

Anticipatory action in the drylands: steps toward centring pastoralist knowledge

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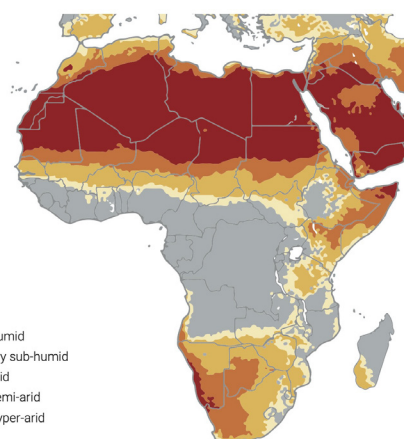
Background: drought, pastoralism and early warning

Drought has long been a characteristic feature of Africa's drylands. Pastoralists who live in these regions prepare for and manage such times of scarcity in diverse ways, deploying their networks, skills and multiple forms of information to strategically navigate a rapidly evolving situation. Their capacity to do this is nevertheless often greatly obstructed. Disasters themselves, from droughts to disease outbreaks, and from floods and conflicts to locust invasions, are occurring with increasing regularity and intensity across Africa's arid lands (Braimoh et al. 2018; IPCC 2019). These disasters compound each other but are also experienced by means of a range of other fundamental challenges stemming from long-term historical marginalisation, negative perceptions or narratives and associated restrictive policies (see for example Pavanello 2009).

Within this context, early warning systems and networks have, for several decades, played a critical role shaping national and international humanitarian interventions in the drylands (see Weingärtner and Wilkinson 2019). By integrating forecasting, disaster risk management, hazard monitoring and a wide range of preparedness activities, these systems seek to stymie the evolution of catastrophic scenarios. Anticipatory action—a term broadly referring to actions taken before a crisis to mitigate its worst impacts—has come to shape a wide range of preparedness activities across multiple spheres, ranging from emergency response and direct assistance to heightened surveillance and from the re-direction of resources to information dissemination (for a more detailed overview see Levine et al. 2020:29).

Key messages:

- To improve the outcomes of anticipatory actions in the drylands, resources and research should be directed towards developing more contextually specific programmes.
- Better anticipatory action can be achieved through more malleable and locally responsive financing, along with the development of robust local level profiles/frameworks catering to pastoralists' flexibility in rapidly changing contexts.
- Opportunities for cross learning, particularly in relation to networks and information dissemination, should be incorporated into programming. These are critical components of both formal early warning systems and pastoral response strategies.



Nevertheless, despite extensive research, investment and technological advancements (particularly in the spheres of meteorological forecasting and remote sensing) Africa's drylands continue to pose distinct and seemingly intractable challenges. While early warning systems have had a broadly positive impact across multiple regions and in relation to multiple forms of disaster world-wide, recurrent drought continues to erode livelihoods across the African continent, regularly resulting in famine like conditions and crisis levels of hunger in pastoralist areas (for specific examples spanning the last two decades, see Hillier and Dempsey 2012; Far et al. 2022).

Africa's drylands are characterised by heightened ecological variability. Extensive research comprising case studies from multiple dryland contexts has shown how pastoralist livelihoods tend to be oriented towards making the most of prevailing uncertainties (rather than buffering against them) and working with volatile conditions in a dynamic manner to establish reliability (see Scoones 2023). Pastoral responses to worsening conditions tend not to be mechanistic or inflexible, like many of the actions stimulated via early warning systems, but are rather enmeshed within far-reaching socio-economic networks, highly flexible and open to many different outcomes. For greater impact, it is important that anticipatory actions find ways of centring and supporting these existing forms of drought preparation and mitigation, which are all made possible by deeply rooted local knowledge systems.

This brief sets out some key barriers to be overcome in the humanitarian sphere, highlighting the need for a more tailored approach to anticipatory action in dryland contexts, explicitly oriented toward pastoral economies and livelihoods. In doing so, it discusses policy implications relating to three key themes: variability and contextual specificity, flexibility and cross learning.

Opportunities for improved impact: overcoming core barriers

Exploring both the recent development of anticipatory action and wider developments in understandings of the drylands (particularly in relation to pastoralism) reveals some fundamental barriers obstructing effective humanitarian assistance in advance of crises today. Actions are often hindered by negative narratives, disconnects between decision-making and local contexts and restrictive concepts of local knowledge.

Negative narratives

For over a century, Africa's arid lands have been enmeshed within narratives that depict them as desolate and unproductive, with pastoralism itself historically being construed as irrational, destructive and unable to cope with change. These longstanding negative narratives have been shown to persist in multiple ways in contemporary governance and policy making circles, despite extensive scientific evidence to the contrary (Odhiambo 2014). In rekindling global attention on the drylands, many have argued that climate change and resource-based conflict are serving to revive them, with productivity often associated primarily with sedentary farming and with the ASALs themselves often envisaged as lands degraded by pastoralism.

For early warning systems and anticipatory action, the influence of these narratives is significant because it has the potential to restrict possibilities for supporting many existing pastoralist drought management strategies. The implicit association of effective assistance with notions of stability limits scope for strengthening more open-ended, flexible approaches to complex unfolding crises. Reliable weather forecasts and efficient action triggers will not translate to effective early action in the drylands unless these barriers are overcome.

Disconnects between decision-making and local contexts

In many countries across Africa, drought management has undergone a process of localisation over the last half century, with hunger itself coming to be envisaged not purely as an outcome of environmental shocks but rather as a result of entrenched marginalisation and exclusion. In Kenya, for example, the establishment of a National Drought Management Authority (NDMA) with the mandate to co-ordinate drought management and end drought emergencies took place following a broad process of political reconfiguration oriented towards better integrating and representing previously marginalised areas.

In this context, certain features of contemporary early warning systems are cause for concern. In particular, a heavy reliance on increasingly technical data synthesis to design and select action triggers might be seen as serving to dislocate decision-making from the environments in which such decisions matter most. It is important that anticipatory actions are formulated not only in relation to various meteorological and socio-economic data but also needs that are perceived at the local level. As part of this, it is also important that forms of collective decision-making common in pastoral areas (and critical to the management of high levels of uncertainty) are better incorporated into assistance programmes stimulated by early warning systems.

Restrictive concepts of local knowledge

Over the course of the last decade or so, great emphasis has been placed on the need to better incorporate local pastoralist knowledge and forecasting into formal early warning systems, with multiple reports and publications emphasising the detrimental impacts of excluding these (For example, Baudoin et al. 2014). Such aims, which are nowadays adopted widely across the spheres of social assistance, humanitarian relief and disaster response, are nevertheless hampered by restrictive ideas of what local knowledge actually is, how it is used amidst spatially and temporally variable contexts and what might be done to better harness it.



Anticipatory action must find ways of shedding prevalent notions of pastoralist knowledge as comprised of stable, immutable repertoires passed down from generation to generation (including in the form of ‘coping mechanisms’). Instead, future interventions should be oriented towards supporting the dynamic improvisation, creativity and innovation that characterise pastoral livelihoods in the drylands. As part of this, early warning systems must find ways of linking actions and protocols with forms of relational resilience established via the maintenance of complex institutional, social and economic networks. Multiple case studies show how these networks are critical throughout drought prone areas, serving to distribute information, resources and labour to those in need, and facilitating collective action in the face of fast-changing challenges (See Mohamed 2023; Caravani et al 2021).

Policy implications

Enhancing the outcomes of anticipatory action in the drylands requires improvements at multiple scales, including broad systemic improvements to early warning systems themselves at both the national and regional levels (see for example Mwangi et al. 2022). Indeed, multiple reports have articulated a need for new forms of financing (including national level drought contingency funds), more political will and momentum, improved co-ordination (including in relation to policy around border crossing and conflict) and general capacity building.

However, beyond these well-defined needs, further scope for improvement can be ascertained in three thematic areas: variability and contextual specificity, flexibility and cross learning. These areas, all related to the challenge of bridging the divide between formal early warning systems and community-led drought mitigation strategies, are discussed below.

Variability and contextual specificity

Regional and even national early warning protocols struggle to cater to the specific needs of local pastoral contexts, which comprise heterogeneous and constantly shifting economic activities. Even with more regular or expansive data collection to enhance monitoring activities or improve the design and selection of action triggers, pastoral livelihoods remain fluid across space and time and change dynamically in line with the prevailing uncertainty of the drylands. Supporting and protecting them is thus not best achieved purely through mechanistic, uniform interventions.

For actions triggered by early warning systems to achieve a greater impact in pastoral areas, research and funding should be directed towards developing more robust local level profiles, frameworks or similar instruments through partnerships with local government and stakeholders with the aim of linking broader early warning protocols and actions to specific local, community-level drought management strategies. Outlining specific local patterns and innovations in drought preparation and management, and keeping accounts of these up to date, will provide clearer and more relevant avenues for support.

Flexibility

Pastoralists grapple with unfolding crises by acting in a dynamic and strategic manner. Expansive networks that draw together different resources, skills and forms of information allow them to change their primary activities quickly, depending on the shifting circumstances around them. This can mean, among many other things, changing the economic activities they pursue, moving to different places, splitting and redistributing their herds, changing

their herding strategies (for example, grazing selectively to preserve dry season pasture), storing fodder or raising and redistributing financial resources via customary or religious institutions to assist vulnerable households. Central to all of these actions are forms of reciprocity, permanent sharing and collective decision-making. Uncertain and volatile circumstances are thus managed not through rigid, pre-determined schemes, but through flexible, open-ended and collaborative action.

Anticipatory actions triggered by early warning systems must find ways of supporting this flexibility. This means opening up to more malleable and locally responsive financing, which is able to shift in relation to a rapidly changing horizon of contextually specific needs. However, it also means building adaptability into the scope of pre-determined actions themselves, across multiple timescales. Even if they are triggered in a timely manner, protocols and actions that remain delimited and fixed throughout their lifespans (however long or short) will achieve minimal impact amidst economies and livelihoods where reliability is achieved via the opposite characteristics.

Cross learning

Networks established through multiple socio-cultural and religious institutions in pastoral areas are of direct consequence to the humanitarian sphere. Understanding how these networks are established and how they operate in specific locations amidst worsening conditions will be useful for organisations seeking to have a wider impact in advance of crises in the drylands. Learning from and incorporating them into programmes will be a crucial step toward bridging the existing gap between decision-making and implementation.

Equally, these networks already serve to distribute local information and resources in a targeted and efficient manner, providing means for rapid collective action. There is therefore great scope for wider impact through better incorporation of information produced by early warning systems into them. Directing resources toward determining pathways toward achieving this in different areas, either through tailored knowledge products or broader systems, will yield benefits over the long term.

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