5. Coverage of extreme weather events and natural hazards in Pacific Island Countries The need for media capacity-building

Abstract: There would be little disagreement over the media's crucial role in reporting extreme weather events and natural hazards, which have become more commonplace in Pacific Island Countries (PICs). However, for various reasons explored in this article, the media have generally failed to satisfactorily cover the unfolding of natural hazards and disasters. Using Fiji as an example, this article discusses media coverage of various cyclones, and the gaps in the reporting. The article argues that more training and capacity building for media personnel should be undertaken to ensure that people are well informed and prepared as they face the brunt of more frequent and intense extreme weather events.

Keywords: cyclones, devastation, Fiji, humanitarian relief, media, meteorology, Pacific Islands

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Introduction

NE OF the gravest threats to the Pacific, according to scientists, is extreme weather events caused by global warming. Cyclones, already a major hazard, are expected to intensify in future. Tropical Cyclone Winston, which struck Fiji and Tonga in February 2016, was the strongest Southern Hemisphere cyclone on record (COP23 Fiji, 2017). With maximum average wind speeds peaking at around 306 kilometres an hour, Winston cut a swathe through Fiji on 20 February 2016, claiming 44 lives, demolishing livelihoods, destroying homes, and damaging the nation's all-important sugar crop. The toll was an estimated \$1.4 billion—more than a third of Fiji's GDP—forcing the Prime Minister Voreqe Bainimarama to declare a 30-day state of emergency (COP23 Fiji, 2017).

News media play a crucial role in disaster communication, which includes warning the public about impending cyclones. This helps people take whatever safety precautions possible, which, in turn, minimises damage and saves lives (Reza, 2007). After a natural disaster, media reports help coordinate rescue and relief efforts. Without adequate pre-cyclone media warnings, and without sufficient post-cyclone media coverage, people and properties are more exposed and vulnerable, and recovery made more difficult. In the case of the earthquake that struck Papua New Guinea in February 2018, awareness about the tragedy's full impact was lacking because of the absence of media coverage. This shortcoming was blamed on a comparable lack of donations (Papua New Guinea earthquake..., 2018). 'It [the earthquake] is a silent emergency where the suffering is out of sight,' stated Anna Bryan, CARE's programme director in Papua New Guinea (Papua New Guinea earthquake..., 2018). This is just one incident that underlines media's pivotal role in disaster communication. As the eyes and ears of the public, media are expected to scrutinise not only the initial government response to a disaster, but also post-disaster relief and rehabilitation, including how donor funds are used. It is plausible that a strong news story or sharp editorial could be a catalyst for improved services, or for reviving projects stalled or slowed down by government inefficiency and/or state corruption. For instance, the BBC's broadcast of the devastating famine in Ethiopia in October 1984 provoked a huge international response, including Bob Geldof's Live Aid concert. The broadcast acted as an 'international siren' about the plight of the famine victims and spurred the biggest humanitarian relief effort in the world (Franks, 2006).

If cyclones are going to increase in size and strength as predicted, there would be a resultant expectation on the media to perform and deliver on a higher level than before. This raises questions about media's preparedness and capacity to deal with this immense responsibility. This exploratory article examines the issue of media capacity in relation to disaster communication, especially cyclones, by looking at specific cases of media coverage of cyclones, mostly in Fiji, where the authors live and work, and relevant examples from the region and elsewhere. The authors identify existing gaps in disaster communication, such as weaknesses in coverage and lack of training in this specific area, and consider the logistical challenges media face reaching remote areas, which also hampers coverage. The authors conclude that in light of the impending threat, these gaps have become more serious, and ought to be addressed urgently. While the article focuses on Fiji, it is relevant to other Pacific Island countries, which not only face a similar threat from natural disasters, but also lack a well-trained media corps in disaster communication.

The danger from extreme weather patterns

The mainstream scientific view holds that extreme weather patterns, potentially

caused by global warming, are in the most part a foregone conclusion. The World Meteorological Organisation Statement on the Status of the Global Climate in 2013 (WMO, 2014) stated that the first decade of the 21st century was the warmest on record since modern measurements began around 1850. This is supported by the findings of an Intergovernmental Panel on Climate Change study which states that the world has witnessed more hot days and heat waves since the 1950s—and predicts that this trend is likely to continue (IPCC, 2017). Examples of dramatic climate and weather extremes experienced in the last decade include the European heatwave of 2003, Hurricane Katrina in the United States in 2005, floods in Pakistan in 2010, Cyclone Nargis in Myanmar in 2008, and droughts in the Amazon Basin, Australia and East Africa (IPCC, 2017; WMO, 2014). These trends raise questions about media's preparedness and overall capacity to inform the public about the looming threat as well as provide sustained coverage of the rehabilitation efforts.

The questions about media capability are more pressing and urgent in the developing country context: for one, journalistic capacity is reportedly generally weaker in these countries, in part due to the lack of training and development opportunities; for another, these are the very countries that are in most need of efficient disaster communication since their already exposed and fragile populations are predicted to be most at risk regarding weather-related disasters. The predicted weather pattern trend puts increasing pressure on the already under- strength journalist corps in developing countries to shape up. Relative to low socioeconomic conditions, the impact of weather-related disasters in poor countries may be 20-30 times larger than in industrialised countries (IPCC, 2001). The small Pacific Island nations are deemed the most vulnerable due to their fragile ecosystems and underdeveloped economies (Diamond et al., 2012). However, there is considerable scope for improving communication systems with upgraded equipment that enhance communication networks and flows between rural communities and urban centres that need to be used. Especially given the region's exposure to cyclones, which are a major concern since they can be extremely damaging and difficult to recover from.

Even as it stands, the seasonal cyclones have taken a heavy toll in the last two decades. Damage from Cyclone Heta, which struck Niue in January 2004 was estimated as NZ\$89 million or 63 percent of GDP; estimated infrastructural damage in the Cook Islands due to a sequence of cyclones since 2005 is around US\$8 million; estimated damage to Fiji from Cyclone Ami in 2003 is around FJ\$104 million. Cyclone Gavin, which pummeled Fiji in 1995, occurred during a Spring Tide, resulting in 25 deaths and US\$18.3 million in damage (Walsh et al., 2012). Between 1981-2016, Pacific island countries have been struck by 27 Category 5 and 32 Category 4 cyclones (Costella & Ivaschenko, 2015). At a Pacific regional health forum in Brisbane in February 2018, Dr Colin Tukuitonga, the Director-General of the Pacific Community, revealed that cyclone losses suffered by some Pacific island countries amounted to some US\$10 billion in 2009-10 alone—20-30 percent of the GDP (Duffield, 2018).

Gaps in coverage and readiness of media to address the threat

That the media have an essential role in reporting disasters such as cyclones is well recognised. Proactive media coverage does not just help minimise the death and destruction, but also galvanises post-cyclone relief efforts, both at the national and international levels, and facilitates the rehabilitation that must follow a major natural disaster, by monitoring and reporting on the progress, or lack of it (Reza, 2007). Extensive media coverage is crucial prior to, during, and after natural disasters. Before a cyclone, the expectation is to provide accurate and regular updates about the impending threat, with continued coverage during the cyclone to keep people in the know. After a cyclone has passed, the media are expected to not only report the destruction, but stick around, at least for several more weeks and months, if not longer, to relay important information about disaster relief and rehabilitation efforts (Cate, 1994). Inadequate media coverage before a cyclone means that the people will be less prepared, whereas insufficient coverage during a cyclone could mean that people are less informed about things like rescue efforts, emergencies, danger zones and evacuation centers. Insufficient coverage after a cyclone could slow and drag down the rehabilitation process as a whole (see Reza, 2007).

This highlights the need for all-round, ongoing coverage, first to allow people to take the necessary precautions, secondly to ensure that the affected people continue to receive the help that they need, and thirdly to bear witness to, and report, on any rebuilding efforts, both long and short term. This is important especially in the Pacific context, where the coordination of relief and recovery efforts, and the use of large aid flows, can be quite haphazard at times. Relief supplies are known to have been spirited away and re-building projects abandoned, if commenced at all in the first place (see Larmour, 2005). This trend suggests that the public is best served by sustained media coverage, well before the cyclone hits and well after it has passed, rather than concentrate coverage around the damage and destruction in the immediate aftermath of the cyclone. Reza (2007) argues for year-round coverage, not just when the disaster is about to strike (when it is too late to make last-minute arrangements).

In terms of the newsworthiness, cyclones have it all—impact, conflict, human interest, unusualness, and immediacy—rolled into one. However, as some have observed, the media coverage can fall short, and the overall media attention can be fleeting, with potentially serious consequences for those in the path of the disaster. Reflecting on the coverage of 'Cyclone Sidr' that hit Bangladesh on November 2007, Julie Reza, a UK-based science communications consultant in global health and international development, stated that while in Britain, she first learnt about the cyclone from the BBC, rather than from the Bangladeshi national media (Reza, 2007). Upon revisiting the November 14 edition of the local Bangladeshi newspaper, *The Daily Star*, she noticed that even though the approaching storm was barely a day away, it was reported as the 10th article on the front-page index, after articles on a national political spat. The fact that the cyclone received scant coverage just a day before it was to strike shows how political disputes can outrank the coverage of an impending natural disaster, even one as powerful as Sidr, which eventually claimed 10,000 lives and caused widespread devastation (Reza, 2007).

Bangladesh's experience as a natural disaster-prone developing country is relatable to the experiences of some at-risk Pacific Island countries, where the lack of coverage and forewarning can also become a major problem, particularly in the remoter areas. While radio and television can, and do provide the quickest information about changing weather conditions and the implications of strong winds and heavy rain, most of these media outlets are urban-centered and not particularly geared to serving rural communities, especially the far-flung outer islands.

In Fiji's case, it has been observed that if the major cities are relatively unaffected, then the routine programme based on entertainment, news and sports continues to run, with little information on what may be transpiring in the more remote parts of the archipelago. This situation underscores Rooney, Papoutsaki and Pamba's (2004) concerns about a largely urban-based media that tends to neglect the needs of the rural people. While they were referring to the Papua New Guinea news media, there are similar concerns in other PICs. The femLINKpacific executive producer-director Sharon Bhagwan Rolls has observed that the effectiveness of commercial radio and television in disaster communication 'depends on their willingness to break their commercial format for public service' (Bhagwan-Rolls, email communication, February 14, 2018).

A cavalier media attitude has been manifest during a number of cyclones that have devastated areas other than the capital and major cities and towns in Fiji. In 1979, Cyclone Meli developed in the northwest part of Fiji and travelled southwards towards the west of the main island, Viti Levu, and onwards in a south-easterly direction. As it had missed the capital city Suva altogether, media personalities on one particular radio station played the latest pop music and joked about the 'harmless' hurricane. It was only two-three days later that the news surfaced of the church in Vabea village, Ono, on the island of Kadavu, collapsing on people who had taken shelter there. Twenty-one people, mostly women and children, lost their lives in the very place they had sought refuge (Survivor's stories about Cyclone Meli, 2016). This tragedy underscores concerns about media's fixation on elite sources and focus on development in urban centres,

sometimes at the expense of the grassroots and non-urban, underdeveloped areas. Traber (1985) bemoans media that tend to serve the ruling elite by concentrating on politicians' statements in major cities and the rituals of public life whereas Pamba (2003) criticises urban-based media's lack of focus on developmental issues. However, in fairness to Pacific media, sometimes a lack of newsroom resources and logistical challenges faced in reaching remote areas can hamper disaster reporting, as in case of the 2018 earthquake in the Papua New Guinea Highlands (Papua New Guinea earthquake, 2018).

Another apparent weakness in the coverage is the translation of scientific language and jargon into layperson language, by both the meteorologists and journalists (see Scientists need to brush up, 2016). Fiji's Nadi-based Regional Meteorological Centre is a hub for tracking tropical depressions and cyclones. In terms of capacity outside of ANZ and New Caledonia/Kanaky, the Nadi centre has both the best qualified personnel and the most sophisticated satellite technology to monitor weather conditions on a continuous basis. The centre plays a critical role in alerting Pacific people generally and Fijians in particular about changes in the weather conditions. However, there are serious issues relating to the communication about deteriorating weather conditions and the emergence of cyclonic conditions to the public. It is not unusual for journalists to interview meteorologists before, during and after cyclones, with the latter often unable to explain what the different categorisation of cyclones means in real terms. Fiji's Neville Koop, the managing director and meteorologist at Na Draki Weather, believes scientists must do a better job communicating with the public in preparation for future severe weather events in the Pacific:

Scientists should also explain how forecasting and warning systems work so people gain scientific literacy. If you cannot explain to people something by coming down to their level, you might as well not say anything. (Scientists need to brush up, 2016)

Koop stated the failure to grasp scientific language and an apparent lack of faith in science could be dangerous in future weather events due to rumourmongering and the circulation of inaccurate, if not outright false information, particularly on social media. This included claims that Cyclone Winston was a 'geo-engineered', man-made event. Says Koop:

The key challenge for scientists and governments as they respond to climate change is to create policy based on the best available science while communicating to the public in a way that relates to their daily lives. (Scientists need to brush up, 2016)

In order to address this communication gap, a number of Pacific regional developmental agencies banded together to organise media training sessions in

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recent years (see Nasiko, 2017). The initiative to improve disaster communication is timely since it is a neglected area in some respects: The Fiji government's Disaster Recovery Framework: topical Cyclone Winston (Ministry of Economy..., 2016), drawn up in coordination with key partners—the World Bank, the United Nations, the European Union, the Asian Development Bank and the Pacific Community—has a section, Communication Strategy, that makes scant mention of the news media, or problems associated with scientific jargon. There is still inadequate recognition given to the potentially significant role of the news media in disseminating jargon-free meteorological information to the general public.

Besides meteorologists' widespread inability to simplify scientific jargon, some journalists fail to sufficiently engage with the weather experts to explicate what is it that they are seeking to inform the public about. There is a need to probe about atmospheric pressure, wind speed and destructive power in real physical terms, rather than in 'knots' and 'categories' alone, since they mean little to the public, especially the uneducated. There is also a need to explain precipitation, possibilities of flooding, the movement of the cyclone and how accurate the model of a cyclone's direction is. In the case of Cyclone Winston, Fijians were largely confused by the track of this 'drunkard cyclone' as it had travelled eastwards outside the archipelago, only to return and move rapidly through the Koro Sea and the Bligh Passage, bringing death and destruction in its wake (Fiji: images of flattened villages, 2016; Scientists need to brush up, 2016). Neither the meteorologists nor the media provided adequate information to Fijians to help them better protect themselves in ways appropriate for a cyclone of such severity. As an educated victim of Cyclone Winston, which struck Fiji in February 2016, wrote: 'Most people had not heard of a Category 5 Cyclone. Maybe some had, but even if they had, they certainly were not aware of the destruction it could cause' (Devi, 2016a). It was only after she and her husband had to vacate their teacher's quarters and seek shelter in the leaky police station, and experienced the destructive natural force at work, that she realised the fierceness of Winston, including destructive waves and tidal surges which caused massive damage to several villages on Koro Island (images of the devastated and desolate villages are to be found in both the Fiji Sun and The Fiji Times, from 25 February and 15 April, 2016 as well as on the internet).

Quite remarkably, although the Ra and Tailevu coasts and hinterlands are on the main island of Viti Levu, telephone and other forms of communication to these areas were lost during and after Cyclone Winston. It was only days, and even weeks later, that the full extent of the destruction of these regions and of Koro and other islands became known to those living in urban areas (Ministry of Economy, 2016). While there were shortfalls observed in pre-cyclone reporting, the media reported quite well on the extent of the devastation caused by Winston and the

humanitarian efforts in the immediate aftermath of the cyclone, particularly of New Zealand and Australian military personnel, who responded expeditiously to the emergency. However, besides *The Fiji Times*, other media outlets, having covered the initial humanitarian and rehabilitation efforts, tended to direct their attention to other matters. The routine bread-and-butter rounds—politics, sports, crime and entertainment—eventually re-took center stage.

That the coverage is comparatively greater in the immediate aftermath of a cyclone than before it strikes, and tends to diminish as things start to return to normal, could be explained through the news values framework that the media usually apply to define news priorities—that is, what events and issues should receive more coverage over others. Impact and magnitude are the prime news values, and towards this end, the immediate aftermath of a cyclone holds the greatest news interest for the media—when the full impact of the devastation in the wake of the cyclone is fully visible. It makes for vivid images and compelling news and feature stories, compared to the pre-strike situation, when it is a suspenseful and fearful waiting game at best, with nothing much to see or report. After reporting on the carnage caused by a cyclone, media coverage tends to to recede in the coming weeks and months, as media eventually return to their normal routines.

On occasion, some media have been observed to buck this trend. For example, The Fiji Times continued to highlight over a much longer period of time than usual, the situation in rural areas, where classes were still reportedly being held in tents, and in parts of the country people were still living in makeshift shelters, more than a year after Winston had passed. Ironically, this unusual persistence in reporting the ground reality of rural communities was criticised by the Fiji Prime Minister Vorege Bainimarama (Heavy rain scares villagers, 2016; PM accuses newspaper, 2018). The somewhat outlandish pronouncements of senior officials of multilaterals like the World Bank and UN agencies-that the government of Fiji had been exceedingly successful in its humanitarian and rehabilitation efforts-were well covered by some media outlets, even though such assertions were based on extremely short visits to the country (for instance Ms Kwakwa, Vice-President for East Asia and the Pacific during her 17 October, 2016 visit—see Fiji Sun and The Fiji Times, as well as FBC online) There was little, if any media commentary on the fact that two years on, rehabilitation work was yet to be fully completed, and that in some places, the basic necessities were still lacking. This is another example of the somewhat shallow coverage of the rehabilitation work months, even years after a cyclone has passed. In the case of Cyclone Winston, the media tended to slavishly report the comments of the bureaucrats and recycle press releases without much original work or investigation of their own. This reflects the problem in general of urban-based journalists' over-reliance on press releases and media conferences, and uncritically reporting how aid and development agencies

have spent, or plan to spend their aid funds on development programmes (see Papoutsaki, 2008; Perrottet, 2015). Such reporting can be misleading when it comes to disaster relief. Fly-by-night experts rarely have the time to do a proper situational analysis, and the government bureaucrats will likely trot out a positive spin of developments. For the media to solely rely on such risky sources of information, without any proper verification, is tantamount to downplaying the seriousness of the situation, and fundamentally failing to fulfil their watch-dog role.

Current state of the training for media and future directions

If predictions that cyclones are likely to intensify are anything to go by, then the apparent gaps in reporting should be of major concern, and steps taken to address the situation. For instance, the recent Pacific Climate Conference in Wellington heard that scientists may need to create a new Category 6 for cyclones as the effects of climate change make them more extreme (Blake-Persen, 2018). New Zealand Climate Change Minister James Shaw cited Cyclone Winston as a case in point. With winds more powerful than the 230km/h upper-limit of a Category 5 cyclone, Winston should have been a Category 6 cyclone. However, there is no Category 6 classification in existence.

In the past, training in disaster communication has not been a top priority for most major media training providers in the Pacific, such as the Pacific Media Assistance Programme (PACMAS) and the Pacific Island News Association(PINA), but recent forecasts about the new and increased threat posed by even stronger cyclones highlight the need for a change in direction. Communications through mainstream media is seen as crucial for not only sounding the alarm about cyclones, but also for post-cyclone recovery and rehabilitation, including government accountability in the delivery of cyclone relief services and overall reconstruction. For example, it was Radio New Zealand International that raised the alarm about hungry victims of Cyclone Hola in Vanuatu resorting to stealing food since they had not received any relief supplies nearly three weeks after the disaster (Hungry Hola victims, 2018).

Given media's enhanced role in cyclone coverage in future, there is not only a requirement to address the current gaps in the reporting, but also to step up the training to strengthen media capacity for the future so as to make, among other things, disaster reporting more prominent and more mainstream, rather than treat it as an afterthought.

The IPCC report recommends a multi-level, multi-pronged approach, with narratives as an important part of a communications strategy. The report recognises there are uncertainties in disaster communication and states that this presents particular challenges which need to be addressed, and that planning needs to start today if a network of journalists is to be ready in five years' time (IPCC expert meeting, 2017). There has been little sign of any such planning in the Pacific in recent years, despite the region's increasing vulnerability, although the pace seems to be gradually picking up. The few disaster relief focused regional media training so far has been organised jointly by the Secretariat of the Pacific Regional Environment Programme (SPREP), the Secretariat of Pacific Community (SPC) and the Forum Fisheries Agency (FFA). This includes a June 2015 workshop, with a follow-up workshop in August 2017, both in Honiara. The 2017 meeting, on the theme, Information Making Impact: Pacific Island Media and Meteorological Services Media Training, attracted 30 regional journalists from eight countries (Nasiko, 2017). Topics included 'understanding national warning systems from national disaster management Offices.' The workshop attendees made up the Pacific media team for the 4th Pacific Meteorological Council and 2nd Pacific Meteorological Meeting in Honiara the following week in February 2018 (Nasiko, 2017).

The training was a milestone event that reflected the growing awareness about the potential threats posed by extreme weather conditions, the enhanced role of the media in mitigating this threat, and the decisive actions taken to build media capacity in the region in this particular area. For example, in an interview in *The Fiji Times*, The Pacific Meteorological Council chairman Ofa Fa'anumu recognised the media's importance in climate reporting, and called for a working relationship with the national meteological services to bridge the communication gap with the public, with journalists acting as conduits. Said Fa'anumu:

In my experience, the people will tend to listen more to a person they can relate to and that is what we find a bit difficult in mediums such as radio. (Nasiko, 2017)

Interestingly, it is organisations like SPREP, SPC, the FFA and The Pacific Meteorological Council that are currently taking the initiative in media training, apparently because in their line of work, they are more acutely aware of the looming danger, compared to the development agencies that work directly in building media capacity, which would have many other priority areas to focus on. Community media organisations like femLINKpacific (www.femlink-pacific.org.fj/index.php/en/) have set up their own 'Women's Weather Watch' update to address what they see as a gap in the news media communications network. According to the femLINKpacific website, 'Women's Weather Watch is a model for monitoring approaching storms and disaster management in their communities and providing real-time information to address the continually overlooked area of the involvement and consultation of women before, during and after natural disasters' (femLINKpacific, 2015). The initiative started in 2009, after Cyclone Mick hit Fiji, when it was noted that women were not being included in the planning and coordination of relief efforts (femLINK

pacific, 2015). It is part of femLINKpacific's campaign for the equal participation of women in all aspects of disaster preparation, management and rehabilitation. This is seen as vital because the women are often responsible for the management of their families, and evacuation strategies must be gender inclusive, particularly to ensure the safety and protection of women, children, the disabled and the elderly (femLINKpacific, 2015).

femLINKpacific executive producer-director Sharon Bhagwan Rolls sees their small Weather Watch efforts as an example of how broadcasters can be involved in preparedness and information sharing (S. Bhagwan Rolls, email communication with the authors, 14 February 2018). During Cyclone Gita this year, femLINKpacific's CSO and broadcast partners in Tonga were running information and community updates dedicated to preparedness. Bhagwan Rolls stated that the feedback from Tonga indicated that community radio combined with SMS alerts—messaging into the process of interviews to cover explanations of meteorological info as well as preparedness and protection information—are crucial (ibid.). Bhagwan Rolls stated that it was vital that mainstream media received focused training to complement the efforts of community media, which do not have the same reach as mainstream media.

There are further signs that the training momentum for mainstream media is picking up. The tentative programme of the Pacific islands News Association's (PINA) 5th Pacific Media Summit in May 2018 in Tonga had two climate reporting related themes out of the 16 slots, even if neither were fully focused on disaster reporting. The topics included Climate reporting-experiences of COP23, and Social media as a tool to keep tabs on the health of oceans and climate change. This is a limited step, but still a step in the right direction. However, predictions of more violent cyclones warrant sustained, coherent, and focused efforts to properly address the situation, rather than ad-hoc arrangements, especially since media capacity is still lacking in this area. Even as Cyclone Gita was brewing from a tropical depression into a cyclone close to the Fiji group in February this year, there was hardly any on-the-hour weather bulletins on Fiji's commercial radio stations. One of the islands in the path of the cyclone was Ono-i-Lau. Fijian academic Professor Sitiveni Ratuva stated that the media were 'treating Ono-i-Lau and its 2,500 Fijian citizens as non-entities, almost as if it's just part of a foreign country. There's virtually no coverage of their fate' (S. Ratuva, email communication with the authors, 13 February 2018). Likewise, coverage of the impact of rapid floods in low lying areas of western Viti Levu as a result of extremely heavy rains brought on by Cyclone Jossie over the Easter weekend on 31 March to 1 April 2018 was grossly inadequate.

Concluding remarks

In her opinion aricle, Reza (2007) posed a myriad of poignant questions regarding

the coverage of cyclones in Bangladesh, one of the most disaster-prone countries in the world. At the heart of the questions is the welfare of vulnerable people who are the least protected, and who tend to suffer the most. The questions posed by Reza are basic, and they apply equally to Fiji and the Pacific. That such questions should arise is indicative of the serious gaps in the reporting. Areas the questions cover include: methods used to predict and warn people about cyclones; what should the people in towns and villages do to prepare; changes and improvements in cyclone preparedness (based on lessons learnt from past cyclones); where are the cyclone shelters situated, how do they work and how are they maintained; provision of food, water and security; who is providing aid and how are relief efforts coordinated; what health precautions should people take; and what will be the economic consequences?

These questions provide a guideline to journalists and training providers on what needs to be prioritised now and in the future, with regard to disaster communication, in the service of the people. The questions underscore earlier arguments made in this article—that covering cyclones is about far more than just focusing on the immediate aftermath. The pre and post-cyclone coverage is just as important, if not more, to assist the people in their preparation and rehabilitation. Issues pertaining to media coverage is a shared responsibility that needs to be jointly addressed by government, households and communities, civil society, the private sector and the media, since the impact of worsening natural disasters affects society as a whole. The international risk management firm Munich Re forecast overall losses from natural disasters in 2017 to US\$330 billion—the second-highest figure ever recorded for natural disasters (Natural catastrophe review, 2017). Besides, the media sector lacks the capacity to improve things on its own, and needs support from other sectors.

Some promising steps have been taken to bridge the gap in communication by meteorologists and the media in the reporting of extreme weather events. This includes media training provided by some regional organisations discussed earlier in this article. Also, the Fiji-based Regional Meteorological Centre has established a communication unit and recruited communications staff to better inform the public. However, there is still much to be done regarding notifications and warnings in layperson friendly language. If this gap is addressed, there could be positive outcomes of a better informed and prepared public. femLINKpacific Women's Weather Watch is an example of a model of better communication from meteorologists that highlights the potential for collaboration between mainstream media and community organisations.

As the IPPC (2017) report states, national systems are at the core of countries' capacity to meet the challenges of observed and projected trends in exposure and vulnerability. Effective national systems comprise multiple actors from national and sub-national governments, the private sector, research bodies, and

civil society, including community-based organisations, playing differential but complementary roles to manage risk, according to their accepted functions and capacities. By pooling their resources, these organisations could provide a better public service in a critically-needed area.

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