# Information preparedness and community engagement for El Niño in the Eastern and Southern Africa Region



Social Science in Humanitarian Action Platform

El Niño can be viewed as a multi-hazard event, and considerations for information needs cut across different populations and risks, including direct weather-related hazards, reduced agricultural production, greater food insecurity and malnutrition, increased transmission of infectious diseases and effects on health care access. Long- and short-term hazard warning communications may need to contain different calls to action, and there are likely to be different levels of urgency to those calls.

This key considerations brief describes the implications of El Niño in the East and Southern Africa Region (ESAR) for Risk Communication and Community Engagement (RCCE) initiatives, based on previous comparable weather events. Lessons learnt are predominantly taken from the literature on communicating forecast and weather information, but have implications for multi-hazard RCCE response. Some lessons learnt are also taken from beyond East and Southern Africa, but considered within the anticipated El Niño effects in ESAR specifically.

The first section of the brief is on information needs, the second section is on ensuring and building trust in information, and the final section is on communications and community engagement strategies. The brief was commissioned by the Collective Service as a resource for organisations working on RCCE related to El Niño in ESAR.

## Key considerations

- Provide forecasting information and associated calls to action and advice at a hyperlocal level, and early enough to allow people to take appropriate action.
- Provide local information on actions people can take to adapt or protect themselves. This should be based on local practices and consultation with affected populations, and should reflect what is structurally feasible action for people to take.
- Align planned information provision to multi-sectoral preparedness and response activities, and ensure coordination between RCCE agencies and actors and local disaster risk reduction and hazard management entities.
- Align resource provision and information, both in terms of providing the resources needed for people to act, and in ensuring that the resources provided reflect the actions communities are advised to take.
- Co-produce scientific information and forecast products with affected communities to make sure they are locally appropriate and take account of existing local actions and knowledge systems.
- Understand the different technical information needs of different communities and assess channel preferences for forecast information before embarking on communications campaigns; map different groups' channel preferences and needs; anticipate delivering a multi-channel strategy.
- Train field-level RCCE staff to interpret and translate meteorological and risk forecasting probabilities appropriately.
- Conduct up-to-date vulnerability assessments to facilitate a tailored response. Social vulnerability can change over time and in response to multi-hazard events like El Niño, so existing data may miss critical changes. Migratory groups, refugee and internally displaced persons (IDPs) populations should not be overlooked.
- Conduct rapid assessments to understand local barriers to action and to identify trusted local interlocutors.

- Establish community feedback and two-way communications systems and share data with decision-makers at all levels to improve understanding of local preferences and needs, and facilitate adaptation of El Niño response to community concerns and insights.
- Identify and engage both formal and informal networks to help improve information dissemination and credibility, including community-level health workforce.
- Engage farmers and agriculturalists for forecast-based participatory planning and decision-making.
- Work with and train local journalists and media houses to build public understanding of the local effects of El Niño, and mitigation activities.

### El Niño in ESAR

El Niño Southern Oscillation (ENSO) is a fluctuation of the ocean atmosphere system that originates in the Southern Pacific. El Niño is the warm phase, and La Niña is the cool phase.<sup>1</sup> El Niño typically occurs every two to seven years, with the last event in 2015/16. The current El Niño season started in June 2023 and is forecast to persist until February 2024.<sup>2</sup> There is increasing evidence of a 'strong' El Niño event which may be compounded by a positive Indian Ocean Dipole effect this year, which typically amplifies wetter conditions. The effects of El Niño are not consistent across affected regions between each event. Although the general climatic anomalies related to El Niño can be forecast with some accuracy, considerable uncertainty remains about the precise effects of ENSO events, as they can be hard to disentangle from other climatic drivers.<sup>3</sup>

In parts of East Africa, El Niño is projected to create wetter than normal conditions with attendant risk of flooding. Countries at particularly high risk between October and December 2023 are Burundi, southern regions of Ethiopia, Kenya, Somalia, South Sudan, Rwanda, Uganda and the United Republic of Tanzania.<sup>3</sup> Flooding presents an immediate threat to life and may increase the risk of population displacement and localised crop and livestock losses that could contribute to food insecurity. However, above average rainfall may also bring relief to previously dry areas, boosting agricultural production.

In Southern Africa, El Niño is projected to create dryer than normal conditions in some countries, with Angola, Eswatini, Lesotho, Zambia and Zimbabwe at particularly high risk. Botswana, South Africa and Namibia may also be at risk. Southern Madagascar and Southern Democratic Republic of the Congo (DRC) may also experience a shift towards dry conditions.<sup>3</sup> Below average rainfall means that El Niño is likely to affect food security in the region, and therefore affect the nutritional status of vulnerable populations. This may be exacerbated if agricultural production in South Africa is reduced.<sup>3</sup>

Alongside the direct health effects associated with food insecurity and extreme weather events such as drought, floods, cyclones, and heatwaves, El Niño has been shown to increase the incidence of vector-borne diseases,<sup>3</sup> such as malaria and Rift Valley Fever. El Niño has also been linked to increases in the incidence of cholera and other diarrhoeal diseases, and it may increase the incidence of rodent-borne diseases.<sup>3</sup> During weather events, reduced access to health care, overcrowding, and displacement can increase the incidence of vaccine-preventable diseases (particularly given that in ESAR, there are more than 3.5 million children who have received no childhood immunisations<sup>4</sup>), worsen maternal and child health, and affect adherence to regimens for people living with HIV or tuberculosis.<sup>3</sup>

At the time of writing (November 2023), the current El Niño event has already led to an increase in cholera cases in East Africa,<sup>3</sup> and there are existing crises and vulnerabilities in ESAR that may be further exacerbated by El Niño or make it harder for the humanitarian community to respond. These include cholera outbreaks in Burundi, DRC, Ethiopia, Kenya, Mozambique, Uganda, Zambia and Zimbabwe.<sup>5</sup> Armed conflict and displacement are affecting DRC, Ethiopia, Mozambique, South Sudan and Sudan, with many populations in these countries already highly

vulnerable to food insecurity. Northern and Western Kenya have continued to face an extended drought in 2023 and substantial food insecurity is already affecting communities.<sup>2</sup> El Niño will likely worsen humanitarian needs in food security; water, sanitation and hygiene (WASH); health; and protection.

### Information needs

People and communities likely to be affected by El Niño-related weather events require access to hyperlocal, timely information that addresses different users' technical needs and that is linked to action (including existing effective community-led action). The probabilistic nature of forecasts requires translation and interpretation. Inaccurate information, or scientific information that is insufficiently translated into local terms, where uncertainty is not properly communicated, can lead to reduced trust in that information or its sources, affecting subsequent engagement and mitigation/response activities.

#### Need for access to hyperlocal information

El Niño has varied geographic effects, even within countries and their sub-regions, and weather outcomes may also be inconsistent across different El Niño events, affecting predictability. Therefore, for climate and weather forecasting information to be useful at the community level, and to enable people to plan and mitigate for weather events, forecasting information needs to be provided at a hyperlocal level.<sup>6</sup> This means that forecasting information should be geographically granular and situated within the needs of specific communities, and not just that national or regional level forecasts need to have greater reach.

El Niño's heterogenous effects do not just relate to geographic variation, but also to differences in vulnerability. Livelihood strategies may vary substantially across a country or region, and therefore local responses/mitigations for weather events and the outcomes associated with them also need to be heterogenous. Livelihoods surveys are needed to understand local vulnerabilities and facilitate a tailored response that takes in different requirements for early warning systems.<sup>7</sup> However, responding to hyperlocal information needs must go beyond the provision of information on local hazards and vulnerability assessments; the technical information needs of different groups must be considered, and forecasting translated into locally actionable information.

### Need for actionable information

During the 2015-16 El Niño event, many countries were not sufficiently prepared to support their most vulnerable populations, and did not translate global forecasts into locally usable information.<sup>8</sup>

Usability of information will depend on its suitability to support different technical needs as well as different geographies and vulnerabilities. Users of forecast information also have different needs. For example, a 2022 study in Nigeria looked at user needs for weather and climate information in relation to drought risks.<sup>9</sup> Those working in agriculture found the most utility in information about rainfall amount, onset and cessation rainfall dates, and rainfall distributions. By contrast, for those people managing water resources, information on rainfall distributions and intensity as well as the length of the dry season was more important.<sup>9</sup>

Smallholders and pastoralists, who may be particularly vulnerable to livelihoods, livestock, and therefore nutrition consequences of El Niño related hazards, require specific information that goes beyond weather and climate information. Forecasting should be accompanied by advice to facilitate informed decision-making about farming and pastoralist activities.<sup>10</sup> For example, a 2019 study examined access to climate information by rural communities affected by El Niño-induced drought in 2015-16 in Ethiopia and Nicaragua. The study found that practical advice

was essential to drought-resilient decision-making. In Ethiopia, information on crop varieties, harvest timing and land preparation techniques contributed to a substantial proportion of study respondents altering planting time.<sup>11</sup> Farmers and agriculturalists should be engaged for forecast-based participatory decision-making, particularly because of the unpredictability of forecasts,<sup>12</sup> which require clear communication about uncertainty as well as continuous information flow.<sup>11</sup>

#### Need for uncertain and probabilistic information to be translated

Several studies have shown that household-level decision-makers may experience difficulties interpreting the technical or probabilistic nature of forecasts, and could benefit from assistance in interpreting information in the context of their own needs and translating it to necessary actions.<sup>12</sup>

Communicating uncertainty therefore requires risk communicators to be trained to interpret and translate forecasting probabilities. A 2017 study in Botswana reported that local field-based risk communicators understood their audience and were therefore able to translate risk and uncertainty into locally appropriate terminology, which helped to bridge the gap between scientific jargon and local terminology.<sup>13</sup>

#### Need for timely information

The provision of warning information in a timely fashion facilitates action and appropriate decision-making. A 2019 systematic review examined users' needs for weather and climate services in sub-Saharan Africa.<sup>10</sup> The review found that well-timed information and actionable guidance helped increase crop yields for arable farmers. The farmers also had sufficient lead time to engage in mitigation activities (e.g., purchase of fungicides or pesticides) as well as to make life-saving decisions (e.g., to avoid flood areas or lightning strikes). Information must be provided early enough so that people have time to take appropriate action. Failing to provide information in a timely manner can affect the credibility of sources and reduce the effectiveness of communications.<sup>13</sup>

Similarly, it is important that responses to weather events are well timed. In Ethiopia, research conducted with drought-affected communities suggested that drought relief came too late for some people. These people reported having to migrate in search of food or for livestock grazing, or to take up casual labour to pay for food.<sup>11</sup>

### Ensuring and building trust in information

Ensuring that alerts are properly received, understood and acted upon requires people-centred early warning systems and collaborative development of risk management plans. People-centred early warning systems should systematically consider all components of a risk warning system including the challenges that different groups might have in implementing protective measures or taking action in response to hazards.<sup>14</sup> Specific details of people-centred early warning systems and the collaborative development of risk management plans will vary by hazard, location and response capacity. In general, however, taking a collaborative approach to the development of (early) warning systems can help build trust in information products and response or mitigation plans; stimulate better trust in data and communications; and ensure that measures to prepare for and respond to alerts are locally viable.<sup>15</sup>

Trust in forecast information of any sort can be diminished when it's poorly timed, or by the challenges interpreting probabilistic information. It can also be affected by the top-down nature of information provision, the lack of interaction between scientists/those assessing risk and communities or farmers, and by the lack of social protection mechanisms available in many places when forecasts fail.<sup>16</sup> Resource provision and information therefore need to be well-

coordinated and aligned, and shaped by community feedback. In practice, this means that people need to be provided with the resources to act, and that the resources provided reflect the actions communities are advised to take. For example, a 2023 study in Zimbabwe reported that key informants expressed frustration with the continued provision of drought intolerant seeds, and the way in which this diverged from advice being provided to communities.<sup>17</sup>

Co-production of scientific information products, such as forecasts, and genuine two-way communication are therefore critical to ensure that information is fit for purpose and well-aligned to local needs and other response activities, and can help to build trust.<sup>12</sup>

Trust can also be strengthened by working with 'boundary' organisations that have deep local knowledge. These organisations can help translate forecasts into action as well as facilitate access where this is challenging. In the Horn of Africa, examples of such organisations include Somalia Water and Land Information Management (SWALIM), Food Security and Nutrition Analysis Unit – Somalia (FSNAU – Somalia), the Famine Early Warning Systems Network (FEWSNET) in Somalia, Kenya Meteorological Department, and the Red Cross Red Crescent Climate Centre in Kenya.<sup>12</sup>

Working with trusted local interlocutors can help bridge 'trust gaps', but it is important to consider local political and social histories when determining who might be trusted at the community level. In a 2023 study in Zimbabwe, trusted interlocutors were those seen to be most distant from political partisanship, suggesting that government officials might not be perceived to be a credible source of information.<sup>17</sup> Despite this finding, agricultural extension workers were widely trusted by study participants, despite their proximity to government, particularly when they had good relationships with local communities. The same study found that trust is dynamic, both over time and space, and in terms of which sources were trusted to provide different kinds of information. For example, the local water authority in Zimbabwe was not perceived to be credible in its explanations for the cause of water shortages because the organisation was thought to be reluctant to accept responsibility for those shortages. It was, however, more trusted to provide advice on how to respond to water shortages.

Response activities also require local ownership, particularly when distribution of scarce resources (e.g., drought resistant seeds or cash transfers) is a component of response activities. In Zimbabwe, the Red Cross helped ensure local ownership of drought response activities by validating and verifying claims for support, conducting community engagement and participatory activities, establishing a whistleblowing mechanism, and continuous monitoring and evaluation.<sup>18</sup> During the 2015-16 El Niño event, the Southern Africa Regional Technical Cash Working Group (SARTCWG) highlighted the importance of cash transfers for drought response in the region, and identified critical lessons. These lessons included the importance of community engagement in programme design, particularly to ensure equity of distribution during shocks which might substantially change the profile of those considered vulnerable or likely to come forward for cash transfer programmes. The organisation also highlighted the importance of cash at the household level.<sup>19</sup>

### Communications and community engagement strategies

Community engagement is needed for information and programme design as well as the establishment of genuine two-way communication or community feedback systems. To facilitate community engagement, it is important to work with local RCCE staff who understand their communities and can translate risk into locally appropriate terms.<sup>13</sup>

Appropriate assessments of local knowledge using existing data (where it is sufficiently timely) should be considered before starting risk communication campaigns. This is because blanket awareness-raising activities may not be a good use of resources, as shown in the following

examples. A 2015 study in Ethiopia looked at factors affecting climate adaptation strategies and found that structural factors, such as land shortages or lack of access to money or credit, were more often cited than lack of access to information.<sup>20</sup> Similarly, a 2023 study in Western Kenya examined WASH-related impacts of climate change and concluded that knowledge of infectious disease risks and appropriate adaptation practices was good, while capacity to adapt was constrained by resource access.<sup>21</sup> Community feedback mechanisms can help identify critical local knowledge gaps and meaningful local barriers to adaptive action. This information should be used alongside that gathered through assessments to understand local levels of trust in government institutions, different response organisation and information sources. This information is key to determining the most effective local evidence-based RCCE strategies.

Given structural barriers to action, and the communal nature of many response options for weather and climate events, some authors have pointed out the limitations of taking an individually focused, top-down approach to behaviour-change communications interventions.<sup>17</sup> In a 2021 study in South Africa, the structure of social networks affected the ability of local government agencies to manage flood risk, with weak social ties affecting knowledge exchange and flood risk governance, and strong social ties facilitating cohesion among different actors, improved knowledge exchange and improved flood risk governance.<sup>22</sup> Further, good information provision alone is not sufficient to support implementation of risk reduction strategies.<sup>23</sup> This is because, alongside structural barriers to action, climate and weather events can have psychosocial effects that have consequences for peoples' perceptions of self-efficacy, which in turn may limit their ability to act.<sup>17</sup>

Despite the limitations of information provision alone, studies suggest that forecast information is not readily available to those who need it, with large proportions of respondents relying on indigenous weather knowledge. This is partly because of a lack of access to scientific information.<sup>24</sup> Improvements to scientific information access should be combined with local knowledge, traditional indicators and forecasting. There is widespread agreement that forecasts should be impact-based<sup>25</sup> and linked to action.<sup>26</sup> Local knowledge and adaptive strategies should complement scientific data to inform response strategies for response to weather events.<sup>27</sup> Messaging about adaptive responses and mitigation strategies should therefore be embedded within existing local practices and reflect what actions are structurally feasible for affected populations to take.

The response community should aim to conduct participatory work that goes beyond awareness raising or classical behaviour change communication approaches. The ability to do this participatory work may be limited by the absence of established communications departments in relevant government ministries. For example, in Malawi, communications on weather or climate events are led by meteorologists rather than communications specialists for this reason. Capacity building of partners may therefore require additional effort and resources, and there may be greater challenges with taking a participatory approach to the design of communication or information products.<sup>28</sup> Moreover, RCCE specialists are often 'housed' within ministries of health and have limited formal connections to disaster management coordination mechanisms. Developing multi-hazard warnings that link to specific sectoral outcomes and actions may also be more challenging in contexts where government risk communication capacity is siloed or limited.

In situations where meteorological communication capacity is limited, it may be important to work with and train journalists and media organisations to help build public understanding of the likely effects of El Niño and locally appropriate mitigation strategies. These efforts are particularly important given the tendency of the media to 'lose interest' in reporting on El Niño or other climate events outside of extreme situations.<sup>6</sup> Working with and through local media organisations can also help to ensure that risk communications are appropriately tailored to local language needs, although consideration should be given to communicating with populations with low levels of literacy.<sup>13</sup> The ESAR RCCE Media Dialogue series and Media Cafes offer

opportunities to connect journalists with experts, to share and address community concerns, and to help close the feedback loop by providing appropriate responses for journalists.

Well-designed information management products, such as infographics and maps, can facilitate decision-making as well as partner coordination.<sup>29</sup> Maps can be helpful particularly where people have internet access and are familiar with interpreting information in that format. Like most early warning products, however, maps need to be provided at a sufficiently local level, be linked to action and ideally co-produced with at-risk or affected communities.<sup>26</sup>

Co-production of scientific information and response plans between producers and users of information can help to ensure that mitigation and response strategies are locally appropriate and take account of indigenous knowledge systems.<sup>12</sup> The Kenya Meteorological Department worked with local farmers to incorporate their indigenous forecast indicators into locally adapted climate forecasts and co-develop appropriate agricultural response strategies.<sup>30</sup> Co-production requires functional, meaningful, two-way community feedback mechanisms where community members can see evidence that their feedback results in changes to programmes. Establishing the right feedback mechanisms in turn requires community engagement to determine feedback preferences.<sup>19</sup> For example, a cash transfer programme in Swaziland and Malawi during the last El Niño event established that the use of a toll-free number was more effective than other feedback mechanisms, with users citing this preference due to privacy concerns.<sup>19</sup> Channel preferences for community feedback are likely to vary substantially across and within countries, and they should be determined based on local knowledge and assessments.

#### **Communication channels**

Communication strategies should take multi-channel approaches that are sensitive to local information access barriers, including telecommunications coverage, literacy, language and social vulnerability. Identifying appropriate communication channels for the provision of risk communications or warning information requires careful consideration. Using inappropriate channels can affect the uptake of risk communication and mitigation messages.<sup>13</sup> Rural populations and farmers may lack access to television or smartphones,<sup>31</sup> and so a multi-channel strategy is likely to be needed to ensure that weather and climate vulnerability is not further compounded by reduced access to information.<sup>13</sup>

It is important to map the ways in which different groups access forecast information to facilitate appropriate channel selection, particularly because the way in which people engage with climate information may be different from other topics. A study in Zimbabwe found that despite widespread access to phones, people were more likely to rely on radio for climate information than for other topics, where mobile phones were more common.<sup>32</sup>

In the absence of time or resources to conduct a channel mapping exercise, existing data may provide an indication of channel preferences. For example, a systematic review published in 2020 on communication needs for weather and climate services in sub-Saharan Africa found that farmers showed a strong preference for radio and that communication channel preferences were broadly consistent across different farming groups.<sup>25</sup> The review also found that farming decisions were positively affected by the translation of relevant information into local languages, transmission of forecast information via mobile phones, broadcasting radio messages using local and not just national radio stations, and ensuring that broadcasts aimed at farmers were timed well around agricultural activities.<sup>25</sup> While radio may be a preferred channel in some settings and for certain groups, national radio rarely offers details based on location specificity or much tailoring to end-users' needs.<sup>33</sup> Engaging community radio stations can help offset this by ensuring a hyperlocal dialogue-based approach.<sup>34</sup>

Radio and mobile phone SMS are examples of dynamic tools and channels that may be better suited to the rapidly changing phenomena that can be associated with weather events in comparison to static tools, such as posters. The increasing penetration of mobile phones offers

opportunities to provide the precise hyperlocal information that is needed. Where smartphone penetration is low, this information can be provided to feature phones using SMS or interactive voice response (IVR). Where smartphones are accessible, but literacy is low, transmitting voice messages in local languages (e.g., via WhatsApp or using IVR systems) is valuable.<sup>13,25,35</sup>

Engaging with both formal and informal networks for risk communication activities can help with dissemination, especially for groups with low literacy or other barriers to accessing more formal channels. A study in Botswana found that most respondents cited the *kgotla* (traditional village meetings that provide a space for two-way communications) as their main credible source of climate information.<sup>13</sup> Farmers' organisations should be leveraged as a way of disseminating information and collecting community feedback by working in partnership with groups who already have relationships with those types of organisations.<sup>25</sup> Similarly, the health workforce should also play an important role, with vaccinators and community health workers trained to disseminate information embedded into community-based health promotion activities.

It may be valuable to map or identify village management committees and district disaster management committees or their local equivalents, and to work in partnership with these and other disaster risk reduction structures.<sup>13</sup> Working in partnership with disaster risk reduction agencies may be valuable for RCCE, and for response activities.<sup>36</sup> Reaching vulnerable groups may require more granular identification of relevant informal groups and networks, such as women's organisations or those that support vulnerable groups (e.g., people living with HIV and AIDS or people living with disabilities).

#### Vulnerability during weather and climate events

Different vulnerabilities may intersect and affect decision-making in unpredictable ways, so interventions will likely require a multi-sectoral hazard response.<sup>6</sup> Response interventions may need to include disaster response, cash support, borehole installation, food bank provision, consistent water truck presence and support with ongoing access to healthcare. The complex coordination requirements associated with a multi-hazard response mean that community feedback systems should be expanded to ensure that perspectives on El Niño effects that go beyond health are collected, disseminated to multi-sectoral decision-makers and responded to in a coordinated fashion. RCCE interventions should therefore be planned in partnership with the full range of response organisations, to facilitate signposting to services and ensure a cohesive response.

Vulnerability to El Niño is complex and intersects geographic and social vulnerability in unpredictable ways that can change over time. Relying on previous vulnerability assessments may provide an incomplete or inaccurate picture of where current need is greatest.<sup>7,12,15,37</sup> Where social protection programmes already exist, they need time to adapt to forecast information and identify potential beneficiaries and vulnerabilities, and to consider expanding distribution channels for any support that might be offered.<sup>12</sup> Social vulnerability can be harder to capture than geographic vulnerability and requires in-depth local knowledge (and therefore a participatory approach).<sup>15</sup> Further, there is some evidence that humanitarian responders have reported a lack of access to information about vulnerable communities, suggesting that information on their profiles, requirements, and locations need to be urgently updated and overlayed against hazard risk data, such as flood risk maps.<sup>25</sup>

Specific groups may be more vulnerable during weather events. Women, people living with HIV, those with less prior experience of similar weather events, people from minority language communities, and those experiencing other humanitarian crises are especially vulnerable and may be missed by mass-media communications campaigns. There is limited literature available on the specific information needs of groups that are more vulnerable during weather and climate events, such as refugees, IDPs, people living with disabilities or people living with HIV. Tailored communication and community engagement and response plans are needed for these groups.

Women may be less able to access forecast or warning information because of reduced access to technology and/or lower levels of literacy. How to engage women most effectively must be given particular consideration during accessibility or dissemination planning for risk communications,<sup>25</sup> and in order not to further disadvantage female farmers or smallholders.

Gender-sensitive analyses are also needed to ensure equitable allocation of response inputs, particularly when these include cash transfers at the household level which may have consequences for domestic decision-making.<sup>19</sup>

Refugees and IDPs may be more exposed to extreme weather conditions and less able to take action to cope or adapt. People living with disabilities may be more vulnerable to food insecurity, be less able to escape from hazards or to evacuate when this becomes necessary. They may also have greater difficulties accessing basic needs and may lose access to assistive technologies, such as medication or hearing and mobility aids.<sup>38,39</sup> People living with HIV/AIDS from lower socio-economic backgrounds are more vulnerable to changes in food security, and so may be more affected by scarcity or increased food prices.<sup>8</sup> Similarly, people living with HIV/AIDS may be at greater risk for waterborne diseases that increase in prevalence during flooding or drought.<sup>37</sup> This group is likely to experience competing vulnerabilities, which can create a tension between critical decisions that can maintain health and wellbeing, such as foregoing health care in favour of sustaining a livelihood.<sup>40</sup> Communication interventions for people living with HIV/AIDS may need to be determined in partnership with local support organisations which may in turn require additional resource to expand the nature and type of support that they offer during El Niño-related impacts.

El Niño effects can be unpredictable and change between events. Communities with limited prior experience of flooding or drought, such as those newly constructed in high-hazard locations are likely to have reduced risk perception for El Niño-related events.<sup>12</sup> It may be necessary to identify these communities and overlay information on their locations against up-to-date forecast and hazard data to identify the most vulnerable populations.

Risk communications plans should consider minority language communities.<sup>17</sup> These communities may otherwise experience information inequity and greater vulnerability to weather hazards and their consequences.

People experiencing humanitarian crises are inherently more vulnerable during weather events. Their vulnerability may increase due to reduced access to resources, less robust housing infrastructure and greater food insecurity, all of which can be compounded by a reduced ability to act in response to warning or other risk communication information. El Niño-related events are likely to increase the humanitarian needs of these communities, and RCCE plans should make special consideration for them.<sup>17</sup>

### Additional resource

El Niño Event Thematic Kit – The Collective Service has curated key documentation and products developed by partners for supporting community engagement for El Niño event preparedness and its related public health emergency response.

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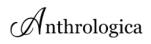
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