





Map of Locations Surveyed

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Map of locations surveyed: Adella Edwards, Cartographer, TESAG, JCU

Please note that the names of respondents are fictitious.

## ***Executive Summary***

**Women and the Wet Season on Northern Australia - An extension of everyday lives:** identification of the strategies undertaken by women as household managers to reduce the impact of the hazards of the Northern Australian wet season on their families.

### **Introduction**

This project focuses on preparedness, response and recovery strategies used by women as community members to mitigate against the natural hazard of regular seasonal flooding and cyclones in Northern Australia. The aim is to contribute to a reduction in community vulnerability to natural hazards by identifying strategies that women themselves identify as useful for mitigation.

### **Methodology**

A grounded theory approach was taken to the research, using qualitative research methods. Initially the proposed research was to use only focus group discussions as the means of obtaining data. This proved somewhat difficult for a couple of reasons, lack of interest being the main issue. In itself, this would seem to confirm widely held views that people tend to be complacent about the wet season in the region. The final data collection methods included focus group discussions, telephone surveys and individual interviews.

### **Results**

There were essentially three different types of locations surveyed. The first were moderately sized regional towns where there was reasonable local government support systems in place (Broome and Port Hedland), the second were quite small townships with accordingly little local government support (Normanton, Kurumba and Giru) and a large regional urban centre (Townsville/Thuringowa).

There is little doubt that in the large urban centre of Townsville/Thuringowa the expectation of women was that services and supplies would be restored within about 3 days after a major weather event that led to cyclones or flooding. In the smaller centres there was the expectation that one could be without supplies for a little longer because they would need to come in from elsewhere. In the very small centres, the expectation was that the individual household needed to be well prepared for the wet season. In general the women prepared for the wet season by starting to stockpile essential items on a gradual basis from November or December.

The capacity for women to organise for the wet season was to some extent a financial issue. Even though there was a low participation rate for low-income women in the survey, from key informants and from other women there was the recognition that women on very low incomes had very little capacity to stockpile supplies. This group of women included Indigenous women in remote communities. The women surveyed have provided a view of preparation for the wet season as clearly being another task they need to add to already busy lives.

Support systems of extended family and friends were an important part of women's feelings of security about preparing for the wet season. For a group of physically handicapped women who were interviewed, family and other support networks were of vital importance.

In the medium sized centres of Broome and Port Hedland, where the local governments have very obvious preparation campaigns in place, the clarity of procedures to people was obvious. In the smaller centres there was a greater tendency to be self-reliant and in the large centres of Townsville and Thuringowa, there was a level of confusion over interpretation of information and the procedures that might be in place.

In the remoter towns where weather reports on radio and television were not detailed enough for local conditions, the Bureau of Meteorology website was an important source of information. Even though not everyone would have access, the people who did have access would obtain the information and pass it on through friendship networks. In Giru in particular, the weather that caused most flooding in their region actually fell in a region to the west whereas the normally broadcasted weather reports were for the Townsville region. In this case the Bureau of Meteorology (bom) website was essential for them to have a good understanding of weather risks. In the larger centres, the use of the bom website tended to be more for individual interest. In Townsville/Thuringowa, the largest centre, the suggestion was that it tended to be mainly the husband/partner of the woman interviewed who used the website.

## **Outcomes**

- Women with dependents can provide practical and achievable strategies to prepare for the wet season in northern Australia,
- Women's needs and capacities differ depending on the type of community in which they live, their income, and their capacity for independent action,
- There was a perception that in the main, the information people needed was out there in the public domain, a little refining is all that is necessary,
- Women's family and friendship networks figure strongly,
- Activities that do not require electricity need to be planned for children,
- The Bureau of Meteorology website is an important resource which is used in slightly different ways by rural and urban households,
- There is a view held by longer term residents that the risk of isolation from flooding has reduced over time as infrastructure has improved,
- There is a view that dependence on authorities has increased, particularly in the larger urban centres,
- There is a view that complacency had increased as a consequence of improved infrastructure, service provision and lack of major events,
- Information sessions and pamphlets seem to have been consulted irregularly, usually on initially moving to an area. The question remains as to how often people refresh that information,
- For all locations, but Queensland in particular, there was a general lack of understanding of weather information and warnings and the official procedures of response to a hazardous weather event.

## **Strategies Identified by the Women**

### **Stocking up**

- Regular, organised turnover of long-life items in pantry, and around November or December ensure there is enough of key items such as batteries, milk, medicines, drinking water/containers, gas containers for at least three days. Make sure there are activities planned for children that do not require electricity. Ensure that medical supplies are backed up where possible so that if it is not possible to go out supplies are available,
- Around November start to prepare for wet season and Christmas, buying in gradually,
- Respond to cyclone alerts, buying in goods like instant noodles, and other things the children will definitely eat.

### **Travelling**

- Avoid travelling where possible,
- Always have water in the car, insect repellent, some snacks and something to keep children occupied.

### **For people with disabilities**

- Ensure that all that is needed is together and easily usable so to remain as independent as possible.

### **For everyone**

- Keep in touch with relatives/friends/neighbours to check on each-other's needs. Plan with those people most likely to be around.

## **Recommendations**

- Information campaigns need to go beyond the generic and be tailored to suit different communities and different sub-sections of communities,
- Emphasise reference to family, friends and neighbours as support during hazardous weather events,
- Rank the resources that are recommended for people to accumulate, and suggest accumulation over time so as to reduce the financial impact on households and to prevent panic buying,
- Acknowledge that people may have different styles of preparation while emphasizing the essentials,
- Emphasize the need for activities to keep children occupied,
- Discourage travel, but emphasise the need for water, food, insect repellent, and activities to keep children occupied,
- In conjunction with service agencies further develop programs targeted to people with disabilities.

# ***Women and the Wet Season in Northern Australia***

## ***Final Report***

### **Introduction**

This project focuses on preparedness, response and recovery strategies used by women as community members to mitigate against the natural hazard of regular seasonal flooding and cyclones in Northern Australia. The aim is to contribute to a reduction in community vulnerability to natural hazards by identifying strategies that women identify as useful for mitigation. The strategies identified can assist in designing more focussed education campaigns.

### **Gender and Natural Hazards: Why women and the wet season.**

Throughout the world women bear disproportionate responsibility for raising children, caring for the ill, disabled and elderly, and meeting the family's daily needs (Morrow and Phillips, 1999:7).

We know from previous research by the Centre for Disaster Studies at James Cook University that presenting information to communities without identifying their needs is ineffectual. Contemporary research in disaster studies indicates that emergency responses have tended to assume homogeneity of communities which ignores differing needs of various groups within a community. In addition, during previous research conducted by the CDS, we have become aware that at least some women do have strategies in place for dealing with the onset of the wet season in order that the impact on their families is minimised. The strategies appear to vary between women and communities and we need to understand these strategies and the rationale of the women themselves to capture benefits that might be applied more widely in the region. The strategies may well be influenced by particular facets of the location, or they may be a consequence of women's personalities, socio-economic status, and/or other factors. The study will build on ideas generated by previous research activities, but will also provide the basis for further research on mitigation by targeting a specific group of people, in this case women as household managers and who have dependents.

In this study we are considering the situation of women living in Northern Australia who are regularly confronted with the potential hazard of heavy rainfall, including cyclonic conditions, which may result in their families being isolated from basic services.

Women have their vulnerabilities and they have their strengths (Morrow and Phillips, 1999). In the spirit of Fordham's (1999) caution against concentrating on individuals as victims and encouraging us to consider resilience and agency, we are assuming that women do have strategies for preparing for the wet season in Northern Australia. By discovering those strategies and incorporating them into information and education campaigns it may be possible to enable other women, particularly newcomers to the region, to adapt, and in so doing, increase their own resilience and agency.



## Methodology

A grounded theory approach was taken to the research, using qualitative research methods (Berg, 2001; Rice & Ezzy, 1999; Strauss and Corbin, 1994). Grounded theory uses an inductive approach to research, developing concepts and themes from the research as it progresses rather than presupposing outcomes which might inhibit new findings.

Initially the proposed research was to use only focus group discussions as the means of obtaining data. This proved somewhat difficult for a couple of reasons, lack of interest being the main issue. In itself, this would seem to confirm widely held views that people tend to be complacent about the wet season in the region.

The final data collection methods included focus group discussions, telephone surveys and individual interviews.

### *Broome & Port Hedland*

A very successful focus group discussion was conducted in Port Hedland with the co-operation and assistance of Ms Michelle McKenzie of the Port Hedland Shire office. In Broome, despite the support of the Deputy CEO of the Broome Shire, Ms Nik Weavers, it was not possible to organise focus group sessions. At the time that we were there, it was around NAIDOC week and just after the Broome Festival, and there was a big football match being televised at the weekend and people were busy organising parties with relatives coming in from out of town. In Broome two key informants were interviewed at length, providing very useful information. A focus group discussion had been organised with the Aboriginal community at Bidyagdanga, which lies between Broome and Port Hedland. However a death occurred the day before the scheduled meeting and we could not proceed. Subsequently, 22 telephone interviews were conducted to the point of redundancy of information. It needs to be noted that in 2001, two journalists (Anne Coombs and Susan Varga) stayed in Broome and without the consent of the participants, conducted research through personal interviews for a book. The incident was reported in *The Australian* newspaper (03.04.01 p1, p13) and the *Weekend Australian*. (24.03.01 p1; 31.03.01 p18; 26.05.01 p27). There was also a PhD student from Edith Cowen University conducting research on vulnerability to natural hazards in the area.

### *Kurumba, Normanton & Giru*

At Normanton two focus group discussions were held, and one in Kurumba. The work in Normanton and Kurumba was possible and successful because of the assistance of the Deputy CEO of the shire, Ms Sue Unsworth.

One focus group session was held at Giru, a small town south of Townsville. It is more appropriate to consider Giru along with Normanton in the context of this research project. Even though Giru is only one hour's drive from Townsville the nature of the wet season hazard there makes it more like a remoter township.

### *Townsville/Thuringowa*

Four focus group meetings were conducted in the Townsville/Thuringowa region. Preliminary analysis of earlier focus groups suggested a predominance of participants

from the middle income range, and it was felt important to ensure that other income groups were not omitted. The range of groups interviewed in Townsville did vary from lower income to the middle-income ranges. Several times attempts were made to meet with wives of Army personnel in Townsville, but because of the service needs in the Middle East, meetings that had been organised had to be cancelled. Several in-depth interviews were also conducted in Townsville in order to follow up on more detail.

In general, the focus group sessions, group sessions and individual interviews flowed easily. The topic was one that women found relatively easy to discuss. However, it must be acknowledged that the issue was not one that many women prioritised. We are left with the impression that women with dependents have very busy lives and natural hazards, like other small and large emergencies get prioritised as the need arises.



## Results

### Broome

For Broome, there were three in-depth interviews, and 22 telephone surveys.

#### Broome Telephone interviews

There were 22 responses to telephone interviews. The women ranged in age from 30 to 52 years. All had at least one child or a dependent relative. Half had one child, two had three children and the remainder 2 children.

In response to the question: what does the wet season mean to you?" cyclones were not immediately mentioned by most respondents to the telephone interviews. Only about one quarter of respondents mentioned cyclones at this point. The remaining responses referred to heat and humidity, the possibility of rain, and a couple mentioned the pleasantness of fewer tourist numbers.

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#### What does the wet season mean to you?

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Beautiful. Thunderstorms & lightening, fresh rain, excitement.

*Nothing really, it is just hot.*

I look forward to the rain. There are a lot of unpleasant conditions - mosquitos, flying insects, it makes living conditions uncomfortable. I look forward to it raining. When it does rain, it is like a whole new experience. Humidity is the hardest to adjust to, even if you've done it for years. If you have air conditioning, it's not such a problem.

*Heat, sweat, pretty horrible, it's a good time to go on holidays.*

Means hot – heat and uncomfortable weather. Cyclones are the main thing,  
*Hot weather, air conditioning, humidity rises, rain-storms, and preparing for cyclones.*

Means a rest period after the tourist season. Cleaning curtains and prepare for next lot of tourists. Be prepared for cyclones.

*Just rain.*

It gets hot, might rain.

*Humid hot weather.*

We don't really have one. Don't get a huge amount of rain.

*Seven months of very uncomfortable conditions – heat and excessive humidity.*

*The threat of cyclones.*

Feeling hot and terrible. Less tourists makes it better. Feel physically bad for a while – no energy. Remind myself it's not me, just too hot.

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However, when it came to the question: "What do you do to get ready for the wet season?" the responses nearly all referred to what might be described as preparation for cyclones or torrential rain that prevents leaving the home for a few days.

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## What do you do to get ready for the wet season?

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Go around outside, check the yard and make sure loose things are put away, things that could fly away – don't bring anything in until the rain comes.

If cyclone due, would get in extra water and torches and batteries, but a bit of extra, not to a great degree.

*For cyclone season – clean up- nice and tidy – get prepared.*

We are pastoralists so you just fit it in with what you do. Cupboards stocked up, not isolated, can always get out because there is 10Km of highway. Could be cut off in the past, but things evolved over time. Things are much easier now than a few years ago.

*Remove loose bits and pieces around. Really nothing else to do. On a blue alert start putting furniture away. Even if the cyclone diverts, there are strong winds and rain.*

Radio, food & water. Canned and dried goods. Plastic storage box in house in pantry. Specifically run it down after season.

*Service air conditioners. Clean up around November. Go through stuff in cupboards.*

If cyclone coming pull down plants and put plants together to protect them. Freeze bottles of water to keep food cold and be a water supply. The minute I hear of a cyclone, make sure garden, yard, outdoor furniture together.

*Batteries, candles and stuff. Regular power outages in Broome so you need them. I use bottled water anyway, can't say why. Food is not a great problem. Tinned spaghetti.*

Clean up yard mainly. On yellow alert - canned food. Milk in cartons. Need to fill up car. Fill bath on red alert.

*Cyclone clean up. Yard clear of debris. Have a plan – camper trailer stocked up with water and food. I'm usually away for Christmas.*

Garden clean up. Trees not much higher than the house. Move refuse. Try not to have much anyway. We have cyclone protection screens on windows. Always have a camping box on standby. Often blackouts so torches, batteries in fridge (?). Water is the main thing. I don't usually use filtered water, but have 20-40L on standby. I have an Ingle fridge that works on a car battery for 11 days.

*Clear gardens of debris that could be missiles. Check air conditioners are working and get the cooler clothes out.*

Cyclone season – UHT milk, cans, batteries, cyclone box, Photo negatives in box, candles, thought about what we'd have to take if evacuating.

Emergency kit, torch, candles, tinned food, water. Try not to have loose stuff around outside. Trim trees.

*Pick up, decide with family where we shelter. Food supplies, cordial, water, flashlights.*

Cyclone kit ready: torch batteries, radio and batteries, tinned food and can opener, baked beans, camping food leftovers, tinned fruit, gas bottles filled up for if there is no power and no lighting. Fill up car with petrol in case need to get out quickly. My theory is that even if there is a cyclone. You eventually get to shop. Enough food for a couple of days, not more than that.

*Tidy up yard, organise shopping list. Get batteries, candles.*

Make sure there is no rubbish around that can fly around and break windows. Make sure trees are lopped. Some tinned food in the house, For Rosita, no power for a whole week. Had water so okay. On yellow alert fill up 5L bottles. Do have generator backup for water supply and can use it on the garden later. Walk in robe is the safest part of the house. Contingencies are planned. Batteries and torches, something to read and to do.

*Not a lot really. Thinking about cyclones, annual yard clean up. Thinking about putting things away. Spare batteries, radio. First year here bought matches, candles, batteries. Now check on these each year.*

Batteries and water. Everybody has a bit of a pantry organised don't they? Don't do anything until after Christmas.

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In Broome there was a focus on clearing the yard of debris for a little over half of the respondents. At the time of the visit to Broome, the Shire was already very involved in its annual clean-up campaign. The most commonly mentioned contingencies included collecting water (one third), batteries (one third), and/or having a storage or camping box to draw on (one third). Approximately one quarter mentioned tinned or

dried food, and one fifth mentioned torches. UHT milk, a radio, filling the car with fuel, candles, gas bottles, photos were all mentioned by only a couple of people. It seems women with children do have a pantry of supplies that they simply check to ensure the basics are there. What constitutes the basics varies between households.

The reasons why these women prepare the way they do is largely because of their experiences of living in the area. Only two women mentioned pamphlets or leaflets or “that’s what you are told to do.”

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### **Why have you decided to do it that way?**

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1½ weeks without electricity. Also worked out bush so fridge and freezer electric, gas, 12V battery. Just cook with a BBQ.

*Lived here a long time, Machinery work - away a lot. If not prepared then its bound to happen.*

40+ years of experience. Low rain is actually worse for us.

*Don't think twice about it. If cyclone usually prepared, but check up. Always lots of tinned food, torches. Part of life, everyday.*

Because that’s what we’re told to do.

*The way it's promoted. Broome Shire – notices in mail, clean up over a couple of weeks.*

Lived here 20 years.

*Lived here 8 years. Don't plan much, never really need to. All services get restored in a couple of days. I don't have to do anything unusual.*

*Learned from previous experience.*

Been here 17 years. In that time only one cyclone. Prior to that a bit complacent. Now tend to do things a bit more thoroughly. If you haven’t been through it you don’t know.

*Fly every day as part of my job. Blue alert everyone rushes – I've seen it happen, so I've got it all ready.*

You’re advised to do that. And for your own peace of mind. Just common sense to me. I think a lot of people don’t think it will happen to them.

*I went through Cyclone Tracey.*

Learnt by experience. First time I panicked and went overboard. I didn’t need to shop for 5 camping trips afterwards.

*Just follow leaflet information.*

Just have to accept it and get on with it.

*Clean up yard, get batteries. Don't bother with much. I have a pantry with a reasonable stock of food. Batteries, Baked Beans. The yard is the most time consuming, the big things.*

Clear away debris that might be blown away. I’m a potter so tie down everything. As long as 10kg of flour in the freezer, I’m okay.

*I've lived here 6 years.*

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Sources of help in sorting out their strategies for dealing with the wet season/cyclones varied. The most frequently mentioned were the Shire Council, SES and Fire Services, advertisements in the newspaper, on TV or the radio; experience; or friends or workplace.

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### Has anyone in particular helped you sort out what to do?

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23 years in the north, Broom 18 years. Don't have a lot of rain in Broome, just high winds. No direct hits in Broome. In building game so at work pick up things there as well.

*Shire puts out stuff on what to do and how to do it.*

Ads, but mainly because we have had most of our lives here.

*Hospital staff (nurse at hospital) and education programs on TV radio etc.*

No not really.

*Local government. Husband works for the Port. Ads locally. Cleanup leaflets in the mail.*

Local emergency services. Ads on TV. Flyers in paper – use it as a checklist. They have a handy fridge magnet. Also experience.

*Ads on TV during wet season. But not always really thorough. For example, it can get cold. Also need to have boots at the ready. If house disintegrates around you, you really need protective clothing. (The Cyclone Tracey book talked about people getting badly cut feet & hurt her own feet during Cyclone Rosita).*

Have a group of friends whose partners are away. Talk with mates talk about where you might go. After Rosita everybody was a bit better prepared. I am more comfortable with friends. I would go to a friend whose house is more solid. We pool our resources. Lots of girls are like that.

*Pamphlets in the post, box, newspaper, radio and tv. Good friend works for FESA.*

Not really – experience, Notices on radio and TV help remind you to get organised.

*Not really, learnt by experience.*

work at the hospital so disaster planning each year.

ABC radio is very good. Meetings in town, especially for new people. Quite good really.

*Shire directory has a cyclone tracking map. Fire and SES. advertising, experience.*

Been here 6 years.

*Plenty of information – SES, fire brigade. People help you out.*

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The issue of what it is that starts them thinking about getting ready is where we clearly see the differences in the levels of risk women with children will take. Almost half of the women mentioned the Shire council seasonal clean up as an impetus for getting organised. Some mentioned seasonal factors such as humidity and build up of storm clouds. Others wait for warnings. Others have a flow of activities.

For example: ...the literature in the letter box, cyclone clean up by council. On a blue alert fill up the car. With Rosita the good news was that I was prepared properly”

Or: Shire collects rubbish. On a warning check cleaned up, emergency kit ready. First or second warning get ready. Running around getting emergency kits ready, boots ready, rain jacket.

Or: Cyclone clean-up day for shire. Don't really have anything. Wait for a blue alert. Then get batteries and other things. You need to get down to the supermarket before the yellow alert. Then everyone else is there. Colour alerts are especially good for the kids.

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### What is it that starts you to think about getting ready?

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When I hear a cyclone is coming.

*Start now before Christmas getting rid of junk and tying down formwork.*

When it starts to get hot and humid. Last few years very dry. When I hear of a low (pressure system) being around.

*When the weather gets hot and humid. Education programs come on TV. Shire has a cyclone clean-up.*

Usually you can feel the humidity rising and the build up of clouds.

*Rely on blue alert.*

On a yellow alert I go and buy things.

Ads on radio and TV.

*Council clean up.*

Council clean up.

*Shire collects rubbish. On a warning check cleaned up, emergency kit ready. First or second warning get ready. Running around getting emergency kits ready, boots ready, rain jacket.*

Literature in letter box. Cyclone clean up by council. Blue alert fill up car. With Rosita, the good news was that I was prepared properly.

*Pre cyclone season clean-ups. Paper and pamphlets, and weather changes.*

Keep track of it. Most important to have battery operated radio and to know what is happening, and to prevent isolation. And so you can move around more freely and check on things because the first thing you lose is power.

*Cyclone clean-up day for shire. Don't really have anything. Wait for the blue alert.*

*Then get batteries and other things. You need to get down to the supermarket before the yellow alert. Then everyone else is there. Colour alerts are especially good for the kids.*

Council clean up comes and then I start.

*If there is an alert I get stocks of food, batteries, candles, gas in the bottles. As it gets closer, fill up the water containers. Its part of living here, just being prepared.*

Shire pre-cyclone clean up. Dead fridges, motor cars even. Do it all through the year so by November, not a big deal. Look forward to the rain.

*Shire notice about rubbish collection, SES Maps, internet tracking, TV.*

Build up to rain. There is a long build up where the only wet you feel I on your body. I live in a caravan park so I'm less isolated.

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When asked if they had any other comments a range of issue arose. For example, there was a suggestion that people who didn't own property don't take as much care; experience makes you better prepared, but also more blasé. There were concerns about what to do with pets, and where to go if evacuation was necessary.



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### Other comments

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For someone new get the pamphlets. Lots of people don't worry about it. Always get warnings but never come. (Cyclone) Rosita gave everyone a shock. Become blasé about it but can't afford to.

*Drink lots of water accept what it is and just contend with it.*

Only last few years had cyclones.

*Some people party on, but you need your wits about you. Only been here 2 years. I'm from Perth. Big change. Need support. Talked about how neighbours help each other.*

Household survey earlier in the year. For people moving into caravans, need to look for notices and information on where to go. Need lighting for houses.

*There's a book on Cyclone Tracey that should be read by everyone in the areas. We are not told about how bad it can be. Experience is a big help. Also need to show consequences of not being prepared. Not just tell people what to do.*

*(Gary McKay, Tracey: the storm that wiped out Darwin on Christmas December 1974).*

Panic buying by those who don't know, People with nothing to lose property wise. When you've got property to look after you take more care. When there was a truck strike the town ran out of milk, but because of her cyclone supplies she was okay. Good idea to think about what's important to you and what to take. She feels better if prepared, especially because partner is away a lot.

*I don't think there's enough things in place in town. I have alternatives for pot plants and things, but nowhere to go. There is nowhere for everybody to go if there is a need to be evacuated.*

Houses now are only built to a Cyclone rating of 3 or 4. The things not in pamphlets are where to put pets, there's nowhere to evacuate. Plus the house is not rated. In a big cyclone, whatever preparations you've made, it doesn't matter.

*Like in America, power needs to be underground.*

Cyclone Rosita was a wake-up call. It could happen. Lots more new people in Broome, so more with no experience. Women seem calmer than the men, the men seem to panic. Women seem to keep calm to keep the children calm. Men get on the internet and watch every movement of the cyclone. I don't think its necessary to stockpile. If things are really bad you'll have to leave.

*During Rosita the ABC was excellent. It was great to have a voice there near you – virtually neighbours.*

(Wildlife carer) During Rosita had to move everything into the house. Always have food on hand in bulk. But there is a problem in saving it if the power goes off (frozen mice). All year I carry a couple of weeks supply. Would be nice if we had a wet season. Used to live in Melbourne. Winter was the focus there. Here it is the wet season, it's not that big a deal.

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### **Key Informants in Broome**

There were three key-informant interviews in Broome, one spoke from a personal perspective while the other two tended to speak of their observations of what happens to others as well.

#### **Anne**

Anne, an Aboriginal woman who is a mother of 4 children, 2 primary aged and, 2 adult sons. She worked as a Research Officer. Anne was born in Broome and aside from living in Cairns for a few years, had always lived in Broome. Her family is in Broome – parents and siblings. Her belief is that the community is complacent about the wet season, and includes herself in that assessment. She does not prepare for the wet season.

Anne remembers during her childhood her father tying down the roof of their house at the beginning of the cyclone season, but there is no need for her to do that now. She has plenty of camping gear which is also suitable for the cyclone season – gas lamps, torches, gas cooker, candles and so on.

The wet season, she felt, does not need any particular preparation – no risk of flooding or being isolated – only problem is likely to be cyclones – she had grown up with cyclones so was not worried – a bit exciting – peninsular communities may have a problem with roads cut by flood water, but not where she lives.

Anne had a clear understanding of the colour coded cyclone warnings she becomes wary at a blue alert and starts to clean up the yard and does some shopping, but only buys food that will be eaten by the children. She fills the car with petrol and gets cash out (power off means that petrol pumps are out and so are teller machines). She tracks the cyclones, and feels confident that she will know days before whether a cyclone is likely to hit.

#### **Kim**

Kim manages a women's refuge. She is a single parent with a young adult son and a teenage daughter. Kim has informal household plans in the event of a cyclone. Her son helps prepare the house while she organises at her workplace. The clients need to be moved to safe shelter and the refuge is closed so that workers can look after their own homes/families.

The wet season is the worst time at the refuge, but this has to do with poverty not the wet season. At Christmas time benefits are paid in a lump sum which is then often spent quickly, and households are left with no money. This in turn generates violence in the family situation and leads to women leaving home and seeking support from the refuge.

Kim argued that for lower income women, particularly Aboriginal women, their financial circumstances lead to usual shopping habits in the town which prevent them from being prepared for cyclones. Many women cannot stock up. They shop two or three times a day, usually for breakfast before the children go to school and then again after school. There are no supplies at home. They also don't have access to refrigeration.

Kim's memories of Cyclone Rosita were mainly about radio coverage. Her view was that the worst thing about power going off was the loss of local ABC transmission. George Manning went off air and Perth reporters that did not know anything about Broome were the only reporters heard on air.

*'We lost the safe voice (of George Manning),  
lost the feeling of protection.'*

Kim also commented that she often heard residents say that they had met neighbours for the first time in the aftermath of Rosita and was surprised to hear of that in Broome. She had expected it might be the case in bigger cities, but not in Broome.

### **Graeme**

**Graeme** was an emergency services worker with considerable experience in the region. Graeme felt that the remote communities were those most at risk.

On Bidyadanga Community – warnings and messages with defensive action statements had been faxed to community council offices, to the administrative staff, but do not get out into the community. There is also a problem with the office not being staffed after 4pm and during the weekend. The community receives warnings via FESA, SES, ABC, fax, radio, the Aboriginal radio service, and the internet. However, he had a major concern about how to get warnings into Indigenous communities – how to raise community awareness there. Graeme felt that the women must be involved. In his view, Aboriginal women are better educated than the men generally, and make most of the household decisions because they have responsibility for the children. Literacy generally is an issue - in the past warnings and hazard information have been too technical – a good strategy, he felt, would be to use pictures and diagrams. Graeme's view was that we really need to find out from the communities what they want – in terms of emergency and risk management.

*'We have tried it our way and it didn't work – we are not going to prop the communities up – we need to work together and find common ground (for sustainable safety).'*

Bidyadanga had an evacuation to Broome Dec 2001. People from Bidyadanga were angry, said they weren't told in time. FESA says the information was sent to the community in plenty of time but not disseminated. Evacuation was to a tent city in the show grounds at Broome – family groups were kept together. Then people were angry they were kept away from Bidyadanga for up to 2 weeks – had to wait for properties to be inspected and infrastructure repairs. Social problems in Broome were often blamed on evacuees. Graeme's view was that the problem after cyclone Sam was the recovery period. All the people wanted to do was to get home to Bidyadanga – they spent 2 weeks in a tent city at PCYC in Broome. Graeme suggested a cyclone shelter at Bidyadanga would stop a lot of the problems. It would be much easier to bring in food and supplies than to evacuate people.

Graeme spends much of his time in communities and is confident of a good relationship. There was some talk of natural signs – people don't know what is likely to happen this year. Landmarks used in weather warnings are generally known (although he was not too sure here).

*'Telling people what to do doesn't work. Instead of telling the people – we need to ask them what they need.'*

*We can make recommendations after recommendations to DMAC, CMAC, ATSIIC and the other government organisations, sometimes it works, sometimes it's too hard.*

*The community comes out with "why weren't we told" we send out information but bottom line is that the community doesn't know. It doesn't get past the community office for some reason.'*

### **Port Hedland**

At Port Hedland a focus group session was organised through the council and held at the Council Offices. There were seven participants with 18 children between them.

For this group of women in Port Hedland, cyclones are the wet season. If there is heavy rain, or a cyclone there is flooding in South Hedland where some of them work and they can be cut off from their homes and where their children go to school. This means that their personal networks are important so that they have somewhere to stay if necessary, and their children have someone to be with if they become separated. The need to have activities to occupy the children was also mentioned.

It is interesting to note that response to particular issues posed by the facilitator was not always direct. What appeared to happen was that participants mentioned the first thing that came to their mind. Eventually it was possible to piece together a coherent view of the issues for the women concerned, and they do vary.

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### **Q – What sorts of things do you do to get ready for the wet season?**

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First Aid Kit is in an esky.

*Problems of getting stores that will be kept (children get into them).*

Shelter next to the school and PCYC in Port Hedland

*No shutters*

Family issues

*Weather comes in – cockroaches, ants, can pick it up before the cyclone warnings*

Wait for yellow alert to prepare

*Prepare beforehand*

Coverage is good hourly warnings

*Everyone talks about it.*

Great cyclone clean-up by council

*Lot of newcomers.*

'Welcome to Port Hedland' kit

*Read cyclone information thoroughly the first time around. Plenty of information around.*

Good to have a list of contacts.

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**Q – How do you prepare children.**

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Keep them occupied.

*Track on the map*

Pack photos – important stuff

*Keep car full of petrol – all the time – gas bottles.*

Car packed on yellow alert (when kids home from school) (class five/ Grade 5 cyclone)

*Shopping husband panic buys*

Used to packing for bushfires.

*Have to prepare now we have kids.*

Always a couple of shelves of canned food.

*Power off- lose fresh food- power always goes off in Port Hedland when there's a cyclone.*

Noodles are good.

*Red alert – remembers no cyclone but red alert active – can't go outside (fines imposed).*

Warnings – forecast ? expectations?

*Greenhouse effect . Unexpected around the corner.*

Forecasters don't categorise properly. Shops don't cater for the whole town. Shelves empty quickly.

*Men panic more than women – know how long it will be before red alert (How long before shops shut).*

I keep in mind if it comes, where can I go to put the kids – in shelter etc.

*Problems are when shop shut – SES no power to shut shops. ? Liquor outlet?*

Plans for kids – end of season

*Rotate food in pantry*

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**Q- What other things are there that are worth mentioning?**

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Open windows

*Ring Bureau – recorded message – detail is great.*

Last week track map – action supermarket had tracking maps

*Pre-season is Now!*

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## **Overview of Broome and Port Hedland**

Overall, the view we have from Broome and Port Hedland, is that women are busy living their daily lives, with or without the help of partners. Women who are financially able to, in the main, prepare on a regular basis. There are some women who are very organised most of the time, turning over goods in their pantries on a regular basis and for the wet season and cyclones only checking to make sure everything is in place. For other women, the clean-up campaigns by the councils serve as a remind them that preparations for the wet season are due. However, for some women who have less financial flexibility, the option is to wait for a weather warning to ensure that they have the essentials on hand, particularly food they know the children will eat. There are some who wait for the second last cyclone alert before the bother to get organised. For some women however, for whom poverty is such that they have few resources beyond operating on a daily basis to meet household needs, it is not possible for them to be better prepared.



Carpentaria Shire Office, Normanton



Kurumba Advertising



Giru State School

## **Normanton, Kurumba and Giru**

### ***Normanton***

Two focus group sessions were held at Normanton, organised by the Deputy CEO of the Shire, Ms Sue Unsworth. The sessions were held on Saturday, November 02, 2002 at the Normanton Town Hall / Library Hall and the other at the Normanton Hospital Visitors Room.

#### **Town Hall Session**

For the first session, there were 9 participants. Mary was a Child Care Centre co-ordinator with 2 children, and a long term resident in remote areas (Pomporaw), and had lived in Normanton for 2 years. Sue was a Bank manager with 1 child (1 yo) and pregnant, had lived for 6.5 years in Normanton and had experience on stations in remote areas in North Queensland. Stacey had lived in Normanton for 3.5 years, works for Council, and has 1 child. April was an Aboriginal woman, one of 13 children, who has brought up 8 children (and numerous grand children), lived in the area for 42 years, with long experience working on stations and in the pubs. Helen was a teachers aid at the local school, has children of her own, and has lived in Normanton all her life (20+ years). Sue, our host has 2 dogs and a partner – been in Normanton 14 months, lived in Cairns (and many other areas including east Africa) will stay for 3 year contract. Amanda is a home economics teacher at the school, has a 3 year old child, and has been in Normanton for 3 years. Jane has lived in the area for 25 years, has long experience in outback, and has children. Lyn has been in Normanton 2 years, has children and is very dissatisfied with lifestyle restrictions (these largely relate to her needs as a deaf person and her preference for larger centres).

The first discussion opened with a summary of the purpose of the meeting, and then developed into a discussion of shared experience of the area. Most participants were aware of the 1998 floods in Normanton, but few had experienced them. All had experienced flood related isolation, describing situations where they had not been able to leave/get home until floodwaters went down between Normanton and Kurumba, or Cairns or Mount Isa. All were aware of the need to be well stocked, and described it as their responsibility. The discussion flowed freely with little need to provide any prompting. A number of themes arose from the discussion: problems; women's roles and family issues; newcomers; changes in infrastructure, services and preparedness; and information and communication.

#### **Problems**

The main problem identified was that floodwaters can be over the roads into the town for around 3 weeks. This was certainly the case in 1998 when there were big problems with the roads. In the wet season generally, there are problems with going away. There are power surges most of the time anyway, but they are worse in the wet season and you must make sure someone checks the house or power surges may cause fridges and freezers to fail. Normal power surges shorten the life of appliances.

It is a problem getting tradesmen during the wet season because many go away, and when there is flooding there is trouble getting in parts and equipment.

Having a pet can be a real problem because there is no vet in the town. One visits regularly every 3 months but if the roads are closed no vet can drive in.



Problems for people with disabilities were identified by a participant who is deaf. She needs batteries that can be sent in by mail with her supplies but if her hearing aid breaks down she has real problems.

The dentist is always an issue, the visiting dentist is always heavily booked which is always an issue, not just in the wet season.

However, there is a good medical service. Really sick patients, particularly children are flown out if necessary. They have a permanent doctor at the hospital and access to the flying doctor. The air-strip stays open and in all weather Medical specialists can fly in.

A view was expressed that people need to think about insurance, to make sure they know what is covered – power surge, flood (and what they mean by flood) storms and storm surge etc.

### **Preparations**

The view was that it is women's work to plan for the wet season,

*'The men get it easy- booze comes first'.*

*'If it wasn't for the women the men would go very hungry'.*

There was a recognised need to do a big stock up shop 4 – 5 times a year – order from Cairns or go to Cairns – buy nappies, toilet paper, tinned and dried food etc. there is a need to stock up in November while the trucks can still get through. However, it was important not to stock up too much because of the problems of storage – unreliable power and insects and vermin in cupboards. There is a particular need to worry about baby supplies and needs, particularly if there are special needs, for example lactose intolerance. Basically,

*'you need to be organized so you don't run out'.*

*'Living in Normanton makes you shop more carefully, you can't really impulse buy like you can in the cities. People are more aware of shopping and planning on a usual and seasonal basis'.*

There was a recognition that some people can't afford to stock up. For example, the belief was that for Indigenous people if their cupboards are full they are obliged for food to be shared out and eaten by extended family members. As well, many indigenous families need to shop daily.

There was a feeling that people should have supplies for the wet season – otherwise it causes problems for others.

*'Because floods often separate families – can't get home etc – you need to be philosophical and just accept that you may not be able to get in or out of the area during the wet season'.*

### **Newcomers**

There was a feeling that newcomers to the area and people not used to the bush get caught out. Newcomers don't understand local conditions for example they might go to Mt Isa to get shopping a week before Christmas and don't realize that just because there was no flooding before they left doesn't mean there won't be when they want to come back. Also, stores of food kept over the wet season can get wasted.

*'You feel like you've got to eat it, that you can't just throw it out. But sometimes it spoils – or you can only get through just so much!'*

It was felt that newcomers to the area get information by personal contact with neighbours, community, and work places. That most ring work places for information before they come, tips on what to bring with them and what to do to prepare for cyclones and floods. The Deputy CEO challenged this view on the basis of her own

experience where information was not forthcoming. There was a little embarrassment at this suggestion, but not too much, it was a very good natured group of women. It was suggested that the Shire should put out a booklet for people new to Normanton and Karumba to give information and advice. Local knowledge was viewed as important, particularly experience in terms of appropriate safe behaviours and local hazards. A long discussion about driving through flood waters and swimming and/or walking through flood waters and the risk of crocodiles ensued.

### **Changes**

There was some discussion that led to a view that improvements in infrastructure and services had occurred over the years and that as a consequence, living in the area had become easier. However, at the same time, there was a feeling that people were becoming more dependent on external services to 'rescue' them. That is, there was increasingly a tendency for less self-reliance.

The view was that these days people were not really as isolated as they used to be, especially in Normanton because there were planes in and out 4 days a week, and the roads are so good now because they are sealed.

*'In the past, like the last floods, there were problems with septic tanks but now they have sewerage that is all fixed up.'*

Purchasing goods is now also easier.

*'We have got 4 – 5 shops to choose from for shopping, all with a slightly different range. With credit cards it is possible can shop by mail order, fax order, and internet. Even drugs, particularly prescriptions, can be flown in. Now the availability of internet shopping makes thing much easier for those that can access and use it, there is the E-Pharmacy.'*

However, the feeling was that because of the improved infrastructure and services.

*'nobody stocks up now like they used to – even the people in Karumba only have to wait 4 days before emergency supplies will be flown in.'*

*We used to always stock up cupboards at the beginning of the wet season – people are just slack now – not just people also the shops. So the problem now is that people don't have enough support and back up – so they panic – particularly panic buying at the shops.'*

Things go off the shelves (panic buy) when people start talking about the trucks getting stuck. For example, last year after 4 days the supermarkets had nothing on their shelves, they ran out of everything, not just bread and milk. It was felt that people with money buy up more than they need then those that have to wait for money (pay day or pension) miss out. It was suggested that perhaps things should be rationed, sold based on need so families don't miss out.

There was also a feeling that people are too complacent.

*'Over the years there have been no direct cyclone hits and this has been just sheer luck – some people believe cyclones won't happen here. Rubbish – people need to clean up yards and everything anyway – need to treat every year like there will definitely be a bad one.'*

There was also a perception that people rely on the Army flying in food.

*'Everybody relies on the Caribou to get stocks in – then it's the best supplies they ever get – all is fresh and good quality – not all emergency supplies – lots of 'luxury' goods come in.*

*'The beer should come last, but everybody has to remain sane'.*

### **Travelling**

*'Having kids teaches you to take water and mozzie spray in the car'.*

People need to be prepared to be isolated when travelling.

*'Whenever you go out in the car in the wet season, especially between Normanton and Karumba, there is a need to take water and mozzie spray. Even if there are no floods because the floods can come up quickly, you might be stuck'.*

It was also considered important to have something in the car for the children to do so that they don't get bored.

### **Information and communication**

There was a general feeling that telecommunications services and information services were unreliable. Despite efforts by Telstra, telecommunication services often failed because landlines become faulty. In addition, because of power outages, television and internet facilities are lost. Satellite phones were viewed as unreliable.

Weather reports for the Gulf region were considered inaccurate and it was felt that people could become caught out because RACQ and weather maps give out the wrong information. For example, road condition reports may say road the road is okay and it is not, and vice versa. There was also the feeling that false or inaccurate warnings had contributed to lack of trust in the information.

### **Hospital Visitors' Room Session**

The second focus group discussion in Normanton was held in the visitors' room at the hospital. There were 6 participants. Only one participant had lived there for more than 5 years and that was for all her life, she had 4 children of her own and now has grandchildren, and owns a butcher shop. Two women had lived in Normanton for a year and had young children. The remaining three had lived there for 5 years and had children ranging from 1-8 years old. Most had worked in the region. To some extent this group had similar responses to the other group in Normanton, but there were some differences.

### **Issues**

For this group, the problems of the wet season are, again, an extension of the normal difficulties of living in a remote area. For example, the road conditions are poor all year round so there is always a need to take care. In some places people can be flood bound for weeks.

*'Some people though can't survive 2 days without fresh milk, but you can (nearly) always get bread. People with special diets can have problems when there are shortages.'*

Special medications must be kept, particularly for chronic sufferers (for example a need for colostomy supplies for 3 months). Fuel shortages can also occur.

Another problem is that children swim and play in flood-water but there can be snakes and crocodiles.

This group also mentioned the need to unplug freezers in thunderstorms, and take TV aerials out of the socket. The impact of power surges on appliances was also mentioned.

### **Preparations**

One participant who is a long term resident in remote areas finds it easier to live on frozen and dried food all year, because she then always has supplies. She has a cyclone kit made up containing tinned food, pasta, batteries, and powdered milk. Another woman has a cyclone pack, but claims to have never needed it. She 'pilfers stuff out of it', but eventually and replaces it. Another woman had taped windows once, but would never do it again. A woman who had experience of living in Mackay puts documents in a sealable bag once a year.

Most women reported big stock-up from the shops 5-6 times a year. The feeling was that

*'everyone goes stupid when a cyclone is coming'.*

### **Changes**

Most suggested they do not do any preparation these days, that they did in the past, but these days because there is always enough stuff coming in to the town, they didn't feel the need to prepare. The view was that the shops don't run out any more, that if they can't get supplies by truck they fly them in. That nobody misses out these days.

*'Once upon a time they would have stocked up in October, like the households.'*

The feeling was that people are more reliant on Emergency Services these days.

*'We have all gone a bit soft'.*

To some extent these comments seem a little contradictory.

### **Travel**

The need to always have a supply of food and water in cars at all times, especially during the wet season was also raised by this group. The view was that flood conditions can change rapidly: 'it is amazing how quickly and how much water there can be between Normanton and Karumba'. Because they felt that road condition and flood reports were unreliable, there was a perceived need to be self reliant.

'take RACQ reports with a grain of salt, road condition reports are often wrong, this causes problems for tourism, the Cairns tourist industry do not want visitors to come out west so tell them the roads are bad'.

### **Information and communication**

For this group, communication and information were considered good, despite the road reports. Most of them regularly accessed the internet, particularly the Bureau of Meteorology website.

*'Communications are good now, we have CDMA mobile phones, landline phones don't often go out, most have a 2-way radio, the internet is terrific, you get great info on the internet... I always look at the internet bom site if planning a trip, weather and flood information - water levels, river heights.'*

All women in the room used the internet.

*'We used to be able to rely on a network of station owners/hands for flood information. We would ring around to find out river heights on various properties, then have a few days warning before floods reached the. Now we*

*still ring around but many places don't have workers there during the wet season and new (station) hands don't know.'*

However, there was still the perception that cyclone warnings are always sketchy and unreliable because the weather stations are at Weipa and Mornington Island. There was also a comment that people in Sydney do not have to take notice of the weather in Melbourne for their weather information. One woman always tries to listen to the 6:20 am river height readings – the regional run-around – to get an idea of what is happening everywhere.

The Normanton Council rings around stations to get road reports, but if locals want to know road conditions before they travel they contact the service stations because they know where people are moving.

## ***Kurumba***

### **Kurumba Hotel**

At the Kurumba Hotel Sue Unsworth (Shire Deputy CEO) organised for us to meet with seven women who were homemakers and/or employed in a range of occupations, including the Child Care Centre. Between them they had 10 children of their own. All were long-term residents of Kurumba with a maximum of 33 years residence to a minimum of 13 years. This group worked well as a focus group with few prompts need to keep the discussion flowing.

### **Preparations**

The first issue raised was the need to have insect repellent on hand for the mosquitos and the sandflies. Candles, batteries and mosquito coils were mentioned as a priority, then the need to stockpile UHT milk and tinned milk. All of this was necessary because the power is often off during the wet season. One woman puts dry clothes in a garbage bag for each family member at the beginning of the cyclone season. The reason she gave was that she had been through Cyclone Tracey in Darwin. Another woman starts to prepare from November by slowly building up supplies. Because there is a bakery now the view was that it may be able to stock up on flour, which would make it easier for residents.

### **Evacuation and flown in disaster supplies**

There have been several (3-4) evacuations from Kurumba, sometimes to Normanton, and sometimes to Weipa. There were concerns about being stuck in Normanton as a consequence of being scared to cross the river. There was also the view that there were a lot of drunks in Normanton, which made it unpleasant.

Since 1991 the Army has brought food in if Kurumba becomes isolated. The impression was given of a degree of dependence on the Army. For example:

*'The Army helps us out a lot if things can't make it here', and  
'Hercules can bring in food, the best fruit and vegies ever, so fresh'.*

There was some discussion about the appropriateness of supplies provided by the Army, and that only essentials should be provided. It was felt that items like tinned dog food were not really necessary.

### **Changes**

Over time there had been some changes. For example, a barge used to come in from Cairns, but that was sunk. On the other hand, road conditions had improved.

### **Travel**

When travelling, water bottles were seen to be of the greatest need. The view was that people always need to be prepared for breakdowns. One woman suggested the need for

*'things like water, dried food, and a scrabble set'.*

Kurumba was reportedly the only airport in the Gulf with a dirt strip and the feeling was that they need an all-weather airstrip in case they need to be relocated.

### **Information and communication**

Apparently the Queensland Police at Kurumba issue a pamphlet. Information is gained from TV maps and charts, and pamphlets that are considered to be good. There was some debate about whether the information was provided in an envelope. Information is standardised and there was a felt need for more pertinence to Kurumba, such as a safe place to go in a cyclone. Some of the women use the internet. The Bureau of Meteorology website is viewed very positively. However, it is not possible to use it when the power is off, and at that time there is no radio either. In that case they use telephones.

There is clearly a need for more education about cyclonic weather. There were some problems with cyclone warnings reported particularly losing track of where they are. That is, there is confusion between how the cyclone position is reported in weather reports and the weather being experienced by the listener. There was also some confusion about reading the weather itself. For example,

*'face into the wind and the eye (of the cyclone) is on your left, or is it right?'*

There was concern that companies in the area have different colour codes for different alert stages, and that these alerts were different from the ones used for cyclones.

The feeling was that RACQ road information was not updated enough, and that there was a need for flood information that is accurate because of the dependence on freight coming in by road.

It was very positively reported that the local Police keep track of who is in town during the wet season. Residents fill in a form and send it back to the Police Station.

### **Newcomers**

There was a view that newcomers panic and go into 'overdrive' for only a category 2 cyclone which was not considered to be a cyclone by the locals, just wet weather. The Shire website, school newsletters, and the Information Board that is placed as you come into Kurumba were considered to be the best places for information. Although they considered that there might not be many tourists, they felt it might help newcomers.

The group concluded with discussions about previous events, how promising the coming wet season was looking, and anecdotes about signs of an oncoming wet season. It was interesting to note that there was a belief that the town did not get direct hits of cyclones because of its location, that Mornington Island was more likely to be affected.

## *Giru*

### **Giru Child Care Centre**

A meeting at the Giru Child Care Centre was organised through one of the staff. There was a Group of 6 women for most of the time, reducing to 5 when someone needed to leave. The women had 14 children between them. This group resulted in a group interview rather than a focus group because it was necessary to provide prompts on a regular basis to keep the discussion flowing. Despite that, discussion did not necessarily keep to the question posed.

In Giru, the wet season had two different elements to it. The first was flooding that came via the Haughton River from rains that fall in the catchments 100km to the west. The second was from cyclonic rains that come from the coastal region. The view was that there had been no bad cyclones for a few years. Floods were considered more common, especially after a cyclone elsewhere. Giru also receives more rain than any of the other locations surveyed.

### **Preparations**

Because Giru is a town based on sugar production, some women wait until the sugar crushing has stopped to clean up their houses. The sugar crushing finishes late November or early December and it's then necessary to clean up to prevent mould developing in the house if the weather becomes humid. One woman left cleaning until the rain stops. There is still mildew after the wet season so some women clean again. Another woman said 'I try to stay on top of the washing with clothes and towels'. And another felt the need to 'make sure I have enough clothes'. The picture here then is to keep up with the washing and drying so that they are not caught short of clean dry clothing and towels if it rain does happen to set in.

The women shop weekly or fortnightly for groceries in either Ayr or Townsville so they are usually stocked up. One woman keeps flour in her freezer and makes her own bread.

One woman claimed to always have batteries for toys (AA) all the time. Some of the group buy batteries for radio and torches at the beginning of the season. Some buy candles. One woman hides one torch so the children don't use it all the time, and she always has batteries for that one.

### **Priorities**

If it looks like there will be flooding the women buy bread and milk from the local. Some will go to Ayr or Townsville and those with a baby buy powdered milk. Some buy batteries, and videos to watch if the power stays on.

If water comes through the house then there is a need raise items off the ground. This happens regularly to some people, particularly the need to raise the washing machine. This is not unusual for people living Queensland style homes which are on stilts. The laundry is often under the house. The husband of one person helps older people move their things. People also move vehicles to higher ground. The town's fire truck and police car are moved out to higher ground. The State Emergency Services truck drives around to check on people. Then

*'Everyone goes to the river'!*

After a flood

*'there are mosquitoes, worms and it stinks'.*

There is a need to close gates to stop animals coming into yard when the yard on higher ground.

Even high set houses can go under if they are on low ground. Some people sandbag doors. The town can be cut off from outside. One person lives 8 km outside town and was stuck once so stocks up first now. The town can get cut in half because when the river peaks it is too strong to cross. The fire truck is used to clean off silt. The School goes under water first so it always needs to be cleaned the day after flood and so there is no school. Staff at the child care centre lose pay if no kids are there. Because they know the local area that feel that if there is flooding they know the limitations. However, one woman said she would prefer her husband or another adult to be with her when driving through floodwater.

Cyclones are different to floods. There is a need to pick up things that may be lying around in the yard. There is a need to listen to the radio and check if the highway is open. One woman listens to the radio when there is a low pressure system in the area. There are 3 hourly reports so there is confidence that one will be heard. She also watches the TV for reports. When a cyclone warning is declared, not a cyclone watch, she starts to listen more. Then she moves things into her houses (from outside) and goes to help her parents.

There is an acceptance of it as part of life. The view was that there had never been a severe cyclone, that in the late 1980's there was a category 3 cyclone.

### **Information and communication**

Communication of information is by word of mouth mostly. One person has access to the Internet, checks on the government warnings, then passes on the information. If people see froth on the river as it comes down then they know that in 12-18 hours the river will flood. The locals that have been residents a long time tell the police. People know how to measure the river now and the rate that it will move so it is easier to be prepared. The State Emergency Services also let people know. The women reported feeling safe in this town because a lot of people know what's going on.

*'Everyone knows everyone so will help each other in floods and/or cyclones, especially the older people who can't lift up their washing machines. People know who needs help around town.'*

If the school is going to be shut then the out of town parents are rung first so that the kids can get home. If people did not have young children then they might not know. The High School apparently does not give out so much information.

The women thought that the authorities panic too soon. That those people used to the floods cope fine. Some of group have a pamphlet. Townsville Bulletin pamphlet is kept because of the cyclone-tracking map. Telephone book used to have a tracking-map but not sure if it still has one.

### **Newcomers**

The view of newcomers was not very positive.

*'Some are stupid and drive through floodwaters when it's dangerous. Often have kids in their car.'*

*If they have kids they will hear from other parents. The mill workers get told through mill people. Friends tell them. They might stay home more.'*



## **Health**

One of group said her husband will not walk in the water because it is so dirty. Kids are made to wear shoes. The mill has cleaned up its act now so drums of oil not floating in the water. None of the women knew about Melioidosis (bacterial infection from the soil in tropical post flood situations). Ear and throat infections seemed to be of more concern. Because the children think the flood is exciting and it's hard to stop them getting in the water there was generally more worry about snakes.

For First Aid they use the Queensland Ambulance Service station that is '*up the road*'. If an emergency arose, the helipad can be used because a helicopter can land at Giru.

Some benefits of flooding at Giru were reported. '*Everyone*' apparently goes fishing after floods near the road that leads to Cape Cleveland to the north. The flood flushes out the big fish. Some people freeze the fish. As well, there was reportedly more socializing in the wet. They go for walks in the rain and kids play in the floods. The children '*get hyped up*'. If it rains all night the children may miss school the next day. It's a social event and residents don't panic about it. People gather to see what's happening.

### ***Overview of Normanton, Kurumba and Giru***

Overall, we are left with a view from these locations that preparing for the wet season is really an extension of necessary daily activities. Because the households tend to be isolated from easy access to goods and services, there is a tendency to plan more to be self-reliant in the context of a wet-season event. Even so, there are still variations in household buying patterns. Some women are prepared all year, while others look to signs of an oncoming wet season to prompt them into action. Poverty also inhibits the capacity of women in this region to be prepared. There was also a low level of concern about helping newcomers to adapt to the wet season.



Proximity to river of some locations in Thuringowa



A community flood mitigation meeting in Townsville



Flood mitigation in Townsville

### ***Townsville and Thuringowa***

There were 3 group interview situations and six more in-depth interviews in the Townsville/Thuringowa area.

### **Personal Residence**

The first focus group discussion was held at a home. There were five participants who came from a diversity of backgrounds, and who also had a diversity of length of residence in the area. Most had children and one had an elderly mother who lived nearby. A couple of women had been through Cyclone Althea in 1971 as children or young adults.

### **Preparations**

For this group, personal experience was considered the most important aspect of understanding what was needed to prepare for the wet season, and cyclones in particular. The experience of not having power for three days meant that frozen goods were lost. Now there was recognition for the need to stock up on non-perishables in particular. For example, tinned meat, dried peas and potatoes and other camping style food. But there is a need to check use-by dates. If they do this, then there is no need to panic buy. Other items mentioned included candles, gas lights, and camp stoves. A couple of women mentioned having a generator available for use if necessary. Solar powered radios and lights were also mentioned. Freezing water in large plastic bottles was mentioned as helping to keep goods frozen as well as being a water supply back-up. The range of preparedness was interesting.

Dealing with loose items in the yard and items such as hanging pot plants were also discussed.

It was considered important to know where supplies were in the house because while most people had the necessary stores, they might not be in the one place. They did not think the men of the household knew where candles and clothing are.

The need for games to keep children occupied was also raised.

### **Information and communication**

A couple of people mentioned a pamphlet left in the letter box as being very useful, particularly because it explains why you do things. Others seek information from local government, neighbours and friends. A newcomer had friends ring to check on her in a recent cyclone event and found that very reassuring. Defence personnel and their families are provided with a welcome to Townsville kit that includes cyclone information and a cyclone-tracking map. For one woman, the Council clean-up week really made her think about what she could clean up and what could be pruned. The radio warning system was considered very useful. The local radio station 4TO was considered a very good source of information, as were the insurance companies.

While most of the information provided seemed like common sense, there were concerns about the purpose of filling garbage bins with water, what to do with boats, and how to deal with neighbours and the issue of debris potentially being strewn around. There was also some discussion about the lack of knowledge about evacuation centres and the evacuation process should it become necessary.

There was one comment about

*'Weather men really good at predicting the wrong place it is going to hit and when, every time!'*

## **Health**

For one woman who had a child with asthma the electricity company would ring if the power was likely to go off to check if an alternative was available for the ventilator machine. For another woman, there had been an experience of poor organization on the part of a day surgery unit in terms of not knowing whether surgery was to be undertaken. It was cancelled only after she arrived at the surgery.

Overall, the view was that people just have to cope as it happens. People innovate to get the necessary tasks accomplished. Although most people said they wouldn't travel unless they had to during the wet season, at least one woman headed off with her family to a scout jamboree after having secured the home.

## **'Wheelies'**

A group of five women participated in a focus group discussion that was held at the ParaQuad Centre in Townsville. Their ages ranged from early 20s to late 50s. Two of the group had been through a cyclone when 15-16 years old. Memories were of fun at that time. One of the group had been in Brisbane during the 1974 floods. The discussion began based on usefulness of the Cyclone information issued in Townsville Bulletin around the end November to the beginning of December.

## **Issues**

For these women, the wet season has some real issues. Rain, humidity, mildew, and mud all make their getting about independently much more difficult. Walking sticks slip on wet pavements or get stuck in mud, consequently there is a tendency to use wheel chairs more in wet season. However, there is also a need to try not to go out in the rain in a wheelchair because of getting wet when transferring from car to door. So there is a tendency to stay indoors more in the wet season. One woman enjoys the rain because it's an excuse to stay in bed.

## **Preparations**

Again, there were variations in preparedness. From preparing all year long to not thinking about it till it comes. One woman cleans up her yard when the council has free dumping. Clearing up is prompted by the council and electricity company coming around and pruning street trees.

The types of food items mentioned included extra tinned food, pasta, rice and bread in freezer, powdered milk or long life milk, dry biscuits, poppa style flavoured milk for kids, tinned fruit, long-life milk, weetbix, sugar, tinned fish and fruit, food for pets, biscuits and soups. One woman has one kit for food all year round in a camping kit which gets upgraded at the beginning of the wet season. One observation was that camping shops stock dried food and vegetables. One woman reported stocking for 1 week's supply although she thought the food would last longer. She kept it like that all the time anyway. Buying some items at the beginning of the wet season for emergencies even though she may not use them. There was a discussion on use-by dates, how relevant and accurate they are. A couple of women raised the issue of freezing water to protect frozen foods and provide a water supply.

Other than food, there was a need for batteries for torches and for kids toys to keep them occupied and keep their mind off what's happening. First Aid kits were identified as important. Filling the car with fuel and making sure gas bottles were full

were also raised. Medication is an issue for these women who felt it should be brought along well before a cyclone. One person mentioned that important documents like passports were kept in a bank safe. The issue of making sure insurance was current was also raised.

There was a definite assumption that should a cyclone occur, there would be a need for fresh water. In this context the suggestions were to fill up the bath tub, laundry tubs, sinks and buckets with water. Someone suggested a camping shower might do for a few people. Another learnt from camping how to shower in little water.

### **Information and communication**

There was some discussion of the reliability of weather forecasts and cyclone forecasts.

*'Anyone believe weather bureau – no!'*

The view was that weather reports are from Brisbane only.

The booklets that are released each year on what to do in the case of a cyclone were well regarded by the group. They were seen as very useful, particularly in terms of using as a check list against what was already in the house. However, there was some discussion on the usefulness of some items, particularly tarpaulins which were considered expensive. A discussion ensued on whether they were really necessary, the burden on emergency services to provide one to everyone that might need one and whether it was the householders responsibility or that of the landlord. The source of the cheapest tarpaulins was also explored, as was the size and what its use.

The issue of hands-free and connection free phones was raised as many of these do not work well in the context of a cyclone, and there is a need for a landline telephone connection, particularly if power goes out.

The suggestion was that maybe there should be an audiotape for the elderly and vision impaired who cannot read, and that information would be useful in other languages too.

There was also quite a discussion on evacuation. A question was raised:

*'If there was a need to evacuate, where do people go'.*

Response to this included that it depends on the cyclone at the time. There was a view that authorities don't publicise safe houses because they don't want people all rushing there "*just in case*", and that people may have to stay put if power lines are down and that people will get told at the time. However, the consensus was that people should know where to go or what the procedure is.

### **Newcomers**

In response to the question 'For a person new in town, what is most important?' the response was:

*'Food, water, gas, lights, radio, batteries, community booklet and get everything on list'.*

## **IMPS Parenting Centre**

A group interview with 17 women was held at the IMPS parenting centre in Thuringowa. The participants were trained nurses and had experience in northern Australia in a range of locations and had worked in hospitals, medical centres and/or in parental support roles in a medical context. A focus group was not possible in this situation because the numbers were so large. However, there was little need for prompts and lively discussion flowed.

### **Wet season means:**

In response to the question ‘what does the wet season mean to you?’ a variety of responses arose. The need for air conditioning, cleaning gutters, ‘mozzies’, heat, humidity, stingers, mango madness, temperaments change, tempers frayed, more domestic violence, smelly towels, mould, stink beetles, cockroaches, cyclones, rain, childhood memories of walking to school in the rain, sun care, stinger suits, sun protection, hats, toads, no major housework after October, the need to mow the lawn more often, the ground gets boggy, melioidosis disease, fear of being flooded, for possessions and flooded back yard.

### **Preparations**

Only 3 or 4 participants actually had a box or kit ready for cyclones. Another mentioned sometimes preparing a cyclone package.

One person mentioned having birth certificates and the like protected. The view was that important documents needed to be put away and that photos are irreplaceable.

The types of items mentioned included: first aid kit, manual can opener, baked beans, tinned food, batteries, torch, candles, mosquito repellent, pastas and food which has no need for refrigeration, muesli bars and the like for children, and toilet paper. The people who go camping were confident of managing during very wet periods or a cyclone, because they have their supplies organised. The need to fill gas bottles was identified. There were humorous discussions about items that were overstocked. One person had too much canned beetroot and the woman who stockpiled toilet paper was identified as the place to go if need be. Checking the roof for clear gutters and loose nails was mentioned, as was clearing the garden of loose material.

The feeling was that people needed a prompt to get organised for the wet season and cyclones. For many, the workplace has a cyclone policy which is reviewed in October, and this helps remind them to get organised.

Should a cyclone arise, a number of matters were discussed. There was some discussion about water, at least one participant used bottled water on a regular basis. Another suggested the need for sterilising tablets. The need for batteries to listen to the radio so they know what’s happening was mentioned. One person mentioned keeping an old shower curtain to keep dry under or cover windows with. Freezer meat will last awhile.

Some remembered Cyclone Althea. It was Christmas time so fridges were full of food. Power in some places was out for 11 days, but some places had power restored earlier.

*‘People were advertising for generators. You could use 1 power point and people were sharing fridges. However, there was good community spirit.’*

If there was a cyclone watch/warning it was then that people really started to get organised. Then there was a rush for candles, batteries and torches, to pack up outside furniture, and fill up the bath sink, saucepans, and rubbish bins with water. One person moves meat to the freezer to try to keep it for as long as possible. A few mentioned having already chosen a room in house to go should the need arise.

One woman felt safe because her husband has a 4-wheel drive and can rescue her if need be. On the other hand, one woman said she cannot be bothered lifting a finger until a category 3 cyclone is declared. Someone suggested that vulnerability depends on house that you live in. It was a little concerning however, to hear the view that emergency services would fly in food in after a couple of days.

A discussion about house insurance arose and the question of whether it does cover cyclone damage. It was also considered difficult to get a straight answer from insurance companies. Some believed they were covered for water damage and not flood.

*'In flood prone area insurance is difficult. If water comes down it's OK, if water comes up then you're stuffed! You need to rip the tin off roof so water comes down into the house!'*

### **Health**

Being nurses and child health workers they all had first aid kits. One person has a good kit because people in street always come to her. A couple of women mentioned the need for condoms in the first aid kit. They had requests for them in the past because

*'people stuck at home and bored afterwards'.*

Melioidosis was raised as an issue and a couple of them had direct experience with patients while others had heard of reported cases, at least one ten years previously. Dengue fever and Ross River fever were also identified as problems in the post cyclone situation.

### **Changes**

Previous experience of being stranded in remote areas made some better prepared now, but others expressed views of increasing complacency. One participant who had been in cyclone Tracey felt that people were used to cyclones going past and were caught because they were complacent, the implication being that the same could happen in Townsville.

### **Information and communication**

Although there was little discussion on information and communication, the view was that people watched the weather reports and kept checking on radio, TV and newspaper coverage over the season. One person even suggested:

*'People are good weather watchers, you need to look out for lows and whether the monsoonal trough down'.*

### **Newcomers**

In response to the question "If there is a newcomer to town, what do you tell them?" the advice ranged from the rather unhelpful

*'She'll be right!'*

to the more useful:

*'clean up the yard, go to the Bulletin (newspaper office) for the book on cyclones and for tracking information, go to 4TO (radio station) because they have a booklet as well, and to go now (November) to the supermarket will nearer a cyclone they will run out of batteries and other items you might need'.*

The discussion ended on a query about information on evacuation points. Some expressed the view that the strategy is not to declare them until necessary, but most felt the strategy regarding evacuations should be made clear.

### **Private Residence Focus Group**

A focus group discussion of 7 women was held at a private residence. Most of the group were nurses who had children and all had lived in northern Australia ranging from 7 to 35 years, and two were born in Townsville.

In response to the question 'What does the wet season mean?' the replies included: all the expected, smells, winds, no watering or mowing because it's too wet, drying clothes, mould, insects, fun in the rain, kids enjoying themselves. The build up followed by the storm.

### **Preparation**

In terms of preparations that were made for the wet season, a wide variety of responses resulted: check the clothes dryer is working, put clothesline under the house, consider buying a dryer, torches, mosquito coils, build up groceries, check barbeque for gas, make sure car is fuelled up, de-ticking dogs, and buying different types of groceries. Because of previous power failure experiences, one woman cuts down on perishables. Most have a separate camping stove or barbeque. A discussion about the 5 day power outage in 1998 then followed. It was clear that this experience influenced the women's behaviour. The view was that women tend to be more organised while their husband's are more off – hand. Those new to cyclones were not sure what to expect and that there were some who weren't prepared in the past who expected assistance post event.

Among the nurses who had worked in maternity hospitals, there was also a short discussion on more births arising from the wet season. There was a story about being able to link hospital records to major events like cyclones and floods.

In response to the question 'When there is a cyclone watch what do you do?' there was: clean up, check kits, new batteries, check radio, fill bath with water, get 'gerry' cans, go to supermarket for candles and batteries. The need to have gas for the barbeque already was raised because of previous long queues in the rain. Some of the participants track the cyclones. One woman gets on net for information. There was also some discussion on what a cyclone watch is, and on the safety (usability) of cordless phones. For one woman, the yard can be her husband's job if he's at home. There was also talk of apathy among the population in general.

### **Children**

For children there was a recognised need for board games because there would be no TV. From past experience during a cyclone threat there was more conversation, more time with the children than usual, that everyone is less tired because they are getting more sleep. To keep track of children they are kept in the bedroom with their parents.



One woman mentioned that the walk-in-robe was their safe place. Some remembered friends who in the past had been alone and afraid.

### **Information and communication**

Some of the discussion indicated that there was a lack of clarity in people's minds about a number of issues, despite their experience with wet seasons and cyclones. For example, there was a question on the differences between tornados and cyclones, a discussion on storm surge, which sought clarification of what it was. The question was raised of

*'Where do we live if the house is destroyed?'*

People had already forgotten the year of the floods and cyclones that had happened in Townsville and Thuringowa. They were unsure of what to do with pets, whether to tape windows. The suggestion was that advice provided by the Army included leaving doors open.

There was a feeling that news broadcasts can scare family in other places, that the media can perhaps overdramatise. However, there was also the view that there was not enough local weather information during previous recent cyclones, that updated reports were slow to come, and that this caused anxiety.

### **Previous experiences**

Difficulties receiving insurance payments was mentioned. Anxiety over not being able to move items from the garden because their partner was away was reported. This resulted in things such as plant pots, trampolines and furniture being stored and not being brought out for use again until the end of the season. There was also the anxiety of having to deal with the situation on their own if their partner was away. For one woman, the walk-in-robe with the children and the pets was her answer to dealing with the anxiety of Cyclone Tess. Others expressed concern for neighbours on their own. There was some discussion of the winds and noise and anxiety about windows moving and whether they would break, and trees falling over, especially at night. Others were anxious about their partners having to drive through floodwaters to get to work or home.

There were some reports of positive experiences though. One woman renting at the time positively remembered the caring of her landlord. She had sewerage coming up the drains in her apartment and she was blocking it off with towels. The real estate agent said it couldn't be sewerage, but the owner of the house called to see if we were having any problems and was really very helpful. The generosity and goodwill of people in times of difficulty was mentioned, that 5 days with no power creates a more neighbourly atmosphere, and that the difference in temperature, the novelty of warm rain and people in water was pleasantly remembered.

### **Child Care Centre**

A group interview was held at a child care centre in a lower income area. There were three participants each with children and each rented their homes.

#### **Preparation**

One person, who was new to the area, had a cyclone box with legal documents, blankets, clothes, torches, candles and matches. One woman has a portable radio, candles, fills the bath and the gas bottle, tinned food, bread and vegemite.

The others, who had been in Townsville some time, seemed to be more relaxed about it all. They didn't have cyclone kits, but instead buy '*stuff*' prior to the cyclone, the day before in fact. This is because they generally have tinned food in the pantry. The yard is cleaned because they are renting and have to keep it clean. There is also a tendency to make sure there is gas in the barbeque. The view was that becoming a parent makes you think about it more. Because they live in rental properties (property) insurance is not their concern. Of greater priority than cyclones is fire in older houses, the need for fire alarms and a means of escape. They think this might be because they haven't experienced a cyclone in some time.

#### **Experience**

One person had taped windows in the past. For one person, it's mainly the inconvenience of travelling to work and to school that is the issue. In the 1998 flood one was unable to get home, another unable to get to work because the bridges were closed. Because they were renting, they saw a need to check whether houses will flood. On the basis of previous experience they felt the 1998 flood map still seemed to be okay. Flooding was common in the area. During the flooding they check which houses flood for their own interest regarding future rentals and so that they can advise friends who might be interested in renting. From past experience, they felt that flooding makes you more aware because books and carpets were damaged. But there hasn't been a significant cyclone here for a long time. Concerns were raised about cyclone proofing in recent buildings. One woman was not happy about being in a large shopping complex in the time of a cyclone. However, there was the view that there was a sense of more of a community during flooding.

#### **Children**

There is a tendency to try to keep children at home, out of the drains especially. For one woman with younger children, the need for nappies and baby food was the issue. Look after friends and the children like they do for picking up and delivering from school.

#### **Information and communication**

In terms of provision of information, the women used barometers, radio, and computers. The view was that radio is better than TV for reliability of information.

## Interviews with Individuals in Townsville and Thuringowa

### June

June lived in Townsville from 1960-1980 then in Richmond for 6 months and in Normanton for 6 years. During Cyclone Althea which hit Townsville in 1971 June had a 10 month old baby and was pregnant so she was being particularly careful at that time. She remembers canned food and candles in particular, and relying on cyclone alerts.

*'In Normanton, November to March you always had to be organised. In October there would be a big trip to the supermarket (in Cairns) to get supplies. You would get big bags of rice and big tins to put it in. For 2 years we had a generator so we needed fuel for that. Bulk foods and storage were important. I needed a fall-back position for the kids who were away at boarding school. I had to check boat worthiness for crossing the river. You couldn't rely on the shops, the barge that usually brought in supplies would sink'.*

June had a hairdressing business and needed to get in bulk hairdressing supplies. She also had responsibilities on a cattle property and had to shift the cattle and horses as water levels rose. She had to deal with the loss of the animals on her own.

*'I certainly had to have enough food to last the (wet) weather - dried carrots and peas, rice and treacle, tinned meat, dried meat, so there was always some kind of food. 'Don't keep it year to year though'.*

In Townsville June feels she is no longer careful. Cyclone Althea was pretty awful to sit through, but not that bad afterwards. She went to live at her mum's because she had power. Cyclone Althea was the day before Christmas, so there were some losses, but they ate a lot.

*'Now I make sure the garden is tidy because of losses through flying debris. You need to know where to go in the cyclones. Big family support group is a real advantage, if you're on your own it is difficult'.*

*'During Althea you got to know the nicest and the nastiest in people. When you have children you are more worried. You needed to boil the water. When I hear that kind of wind, the (anxious) feelings return. Kids need to understand things like window safety, and you need to know what to do with children in the case of a cyclone. I wouldn't have big trees in my garden because of cyclones. In Townsville, the services and infrastructure come back on quickly, so I think we have all got complacent. After Normanton, when I travel now, I always have water, food, sleeping bags and insect repellent. When you go camping and fishing, you are more prepared. I fill milk bottles with ice and fill the freezer with ice to keep the stored food cold. If there is a cyclone or the power is off I can cook up the frozen foods'.*

### Penny

Penny had 3 children, has lived in Townsville for 8 years and has previously lived in Cairns and Mareeba so overall has had 20 years in North Queensland.

*'The wet season means mainly being wet. Never getting anything dry, especially in Cairns. Wooden utensils and shoes all go blue with mould. Keeping things dry is an issue. Towels, I have thin towels for the wet season, and dry them in the dryer after showers. If there is no power, I can't run the dryer. I have lots and lots of plastic bags. I put towels into the plastic bags. I*

*have children with asthma. They also get pleurisy. It's too hot to wear raincoats, if you wear raincoats you sweat. During the wet periods I wrap the rugs in plastic'.*

*'I have no fitted carpets in the house. In 1998 (particularly wet season in Townsville) the roof leaked and the carpets got wet. Water came down through the walls. Water damage was the main problem. The house has storm shutters that were installed by the previous owners. These work very well'.*

*'The insurance companies brought people up from Brisbane. The painter kept having to put water in the paint. Even though it was winter it was hot and dry. Assessors from Brisbane didn't understand, but the local assessors understood that the ceiling needed replacing'.*

*'We use the garage for storage during the cyclone season. The housing design is not good – floor to ceiling glass walls and windows – definitely not good. Glass was a real problem during Althea – taping of windows is questionable, glass explodes, shards everywhere'.*

*'You need to check the flood maps, the storm surge maps. Sewerage backs up in the toilets. I have 1 week's clothes in plastic bags. Even if you have power, you may not have water. I empty wheelie bins and fill with water to use in toilets, fill 2L cordial bottles with water, collect rainwater for drinking and boil it if not mains water. From past experience, it is best to have a plate or ring to boil water, not use the BBQ plate'.*

*'Emergency workers can't always get to you. There is a limited number of people. You need to try to be self-sufficient'.*

*'The new phones rusted out'.*

*'Food in freezers needs to be run down. I helped people in Brisbane clean out the freezers and fridges at Rocklea after the 1974 flood. I start to build up on tinned food around November. I can go 1 week without shopping at any time. I never use much milk powder, but always have some on hand. I don't like UHT milk. Food that can be eaten straight from the tin is best and meals that can be made from tinned stuff. I want to save the gas to use for boiling water. If there is a problem, I need to be able to get onto the water, need lots of water. Meal soups – canned can be eaten straight from the tin, baked beans, tinned vegies, and tinned fruit. We eat what is in the fridge and freezer first, then go onto tins'.*

*'During the '74 floods in Brisbane, people panic shopped so you can't rely on things being there. Women with trolleys filled with milk powder in the '98 floods in Townsville. Shops can't be supplied. Even if you have power and water you can have a food shortage, people don't realise. Rice and pasta and bottled sauces - things that will keep. Nuts and dried fruit and rice make a nice meal. Mosquito coils often run out, there are 12 hour ones now.'*

*'I always keep medication, what I am using and a spare. I have emergency stuff on hand and know how to use it. You have to be self-sufficient, have to know what affects your family and how to deal with it. There's always someone worse off. Even if you feel it is an emergency, (things like) major injuries, electrocutions'.*

*'For two weeks afterwards supply lines can be flooded. Insurance system a whole new nightmare, it can take 2 years. You need to check roof space because water syphons in if very wet. Metal roof tiles leak badly'.*

Penny questioned the maintenance of electricity and phones.

*'Waiting periods for repairs is getting longer, flying people in from other parts of the country'.*

In terms of how she keeps track of where the children are:

*'I don't let them out. We play cards, monopoly, they put on a play. Lots of books, reading, taking turns to read. If the kids are only used to electronic games it could be bad news. They can go out as long as it's not howling a gale and as long as they are sensible and in 'wet' gear'.*

*'We clean up the yard. You get snakes and rats afterwards'.*

*'Don't sit down and say "I'm going to do this" just do stuff. Check the pantry, clean up, check gear. You need to ring the council about evacuation centres. Survival kits are advertised in the paper. I don't remember ever having to use evacuation centres'.*

### **Jane**

Jane was a mother of 3 children who worked at the university in an administrative position. Jane responded to an advertisement in the local school newsletter about the conduct of research on how women prepare for the wet season. After a brief introduction to the topic Jane immediately suggested:

*'I don't expect welfare agencies to pick up after events, but many people do. There seems to be a sense of dependency'.*

In response to the question 'How widespread do you think that is?' she replied:

*'I think that publicity builds people's expectations of help'.*

Her feeling was that the local newspapers are often running donation campaigns to help victims of various difficult situations and that this encourages people to depend on others for help, financial help particularly.

In response to the question 'Who do people turn to?' Jane replied:

*'Family first, welfare agencies last. I think it is an age thing, my parents never relied on welfare. You need to be self-dependent, and strong sense of family'.*

*'Many people are complacent. There are cyclone plans at the university and other workplaces'.*

*'I was flooded in 1997 and moved to my parents' high set house. We were without power for 3 days. I grew up in a situation where we were prepared. We camped and we lived on a boat, we were always prepared. We clear our block regularly. We arrived in 1975, my parents were really conscientious about being prepared'.*

Jane felt that:

*'There is not an 'in your face' awareness program. They seem to have dropped that approach because of tourism'.*

Jane starts to prepare late September early October, when it starts to get hotter.

*'If there is a cyclone watch anywhere I make sure I check that all is organised. The kids are young so I know where they are'.*

*'Media presentations are dampened down. A long stretch of dry (wet) seasons has meant low impact weather and few cyclones – this has led to complacency'.*

*'Newcomers are not prepared. There is a mass panic on buying fresh stuff. Each fortnight I add things to the shopping list. Loss of personal things like photos is more important. I don't expect the shops to reopen. I keep fuel stocked up. If there is no power there is no fuel.'*

*'In the media now it is entertainment to raise donations via the media for people in need, like travelling to Brisbane to hospital, those sorts of things. There is also access to welfare services by those who are less needy. Welfare agencies need records of service provision'.*

Jane wonders if we are being taught to be reliant on agencies, government and welfare. Jane feels that she is not really all that well organised a person. She is organised for her work at university, and for the wet season, but is often late to pay bills or organise children's school things, even though they are important. She suggests it is priorities. She thinks she is used to cyclones now and her parents are the ones who taught her to be prepared.

### **Terry**

Terry works as an organiser for a handicapped persons organization. The perspective she brings is one of how to assist those less able to help themselves. Terry also has a child of her own and is a single parent who lives in rental accommodation.

Terry argues that people with handicaps are rarely only physically handicapped. There are many with acquired brain injuries as well. This makes it more difficult to help them, particularly if there is little or no family support as well. Terry feels there needs to be a better organised, more structured way of getting information out to those who assist handicapped people, and to provide it in a format that is easily understood.

Perhaps a letter from Centrelink to prompt them, or information at doctor's surgeries (like other health promotion activities) might be useful strategies. There seems to be a need to help people prioritise what they do need to do.

Terry provided some examples:

*'If you keep enough food for a week, you don't need to get extra.*

*If you keep water in the freezer, you don't need to buy any more.*

*If you have a chest freezer freeze water in empty drink containers that are clean.'*

Terry's view was that money is always an issue for handicapped people. Over time, much of the assistance they receive has been removed, for example, financial help to move house is no longer available. There are co-ordinators in various suburbs that provide assistance to handicapped people who could be the focus of information. She questioned whether there might be an inexpensive kit that could be purchased because handicapped people can't go looking over town for all the bits and pieces that they might need.

Other questions Terry raised included:

*'What is really important to have?  
Could packs for the wet season be hired?  
What would they do with kits?  
Where would they store it so they can easily access it?  
Have they got the necessary wherewithal to actually use it?  
Have they got the utensils to use the food like a manual can opener, basic crockery and cutlery.  
Carers would need to do a household assessment to help check what they already have before going out shopping for them.  
How safe is my home?  
Where is the stuff I need?  
Who would come to help determine whether I am prepared?  
Is there an evacuation plan.  
If I had the flu, what would I need to get by? Is a useful question to ask people.'*

### **Karen**

Karen is the manager of a child care centre that caters for a wide range of incomes, but also a significant proportion of indigenous and single parent households.

*'Cyclones are part of the overall emergency response system for the Centre. We used to be run by the council who made decisions about closing, now I make the decisions. If the schools are closed we close. I also monitor the situation closely once warnings start, and advise parents. We tend to take a conservative approach because parents need to be phoned and given time to come and pick up the children, so you can't leave it too late. Because they may not be able to leave work you can't ask them to come too early either'.*

*'It is hard for people, they have work conflicts, and in terms of preparing, you'd be surprised what kinds of families have difficulty managing from week to week. There is little leeway for people to purchase extra. If it is basic and simple, then people are more willing to do things. We assume everyone listens to the radio or TV all the time, but they might not. The other thing is that we get warnings, but it doesn't always happen (a cyclone) so people become complacent and assume it won't happen.'*

### **Susan**

Susan is a nurse specialising in critical care anaesthetics. She has 3 children – 13, 10 and 4.

Susan starts to shop in the first week of December, at which time she starts to add items for Christmas and the cyclone season. She gets candles early because if you leave it too late there are none left. She buys a bit more tinned food than they would usually use. Her husband, Martin, 'always' buys another water jug with a screw top, and a blue tarp.

*'Soon we'll have so many tarps there'll be nothing to cover'.*

Her husband worries about the roof leaking and potential damage to the furniture.

*'Two weeks before Christmas I fill up the gas cylinders and Martin makes sure the gas light works. We get batteries for toys and emergencies. Martin watches the weather closely. When there is a potential cyclone he goes into a bit of a panic and checks stuff. We never tape the windows because you can't get it off. I seem to not worry so much. I get the photos and put them in a plastic bag, and organise my jewellery.'*

*'During Cyclone Tessi I had to go to work because of an emergency operation. Martin was really mad about it. I was stuck at work until the next afternoon. I was really worried about the children in the house on their own if Martin had to go outside to check on anything. It's a big responsibility to place on young children to look after the little ones. (Her youngest was 1 at the time).'*

*'We ate well for the first few days getting rid of stuff. By the end we were down to 3 minute noodles. We coped though, there was enough to eat and we played games, cards. You do and eat things you don't normally. It was actually a good time, a bit like camping aside from the uncertainty of when the power is coming back on.'*

*'The power was off for a week for Cyclone Tessi, so by the end the food was getting a bit low, but we managed. My mum taught us really well. As little kids we were travelling to Brisbane and were caught at Connor's Creek for a week. Dad worked for NORQEB (electricity authority) so he knew that the power could be off. Mum would clean out the bath on a cyclone warning and then fill it up with water.'*

### **Sally**

Sally has one child and works as in administration with a large company.

*'Jason, my husband watches the weather reports. He says there's a low coming and it looks like a cyclone. He'll clean up around the yard. I wait for the first warning. There have been too many false alarms. I get canned food, try to cook up food so the fridge and freezer aren't full if the power goes off. I fill up the gas bottle. I fill up the bath with water, I don't know why. If it really gets blowy I tape up the windows. I use 'metho' to get it off. We all stay home, that's about it.'*

### **Overview of Townsville and Thuringowa**

From the interviews and group meetings in Townsville and Thuringowa it is clear that personal experience better equips people to cope with hazardous weather events. Again, there is a range of levels of preparedness on the part of women. There are those women who are very organised having the necessary goods at hand, and in some cases having other aspects of the household very well prepared. Those who go camping regularly seem to be better prepared for the eventualities of losing power. There are those women who plan from November or December to stock up on the relevant supplies and still others who leave planning until the cyclone warnings are happening. The perspective of the specific needs of people with handicaps was raised and warrants a closer view.



## Discussion

This research started with the assumption that whilst women may have their vulnerabilities in the context of natural hazards, they also have resilience. This assumption, in combination with information gleaned from previous studies conducted by the Centre for Disaster Studies, led us to investigate the strategies women do have for preparing for the wet season in Northern Australia. The strategies identified appear to vary between women and communities and we need to understand these strategies and the rationale of the women themselves to capture benefits that might be applied more widely in the region. The strategies do seem to be influenced by particular facets of the location, and/or they may be a consequence of women's personalities, socio-economic status, and/or other factors.

In this study we considered the situation of women living in Northern Australia who are regularly confronted with the potential hazard of heavy rainfall, including cyclonic conditions, which may result in their families being isolated from basic services.

There were essentially three different types of locations surveyed. The first were moderately sized regional towns where there was reasonable local government support systems in place (Broome and Port Hedland), the second were quite small townships with accordingly little local government support (Normanton, Kurumba and Giru) and a large regional urban centre (Townsville and Thuringowa).

There is little doubt that in the large urban centre of Townsville/Thuringowa the expectation of women was that services and supplies would be restored within about 3 days after a major weather event that led to cyclones or flooding. In the smaller centres there was the expectation that one could be without supplies for a little longer because they would need to come in from elsewhere. In the very small centres, the expectation was that the individual household needed to be well prepared for the wet season. In general the women prepared for the wet season by starting to stockpile essential items on a gradual basis from November or December.

The capacity for women to organise for the wet season was to some extent a financial issue. Even though there was a low participation rate for low-income women in the survey, from key informants and from other women there was the recognition that women on very low incomes had very little capacity to stockpile supplies. This group of women included Indigenous women in remote communities. The women surveyed have provided a view of preparation for the wet season as clearly being another task they need to add to already busy lives.

Support systems of extended family and friends were an important part of women's feelings of security about preparing for the wet season. For a group of physically handicapped women who were interviewed, family and other support networks were of vital importance.

In the medium sized centres of Broome and Port Hedland, where the local governments have very obvious preparation campaigns in place, the clarity of procedures to people was obvious. In the smaller centres there was a greater tendency to be self-reliant and in the large centres of Townsville and Thuringowa, there was a

level of confusion over interpretation of information and the procedures that might be in place.

In the remoter towns where weather reports on radio and television were not detailed enough for local conditions, the Bureau of Meteorology website was an important source of information. Even though not everyone would have access, the people who did have access would obtain the information and pass it on through friendship networks. In Giru in particular, the weather that caused most flooding in their region actually fell in a region to the west whereas the normally broadcasted weather reports were for the Townsville region. In this case the Bureau of Meteorology (bom) website was essential for them to have a good understanding of weather risks. In the larger centres, the use of the bom website tended to be more for individual interest. In Townsville/Thuringowa, the largest centre, the suggestion was that it tended to be mainly the husband/partner of the woman interviewed who used the website.

One finding of the research that in hindsight may seem obvious, but which is not directly addressed by information and education campaigns is the need to have activities to keep children occupied, either to divert them from anxiety or to prevent them becoming fractious and argumentative.

The specific strategies identified from the research include different approaches to the stocking of pantries and goods:

- Regular, organised turnover of long-life items in pantry, and around November or December ensure there is enough of key items such as batteries, milk, medicines, drinking water/containers, gas containers for at least three days. Make sure there are activities planned for children that do not require electricity. Ensure that medical supplies are backed up where possible so that if it is not possible to go out then not vulnerable
- Around November start to prepare for wet season and Christmas, buying in gradually
- Respond to cyclone alerts, buying in goods like instant noodles, and other things the children will definitely eat.
- Incapacity to plan because of lack of resources.

For travelling the recommendations are:

- Avoid travelling where possible
- Always have water in the car, insect repellent, some snacks and something to keep children occupied
- Check Bureau of Meteorology website for river height and rainfall data.

For people with disabilities:

- Ensure that all that is needed is together and easily usable so to remain as independent as possible
- Ensure that support personnel are well briefed increase their effectiveness

For everyone:

- Keep in touch with relatives/friends/neighbours to check on each-other's needs. Plan with those people most likely to be around.

In conclusion, the women interviewed in the conduct of this research have proved to be a rich source of information about resilience in the context of wet weather natural hazards. Information campaigns need to:

- Go beyond the generic and be tailored to suit different communities and different sub-sections of communities.
- Emphasise reference to family, friends and neighbours as support during hazardous weather events,
- Rank the resources that are recommended to people for accumulation and suggest accumulation over time so as to reduce the financial impact on households and to prevent panic buying,
- Acknowledge that people may have different styles of preparation while emphasizing the essentials,
- Emphasize the need for activities to keep children occupied,
- Discourage travel, but emphasise the need for water, food, insect repellent, and activities to keep children occupied,
- In conjunction with service agencies further develop programs targeted to people with disabilities.

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