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Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises

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SYNTHESIS REPORT

THE DRYLANDS OF TOMORROW

Pathways to prosperity, peace and resilience

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About SPARC

Climate change, armed conflict, environmental fragility and weak governance and the impact these have on natural resource-based livelihoods are among the key drivers of both crisis and poverty for communities in some of the world's most vulnerable and conflict-affected countries.

Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises (SPARC) aims to generate evidence and address knowledge gaps to build the resilience of millions of pastoralists, agro-pastoralists and farmers in these communities in sub-Saharan Africa and the Middle East.

We strive to create impact by using research and evidence to develop knowledge that improves how the UK Foreign, Commonwealth & Development Office (FCDO), donors, non-governmental organisations, local and national governments and civil society can empower these communities in the context of climate change.

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BOXES, FIGURES AND TABLES

ACRONYMS

AU	African Union
AUDA-NEPAD	African Union Development Agency New Partnership for Africa's Development
ECOWAS	Economic Community of West African States
FUDECO	Fulbe Development and Cultural Organisation
GDP	gross domestic product
IDDRSI	IGAD Drought Disaster Resilience and Sustainability Initiative
IPCC	Intergovernmental Panel on Climate Change
NGO	non-governmental organisation
REC	regional economic communities
SPARC	Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises
TCAR	transboundary climate risk

EXECUTIVE SUMMARY

This report synthesises insights from six years of SPARC research to take stock of the key challenges and opportunities facing pastoralism and agriculture in the drylands today, and to reflect on where future investment and support might be most effective. Drawing on evidence from multiple countries and placing it in conversation with wider bodies of research, the report speaks to a broad audience across policy, practice and research. It is organised around three thematic sections – peace, prosperity and resilience – each chosen to reframe common narratives. Rather than focusing solely on conflict, poverty and climate vulnerability, the report shifts attention towards what works, what is changing, and what forms of support are proving most relevant in these evolving contexts.

By tracing long-term trajectories of change in drylands economies, the report challenges enduring negative framings that cast these regions as barren or unproductive. Such narratives continue to shape investments that prioritise large-scale, transformational 'mega projects' over the more effective support of existing livelihood systems. In contrast, the report highlights how pastoralism and smallholder farming – forms of subsistence that are often dismissed or misunderstood – enable people to thrive in volatile conditions. It underlines the value of supporting these systems through small-scale, incremental investments and through progress measured against locally meaningful indicators, rather than generic, top-down metrics.

In its focus on peace in the second section, the report draws from cross-cutting evidence to show how conflict emerges not from inevitable competition over resources or fixed identities, but from complex, historically rooted dynamics shaped most prominently by political exclusion and marginalisation. Peace, it argues, is usually not best understood as a singular end-state, but rather as an ongoing, grounded process of addressing local grievances. Effective peacebuilding engages with existing socio-political realities and builds from the bottom up, through incremental improvements that reflect the priorities of affected communities.

The final section of the report, which focuses on resilience, explores how drylands populations respond to change not as isolated individuals but through collective institutions, flexible livelihoods and expansive social networks. It emphasises that resilience is generated through dynamic, interconnected systems of land management, trade, social support and knowledge-sharing. While these systems are locally grounded, they are shaped by wider structural forces. As such, the report stresses the need for action across scales – linking local innovation to supportive national and regional policy environments – to address deeper barriers to adaptation and change.

KEY MESSAGES

1. In the drylands, sustainable prosperity and peace usually come from incremental, locally grounded change, not large-scale transformation

The drylands are often framed as marginal, unproductive places requiring large-scale transformation. This is a narrative that reaches back to old and flawed interpretations but nevertheless continues to shape a growing wave of expansive investment projects. This includes commercial irrigation schemes, renewable energy installations and resource extraction initiatives, all designed to unlock the supposed potential of these 'barren' and 'empty' lands. Such interventions overlook the finely calibrated ways in which people already manage the characteristic uncertainty of these environments via dynamic, adaptive livelihoods. It is usually not sweeping schemes, but small-scale, iterative investments in these everyday livelihoods that matter most to future prosperity. The best investments align closely with the socio-ecological logics of dryland systems and are suited to the complex, shifting realities of fragile and conflict-affected settings. Without this grounding in lived reality, development is at risk of inadvertently becoming extractive, exclusionary and unsustainable.

Similarly, the conflicts that persist in these areas are ill understood as simply the result of inherent animosities or fixed identities. They arise from complex, evolving dynamics shaped most profoundly by the lived experiences of local communities. Peace should not be imagined as a distant, grand objective, but rather as a series of small, more tangible improvements to daily life. Peacebuilding is rarely impactful if it aims to impose a one-size-fits-all solution or chase after idealised forms of permanent stability. Instead, effective peacebuilding in the drylands addresses the specific grievances that communities face, in inclusive, gender-sensitive ways that respect local knowledge and socio-political realities. It seeks to make gradual, incremental progress, with a focus on the nuanced needs and ambitions of those impacted by conflict.

2. What does real progress look like, and who decides?

Development programming often defines problems and measures success using generic, composite language. Phenomena such as poverty, climate vulnerability and nutrition, for example, are all typically assessed through standardised indicators designed to capture trends across diverse geographies. Yet these broad measures frequently fail to reflect what matters most to people in specific places.

In dryland regions, where livelihoods are highly flexible and rely on social interdependence to navigate unpredictability, generic metrics often obscure more than they reveal. At the local level, success is rarely defined by income or asset accumulation alone, but rather by relationships, reciprocity and adaptability. When development efforts prioritise standardised indicators over these lived experiences, they risk misdiagnosing challenges and undermining effective responses. This disconnect will persist unless the systems that drive aid and policy accountability get better at valuing and responding to what local people define as progress.

Importantly, rooting progress in local realities does not mean limiting action to the local level alone. Lasting impact requires being led by the local context, but thinking and acting beyond it. Investment and support will be more effective where interventions tackle locally defined issues

at multiple levels, including the wider economic, political and normative systems that shape them. Many challenges such as conflict, disease and climate risks transcend boundaries, requiring coordinated action and supportive policies at regional and national levels.

3. Collective practices are key to resilience and development in the drylands

In the drylands, prosperity, peace and resilience tend to be rooted in collective rather than individual or household-level dynamics. This collective strength is expressed through communal land tenure systems and various forms of locally driven social assistance and practices based on shared responsibility during crisis. Decision-making is often deliberative and distributed across diverse knowledge and experience bases, enabling adaptative responses to evolving needs and challenges.

New investments and programmes often adopt too narrow a focus, targeting households or individuals, particularly those identified as the most vulnerable. This focus risks overlooking the interconnected systems that sustain drylands communities, where access to shared resources, including water and pasture, is managed via local social institutions. Similarly, technical interventions often target specific, single challenges (such as water infrastructure), failing to recognise connections to wider social, economic and ecological landscapes. This fragmented approach risks undermining the resilience of the collective.

Effective policy builds on collective forms of decision-making, problem-solving and resource management. Rather than relying solely on individual or household-level interventions, these existing dynamics should be enhanced through better recognition and support. Equally, rather than focusing on quick technical fixes, policy should encourage integrated solutions that address multiple interconnected challenges simultaneously, prioritising long-term investments that enhance collaboration between different kinds of formal and informal governance.

4. The flexibility of local livelihoods and knowledge must be recognised

In the drylands, livelihoods are not static or monolithic. They are open-ended and constantly adapting to shifting environmental, social and economic conditions. Drylands economies emerge from dynamic interactions between pastoralism, farming, trade and other subsistence practices. Yet policies often rely on rigid categories and one-size-fits-all solutions that fail to recognise flexibility and interconnectedness – an approach that limits opportunities for innovation and growth. Attempts to stabilise or return to a 'normal' baseline usually miss the point. Livelihoods are sustained not by fixed routines but by flexibility and improvisation in the face of constant change. Supporting the interactions between pastoralists, farmers, traders and others – rather than treating them as separate sectors – can strengthen the kinds of practical networks and relationships that help people adapt. Many of these networks are substantively shaped or managed by women and women's groups.

Similarly, local knowledge – often framed as traditional or 'indigenous' knowledge – is not a static resource but a living, adaptive process that evolves with changing circumstances. Local knowledge is constantly being revised through observation, experience and discussion, and it helps people navigate changing conditions in real time. Rather than reducing it to a static 'resource', development efforts must engage with this knowledge as an ongoing process of enquiry and adaptation.

Aerial view of Marsabit, northern Kenya.
Photograph by Samuel F. Derbyshire.

5. Negative narratives have enduring power

The challenges faced in the drylands today are not the result of inherent vulnerability. Many of them emerge from long histories of political neglect, marginalisation and misrepresentation. The legacies of these histories live on, not just in governance systems but in the dominant narratives that frame the drylands as barren, chaotic and economically irrelevant. Such narratives continue to shape policy choices, investment priorities and institutional blind spots.

But the drylands are not empty or inherently vulnerable; they are underserved. Seen from within, they are places of ingenuity, cooperation and deep resilience. Supporting better futures means reshaping how drylands are spoken about and understood. This includes recognising the value of local strategies already in place and ensuring that investments reflect the realities and priorities of those living in these landscapes. Many local solutions to current challenges exist and offer significant opportunities to those willing to provide investment and support in the years ahead.

INTRODUCTION

This report synthesises key insights from six years of research from the Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises Consortium (SPARC). It takes stock of where we stand, and of some of the longer-term trajectories of change shaping drylands economies. Focusing on SPARC's key themes of peace, prosperity and resilience, it explores both challenges to and factors enabling progress for those making their way in the drylands. Rather than offering operational guidance, it aims to challenge prevailing assumptions and propose alternative, grounded narratives that can inform strategic thinking. In doing so, it offers a realistic picture of what does and does not work, setting out implications for decision-makers in private and public sectors – those shaping projects, initiatives, policies and investments in the years ahead.

To do this, it is first necessary to ask what ideas have driven policy and practice in the drylands to date. This is because ideas underpin narratives and assumptions that grow more entrenched as they monopolise interpretations of events and long-term processes. Since early colonial times, arid and semi-arid regions – and the livelihoods they sustain – have been construed through an imaginative lens based varyingly on several key principles: that they are home to traditionally violent and irrational cultures, crafted amid resource scarcity; that they are low-potential, unproductive areas, where subsistence (whether in the form of drylands farming or pastoralism) is meagre; that the livelihoods pursued in them are environmentally destructive and resistant to change; and that their populations are *inherently* vulnerable to disasters that result in crises and famine.[1]

While they have been discredited by research, these principles remain influential in multiple significant contexts.[2] In the years following independence from colonial powers, they have come to take on more nuanced, complex forms.[3] Some of the most important policy-oriented research focused on the drylands to date has sought to underline and counter their legacies in dominant perspectives on famine, ecology and development, setting out alternative analyses and possibilities.[4] And yet despite this research, an unhelpful imaginary persists, framing pastoralists and peasant farmers as anathema to modernity and development. This perspective manifests itself in unnecessarily restrictive understandings of drylands livelihoods and knowledges, approaches to complexity that see it as a problem, and a prevailing drive towards instituting new forms of stability in place of uncertainty – all of which biases are challenged by SPARC research, as we discuss throughout this report. The accepted premise, across many quarters, is that solutions to the many problems faced in these regions must come from the outside. This may be in the form of new technologies or large-scale commercial projects and schemes aimed at unlocking vast untapped potential – from renewable energy to mining and resource extraction.

1 Michael Odhiambo (2014) explores the origins, transformation and persistence of these narratives and others in the context of Kenya's national development and the shifting policy discourses behind it. Similarly, Simone Rettberg (2010) unravels Ethiopia's construction of 'pastoral backwardness' in cultural and economic terms over history, and its instrumental role justifying interventions aimed at large-scale transformation of landscapes and economies. For an overview of some of the complex ways in which various long-standing ideas have shaped framings and responses to conflicts between farmers and herders in West Africa, see Shettima and Tar (2008).

2 For a more detailed discussion, see Krätli et al. (2015).

3 The 1960s, for most African countries.

4 Such as Sen (1982) and De Waal (2005) on famine, Ellis and Galvin (1994) on African pastoralism and ecology (see also Warren, 1995), and Scoones (2023) on development planning and practice.

Africa has seen a proliferation of such 'mega projects' in recent years (albeit following a long history of similar interventions), ranging from hydro-electric dams to wind farms and irrigation agriculture schemes.[5] Despite their justification in relation to national development plans, such schemes have, in many instances, resulted in negative outcomes for local populations in terms of livelihoods, community cohesion and land rights.[6] Indeed, one of the most prominent critiques of them has revealed their disproportionately negative impact on women (cf. Daley and Pallas, 2014). Beyond the well-known (and often critiqued) underperformance of such projects, the more pressing issue at stake is what they rule out and override – that is to say, the versions of small-scale, incremental progress that are already under way, and that make the most sense to those pursuing their livelihoods in the drylands. The empirical evidence from the SPARC programme underlines the urgent need to centre these local-level processes of development and the hopes and aspirations driving them in the face of new large-scale commercial interests.

Many SPARC case studies point specifically to the critical questions currently surrounding access to land and tenure security for pastoralists amid this renewed enthusiasm for large-scale schemes oriented towards increasing gross domestic product (GDP) that take for granted a negative view of existing drylands livelihoods.[7] In challenging the idea that productivity must be instituted via radical transformation away from existing patterns and practices, this report points to the major contributions that livestock already make to GDP across the drylands: drylands livelihoods are already critical to national economies. Setting out key insights from diverse evidence bases, we argue that only by investing in and supporting these livelihoods on their own terms can prosperity truly be realised.

But what does this mean? Fundamentally, and as we explore in the following section – 'Prosperity' – it means building on the approaches to uncertainty and change that already work at a local level. The drylands are well known as unpredictable places that characteristically experience very low and highly variable rainfall. Pastoral production systems make the most of these conditions by harnessing them and working with them.[8] They do so via the fundamental ingredients of mobility, collective resource management, strategic problem-solving via diverse networks, and creative adaptation over the course of intersecting socioeconomic and ecological changes. In other words, they embrace uncertainty.[9] To unlock new opportunities in the years ahead, this report suggests that it is necessary to abandon rigid, monolithic understandings of livestock-based drylands economies altogether. Both pastoralism and smallholder farming are continually changing in relation to each other, and in response to new challenges and opportunities. Many examples in this report attest to the fact that they are not bounded, passive units of activity, but rather open-ended pursuits across both time and space that are often entangled via close economic cooperation and indeed often converge in mutually beneficial ways within single families.

Instituting new forms of stability is thus not the answer. This is true with large, inflexible schemes and investments as much as it is with prevalent approaches to drought management, which often hinge on an underlying drive towards returning to some kind of 'normal' state. The reality is that drought always intersects in complex ways with a variety of other forms and

5 This new phase of sweeping, monumental development began, according to Müller-Man et al. (2021), in the early 2000s, and gained momentum with China's Belt and Road Initiative.

6 See, for example, Lind and Rogei (2025).

7 A recent report by the Maasai International Solidarity Alliance (MISA, 2025) also highlights these issues, paying particular attention to the spectre of carbon credits and associated processes of land alienation.

8 For a more comprehensive description and discussion of the evidence, see Krätli et al. (2015).

9 For an overview of this principle and its implications, see Scoones (2023).

scales of crisis, including conflict and the legacies of historical marginalisation. Pastoralists manage the difficult situations that ensue through dynamic, real-time decision-making – an approach that is responsive to the surrounding terrain of risks and options as it changes before their eyes – not by relying on predictions made weeks or months in advance (even though these can be useful).

As we discuss in the third section of the report – 'Resilience' – the best forms of support (whether in advance of or during a crisis) take local context seriously, defining and measuring success in specific terms that make sense at the local level (rather than purely through generic metrics). However, they also target multiple levels and scales of action, recognising that many problems, while experienced and managed at the local level, require new forms of national and international collaboration, advocacy and financing to be dealt with effectively.

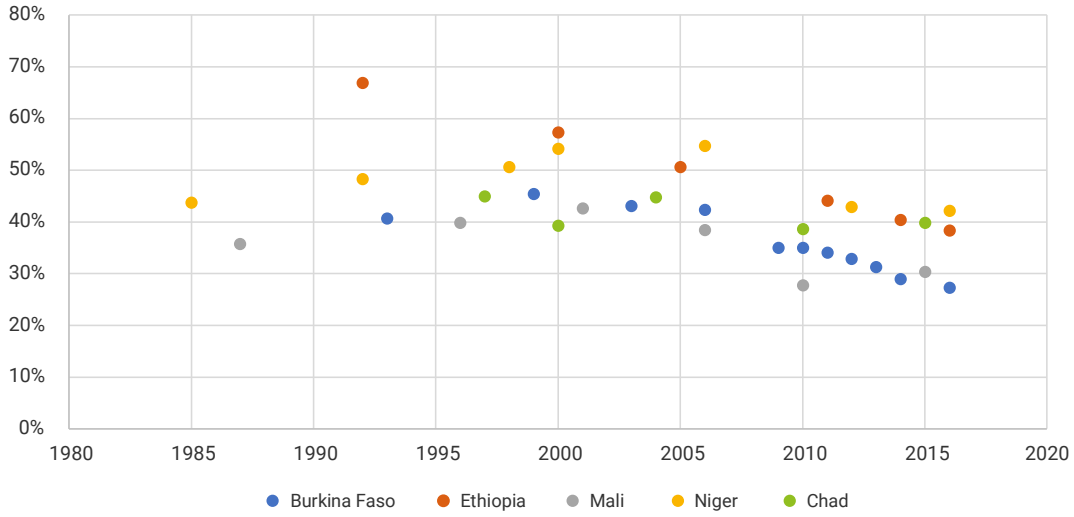
In highlighting the value of these kinds of approach, and indeed in advocating for new understandings of and investments in drylands economies more generally, this report aims to move beyond crisis narratives and overly negative portrayals of life in the drylands – partly because they conjure up an unhelpful 'black and white' picture of how things are vs. how things could be, but also because when taking a long-term view of the drylands, these narratives do not bear up to scrutiny. Indeed, there is much evidence of positive trends across many countries in poverty rates, food security and nutrition. Figures 1–3, for example, from Levine's (2022) analysis of resilience in the Sahel reflect long-term trends in life expectancy, poverty and the prevalence of stunting, which all challenge assumptions that many might hold. There are also many examples of pioneering, progressive processes of institutional growth that have been explored in depth by SPARC research. Kenya's history of drought management, from project-based famine response in the 1980s to proactive authorities and institutions mandated to monitor conditions and issue warnings to relevant departments, is one such example (see Derbyshire et al., 2024). The idea that everything is getting worse is simply not true.

This is not to say that difficult, intractable problems do not still exist, rather that solutions that are too simple, neat or uniform tend to be unhelpful. Making progress means embracing messiness and complexity and being realistic about what is possible in each distinct context of action. Inflexible, uncompromising approaches that orient themselves towards definitive, universal outcomes tend to miss golden opportunities for more tangible, if gradual success.

This is particularly the case in situations of conflict (including various forms of conflict between farmers and herders), which we explore in section two – 'Peace'. SPARC evidence emphasises that these tend not to be reducible to single 'drivers', but rather take shape amid multiple overlapping social, economic, ecological and political dynamics, often spilling into new theatres and scales in unpredictable ways. Often the most effective approach to making progress towards peace entails working with (rather than seeking to simplistically eradicate) difficult, unpredictable conditions, and finding ways amid these conditions to make incremental improvements to people's lives and livelihoods. In this way, conflicts in the drylands, like crises that emerge from drought, are phenomena without universal causes or answers. The most accurate way of understanding them is by situating them within longer-term processes of socio-political exclusion and marginalisation. Just as regions and populations are not inherently vulnerable to famine, so they are not inherently prone to conflict. Both are systemic failures.

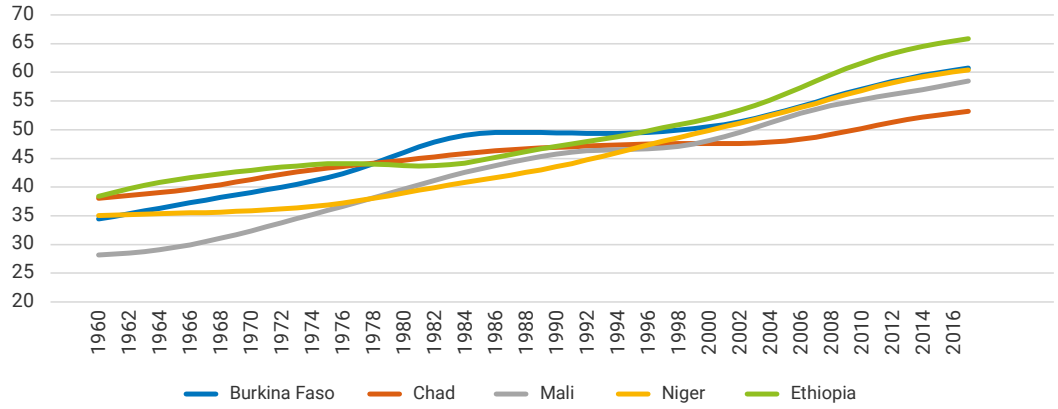
The following section begins by examining the foundations of prosperity for pastoralists and smallholder crop farmers, asking how people engage in each of these livelihoods in the drylands to pursue economic advancement in a complex and uncertain world, and what obstacles they face.

FIGURE 1. PREVALENCE OF STUNTING IN CHILDREN UNDER THE AGE OF FIVE IN COUNTRIES IN THE SAHEL AND ETHIOPIA



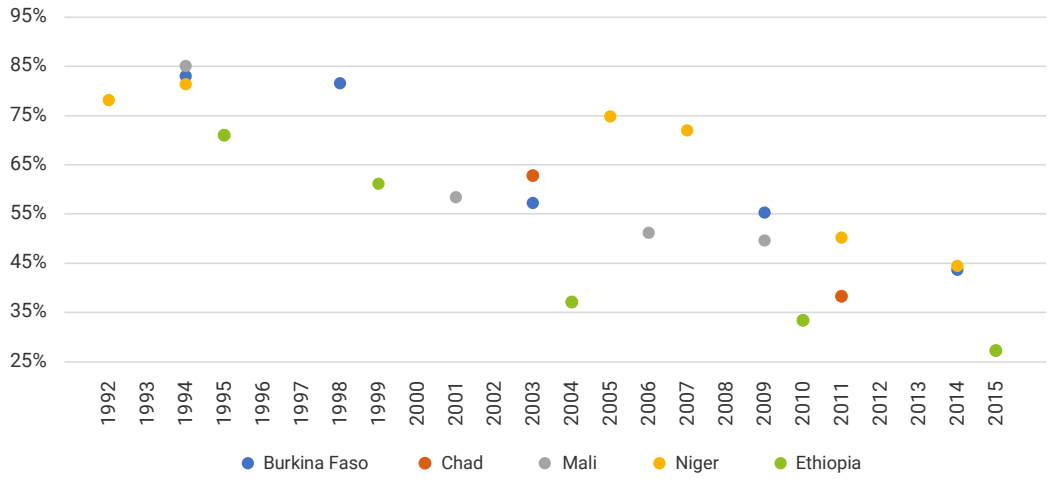
Source: Adapted from Levine (2022: 11).

FIGURE 2. CHANGES IN LIFE EXPECTANCY IN COUNTRIES IN THE SAHEL AND ETHIOPIA (1960–2016)



Source: Adapted from Levine (2022: 9).

FIGURE 3. CHANGES IN PREVALENCE OF POPULATION BELOW THE INTERNATIONAL POVERTY LINE IN COUNTRIES IN THE SAHEL AND ETHIOPIA (1992–2015)



Source: Adapted from Levine (2022: 9).

1. PROSPERITY

What drives prosperity in the drylands? In some respects, the well-known unpredictable ecological and economic dynamics of these regions defy the kind of stable, incremental growth that is so often conceptually tied to the idea, particularly in the world of international development. Livestock herd sizes fluctuate continually in line with shifting conditions. Families and communities move in a dynamic, open-ended way, incorporating new opportunities into their livelihoods as and when they emerge. Resources tend to be communally owned and managed through expansive networks and relationships established on mutual trust and obligation. Combined, these features make it difficult to see overarching, GDP-oriented commitments to growth – a common framing of policy goals set by governments – as sufficient for capturing the hopes and aspirations of those making their way in these places.[10]

That said, it is a common misapprehension to assume that the drylands, and indeed pastoralism, are unproductive, in any sense of the word. Pastoralism already contributes between 10% and 44% of GDP in African countries, benefiting approximately 1.3 billion people through the livestock value chain (see Box 1). What makes this possible, even in contexts of extremely limited investment, is not a standard way of doing things, but rather a diverse set of approaches to navigating volatile and unpredictable conditions, and collective, relational forms of decision-making and resource management, which are attuned to specific contextual dynamics.

Thus, what drives prosperity in the drylands, whether in terms of the economic value of livestock or the unmeasured qualities of individual lives and societies, is always context-specific. Knowing how to support it in one area does not necessarily mean knowing how to support it in another. SPARC research has underlined multiple instances across diverse geographies where assumptions about what is straightforwardly good (as an investment or form of support) have come at the expense of an understanding of local livelihood dynamics, patterns of behaviour, priorities and ambitions, resulting in misguided, unhelpful interventions. Some of these instances are discussed in this report.

The prevalence of such interventions is perhaps part and parcel of the overwhelmingly negative framing through which the drylands continue to be approached (as discussed in the introduction), and the kinds of crisis-oriented narratives that continue to find their way into planning and practice in multiple complicated ways. There are numerous carefully constructed measurements of poverty, for example,[11] and yet very limited thinking around what we actually mean by prosperity beyond purely economic factors, and how we measure success along these lines, accounting for local conceptions of environmental sustainability, community cohesion, security and well-being, all of which SPARC research emphasises as critically important concerns to diverse drylands populations in the present era.

Having said this, existing generalised metrics for things such as poverty and food security remain important and should not be discounted entirely, particularly because addressing locally defined and context-specific problems usually requires action at multiple scales and

10 As Henrietta Moore (2023: 2) points out, while calling for new ways of approaching and measuring prosperity in the 21st century beyond purely economic factors, GDP 'measures the monetary value of the goods and services that are produced and consumed within the economy, but . . . takes no account of inequality, environmental degradation, unpaid domestic work, caring responsibilities, subsistence farming or voluntary activities'.

11 Such as relative poverty, absolute poverty, the multidimensional poverty measure, the poverty gap index and so on.

BOX 1. THE ECONOMIC CONTRIBUTIONS OF PASTORALISM IN AFRICA

In the past, pastoralism was framed as a comparatively unproductive livelihood. This understanding, while still influential in multiple ways, is now widely viewed as a mischaracterisation of pastoralism's potential. Pastoralists across Africa already make major economic contributions. That they do this with minimal government support, investment and often a lack of basic services demonstrates their immense resourcefulness and perseverance.

In West Africa, pastoralism accounts for about 60% of the meat and milk products consumed (UNECA, 2016). Niger's livestock sector accounts for 13% of national GDP, supporting more than 17% of the population (World Bank, 2023). In East Africa, it 'provides 90% of the meat consumed . . . and contributes 19%, 13% and 8% of GDP in Ethiopia, Kenya and Uganda, respectively' (Nyariki and Amwata, 2019: 1).

Sudan's livestock export market to Saudi Arabia, despite looking informal and low tech, is worth over $400 million a year (Humphrey et al., 2021). In Burkina Faso, livestock is the third largest export after cotton and gold. It contributes 30% to export earnings, which is more than 18% of GDP. The livestock industry employs more than 87% of working people and provides 39% of rural household cash income (Sawadogo et al., 2024).

In Somalia, despite rapid urbanisation, the livestock sector employs more than half of the total national labour force, contributing 40% of GDP. Livestock sales account for between 50% and 80% of household income for poorer households, and livestock account for 80% of Somalia's exports (Banerjee et al., 2021).

While it is important to take stock of these enormous contributions – and to recognise the vital role of pastoralism within wider national and regional economies – it is also important to discern the limitations of GDP-oriented measurements. They do not reflect the numerous non-market activities that contribute to a broader sense of prosperity in pastoral areas, and which require urgent investment and support. Numerous forms of unpaid labour and resource management are critical to pastoral production. GDP-oriented measurements are also unable to capture many of the core ingredients that lead to a 'good life' – for example, a sense of community cohesion and 'well-being', a sense of purpose, a feeling of belonging to a place, a history and so on. These factors are crucial for true prosperity. Without them, investments are at risk of engendering forms of economic growth that disregard or actively undermine the interests, concerns and ambitions of pastoralist peoples.

levels (as this report demonstrates through a variety of examples), and such action must take place on some form of common ground, in relation to some kind of common direction. Watkins et al. (2024) make this clear in their report on financing the fight against poverty and hunger, in which they note that the 'no poverty' and 'zero hunger' goals (two of the sweeping United Nations Sustainable Development Goals) are on track to be missed.[12] They note how overall financing for global poverty and hunger remains extremely limited, with shrinking grant sizes and a growing trend of delivering support outside government systems. To address this, they advocate for higher flows of official development finance in place of project-based support. Similarly, in their analysis of private sector solutions to food security in fragile

12 The situation is no doubt even more critical in light of recent cuts to aid budgets worldwide.

contexts, Lemma et al. (2023) emphasise that development finance institutions are currently facing mixed incentives and regulatory frameworks, which is resulting in limited investments. They set out a range of potential solutions for better incentivising development finance institutions in fragile contexts by combining flexible financial tools, fostering local investment readiness and streamlining operations to reduce barriers and cost.[13]

In both instances, as in many others, broad, universal terms and policy languages facilitate advocacy at a high level. This is just as critical for driving and supporting prosperity in specific drylands contexts as more locally focused forms of activism or investment, given the ways in which local challenges and opportunities are shaped by global networks and systems spanning the international economic and political landscape. The challenge is not choosing whether to focus on hyper local concepts of prosperity or purely generic metrics and terms, but rather ensuring that these two scales of thought and action shape each other in more beneficial ways. This is a particularly important task in the current era when, as we set out in the introduction, large-scale infrastructure and renewable energy projects are proliferating at pace.

1.1 Small-scale, incremental progress

The idea of shifting the focus of support and investment from large-scale commercial schemes and projects to smaller-scale, family-run enterprises is prominent in the work of Ajl et al. (2023).[14] Their analysis of international financial institutions and policy trends connected to climate and the environment in North Africa emphasises an enduring failure to recognise the centrality of small-scale family farming, not only in terms of food production but also social reproduction, community cohesion and well-being. They emphasise how, largely as a result of their preoccupation with polices oriented towards mitigation and adaptation, international financial institutions have consistently failed to address the root causes of poverty, which are historical and political. In taking for granted a purely economic vision of prosperity, international financial institutions have focused on modernising agriculture for rural areas, which has led to land concentration, the displacement of smallholder farmers and the fragmentation of small farms, all of which factors have contributed to the impoverishment of rural communities rather than any sense of prosperity.

Smallholder farming is likewise emphasised as the primary engine of recovery and resilience in Wiggins et al.'s (2023) report on 'farming after fighting', which investigates post-conflict dynamics in six countries (Rwanda, Mozambique, Peru, Cambodia, Sierra Leone and Uganda). Despite devasting losses from conflicts that ended in the 1990s and early 2000s, the study describes how agriculture recovered rapidly when peace returned (with the exception of northern Uganda), with pre-conflict production levels restored and then surpassed. This rebound came 'as much, if not more, from crops grown very largely by smallholders as from commercial and export crops typically grown on larger farms'.

The speed and resilience of smallholder farming are especially remarkable given post-conflict public policy. Indeed, in Cambodia, Mozambique, Peru and Rwanda, smallholder farming was

13 Complementary recommendations are made by Cao et al. (2021) in their report on conflict blind spots in climate adaptation finance in the Sahel and the Horn of Africa, which focuses on integrating climate and conflict considerations into adaptation strategies, fostering local ownership and enhancing coordination to better address the unique challenges faced in fragile, conflict-affected settings. The report underlines the value of an overarching, common policy language in facilitating better-coordinated and targeted international action to break negative cycles.

14 This shift must take place in at least a gender-sensitive, if not a gender-responsive way so as not to entrench discriminatory gender norms where they do exist. Neither family farming nor family-run enterprises, which we discuss below, are straightforward, neutral concepts.

largely neglected when peace was restored. Governments prioritised maintaining peace, often focusing resources on former combatants to prevent a return to arms. With depleted public coffers, little funding was available for agriculture, and donors focused on immediate human needs, such as aiding refugees and restoring schools and health services. Alongside this, there was a clear ideological bias against smallholders, with leaders and technical experts in the 1990s viewing large-scale, capital-intensive farming as the most appropriate engine of agricultural growth.

Complementary points are raised in Ghafoori et al.'s (2023) report on farming in Afghanistan, which emphasises how investments in post-harvest food storage and processing (limited though they are) have tended to focus on private sector companies close to cities. Drawing on data from three provinces in Afghanistan (Laghman, Herat and Badakhshan), the authors highlight the importance of post-harvest storage in smallholder farms for minimising losses, and the potential for investments that are better targeted at these farms to reduce food insecurity and enhance purchasing power. Here, as in all other cases, social dynamics related to gender and age play fundamental roles determining access to resources and opportunities. Women play a vital role in post-harvest management in Afghanistan – a fact that was not reflected in available data prior to Ghafoori et al.'s study. In the absence of such work, gender-blind policies and programmes risk reinforcing inequalities and providing differential access to opportunities.

In seeking to shift attention towards smaller-scale, more incremental progress in the drylands (and thus towards what is already working), we must always take care to critically examine the conditions under which wealth is created and distributed, as well as the mechanisms for addressing inequities in its allocation.

1.2 Rights, recognition and marginalisation

Pastoralism, like smallholder farming, is a core driver of prosperity in the drylands. As much as this is true in terms of the economic value of livestock, it is also true in terms of the social ties that take shape around cattle, camels and small stock, and around the open landscapes traversed and managed via long-standing, customary arrangements and institutions. In most instances, livestock's connection to a broader sense of prosperity is less about its economic value and more about its pivotal position in shaping wider social dynamics, value systems, practices and interactions. Accounting for these wider facets of pastoralist prosperity, even in seemingly straightforward ways, is made more difficult in the wake of historical marginalisation and exclusion. Even ostensibly progressive financial reforms and market development, though well intended, can fail to achieve intended objectives when broader socio-political and historical factors are not considered.

A key example of this is described by Opitz-Stapleton et al. (2024), whose work in collaboration with the Fulbe Development and Cultural Organisation (FUDECO) demonstrates how the Naira redesign and an associated digitisation of banking transactions in Nigeria has led to financial hardship for pastoralists and agro-pastoralists in settlements in Kaduna and Taraba State.[15] This is primarily because of a pre-existing lack of both bank accounts and access to information and communications technology, both of which facets emerge from a history of exclusion.[16] Recent policy shifts have thus effectively made it much harder for people to sell

15 A group of settlements called Hayin Ade in Kaduna State, and another called Wuro Alhaji Idrisa Bappate in Taraba State.

16 Opitz-Stapleton (2024) notes that one of FUDECO's key findings in these two areas was that many community members had never been registered with the Nigerian Government and thus lacked any kind of formal identification. This is a form of exclusion tied to uneven power dynamics and relations between the central State and the peripheries that prohibited herders from opening bank accounts.

livestock and buy veterinary medicine or supplemental fodder – that is, harder to pursue their livelihoods and manage increasingly volatile environmental conditions. A new form of exclusion has emerged from a perhaps well-intentioned but nevertheless narrow-minded reform.

More widely, this work has also examined related issues around land tenure security in Nigeria (i.e. Opitz-Stapleton et al., 2023). In a context of rampant illegal artisanal mining and intensive land speculation by elites at the local level, and policies that promote intensive agriculture over pastoralism at the federal level, the complexities of Nigeria's Land Use Act of 1979 have culminated in troubling ambiguities in interpretation. The resultant inconsistent system has created a context of profound tenure insecurity for herders. FUDECO's work on rights education in this context is particularly critical, and encouraging, where many pastoralists and agro-pastoralists are not sufficiently informed of access or compensation rights (see Box 2).

What does this kind of land tenure insecurity (which is by no means limited to Nigeria's pastoralists) mean for major investments in infrastructure? Such investments are clearly not to be disparaged across the board. Indeed, Chelanga et al. (2023) provide a case study from northern Kenya suggesting that recent infrastructural investments – specifically in roads, market infrastructure, telecommunications networks and digital financial infrastructure – have had a strong influence on local markets, and that more investments would enhance competitive trading and reduce unidirectional price transmission. Yet more widely, SPARC research has described some of the clear risks that come with such benefits, including increased competition for resources, and increased threats of land privatisation. This has been observed in Kenya and Tanzania, where fragmentation, parcelisation and privatisation are resisted through legal action and where pastoralists have contested private ownership in the courts (see Robinson and Flintan, 2022).

In providing examples of some of the specific ways in which histories of marginalisation and exclusion continue to shape processes of development in the drylands, SPARC research emphasises that the improvements promised by better roads and other infrastructures must always be examined critically and considered alongside concomitant risks. The kinds of change that come with such improvements are not inherently good or bad. The deciding factor is always the extent to which they are designed, implemented and managed with a view to enhancing not only contributions to GDP but also the myriad other factors shaping prosperity for the communities with something at stake, including tenure security, customary institutions and values.

1.3 Economic growth and collective prosperity

Livestock markets are critical engines of growth in the drylands but are also shaped by complex risks. SPARC research highlights possibilities for improved policies across the private and public sectors which might help to enhance them. In Sudan, for example, outbreaks of Rift Valley Fever have often severely disrupted marketing chains, negatively impacting livestock exports to Saudi Arabia. Looking beyond the current civil war, policies supporting new veterinary health measures that prevent further outbreaks will be key. Here and elsewhere, new forms of insurance that are tailored to the dynamics of livestock herding and the kinds of challenges faced by herders may also serve as key pathways towards improved economic prosperity (see, for example, Chelang'a et al., 2015).

In grappling with the question of how to better manage shocks that disrupt and destabilise markets, one critical lesson from many different SPARC case studies has been to pay more attention to – and indeed create policies that better support – the forms of solidarity and social cohesion that underpin livelihoods and market interactions, including during crises. For example, surmising key lessons from a review of protracted conflicts across 11 contexts, Levine et al. (2021)

make the important yet often overlooked point that people generally survive conflicts due to their own abilities and their relationships with family and wider communities. In this sense, prioritising people's choices in aid programming is key – people know what works and what is needed in different contexts, and cash is usually the best option of enabling them to attain it.

But these 'moral economy' dynamics go far beyond conflict settings and indeed have been explored at great length by past research looking into the ways in which pastoral economies

BOX 2. THE FULBE DEVELOPMENT AND CULTURAL ORGANISATION (FUDECO)

Established in 2017 following a massacre of Fulbe pastoralists in Taraba State, north-eastern Nigeria, FUDECO is a humanitarian and development non-governmental organisation (NGO) that has worked over the past eight years to empower pastoralists across Nigeria.

Addressing multiple issues emerging from a complex history of socio-political marginalisation, FUDECO has worked to manage conflict, promote rights to equal citizenship and participation in decision-making, facilitate training and education, and advocate on behalf of pastoralists in national and international forums. In December 2024, it was honoured by the United Nations Positive Livelihoods Award Centre (UN POLAC) for contributions to nomadic education and peacebuilding.

Pulaaku Day

The National Pulaaku Day celebrations, which are organised by FUDECO, comprise a platform for dialogue and reconciliation between Fulani communities and other ethnic groups. Often aligning with the United Nations International Day of Indigenous Peoples, Pulaaku Day is an opportunity to celebrate Fulbe customs and heritage with a view to championing long-standing Fulani values as a pathway to peace.

Policy reform

Championing local issues in key policy-making contexts, FUDECO has sought to find solutions to recurring conflict between farmers and herders. Advocating for a Ministry of Livestock Development in Yobe State to help address tenure insecurity faced by pastoralists, it has successfully brought about government initiatives aimed at responding to a lack of grazing reserves for pastoralists, and the encroachment of farmland into areas previously used by cattle. Its efforts have led to the construction of grazing reserves in Nazari and Fika, which are aimed at reducing resource-based conflicts.

Education

Viewing education as one of the keys to reducing conflict, FUDECO has worked to facilitate the enrolment of Fulani children in education systems. By promoting education, it has sought to provide a pathway to reducing the radicalisation of youth and diminishing the draw to violent conflicts. These efforts have been recognised and commended by local leaders.

Research

Deploying participatory action research methods, FUDECO has undertaken critical research into issues such as rights and recognition, land tenure, conflict, and the impact of climate change on pastoralist livelihoods. This varied research has sought to amplify the voices of pastoralists, and to identify policy gaps and advocate for change in collaboration with universities, development agencies and government bodies. It has also sought to understand what barriers exist to education for Fulani youth, and how formal and informal education systems can be better integrated.

Herding camels in Korr, northern Kenya.
Photograph by Samuel F. Derbyshire.

function in diverse situations.[17] Livestock marketing itself is not solely an economic phenomenon but is also deeply embedded in the social cohesion and trust that sustain its functionality. Most markets in the drylands depend heavily on interpersonal relationships, trust networks and the exchange of shared knowledge, which collectively play a pivotal role in promoting broader community prosperity. Sawadogo et al.'s (2024) report examining collective tenure security in pastoral systems in Burkina Faso emphasises this point, along with the broader ways in which livestock-based livelihoods established on collective tenure build resilience by means of socially rooted exchanges.

Likewise, Banerjee et al.'s (2022: 6) investigation into financing livestock trade across Kenya, Mali and Somalia points out:

> *[T]he key to successful trading is prompt, informed and experienced response to the many fluctuations in the supply of livestock arising from seasonality, drought, conflict and so on. Social capital, rather than financial capital [alone], is critical to this – traders need trusted personal contacts on the ground.*

Here, as in many other cases, the fundamental roles of social networks, trust and social capital are shown to underpin vast export markets and economic contributions. Personal relationships formed between producers, traders and buyers form the foundations of trust-based exchanges, which help mitigate transaction risks in livestock trade, including overpricing, theft and insufficient supply. Collective, relational approaches to commerce drive prosperity in volatile and uncertain contexts.

Economic incentives that work to undermine collectivity and solidarity are thus poorly placed and will not lead to any sense of tangible prosperity at the local level in the years ahead. These include incentives that drive the privatisation and fragmentation of land and resources and exclusionary forms of commercialisation in the livestock sector, which undermine relational approaches to livestock marketing by favouring either large-scale producers or well-resourced individuals. Instead, economic incentives should seek to support collective action. This might be through marketing cooperatives, or indeed cooperative veterinary services, which facilitate shared costs for disease prevention and other forms of veterinary care. It might also be through community-based savings and credit schemes, such as those provided through Ethiopia's productive safety net programme.

A critical barrier to successful livestock marketing, and to prosperity in the drylands much more broadly, is conflict, which disproportionately impacts drylands communities and intersects with and exacerbates multiple other challenges. The following section unravels key insights from SPARC research to ask what might be done differently to achieve progress, from conceptual framings to analyses and interventions.

17 The idea of the moral economy grew in popularity in the 1970s following the work of James Scott (1971). In more recent years, it has become a critical concept in pastoralism studies, shaping understandings of the role played by social institutions and relationships in livestock-based economies in uncertain contexts (see Mohamed, 2023; Scoones, 2023).

BOX 3. LIVESTOCK MARKETING: MYTHS AND EVIDENCE

Two dominant narratives shape perceptions of livestock marketing in Africa's drylands: that traders exploit herders through unfair pricing, and that marketing chains are inefficient and outdated. Recent research from Mali, Sudan, Kenya and Somalia – including both mobile phone interviews with traders and secondary data – challenges both assumptions.

Predatory traders?

The popular belief is that traders wield monopsony power: herders are numerous and scattered, and lack access to terminal market prices, while traders are few and better informed. This should allow traders to dictate terms. However, the evidence shows a more nuanced picture.

Despite long and difficult supply routes, which often span over 1,000 kilometres across rough roads, police checkpoints, and even international borders with frequent bribe demands, herders still manage to secure a substantial share of the final price. This suggests that while asymmetries exist, the power dynamics are not as one-sided as often portrayed.

Inefficient marketing chains?

Livestock marketing involves multiple stages: small traders collect animals from herders and sell them at local markets; these are aggregated by mid-size traders and passed up to regional and then urban markets. Each link adds transaction costs, and there is little visible value addition.

Still, the system works. In conditions of highly variable supply, driven by rainfall and forage availability, traders consistently manage to match supply with relatively stable demand in urban centres. While value addition (such as fattening near cities) is rare, this is due to weak consumer demand for premium products. Most buyers want affordable meat, and red meat prices are held in check by cheap alternatives such as chicken and fish.

Margins are slim across the chain. This is not evidence of inefficiency, but of the tight economic balancing act traders and herders perform. Their success relies not only on market savviness but also on deep social capital and trust.

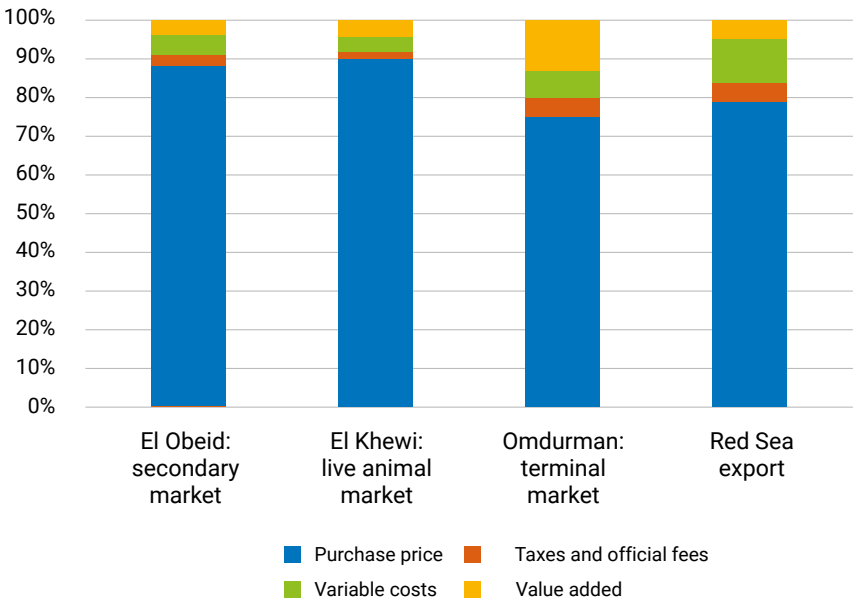
Real challenges vs. misguided perceptions

When drought hits and animals must be sold rapidly, the system struggles: markets are flooded, prices collapse, and both herders and traders suffer. Both of these are structural constraints, not failures of market actors.

Unfortunately, policy-makers often misunderstand the system. Viewing herders and traders (who are often ethnically and linguistically different) as uneducated and backward, they impose poorly informed regulations or invest in unnecessary infrastructure such as remote abattoirs. Worse, corrupt officials assume traders make large profits and extract excessive bribes, compounding the challenges.

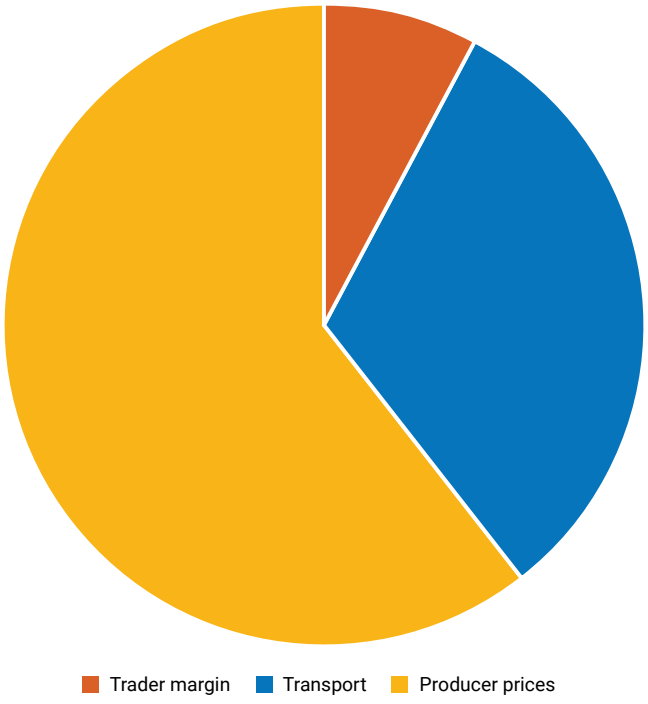
Livestock marketing is adaptive, socially embedded, and resilient under pressure. While challenges are real, misleading narratives obscure effective policy responses and risk doing more harm than good.

FIGURE 4. COSTS IN SHEEP MARKETING CHAINS, SUDAN, 2007



Source: Adapted from Idris (2007).

FIGURE 5. COSTS IN CATTLE MARKETING CHAIN FROM NIORO, MALI TO ABIDJAN, CÔTE D'IVOIRE IN 2013



Source: Adapted from Santara et al. (2013).

2. PEACE

The drylands are not inherently predisposed to conflict. Nor are farmers and herders somehow inescapably entangled in ties of enmity that emerge from their identities and predispositions.[18] Yet many of these places, and societies, experience persistent insecurity, 'defying repeated attempts by different bodies to build peace and provide security' (Pavanello and Scott-Villiers, 2013: 1).[19] In addressing the question of why, and what might be done differently to grapple with complex, unpredictable conflict dynamics more effectively, research from across the SPARC programme has emphasised the dangers of one-dimensional, linear thinking. Indeed, discussions of 'drivers' of conflict (even those that explore multiple drivers) perhaps imply a linearity that is unrealistic, restricting thinking about what the best solutions are in any given context or time. For many programmes or plans oriented towards peacebuilding, the underlying, often unstated principle is to arrive at a state of enduring stability (which is often viewed as synonymous with peace). Interventions with such sweeping objectives attract resources and attention but rarely achieve their aims, particularly in areas characterised by high levels of mobility and flexible, open-ended livelihood dynamics. They are often informed by a narrow analytical lens, limiting understandings of both the problem and the scope for intervention.

In thinking about what catalyses and facilitates peace, this section does not dismiss explorations of the causes of conflict (on the contrary, many of these are discussed in detail). Instead, it reflects on research that offers a more grounded, pragmatic form of analysis, centring the complexity of conflict in the drylands across both time and space, and the reality of its diverse, intertwining and sometimes mutually constitutive contributors. Peace, in situations such as this, is not helpfully envisaged as a simplistic static end point to be arrived at or returned to. It is an aspiration fought for in diverse ways. For some, it is a quality of everyday life carved out amid wider dynamics of hostility and violence. For others, it is the very goal of armed struggle. As with superficial, generalised conceptions of violence, too shallow an interpretation of peace and one's capacity for working in and with specific socioeconomic and political contexts is constrained.

As with drylands development more generally, the answers do not lie in pursuing new forms of 'control' – that is, working to establish new forms of stability and to assert order in place of volatility (see Scoones, 2023). The outcomes of such interventions in conflict settings will at best be fragile and short-lived, and at worst create new vulnerabilities. Instead, resolutions might be found by working at multiple scales and levels (from the local to the international) to support more incremental, realistic visions of peace. This means listening to and directing both policy and investment towards specific grievances, and working to understand how these are shaped by wider socio-political factors, different forms of governance and long-term trends (see Krätli and Toulmin, 2020).

18 This point is made clear in Krätli and Toulmin's (2020) report into conflict between farmers and herders. This perspective, they argue, overlooks a long history of cooperation.

19 This point is made specifically about the drylands of the Greater Horn of Africa, but similar sentiments can be found across multiple other drylands contexts. See, for example, Cold-Ravnkilde and Jacobsen (2020) on conflict in the Sahel.

2.1 Farmer–herder conflict: beyond resource scarcity

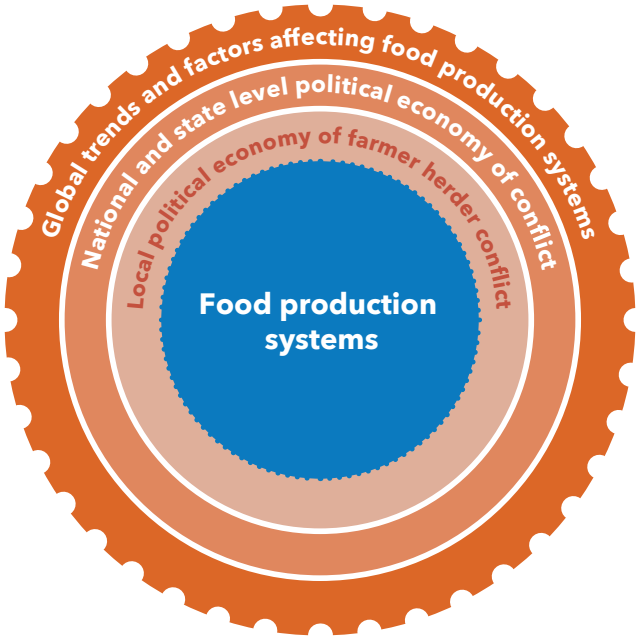
Conflict analysis in the drylands has, in the past, often focused on relations between different resource uses and competition over shared resources. Links between resource scarcity and farmer–herder conflict – that is, conflicts that emerge between different peoples engaged in different forms of subsistence (farming and herding) – have been emphasised particularly often. More recently, growing bodies of evidence from multiple regions have emphasised the simplicity of such a framing, and its unhelpful prioritisation of environmental factors over other political and economic dynamics. In many instances, conflict over shared resources emerges from political favouritism or the exploitation of historical grievances. Likewise, times of scarcity can drive closer cooperation between different communities rather than conflict, particularly when supported by effective local governance systems. Having said this, it is important to note that in many contexts there remains a limited understanding of how women shape these forms of governance, and whether their roles might be better recognised and supported. Either way, Nassef et al.'s (2023) systematic scoping review of the evidence around the causes of conflict between farmers and herders found that while uncritical references to resource scarcity still emerge, there is a growing alignment with critiques of this narrative as an oversimplification.

Nassef et al. (2023) also draw attention to the challenge of vagueness in analyses that grapple with multiple, overlapping drivers, and the problem of unclear topline analyses that describe dynamics without providing critical interpretation. In other words, conflict analysis often pays more attention to *what* is happening than the difficult question of *why*. Land tenure insecurity, for example, is often alluded to as a driver of conflict via its symptoms (e.g. encroachment, declining agricultural productivity, loss of access) without a detailed discussion of the underlying causes of the insecurity, which are political and historical. Flintan et al. (2021) emphasise that the complex linkages between land tenure and conflict are a critical research gap. In tackling this research gap, several SPARC case studies provide new evidence.

Sulieman and Karem (2023), for example, explore the centralisation of power in Sudan over the course of several decades, and its facilitation of large-scale land acquisition. This State-led process has served to erode the power of customary institutions governing land tenure, paving the way for the establishment of large-scale commercial agricultural schemes at the expense of both small-scale farmers and pastoralists. This has contributed to enhanced tensions between different resource users. Ba (2023), on the other hand, examines the role of decentralisation in Mali, a process aimed at devolving decision-making around resource management to local contexts, and codifying laws that do not favour one resource user over another. Despite these overt aims, this process has come to be widely viewed as corrupt, favouring more 'productive' or 'modern' practices over more flexible community-led approaches, including pastoralism. It has resulted in a decline in the effectiveness of customary authorities, though these are at times still favoured. In Nigeria, the Land Use Act of 1979, which we discussed in the preceding section, comprised an attempt to formalise customary law around land. It was designed to simplify a 'patchwork' of customary laws, making governance more straightforward. In reality, it has led to a fraught and opaque system, with varying interpretations and inconsistent implementation. It has seen multiple abuses and manipulations, particularly in a context where pastoralist populations have little access to education about their rights (Flintan et al., 2021).

Here and elsewhere, changes in land use and various forms of tenure insecurity do not occur in isolation. Food production systems, and indeed conflicts between different food production systems (such as pastoralism and farming), are always enfolded within and influenced by wider factors spanning different scales (see Figure 6). This makes it critical to view livelihood systems and conflict through a political economy lens, and for analyses to explicitly account

FIGURE 6. FOOD SYSTEM CONFLICTS AMID POLITICAL AND ECONOMIC DYNAMICS



Source: Adapted from Flintan et al. (2023).

for local, national and international dynamics, and how they interrelate. This includes paying attention to structural conditions, incentives, changing relationships over time (social, political and economic), and the different roles and interactions of both formal and informal laws, institutions and rules, among other things (see Flintan et al., 2023).

The above-mentioned research cases from Sudan and Mali illustrate this point clearly. In Sudan, clashes took place over access to livestock corridors (themselves poorly designed), resulting in a lack of flexibility in movement and constrictions in access to services such as markets. These clashes must be viewed against a backdrop of several other trends, including the centralisation of power (as noted above), the prioritised development of large-scale mechanised agriculture, restrictions in movement because of ongoing national-level conflict, and feelings of injustice and bias towards farmers when disputes are dealt with by the State. Intersections between livelihood, ethnicity and biased government support, in this context, led to increased identity-based violence and, prior to the outbreak of civil war, farmer–herder conflicts that were once seasonal occurring year round.

In Mali, a decline in the role of traditional management of shared resources was largely engendered via decentralisation. These two entangled processes have come to recursively shape and be shaped by environmental and land use change (including via government support for 'modern' agriculture). In a wider context of deteriorating security, where once compromise was sought, now a 'zero sum' mentality prevails among different livelihood groups. Given close ethnic and religious allegiances, conflict has, on the surface, in many respects come to be identity-based. Political actors, including non-state armed groups, are exploiting identity-based differences to exacerbate violence between different resource users.

Clearly, simplistic links between climate change, resource scarcity and rising conflict levels do not provide an adequate framework for analysis. Yet, more broadly, it is also inaccurate to assume that farmer–herder violence in particular is a key driver of worsening trends

(Nasser et al., 2023). Krätli and Toulmin's (2020) recent examination of conflict reporting data from 1997 to 2017 demonstrates that despite an overall rise in the level of violence and fatalities in both East and West Africa, violence specifically relating to clashes between farmers and herders is only a small factor in this. Moreover, the proportion of overall violence associated with pastoralists is not abnormally high. 'While there are significant conflict hotspots at country and regional level, where unresolved disputes fester', they note, 'peaceful relationships and cooperation continue over much larger areas' (2020: 7).

Likewise, the framing of farmer–herder conflict in binary terms is itself analytically constraining. Livelihoods are not static. Both smallholder farming and pastoralism have transformed in diverse and context-specific ways across the drylands amid various long-term processes of social, economic, environmental and political change. Throughout these recent histories of transformation, not only have farmers and herders regularly collaborated via mutually beneficial economic arrangements, but such relations have also often taken place in contexts of profound ethnic and economic fluidity. Being a 'farmer' or a 'herder' almost always happens on a shifting spectrum, shaped by seasonal fluctuations. Pastoralism has never entailed a straightforward, sole reliance on herd animals but has rather been made possible through wider networks and exchange relations facilitating the flow of different products and resources across different food systems. In most contexts the present era is no different.

With this in mind, the spectre of 'neo-pastoralism' in contexts such as Nigeria and South Sudan poses difficult questions (see Ajala, 2020; Cottyn and Meester, 2021). The accumulation of large herds for economic interest by absentee owners is a departure from the locally rooted collective approach to resource management that has characterised pastoral systems in these areas over history. The deployment of 'salaried herders who carry sophisticated weapons' is obstructive to the kinds of inter-livelihood and inter-ethnic cooperation necessary for peace (Nassef et al., 2023: 26). Many such absentee owners in South Sudan purchased their herds with resources acquired during the war (Cottyn and Meester, 2021).

Either way, the key point is that terms such as 'farmer–herder conflict' imply a homogeneity in each of the groups involved that is not realistic. Both livelihoods comprise a complex mix of individuals and social dynamics, shaped by factors such as age, gender, wealth status and generational roles, among other things (see Flintan et al., 2021). Such internal social dynamics are, in many contexts, far more significant than wider inter-group dynamics or framings. Benjaminsen and Ba's (2019) work exploring the linkages between the jihadist insurgency in Mali and pastoralist groups is a key example of this. They explore how social cleavages between pastoralist elite and non-elite (related to land access and land fees) have encouraged economically disadvantaged clans to embrace the ideology of some non-state armed groups, particularly ideas of emancipation enfolded within an anti-state, anti-elite discourse.

Importantly, creating policy in relation to these kinds of dynamics is usually not feasible in generic terms (that is, based entirely on sweeping profiles and categories). Mayhew et al.'s (2022) examination of youth radicalisation in the Sahel emphasises this point, and the need for policy related to conflict to be shaped with geographical specificity, with the understanding that environments conducive to youth radicalisation emerge from discrete sets of interactions between economic conditions and political dynamics within broader milieux of thought and action.

2.2 The role of conflict analysis

Improving conflict analysis has real-world operational implications. Indeed, Nassef et al. (2023) point to the role that narrow analyses can play in misdiagnosing problems and penalising particular livelihood groups. The regularly recurring reductionist theme of 'pastoral mismanagement' of resources and landscapes as a core driver of conflict is a key example of how negative narratives rooted in colonial rationalities and approaches continue to shape policy and practice in consequential ways. Improvements in both the quality and consistency of the kinds of conflict analysis informing programming (as called for by Cao et al., 2021) will emerge from a more careful appreciation of how livelihood, land, politics, trade and criminality all shape each other in situations constrained and impeded by the legacies of such harmful preconceptions. These include assumptions about the function and risks of mobility and the values shaping livestock ownership and resource management.

This negative impact of shallow conflict analyses is highlighted in Cao et al.'s (2021) exploration of conflict blind spots in climate adaptation finance. They point to multiple instances across multiple countries where climate and environmental projects implemented without careful or detailed conflict analysis have led to negative outcomes. In the drylands, where access to communal resources is so often and so widely threatened by new commercial interests and processes of privatisation, the risk of limited or piecemeal conflict analysis is particularly urgent. Given the close entanglement of conflict and climate, it is also troubling that so many multilateral climate funds – and indeed many bilateral donors – tend not to allocate funds for conflict-affected areas. These are situations where such funds are most needed (Quevedo and Cao, 2022). One solution is the development of new donor strategies that do better at foregrounding conflict dynamics.

More widely, a more 'joined up' approach promises improved impact. Indeed, Opitz-Stapleton et al.'s (2023) exploration of pathways to climate-resilient development in conflict-affected areas highlights the successful use of conflict-sensitive inclusivity measures in post-disaster recovery and relief operations in Pakistan. Critically, effective conflict sensitivity analysis does not just mean considering the risk of conflict to a development programme. It should also comprise a careful appreciation of the risks that new programming might bring via its position amid existing conflict dynamics. The prioritisation of analyses that focus solely on possible impacts of conflict escalation on investments and staff, rather than understanding interventions as active forces within a complex conflict-affected situation, is a barrier to more effective programming (Cao et al., 2021).

As part of this, one key question is whether a better understanding of what is possible in high-risk areas – and indeed more examples of successful programming – would raise risk appetite. Evidence from across SPARC highlights the potential of more collaborative working in conflict settings, across different levels and sectors, and the need to overcome the unfortunate tendency in many contexts for siloed, unconnected planning and practice (see Quevedo et al., 2023; Mohamed et al., 2025). Case studies that demonstrate successful, context-sensitive approaches perhaps hold the key to ensuring that areas deemed to be insecure or conflict-prone are not left behind.

Importantly, it is not always the case that good contextual analysis is not available. Pain and Levine (2024) emphasise that poor programme design often stems from a failure to adopt existing analyses and incorporate them into decision-making. Meanwhile, Davies et al. (2024) highlight the need for programmes and institutions to do better at recognising the roles they play within the political economy of conflict and prioritise systematic conflict analysis in a manner that shapes both overall strategy and day-to-day decision-making. A pertinent

BOX 4. WHAT DOES EFFECTIVE CONFLICT-SENSITIVE PROGRAMMING LOOK LIKE?

Flooding in Pakistan

In July and August 2010, Pakistan faced unprecedented floods, impacting over 20 million people and resulting in forms of resource scarcity that threatened to provoke violence. Environmental scarcity resulted in strained relations between tenants and landlords and magnified wider structural inequalities (see Arai, 2012).

Rebuilding lives and livelihoods effectively in the aftermath of this flood meant foregrounding the heightened risk of conflict and understanding the core underlying dynamics leading to these risks. The emergency response plan was able to do this effectively, building partnerships between local and international stakeholders to avoid the co-option of aid distribution and prioritising the most vulnerable sectors of the population throughout (see Opitz-Stapleton et al., 2023).

Storm Daniel in Libya

In September 2023, Storm Daniel resulted in catastrophic flooding in Libya, and particularly in the city of Derna, in eastern Libya. Thousands were killed, and tens of thousands were displaced. In a context of Libya's fragmented political system (comprising rival governments) and deep political rifts, this crisis threatened to provoke conflict through the politicisation of aid, unequal access to support and the exacerbation of mistrust.

Humanitarian actors, including United Nations agencies, international NGOs and local and national actors, deployed a conflict-sensitive response, taking care to work across political divides in a neutral and transparent manner, avoiding overt political alignment. Some of the more successful strategies in this response included participatory assessments and inclusive planning, and a communication strategy keenly attuned to the conflict risks inherent in the situation (Peaceful Change Initiative, 2023).

question to ask when thinking about how to make this a reality is where the barriers lie in each instance (i.e. whether they emerge from time constraints, a lack of resources or systemic dynamics that work to restrict working parameters).

2.3 Envisioning peace: pluralism, governance and care

What should peace look like in the drylands? The question is deceptively simple. This is partly because there are forms of overarching peace that are broadly negative at the community level, comprising everyday violence and oppression. However, in a much more general sense, it is also true because the ways in which peace is imagined are plural, contextually dependent and often contested. As an ideal, peace is shaped by histories, values and lived experiences.[20] In seeking to emphasise these points, and to challenge 'top-down', donor-oriented forms of peacebuilding that conceptualise peace in totalising terms, much research over the past two decades has advocated for new approaches that focus on local perspectives and aspirations (MacGinty and Firchow, 2014; Lemon, 2023). This 'local turn' continues to pose critical

20 Johan Galtung's (i.e.1969) influential work on peace and conflict remains a critical source of ideas and examples of relevance to programmes in the drylands. His concepts of 'negative' and 'positive' peace are particularly relevant, with negative peace reflecting simply the absence of conflict, while positive peace is much more about the presence of social justice and equality, and indeed the elimination of forms of structural violence. His fundamental premise that the word 'peace' is used too loosely and non-specifically remains applicable (cf. Krahmann and Podder, 2025).

questions in terms of how peace is sought and indeed measured (Thurston, 2022; Krahmann and Podder, 2025).

In the drylands, moving beyond ubiquitous conceptions of peace does not mean accepting that violence and conflict are somehow endemic. Rather, it means adopting a more caring (as opposed to controlling) approach, which is less about reaching a stable, predefined end point, and more about understanding and investing in processes, institutions and practices that make sense to those impacted by conflict (cf. Scoones, 2023; see Table 1). Importantly, and as we emphasise at numerous other points throughout this report, this should never mean directing all efforts purely towards local contexts and disregarding broader systemic dynamics. Instead, problems that are defined and measured at the local level, in ways that make the most sense to those facing them, must be addressed at multiple different levels, including, if necessary, national policies and laws, and relationships shaping regional coordination.

A key part of this, and an often articulated point in analyses of conflict and peacebuilding in the drylands, is that various long-standing, socio-culturally situated customary institutions play vital roles and must be better accounted for. SPARC research has explored many such institutions, seeking to understand their changing roles amid different forms of conflict. A common theme across many case studies and contexts is the ways in which communities navigate messy, complex legal contexts in which different laws and systems of governance have come to be entangled (i.e. those deriving from formal state power and those deriving from pre-existing customary frameworks). For example, Opitz-Stapleton et al. (2022) note how mediation in violent conflict in Somalia takes place via a combination of Xeer and Sharia law, with a large proportion of their respondents reporting a high level of confidence in this approach.

This adaptive navigation of different systems takes for granted a sense of fluidity in terms of boundaries of jurisdiction, ownership and decision-making power. Ultimately it takes place amid forms of legal pluralism guided by precedents; the validities of these precedents are

TABLE 1. CONTRASTING APPROACHES TO DEVELOPMENT: CONTROL VERSUS CARE

Control	Care
Predictable risk, stable, static, linear time	Uncertain, non-linear, complex, mobile, diverse temporalities
Technocratic, singular, modernist development	Multiple, alternative development pathways
Top-down planning blueprints	Open-ended, flexible, adaptive, deliberative, participatory
Narrow, disciplinary expertise	Diverse, multiple formal and informal knowledges
Individualised, privatised	Collective, networked, collaborative social relations
Mostly technical interventions	Social, cultural socio-technical innovation processes
Humans and nature separate; independent of contexts	Entangled human–nature relations, embedded in context; emotions and affective relations
Closing down to hubristic, standardised approaches	Humility, opening up to possibility, hope, conviviality

Source: Adapted from Scoones (2023).

Fulani cattle and settlement, Kano, Nigeria. Photograph by Samuel F. Derbyshire.

agreed on collectively as and when necessary, or indeed disputed. Challenges emerge when efforts to recognise customary governance engender processes of formalisation that reify systems that were previously not so rigid. In the following section, we discuss the implications of this fraught process in relation to tenure security. While tenure insecurity clearly leads to other forms of insecurity, efforts to formalise local legal systems can also transform them into structures that work in new, negative ways, opening the doors to new forms of corruption and criminality and undermining the functions they previously served (Nassef et al., 2024). Thus, while it is clearly critically important for future peace that pastoralist land tenure is recognised and secured, the question of how this should be achieved remains complex and context-specific. In most instances, the best approaches acknowledge and leverage such complexity, rather than ignoring it or seeing it as a problem.

The challenge of navigating different forms of governance also arises as a key theme in the case of water development in northern Kenya and southern Ethiopia, where SPARC research demonstrates that a lack of recognition of existing forms of water governance (the Borana Deeda system) on the part of those establishing new water infrastructure has led to situations in which these customary systems are undermined, leading to new forms of resource-based conflict (Wachira et al., forthcoming). Here, as in many other contexts highlighted by SPARC research, complex, interconnected problems addressed through simple, generic interventions were exacerbated or transformed into new sets of problems.

One key lesson with regards to peacebuilding is that resource scarcity can lead to intensive collaboration as much as it can lead to conflict. Approaches based on a vision of 'positive peace' (i.e. those not geared simply towards creating an absence of conflict but rather supporting and establishing cohesion and social justice) work to understand where these existing forms of collaboration are, what rules and values shape them, and how they might be supported (Galtung, 1969; see Box 5). The challenge is developing peacebuilding strategies

BOX 5. WORKING TOWARDS POSITIVE PEACE

There are many examples of positive peacebuilding initiatives across eastern and western Africa which focus on building new forms of dialogue, trust and cohesion in situations impacted by conflict. Usually they take place on a small scale and address specific contextual dynamics.

FUDECO's work in Nigeria is a good example. Its work addresses long-standing conflict from multiple angles, seeking to promote peace through initiatives that range in focus from education (to reduce radicalisation) to a new cultural festival that promotes communication and dialogue while celebrating cultural values. Similarly, the Lake Turkana Cultural Festival in Loiyangalani, northern Kenya, established through partnerships between the county government and various NGO partners, provides space for inter-community dialogue in a context of fraught inter-ethnic tension and recurrent conflict. Further north in Kenya, the Catholic Church has worked with communities in Ileret, close to the Ethiopian border, to facilitate an innovative programme of homestays between families from Daasanach and Gabra communities. This programme has served to build bonds of friendship, camaraderie and trust in a context previously defined by animosity. It has yielded very promising results, with support from local leaders.

that are based on compromise, and which articulate with local values, institutions and norms without working to refabricate them in a manner that reflects inflexible preconceptions. As we noted above, recognising the critical significance of existing forms of customary governance should never mean reducing all problems to ways of supporting or improving these kinds of governance. This is particularly the case in contexts of inter-ethnic conflict and transboundary conflict (see Opitz-Stapleton, 2023), where the most effective target for peacebuilding is less likely to be individual forms of governance (whether customary or otherwise) and more likely to be the overarching socio-political and economic relationships connecting multiple governance systems across borders and boundaries.

The following section builds on this discussion of governance and legal pluralism with a specific focus on the question of 'resilience' – an ambiguous and yet widely used term with both negative and positive implications. It explores the changing ways in which pastoralists and farmers manage a fast-moving domain of dangers and opportunities given the characteristic environmental volatility of the drylands, and how their efforts might be better supported in the years to come.

3. RESILIENCE

'Resilience', like 'peace', is an ambiguous and contested term. We might understand it as a quality that emerges from a set of interlocking characteristics pertaining to different elements of the varied socio-ecological systems that underlie pastoralist and farming livelihoods. Resilience means healthy environments and well-managed natural resources. It means social cohesion and healthy forms of cooperation and mutual support. It means a working social contract, and the efficient functioning of governance systems at multiple levels in dealing with a dynamic and changing terrain of challenges at the local level. It also means vital 'customary' or 'informal' institutions which shape everything from the management of grazing lands and water points to the redistribution of resources and locally led emergency assistance during times of crisis.

This latter point is particularly key and has been explored at length through multiple pieces of SPARC research. Robinson and Flintan (2022), as we have noted, highlight the critical role of customary pastoral land tenure in eastern Africa in facilitating the management of highly variable resources. They explain that such systems:

> *reflect the mobile livelihood system and the uncertainty, variability, and low density of resources, often comprising loose sets of collective institutions characterised by principles of flexibility, adaptability, multiple use by multiple users, and sophisticated layering of rights over the same resource. (2022: 2)*

In South Sudan, two years of research identified a variety of locally led strategic adjustments and adaptations that contribute to an overall sense of dynamism in the ways in which pastoralists manage and respond to shocks, including the regrowth of livestock herds partly through support systems based on kinship (Humphrey et al., 2023).

The varied nature of what contributes to resilience, and the corresponding diversity of forms of vulnerability that might be seen to be blocking it, ensures the term remains vague and flexible in the aid sector, and appropriately so. It shapes programming relating to everything from chronic poverty to environmental shocks. But Levine (2022: 12) notes a worrying trend of envisaging a 'resilience sector', within which a 'language and measure of resilience are being generically applied through the use of abstract measurements that seek to capture dimensions of resilience that can be used in any situation of vulnerability'. Just because resilience might relate to multiple different characteristics or vulnerabilities does not mean that methods of assessing and measuring it should be generic. On the contrary, evidence from across SPARC emphasises how much of a barrier such generic applications of resilience thinking is, advocating instead for the need for context-specific understandings of problems and for locally relevant and specific (not vague and fuzzy) measurements of success.

Resilience thinking should help us work in relation to systems and system dynamics, and yet the reality in much development programming is that it ends up doing the opposite. While contextual analyses are increasingly common, their impact on programming is often compromised by structural problems in aid decision-making (Levine and Pain, 2024).[21] Rather than developing programmes that respond to clearly defined local needs and aspirations, organisations find themselves engineering solutions in relation to standardised metrics and objectives. This is despite the approaches articulated in widely accepted policy

21 This is a similar point to the one we raised previously about the lack of a meaningful role for detailed, nuanced conflict analyses.

BOX 6. POLICY, INSTITUTIONAL CULTURES AND SYSTEM DYNAMICS: WHAT REALLY SHAPES EFFECTIVENESS IN DROUGHT RESPONSE?

Good policies are critical but are never enough on their own. SPARC research has asked why well-formulated and widely adopted policies have led to limited implementation and overall progress, highlighting some of the ways in which dynamics within and between different development and humanitarian institutions work to restrict possibilities and undermine initial objectives (see Mohamed et al., 2025; Mohamed et al., forthcoming). Exploring disaster management in the Horn of Africa, and particularly the ways in which the IDDRSI shapes action, this research has set out important priorities for the years ahead.

The world of disaster management is extraordinarily complex, spanning multiple levels and scales of action. Amid this complexity, the factors that shape effectiveness (or lack of effectiveness) are often not the goodness of intentions or frameworks but rather institutional cultures, relationships, power dynamics and interests. It is critically important that these dynamics are better understood and seen as key grounds for improvement, particularly now, as we enter a new, uncertain era of radically restricted aid budgets and reorganised objectives. In the urgency of transition, space must be made for introspection, and for the development of new forms of collaboration across institutions, sectors and regions. The systemic dynamics and institutional incentives of tomorrow must avoid a situation in which delivery is rewarded over effectiveness.

frameworks such as the IGAD Drought Disaster Resilience and Sustainability Initiative (IDDRSI) framework. Indeed, Mohamed et al. (2025) describe clear disconnects in the Greater Horn of Africa between the kinds of ideas and ambitions set out in IDDRSI and the reality of their implementation, on the other side of complex and obstructive institutional dynamics.

3.1 Scales and systems

What are the outcomes of this unfortunate trend in resilience programming? For water infrastructure in northern Kenya, it has resulted in the prioritisation of surface-level technical solutions at the expense of an appreciation of the wider governance systems and livelihood dynamics that actually shape water management and use among pastoralists. Indeed, Wachira et al. (2024) ask whether new water supplies are the solution for pastoralists' resilience or part of the problem. Their work examines the impact of significant investments in water infrastructure, including boreholes and solar systems, aiming to enhance resilience to drought in the drylands. They point to pressing issues emerging from single-path, technocratic thinking, including the role of poorly placed water points in creating new settlements in areas traditionally reserved for grazing, increasing vulnerability to drought in the long term. They also note the implication of new water sources in increased resource-based conflict and insecurity between host and visiting communities.

In this case study, as in many others, a lack of meaningful community consultation and a disregard for traditional governance worked to undermine local ownership. In failing to address broader political and social contexts, such purely technocratic solutions result in fraught and unsustainable forms of development. This point is acutely significant for women, who, particularly in pastoralist contexts, are often primarily involved in the collection and management of water. While resilience might be seen to be enabled by new technologies, facilities or infrastructures, it is important to work from the first principle that it is really driven by social forces and dynamics that flow much deeper. In other words, it emerges not from

resources themselves but from the human relationships of mutual trust and obligation that are built around them. These are not rigid or passive but rather open-ended and continually negotiated (Derbyshire, 2020).

Such a principle raises particularly pertinent questions with regards to the future of land in the drylands, especially as new processes of expropriation, privatisation and rangeland fragmentation are beginning to take shape in multiple areas. Alulu et al. (2024) have demonstrated a direct link between forage condition and household food security in northern Kenya. Their research shows that the health of the household, in a very straightforward sense, is tied to the health of the rangeland – a perspective that closely articulates with the 'one health' agenda (i.e. Zinsstag et al., 2016). This relationship does not simply flow one way. For forage to continue nurturing pastoralist communities, via their livestock, it must be managed and maintained. In an ecological context of profound variability, the most effective way of doing this is via collective, long-standing tenure agreements that govern access flexibly and responsively, ensuring the efficient conversion of asymmetrical resources into food and other livestock products (cf. Krätli, 2015; Scoones, 2023).

Diverse SPARC case studies from across Africa have unravelled the complex ways in which policy processes are (or are not) engaging with the difficult question of pastoralist land rights and tenure security.[22] In many cases, such processes have been characterised by a drive towards formalisation. As we noted above, this is a difficult and often fraught ambition that struggles to account for overlapping institutions (formal and informal), rights, systems and processes of active, never-settled negotiation for access (Robinson and Flintan, 2022). Tenure formalisation, like the development sector more broadly, is often predisposed to see complexity in decision-making and cooperation as a problem that must be simplified and managed, rather than as simply the most reasonable and effective way of dealing with an equally complex and unpredictable array of challenges.

Complexity is in fact a critical enabling feature when it comes to resilience in the drylands. It is something that must be leveraged, perhaps even bolstered, not worked with begrudgingly. With regards to collective tenure, the key point is that pastoralists across East and West Africa are actively negotiating various forms of tenure insecurity in strategic, innovative and context-specific ways. In some instances, the commons are being recreated in place of newly privatised grazing lands; in others, private property is being used strategically to access broader rangeland resources; and in yet other contexts, pastoralists are 'forum shopping' – that is, choosing between multiple overlapping legal frameworks to negotiate the best outcome. In most instances, seeking to simplify or reduce this increasing complexity of laws, barriers and changing strategies is an inefficient way of defending pastoralists' rights to resources. One-size-fits-all solutions simply do not work. Instead, work should focus on building pastoralists' capacity to navigate new pressures on their own terms (Flintan et al., 2021).

Having said this, it is equally important to recognise that action needs to be taken at multiple different levels, or rather, in multiple different parts of the varied systems that shape these issues on the ground.[23] There needs to be more formal, high-level recognition of collective rights for pastoralists. National and international policies should recognise and support

22 Nassef et al. (2023), for example, explore the connections between farmer–herder conflict and land tenure across different contexts in Africa (see also Nassef et al., 2024). Sulieman et al. (2024) explore the critical role of collective tenure, governed via 'unwritten customary rules', in Sudan, where formal tenure laws are neither evident nor enforced. Sawadogo et al. (2024) explore evidence from the centre-south region of Burkina Faso, where pastoralists graze according to customary, collective rights on land that is privately owned. They note how, while this situation of customary tenure aligns with the Land and Rural Orientation Plan, it nevertheless remains insecure and is threatened by multiple factors.

23 Indeed, Flintan et al. (2021) point out that it is far more important and viable, in most instances, to focus on achieving legal protection for 'linchpin resources' such as dry season grazing lands with permanent water access.

BOX 7. DESERTIFICATION: MYTH OR MENACE?

'Desertification' is a concept that is both seductive and emotive, even if the widely used definition – 'land degradation in drylands resulting from various factors, including climatic variations and human activities' (Mirzabaev et al., 2019; cf. Reynolds, 2013) – is far more mundane.

Some dryland areas are very probably being degraded: they are experiencing 'reduction or loss of the biological and economic productivity and complexity of terrestrial ecosystems' (Reynolds, 2013). 'Some', however, is the operative word, since the extent of degradation in the drylands is not known accurately but may be as little as less than one tenth:

> *The multiplicity and complexity of the processes of desertification make its quantification difficult. Desertification hotspots, as identified by a decline in vegetation productivity between the 1980s and 2000s, extended to about 9.2% of drylands (±0.5%), affecting about 500 (±120) million people in 2015. (Mirzabaev et al., 2019)*

The problems with the term 'desertification', when used to describe these forms of degradation, arises from its historical association with hypotheses that the arid lands are much more widely subject to degradation, that deserts are increasing, and that the overwhelming reason for these changes has been, and continues to be, the activities of people living in the drylands.

The idea that deserts have been created primarily by overuse and misuse of the drylands by humans goes back hundreds of years (Davis, 2020). Modern formulations come from scientists working in colonial Africa in the early 20th century. Colonial foresters observed the Sahel and concluded it was deforested and degraded by farmers and herders. Stebbing, a forester with the Indian Forestry Service, travelled through West Africa in 1934, during which time he was convinced that population pressure was extending the tilled area, reducing fallows and leading to land becoming too infertile for cropping. It would then be heavily grazed and browsed, and annually fired, leading to ever less productive bush that would yield to sand dunes. Stebbing believed the desert was encroaching at 1 kilometre a year over the last 300 years, a rate of advance that was accelerating. He proposed planting east–west forest belts, 15 miles thick, along the Anglo-Franco border (Swift, 1996).

Following Stebbing's recommendations, an Anglo-French Forestry Commission did extensive fieldwork in 1936–1937 along the Nigeria–Niger boundary, immediately after a very wet 1936 wet season. The Commission saw variability, not trends: much of Stebbing's argument was thus rejected. Yet by 1949, Aubréville, a Commission member, had hardened his views and coined the term 'desertification'.

Interest in desertification died down for two decades during wet spells in West Africa until the 1968–1973 droughts revived interest. Two Sudanese studies were influential: Lamprey's reconnaissance carried out for UNESCO and the United Nations Environment Programme, and the work of Fouad Ibrahim in northern Darfur in 1976–77 to 1982. They observed deforestation and moving sand dunes to reach similar conclusions about anthropogenic desertification. These studies were, like those of Stebbing, affected by observing the drylands during drought, then comparing the extent of vegetation under drought to a baseline from a previous year that was considerably wetter. Subsequent re-working and re-evaluation of their evidence, comparing years of similar rainfall and observing changes in vegetation over time, found no trends at all (Swift, 1996).

But contrary evidence has done little to calm fears of alarming and accelerating rates of human-caused desertification. International concern led to the United Nations Conference on Desertification being convened in 1977, at which Kenya's country position paper made it clear what it considered the key cause of desertification: 'improper livestock and range management' – pastoralists themselves. This conference later led to the 1994 United Nations Convention to Combat Desertification, an international framework served by a secretariat which has organised 16 conferences of parties between 1997 and 2024.

Nevertheless, evidence on the degradation of drylands is surprisingly sparse, with estimates always hedged with qualifications (Mirzabaev et al., 2019). This is not surprising given that the drylands are much affected by erratic rainfall and wildfires. The state of vegetation at any moment reflects in large part very recent (and random) events. Many and detailed observations over time are needed to establish a trend such as degradation.

Meanwhile, in West Africa's Sahel, observations over the last 30 or so years show signs that the Sahel may be greening, not browning (Olsson et al., 2005; Mirzabaev et al., 2019).

pastoral land rights, while being careful not to impose rigid systems that undermine local, informal governance structures. Policy efforts to enhance tenure security should focus on community cohesion, inclusive decision-making and maintaining mobility, all of which are key elements of resilience in drylands pastoralism.

Clearly, while it is critical to understand and even measure resilience at the local level, it is not sufficient for actions to be limited to this level alone. The problems pastoralists and farmers face in the drylands are always partly shaped by processes taking shape on a much vaster scale, from climate change to economic policy. Wiggins et al.'s (2023) analysis of food prices in Mali and Sudan, for instance, describes how the prices of cereals doubled between 2019 and 2022, noting that two of the major contributing factors to this were domestic economic policy and international trade embargos. In this context, trying to build capacity or improve access at the local level may help in the short term, but the root causes of strife can only be dealt with by addressing different parts of overarching economic and political systems. Supporting the resilience of farmers and herders in the drylands means taking local context seriously in programming (including local social and economic differences and power dynamics; see Pain and Levine, 2024), and indeed measuring success in ways that make sense to target populations, but it also means identifying and addressing the factors shaping local challenges at multiple other scales. This includes other parts of local ecological and economic landscapes that may be entangled with the particular issue at hand (the way rangeland condition is entangled with water infrastructure, for example) as much as it does laws, policies and approaches that are formulated at the highest levels.

3.2 Shocks

The point that resilience thinking should require us to adopt much wider lenses of analysis and more holistic approaches to various issues than is currently the case provokes important questions about responses to environmental shocks. New approaches to the long-standing challenge of drought have been oriented around predicting and acting in advance of the kinds of crises it provokes. The aid modality of 'anticipatory action', which tends to be linked closely to overarching early warning systems (through mechanistic action triggers), is nowadays considered a critical component of resilience in the drylands.[24] And yet SPARC research has challenged the kind of linear, prediction-based interventions it comprises, suggesting that

24 For a detailed review of the challenges and potentials of anticipatory action, see Levine et al. (2020).

progress needs to be made to better account for the socioeconomic heterogeneity of the drylands and the diverse, unpredictable range of crises that intersect at any given moment to impact people's livelihoods and daily decisions.

A study undertaken across three areas in north-eastern Somalia between 2020 and 2022, for example, emphasised the diversity of the actions taken and livelihood pathways pursued by local communities as they grappled with a complex and unpredictable crisis that had no discernible trajectory or obvious end point (Levine et al., 2023). Here, as in pastoralist contexts elsewhere across the drylands, decision-making took the form of constant improvisation rather than the sort of scripted decision-making that is perhaps implicitly assumed to take place. Answers to the question of what should be done to prevent a worsening crisis in a situation such as this are neither singular nor straightforward. Knowing when to act (because an accurate forecast has been proffered) does not mean knowing what to do or indeed having the capacity to do it. The conversation, Levine et al. suggest, needs to shift from doing to facilitating.

In other words, rather than asking what kinds of actions should be planned by implementing organisations in advance of catastrophic drought, we should be asking how do local populations already manage complex and unpredictable crises in the drylands, and what factors are limiting their efforts? The spectre of famine is, even today, perhaps too often viewed as purely environmental in nature, its solutions thus perceived to be changing people's existing livelihood activities rather than grappling with underlying systemic issues and causal factors (in many cases, this takes the form of efforts to diversify livelihoods away from pastoralism towards more 'sustainable' options).[25] This approach to support and investment fails to grasp the political failures that really shape vulnerability to drought, and the legacy of historical marginalisation, which has worked to limit pro-pastoralist development in favour of solutions that take stability and predictability for granted as positive enabling factors. Climate vulnerability is not an inherent feature of drylands pastoralism, but rather an outcome of policy that fails to recognise and support the ways it navigates unpredictable conditions through fluid, open-ended transformation.

Perhaps more significantly, though, this approach also tacitly rests on a monolithic view of pastoralism and pastoral knowledge that directly contradicts the lived realities of herders in the drylands. Assuming that pastoralism comprises a straightforward reliance on livestock for food and, more broadly, a bounded social practice through which entire communities or families disregard other economic possibilities is a grave mistake. SPARC research has highlighted diverse evidence of networked, relational engagements with a wide variety of resources in pastoralist contexts, within which livestock always serve as one among many sources of capital. A review of drought management in northern Kenya since the early 1980s emphasised how this is not a new feature of drylands pastoralism, which is resilient precisely because it continually reconfigures itself in relation to the changing world around it (Derbyshire et al., 2024). This process, which might be termed 'relational resilience', is not something novel, despite clearly taking on new forms in recent years, but must be better understood and supported by governments and NGOs.[26]

25 This is despite the seminal work of Alex DeWaal (1989) on 'dark famine', and indeed Amartya Sen's (1981) earlier work foregrounding the social and economic factors shaping famine. More recently, Majid and McDowell (2012) have underlined direct causal links between ongoing forms of marginalisation and famine in Somalia.

26 Semplici et al. (2024) have recently noted how the term 'resilience' is particularly relevant to pastoralism, given its capacity for encompassing the key features of pastoral livelihoods, which are uncertainty, complexity and dynamism. They frame 'relational resilience' as a feature of pastoralism that is 'dependent on context and the fluid overlapping of multiple domains (e.g. everyday practices, socio-cultural dimensions, governance processes' (2024: 11–12), suggesting that such a perspective makes it easier to identify both enabling and constraining factors.

Drylands communities tend to manage uncertainty, including recurrent droughts, through networked moral economy practices that enshrine 'reciprocity, redistribution, social insurance, and the formation of identities that are essential in helping people survive and thrive' (Mohamed, 2023: 81). In Somalia, in 2021, this included the pooling of funds and a reliance on credit issued by local shopkeepers (Weingärtner et al., 2022). However, it also involved a different kind of sharing – that of information on coming disasters (such as floods and locust swarms) and viable options for future actions (including places to move livestock, with good pasture and water).

The reality of this relational approach to disaster management is often overlooked by interventions that focus on individual and household-level vulnerability, and by anticipatory action protocols that take too limited a view of local or 'indigenous' knowledge, conceiving of it as a set of time-tried, traditional practices (such as 'coping strategies') rather than as a collective, dynamic negotiation of changing circumstances through creative improvisation.[27] Equally, resilience programming that does not orient itself at least in part towards these vital, networked practices is prone to make the mistake of taking too bounded a view of the actual locus of support being offered, thereby drastically limiting any impact. Levine (2022) underlines an excessive focus on 'communities' shaping much resilience work, which fails to account for the relationships and networks that actually shape resilience and build social capital at the local level before and during crises. These usually comprise different communities and economic activities, in many cases spanning sizeable diaspora networks. Wider work has emphasised the gendered nature of such networks, and the critical roles played by women's groups in navigating various markets during difficult times (see, for example, Mohamed and Nori, 2025).

Across SPARC research, a prevailing proposition for dealing with these various issues and improving resilience programming has been the development of new participatory approaches. Bedelian et al. (2023), for example, emphasise the immense potential of Kenya's Ward Development Planning model – a participatory planning approach already implemented in five of Kenya's counties to improve pastoralist participation in government planning processes. More widely, Hakiman and Sheely (2023) highlight the complexity of getting such models right, noting how formative and yet often unrecognised the roles of ground-level implementers are, and how important it is to focus on addressing genuine governance gaps at an institutional level. Meanwhile, Derbyshire et al. (2023) point to the potential of new participatory approaches to anticipatory action, which might take a more open-ended picture of pastoral knowledge as their starting point.

One outcome of such improved participatory approaches, and a general improved orientation towards existing knowledges, practices and dynamics in the drylands, might be technical interventions that are better suited to the needs and ambitions of pastoralists. 'Afriscout' – a recently developed digital application that provides herders with real-time visual data on rangeland condition – is noteworthy here, in that it seeks to cater to locally defined needs much more than many crisis-oriented protocols and programmes currently do (Turnbull and Harrison, 2024). In relation to resource management, Participatory Rangeland Management – a flexible process developed in Ethiopia in 2010 (and now successfully piloted in multiple countries) which aims to improve the management of resources and thereby tenure security – has been shown to enhance productivity and governance and slow down elite land grabbing (Flintan et al., 2022: 45).[28]

27 This is explored in Derbyshire et al. (2023), along with possibilities for new approaches that view pastoralist knowledge differently.

28 It is also important to note that such participatory approaches do not only apply to 'solutions'. A similar approach underlies work by Shikuku et al. (2024), which aims to crowdsource data to monitor drought impacts.

BOX 8. HOW CAN AFRICA MANAGE THE TRANSBOUNDARY CLIMATE RISKS IT FACES?

Climate risks cascade across international borders, making them 'transboundary' in nature. Such transboundary climate risks (TCARs) pose growing threats to economic development, trade, food security and infrastructure. Stronger international cooperation is urgently needed throughout the African Union (AU), including regional communities and Member States, to manage shared risks and build resilience. How can this be achieved? SPARC research from Opitz-Stapleton et al. (2023: 9) sets out six recommendations:

1. Pan-African risk assessment

The AU Commission, African Union Development Agency New Partnership for Africa's Development (AUDA-NEPAD) and partners should facilitate a pan-African TCAR assessment and publish a flagship report to profile its findings and recommendations, including on the roles that AU institutions, regional economic communities (RECs), Member States and partners need to adopt in building resilience to these risks.

2. TCAR indicators

The AU institutions and RECs, working with research and development partners, should develop TCAR indicators, with the explicit intention of incorporating them into the AU monitoring, reporting and learning dashboard currently under development.

3. Integration guidance

The African Group of Negotiators Expert Support, in collaboration with AUDA-NEPAD and partners, should produce and pilot guidance on how to integrate transboundary and cascading climate risks into risk and vulnerability assessments and adaptation plans at local, national, regional and continental scales.

4. Knowledge exchange

The AU institutions and RECs, with support from development partners, should convene a knowledge exchange programme on transboundary and cascading climate risks in Africa, running to 2032, to document the risks being faced and responses to them.

5. African priorities

The Intergovernmental Panel on Climate Change (IPCC) National Focal Points, African Group of Negotiators and other stakeholders should identify Africa's priority knowledge gaps on TCARs to facilitate engagement in negotiations of the United Nations Framework Convention on Climate Change and IPCC processes, including proposing an IPCC special report on the topic.

6. Data management plan

The AU institutions, the African Ministerial Conference on Meteorology, the United Nations Economic Commission for Africa and other partner organisations should design a data management plan to strengthen the capacity of researchers and policy-makers to assess progress towards the indicators developed and the research needs identified.

Nevertheless, it is worth re-emphasising that resilience is never shaped purely at the local level. People in the drylands manage shocks with the means at their disposal, and yet the risks they face in doing so are often transboundary in nature. They might include, for example, cross-border livestock and crop disease, various forms of conflict and associated regional displacements. Such risks cannot only be managed via approaches that seek to enhance local capacity, whether in the form of new technologies or planning models; they can only be dealt with via improved international coordination. In this vein, Opitz-Stapleton et al. (2023) set out

six recommendations that might enhance the ongoing efforts of African policy-makers, noting that the answer is not necessarily new policies, given that many strong policy frameworks already exist, including the African Union's Climate Change and Resilient Development Strategy and Action Plan (2022–2032). These recommendations include new pan-African risk assessment, new indicators and better knowledge exchange.

3.3 Markets and the 'resilient generation'

Equally important in terms of getting resilience right in the drylands is recognising the critical social and economic changes at play over the longer term and understanding that drylands pastoralism and farming (and indeed the wider agricultural systems in which they operate) not only look and function very differently in different economic, ecological and political contexts but also transform in their scope with each new generation. The well-documented fluidity of drylands livelihoods – to which SPARC research attests with ever more evidence – not only shapes their responses to volatile conditions and shocks but is also an active current driving the continual reconfiguration of core relationships and practices. As we outlined in the introduction to this report, pastoralism has always existed on a spectrum, with seasonal and longitudinal fluctuations comprising fundamental features of its longer-term outlook. This means that being a pastoralist today means operating amid and by means of multiple different economic pursuits and forms of subsistence, including emerging industries and markets.

There are multiple implications for the future. In their report on what they term the 'resilient generation' in the drylands across eastern and western Africa, Dupar et al. (2021) note how people under the age of 20 make up more than half of the population. This generation harbours great potential for positive change and yet is currently drastically underserved by governments and development agencies. They underline the existence of multiple economic opportunities that build on the strengths of drylands pastoralism and farming, including in the realms of tourism, renewable energy, and processing and service industries. They set out recommendations to help unlock these new opportunities by creating an 'enabling environment to secure young people's access to secure, decent work' (Dupar et al., 2021: 10). One key point here is that pastoralism, and particularly livestock trading, is already actively facilitated through the work of actors who span complex meat supply chains across the drylands. Not only is there great scope for investing in and creating more jobs in such value chains, as Dupar et al. point out, but ignoring them leads to misguided, and often unhelpful investments. This latter point was emphasised by Roba et al. (2017) in their exploration of the role of traders in pastoral economies, based on research undertaken in northern Kenya. They argue that many projects seeking to 'link pastoralists to markets' place too much emphasis on the producers themselves, without understanding the existing relationships and information networks that already shape their engagements with such markets – a key domain for more investment and improved coordination.

Importantly, in such cases the straightforward formalisation of relationships or markets tends not to be the best option, in the same way that it yields complex hazards in the sphere of tenure security. More beneficial would be policies and investments that aim to 'strengthen relations that structure information exchange to minimize information asymmetry' and to facilitate more informed decision-making (Roba et al., 2019: 42). Fundamentally, a less restrictive view of pastoralism must be adopted across the aid sector to engender this shift. Whether oriented towards diversifying away from pastoralism or supporting it as it is, the language of drylands development still often paints a picture of pastoralists as passive, removed populations, rather than actors already involved in complex, dynamic economic networks and practices involving diverse skills and specialisms.

Homesteads in Turkana, northern Kenya. Photograph by Samuel F. Derbyshire.

In the Sahel, Simonet and Carabine (2021) draw on data from Mali, Burkina Faso and Niger to emphasise the resilience of the regional livestock markets despite complex, protracted conflict. They note a positive trend towards regional integration, potentially tied to the 2013 Nouakchott Declaration on Pastoralism and the arrival of the Economic Community of West African States (ECOWAS) peacekeeping mission in January 2013. To further enhance this resilience, they set out recommendations that span livestock value chains, from strengthening early warning systems to developing new private–public partnerships and putting recently developed transhumance regulations into practice. Ultimately, they emphasise that improving the resilience of markets in the drylands requires a focus on relationships, information flows and capacity rather than merely infrastructure and technology (though these two things clearly matter).

A complementary set of recommendations is offered by Levine and Wiggins (2023), drawing on data pertaining to food insecurity from 14 countries at risk of food crises, food emergencies and famine (with a particular emphasis on Ethiopia, Somalia and Yemen). This work emphasises how food insecurity in these countries is mostly determined by domestic factors – i.e. people not having enough money to purchase food rather than there actually not being enough food. Given that sharp food price rises are often linked to poor harvests or conflict, or indeed both, they argue that there should be much more focus on local harvests and incomes and less on the international dynamics perceived to be shaping local food security. Partly, this means more investment in climate-smart agriculture and social safety nets, but it also means stimulating and supporting the non-farm economy, even (or indeed especially) during protracted conflict. Particularly important here is that aid during conflict tends to focus on individuals, farms and households rather than the much wider system dynamics shaping and facilitating trade (including the critical roles of traders themselves). Markets are crucial during conflict and serve as a fundamental means of 'getting by' for those navigating insecurity. There should be more consideration, Levine and Wiggins (2023: 4) argue, 'of what allows local economies to function in conditions of uneasy peace and intermittent violence'.

4. CONCLUSIONS

Amid growing pressures, the future of the world's drylands is still being written, its course dependent on choices made today. We noted in the introduction how a potent combination of climate change, exclusion and persistent negative framings of both the past and the future continue to work to limit the kinds of locally rooted positive change and progress that make sense to pastoralists and smallholder farmers. This report, along with an increasing array of other publications, has sought to think more carefully about what this context-specific progress looks like, and how it might be better enabled in the years ahead. Still, as we move past reductive negative framings, the growing pressures of privatisation and shrinking aid budgets represent serious combined threats that demand close attention. One of the more powerful enabling factors underpinning multiple different harmful agendas in the present era remains the hegemonic influence of old ideas, long challenged and debunked by research, about the inadequacy of the ways of life pursued in the drylands, and the urgent need for radical transformation.

In seeking to provide an alternative narrative, research across multiple disciplines has already emphasised the dynamic adaptability of drylands livelihoods, their unique capacity for harnessing and working with uncertainty, and their open, flexible orientation towards changing economic and political contexts. The SPARC programme has built on this trajectory of thought and action, setting out detailed analyses of contemporary issues, pragmatic solutions and new case studies that might shape future policy and practice. Where past research has underlined the need for broad shifts in understanding, SPARC has focused on the difficult question of *how* such new ways of thinking might be operationalised, and what they might mean in the messy, everyday contexts that constitute the reality of development.

The answer to this 'how' could never lie in a universal pathway or approach. Engaging seriously with the challenges of the drylands means recognising that shared problems and vulnerabilities play out in profoundly diverse contexts. Challenging narrow, negative narratives should not mean replacing them with vague, superficially optimistic ones. We must take the time to ask what a positive future – peace, prosperity and resilience – means for those with the most at stake, how progress towards it should be measured, and where and how action can support its realisation. The reflections that follow distil key insights from the research summarised in this report to help inform that effort.

Incremental progress

The drylands are often framed as unproductive, backward and in need of improvement via transformative, large-scale interventions, schemes and projects. Recent years have seen a proliferation of investments in such projects, ranging from mega dams to irrigation schemes, and from renewable energy projects to large-scale mining and resource extraction activities. Much more is planned in the years ahead, all justified in relation to broader narratives (either climate change or potential contributions to GDP) rather than local needs and aspirations.

However, evidence from SPARC shows that the real engines of prosperity and resilience in the drylands are pastoralism and smallholder farming. These often closely entangled agricultural production systems make the most of volatile, unpredictable conditions. The best way of enhancing them and enabling long-term livelihood sustainability is through small-scale investments aimed at achieving gradual, incremental progress, not large-scale, transformational, inflexible schemes.

Building peace from the ground up

In the same vein, the resolution of most conflicts is unlikely to emerge from efforts to impose new forms of control, since attempts to assert order in place of uncertainty often yield fragile, short-term outcomes and can even generate new forms of vulnerability. More enduring forms of peace are likely to come from working across multiple scales – from the local to the international – to support incremental, grounded approaches. Peace should not be imagined as a distant, grand objective, but rather as a series of small, more tangible improvements to daily life. Peacebuilding is rarely impactful if it aims to impose a one-size-fits-all solution or chase after idealised forms of permanent stability. Instead, effective peacebuilding in the drylands addresses the specific grievances that communities face, in ways that respect local knowledge and socio-political realities. It seeks to make gradual, incremental progress, with a focus on the nuanced needs and ambitions of those impacted by conflict.

Measuring what matters

Development programming often defines problems and measures success using generic language. Phenomena such as poverty, climate vulnerability and nutrition, for example, are all measured using standardised indicators developed to assess trends and priorities across diverse geographies.

While they are useful in building a long-term picture, basing the design of new interventions and programmes on such universal measurements can lead to serious limitations. While challenges may appear superficially similar from one place to the next, they are always shaped by context-specific factors and dynamics and thus require solutions that, above all else, make sense in relation to these local factors.

The profound social and economic diversity of the drylands demand specific, locally rooted metrics that make sense at the local level. This means defining what progress looks like in a specific place in collaboration with those who stand to benefit from it, and agreeing on reasonable indicators that might be observed during and after programmes to understand their impact.

Thinking local while acting across multiple scales

Defining and measuring success in more context-specific terms does not confine all action to the local level. Many barriers blocking creative innovation and adaptation in the drylands stem from much larger, systemic issues which are often shaped by national policy and international relationships. Many different kinds of transboundary climate risks, for example, including various conflicts and diseases, simply cannot be dealt with in a sustainable way at the local level alone. They require better coordination at a regional level.

Lasting impact requires thinking and acting beyond the local context. Investment and support will be more effective where interventions tackle locally defined issues at multiple levels, including the wider economic and political systems that shape them. In some cases, this may take the form of advocacy regarding economic policy or perhaps tenure security; in others, it might involve convening new multilateral agreements or commitments.

Networks

Social networks are vital in enabling people to navigate complex crises, including both conflict and drought. These networks rely on trust and social capital and are often, though not always, based on clan affiliation. They are also critically important for market traders, who rely on them for information and access to commodities.

Significant opportunities lie in better recognising and actively supporting social networks in the drylands. Development programming and private sector investment can do better at harnessing their existing roles across multiple domains, thereby becoming nimbler and more responsive to local needs. In livestock marketing, this could mean seeking to enhance real-time information-sharing through new platforms and tools. In disaster response and drought management, it could mean tailoring assistance to the networks that already shape resource-sharing, emergency assistance and crisis management. In contexts prone to conflict, it could mean fostering collaboration between local authorities, traditional leaders, customary governance structures and other stakeholders.

Collective practices and institutions

Collective practices and institutions – communal land tenure and shared responsibility – support the kind of distributed, adaptive decision-making that is necessary to manage the unpredictability of the drylands. Often investments and interventions focus narrowly on individuals or isolated issues, overlooking these collective dynamics. This fragmented approach risks undermining community resilience. Greater emphasis on collective governance and integrated, long-term solutions that build on local dynamics is essential for sustainable progress.

Flexibility in livelihoods and knowledge systems

The livelihoods shaped by these collective practices are not static or monolithic. They are open-ended and constantly adapting to shifting environmental, social and economic conditions. Drylands economies emerge from dynamic interactions between pastoralism, farming, trade and other subsistence practices. However, policies often rely on rigid categories and one-size-fits-all solutions that fail to recognise flexibility and interconnectedness – an approach that limits opportunities for innovation and growth. Rather than striving for stability or returning to 'normal' conditions, development strategies should embrace the fluid and evolving nature of drylands livelihoods. Supporting flexibility within livelihood practices – including by fostering cross-sectoral collaboration between pastoralists, farmers, traders and entrepreneurs – can enhance resilience and create synergies that benefit all parties.

Similarly, local knowledge – often framed as traditional or 'indigenous' knowledge – is not a static resource but a living, adaptive process that evolves with changing circumstances. Instead of seeking to simplify or codify and 'integrate' this knowledge, development strategies should aim to strengthen and support its dynamic role in decision-making.

Narratives

Many of the problems faced in the drylands today result from long histories of marginalisation and political failure. Even in contexts where new local political powers and forms of representation have emerged (and such contexts are many), the legacies of these histories are still profound.

Improving lives and livelihoods today requires us to take stock of the enduring power of these histories, and the narratives they carry. Drylands are often imagined as barren, unproductive places, rife with conflict and poverty. However, we suggest it is more accurate to think of them as places that are underserved by larger systems and neglected by policies developed far away from the lived realities of pastoralists and farmers. Many local solutions to current challenges exist and offer significant opportunities to those willing to provide investment and support in the years ahead.

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