

PARES Case Study of Engagement & Involvement for Resilience

Case Study Title: Madagascar, Cyclones, Communication & Information Systems for risk reduction

Country/location: Madagascar – five municipalities in Ambanja District

Crisis/challenge type: Cyclones and cyclone-related flooding

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PARES Domain illustrated by this case study:

Operational Systems: Risk Communication systems & partnerships

Recommended Actions

Communities: Share with external agencies those communication channels you use and trust.

Ensure you maintain communication channels with, and respond to, external agencies who can help build local resilience to crises.

NGOs and other actors: Use established and trusted communications channels. Identify and act (in partnership with trusted leaders) on barriers that hinder implementation of recommended actions for preparedness.

Consider how best to mobilise and work with community resources and actors. Address the needs that communities themselves have identified.

Government: Coordinate and collaborate with NGOs and community structures/institutions to agree best communication channels for hard-to-reach communities. Work with established and trusted community mobilisation systems.

Ensure communities have access to the resources necessary to respond to crises.

Funders: Allocate sufficient resource for grantees to identify and use trusted communication channels.

Ensure resource allocation for immediate crisis response *and* long-term risk reduction.

Data for this case analysis

Primary data from respondents in five villages in five different municipalities: 20 key informant interviews, 5 focus group discussions.

Key Message

Timely and trusted risk communication and effective use of early warning systems can trigger effective community cyclone response. This, coupled with cyclone risk management that is undertaken in partnership with communities, can serve to reduce the risk posed by cyclones and build longer term resilience, leading to a reduction in mortality and reduced loss and damage.

Case study summary

When the meteorological office issues cyclone warnings district authorities are notified. They liaise with long-standing NGO partners and local authorities at the village level to support preparedness actions. The presence of embedded partners has built trust and a willingness among people to engage with them. Training and support (from NGOs) offered to minimise post-cyclone flooding risks was readily taken up, as was support for the cyclone early warning system. The sharing of timely meteorological communication preceding and during a cyclone, triggering the early warning system, has led to timely community mobilisation and an effective response to the cyclone. Embedded NGOs and local authorities communicate with community using coloured flags, megaphones, and whistles, asking people to stay in their houses, while constantly listening to information on radio about the progress of cyclone. NGOs provide radios to households who do not have them. These combined approaches were trusted and observed to work by communities who put the preparedness actions into practice. This led to an observed reduced death rate during cyclones, increased community resilience (e.g. management of food) and increased community trust towards the supporting NGOs and local authorities.

Detailed Explanation of engagement mechanisms

Context that provides the conditions in which the observed actions work

In the coastal northwest of Madagascar communities rely heavily on marine resources: mangrove forests and fisheries. There are limited livelihood alternatives and high levels of poverty. Cyclones, which are becoming increasingly frequent and severe, regularly cause serious destruction of property and loss of life. Additionally, progressive over exploitation of mangroves has led to reduced mangrove forest cover, accelerating soil erosion and increasing their vulnerability to the effects of strong winds during cyclones. Communities have lived experience of cyclones and are aware of the need to protect themselves

from the impacts of these cyclones. These communities have limited access to meteorological information, so have limited ability to prepare for the arrival of cyclones.

In the area one NGO was providing support for the sustainable management of fisheries, along with mangrove restoration and protection. It also provided healthcare at local level, working with networks of community health workers. It was widely known and trusted locally.

The actions (mechanisms) that were observed to lead to resilience outcomes

In response to the increasing threat posed by cyclones, local agencies (local government and NGOs) worked with communities to develop a locally managed cyclone early warning system, using community members and trusted communications channels. As a result of the community's awareness of the risks and the trust they had in these local agencies, they readily engaged in the process and developed a system for rapidly disseminating information about incoming cyclones and for mobilising communities to take protective action, such as staying at home and tying up their boats. Communication tools included the use of flags, visiting households door to door and local radio. Community members also availed themselves of the training on how to rescue village members stranded by flood water and at risk of drowning.

In addition to these actions to minimise harm caused by cyclones in the acute phase, these agencies worked with communities on longer risk reduction measures, including the planting of grasses and trees along the sides of river beds, to reduce soil erosion. Communities were aware of the impact that soil erosion was having on their homes and were willing to engage with these agencies.

Observed outcomes

During the cyclone period, information, coming through different channels, was acted upon quickly. Communities mobilised effectively and responded rapidly to ensure that harm from the cyclone was minimised. There was an observed reduction in mortality.

As a result of planting of grasses and trees at the edges of rivers, there was a noticeable reduction in soil erosion, with a reduction in damage to properties.

The flexibility and long-term commitment of the NGO to work with communities to provide for their needs, reinforced the feeling of trust towards the NGO. As a result of communities playing an active role in cyclone risk reduction, they conveyed a greater sense of agency.

Case evidence

Vignettes #15, #22 and #23 in Madagascar – Cyclones – Supporting Evidence Document.

Related Case Studies

Social Relations and Structures

Madagascar – Cyclones – Social Capital & Collective Action

Operational Systems

Madagascar – Cyclones – Embedded & Equitable Partnerships

Other Relevant Case Studies

On Flood response

Uganda – Flood – Knowledge Systems Integration

Uganda – Flood – Drought – Social Capital and Collective Action

Uganda – Flood – Drought – Multi-stakeholder Coordination

Uganda – Flood – Drought – Embedded and Equitable Partnerships