## **Notes from the Field**

Managed by us mob: helping remote northern communities face natural hazards Nathan Maddock, Communications Officer, Bushfire and Natural Hazards CRC

Deep in Arnhem Land in the Northern Territory, perched on a small hill above the banks of the often-flooded Roper River, lies the community of Ngukurr. When the rains come each wet season, the community is cut off by road and the crossing over the mighty river becomes impassable.

Bushfire and Natural Hazards CRC researchers from the Research Institute for the Environment and Livelihoods at Charles Darwin University and the University of New England visited the Ngukurr community in June 2015 for a workshop with local representatives. They camped beside the lily-covered Yarriowarda billabong (Yellow Water in English).

Cherry Daniels, a senior Elder of Ngukurr said, 'Yarriowarda is the place of kangaroo dreaming. The white gums resemble the kangaroos. It is a special place.'

Four CRC projects were represented at the workshop, which was joined by local community members and researchers from the Aboriginal Researcher Practitioners' Network (ARPNet) who are conducting the research on the ground for the CRC.

ARPNet is a network of Indigenous research practitioners in northern Australia who are trained in participatory and other research and evaluation tools, primarily in the field of natural resource management and livelihoods. Community-based Aboriginal researchers make it possible for research to be conducted in the first language of the participants, using locally-adapted participatory tools, with due attention given to local cultural sensitivities. ARPNet Director for Research and Training and CRC researcher Dr Bevlyne Sithole said this is not the only advantage.



Kingswood Dirdi, ARPNet member, surveying Otto Dann, Gunbalanya resident, about perceptions of natural hazard risk.

'They [local community members] do not feel like they are being researched. It feels like they are having a conversation with someone they trust,' Dr Sithole said.

Along with Ngukurr, the CRC's Scoping Remote North Australian Community Resilience project has undertaken on-the-ground research in Gunbalanya (also known as Oenpelli), another Arnhem Land community. Further north and closer to the coast, Gunbalanya is situated in a river basin and is regularly affected by cyclones and flooding.

The CRC research will benefit the communities living in the environment along the coast of northern Australia, explained Dr Sithole.

These Indigenous communities face many natural hazards on a regular basis. They feel like they are often unprotected and unprepared because of their socioeconomic situation. They worry a lot about their survival and their wellbeing.

'It is crucial that we engage with communities and talk to them about what is happening on country, so that we can find out how to bring the resilience back to the communities; understand what needs strengthening and what we should prioritise,' Dr Sithole said.

## **Protecting local knowledge**

At the moment communities feel very vulnerable. There is a worry that the young people are not fully aware of the risks from natural hazards.

In the old days, the old people in the community knew how to react to natural hazards. They knew which places to go to and ways to read the weather and nature. They could tell way before something happened that it was going to occur, and there were some people who knew how to control weather or natural events,' said Dr Sithole.

This awareness and knowledge is much reduced; in some places it is being lost as time goes on.

Before the workshop 22 ARPNet researchers spent several weeks in both Gunbalanya and Ngukurr talking with community members and completing 188 interviews. The benefits of the CRC researchers attending the Ngukurr workshop are many, said Dr Sithole.

'The best thing about meeting on country is that it is easier to relate to the information when you can see where it is coming from, when you can really see the landscape and the challenges faced. You hear firsthand the community researcher's feedback and analysis of the situation.

'These communities can be isolated for four or five months a year during the wet season. Being on country, we can go and see the high-water mark. It makes it more real. It is clear what is affected and the range of challenges presented,' Dr Sithole said.

It is not just the immediate environmental barriers that come into focus. Feeding the family is also a challenge with natural hazards: from the rising cost of food, to reduced opportunity for hunting and collecting. In some instances there is an added burden to feed multiple families.

'We can go to the local shop and see the prices. Then we hear within the community that these already high costs go up substantially when there is a natural disaster,' said Dr Sithole.

## What has been discovered?

The disaster preparedness of the Ngukurr and Gunbalanya communities is often linked to the seasons. Water levels in the rivers and billabongs fluctuate greatly between the wet and the dry. During the dry, fire produces lots of smoke in both areas. Their locations, relative to hills and rock outcrops, can be both an advantage and a disadvantage.

Stories about vulnerability and safety are connected to people's views about housing quality and infrastructure. Most of all, stories about vulnerability related to an absence of people on country and a weak connection to culture, traditional ceremonies and traditional structures. Strong advocacy was expressed for bringing old ways back and putting people back on country to strengthen the connection to country and to reinvigorate the coping capabilities within families.

Traditional ceremonies are a large part of how Aboriginal communities cope with and manage natural hazards. In today's world these ceremonies do not occur as frequently as they used to.

Ceremonies require the commitment of many. However, the 'modern' jobs that people hold often mean that the availability of the senior people required to hold a ceremony is just not there. Ceremonies take time and leave from employment does not allow for this. Ceremonies need to be recognised formally as a crucial part of managing country.

Dr Sithole explained, 'We found that the communities are already weakened by other factors [other than emergencies]. Natural disasters just make this weakness worse.

When we interviewed people in the local communities, we were talking about big disasters and we found it became irrelevant. The size [of the event] did not matter. Any disaster leaves an impact on anyone who is already vulnerable. Any small bushfire, any small flood—that really affects a community in a fundamental way. It becomes seriously exacerbated in a big disaster,' Dr Sithole added.

Connectedness to country is fundamental in remote communities. Their way of life depends on this relationship and, as communities become increasingly connected to the outside world, this vital bond has been weakened

People feel safe to a certain extent in remote areas because it is their landscape. But that is not to say they are not aware of the harshness of the environment. It is accepted that the landscape is harsh and that there will be some challenges. At the moment they feel that there is not enough information available to them, from either their traditional ways or the modern ways, to allow them to be better prepared.

Often I will hear comments like, "We heard that the climate is changing. Maybe for us Aboriginal people it is changing too fast. Maybe it will be very hard for us to change so quickly",' said Dr Sithole.

The notion of a safe place understandably differs to that held in other communities. For a cyclone, a safe place for these remote communities does not always refer to a cyclone shelter, as not all communities have such a shelter. It can refer to a brick house belonging to a relative. Improved housing remains a key issue in Ngukurr and Gunbalanya, especially the provision of cyclone-coded housing and shelters. A key point that Dr Sithole raised was that the design of shelters must reflect cultural norms and practices that might affect how these facilities are used.

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Sheltering from a natural hazard in an Aboriginal community is not as simple as having one shelter that everyone can access. As part of their culture, different family members are required to avoid others in their family because of avoidance relationships.

'People need to meet their cultural obligations and be safe too,' Dr Sithole explained.

Community-wide emergency plans are another issue for remote communities. Less than a third of the surveyed population in Gunbalanya, and just over a half in Ngukurr, knew there was an emergency plan. Many



of these people had not seen the plan, which is held at

Ngukurr.

the local police station.

communities have with the police.

Dr Sithole noted that to understand this issue, one must appreciate the extent of Aboriginal incarceration in the Northern Territory, and the relationships that

'There is a reluctance for most people to go visiting the police station and openly ask questions about emergency management,' Dr Sithole said.

The research found that all aspects of emergency management can be improved, not only preparation and response. Recovery after a natural disaster is also a key factor. Many people within communities have skills that can be called on in an emergency situation, but are not used.

Jobs like operating machinery and chainsaws are required in the clean-up, but local people can feel excluded from the response and are not employed to do these tasks. People from Darwin often come in and are given these responsibilities while locals are given menial tasks.

'The Ngukurr and Gunbalanya communities are recommending a skills register of local people so the government is aware of the local response capability. These people can be called on within their community, or another community nearby, to assist in emergency responses.

'They also want government to consider identifying individuals in the community as part of a disaster



the Gunbalanya research, recording a completed matrix activity on perceptions of natural hazard risk over time.

response team whose skills are developed over time and can operate in communities to help in times of disasters,' Dr Sithole said.

Emergency preparedness, response and recovery in remote communities across northern Australia is not much different from in other locations around the country. It is about people, and Dr Sithole said a people-focused message comes through loud and clear in the research findings.

'For any planning or talking about emergencies, Aboriginal people should be central. They want to be part of it and know what is going on. From just knowing what resources are available, who is doing what, to knowing what houses are coded to different cyclone categories, to being involved and doing their part,' said Dr Sithole.

ARPNet Co-Chair and team leader for Gunbalanya, Dean Yibarbuk, agreed that people are paramount.

'Government needs to see us as capable people who can be involved in planning and responding to disasters.

'The big message from this project for us mob is to find a way to get government to recognise that ceremony is important and that it is a big part of how we as a people understand and manage disasters,' Mr Yibarbuk said.

Find out more about this research at www.bnhcrc.com.au.