

# **RESPONDING TO DROUGHTS**

**LEARNING FROM CRISES**



---

The Active Learning Network for Accountability and Performance in Humanitarian Action (ALNAP) is a global network for advancing humanitarian learning. Our goal is for all humanitarians to benefit from our sector's collective experience.

[www.alnap.org](http://www.alnap.org)

**Authors:**

Nigel Timmins and Anna Lindenfors (CollaborANTS), Ziad Issa (Impact Compass) and Zahra Hdidou. Additional research support: Ben Timmins

The authors would like to thank the many people who generously contributed their time and insights to this study. The authors are particularly grateful to Sarah Gharbi and Juliet Parker (ALNAP) for their feedback on the report and the insights shared during the development process, and additional support provided by Anna-Louise Van der Merwe and Molly Maple (ALNAP).

Special thanks go to the experts who participated in the Delphi Panel review process: Nancy Balfour, Mihir Bhatt, Caroline Birch, Alessandro Costantino, Kaustubh Devale, Paul Harvey, Chief Monday Ogheneruona Itoghor, Hisham Khogali, Mohammad Dauod Khuram, Julie, Lawson-McDowall, Everjoy Mahuku, Prof. Daniel Maxwell, Dr. Samuel Muhula, Sibonginkosi Gugulethu Mungoni, Monde Nasilele, Monica Ramos, Manuel Rothe

**Suggested citation**

ALNAP (2026) *Responding to droughts*. Learning from Crises paper. London: ALNAP/ODI Global (<https://alnap.org/help-library/resources/responding-to-droughts-learning-from-crises>)

© ALNAP/ODI Global 2026

ISBN: 978-1-913526-93-1

**Communications management**

Molly Maple  
Wairimu Wanjau

**Editorial**

Hannah Austin

**Design**

Alice Hale

# TABLE OF CONTENTS

Introduction	1
About ALNAP Learning from Crises papers	2
Summary of lessons	3
Methodology	6
<b>LESSONS FOR RESPONDING TO DROUGHTS</b>	<b>7</b>
<b>Lesson 1: Strengthen coordination, leadership and governance</b>	<b>7</b>
<b>Lesson 2: Build effective partnerships</b>	<b>9</b>
<b>Lesson 3: Ensure predictable and flexible funding</b>	<b>11</b>
<b>Lesson 4: Use early warnings of drought and make timely drought declarations</b>	<b>13</b>
<b>Lesson 5: Move towards anticipatory action</b>	<b>16</b>
<b>Lesson 6: Put people and communities affected by drought at the centre of responses</b>	<b>18</b>
<b>Lesson 7: Address social and structural barriers to inclusion</b>	<b>20</b>
<b>Lesson 8: Integrate protection across drought response</b>	<b>22</b>
<b>Lesson 9: Apply conflict-sensitive and peace-positive approaches</b>	<b>24</b>
<b>Lesson 10: Deliver multisectoral drought responses</b>	<b>26</b>
<b>Lesson 11: Address health needs during drought</b>	<b>28</b>
<b>Lesson 12: Strengthen social protection for drought response</b>	<b>31</b>
<b>Lesson 13: Select appropriate programme modalities</b>	<b>33</b>
<b>Lesson 14: Link humanitarian response to resilience</b>	<b>35</b>
<b>Lesson 15: Protect and strengthen livelihoods and assets</b>	<b>37</b>
<b>Lesson 16: Build water, sanitation and hygiene (WASH) and ecosystem resilience</b>	<b>39</b>
<b>Lesson 17: Strengthen monitoring, evaluation, accountability and learning (MEAL) and data systems</b>	<b>41</b>
<b>Bibliography</b>	<b>43</b>
<b>Annex: Detailed methodology</b>	<b>64</b>

# ACRONYMS

<b>ALNAP</b>	The Active Learning Network for Accountability and Performance in Humanitarian Action
<b>CVA</b>	cash and voucher assistance
<b>GBV</b>	gender-based violence
<b>MEAL</b>	monitoring, evaluation, accountability and learning
<b>MHPSS</b>	mental health and psychosocial support
<b>SAM</b>	severe acute malnutrition
<b>WASH</b>	water, sanitation and hygiene

# INTRODUCTION

From damaging livelihoods to catalysing conflict, the human cost of drought can be devastating. Since ALNAP's last paper on lessons for responding to droughts in 2011, the climate crisis has only supercharged its scale, severity and complexity – as we saw when the Horn of Africa ricocheted between floods and drought from 2019 to 2023.

When reviewing the evidence for this paper, we found some areas in which notable progress has taken place since 2011 (for example, in cash- and market-based programming). Yet certain issues have remained stubbornly resistant to change, despite a proliferation of discourse around them:

- Early warning is still a key concern in the literature, yet swift reactions to early signs of drought are still rare.
- The literature still reflects the experiences of aid providers, rather than people receiving aid and is still overwhelmingly produced in the Global Minority.
- Localisation, while increasingly embraced in theory, is still rarely seen in practice.

While drought has escalated, funding for humanitarian assistance has shrunk dramatically. This perfect storm of soaring need and plummeting resources has hit those least equipped to weather it the hardest. Against this backdrop, closing the gap between policy and practice has never been more urgent.

The lessons in this paper aim to do just that, drawing on the hard work and commitment of humanitarian and community responses to drought. They reflect the wealth of learning accumulated in our sector – and years of experience of well-intentioned strategy meeting on-the-ground reality. As a sector, we are collectively accountable for making the most of that learning. It is in this spirit that we offer these lessons to humanitarian actors worldwide.

# ABOUT ALNAP LEARNING FROM CRISES PAPERS

ALNAP [Learning from Crises papers](#) gather learnings from past humanitarian responses and present them as digestible, practical lessons for humanitarian actors to consider when designing and preparing for future responses. Their purpose is not to provide a definitive answer to the question 'what works?' but to highlight critical issues that agencies must consider when designing and implementing responses.

Our Learning from Crises papers are aimed at a broad audience of humanitarian actors: from explicitly humanitarian organisations to civil society organisations, governments (national, regional and local) and donors. We trust readers to decide which lessons are most relevant to them and how best to operationalise them in their specific context and role.

The intention behind these papers – and ALNAP's broader goal – is to support humanitarians everywhere to improve humanitarian action by exchanging evidence, experience and practical ideas.

# SUMMARY OF LESSONS

This section provides an overview of the 17 top-level lessons we identified by reviewing evaluations, research and the documented experience of humanitarian responses to droughts between 2012 and 2024, complemented by expert input through a Delphi process. The lessons highlight areas of strong convergence on what humanitarian actors should prioritise when anticipating, responding to and supporting recovery from drought. Each lesson is explored in more detail in the following section.

01

## STRENGTHEN COORDINATION, LEADERSHIP AND GOVERNANCE

Effective drought response and resilience-building require inclusive and coordinated systems that align as many humanitarian, development, government, community and regional actors as possible under shared goals, clear roles and sustained donor support.

02

## BUILD EFFECTIVE PARTNERSHIPS

Partnerships that combine community insight with private-sector capacity, civil society and government leadership enable faster humanitarian responses that leave behind stronger, more connected systems capable of withstanding future droughts – especially when built *before* a crisis.

03

## ENSURE PREDICTABLE AND FLEXIBLE FUNDING

Effective programming depends on predictable, flexible and harmonised financing. Embrace innovative risk-transfer tools to move beyond short-term, reactive aid to include 'no regrets'<sup>1</sup> early action and resilience-building.

04

## USE EARLY WARNINGS OF DROUGHT AND MAKE TIMELY DROUGHT DECLARATIONS

Humanitarian and development actors must anticipate risks rather than react to crises. Governments need to make evidence-based and timely drought declarations and not wait until the full impact of a drought has materialised.

05

## MOVE TOWARDS ANTICIPATORY ACTION

Humanitarian and development systems must transition from reactive crisis response to proactive, anticipatory risk management to reduce the human and economic toll of drought and make the most cost-efficient use of donor funds.

1 'no regrets' refers to decisions or actions that provide a benefit, or at a minimum no harm, even if the crisis is not realised.

**06****PUT PEOPLE AND COMMUNITIES AFFECTED BY DROUGHT AT THE CENTRE OF RESPONSES**

Drought responses are more effective when communities – including women-, youth- and farmer-led groups – lead analysis, planning, implementation and monitoring.

**07****ADDRESS SOCIAL AND STRUCTURAL BARRIERS TO INCLUSION**

Drought responses must be inclusive of all affected people so that everyone can participate and benefit, especially those most at risk.

**08****INTEGRATE PROTECTION ACROSS DROUGHT RESPONSE**

Protection risks increase in specific ways during drought, particularly through family separation, mobility, reduced access to essential services and harmful coping strategies. Responses must integrate protection analysis across sectors and strengthen community-based, inclusive systems that reduce risks and prevent harm.

**09****APPLY CONFLICT-SENSITIVE AND PEACE-POSITIVE APPROACHES**

Drought responses must be conflict-sensitive and support peace-building efforts where possible.

**10****DELIVER MULTISECTORAL DROUGHT RESPONSES**

Actors should design context-specific, multisectoral drought responses that address both immediate needs and the structural causes of vulnerability.

**11****ADDRESS HEALTH NEEDS DURING DROUGHT**

Different and specific health needs should be addressed and existing health infrastructure supported, where possible, given the extra demands on health services during drought.

**12****STRENGTHEN SOCIAL PROTECTION FOR DROUGHT RESPONSE**

Large-scale social protection programmes demonstrate the potential to support millions during drought. They may have systemic weaknesses, but they can be strengthened to become more dynamic and responsive.

**13****SELECT APPROPRIATE PROGRAMME MODALITIES**

Cash programming is effective – and communities often prefer it – but it needs to be adaptive to local contexts.

**14****LINK HUMANITARIAN RESPONSE TO RESILIENCE**

Humanitarian and development actors should move beyond short-term relief by integrating immediate drought response with long-term resilience-building. Linking livelihood protection with sustainable systems and coordinated, cross-sectoral collaboration enables communities to recover, adapt and thrive.

**15****PROTECT AND STRENGTHEN LIVELIHOODS AND ASSETS**

Prioritise protecting, diversifying and strengthening livelihoods. This should include rural and urban households, and male- and female-headed households by employing adaptive, gender-sensitive, climate-informed approaches.

**16****BUILD WATER, SANITATION AND HYGIENE (WASH) AND ECOSYSTEM RESILIENCE**

Humanitarian actors should move from short-term water trucking and emergency WASH responses towards integrated, sustainable water and ecosystem management as soon as possible.

**17****STRENGTHEN MONITORING, EVALUATION, ACCOUNTABILITY AND LEARNING (MEAL) AND DATA SYSTEMS**

Embed MEAL systems that are inclusive and locally led, and implement data management systems that generate timely, disaggregated, actionable insights.

# METHODOLOGY

This Lessons Paper follows [ALNAP's Lessons Papers: A methods note](#) and combines a systematic evidence review with a structured Delphi panel process (see [Annex](#)) to identify and validate lessons from humanitarian responses to drought.

The study began with a scoping phase to refine research questions, informed by consultations with humanitarian practitioners working directly on drought response. The scope focused on humanitarian responses to drought between 2012 and 2024, covering preparedness, response, recovery and resilience, as well as cross-cutting themes such as gender, protection and localisation.

We conducted a systematic search of more than 20 humanitarian, academic and institutional databases, including ALNAP, Cash Learning Partnership (CaLP), Food and Agriculture Organization of the United Nations (FAO), International Federation of Red Cross and Red Crescent Societies (IFRC), ODI Global, ReliefWeb, UN Evaluation Group and World Food Programme (WFP). Using defined inclusion and exclusion criteria, we screened over 1,000 documents, selected 224 for detailed analysis and assessed each one for relevance, methodological rigour and scope, enabling weighted analysis of the evidence. We then extracted, thematically coded and synthesised findings, lessons and recommendations through a structured analytical process. This generated an initial longlist of lessons, which we refined and consolidated into a focused set of drought-specific lessons. Finally, we validated these lessons via a two-round Delphi panel process in which panel members reviewed, verified and refined the findings, assessed their relevance and clarity, and identified gaps or missing perspectives. Where gaps were found, the long list of lessons were reviewed and relevant lessons 'lost' during consolidation were added in. If there was no supportive evidence but a Delphi panel member contributed an important view, this was added as well but indicated as a perspective from the Delphi panel not from literature.

Please see the [Annex](#) for a detailed methodology, including evidence-scoring frameworks and inclusion and exclusion criteria.

# LESSONS FOR RESPONDING TO DROUGHTS

## LESSON 1: STRENGTHEN COORDINATION, LEADERSHIP AND GOVERNANCE

**Effective drought response and resilience-building require inclusive and coordinated systems that align as many humanitarian, development, government, community and regional actors as possible under shared goals, clear roles and sustained donor support.**

Despite substantial improvements in early warning – both in quality and lead time – weak coordination, fragmented leadership, low levels of political will, inconsistent funding and lack of transparency and accountability continue to undermine drought response and recovery. Planning and fundraising delays often stem from risk-averse leadership and uncertain resources, while duplication of roles across clusters, working groups and government structures results in confusion and inefficiency. By contrast, evidence from evaluations of drought responses consistently highlights when coordination mechanisms are clear, outcome-focused and inclusive, they help unlock faster, more coherent and better-resourced responses.

Government leadership is central to achieving sustainability and national ownership. Where national and subnational authorities are engaged early and empowered to act, responses tend to be timelier and better aligned with local priorities, systems and capacities. In contrast, evaluations note that highly centralised decision-making by international actors and donors can limit flexibility, slow adaptation to evolving conditions and weaken accountability to populations affected by drought. Strengthening government and national and local actors' capacity in planning, monitoring and climate risk management allows responses to align with national strategies rather than depend on parallel humanitarian systems. However, capacity support must go hand in hand with advocacy for transparency, accountability and sound governance to ensure public confidence and effective delivery.

Drought impacts often extend beyond administrative and national boundaries, particularly in pastoral, border and transboundary catchment areas. In such contexts,

Number of documents contributing to the lessons: 29

Average evidence scores of all documents contributing to the lessons: 4.2

Median evidence strength of documents contributing to the lessons: 86%

regional and cross-border coordination mechanisms have supported more coherent approaches to early warning, natural resource management and response planning. Donor engagement plays an enabling role when funding supports inclusive, multiyear coordination arrangements that align with national systems rather than reinforcing parallel humanitarian structures. Where coordination mechanisms have not functioned as intended, evaluations underline the importance of collective reflection, learning and adaptation by all actors involved.

## RECOMMENDATIONS

- Humanitarian actors should clearly define roles, mandates and leadership structures for drought response to ensure accountability and prevent overlap or inefficiency across participating agencies.
- Humanitarian actors should prioritise capacity development and reinforce national and local systems in coordinating and implementing drought responses, ensuring alignment with national strategies and holding governments accountable.
- Humanitarian, development and government actors should strengthen regional and cross-border coordination frameworks, leveraging intergovernmental bodies and regional organisations.
- Humanitarian, development and government actors should enable meaningful participation of local and national actors in coordination and priority-setting processes, rather than limiting their role to programme implementation.
- Donors should sustain their commitment to support coordination mechanisms and align them with government-led systems.

# LESSON 2:

## BUILD EFFECTIVE PARTNERSHIPS

**Partnerships that combine community insight with private-sector capacity, civil society and government leadership enable faster humanitarian responses that leave behind stronger, more connected systems capable of withstanding future droughts – especially when built *before* a crisis.**

Building partnerships that bridge humanitarian, government and private sectors alongside community knowledge and civil society enables more coherent and sustainable drought responses. When agencies, local authorities, traders and service providers collaborate in joint market analysis and response planning, programmes become better aligned with how local economies function. This prevents duplication, enhances accountability and strengthens the connection between emergency action and long-term recovery.

Public–private partnerships have proven effective in scaling up interventions such as livestock management, agricultural activities, water resource management and cash and voucher assistance. For example, collaborating with payment service providers, mobile network operators and financial institutions increases the efficiency, reach and transparency of cash delivery while also expanding financial inclusion. In several drought-affected regions, mobile cash transfers have prompted people with no existing bank account to open mobile money accounts, giving them lasting access to savings and credit. In turn, these financial linkages have revitalised trade, supported local markets and strengthened relationships between producers, suppliers and consumers.

Given the different language and jargon used by private-sector and humanitarian organisations, establishing good working relationships can take time. As such, it is best done at a time when there is not a major scale-up. It can also be valuable for a third party to broker the relationships. While it is important to acknowledge that private-sector objectives extend beyond humanitarianism (for example, market penetration and developing a positive brand image), these need not be counter to humanitarian goals. For partnerships to be effective, both parties need to see value in the relationship.

Number of documents contributing to the lessons: 7

Average evidence scores of all documents contributing to the lessons: 4

Median evidence strength of documents contributing to the lessons: 80%

## RECOMMENDATIONS

- Humanitarian actors should invest in building partnerships with communities, civil society, local authorities and the private sector in areas at risk of drought as part of preparedness, rather than waiting until drought response is underway.
- Humanitarian and development organisations should work with community-based and local actors to co-design interventions that reflect local priorities, capacities and accountability mechanisms.
- Donors and international actors should systematically analyse how decisions on priorities, resources and actions are made and adapt programme governance, funding modalities and partnerships to enable meaningful decision-making by local actors and institutions.
- Humanitarian actors and donors should engage private-sector actors – such as traders, financial institutions and service providers – to improve the efficiency, reach and sustainability of drought responses, particularly for cash- and market-based programming.
- Organisations entering public–private partnerships should explicitly recognise differing incentives and objectives, and design partnership arrangements that create shared value while safeguarding humanitarian principles.
- Donors and coordination bodies should support partnership models that are embedded within national and community systems and contribute to longer-term resilience beyond individual drought responses.

# LESSON 3:

## ENSURE PREDICTABLE AND FLEXIBLE FUNDING

**Effective programming depends on predictable, flexible and harmonised financing. Embrace innovative risk-transfer tools to move beyond short-term, reactive aid to include 'no regrets'<sup>2</sup> early action and resilience-building.**

Chronic underfunding and short-term, reactive financing remain major barriers to effective drought response. Humanitarian actors often receive resources only after impacts have escalated, leaving early warnings unheeded and opportunities for prevention lost.

Establishing predictable, multiyear, pre-arranged financing mechanisms allows agencies to act early, sustain interventions and reduce overall response costs. Instruments such as crisis modifiers and forecast-based financing can trigger timely action and bridge humanitarian and development investments.

Flexibility is critical. Drought conditions evolve and rigid project structures limit the ability to adapt to changing needs; donors should therefore enable adaptive management, allowing partners – especially local actors – to modify activities and budgets as conditions change. Trust-based relationships, transparent reporting and outcome-focused accountability frameworks can balance flexibility with oversight.<sup>3</sup>

Fragmented funding streams further weaken coherence, mitigation efforts and efficiency. By harmonising humanitarian, development and climate financing, donors can reduce duplication and support more integrated long-term outcomes. Blended financing models encourage continuity from resilience to relief and sustainable recovery. Financing must prioritise anticipatory and preventative action by funding early warning systems, preparedness and livelihood protection, rather than waiting for disaster declarations. When aligned with national resilience and adaptation strategies, such approaches ensure that humanitarian interventions not only save lives but also strengthens local systems, markets and communities in the long term.

Number of documents contributing to the lessons: 35

Average evidence scores of all documents contributing to the lessons: 4.1

Median evidence strength of documents contributing to the lessons: 80%

2 'no regrets' refers to decisions or actions that provide a benefit, or at a minimum no harm, even if the crisis is not realised.

3 Experts from the Delphi panel also noted that current financing instruments often fail to reach small-scale and communal farmers, who make up the majority of producers and are disproportionately women. Ensuring direct, accessible and gender-responsive financing for smallholder farmers is essential to strengthening household and community resilience.

## RECOMMENDATIONS

- Donors should establish predictable, multiyear, pre-arranged financing mechanisms.
- Donors and actors should prioritise financing models that strengthen underlying systems, such as early warning, local markets, and community and government capacities.
- Donors should adopt multicycle financing models able to support anticipatory action and recovery across consecutive drought years, not just one-off events.
- Donors should ensure anticipatory and resilience financing is accessible to small-scale and communal farmers – particularly women – through simpler eligibility rules, direct financing channels and gender-responsive targeting.
- Donors and humanitarian agencies should increase flexibility in funding to allow adaptive and locally led programming.
- Donors should harmonise funding streams and bridge humanitarian, development and climate financing to reduce fragmentation and inefficiency.
- All actors should consider risk-transfer mechanisms, such as insurance, in their context. Such mechanisms can play a useful role in providing payouts and protecting assets or investments. The costs and risks covered of any product need to be understood.
- Donors should prioritise funding for anticipatory and preventative action and mitigation efforts. This can be linked to specific, objective and measurable drought indicators (including early indicators) within the funding instruments to release funding for no-regret interventions.
- Humanitarian and development investments should promote long-term, financially self-sustaining resilience rather than perpetuating short-term dependency. This may require efforts to overcome institutional silos.

## LESSON 4:

# USE EARLY WARNINGS OF DROUGHT AND MAKE TIMELY DROUGHT DECLARATIONS

**Humanitarian and development actors must anticipate risks rather than react to crises. Governments need to make evidence-based and timely drought declarations and not wait until the full impact of a drought has materialised.**

Climate-related hazards are increasing in frequency, intensity and complexity; yet drought responses remain fragmented and reactive. As drought cycles shorten, humanitarian and development actors must better connect climate monitoring, early warning and preparedness mechanisms to ensure interventions happen before impacts become emergencies. Integrating climate and environmental risk management into programmes contributes to anticipating potential shock, in order to design adaptive interventions and link immediate humanitarian response to long-term climate resilience.

Weaknesses in early warning, assessment and information systems, as well as in decision-making processes, repeatedly delay action and result in aid only being mobilised following media attention. Improved access to climate-information systems would help local communities to understand long-term trends and shifting weather patterns, enabling them to adapt their agricultural practices. These weaknesses underscore the need for anticipatory data systems that generate reliable, real-time information and – importantly – trigger funding before conditions deteriorate. When early warning is integrated with flexible financing and national coordination systems, it enables faster, more cost-effective and more preventative responses that protect livelihoods and save lives.

In some cases, even when early warning information is available and trusted, affected households may be unable to act due to financial, social or logistical barriers. As such, strengthening early warning systems alone is insufficient; support mechanisms – including timely and flexible financing – must also be put in place to enable families to take protective measures and adapt to emerging risks.<sup>4</sup>

<sup>4</sup> Experts from the Delphi panel also noted that, in many contexts, donors can only release funds, states can only provide financial assistance, insurance companies can only pay out and responsible authorities can only begin drought-management governance arrangements once national authorities have formally declared a drought.

Number of documents contributing to the lessons: 43

Average evidence scores of all documents contributing to the lessons: 3.9

Median evidence strength of documents contributing to the lessons: 80%

Government recognition of a drought can be delayed for political reasons or procrastination caused by inter-agency (or inter-ministry) tugs of war over data and definitions. In some cases, humanitarian actors have been reluctant to push governments to officially recognise a drought due to fears of being seen as contradicting a government's narrative. It may be necessary for actors and donors to balance alignment with governments with advocacy for reforms, transparency and accountability.

If necessary, the capacity of governments (both national and subnational/local) to monitor drought should be resourced and strengthened in the use of technical datasets (such as precipitation, hydrological, agricultural and associated indicators) so that governments can use them in real-time to officially declare drought at the appropriate level – whether local, provincial, subnational/regional or national.

'Pre-drought declarations' issued before drought conditions fully materialise (based on early warning indicators on, for example, precipitation, crop and vegetation health) can act as an anticipatory alert to mobilise resources and enable preventative measures, such as water rationing and storage, the distribution of drought-resistant seeds and early livelihood-protection support.

## RECOMMENDATIONS

- Humanitarian and development actors should integrate climate and environmental risk management across programmes, linking early warning, preparedness and long-term adaptation.
- Humanitarian, development and government actors should promote the adoption of unified and interoperable early warning systems to improve consistency, credibility, timeliness and the quality of needs assessments, and to reduce delayed or reactive responses.
- Donors and humanitarian actors should invest in harmonised systems for risk data and early warning, including comprehensive shocks data and clear crisis-modifier guidance.
- Humanitarian and development actors should ensure that new and existing early warning systems adequately include pastoral areas and populations that are often excluded.
- Humanitarian and development actors, working with governments, should establish joint, pre-agreed triggers that enable early action before formal crisis declarations, drawing on indigenous and community knowledge where appropriate. For example, anticipatory cash transfers should be used before peak drought.
- Humanitarian actors should communicate early warning information in ways that are accessible, easily understood and trusted by populations affected by drought, including women and groups with limited access to information channels. Designing early warning systems with people affected by drought supports relevance, uptake and timely protective action.

- 1 ● Governments should have clear legislative and policy frameworks for drought declaration, setting out required data, responsible institutions, trigger levels and decision-making authority.
  - 2
  - 3
  - 4 ● Governments and technical agencies, including those supporting them, should agree on key meteorological, hydrological, agricultural and socioeconomic definitions and indicators to inform drought declaration processes.
  - 5
  - 6
  - 7
  - 8
  - 9
  - 10
  - 11
  - 12
  - 13
  - 14
  - 15
  - 16
  - 17
- Humanitarian actors and donors should be prepared to engage in coordinated advocacy in cases where delays in drought declaration or response appear to be driven by political or institutional constraints, including corruption.

# LESSON 5:

## MOVE TOWARDS ANTICIPATORY ACTION

**Humanitarian and development systems must transition from reactive crisis response to proactive, anticipatory risk management to reduce the human and economic toll of drought and make the most cost-efficient use of donor funds.**

Most drought responses still begin after communities have already suffered significant losses. Anticipatory action links risk forecasting, preparedness and flexible financing to ensure assistance reaches people before crises peak. Pre-arranged mechanisms – such as crisis modifiers, risk-financing instruments (including parametric insurance) and contingency funds – allow agencies to act early, based on clear triggers, rather than waiting for disaster declarations. These systems (which will require investment) can reduce response times, lower costs and enable communities to protect assets and avoid harmful coping strategies.

Anticipatory approaches must be embedded in wider resilience and adaptation frameworks, integrating humanitarian and development objectives. They work best when underpinned by real-time data, climate and market analysis, and strong institutional linkages between forecasters, decision-makers and local actors. Preparedness requires not only technical systems but also practical arrangements: pre-approved plans, contracts with service providers and community-level communication that translates scientific forecasts into actionable guidance.<sup>5</sup> Many donors continue to favour interventions that deliver immediate, visible results, making it challenging to articulate and demonstrate the long-term value and impact of anticipatory investments.

Effective anticipatory action requires flexible programming that supports locally led initiatives rather than imposing pre-defined external interventions. Local communities often have the most timely knowledge of risks and appropriate responses. Donor funding allocation should allow more timely interventions, such as early cash transfers, feed provision or targeted livelihood support, which can prevent asset depletion and preserve dignity. Aligning assistance with predictable seasonal hunger periods further maximises impact. Regional coordination and market linkages ensure that food, feed and cash can move quickly – even in times of stress.

<sup>5</sup> Experts from the Delphi panel noted that anticipatory action remains a critical approach for managing and reducing risks; however, wider donor buy-in is still needed.

Number of documents contributing to the lessons: 70

Average evidence scores of all documents contributing to the lessons: 4

Median evidence strength of documents contributing to the lessons: 80%

## RECOMMENDATIONS

- Humanitarian and development actors should integrate anticipatory action into drought preparedness and response strategies, rather than treating it as a separate or pilot approach.
- Donors should increase support for anticipatory action through flexible and pre-arranged financing instruments that can be triggered by early warning indicators and agreed thresholds.
- Humanitarian actors, working with governments and technical agencies, should establish clear, jointly agreed triggers for anticipatory action that are linked to operational plans and financing mechanisms.
- Humanitarian actors and donors should support locally led anticipatory interventions that build on community knowledge, priorities and existing coping strategies.
- Humanitarian actors should invest in practical preparedness measures – including pre-approved response plans, framework agreements with service providers and pre-positioning of assistance – to enable rapid action when triggers are reached.
- Humanitarian and development actors should align anticipatory interventions with predictable seasonal hunger periods to maximise impact and protect livelihoods.
- Humanitarian actors and donors should strengthen regional coordination and market linkages to support anticipatory action in remote, mobile and cross-border contexts.

## LESSON 6:

# PUT PEOPLE AND COMMUNITIES AFFECTED BY DROUGHT AT THE CENTRE OF RESPONSES

**Drought responses are more effective when communities – including women-, youth- and farmer-led groups – lead analysis, planning, implementation and monitoring.**

Evidence from drought responses consistently shows that interventions are more effective, relevant and sustainable when they are grounded in the priorities, capacities and lived experiences of people affected by drought. Evaluations highlight that community-centred approaches improve targeting, strengthen accountability and increase the likelihood that assistance supports dignity and self-determined coping strategies. Where programmes are designed without meaningful engagement with communities affected by drought, they are more likely to overlook local priorities, reinforce inequalities or create unintended harm. People-centred approaches focus on how responses are designed and delivered, enabling populations affected by drought to influence decisions on timing, targeting and trade-offs across the drought cycle.

Participation in drought response is often uneven. While many programmes include consultation or feedback mechanisms, evaluations note that these are frequently limited in scope or occur late in the programme cycle, reducing their influence on key decisions. Marginalised groups – including women, pastoralists, older people, persons with disabilities and mobile populations – are often underrepresented in assessments, planning and decision-making processes. Power dynamics within communities can further shape whose voices are heard, requiring deliberate efforts to ensure inclusive and safe participation.

Community-centred approaches are most effective when they go beyond consultation and support shared decision-making. Evidence shows that programmes that enable communities to influence priorities, modality choices and implementation arrangements are more responsive to changing conditions and local risk profiles. Trust between communities and implementing actors is strengthened when feedback mechanisms are accessible, safe and demonstrably linked to programme adaptation. Where accountability systems are weak or poorly resourced, opportunities for learning and course correction are often missed.

Number of documents contributing to the lessons: 60

Average evidence scores of all documents contributing to the lessons: 3.9

Median evidence strength of documents contributing to the lessons: 80%

1 People-centred approaches, localisation and locally led action are closely connected but distinct. While people-centred approaches shape the quality and relevance of interventions for populations affected by drought, localisation determines whether the systems, partnerships and resources needed to sustain these approaches are in place. Localisation involves shifting power, resources and decision-making to local actors and systems; although widely embraced in principle, evidence shows that much remains to be done to translate this commitment into practice. Locally led action requires directly resourcing and scaling initiatives driven by local actors, often outside international aid structures. Without localisation and locally led systems, people-centred approaches risk remaining limited to consultation, rather than driving meaningful change in how drought risks are anticipated and managed.

2  
3  
4  
5  
6 Longer-term engagement with communities supports continuity across preparedness, response and recovery. Evaluations suggest that investing in local institutions, social networks and community leadership enhances resilience and reduces reliance on repeated emergency assistance. However, short funding cycles and high staff turnover can undermine sustained relationships and institutional memory, limiting the effectiveness of people-centred approaches over time.

## RECOMMENDATIONS

- 7 ● Humanitarian actors should ensure drought responses are informed by meaningful and inclusive engagement with communities affected by drought throughout the programme cycle, from assessment and design to implementation and review.
- 8 ● Humanitarian and development actors should take deliberate steps to include marginalised and underrepresented groups, such as women, pastoralists, older people, persons with disabilities and mobile populations, in decision-making processes.
- 9 ● Humanitarian actors should support approaches that enable communities to meaningfully shape and share decision-making on key programme decisions – including priorities, targeting and modality choices – rather than limiting participation to consultation alone.
- 10 ● Humanitarian actors and donors should invest in accessible, safe, well-resourced feedback and accountability mechanisms and ensure that feedback leads to visible programme adaptation.
- 11 ● Humanitarian and development actors should support longer-term engagement with communities by investing in local institutions, leadership and social networks that sustain preparedness, response and recovery across drought cycles.
- 12 ● Donors should systematically analyse how decisions on priorities, resources and actions are made and redesign programme governance, funding modalities and partnerships to shift meaningful decision-making power to local actors and institutions.
- 13  
14  
15  
16  
17

## LESSON 7:

# ADDRESS SOCIAL AND STRUCTURAL BARRIERS TO INCLUSION

**Drought responses must be inclusive of all affected people so that everyone can participate and benefit, especially those most at risk.**

'Inclusion' focuses on who is reached and whether assistance and participation is equitable: it asks whether we are reaching everyone, especially those most at risk. As such, it is not an optional extra; it is central to accountability and effective action. Droughts often deepen existing inequalities and social barriers, and people in vulnerable situations or with specific needs can face both heightened risks and limited access to information, resources and decision-making. In the context of drought, inclusion requires continuous attention to who may be left out as conditions evolve, identifying and reducing barriers for people in vulnerable situations or with specific needs (including, for example, women, children, older people, persons with disabilities and groups specifically affected by drought, such as pastoralists) and ensuring that participation in identifying their specific needs and access to appropriate solutions remain fair and meaningful.

There has been progress on child- and women-centred approaches, which have proven both effective and essential in recent drought responses. Nonetheless, barriers for women and others still need to be actively considered (for example, do all women have ID cards?). Older people, persons with disabilities and remote or marginalised pastoralists can still be overlooked, and people who are displaced, stateless, migrants, indigenous or lesbian, gay, bisexual, trans or queer continue to be deprioritised. For example: older people can face physical and financial barriers and disrupted access to treatment for chronic illness; inaccessible communication, digital illiteracy and service design may exclude persons with disabilities from assistance and participation, and may expose them to protection risks; and, while not all pastoralists are marginalised, those who are require flexible support that respects mobility and maintains access to grazing and water across administrative boundaries.

Inclusion is most effective when analysis starts early and data is disaggregated by sex, age and disability to capture the diverse impacts of drought. Transparent criteria, community-based targeting committees and regular updates to recipient lists help ensure that assistance remains fair as conditions change. Programmes that link livelihoods and protection measures, such as reducing gender-based violence (GBV) risks and ensuring accessible service delivery, strengthen both equity and safety.

Number of documents contributing to the lessons: 19

Average evidence scores of all documents contributing to the lessons: 3.5

Median evidence strength of documents contributing to the lessons: 73%

## RECOMMENDATIONS

- Humanitarian and development actors should integrate analysis of social and structural barriers to inclusion across all stages of drought response, including assessments, programme design, implementation, monitoring and learning.
- Humanitarian actors should ensure that gender, age, disability, displacement status and livelihood systems inform vulnerability analysis, targeting criteria and programme modalities rather than relying on generic household-level approaches that risk obscuring intra-household inequalities.
- Humanitarian actors should adapt programme design and delivery mechanisms to better reach pastoralist, mobile and remote populations, including through flexible targeting approaches, mobile service delivery and cross-border coordination where relevant.
- Humanitarian actors should ensure that assessments and data-collection methods are inclusive and accessible, including through the use of disaggregated data, adapted tools and engagement with marginalised groups, who are often excluded from standard assessment processes.
- Humanitarian and development actors should address power dynamics within households and communities that shape access to assistance and decision-making, including by supporting the safe and inclusive participation of women, girls, older people and persons with disabilities.
- Humanitarian actors should work with representative organisations – such as those run by and for women, persons with disabilities, pastoralists and older people – to improve programme relevance, accountability and reach.
- Humanitarian actors should ensure that information about assistance, eligibility and feedback mechanisms is accessible to people with different communication needs, literacy levels and access constraints, including by making such information available in multiple formats and languages, and disseminating it via trusted communication channels.
- Humanitarian actors and donors should invest in staff capacity, technical expertise and the operational adaptations required to deliver inclusive drought responses, recognising that inclusion requires additional time and resources.
- Donors should ensure funding arrangements allow sufficient flexibility and duration to support inclusive approaches, including the adaptations needed to respond to changing risks and vulnerabilities over the drought cycle and to support marginalised and hard-to-reach groups.

# LESSON 8:

## INTEGRATE PROTECTION ACROSS DROUGHT RESPONSE

**Protection risks increase during drought, particularly through family separation, mobility, reduced access to essential services and harmful coping strategies.**

**Responses must integrate protection analysis across sectors and strengthen community-based, inclusive systems that reduce risks and prevent harm.**

Drought heightens protection risks as households adopt strategies that involve separation, migration and difficult trade-offs. Male migration for work (common in drought-affected pastoral and rural settings) increases the vulnerability of women- and child-headed households and weakens informal safety networks. Split households and mobile populations face specific risks along migration routes, where services are limited or inaccessible.

As livelihoods collapse and displacement rises, coping strategies can increase the risks of GBV, early marriage, child labour and exploitation, especially for adolescents. Reduced access to water forces women and girls to travel longer distances, increasing their exposure to harassment and violence, while household stress linked to food insecurity and economic strain can heighten domestic violence and other forms of abuse. School closures or pressure to withdraw children from education during drought further increase risks for girls and boys, who lose safe spaces and protective structures. Older people and persons with disabilities who already face existing exclusion may find migrating extremely difficult or even be left behind, reducing their access to basic needs.

The centrality of protection means safeguarding rights and reducing risks must be systematically integrated across all sectors. Building protection risk analysis into programme design early; ensuring safe spaces, referral systems, accessible and survivor-centred services; and coordinating with specialised actors helps ensure services reduce, rather than exacerbate, risks. Protection responses should prioritise community-based mechanisms (including women's organisations, youth groups and organisations of persons with disabilities) with targeted outreach and support for informal safety networks. Community trust, accountability and inclusive communication are central to preventing unintended harm.

Number of documents contributing to the lessons: 22

Average evidence scores of all documents contributing to the lessons: 3.6

Median evidence strength of documents contributing to the lessons: 73%

## RECOMMENDATIONS

- Humanitarian actors should integrate protection risk analysis across all stages of drought preparedness, response and recovery, rather than treating protection as a standalone or secondary concern. This will ensure that services and assistance reduce rather than exacerbate protection risks for different groups.
- Humanitarian actors should ensure that sectoral programmes – including food security, WASH, livelihoods, health and cash assistance – are designed and implemented in ways that minimise protection risks and promote safety and dignity.
- Humanitarian actors should strengthen gender-sensitive and age-appropriate approaches to protection, including measures to mitigate risks of GBV, child labour, early marriage, family separation during drought and other harmful coping strategies.
- Humanitarian actors should ensure that programmes are accessible to persons with disabilities and older people, including through adapted delivery mechanisms, accessible infrastructure and inclusive communication.
- Humanitarian actors and donors should invest in context-specific protection analysis and staff capacity to support effective protection mainstreaming across drought responses, including through strengthening locally led protection systems.
- Humanitarian actors should establish or strengthen accessible, safe and trusted feedback and complaints mechanisms that enable people affected by drought to report protection concerns and influence programme adaptation.
- Humanitarian, development and government actors should coordinate to address protection risks linked to displacement, competition over resources and access constraints in drought-affected areas.

## LESSON 9:

# APPLY CONFLICT-SENSITIVE AND PEACE-POSITIVE APPROACHES

**Drought responses must be conflict-sensitive and support peace-building efforts where possible.**

Understanding how drought interacts with insecurity, competition over natural resources and governance systems is essential to avoid exacerbating tensions and to promote stability and cooperation among communities affected by drought. Conflicts normally emerge because of many convergent reasons – for example, heightened competition for scarce natural resources (particularly pasture and water) in fragile, already conflict-affected settings – which drought and extreme heat can exacerbate. Conflict-sensitive approaches are vital to ensure humanitarian and resilience programmes do not unintentionally reinforce inequalities or fuel instability. In some cases, the need for greater community collaboration in the face of a shared drought and its impacts can even improve community cohesion.

Community ownership and participation are essential for success in insecure contexts, where local trust and accountability can protect projects from corruption and manipulation. Livestock and livelihood interventions should be carefully designed to avoid creating incentives for theft, worsening tensions or consolidating patterns of exclusion. Understanding how power relations, social networks and access systems shape who benefits from aid is critical for equitable and safe delivery.

Number of documents contributing to the lessons: 6

Average evidence scores of all documents contributing to the lessons: 3.5

Median evidence strength of documents contributing to the lessons: 70%

## RECOMMENDATIONS

- Humanitarian and development actors should integrate conflict analysis into drought assessments, programme design and monitoring, recognising how drought interacts with existing tensions, power relations and governance dynamics.
- Humanitarian actors should ensure that targeting, resource allocation and delivery mechanisms are transparent and equitable to reduce the risk of exacerbating grievances or patterns of exclusion.
- Humanitarian, development and peace actors should strengthen coordination and information-sharing in drought-affected, conflict-prone contexts to support coherent and complementary responses.
- Humanitarian actors should support inclusive decision-making and community-engagement processes that help mitigate tensions and strengthen social cohesion during drought response.
- Humanitarian and development actors should invest in shared or collective assets, such as water infrastructure or natural resource management systems, where evidence suggests these can reduce competition and conflict risks.
- Humanitarian actors should regularly review and adapt programmes based on evolving conflict dynamics and feedback from communities affected by drought.

# LESSON 10:

## DELIVER MULTISECTORAL DROUGHT RESPONSES

**Actors should design context-specific, multisectoral drought responses that address both immediate needs and the structural causes of vulnerability.**

Food is often the first priority in drought response, but when aid focuses too narrowly on food distributions, other critical needs (such as agriculture, water, health and nutrition) remain underfunded.

Assessments that are too narrow or based on outdated assumptions lead to gaps in response design; for example, focusing on communities in rural arid and semi-arid lands (ASALs) overlooks emerging evidence of urban vulnerability and the interdependence between sedentary and pastoralist households. By combining food security, WASH and livelihood analyses with community input, assessments can capture a fuller picture of drought impacts, enabling more strategic and context-specific interventions that reflect the real coping strategies and needs of different groups. A balanced, multisectoral approach addresses immediate hunger and protects the assets and livelihoods that underpin recovery and future food security.

Cash is often preferred by programme participants, but cash does not consistently translate into better nutrition, health or education when services are weak or prices are high. Integrated packages that pair cash and voucher assistance with WASH, nutrition and health outreach improve food security and child nutrition, reduce harmful trade-offs and better meet diverse and specific needs, including those of persons with disabilities, older people and people who are ill.

Linking social protection support to productive activities, such as soil and water conservation, is an adaptive social protection approach that can allow food-insecure households to meet immediate needs while investing in natural resource management and community assets. It is particularly effective in contexts facing recurrent droughts, as it reduces future dependence on aid.

Households dependent on rain-fed agriculture are highly exposed to crop failure. Investments in drought-tolerant seeds, improved planting methods, terracing and integrated pest management can significantly increase yields and household incomes. However, input distribution must align with seasonal calendars and be supported by

Number of documents contributing to the lessons: 63

Average evidence scores of all documents contributing to the lessons: 3.8

Median evidence strength of documents contributing to the lessons: 80%

1 training, pest control and water access to achieve lasting results. Combining these measures helps protect agricultural systems from drought stress and builds long-term resilience.

2 WASH interventions are most impactful when they link water access with employment opportunities, agricultural support or health services, generating wider benefits for food security, education and resilience. Infrastructure, such as rehabilitated water points and new community systems, delivers strong value for money as it provides benefits across multiple dry seasons and reduces repeated emergency costs.

3 Education should be integrated into drought contingency plans to keep schools open and functional. For children in vulnerable situations, including those from migrating pastoralist families, displaced communities and children with disabilities, schools can be a critical lifeline. School meals, take-home rations and conditional transfers can sustain attendance, reducing reliance on harmful coping strategies such as early marriage or child labour. Mapping pastoralist movements, introducing flexible curricula and supporting adapted teaching methods can sustain learning.

## 8 RECOMMENDATIONS

- 9 ● Humanitarian and development actors should design drought responses based on integrated analysis that captures the interlinked impacts of drought across food security, nutrition, health, water, livelihoods and protection.
- 10 ● Humanitarian actors should strengthen coordination and joint planning across sectors to improve coherence, sequencing and complementarity of interventions.
- 11 ● Donors should support multisectoral programming through flexible funding arrangements that allow activities and budgets to be adapted across sectors as needs evolve.
- 12 ● Humanitarian actors should use cash-based approaches, where appropriate, as part of broader multisectoral strategies that are complemented by investments in services, infrastructure and market systems.
- 13 ● Humanitarian and development actors should align assessment, monitoring and reporting processes across sectors to reduce fragmentation and support integrated decision-making.
- 14 ● Humanitarian actors and donors should invest in staff capacity, coordination mechanisms and systems that enable the design and delivery of effective multisectoral drought responses.
- 15
- 16
- 17

# LESSON 11:

## ADDRESS HEALTH NEEDS DURING DROUGHT

**Different and specific health needs should be addressed, and existing health infrastructure supported where possible given the extra demands on health services during drought.**

Health risks rise sharply during drought: from malnutrition and disease outbreaks to reduced access to essential services. This has a particular impact on children, pregnant and lactating women, persons living with disabilities and chronic illness, and older people. Maternal health is among the first areas to decline, with reduced antenatal and postnatal care visits, limited skilled birth attendance and rising risks of complications. A special need during drought is the rise in severe acute malnutrition (SAM) cases, which require immediate rehabilitation. Therapeutic feeding is rarely part of a conventional primary healthcare setup, and will need scaling up through investment in SAM-management programmes and facilities. Heat-related illness can also have an impact in periods of very high temperatures.<sup>6</sup>

While progress has been made in integrating the health needs of women and children, older people and persons with disabilities are consistently deprioritised. Programmes should target the specific health problems of older people, particularly access to drugs. Older adults also face a rising burden of non-communicable diseases (NCDs) such as hypertension, diabetes, arthritis and chronic respiratory diseases, which require consistent treatment that becomes harder to access during droughts. Too often, responses also treat persons with disabilities as a homogenous group, overlooking the wide variation in their health needs and resilience. Health interventions should therefore be designed using existing research and evidence about the particular needs of persons with disabilities and older people, supported by disaggregated data and tailored approaches, to ensure no one is left behind. Health access barriers, including long distances to health facilities, mobility challenges and lack of assistive devices, further exclude older adults and persons with disabilities from essential services. Frequent mobility of pastoralist households during drought also disrupts continuity of care, leading to missed immunisations, treatment interruptions and weak follow-up for chronic and childhood illnesses.

Number of documents contributing to the lessons: 43

Average evidence scores of all documents contributing to the lessons: 3.9

Median evidence strength of documents contributing to the lessons: 80%

<sup>6</sup> Delphi Panel members noted that establishing community cooling points can bring some relief.

Beyond physical impacts, drought creates significant mental burdens for caregivers, adolescents and displaced families; these are linked to livelihood loss, food insecurity and school disruption. Aid programmes can also unintentionally increase stress, if poorly designed. For example, because women frequently have both caregiving and farming roles, they simultaneously face pressure to farm in difficult conditions and to spend more time caring for sick family members; finding time to participate in a programme becomes yet another pressure. Tailored mental health and psychosocial support (MHPSS) interventions, embedded in community health and education systems, can reduce distress, strengthen family resilience and protect the wellbeing of young people, who are especially vulnerable to climate anxiety and trauma. Humanitarian programmes can unintentionally increase stress when aid is conditional, registration processes are complex or programme participants spend long hours waiting for assistance.

Drought places heavy pressure on fragile health systems, which undermines routine service delivery, including immunisation, antenatal care for pregnant women and routine nutrition screening, as health workers struggle to reach mobile or displaced households. These additional needs should be anticipated in areas prone to drought, including how to surge health capacity. Additionally, health budgets are often reduced or reallocated towards emergency drought response, limiting the resources available for the routine service delivery and strengthening of health facilities. Health-worker shortages worsen as some migrate, are reassigned to emergency duties or leave remote facilities due to poor working conditions. Evidence shows that building on existing government-run health centres is more efficient and sustainable than establishing temporary standalone systems. Strengthening continuity of essential services and securing reliable power, water and medical supplies reduces morbidity and prevents service collapse during prolonged crises.

## RECOMMENDATIONS

- Humanitarian and development actors should integrate health considerations into drought assessments and response planning, recognising the direct and indirect impacts of drought on morbidity, mortality and wellbeing.
- Humanitarian and development actors should support the continuity of essential health services during drought, including primary healthcare, maternal and child health and management of chronic conditions.
- Humanitarian actors should strengthen the integration of health, nutrition and WASH interventions to address the interlinked drivers of poor health outcomes during drought.
- Humanitarian and development actors should invest in community-based and outreach health services to improve access for pastoralists, mobile populations and marginalised groups.
- Humanitarian actors and donors should support health-system strengthening in drought-prone areas, including supply chains, health workforce capacity and referral systems, to improve resilience to recurrent shocks.
- Humanitarian and development actors should strengthen health information systems and disease surveillance to enable early detection of drought-related health risks and timely response.
- Humanitarian actors should ensure that MHPSS needs are considered as part of drought health responses, alongside physical health priorities.

## LESSON 12:

# STRENGTHEN SOCIAL PROTECTION FOR DROUGHT RESPONSE

**Large-scale social protection programmes demonstrate the potential to support millions during drought. They may have systemic weaknesses, but they can be strengthened to become more dynamic and responsive.**

Where functional government systems exist, scaling them up during droughts can provide reach, efficiency and sustainability. Linking humanitarian aid with national systems can help strengthen institutions, build trust and leave lasting capacity to respond to future droughts. National systems can be supported to better flex to respond to the impacts of droughts by expanding coverage to meet the needs of newly vulnerable populations and/or by increasing benefit amounts for existing recipients.

In practice, many systems are fragile and underresourced, with weak targeting and static registration lists (out of date, arbitrary rationing, etc.) that exclude people in vulnerable situations and mobile populations. To ensure accountability and fairness, humanitarian actors – with governments – should support strengthening elements of national systems, with a particular focus on identifying people who need support (including mobile populations), implementing digital safeguards and strong accountability measures (such as independent monitoring), and tackling exclusion, elite capture and corruption. Over-emphasis on shock-responsive design without strengthening routine foundations risks creating fragile add-ons. Humanitarian actors should strive to avoid parallel systems; instead (and where possible), they should promote harmonisation and interoperability with national systems.

Droughts often have the most serious humanitarian consequences in situations of fragility, conflict and violence, where it is difficult for international aid actors to work directly with governments. However, lessons from multiple contexts (such as Haiti, Myanmar, the Sahel, Somalia and Yemen) suggest it is still possible to link with, strengthen or build the foundations of national social protection systems.

Number of documents contributing to the lessons: 30

Average evidence scores of all documents contributing to the lessons: 3.9

Median evidence strength of documents contributing to the lessons: 80%

## RECOMMENDATIONS

- Governments should strengthen social protection systems in drought-prone areas to enable timely, predictable and scalable support during drought.
- Governments and development actors should work to expand coverage of social protection programmes to include groups commonly excluded, such as pastoralists, mobile populations, women and persons with disabilities.
- Humanitarian and development actors should strengthen linkages between humanitarian assistance and social protection systems, including through shock-responsive approaches that allow programmes to scale both in terms of coverage and increasing the amount of benefits in response to drought.
- Humanitarian actors should, where appropriate, align targeting, delivery mechanisms and registries with existing social protection systems to reduce duplication and improve efficiency.
- Donors should provide predictable, multiyear financing to support the capacity, coverage and adaptability of social-protection systems in drought-prone contexts.
- Governments and partners should invest in the institutional capacity, data systems and coordination mechanisms needed to enable social protection systems to respond effectively to drought.

# LESSON 13:

## SELECT APPROPRIATE PROGRAMME MODALITIES

**Cash programming is effective – and communities often prefer it – but it needs to be adaptive to local contexts.**

Cash transfers have proven consistently effective in improving food security, nutrition and dietary diversity and reducing reliance on negative coping strategies. Evidence shows that cash is more efficient than in-kind aid and that digital delivery mechanisms can further improve efficiency. Programme participants overwhelmingly prefer cash to in-kind food due to its flexibility and dignity. If livelihoods fail, households lose income and purchasing power while markets still function, so CVA can restore access to markets and services – although success depends on setting transfer values that keep pace with inflation. Cash can also be used to support livelihood diversification. Transfers that are too small risk failing to sustain food-security improvements. Cash can be used to complement livelihood support, job opportunities or skills training to contribute towards resilience. Crisis modifiers and budget buffers can help to ensure cash is timely, effectively implemented and linked to development and social protection.

Drought responses often coincide with sharp rises in staple food prices and a decline in livestock prices (if the health of livestock cannot be maintained), eroding household purchasing power and worsening malnutrition. Humanitarian actors should monitor and improve how food markets operate, including by introducing regulatory frameworks and supply-side interventions to support market-recovery processes. Inflation can erode the value of cash benefits, which may require flexibility in transfer values, supply-side interventions or mixing or switching modalities accordingly until supply recovers and inflation reduces. When deploying cash at scale, assess foreign-exchange dynamics, although the risk is lower with smaller volumes of cash transfer, for example below typical remittance levels. Experiences in Somalia and Syria show that pegging cash values to the US dollar and budgeting buffers allow for timely adjustments. Donors should maintain flexibility to shift between cash, vouchers and in-kind assistance depending on changing contexts.

Recipients often share the food and cash they have received beyond the target individuals, reducing their effectiveness in covering household food needs (although expanding coverage and supporting social capital). Accounting for this predictable

Number of documents contributing to the lessons: 49

Average evidence scores of all documents contributing to the lessons: 4

Median evidence strength of documents contributing to the lessons: 80%

behaviour can help ensure rations or transfer values are sufficient to meet minimum nutritional requirements.

Other modalities that support future preparedness or risk reduction can also be considered, such as climate-resilient seed promotion, cropping advisories and fodder banks for livestock.

## RECOMMENDATIONS

- Humanitarian and development actors should base modality selection on context-specific analysis of markets, services, security and household priorities and review modality choices as conditions evolve.
- Humanitarian actors should use CVA where markets are functioning and access is feasible.
- Where markets are weak or inflationary, humanitarian actors should put in place strong market monitoring, and ensure transfer values can be adjusted. Integrating cash with service-delivery programming (health, education and WASH) and protection can help to mitigate risks of harm and exclusion.
- Humanitarian actors should ensure digital and financial delivery mechanisms are accessible, safe and aligned with data-protection and accountability standards, and should undertake regular risk analysis – including of privacy and power risks – particularly where regimes are repressive or systems favour communities already connected to aid actors.
- Cash suits mobile households and improved conditions in target areas can attract new arrivals. Humanitarian actors should anticipate movement and manage distributions through mobile money and delivery plans that are portable and sensitive to mobility.
- Humanitarian actors should ensure that modality choices support inclusion and accessibility for women, older people, persons with disabilities and mobile populations.
- Persons with disabilities frequently face extra costs, such as expenses for transportation, medicine, healthcare and maintenance of assistive devices. These should be considered when setting amounts to meet their basic needs.

# LESSON 14:

## LINK HUMANITARIAN RESPONSE TO RESILIENCE

**Humanitarian and development actors should move beyond short-term relief by integrating immediate drought response with long-term resilience-building. Linking livelihood protection with sustainable systems and coordinated, cross-sectoral collaboration enables communities to recover, adapt and thrive.**

Repeated droughts reveal the limitations of reactive, short-term humanitarian responses. Households and communities rely on a mix of agricultural and non-agricultural strategies to survive, yet programmes often fail to support both dimensions in a coordinated way. Effective resilience requires linking emergency assistance with early recovery and long-term systems that strengthen livelihoods, market access and financial stability.

Building resilience demands investment in durable infrastructure, regenerative climate-smart agriculture, nature-based solutions and inclusive financial mechanisms (such as savings groups, insurance and credit). Humanitarian and development actors should align around common tools and frameworks to integrate policies across relief, social protection and disaster risk reduction. Collaboration between governments, non-governmental organisations and communities – grounded in local analysis and locally led initiatives – helps ensure responses are contextually relevant and sustainable.

Number of documents contributing to the lessons: 39

Average evidence scores of all documents contributing to the lessons: 4

Median evidence strength of documents contributing to the lessons: 80%

## RECOMMENDATIONS

- Humanitarian and development actors should design drought responses in ways that protect livelihoods and productive assets, reducing longer-term vulnerability alongside meeting immediate needs.
- Humanitarian actors should identify opportunities to align emergency assistance with existing development, resilience and climate-adaptation initiatives in drought-prone areas.
- Donors should support funding approaches that enable stronger linkages between humanitarian response, recovery and resilience, including through multiyear and flexible financing.
- Humanitarian and development actors should strengthen coordination and joint planning across humanitarian, development and climate actors to reduce institutional silos and improve coherence over time.
- Governments and local authorities should be supported by humanitarian actors to lead and coordinate efforts that link drought response with national resilience and development strategies.
- Humanitarian actors and donors should invest in local systems, institutions and capacities during drought response to support continuity and resilience beyond individual crisis periods.

# LESSON 15:

## PROTECT AND STRENGTHEN LIVELIHOODS AND ASSETS

**Prioritise protecting, diversifying and strengthening livelihoods. This should include rural and urban, and male- and female-headed households by employing adaptive, gender-sensitive and climate-informed approaches.**

Livelihood insecurity lies at the heart of drought vulnerability. Effective drought response should therefore safeguard productive assets and promote adaptive coping strategies. Planning should include urban-poor populations affected by migration and market disruptions, as well as supporting rural producers and pastoralists, whose livelihoods are vital to food security and cultural identity.

Resilient livelihoods depend on investment in preparedness: infrastructure for water, housing and markets, functioning national extension services and financial tools (such as insurance, credit and climate-sensitive safety nets). Integrating these systems enables households to withstand shocks without resorting to harmful coping strategies. Households should be supported by humanitarian and development actors to diversify their livelihoods, where relevant; for example, farmers may adopt off-farm activities, while pastoralists may begin agricultural or agropastoral livelihoods.

Livestock-based livelihoods may require interventions for livestock health, production and feeding. De-stocking should be treated with sensitivity, given the cultural and economic significance of holding livestock assets. Humanitarian actors should take in to consideration the risk that livestock interventions may increase inequality between small- and large-scale herders, thereby failing to benefit the most vulnerable populations. The resilience of pastoral systems depends largely on mobility for sustainable use of rangelands and access to water and pasture, so actors should consider the political and administrative boundaries constricting mobility, particularly in conflict-affected areas. Droughts disproportionately impact women, particularly those in informal economies or with limited access to land, credit and markets. The specific needs of women pastoralists, such as access to markets and risks of GBV – particularly during displacement – should therefore be addressed by actors responding.<sup>7</sup>

Number of documents contributing to the lessons: 43

Average evidence scores of all documents contributing to the lessons: 3.9

Median evidence strength of documents contributing to the lessons: 80%

<sup>7</sup> According to the Delphi panel members, people with limited mobility, persons with disabilities, older people and those with chronic illness face barriers to traditional livelihood options. Livelihood programmes should therefore explore adapted and innovative opportunities, such as home-based or digital livelihoods, which can provide resilient income streams even during drought.

## RECOMMENDATIONS

- Humanitarian and development actors should prioritise early livelihood-protection measures during drought to prevent irreversible loss of productive assets and long-term dependency on assistance.
- Humanitarian actors should tailor livelihood interventions to different livelihood systems, including pastoralism, smallholder farming and informal work, recognising distinct risks and seasonal dynamics.
- Humanitarian and development actors should align livelihood support with early warning information, anticipatory-action mechanisms and seasonal calendars to maximise impact.
- Humanitarian actors and donors should support integrated livelihood responses that combine cash, services and market support, rather than relying on single-sector interventions.
- Humanitarian and development actors should strengthen linkages between livelihood interventions, social protection systems and market actors to support recovery and resilience.
- Donors should provide flexible and sufficiently long-term funding to enable sustained livelihood protection and recovery in drought-prone contexts.

## LESSON 16:

# BUILD WATER, SANITATION AND HYGIENE (WASH) AND ECOSYSTEM RESILIENCE

**Humanitarian actors should move from short-term water trucking and emergency WASH responses towards integrated, sustainable water and ecosystem management as soon as possible.**

Water access is among the most immediate and critical needs during drought, yet reliance on emergency measures, such as water trucking, is unsustainable and costly. While lifesaving in acute crises, trucking must be complemented by systemic solutions that ensure lasting access, such as mapping local sources, rehabilitating boreholes, increasing storage and establishing permanent water-delivery and governance structures, as well as ensuring an enabling policy environment. WASH facilities should also be accessible for persons with disabilities, older people and others with mobility challenges.

Effective drought response should include embedding water and ecosystem programming into long-term sustainability strategies, such as soil and water conservation, water storage and drainage, landscape restoration and management, and government leadership and accountability. Tailored approaches must reflect how drought differently impacts people's livelihoods – especially farmers, pastoralists and the urban poor – so that resources are distributed equitably and efficiently. This will include training local water committees and linking them to financial protection schemes.

Finally, water security cannot be separated from environmental health. Investing in ecosystem resilience by restoring rangelands, managing watersheds and protecting forests and aquifers supports both human and ecological systems. Building resilience requires expanding capacities for water harvesting and storage so that households, farmers and communities can better withstand prolonged dry periods. Facilitating access to finance through grants, micro-loans or subsidies enables investment in affordable water infrastructure and technologies, while integrating modern and traditional methods ensures solutions are context-appropriate and locally owned.

Number of documents contributing to the lessons: 17

Average evidence scores of all documents contributing to the lessons: 3.8

Median evidence strength of documents contributing to the lessons: 80%

Following severe and/or prolonged drought, flooding may occur due to the ground not being able to absorb as much surface water. Responding actors can support soil and water conservation, landscape restoration and management to increase resilience to droughts.<sup>8</sup> Strengthening the regulatory frameworks that govern natural-resource use ensures that humanitarian and development interventions reinforce one another, creating the foundations for sustainable drought resilience.

## RECOMMENDATIONS

- Humanitarian and development actors should integrate water resource management and ecosystem considerations into drought preparedness, response and recovery strategies.
- Humanitarian actors should design emergency water interventions as part of a broader strategy that considers sustainability, cost and transition to longer-term solutions.
- Humanitarian, development and environmental actors should invest in water infrastructure, catchment management and ecosystem restoration to reduce vulnerability to future droughts.
- Humanitarian and development actors should support inclusive and participatory water governance and natural resource management, paying particular attention to gender, power dynamics and marginalised groups.
- Governments and partners should strengthen coordination across water, environment, agriculture and humanitarian sectors to improve the coherence and sustainability of drought responses.
- Donors should support multiyear and flexible financing for water- and ecosystem-resilience interventions in drought-prone contexts.

<sup>8</sup> The Delphi panel members highlighted that traditional structures for water storage and drainage, such as the Wadi or Hafir, should be promoted in arid regions (where contextually relevant) to recharge groundwater by controlling water flow and encouraging water infiltration.

## LESSON 17:

# STRENGTHEN MONITORING, EVALUATION, ACCOUNTABILITY AND LEARNING (MEAL) AND DATA SYSTEMS

**Embed MEAL systems that are inclusive and locally led, and implement data management systems that generate timely, disaggregated, actionable insights.**

Evidence from drought responses consistently highlights the importance of robust MEAL systems to inform timely decision-making and improve programme quality. In slow-onset crises such as drought, the ability to track changing conditions, household outcomes and emerging risks over time is particularly critical. Evaluations show that weak or under-resourced MEAL systems limit learning, reduce accountability to populations affected by drought and constrain actors' ability to adapt interventions as conditions evolve.

Data gaps and fragmentation remain significant challenges in drought contexts. Evidence highlights inconsistencies in indicators, methodologies and data-sharing practices across organisations and sectors, making it difficult to compare findings or build a coherent picture of needs and outcomes. Local and national data systems are often underutilised or bypassed, despite their potential to support contextually relevant analysis and ownership. Where data collection places excessive burden on communities affected by drought, it can undermine trust and participation.

Accountability to populations affected by drought is a central component of effective MEAL systems. Evaluations show that feedback and complaints mechanisms can improve programme relevance and protection outcomes when they are accessible, trusted and linked to decision-making. However, these mechanisms are often poorly resourced, inaccessible to marginalised groups or disconnected from programme adaptation. Learning processes are similarly constrained when findings are not shared across teams, sectors or institutions. Strengthening MEAL in drought responses requires sustained investment, coordination and a culture of learning. Evidence suggests that integrating qualitative and quantitative data, including community-generated information, improves understanding of drought impacts and response effectiveness. Linking MEAL systems to early warning, anticipatory action and resilience frameworks can further enhance their relevance and usefulness over time.

Number of documents contributing to the lessons: 26

Average evidence scores of all documents contributing to the lessons: 4.2

Median evidence strength of documents contributing to the lessons: 80%

## RECOMMENDATIONS

- Humanitarian and development actors should institutionalise inclusive, outcome and impact focused MEAL systems that systematically capture disaggregated and longitudinal data. This should include disaggregated data, for example for children, adolescents and marginalised groups.
- Governments, and humanitarian and development actors should invest in harmonised systems for risk data, early warning and evaluation, including comprehensive shocks data and clear crisis modifier guidance.
- Humanitarian and development actors should institutionalise quality assurance and learning systems, including clear quality assurance responsibilities, context-driven analysis, contribution analysis and documentation of decisions, to ensure collective accountability and avoid repeating past mistakes.
- Humanitarian and development actors should capture both intended and unintended impacts in MEAL data. This should include less tangible outcomes such as community trust, perceptions of fairness or conflict risks. Weak documentation and reporting often undermines fundraising and timely adjustments in operations. Embedding adaptive learning loops ensures interventions remain relevant and accountable.

# BIBLIOGRAPHY

Abdulla, A I S (2015) *Cash transfer programming in the ASALs of Kenya*. CaLP. <https://alnap.org/help-library/resources/cash-transfer-programming-in-the-asals-of-kenya/>

Abebe, A et al (2016) *Ethiopia drought: midterm evaluation report (MDRET016)*. Geneva: IFRC. <https://alnap.org/help-library/resources/ethiopia-drought-midterm-evaluation-report/>

ACTED (2022) *ACTED Cash programming Somalia review 2018–2022*. Internal monitoring and evaluation report. Paris: ACTED. <https://alnap.org/help-library/resources/cash-programming-somalia-review-2018-2022/>

Adelphi Research and Chemonics International (2020) *Pathways to peace: addressing conflict and strengthening stability in a changing climate. Lessons learned from resilience and peacebuilding programs in the Horn of Africa*. Washington DC: USAID. <https://alnap.org/help-library/resources/lessons-learned-from-resilience-and-peacebuilding-programs-in-the-horn-of-africa/>

Alexandre, J and Christensen, R (2012) *Lessons learned from Horn of Africa drought crisis*. Global Education Cluster. <https://reliefweb.int/report/ethiopia/lessons-learned-horn-africa-drought-crisis-ethiopia-kenya-and-somalia-education>

Asia-Pacific Technical Working Group on Anticipatory Action and Asia-Pacific Regional Cash Working Group (2024) *Anticipatory action and cash transfers for slow-onset hazards: practitioners' note for field testing*. Bangkok: Asia-Pacific Technical Working Group on Anticipatory Action and Asia-Pacific Regional Cash Working Group. <https://alnap.org/help-library/resources/anticipatory-action-and-cash-transfers-for-slow-onset-hazard-events-practitioners-note-for-field-testing/>

Austin, L, Grosso, S and O'Neil, G (2017) *START Network slow-onset crises: review of surge practices – Transforming Surge Capacity project*. London: Start Network. <https://alnap.org/help-library/resources/slow-onset-crises-review-of-surge-practices/>

Bailey, S and Polvanesi, M (2019) *Cash transfers and vouchers in response to drought in Mozambique: lessons on social protection linkages and separation of functions*. Rome: WFP and London: DFID. <https://alnap.org/help-library/resources/cash-transfers-and-vouchers-in-response-to-drought-in-mozambique-lessons-on-social/>

Bailey, S, Kardan, A, Morris, H, Scott, M and Harvey, P (2017) *Zimbabwe 'cash first' humanitarian response 2015–2017 evaluation report*. Oxford: Oxford Policy Management. <https://alnap.org/help-library/resources/zimbabwe-cash-first-humanitarian-response-20152017-evaluation-report/>

Barbelet, V, Samuels, F and Plank, G (2018) *The role and vulnerabilities of older people in drought in East Africa*. ODI Humanitarian Policy Group. London: ODI. <https://alnap.org/help-library/resources/the-role-and-vulnerabilities-of-older-people-in-drought-in-east-africa-progress/>

Bastagli, F et al (2016) *Cash transfers: what does the evidence say? A rigorous review of impacts and the role of design and implementation features*. London: ODI. <https://alnap.org/help-library/resources/cash-transfers-what-does-the-evidence-say-a-rigorous-review-of-impacts-and-the-role-of/>

Beazley, R, Solórzano, A and Barca, V (2019) *Study on shock-responsive social protection in Latin America and the Caribbean: summary of key findings and policy recommendations*. Oxford: Oxford Policy Management in collaboration with the World Food Programme. <https://alnap.org/help-library/resources/study-on-shock-responsive-social-protection-in-latin-america-and-the-caribbean/>

Bell, E (2015) *Violence against women and cash transfers in humanitarian contexts*. VAWG Helpdesk Research Report 68. London: VAWG Helpdesk/UKAID. <https://alnap.org/help-library/resources/violence-against-women-and-cash-transfers-in-humanitarian-contexts/>

Berhanu, D et al (2019) *Interagency humanitarian evaluation of the drought response in Ethiopia 2015–2018*. Interagency Humanitarian Evaluation Steering Group. Geneva: IASC. <https://alnap.org/help-library/resources/inter-agency-humanitarian-evaluation-of-the-drought-response-in-ethiopia-2015-2018/>

Boulinaud, M and Ossandon, M (2023) *Evidence and practice review of the use of cash transfers in contexts of acute food insecurity*. Rome: Global Food Security Cluster. <https://alnap.org/help-library/resources/evidence-and-practice-review-of-the-use-of-cash-transfers-in-contexts-of-acute-food-insecurity/>

British Red Cross (2022) *Changing climate, changing realities: migration in the Sahel*. London: British Red Cross. <https://alnap.org/help-library/resources/changing-climate-changing-realities-migration-in-the-sahel/>

BRCiS – Building Resilient Communities in Somalia Consortium (2022) *Midline evaluation summary: BRCiS project (2018–2022)*. Consortium Report. Mogadishu: BRCiS Consortium. <https://alnap.org/help-library/resources/building-resilient-communities-in-somalia-brcis-midline-evaluation-summary/>

BRCiS Consortium (2023) *BRCiS: Phase 2*. Mogadishu: BRCiS Consortium. <https://alnap.org/help-library/resources/building-resilient-communities-in-somalia-brcis-devco2-endline-report/>

Byrareddy, V et al (2021) 'Coping with drought: lessons learned from robusta coffee growers in Vietnam' *Climate Services* 22: 100229. <https://alnap.org/help-library/resources/coping-with-drought-lessons-learned-from-robusta-coffee-growers-in-vietnam/>

CaLP – Cash Learning Partnership (2022) *The changing landscape of cash preparedness: lists, risks and relationships*. CaLP. <https://alnap.org/help-library/resources/the-changing-landscape-of-cash-preparedness-lists-risks-and-relationships/>

CaLP (2023) *Cash and voucher assistance within social protection preparedness in Central America, Mexico and the Dominican Republic*. CaLP. <https://alnap.org/help-library/resources/cash-voucher-assistance-within-social-protection-preparedness-in-central-america-mexico/>

CaLP (2023) 'Climate change and environmental considerations in CVA' in *The state of the world's cash 2023: cash and voucher assistance in humanitarian aid*. CaLP. <https://alnap.org/help-library/resources/the-state-of-the-worlds-cash-2023/>

Carabine, E, Jouanjean, M and Tsui, J (2015) *Kenya ending drought emergencies policy review: scenarios for building resilience in the ASALs*. Report prepared by the Technical Consortium, a project of the Consultative Group on International Agricultural Research. Technical Report Series No. 2: Strengthening the Evidence Base for Resilience in the Horn of Africa. Nairobi: ILRI. <https://alnap.org/help-library/resources/kenya-ending-drought-emergencies-policy-review-scenarios-for-building-resilience-in-the-asals/>

CARE Afghanistan (2019) *End-line assessments report emergency response for drought affected households in Northern Afghanistan project*. Kabul: CARE International

CARE Ethiopia (2021) *Livelihoods, WASH and protection support to drought and conflict-affected IDPs and host communities in Somali region, Ethiopia*. End Line Survey Report Project. Addis Ababa: CARE International.

CARE International (2013) *Evaluation of CARE's response to the 2011–2012 Sahel humanitarian crisis*. Internal Evaluation Report. CARE International West Africa Regional Management Unit. <https://alnap.org/help-library/resources/care-sahel-2011-2012-response-evaluation/>

CARE International and Oxfam (2016) *Consolidated gender analysis for the Ethiopian drought response*. Oxford: Oxfam GB for Oxfam International. <https://alnap.org/help-library/resources/consolidated-gender-analysis-for-the-ethiopian-drought-response/>

CARE International UK (2017) *Adaptable and effective: cash in the face of multi-dimensional crisis – lessons from Zimbabwe*. London: CARE International <https://alnap.org/help-library/resources/adaptable-and-effective-cash-in-the-face-of-multi-dimensional-crisis/>

CARE International Zimbabwe (2019) *Progress toward building resilient livelihoods and climate change adaptation in Gwanda and Beitbridge districts*. Evaluation Report. Unpublished manuscript.

Checchi, F, et al (2013) 'Study suggests 258,000 Somalis died due to severe food insecurity and famine (October 2010–April 2012)'. Mogadishu: FSNAU, FAO and Famine Early Warning Systems Network (FEWS NET). [https://fews.net/sites/default/files/documents/reports/FSNAU\\_FEWSNET\\_PR\\_050113\\_FINAL.pdf](https://fews.net/sites/default/files/documents/reports/FSNAU_FEWSNET_PR_050113_FINAL.pdf)

Clifton, D (2012) *Gender equality in the East Africa crisis response: joint evaluation by the Disasters Emergency Committee and the Humanitarian Coalition*. London: Humanitarian Coalition and Disasters Emergency Committee. <https://alnap.org/help-library/resources/gender-equality-in-the-east-africa-crisis-response/>

Costella, C and Weingärtner, L (2019) *Linking financial services and social protection for resilience: lessons from Kenya*. London: ODI Global. <https://media.odi.org/documents/12903.pdf>

Cross, A, Sánchez Canales, A, and Shaleva, E (2018) *Cash transfer programming in the education and child protection sectors: Literature review and evidence maps*. London: London School of Economics (on behalf of CaLP). <https://alnap.org/help-library/resources/cash-transfer-programming-in-the-education-and-child-protection-sectors-literature-review-and-evidence-maps/>

Dahir, S (2019) *Building on experience: reflections and recommendations from evaluations of the 2017 CVA Somalia Drought Response*. CaLP Network. <https://alnap.org/help-library/resources/building-on-experience-reflections-and-recommendations-from-evaluations-of-the-2017-cva-somalia-drought-response/>

Dahir, S and Peachey, K (2019) *Using learning to strengthen cash and voucher assistance in the 2019 drought response in Somalia*. CaLP Network. <https://www.calpnetwork.org/publication/6-key-points-to-address-using-learning-to-strengthen-cash-and-voucher-assistance-in-the-2019-drought-response-in-somalia/>

Daniels, C M et al (2018) *Evaluation of the 2017 Somalia humanitarian cash-based response*. Cash Working Group. <https://alnap.org/help-library/resources/evaluation-of-the-2017-somalia-humanitarian-cash-based-response/>

Danish Refugee Council (2016) *Review of durable solutions initiatives in East and Horn of Africa*. Copenhagen: DRC. <https://alnap.org/help-library/resources/review-of-durable-solutions-initiatives-in-east-and-horn-of-africa-good-practices-challenges-and-opportunities-in-the-search-of-durable-solutions/>

de Geoffroy, V et al (2021) *Adapting humanitarian action to the effects of climate change*. London: ALNAP. <https://alnap.org/help-library/resources/alnap-lessons-paper-adapting-humanitarian-action-to-the-effects-of-climate-change/>

Devonald, M, Jones, N and Yadete, W (2020) *'The first thing that I fear for my future is lack of rain and drought': climate change and its impacts on adolescent capabilities in low- and middle-income countries*. London: Gender and Adolescence – Global Evidence and ODI Global. <https://alnap.org/help-library/resources/the-first-thing-that-i-fear-for-my-future-is-lack-of-rain-and-drought-climate-change-and-its-impacts-on-adolescent-capabilities-in-low-and-middle-income-countries/>

Devonald, M et al (2024) 'Rethinking climate change through a gender and adolescent lens in Ethiopia' *Climate and Development* 16(3): 176–186. <https://doi.org/10.1080/17565529.2022.2032568>

DEC – Disasters Emergency Committee (2012) *East Africa crisis real-time evaluation: Kenya*. London: DEC. <https://alnap.org/help-library/resources/disasters-emergency-committee-east-africa-crisis-appeal-kenya-real-time-evaluation/>

DEC (2012) *Real time evaluation (RTE): East Africa crisis appeal synthesis report*. London: DEC. <https://alnap.org/help-library/resources/disasters-emergency-committees-dec-east-africa-crisis-appeal-synthesis-report/>

Duncalf, J (2013) *External evaluation: response to the 2012 Sahel food security and livelihoods crisis (DFID I and II)*. London: ACF International. <https://alnap.org/help-library/resources/final-independent-evaluation-of-project-for-response-to-the-2012-sahel-food-security/>

Duncalf, J (2014) *Food security and livelihoods: from recovery to resilience*. London: ACF International. <https://alnap.org/help-library/resources/food-security-and-livelihoods--from-recovery-to-resilience/>

Dunn, S et al (2013) *Final monitoring report of the Somalia cash and voucher transfer programme – Phase 2: April 2012–March 2013*. Cash and Voucher Monitoring Group Report. London: ODI. <https://alnap.org/help-library/resources/cash-and-voucher-monitoring-group-final-monitoring-report-of-the-somalia-cash-and/>

Easton-Calabria, E et al (2023) *Anticipatory action in complex crises: lessons from Ethiopia*. Boston: Feinstein International Center, Tufts University. <https://alnap.org/help-library/resources/anticipatory-action-in-complex-crises-lessons-from-ethiopia/>

El-Zoghbi, M et al (2017) *The role of financial services in humanitarian crises (Forum 12)*. Washington DC: Consultative Group to Assist the Poor, State and Peace-Building Fund and World Bank. <https://alnap.org/help-library/resources/the-role-of-financial-services-in-humanitarian-crises/>

Elsamahi, M, Ochieng, G A and Bedelian, C (2023) *Coping with the drought crisis in Somalia: formative research findings from the Resilience Population Measurement (RPM) project*. Mogadishu: RPM Activity. <https://alnap.org/help-library/resources/coping-with-the-drought-crisis-in-somalia-formative-research-findings-from-the-resilience-population/>

Eshetu, Y (2018) *Emergency nutrition and livelihood support for drought affected communities of East and West Hararghe, Ethiopia, 2017–18*. Rome: FAO. <https://careevaluations.org/evaluation/emergency-nutrition-and-livelihood-support-for-drought-affected-communities-of-east-and-west-hararghe-ethiopia/>

EC – European Commission (2022) *Combined evaluation of the European Union’s humanitarian interventions in the Horn of Africa, 2016–2020, and DG ECHO’s partnership with the International Committee of the Red Cross: Final report*. Brussels: EC. <https://alnap.org/help-library/resources/combined-evaluation-of-the-european-unions-humanitarian-interventions-in-the-horn-of/>

Fanning, E (2018) *Drought, displacement and livelihoods in Somalia: time for gender-sensitive and protection-focused approaches*. Oxford: Oxfam International. <https://alnap.org/help-library/resources/drought-displacement-and-livelihoods-in-somalia-time-for-gender-sensitive-and/>

FAO – Food and Agriculture Organization of the United Nations (2012) *A concept note based on FAO’s experience in running a cash-for-work programme during the humanitarian crises in August–October 2011*. EC-FAO Programme on Linking Information and Decision Making to Improve Food Security. Rome: FAO. <https://alnap.org/help-library/resources/cash-for-work-in-somalia-linking-relief-to-recovery/>

FAO (2013) ‘Annex 10: A study of FAO Somalia’s cash for work programme’ in *Evaluation of FAO’s cooperation in Somalia*. Rome: FAO. <https://alnap.org/help-library/resources/evaluation-of-faos-cooperation-in-somalia-2007-to-2012/>

FAO (2018) *Drought characteristics and management in North Africa and the Near East*. FAO Water Report 45. Rome: FAO. <https://alnap.org/help-library/resources/drought-characteristics-and-management-in-north-africa-and-the-near-east/>

FAO (2020) *Evaluation of FAO’s contribution to building resilience to El Niño-induced drought in Southern Africa 2016–2017*. Rome: FAO. <https://alnap.org/help-library/resources/evaluation-of-faos-contribution-to-building-resilience-to-el-ni%C3%B1o-induced-drought-in/>

FAO (2020) *Final evaluation of the project ‘Strengthening institutionalized subnational coordination structures and harmonization mechanisms’ in Ethiopia*. Project Evaluation Series, 04/2020. Rome: FAO. <https://alnap.org/help-library/resources/final-evaluation-of-strengthening-institutionalized-subnational-coordination/>

FAO (2023) *Social protection and anticipatory action to protect agricultural livelihoods*. Rome: FAO. <https://alnap.org/help-library/resources/social-protection-and-anticipatory-action-to-protect-agricultural-livelihoods/>

FCDO – Uk Foreign, Commonwealth and Development Office (2017) *Project completion review – top sheet, Ethiopia drought response programme 2017*. London: FCDO. <https://alnap.org/help-library/resources/project-completion-review-ethiopia-drought-response-programme/>

Feed the Future Ethiopia (2015) *External mid-term performance evaluation report*. Portland OR: Mercy Corps <https://alnap.org/help-library/resources/feed-the-future-ethiopia-external-mid-term-performance-evaluation-report/>

Feed the Future (2023) *Enhancing incomes and resilience of pastoralists in Ethiopia through vertically integrated livestock supply chains*. Portland OR: MercyCorps. <https://alnap.org/help-library/resources/enhancing-incomes-and-resilience-of-pastoralists-in-ethiopia-through-vertically-integrated-livestock-supply-chains/>

Feinstein International Center and Charters, R (2015) *Early response to drought in pastoralist areas: lessons from the USAID crisis modifier in East Africa*. USAID East Africa Resilience Learning Project. Washington DC: Feed the Future. <https://alnap.org/help-library/resources/early-response-to-drought-in-pastoralist-areas-lessons-from-the-usaid-crisis-modifier/>

FEWS NET (2020) 'COVID-19 pandemic drives global increase in humanitarian food assistance needs: lasting economic impacts of the COVID-19 pandemic to adversely affect food security into 2021.' *Global Food Security Alert*. FEWS NET, 30 September. <https://fews.net/global/alert/september-2020>

FEWS NET (2024) *Mozambique food security outlook June 2024–January 2025: Crisis (IPC Phase 3) outcomes persist due to El Niño and conflict impacts*. FEWS NET. <https://fews.net/southern-africa/mozambique/food-security-outlook/june-2024>

Forcier Consulting (2018) *Cash Alliance's food security and livelihoods project in Somalia: learning, review, and impact assessment*. Oslo: NRC. <https://alnap.org/help-library/resources/cash-alliances-food-security-and-livelihoods-project-in-somalia-learning-review-and-0/>

Gelders, B (2018) *Assessment of the geographical and community-based targeting of WFP's cash and food for assets programme in Kenya*. Nairobi: WFP Kenya. <https://alnap.org/help-library/resources/assessment-of-the-geographical-and-community-based-targeting-of-wfps-cash-and-food-for/>

Global CCCM Cluster (2022) *CCCM case studies 2021–22: Chapter 2: Inclusion of people with disabilities. Somalia, Mozambique and Bangladesh cases*. Global Camp Coordination and Camp Management Cluster. <https://alnap.org/help-library/resources/cccm-case-studies-2020-21-chapter-two-inclusion-of-people-with-disabilities-somalia-mozambique-and-bangladesh-cases/>

Global Emergency Group – GEG, and Centre for Humanitarian Change – CHC (2018) *Real time evaluation on the emergency drought situation response in Kenya, 2017*. New York: UNICEF. <https://alnap.org/help-library/resources/real-time-evaluation-on-the-emergency-drought-situation-response-in-kenya-2017/>

Global Public Policy Institute – GPPI (2019) *Inter-agency humanitarian evaluation of the drought response in Ethiopia (2015–2018)*. Berlin: GPPI. <https://alnap.org/help-library/resources/inter-agency-humanitarian-evaluation-of-the-drought-response-in-ethiopia-2015-2018/>

Global Water Partnership Eastern Africa (2016) *Building resilience to drought: learning from experience in the Horn of Africa*. Entebbe: Integrated Drought Management Programme in the Horn of Africa. <https://alnap.org/help-library/resources/building-resilience-to-drought-learning-from-experience-in-the-horn-of-africa/>

Government of Kenya (2015) *Common Programme Framework for Ending Drought Emergencies*. November 2015. Nairobi: GoK. <https://alnap.org/help-library/resources/common-programme-framework-for-ending-drought-emergencies/>

Groupe URD and ALNAP (2018) *The State of the Humanitarian System case study: Kenya*. ALNAP Paper. London: ALNAP/ODI. <https://alnap.org/help-library/resources/kenya-case-study--sohs-2018/>

Grünewald, F and Paul, J (2012) *From early warning to reinforcing resilience: lessons learned from the 2011–2012 Sahel response*. Report for the Inter-Agency Standing Committee (IASC) Principles. Plaisians: Groupe URD and Geneva: OCHA. <https://alnap.org/help-library/resources/from-early-warning-to-reinforcing-resilience-lessons-learned-from-the-2011-2012-sahel/>

Grünewald, F, Léon, V and Levine, S (2019) *Comprehensive review of 2016–17 ECHO Horn of Africa (HoA) Drought Response*. INSPIRE Consortium. <https://alnap.org/help-library/resources/comprehensive-review-of-2016-17-echo-horn-of-africa-drought-response/>

Guixé, I (2015) *Building gender sensitive resilience through women's economic empowerment: lessons learned from pastoralist women in Ethiopia*. Boston MA: Oxfam America. <https://alnap.org/help-library/resources/building-gender-sensitive-resilience-through-womens-economic-empowerment-lessons-learned-from-pastoralist-women-in-ethiopia/>

Hillier, D and Dempsey, B (2012) *A dangerous delay: the cost of late response to early warnings in the 2011 drought in the Horn of Africa*. Joint Agency Briefing Paper. Oxford: Oxfam GB and Save the Children. <https://alnap.org/help-library/resources/a-dangerous-delay-the-cost-of-late-response-to-early-warnings-in-the-2011-drought-in/>

ideas42 and CARE International (2020) *Applying behavioral science to humanitarian cash and voucher assistance for better outcomes for women*. London: ideas42 and CARE International. <https://alnap.org/help-library/resources/applying-behavioral-science-to-humanitarian-cash-voucher-assistance-for-better-outcomes/>

lese, V et al (2022) *Community-based early warning early action (EWEA) in the Pacific: findings from Tuvalu*. Tuvalu Red Cross Society, Red Cross Red Crescent Climate Centre, University of the South Pacific and IFRC. The Hague: Red Cross Red Crescent Climate Centre. <https://alnap.org/help-library/resources/community-based-early-warning-early-action-ewea-in-the-pacific-findings-from-tuvalu/>

IFRC – International Federation of Red Cross and Red Crescent Societies (2012) *Community early warning systems: Guiding principles*. Geneva: IFRC. <https://alnap.org/help-library/resources/community-early-warning-systems-guiding-principles/>

IFRC (2013) *Emergency operation evaluation (EOE) of Ethiopia drought operation*. Geneva: IFRC. <https://alnap.org/help-library/resources/emergency-operation-evaluation-of-ethiopia-drought-operation/>

IFRC (2015) *Kenya drought response evaluation report: focus on Marsabit and Baringo counties*. Geneva: IFRC. <https://alnap.org/help-library/resources/kenya-drought-response-evaluation-report-focus-on-marsabit-and-baringo-counties/>

IFRC (2018) *Beyond charity: the transformative power of zakat in humanitarian crises – how zakat support from Malaysia helped communities in Kenya recover from drought*. Geneva: IFRC. <https://alnap.org/help-library/resources/beyond-charity-the-transformative-power-of-zakat-in-humanitarian-crises-how-zakat/>

IFRC (2021) *Final evaluation of multi-country emergency appeal in Southern Africa drought/food insecurity*. Nairobi: SAWA Consulting. <https://alnap.org/help-library/resources/final-evaluation-multi-country-emergency-appeal-for-southern-africa-drought/>

IFRC and American Red Cross (2024) *Assessing early action implementation by Red Cross Red Crescent national societies: desk review and qualitative research study*. Geneva: IFRC-DREF and American Red Cross. <https://alnap.org/help-library/resources/assessing-early-action-implementation-by-red-cross-red-crescent-national-societies/>

iMMAP (2024) *Community insight survey for cash-based programs in Afghanistan*. Kabul: iMMAP Inc. Afghanistan. <https://alnap.org/help-library/resources/community-insight-survey-for-cash-based-programs-in-afghanistan/>

Independent Commission for Aid Impact – ICAI (2012) *The Department for International Development's humanitarian response to the Horn of Africa crisis*. London: ICAI. <https://alnap.org/help-library/resources/dfids-humanitarian-emergency-response-in-the-horn-of-africa/>

Issa, Z, Lindenfors, A and Timmins, N (2024) *Global insights: the humanitarian research and innovation landscape – 2024 report*. London: Elrha. <https://alnap.org/help-library/resources/the-humanitarian-research-and-innovation-landscape-2024-report/>

Jeong, D and Trako, I (2022) *Cash and in-kind transfers in humanitarian settings: a review of evidence and knowledge gaps*. Policy Research Working Paper 10026. Rome: WFP and Washington DC: World Bank. <https://alnap.org/help-library/resources/cash-and-in-kind-transfers-in-humanitarian-settings-a-review-of-evidence-and-knowledge/>

Kapata, L (2022) *Coping with drought and climate change in Zambia (CDCC) project in Gwembe district of Southern Province*. Endline assessment report. Lusaka: CARE International in Zambia

Kenya Red Cross (2017) *Drought emergency cash transfer response 2016–2017*. Real Time Evaluation Report. Nairobi: Kenya Red Cross. <https://alnap.org/help-library/resources/drought-emergency-cash-transfer-response-2016-2017/>

Kenya Red Cross (2017) *A buffer against the drought: riding on the hunger safety net programme platform to deliver aid to the most vulnerable through the use of bank accounts*. Nairobi: Kenya Red Cross. <https://alnap.org/help-library/resources/a-buffer-against-the-drought-riding-on-the-hunger-safety-net-programme-platform-to-deliver-aid-to-the-most-vulnerable-through-the-use-of-bank-accounts/>

Kett, M, et al. (2017) 'Disability and climate resilience: a literature review' in *Disability and climate resilience: analysis from 2007 onwards in low and middle-income countries*. London: Leonard Cheshire Disability. <https://alnap.org/help-library/resources/disability-and-climate-resilience-a-literature-review/>

Kreidler C, Battas S, Seyfert K and Saidi M (2022) *Linking humanitarian cash assistance and national social protection systems: flagship report*. Sahel Adaptive Social Protection Program. Washington DC: World Bank. <https://alnap.org/help-library/resources/linking-humanitarian-cash-assistance-and-national-social-protection-systems/>

Lain, J. (2017) *Resilience in Ethiopia and Somaliland: impact evaluation of the reconstruction project 'Development of enabling conditions for pastoralist and agro-pastoralist communities'*. Oxford: Oxfam GB. <https://alnap.org/help-library/resources/resilience-in-ethiopia-and-somaliland-impact-evaluation-of-the-reconstruction-project-development-of-enabling-conditions-for-pastoralist-and-agro-pastoralist-communities/>

Lee, H et al (2023) *Synthesis report of the IPCC sixth assessment report (AR6): longer report*. Intergovernmental Panel on Climate Change (IPCC) IPCC AR6 SYR. Geneva: IPCC. <https://ntrs.nasa.gov/api/citations/20230009525/downloads/ARuanelPCC6thAssessSynthesisAccepted.pdf>

Lenhardt, A, Glennie, J, Ali, A and Intsher N (2014) *A greener Burkina: sustainable farming techniques, land reclamation and improved livelihoods*. London: ODI. <https://alnapp.org/help-library/resources/a-greener-burkina-sustainable-farming-techniques-land-reclamation-and-improved-livelihoods/>

Letsoalo, N et al (2023) 'Coping and adapting to drought in semi-arid Karoo rangelands: key lessons from livestock farmers' *Journal of Arid Environments* 219(105070). <https://alnapp.org/help-library/resources/coping-and-adapting-to-drought-in-semi-arid-karoo-rangelands-key-lessons-from-livestock-farmers/>

Levine, S (2022) *Making the concept of resilience in the Sahel more useful*. Issue Brief. London: SPARC. <https://alnapp.org/help-library/resources/making-the-concept-of-resilience-in-the-sahel-more-useful/>

Levine, S et al (2020) *Anticipatory action for livelihood protection: a collective endeavour*. ODI Working Paper 580. London: ODI. <https://alnapp.org/help-library/resources/anticipatory-action-for-livelihood-protection-a-collective-endeavour/>

Lindsay, C, Dupar, M and Beauchamp, E (2024) *Mapping the information and learning landscape for adaptation in small island developing states*. ODI and International Institute for Sustainable Development (IISD) Working Paper. London: ODI and Winnipeg: IISD. <https://alnapp.org/help-library/resources/mapping-the-information-and-learning-landscape-for-adaptation-in-small-island-developing-states-sids/>

Magoma (2022) *The Kenya Cash Consortium locally-led response case study*. ACTED. <https://alnapp.org/help-library/resources/kenya-cash-consortium-four-years-on-locally-led-response-case-study/>

Mangano, M (2013) *Good practice principles and lessons learnt from cross-border DRR programming in the drylands of the Horn of Africa*. ACTED. <https://alnapp.org/help-library/resources/good-practice-principles-and-lessons-learnt-from-cross-border-drr-programming-in-the-drylands-of-the-horn-of-africa/>

Martinez, E and Lundy, A (2012) *A creeping crisis: the neglect of education in slow-onset emergencies*. London: Save the Children Fund. <https://alnapp.org/help-library/resources/a-creeping-crisis-the-neglect-of-education-in-slow-onset-emergencies/>

Martínez-Piqueras, A and Ruiz Bascarán, M (2012) *ACF International's response to the Horn of Africa crisis, 2011*. London: ACF International. <https://alnapp.org/help-library/resources/final-independent-evaluation-of-acf-internationals-response-to-the-horn-of-africa/>

Maxwell, D and Majid, N (2014) *Another humanitarian crisis in Somalia? Learning from the 2011 famine*. Boston MA: Feinstein International Center, Tufts University. <https://alnap.org/help-library/resources/another-humanitarian-crisis-in-somalia/>

Maxwell, D et al (2020) *Classifying acute food insecurity using the household hunger scale: evidence from three countries*. Boston MA: Feinstein International Center, Tufts University. <https://alnap.org/help-library/resources/classifying-acute-food-insecurity-using-the-household-hunger-scale/>

Maxwell, D et al (2020) *The politics of information and analysis in humanitarian emergencies: evidence from Kenya*. Boston MA: Feinstein International Center, Tufts University. <https://alnap.org/help-library/resources/the-politics-of-information-and-analysis-in-humanitarian-emergencies-evidence-from-0/>

Medway, P, Barrena, I and Gonzalez, L (2020) *Six country evaluation of Oxfam America's strengthening community preparedness, rapid response and recovery in Asia/Pacific islands and Central America*. Boston MA: Oxfam America. <https://alnap.org/help-library/resources/final-report-six-country-evaluation-of-oxfam-americas-strengthening-community-preparedness-rapid-response-and-recovery-in-asiapacific-islands-and-central-america/>

Megersa, K (2019) *Cash transfer programmes in high inflation contexts*. K4D Helpdesk Report. Brighton: Institute of Development Studies. <https://alnap.org/help-library/resources/cash-transfer-programmes-in-high-inflation-contexts/>

Mercy Corps (2012) *From conflict to coping: evidence from Southern Ethiopia on the contributions of peacebuilding to drought resilience among pastoralist groups*. Portland OR: Mercy Corps. <https://alnap.org/help-library/resources/from-conflict-to-coping-evidence-from-southern-ethiopia-on-the-contributions-of/>

Mercy Corps (2017) *Ethiopia payment mechanism assessment report: piloting guidance for multipurpose cash*. Portland OR: MercyCorps. <https://alnap.org/help-library/resources/ethiopia-payment-mechanism-assessment-report-piloting-guidance-for-multipurpose-cash/>

Mercy Corps (2021) *Protecting development gains: the crisis modifier in Mercy Corps' Ethiopia programs*. Portland OR: MercyCorps. <https://alnap.org/help-library/resources/protecting-development-gains-the-crisis-modifier-in-mercy-corps-ethiopia-programs/>

Mercy Corps (2022) *Meeting immediate needs and protecting development gains: lessons from Ethiopia's drought response*. Portland OR: MercyCorps. <https://alnap.org/help-library/resources/meeting-immediate-needs-and-protecting-development-gains/>

Mercy Corps (2022) *Outsmarting La Niña: lessons and recommendations for strengthening resilience through the drought response in the Horn of Africa*. Portland OR: MercyCorps. <https://alnap.org/help-library/resources/outsmarting-la-ni%C3%B1a/>

Miyan, M A (2015) 'Droughts in Asian least developed countries: vulnerability and sustainability' *Weather and Climate Extremes* 7: 8–23. <https://alnap.org/help-library/resources/droughts-in-asian-least-developed-countries-vulnerability-and-sustainability/>

Muller, J C Y (2014) 'Adapting to climate change and addressing drought: learning from the Red Cross Red Crescent experiences in the Horn of Africa' *Weather and Climate Extremes* 3: 31–36. <https://alnap.org/help-library/resources/adapting-to-climate-change-and-addressing-drought-learning-from-the-red-cross-red-crescent-experiences-in-the-horn-of-africa/>

Murray, S (2016) *Can e-transfers promote financial inclusion in emergencies? A case study from Ethiopia*. Portland OR: Mercy Corps. <https://alnap.org/help-library/resources/can-e-transfers-promote-financial-inclusion-in-emergencies-a-case-study-from-ethiopia/>

Netherlands Red Cross and Ethiopian Red Cross Society (2018) *A step towards resilience: joint initiatives addressing protracted crisis in Somali region – Ethiopia*. Oslo: The Netherlands Red Cross and Addis Ababa: Ethiopian Red Cross Society. <https://alnap.org/help-library/resources/a-step-towards-resilience-joint-initiatives-addressing-protracted-crisis-in-somali/>

O'Brien, C et al (2018) *Shock-responsive social protection systems research*. Synthesis Report. Oxford: Oxford Policy Management. <https://alnap.org/help-library/resources/shock-responsive-social-protection-systems-research-synthesis-report/>

Obrecht, A (2019) *Adapting according to plan: early action and adaptive drought response in Kenya*. ALNAP Country Study. London: ODI/ALNAP. <https://alnap.org/help-library/resources/adapting-according-to-plan-early-action-and-adaptive-drought-response-in-kenya/>

OCHA – United Nations Office for the Coordination of Humanitarian Affairs (2011) *Consolidated appeal for Chad 2012: common humanitarian action plan*. Geneva: OCHA. <https://digitallibrary.un.org/record/717496?v=pd>

OCHA (2013) *Somalia 2012 consolidated appeal: End year report*. Geneva: OCHA. <https://alnap.org/help-library/resources/consolidated-appeal-somalia-end-year-report-2012/>

OCHA (2019) *Amplifying community voices in humanitarian action in Somalia*. Geneva: OCHA. <https://alnap.org/help-library/resources/amplifying-community-voices-in-humanitarian-action-in-somalia/>

OCHA (2021) *Acting early when the world isn't watching: lessons from anticipatory action in Ethiopia in 2021*. Geneva: OCHA. <https://alnap.org/help-library/resources/acting-early-when-the-world-isnt-watching-lessons-from-anticipatory-action-in-ethiopia-in-2021/>

OCHA (2021) *Beneficiary assessment for independent evaluation of anticipatory action pilot in Somalia*. Final Report. Geneva: OCHA. <https://alnap.org/help-library/resources/beneficiary-assessment-for-independent-evaluation-of-anticipatory-action-pilot-in-somalia-august-2021/>

OCHA (2022) *Humanitarian response plan 2022: End-year monitoring report*. Geneva: OCHA. <https://alnap.org/help-library/resources/afghanistan-humanitarian-response-plan-2022-end-year-monitoring-report-of-financing-achievements-and/>

OPM – Oxford Policy Management (2016) *Evaluation of the Kenya hunger safety net programme phase 2 – drought emergency scale-up payments process review*. Final Report. Oxford: OPM. <https://alnap.org/help-library/resources/evaluation-of-the-kenya-hunger-safety-net-programme-phase-2-drought-emergency-scale-up/>

OPM (2016) *Shock-responsive social protection systems: literature review*. Oxford: OPM. <https://alnap.org/help-library/resources/shock-responsive-social-protection-systems-literature-review/>

OPM (2017) *Shock-responsive social protection systems research: literature review*, 2nd edn. Oxford: OPM. <https://alnap.org/help-library/resources/shock-responsive-social-protection-systems-literature-review-2nd-edition/>

Oxfam (2017) *Horn of Africa 2017 drought response*. Oxford: Oxfam. <https://alnap.org/help-library/resources/oxfam-horn-of-africa-2017-drought-response/>

Oxfam GB (2013) *Drought management initiative: livestock component project effectiveness review*. Full Technical Report. Oxford: Oxfam GB. <https://alnap.org/help-library/resources/drought-management-initiative-livestock-component/>

Oxfam International (2013) *Learning the lessons? Assessing the response to the 2012 food crisis in the Sahel to build resilience for the future*. Oxfam Briefing Paper. Oxford: Oxfam GB. <https://alnap.org/help-library/resources/learning-the-lessons-assessing-the-response-to-the-2012-food-crisis-in-the-sahel-to/>

Pan African Research Services Limited (2023) *Evaluation of Islamic Relief's global hunger prevention and response programme*. Final Report. Nairobi: PARS Research. <https://alnap.org/help-library/resources/the-evaluation-of-islamic-reliefs-global-hunger-prevention-and-response-programme/>

Pandyopranoto, P (2016) *Building resilient communities by strengthening livelihoods and giving people more options*. The Hague: Partners for Resilience. <https://alnap.org/help-library/resources/building-resilient-communities-by-strengthening-livelihoods-and-giving-people-more-options/>

Passarelli, D and Day, A (2022) *Models for prevention: lessons from the Sahel, Horn, and Latin America*. New York: UN University. <https://alnap.org/help-library/resources/models-for-prevention-lessons-from-the-sahel-horn-and-latin-america/>

Peachey, K (2017) *Checking back: using cash and vouchers in Somalia – recommendations from the 2011–12 Somalia drought response*. CaLP Network. <https://alnap.org/help-library/resources/checking-back-using-cash-and-vouchers-in-somalia-recommendations-from-the-2011-12-somalia-drought-response/>

Peachey, K (2017) *CTP in the Ethiopia drought response: using learning to shape action*. Inter-Agency Workshop Report. CaLP Network. <https://alnap.org/help-library/resources/cash-transfer-programming-ctp-in-the-ethiopia-drought-response-using-learning-to-shape-action/>

Peters, K et al (2019) *Disaster risk reduction in conflict contexts: an agenda for action*. London: ODI. <https://alnap.org/help-library/resources/disaster-risk-reduction-in-conflict-contexts-an-agenda-for-action/>

Peters, K et al (2020) *Climate change, conflict and fragility: an evidence review and recommendations for research and action*. London: ODI. <https://alnap.org/help-library/resources/climate-change-conflict-and-fragility-an-evidence-review-and-recommendations-for/>

Price, R (2021) *Lessons from livelihood interventions that increase the resilience of populations to droughts in Afghanistan and other FCAS*. Brighton: Institute of Development Studies. <https://alnap.org/help-library/resources/lessons-from-livelihood-interventions-that-increase-the-resilience-of-populations-to-droughts-in-afghanistan-and-other-fragile-and-conflict-affected-settings-fcas/>

Prima, R A et al (2024) *Afghanistan joint response DRA project endline assessment*. London: Save the Children International. <https://alnap.org/help-library/resources/afghanistan-joint-response-dra-project-endline-assessment/>

Quak, E (2021) *Lessons learned from community-based management of acute malnutrition (CMAM) programmes that operate in fragile and conflict affected settings*. K4D Helpdesk Report 1048. Brighton: Institute of Development Studies. <https://alnap.org/help-library/resources/lessons-learned-from-community-based-management-of-acute-malnutrition-cmam-programmes-that-operate-in-fragile-or-conflict-affected-settings/>

REACH (2018) *Cash impact on food security and non-food outcomes: March–July 2018*. Geneva: REACH. <https://alnap.org/help-library/resources/somalia-cash-impact-on-food-security-and-non-food-outcomes/>

REDLAC and R4V (2021) *Linking cash and voucher assistance with social protection systems in Latin America and the Caribbean*. Santa Tecla: REDLAC. <https://alnap.org/help-library/resources/linking-cash-and-voucher-assistance-with-social-protection-systems-in-latin-america-and-the-caribbean/>

Rothe, M et al (2021) *Disability inclusive cash assistance: learnings from practice in humanitarian response*. Laudenbach: CBM Global. <https://alnap.org/help-library/resources/disability-inclusive-cash-assistance-learnings-from-practice-in-humanitarian-response/>

Samuel Hall (2014) *Humanitarian assistance through mobile cash transfer in Northern Afghanistan: an evaluation of a DFID pilot project in Faryab, Jawzjan, and Samangan*. Nairobi: Samuel Hall. <https://alnap.org/help-library/resources/humanitarian-assistance-through-mobile-cash-transfer-in-northern-afghanistan/>

Samuel Hall and Resilience, Environment, and Humanitarian Aid – REHA (2024) *Harnessing hope: community perceptions and climate adaptation in Afghanistan – lessons learned and the way forward*. Nairobi: Samuel Hall and REHA. <https://alnap.org/help-library/resources/harnessing-hope-community-perceptions-and-climate-adaptation-in-afghanistan-lessons-learned-and-the-way-forward/>

Save the Children (2024) *Lessons learned: anticipatory action in a protracted crisis*. London: Save the Children. <https://alnap.org/help-library/resources/lessons-learned-anticipatory-action-in-a-protracted-crisis/>

Sida, L, Gray, B and Asmare, E (2012) *IASC real-time evaluation of the humanitarian response to the Horn of Africa drought crisis: Ethiopia, February 2012*. New York: IASC. <https://alnap.org/help-library/resources/iasc-real-time-evaluation-iasc-rte-of-the-humanitarian-response-to-the-horn-of-africa-0/>

Sifundza, L S, van der Zaag, P and Masih, I (2019) 'Evaluation of the responses of institutions and actors to the 2015/2016 El Niño drought in the Komati catchment in Southern Africa: Lessons to support future drought management' *Water SA* 45(4): 537–549. <https://alnap.org/help-library/resources/evaluation-of-the-responses-of-institutions-and-actors-to-the-20152016-el-ni%C3%B1o-drought-in-the-komati-catchment-in-southern-africa-lessons-to-support-future-drought-management/>

Simard, M et al (2017) *Disability and climate resilience: a literature review*. London: University College London. <https://alnap.org/help-library/resources/disability-and-climate-resilience-a-literature-review/>

Singh, R et al (2016) *Reality of resilience: perspectives of the 2015–16 drought in Ethiopia*. London: BRACED. <https://alnap.org/help-library/resources/reality-of-resilience-perspectives-of-the-201516-drought-in-ethiopia/>

Slater, R and Bhuvanendra, D (2014) *Scaling up existing social safety nets to provide humanitarian response*. CaLP Network. <https://alnap.org/help-library/resources/scaling-up-existing-social-safety-nets-to-provide-humanitarian-response/>

Slim, H (2012) *IASC real-time evaluation of the humanitarian response to the Horn of Africa drought crisis in Somalia, Ethiopia and Kenya*. Synthesis Report. New York: IASC. <https://alnap.org/help-library/resources/iasc-real-time-evaluation-of-the-humanitarian-response-to-the-horn-of-africa-drought/>

Somaliland Cash Working Group and CARE International (2018) 'Cash transfer programming in Somaliland'. CARE and CaLP Learning Event, 26 March, Hargeisa. <https://alnap.org/help-library/resources/cash-transfer-programming-in-somaliland-learning-event-report/>

Southern Africa Regional Technical Cash Working Group (2018) *Synthesis of lessons from the El Niño response: cash transfers lessons learnt in Southern Africa*. Rome: WFP. <https://alnap.org/help-library/resources/synthesis-of-lessons-from-the-el-nino-response-cash-transfers-lessons-learnt-in-southern-africa/>

Spencer, J (2022) *Evaluation of BRCiS' 2022 IRF phase II emergency response*. Final Report. BRCiS Consortium. Oslo: NRC. [https://www.nrc.no/globalassets/pdf/reports/brcis-drought-response-programme-impact-evaluation/brcis-drought-response-project-impact-evaluation-final-report\\_202211.pdf](https://www.nrc.no/globalassets/pdf/reports/brcis-drought-response-programme-impact-evaluation/brcis-drought-response-project-impact-evaluation-final-report_202211.pdf)

Spencer, J et al (2023) *Understanding livelihood-related urban–rural connections for women from displacement affected communities (DACs) in South-West State of Somalia*. BRCiS. Oslo: NRC. <https://alnap.org/help-library/resources/understanding-livelihood-related-urban-rural-connections-for-women-from-displacement-affected-communities-dacs-in-south-west-state-of-somalia-comprehensive-report-on-a-multi-phased-learning-activity/>

STAIT – Senior Transformative Agenda Implementation Team, and OCHA (2016) *Retreat outcomes: Ethiopia lessons learned from the El-Niño drought, 2015–16*. Geneva: OCHA. <https://alnap.org/help-library/resources/retreat-outcomes-ethiopia-lessons-learned-from-the-el-ni%C3%B1o-drought-2015-16/>

Stark, J et al (2017) *Lessons learned from the Peace Centers for Climate and Social Resilience: an assessment in Borana Zone, Oromia National Regional State, Ethiopia*. Washington DC: USAID and Chemonics Intl. <https://alnap.org/help-library/resources/lessons-learned-from-the-peace-centers-for-climate-and-social-resilience-an-assessment-in-borana-zone-oromia-national-regional-state-ethiopia/>

Start Network (2017) *Timor-Leste: anticipation of drought 2017*. Case Study. Start Fund Alert 158. Start Network. <https://alnap.org/help-library/resources/timor-leste-anticipation-of-drought-2017/>

Suarez, J M et al (2021) *Evaluation report of OCHA's anticipatory action trigger: Ethiopia*. Geneva: OCHA. <https://alnap.org/help-library/resources/evaluation-report-of-ochas-anticipatory-action-trigger-ethiopia-26-april-2021/>

Tofu, D A and Wolka, K (2023) *Evaluating adaptation efforts of food-aid-reliant smallholder farmers in the drought-prone area*. Ambo: Ambo University. <https://alnap.org/help-library/resources/evaluating-adaptation-efforts-of-food-aid-reliant-smallholder-farmers-in-the-drought-prone-area/>

Tozier de la Poterie, A et al (2023) 'Anticipatory action to manage climate risks: lessons from the Red Cross Red Crescent in Southern Africa, Bangladesh, and beyond' *Climate Risk Management* 39(100476). <https://alnap.org/help-library/resources/anticipatory-action-to-manage-climate-risks-lessons-from-the-red-cross-red-crescent-in-southern-africa-bangladesh-and-beyond/>

Tripaldi, M (2022) *An unprecedented crisis: meeting humanitarian needs through integrated cash, nutrition and WASH interventions – a case study from Afghanistan*. London: Save the Children UK. <https://alnap.org/help-library/resources/an-unprecedented-crisis-meeting-humanitarian-needs-through-integrated-cash-nutrition/>

Twigg, J and Calderone, M (2019) *Building livelihood and community resilience: lessons from Somalia and Zimbabwe*. Working Paper 545. London: ODI and Cesvi. <https://alnap.org/help-library/resources/building-livelihood-and-community-resilience-lessons-from-somalia-and-zimbabwe/>

UNDP – United Nations Development Programme (2013) *Terminal evaluation of 'Coping with drought and climate change' in Ethiopia*. Independent Evaluation Office. Paris: UNDP. <https://alnap.org/help-library/resources/terminal-evaluation-of-coping-with-drought-and-climate-change-in-ethiopia/>

UNDP (2014) *Terminal evaluation of 'Coping with drought and climate change' (Mozambique, 2012–2016)*. Independent Evaluation Office. Paris: UNDP. <https://alnap.org/help-library/resources/terminal-evaluation-of-coping-with-drought-and-climate-change-in-mozambique-2012-2016/>

UNDP (2021) *Final evaluation of joint UNDP–FAO project entitled 'Support to livelihoods of drought affected households and resilience building of vulnerable groups in Warder and Kebridehar Woredas of Ethiopia Somali region'*. Independent Evaluation Office. Paris: UNDP. <https://alnap.org/help-library/resources/final-evaluation-of-joint-undp-fao-project-entitled-support-to-livelihoods-of-drought-affected-households-and-resilience-building-of-vulnerable-groups-in-warder-and-kebridehar-woredas-of-ethiopia-somali-region/>

UN International Strategy for Disaster Reduction Regional Office for Africa (2012) *Special issue on drought risk reduction 2012*. Nairobi: UN International Strategy for Disaster Reduction Regional Office for Africa. <https://alnap.org/help-library/resources/disaster-reduction-in-africa-special-issue-on-drought-risk-reduction-2012/>

UN Office for Disaster Risk Reduction (2021) *GAR special report on drought 2021*. Geneva: UNDRR. <https://www.undrr.org/publication/gar-special-report-drought-2021>

UN Women (2024) *End of program evaluation: Leap III programme on strengthening protection of women and girls from the disproportionate and adverse gendered impacts of drought and famine in Somalia*. New York: United Nations Entity for Gender Equality and the Empowerment of Women. <https://alnap.org/help-library/resources/end-of-program-evaluation-leap-iii-programme-on-strengthening-protection-of-women-and-girls-from-the-disproportionate-and-adverse-gendered-impacts-of-drought-and-famine-in-somalia/>

UNICEF – United Nations Children's Fund, and Government of Viet Nam (2017) *After action review of the Government of Viet Nam and UNICEF emergency response supporting children and women in 10 provinces in Viet Nam Affected by drought and salt water intrusion crisis*. Hanoi: UNICEF Viet Nam. <https://alnap.org/help-library/resources/after-action-review-of-the-government-of-vietnam-and-unicef-emergency-response-supporting-children-and-women-in-10-provinces-in-vietnam-affected-by-drought-and-salt-water-intrusion-crisis/>

USAID – United States Agency for International Development (2012) *Building resilience and fostering growth in the Horn of Africa: a call for change*. Washington DC: USAID. <https://alnap.org/help-library/resources/building-resilience-and-fostering-growth-in-the-horn-of-africa/>

USAID (2023) *Climate information services in Ethiopia: a key resilience capacity for households and businesses*. Learning Brief 5. Washington DC: USAID. <https://alnap.org/help-library/resources/climate-information-services-in-ethiopia-a-key-resilience-capacity-for-households-and-businesses/>

Venton, C C (2018) *Economics of resilience to drought in Ethiopia, Kenya and Somalia*. Washington DC: USAID. <https://alnap.org/help-library/resources/the-economics-of-resilience-to-drought-in-ethiopia-kenya-and-somalia/>

Venton, C C et al (2012) *The economics of early response and disaster resilience: lessons from Kenya and Ethiopia*. London: DFID. <https://alnap.org/help-library/resources/the-economics-of-early-response-and-disaster-resiliencelessons-from-kenya-and-ethiopia/>

Vieira, Y E M et al (2020) 'A procedure to support the distribution of drinking water for victims of drought: the case of the Brazilian semi-arid region' *Transportation Research Procedia* 47: 331–339. <https://alnap.org/help-library/resources/a-procedure-to-support-the-distribution-of-drinking-water-for-victims-of-drought-the-case-of-the-brazilian-semi-arid-region/>

Visser, M et al (2021) *Mid-term evaluation (including annual outcome monitoring) of outcome 2 (Sustainable Food Systems Programme), of WFP Kenya Country Strategic Plan, in arid and semi-arid areas in Kenya 2018–2023*. Nairobi: WFP Kenya. [https://www.unevaluation.org/member\\_publications/mid-term-evaluation-including-annual-outcome-monitoring-outcome-2-sustainable](https://www.unevaluation.org/member_publications/mid-term-evaluation-including-annual-outcome-monitoring-outcome-2-sustainable)

Watson, C (2016) *Shock-responsive social protection in the Sahel: community perspectives*. Shock-Responsive Social Protection Systems Research Working Paper 3. Oxford: Oxford Policy Management. <https://alnap.org/help-library/resources/shock-responsive-social-protection-in-the-sahel-community-perspectives/>

Weingärtner, L (2019) *Mapping financial flows for disasters*. Centre for Disaster Protection Working Paper 1. London: Centre for Disaster Protection. <https://alnap.org/help-library/resources/mapping-financial-flows-for-disasters/>

Weingärtner, L, Simonet, C and Caravani, A (2017) *Disaster risk insurance and the triple dividend of resilience*. Working Paper 515. London: ODI. <https://alnap.org/help-library/resources/disaster-risk-insurance-and-the-triple-dividend-of-resilience/>

WFP – World Food Programme (2016) *El Niño: undermining resilience – implications of El Niño in Southern Africa from a food and nutrition security perspective*. Rome: WFP. <https://alnap.org/help-library/resources/el-ni%C3%B1o-undermining-resilience-implications-of-el-ni%C3%B1o-in-southern-africa-from-a-food>

WFP (2017) *Addressing food insecurity: does the choice of transfer modality matter? Study comparing voucher, cash and multipurpose cash in El Salvador (November 2016–June 2017)*. Panama City: WFP Regional Bureau for Latin America and the Caribbean. <https://alnap.org/help-library/resources/addressing-food-insecurity-does-the-choice-of-transfer-modality-matter-study-comparing-voucher-cash-and-multipurpose-cash-in-el-salvador/>

WFP (2020) *The evidence base on anticipatory action*. Rome: WFP. <https://alnap.org/help-library/resources/the-evidence-base-on-anticipatory-action/>

WFP (2022) *Anticipatory action in Ethiopia: drought activation for Somali region*. Collaboration with International Research Institute for Climate and Society, Ethiopian Meteorological Institute, Somali Region Disaster Risk Management Bureau, Shebelle Bank and Mercy Corps. Addis Ababa: WFP Ethiopia Country Office. <https://www.wfp.org/publications/anticipatory-action-ethiopia-drought-activation-somali-region>

WFP (2022) *Climate risk insurance annual report 2022*. Rome: WFP. <https://www.preventionweb.net/publication/2022-climate-risk-insurance-annual-report>

WFP (2023) *Building systems to anticipate drought in Southern Africa: a regional impact assessment of the country capacity strengthening interventions for drought anticipatory action*. Rome: WFP. <https://alnap.org/help-library/resources/building-systems-to-anticipate-drought-in-southern-africa-a-regional-impact-assessment/>

WFP (2023) *More than a decade of drought: impacts and lessons learned across the eastern Horn of Africa 2011–2018*. Rome: WFP. <https://alnap.org/help-library/resources/more-than-a-decade-of-drought-impacts-and-lessons-learned-across-the-eastern-horn-of-africa-2011/>

WFP and Action Against Hunger (2024) *El Niño 2023–2024: Latin America and the Caribbean*. Rome: WFP. <https://alnap.org/help-library/resources/el-ni%C3%B1o-in-latin-america-and-the-caribbean-2023-2024/>

WFP and FAO (2024) *El Niño's impact on food and nutrition security in Southern Africa: lessons learned for improved coordination and response*. Johannesburg: WFP Regional Bureau and FAO Subregional Office for Southern Africa. <https://alnap.org/help-library/resources/el-ni%C3%B1os-impact-on-food-and-nutrition-security-in-southern-africa-lesson-learned-for-improved-coordination-and-response/>

Wiater, J and le Bloas, J (2013) *External evaluation: ACF International's response to the West African Sahel food crisis 2012*. New York: Action Against Hunger and ACF International. <https://alnap.org/help-library/resources/final-independent-evaluation-of-the-response-to-the-west-african-sahel-food-crisis-2012/>

Wilkinson, E and Peters, K (eds) (2015) *Climate extremes and resilient poverty reduction: development designed with uncertainty in mind*. London: ODI. <https://alnap.org/help-library/resources/climate-extremes-and-resilient-poverty-reduction/>

World Bank (2023) *Addressing compounded crises in Belize: how a flexible approach cushioned vulnerable communities against shocks*. Global Facility for Disaster Reduction and Recovery. Washington DC: World Bank. <https://alnap.org/help-library/resources/addressing-compounded-crises-in-belize-how-a-flexible-approach-cushioned-vulnerable-communities-against-shocks/>

World Health Organization – WHO (n.d.) 'Drought'. Webpage. Geneva: WHO. [www.who.int/health-topics/drought](http://www.who.int/health-topics/drought)

Zerhusen, D (2012) *Drought response in the agricultural sector in Ukambani and Marsabit, Welthungerhilfe. Evaluation Final Report*. Bonn: Welthungerhilfe. <https://alnap.org/help-library/resources/drought-response-in-the-agricultural-sector-in-ukambani-marsabit-kenya/>

Zimmerman, J M and Bohling, K (2013) *Cash for assets: WFP's exploration of the in-kind to e-payments shift for food assistance in Kenya*. Washington DC: CGAP/World Bank. <https://alnap.org/help-library/resources/cash-for-assets-world-food-programmes-exploration-of-the-in-kind-to-e-payments-shift-for-food-assistance-in-kenya/>

Zullo, C (2022) *A dry horizon: Iraq's interlinked drought and climate crises*. Oslo: NRC. <https://alnap.org/help-library/resources/a-dry-horizon-iraqs-interlinked-drought-and-climate-crises/>

# ANNEX: DETAILED METHODOLOGY

## RESEARCH APPROACH

This research follows the approach set out in ALNAP's [Lessons Papers: A methods note](#), combining a systematic evidence review with a Delphi consultation process to validate the findings as follows.

### STEP 1: SCOPING AND RESEARCH DESIGN

The study began with a scoping phase to refine and focus the research questions. We:

- consulted six humanitarian practitioners working directly on drought response to refine the research questions
- defined the scope as humanitarian response to drought, excluding broader environmental management issues
- developed sub-questions covering early warning, response, recovery and resilience, and cross-cutting themes including gender, protection and localisation.

### STEP 2: EVIDENCE SEARCH AND SCREENING

We conducted systematic searches of more than 20 humanitarian, academic and institutional databases and libraries, including ALNAP, Cash Learning Partnership (CaLP), Food and Agriculture Organization of the UN (FAO), International Federation of Red Cross and Red Crescent Societies (IFRC), ODI Global, ReliefWeb, UN Evaluation Group and World Food Programme (WFP), and organisational repositories.

Search parameters included:

- **Date range:** 2012–2024
- **Document types:** Evaluations, case studies, 'lessons learned' reports, operational reviews, guidelines
- **Full-text availability.**

We identified and screened over 1,000 documents using a two-stage process:

1. **Initial screening:** We assessed titles, keywords, summaries and study dates against inclusion/exclusion criteria.
2. **Full-text screening:** We evaluated documents for relevance, presence of lessons or recommendations and alignment with thematic and temporal scope.

We retained documents indirectly related to drought if they offered relevant cross-

cutting insights (for example, on gender equality, inclusion of persons with disabilities or older people, and localisation).

We excluded documents if they:

- lacked substantive lessons or recommendations
- were based entirely on data collected before or after 2012–2024
- were duplicates or overly general (for example, CVA or GBV guidance unrelated to drought).

A full list of the inclusion and exclusion criteria can be found [below](#).

**Outcome: 224 documents selected for detailed analysis.**

### STEP 3: QUALITY ASSESSMENT

We scored each retained document (from 1–5) against three criteria:

1. Relevance to drought-response learning
2. Methodological rigour, including transparency and robustness
3. Scope and generalisability across contexts.

We calculated an average evidence score for each document to enable weighted analysis in subsequent stages. Detailed descriptions of the quality assessment criteria can be found [below](#).

### STEP 4: DATA EXTRACTION AND CODING

We followed a structured extraction and coding process to capture consistent, traceable lessons aligned with the research framework. Using a standardised template, we extracted text from each document and coded it across more than 25 thematic areas, including anticipatory action, CVA, gender, livelihoods, localisation, protection and resilience.

Extraction involved two steps:

#### 1. Extract text

- We recorded direct quotes summarising findings, lessons, challenges or recommendations.
- We linked each extract to its source for full traceability.

#### 2. Code the extract

- We assigned each extract to a thematic area.
- We tagged each extract as a lesson on what worked, what did not work, a

challenge or a recommendation.

- We assigned each extract a document ID.

**Outcome: 1,587 unique extracts generated.**

### STEP 5: ANALYSIS, SYNTHESIS AND DRAFTING OF LESSONS LEARNED

The analytical process transformed raw evidence into a coherent longlist of preliminary lessons. This involved four stages:

- 1. Sense-making:** We reviewed and clustered the 1,587 extracts to identify patterns, recurring themes and contrasts, shifting from descriptive findings to actionable learning.
- 2. Generating the longlist:** We synthesised extracts into clear, evidence-based statements, producing an initial set of 293 lessons learned.
- 3. Consolidation:** We refined the lessons by reducing duplication, sharpening vague statements and ensuring each lesson was evidence-based and traceable. This resulted in 150 draft lessons, of which 82 directly related to drought response. We largely set aside more generic lessons to maintain a focus on drought-specific learning.
- 4. To improve accessibility,** we further refined the core lessons and grouped them into 17 overarching lessons and sub-points.

### STEP 6: DELPHI VALIDATION AND PRIORITISATION OF LESSONS

We used a structured Delphi process to validate and refine the lessons emerging from the evidence review. Objectives of this step were to:

1. validate the relevance, accuracy and completeness of the draft lessons
2. refine the language and framing of lessons for clarity and practical application
3. identify gaps or missing perspectives, especially from underrepresented regions or sectors.

This process involved two rounds:

- 1. Written review:** Panel members reviewed the longlist of lessons and provided written feedback on clarity, accuracy and relevance.
- 2. Virtual discussion:** After revisions based on Round 1 feedback, the panel convened virtually to discuss remaining differences, refine wording and agree on a final prioritised list.

We invited panel members to:

- flag lessons that were unclear, less relevant or insufficiently supported

- suggest improvements or consolidations
- highlight missing lessons
- offer feedback on the structure and usability of the draft paper.

### STEP 7: FINAL REPORT

Following the Delphi validation, we incorporated all feedback into the final synthesis and report drafting. This step involved:

- reviewing and integrating all written comments and discussion points from both Delphi rounds
- revising lesson wording to improve precision and usability
- editing and structuring the full report, including narrative sections, thematic analysis and references
- conducting a final internal review for coherence, clarity and consistency with ALNAP guidelines.

## HOW TO READ THE EVIDENCE SCORES

To help interpret the lessons and their supporting evidence, the following indicators are used throughout this report:

### NUMBER OF DOCUMENTS CONTRIBUTING TO THE LESSON

This shows how many documents were used to identify or support each lesson. A higher number indicates that the lesson is supported by a broader range of sources.

### AVERAGE EVIDENCE SCORE

This represents the average strength or quality of the evidence across all documents contributing to the lesson. It gives an overall sense of how strong the supporting evidence is.

### MEDIAN EVIDENCE STRENGTH

This is the middle evidence score when all contributing documents are ranked from weakest to strongest. It reflects the **typical** strength of the evidence, and is less influenced by very high or very low scores.

Together, these indicators provide a balanced picture of both the breadth and strength of the evidence underpinning each lesson.

## EVIDENCE SCORES AND STRENGTH

- **Evidence score:** The evidence score of each document is calculated as the average of three criteria: evidence relevance, methodological rigour and evidence quality, and evaluation scope. Each criterion is scored out of 5, with 5 representing the highest possible score.
- **Evidence strength:** Evidence strength is calculated as the total score across the three criteria (out of 15), which is then converted into a percentage. This provides a standardised measure of the overall strength of each document, allowing for easier comparison across documents.

**Note:** We scored the evidence based on the reviewers' assessment against pre-agreed criteria developed with ALNAP. Detailed descriptions of the quality assessment criteria are presented in the '[Quality assessment criteria](#)' section below.

### NOTE ON THE DISTRIBUTION OF MEDIAN EVIDENCE-STRENGTH SCORES

A number of lessons have a median evidence strength of 80%. This reflects the structure of the evidence scoring system and the distribution of scores across the evidence base.

Evidence strength is calculated from three criteria (scored from 1 to 5), resulting in discrete percentage values, with 80% (12 out of 15) representing a common outcome for documents demonstrating consistently good performance across relevance, methodological rigour and evaluation scope.

Where a large number of documents support a lesson, the median therefore often falls at this value, reflecting the typical strength of the contributing evidence rather than an absence of variation.

## INCLUSION AND EXCLUSION CRITERIA

When screening the initial database of resources, we applied the following inclusion and exclusion criteria to ensure the selected documents were relevant, high-quality and aligned with our research goals.

### INCLUSION CRITERIA

- **Relevance to drought response:** Documents must focus on drought interventions, evaluations or lessons learned.
- **Evaluation-based:** Documents must include an element of evaluation or impact assessment, or documented lessons from drought-response programmes or policies.
- **Date of evaluation:** The evaluation period must be within the study timeframe (2012–2024).
- **Complete access:** Only full-text documents will be included.

- **Peer-reviewed and grey literature:** Both peer-reviewed articles and credible grey literature (for example, NGO reports and working papers) will be included to maintain a balance between academic rigour and practical field-based evaluations.

### EXCLUSION CRITERIA

- **Irrelevant topics:** Documents that discuss general environmental issues, water resource management or disaster response but do not specifically address drought and humanitarian response.
- **Scientific papers:** Documents that focus on evaluating mathematical models for anticipating droughts.
- **Outdated information:** Documents that were published within the study period but that provide a historical perspective or evaluation period before 2012.
- **Lack of evaluation:** Documents that do not offer evaluations, impact assessments or lessons learned (for example, theoretical papers or news articles).
- **Incomplete or abstract-only:** Documents where full text is unavailable or that only provide abstracts without sufficient detail.
- **Conference papers, theses, presentations, speeches and news articles.**

### QUALITY ASSESSMENT CRITERIA

We used the following quality assessment criteria.

#### EVIDENCE RELEVANCE

This criterion assessed the extent to which each document relates to the various stages of the drought response and our research questions:

- **High score (5):** Documents that provide direct and in-depth analysis or lessons learned on multiple stages of the drought response and explicitly address the research questions.

*Example: A document that thoroughly evaluates a drought-response intervention – covering preparedness, emergency aid, recovery and long-term impact – and directly answers key research questions.*

- **Low score (1):** Documents that only tangentially mention drought response or focus on a narrow aspect unrelated to the main research objectives.

*Example: A document that focuses primarily on water resource management and only briefly mentions drought response in a broader context of environmental planning.*

## METHODOLOGICAL RIGOUR AND EVIDENCE QUALITY

This criterion assessed the robustness of the research design, data collection and analysis methods, along with the overall quality and richness of evidence presented.

- **High score (5):** Documents with strong methodologies (for example, mixed methods or robust qualitative or quantitative approaches), well-triangulated data from multiple credible sources and transparent analysis.

*Example: A report that synthesises data from interviews, surveys and secondary data sources and demonstrates consistency across different data sets.*

- **Low score (1):** Documents with weak designs, limited data or poor evidence quality that rely on single, unverified sources or anecdotal evidence without thorough analysis.

*Example: A document that bases its conclusions on a small, non-representative sample, with no verification from other data sources or cross-checking of information.*

## DOCUMENT SCOPE

This criterion assessed the potential for generalising lessons learned. We weighted documents more heavily that have greater potential for generalisation.

- **High score (5):** Documents with broad scope, covering diverse geographical areas or populations or multiple aspects of drought response, with potential for generalising lessons learned to other contexts.

*Example: A document that evaluates drought response across multiple countries in the Horn of Africa, covering various population groups and stages of the response, providing insights that could be applied globally.*

- **Low score (1):** Documents with narrow scope, limited to a single region or population or focusing on a very specific aspect of drought response, with little potential for wider applicability.

*Example: A document that focuses exclusively on a local community's water intervention without assessing the broader implications for other regions or aspects of drought response.*

