Ethiopia Supporting Evidence from drought case study data in three villages in three districts of Borana Zone

Contact Researcher: Gelila Abraham: gelila.abraham15@gmail.com

Manuscripts

Abraham G., Birhanu Z., Berhanu N., PARES, Mayhew S. H., Woldie M. *Under Review Health Policy and Planning*. Community Engagement in Response to Drought-related Public Health Emergencies: A Realist-informed Review from sub-Saharan Africa.

Abraham G., Birhanu Z., Berhanu N., PARES, Mayhew S. H., Woldie M. *In Preparation*. Community Engagement in Drought-related Health Emergency Response: a Realist Evaluation of Mechanisms in Borana, Ethiopia.

Abraham G., Birhanu Z., Berhanu N., Mekonene D., PARES, Mayhew S. H., Woldie M. *In Preparation*. Strengthening drought-related health emergency responses through community validation: insights from a realist evaluation in Ethiopia.

Data Collected

Review of 19 published and grey-literature papers (from a total of 398 initially searched) on drought response in sub-Saharan African countries.

Qualitative data were collected from three villages in three different districts (Dubluk, Elwaye, & Gomole), and at district/zonal levels of Borana zone, Ethiopia, as follows:

- 6 key informant interviews (KIIs) at District level (2 from each of the three districts): PHEM focal persons and 'Buusaa Gonofaa' heads.
- 12 KIIs at village (kebele) level (4 from each village): HEWs and ADAs
- 9 focus group discussions (FGDs): three per village: Elders and community leaders, community members.

Quantitative data collected from 20 validation workshop participants using the Nominal Group Technique, Yabello tow, Borana zone, Ethiopia. The workshop was attended by participants from whom data were collected in the three study districts, spanning all levels from the zonal health office, district office and the community. This included HEWs, ADAs, elders, PHEM officers, Buusaa Gonofaa (Disaster & Risk Mgt) heads, WDAs, community leaders, and community members.

Identified mechanisms by which community engagement & involvement can build resilience

Case study 1: Ethiopia – Drought – Trusted leaders and communication

When drought and health information is communicated through trusted community leaders such as elders, wise men, and local leaders, communities are more likely to understand risks, trust the messages, and take timely action to protect livelihoods and health.
Vignettes #1 and #2

Case study 2: Ethiopia – Drought – Knowledge Systems Alignment

Blending of traditional and scientific knowledge: When traditional seasonal forecasting and scientific drought forecasts are jointly interpreted and aligned, communities perceive the information as more credible and actionable, enabling and more coordinated responses to drought.
Vignettes #7 and #8

Case study 3: Ethiopia – Drought – Social capital and collective action

When culturally legitimate leadership and indigenous social protection systems such as elders' councils, traditional courts, and the 'Buusaa Gonofaa' mutual support culture guide community engagement, participation and compliance increase, enabling coordinated collective action that strengthens drought preparedness and resilience.
Vignettes #3, #4, #5, and #6

Case study 4: Ethiopia – Drought – Embedded and Equitable Partnerships

Health engagement and gender norms: Active engagement of men and households through HEWs, fathers' groups, and community forums strengthens shared responsibility, improves preventive and promotive health behaviours, and ensures inclusive participation during drought.
Vignettes #9, #10, and #11

Vignettes (1-11 – Organized in numerical order)

Vignette 1

In Borana community, elders and traditional institutions play a central role in sharing information and guiding collective action. During periods of drought, local leaders often call community meetings through the traditional community court, a respected forum where communal issues are discussed and decisions are communicated. These gatherings provide an opportunity for leaders to raise awareness about drought conditions, discuss challenges facing the community, and encourage preparedness measures. Because elders hold strong cultural authority and are widely trusted, their messages carry significant influence. District officials frequently work through these traditional structures to ensure that information reaches the community effectively. As one district public health emergency management expert explained, *"So, we often use the traditional court and community leaders to call for community meetings, as they often trust and obey their elders"* (KII: 32, Male, District PHEM Expert). By sharing drought-related information through trusted elders and familiar community forums, messages become easier to understand and more widely accepted. Community members described feeling confident in the guidance provided and were more willing to discuss risks and take collective actions to prepare for the impacts of drought.

Vignette 2

During a recent drought in Borana, district-level workers traveled to kebeles and villages to discuss the severity and consequences of the dry conditions with local communities. They explained the potential impacts of drought and shared practical advice on how households could prepare and reduce risks. HEWs played a particularly important role in communicating drought-related health risks and preventive measures. Because they often stay within the community and work closely with families, their presence strengthened trust and ensured that vital health information reached households. As one religious leader explained, *"Currently, particularly during the drought, the Health Extension Workers (HEWs) come to our community and stay with us, working day and night, doing what is necessary. Thus, they are providing us with substantial help"* (FGD: 55, Male, Religious Leader). Local governance structures also helped reinforce these messages. *'Kebele'* (village-

level) authorities mobilized community members and supported health workers in communicating information about drought risks and response efforts. As one HEW noted, *"There is a 'kebele' structure that stands by the people and convinces the community of what has been done. They support us in such things"* (KII: 29, HEW). Through these coordinated efforts, trusted frontline workers and local officials helped ensure that communities understood the risks and were encouraged to take early actions to protect their health and livelihoods.

Vignette 3

In Borana, traditional courts and elders play a central role in strengthening drought preparedness by reinforcing the importance of attending community and government-led meetings where early warning information and preparedness actions are discussed. Drawing on their respected authority, elders monitor participation and remind households of their social responsibilities to the wider community. Their guidance helps frame meeting attendance not as an optional activity but as an important step for protecting livelihoods and minimizing drought-related losses. As one district expert explained, *"The community traditional court plays a crucial role in enforcing orders … they punish those who are not obedient to the community's norms"* (PHEM, 32). This culturally grounded system of accountability encourages households to attend meetings regularly and actively engage in discussions on health, development, and drought preparedness. Government actors also rely on these trusted structures to mobilize communities, noting that *"we often use the traditional court and community leaders to call for community meetings, as they often trust and obey their elders"* (PHEM, 32). Through this combination of traditional authority and formal coordination, communities participate more consistently in preparedness activities and take timely action to reduce drought-related risks.

Vignette 4

During a prolonged drought in Borana, elders used the traditional court system to reinforce participation in preparedness activities and ensure that community members followed agreed guidance. Drawing on their culturally recognized

authority, elders applied sanctions and public reminders to those who ignored collective decisions or refused to take recommended actions. These visible accountability mechanisms signaled the seriousness of preparedness and encouraged wider compliance within the community. Community members described how this system motivates action, noting that *"if a person refuses to build his latrine, they penalize him or her, so that the person is forced to build it, and that is a good opportunity for the community to engage"* (CM, 55). Observing these practices, households recognized the importance of acting early and adopted preventive measures such as storing grass and water, diversifying livestock, and preparing for drought. These culturally grounded enforcement mechanisms strengthened collective preparedness and reduced the impacts of the dry season on community livelihoods.

Vignette 5

In Borana, elders often work closely with government officials during planning and coordination meetings to ensure that drought preparedness efforts align with community norms and realities. Their guidance helps determine appropriate meeting times, communication strategies, and culturally sensitive messages that resonate with community members. By bridging local knowledge and government planning processes, elders help ensure that meetings are well attended and that communities actively participate in discussions on drought response. A Health Extension Worker described this role by explaining that elders *"bring the general public together to confirm whether the decisions made by leaders are acceptable, feasible, and satisfactory to the community"* (HEW, 25). Through this collaboration, government actors gain a better understanding of local norms and social structures, while communities feel more confident participating in planning processes. As one community leader noted, *"Community members have also accepted the recommendations of the government and local wise men, and they are preparing their land"* (CL, 58). These joint efforts improve communication, strengthen trust between government and communities, and support coordinated actions such as securing water sources and adjusting livestock management.

Vignette 6

Alongside leadership structures, Borana communities rely on a deeply rooted social protection system known as '*Buusaa Gonofaa*', which promotes mutual assistance and solidarity during times of hardship. Through this tradition, community members support one another by sharing resources such as livestock, food, or materials needed to rebuild homes and sustain livelihoods during drought. This collective support system ensures that vulnerable households are not left behind and strengthens the social bonds that enable coordinated responses to crises. Community members describe '*Buusaa Gonofaa*' as an essential part of Borana culture and identity. As one participant explained, *"According to 'Buusaa Gonofaa' customs, a person who has two animals gives to the one who has none"* (FGD, 31, Male, Community Member). Others emphasized that this culture reflects a strong tradition of solidarity within the community, noting that *"there is a very good culture of helping one another among our community members"* (KII, 25, HEW). By reinforcing shared responsibility and cooperation, '*Buusaa Gonofaa*' strengthens community cohesion and helps households cope with the impacts of drought.

Vignette 7

In Borana, a group of wise men noticed unusual changes in rainfall patterns and called a village-wide meeting to discuss what these signs might mean for the coming season. Drawing on their traditional forecasting knowledge such as reading animal behaviour and environmental indicators, they shared their interpretations alongside updated seasonal forecasts provided by the local government. As one participant explained, *"Uuchus are wise men who examine animal intestines to forecast the next season, and because this practice has long been prevalent and trusted in our community and across Borana, most people rely on 'Uuchus' rather than meteorologists when contradictions arise"* (ADA, 28). The elders translated the likelihood of a dry season into practical guidance that community members could relate to and act on, and because the message came from figures they trusted, households responded quickly, including planning how to support more vulnerable neighbours. Community members described feeling confident in the warnings and motivated to

take early, proactive steps to prepare for drought, reinforcing trust in both the wise men and the scientific information they shared; as one community member noted, *"we follow what the elders predict because we have seen it work over time, and it guides our decisions on crops and livestock"* (CM, 55).

Vignette 8

In Elwaye district of Borana, the *Buusaa Gonofaa* office convened a joint forecasting session that brought together local wise men, disaster management officers, and community leaders to jointly assess the likelihood of an upcoming dry season. During the session, participants combined long-standing traditional knowledge such as observations of seasonal changes and animal behavior with scientific meteorological forecasts, and the integrated outlook was later shared in a community meeting attended by villagers, women's groups, and youth representatives. As one community leader explained, *"If the elders' forecast aligns with the meteorologists' prediction, it is accepted as credible; if it does not, the issue is shared with other elders and the community, discussed collectively, and a consensus-based interpretation or decision is reached"* (CL, 54). Seeing trusted elders and government experts working side by side increased community confidence in the information and encouraged collective action, leading villagers to establish preparedness structures to coordinate early response and resource management; as one health official noted, *"we have established a kebele command post, which is composed of DAs, HEWs, and kebele managers"* (PHEM, 32). Through these coordinated efforts, the community reduced the impacts of drought, strengthened social cohesion, and reinforced trust in collaborative forecasting and disaster response mechanisms.

Vignette 9

In Borana, NGOs and the district health office organized targeted orientation sessions and training workshops for men who had previously been reluctant to allow their wives or women from the local Women's Development Associations (WDAs) to engage with Health Extension Workers (HEWs). Through these sessions, men were introduced to the importance of maternal and child health, preventive

care, nutrition, and hygiene, and began to see how women's participation directly benefited family wellbeing. As one community leader explained, trained fathers and mothers now actively link households to services, noting that *"they contact the HEW, saying, 'I have referred someone to you for assessment; they will be coming to you,' and this kind of communication is common"* (CL, 50). Over time, men's attitudes shifted, with a district PHEM expert observing that *"since the training of men and the establishment of fathers' groups, men's awareness has improved, and they have become supportive of the work of mothers' groups"* (District PHEM Expert, 32). Following the trainings, men encouraged their wives to attend health sessions, ensured children were vaccinated on schedule, and supported the adoption of nutrition and hygiene practices at home. This change was established through the formation of fathers' committees working alongside mothers' groups, which, as one community member described, *"work on health issues like proper use of sanitation and toilet facilities, maternal and child health, and other similar issues"* (CM, 35). Together, these shifts improved health service uptake, strengthened family health practices, and built greater trust in community-led health initiatives.

Vignette 10

During a prolonged dry season in Borana, men directly witnessed the effects of drought on their families, including worsening nutrition, increased illness, and difficulties in accessing health services. Building on recent training and orientation sessions delivered by NGOs and Health Extension Workers (HEWs), men developed a stronger understanding of maternal and child health, preventive care, and nutrition, which reshaped their roles within the household and community. Motivated by this knowledge and the visible impacts of drought, they began actively supporting their wives' participation in health programs, accompanying them to community health sessions, and facilitating timely childhood vaccinations. As one village leader noted, *"our community has been awakened now; people's awareness of their health and wellbeing has improved, and they have even started asking for children's vaccinations when they get delayed"* (VL, 45). This increased male engagement boosted attendance and participation in health initiatives, strengthened preventive practices at the household level, and encouraged wider

community involvement. An elder reflected on this shift, observing that *"now, every neighbour, whether educated or uneducated, is aware of the signs of malnutrition because health professionals have provided information on how to assess, examine, and identify malnutrition in a child"* (Elder, 51), underscoring growing trust in local health services and shared responsibility for family health.

Vignette 11

Health Extension Workers (HEWs), supported by local Women's Development Associations (WDAs), NGOs, and the district health office, coordinated comprehensive community health campaigns that included vaccination, nutrition, and hygiene promotion sessions, drawing on existing community structures to reach a wide audience. As one district respondent explained, *"the health sector organizes health campaigns, using all available community structures to disseminate information to wider community members"* (DRM, 28). Men who had previously received training and orientation played an active role by encouraging their wives and family members to attend these sessions, facilitating household participation, and reinforcing preventive practices at home. Through this collective effort, families increased their use of available health services and strengthened their understanding of nutrition, hygiene, and disease prevention. This was supported by community volunteers and health extension workers who regularly shared information at the kebele level, with one official noting that *"there is something called volunteers who convey the message in the kebele, and the health extension also gives training and creates awareness for the community"* (PHEM, 35). Together, these coordinated actions built trust in the health system, deepened community engagement, and fostered a shared sense of responsibility for improving health outcomes within households.