



DISASTER INFORMATION PROVIDERS IN BURMA



International Development
Australian Broadcasting Corporation



Background

This report has been prepared by the International Development Unit of the Australian Broadcasting Corporation (ABCID) based on background research, and discussions held between July and August 2014 with media organisations, disaster management authorities, and local and international non-government organisations. The overall focus of consultations was on community resilience, how citizens get information during disasters and opportunities to improve two-way communication between affected people and support providers via the media.

Australian Broadcasting Corporation (ABC)

As Australia's national broadcaster the ABC functions as Australia's emergency broadcaster. The ABC uses its radio, television and online services to deliver timely, accurate and relevant information to affected communities during fires, floods and other natural disasters and emergencies. The ABC also plays an important role in building community resilience and the ability to prevent, prepare, respond and recover during times of adversity. Local radio (54 stations across the country) has an estimated national penetration rate of 99.4 per cent and is often the only source of vital weather and emergency service information for regional and rural Australians.

This emergency broadcasting role is supported by agreements with all state and territory emergency services. The ABC has formal and informal arrangements allowing emergency agencies and recovery specialists to use the local radio network to deliver emergency warnings. Local radio managers are active members of most state and local emergency management committees.

The ABC provides emergency broadcast training for its local radio staff to ensure that they are adequately prepared for emergency situations. In recent years, local radio has provided emergency broadcasting for fires, cyclones, flooding, storms, tsunami warnings, heatwaves, equine flu outbreaks and locust plagues. The ABC has provided emergency broadcasting in every state and territory, on numerous occasions.

Radio and television broadcasting are very effective methods of communicating important information to large groups of people before, during and after emergency situations. Local radio services are particularly effective, as broadcasters have established relationships with local communities and detailed local knowledge that may assist listeners.

Acknowledgements

ABCID appreciates the assistance provided by Australian Aid and all organisations that shared information during consultations.

This report is not intended to be an all-encompassing exploration of the many disaster related projects that have been, and are being, conducted in Burma. We acknowledge the work of the organisations dedicated to decreasing disaster related risks within the country.

While it was not possible to consult all relevant actors, discussions were held with a range of organisations, in the media, government, disaster management and humanitarian support sectors to establish an overview of the major challenges facing the delivery of emergency information to citizens.

This report is based on the opinions and perspectives of the participants and does not necessarily reflect the views of ABCID or Australian Aid.

Acronyms

ADPC	Asian Disaster Preparedness Centre
AHA	ASEAN Center for Humanitarian Assistance on Disaster Management
DM	Disaster Management
DMH	Myanmar Department of Meteorology and Hydrology
DRR	Disaster Risk Reduction
HFA	Hyogo Framework for Action
IASC	Myanmar - Inter-Agency Standing Committee - Myanmar
INGO	International Non-Government Organisation
JICA	Japan International Cooperation Agency
MPT	Myanmar Post and Telecommunications
MRCS	Myanmar Red Cross Society
NDPCC	National Disaster Preparedness Central Committee
NDPMWC	National Disaster Preparedness Management Working Committee
PTD	Myanmar Post and Telecommunications Department
UNISDR	United Nations International Strategy for Disaster Reduction
UNDP	United Nations Development Programme
WMO	World Meteorological Organisation



Country context

Burma is a country of more than 55 million people, bordered by India, Bangladesh, China, Laos and Thailand. Around 75 per cent of all Burmese live in rural areas. Many parts of the country, especially the coastal regions, are affected by hazards such as cyclones. The flooding of eight major rivers in the country is an ongoing challenge. One-third of the country's total perimeter forms an uninterrupted coastline along the Bay of Bengal and the Andaman Sea which experiences regular earthquakes.

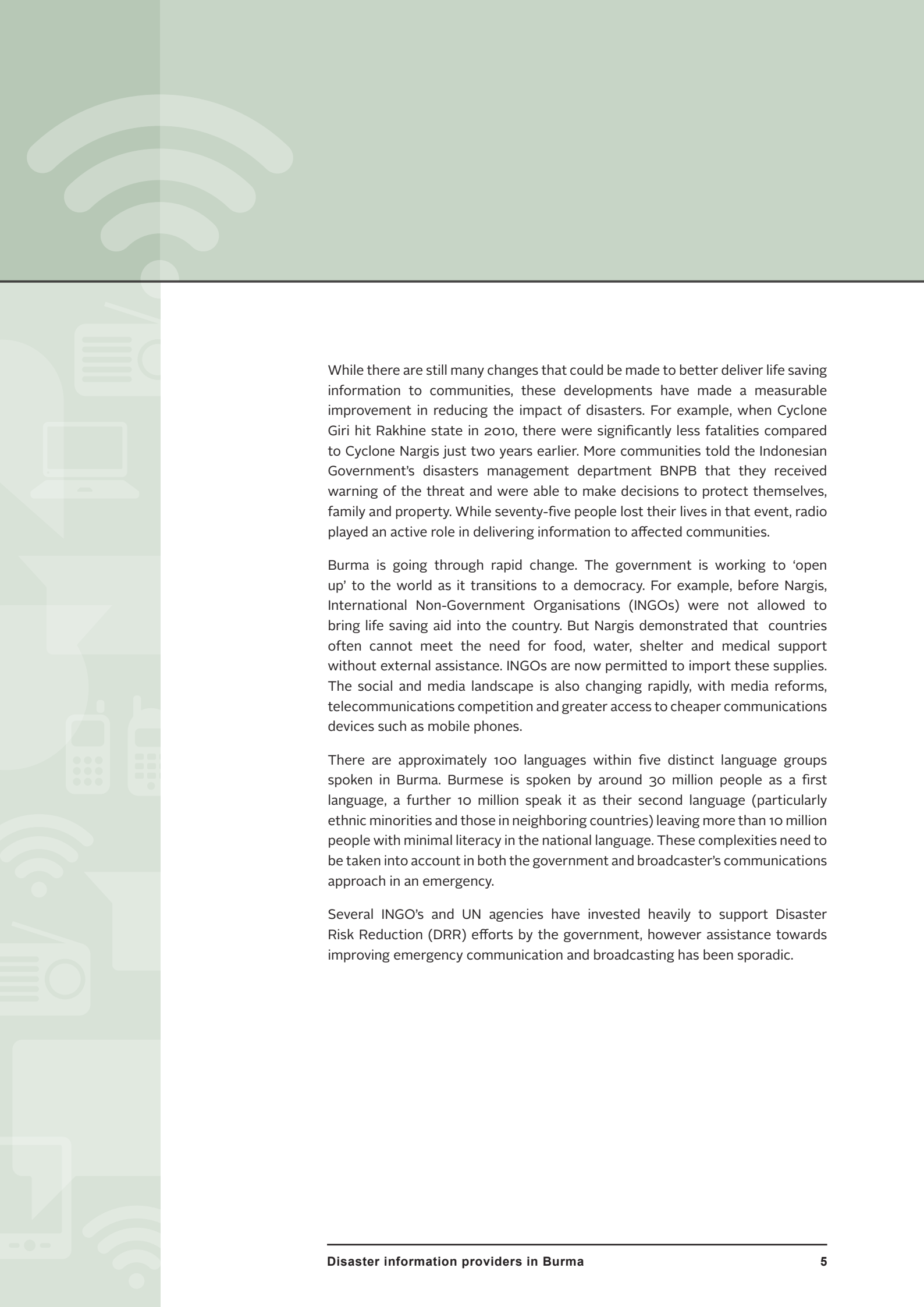
In 2008 the country was hit by the devastating cyclone Nargis. Winds of more than 200 kilometres an hour and a 6.3 metre storm surge caused significant damage to the Ayeyarwady delta region and divisions of Yangon. Just over 140,000 people were killed, hundreds of thousands of families displaced and basic infrastructure damaged.

The New York Times wrote:

“The cyclone was one of the deadliest storms in recorded history. It blew away 700,000 homes in the delta. It killed three-fourths of the livestock, sank half the fishing fleet and salted a million acres of rice paddies with its seawater surges.”¹

Since this event, major changes have been made to the planning and response to disasters in Burma, as well as to the national media landscape, as the country transitions to a democracy. An important factor in the impact of cyclone Nargis was the government's inability to communicate early warning messages to affected communities. In the last five years, donor assistance has meant weather forecasting technology has been upgraded, methods of communicating with the media have improved and the government has allowed the introduction of semi-commercial FM broadcasters to better communicate with citizens.

¹ New York Times, April 29, 2009 http://www.nytimes.com/2009/04/30/world/asia/30myanmar.html?pagewanted=all&_r=0



While there are still many changes that could be made to better deliver life saving information to communities, these developments have made a measurable improvement in reducing the impact of disasters. For example, when Cyclone Giri hit Rakhine state in 2010, there were significantly less fatalities compared to Cyclone Nargis just two years earlier. More communities told the Indonesian Government's disasters management department BNPB that they received warning of the threat and were able to make decisions to protect themselves, family and property. While seventy-five people lost their lives in that event, radio played an active role in delivering information to affected communities.

Burma is going through rapid change. The government is working to 'open up' to the world as it transitions to a democracy. For example, before Nargis, International Non-Government Organisations (INGOs) were not allowed to bring life saving aid into the country. But Nargis demonstrated that countries often cannot meet the need for food, water, shelter and medical support without external assistance. INGOs are now permitted to import these supplies. The social and media landscape is also changing rapidly, with media reforms, telecommunications competition and greater access to cheaper communications devices such as mobile phones.

There are approximately 100 languages within five distinct language groups spoken in Burma. Burmese is spoken by around 30 million people as a first language, a further 10 million speak it as their second language (particularly ethnic minorities and those in neighboring countries) leaving more than 10 million people with minimal literacy in the national language. These complexities need to be taken into account in both the government and broadcaster's communications approach in an emergency.

Several INGO's and UN agencies have invested heavily to support Disaster Risk Reduction (DRR) efforts by the government, however assistance towards improving emergency communication and broadcasting has been sporadic.

Major disaster risks

Burma ranks first as the 'most at risk' country in Asia and the Pacific according to the UN Risk Model. The country's large exposed coastline, mountainous regions and high rainfall during the monsoonal season expose it to a series of risks. Floods, landslides and tropical cyclones are the major risks. The country is also prone to tsunamis, earthquakes and forest fires

Rakhine, situated on the western coast of Burma is prone to several hazards. The mountainous areas of the state have faced landslide problems in the past, especially in the rainy season. In June 2010, 46 people were killed in a landslide triggered by heavy rain in Maungtaw Township.

These disasters have caused severe losses to the affected communities and delayed important development work. However in recent years improved disaster response practices have also resulted in increased cooperation between the Government, the international community and local organisations.

Summarised Table of Natural Disasters in Burma from 1900 to 2014

		# OF EVENTS	KILLED	TOTAL AFFECTED	DAMAGE (000 US\$)
Earthquake	Ground movement	7	663	22923	4770
	Tsunami	1	71	15700	500000
Flood	Unspecified	7	161	386988	55115
	Flash flood	3	263	85734	1700
	Riverine flood	13	134	2188690	79840
Landslide	Landslide	4	125	146367	-
Storm	Tropical cyclone	17	90827	3935844	4079388
Wildfire	Forest fire	2	8	78588	11000

Source: "EM-DAT: The OFDA/CRED International Disaster Database, www.em-dat.net - Université Catholique de Louvain - Brussels - Belgium"



Media consumption

Burma has an evolving media environment that has seen considerable change in the last five years. Sixty-two per cent of households in Burma do not own a television, so radio remains a key source of information.

MRTV (the national radio and television broadcaster) was the only radio broadcaster in the country until the launch of government owned City FM in 2001. In 2009 seven commercial FM licenses were released for the first time bringing the number of radio stations in the country to nine. These FM broadcasters now operate in a semi-commercial environment. They are funded by commercial bodies however the broadcasting infrastructure is generally government owned. The number of operators that function under this model may increase, with parliament debating new media laws that could see the release of more FM licences and the establishment of community radio.

In 2009, eight free to air (FTA) TV channels were launched by a number of commercial providers. In 2010 MRTV launched 'Burma International' a 24 hour English station that broadcasts across the region. There are 12 locally produced FTA channels.

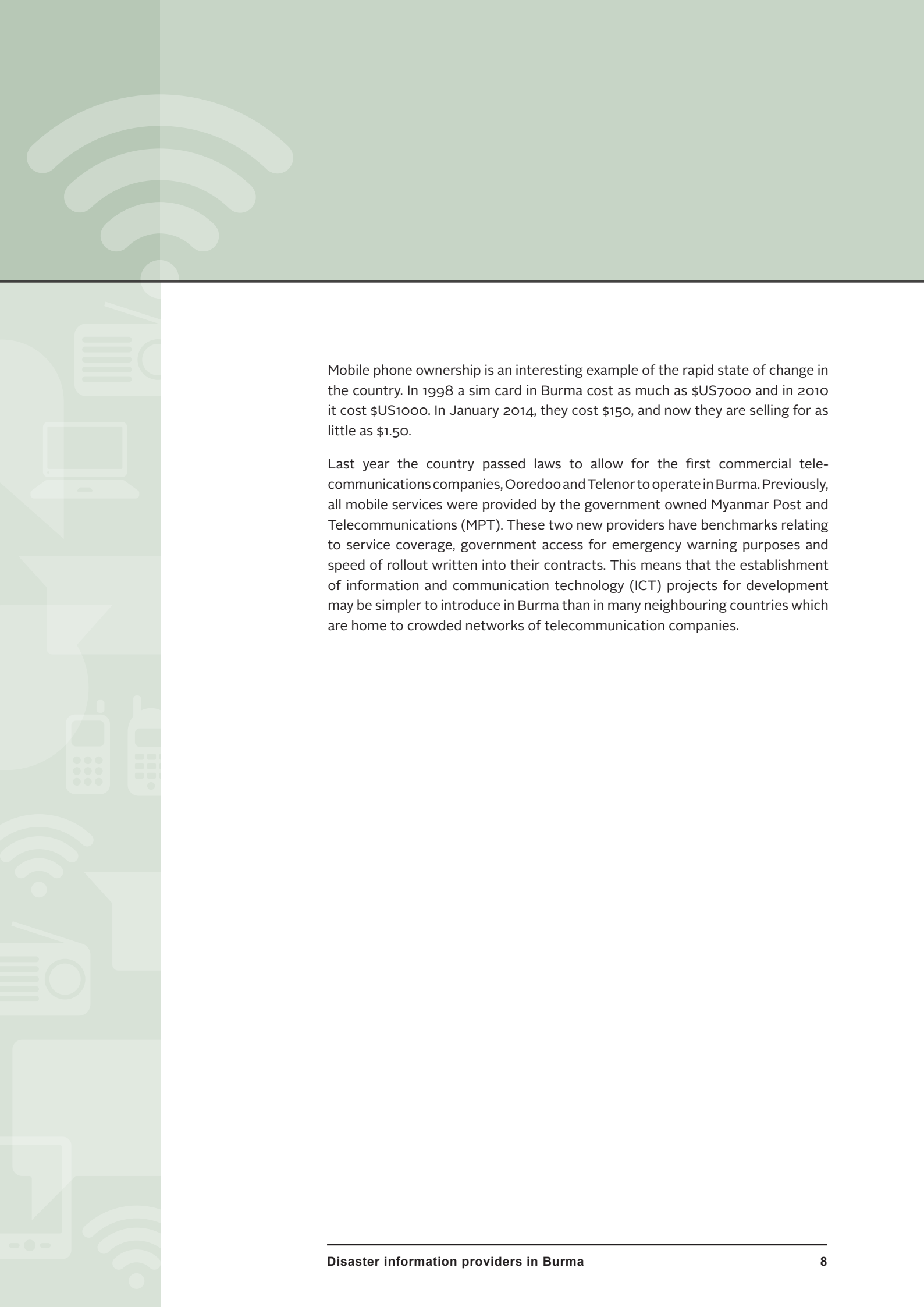
While most media is government owned or semi-government controlled, independent news organisations such as Mizzima, formed in 2012 by a group of exile journalists, are gaining popularity through the use of online, mobile and print platforms. Mizzima now operates from within the country The Forever Group launched Burma's first Pay TV service in 2005, however uptake is relatively low.

In 2012 most villages in Burma were still without a fixed telephone line service. Delays in the introduction of such technologies have led many commentators to brand Burma as a 'technological leapfrog' society that will completely skip some of the older technologies such as fixed line telephones, PC's or broadband connections and 'leap' straight into more affordable mobile phones, smartphones and increasingly available Wi-Fi.

According to OnDevice Research, in 2014 more than half of Burma's mobile Internet users came online in the last year². Viber has a monopoly in the online chat applications market and claims it now has five million users in the country, almost twice the number of Facebook users.

Since 2012, major changes have been taking place in Burma's telecommunications sector. While mobile phone penetration sits at just above 10 per cent of the population, the decreased costs associated with market competition should see those figures rise steadily. Despite expected increases, it may be ambitious to envisage that the government will reach their target of 80 per cent mobile phone ownership by the next election in 2015.

² OnDevice Research (2014) Myanmar: the last frontier for the mobile internet
<https://ondeviceresearch.com/blog/myanmar-mobile-internet-report>



Mobile phone ownership is an interesting example of the rapid state of change in the country. In 1998 a sim card in Burma cost as much as \$US7000 and in 2010 it cost \$US1000. In January 2014, they cost \$150, and now they are selling for as little as \$1.50.

Last year the country passed laws to allow for the first commercial telecommunications companies, Ooredoo and Telenor to operate in Burma. Previously, all mobile services were provided by the government owned Myanmar Post and Telecommunications (MPT). These two new providers have benchmarks relating to service coverage, government access for emergency warning purposes and speed of rollout written into their contracts. This means that the establishment of information and communication technology (ICT) projects for development may be simpler to introduce in Burma than in many neighbouring countries which are home to crowded networks of telecommunication companies.



Observations on media as disaster information providers

As the national, established broadcaster, MRTV has the most experience in providing emergency information during a disaster. However, as more TV and radio choices have emerged in recent years, the broadcaster is losing popularity.

MRTV moved to new headquarters in Tatkone, near Naypyitaw in 2006. The state of the art facility built with the assistance of an international donor is located more than an hour's drive from the nation's capital. MRTV also has eleven smaller bureaus scattered across the country with small teams of four journalists in each location. This distance from 'news' has created some issues around news coverage for the broadcaster.


The radio division of MRTV owns two medium wave transmitters and is currently installing FM transmitters in every large city, aiming for 15 in total. MRTV broadcasts in 17 ethnic languages through their 'Races Channel'. The station broadcasts from 5am to 11.30pm, however these times can be extended in the event of a disaster.

The Ministry of Information has submitted a proposed Public Service Media Law to Parliament. The Bill intends to transform current State media, such as the *New Light of Myanmar* and *The Mirror* newspapers and MRTV, into independent public service media. The proposal includes a funding model of 70 per cent funding from Government and 30 per cent from commercial advertising.

The Bill intends to promote editorial independence from government but the draft law is still controversial. Commercial print media perceives current new media law as unfair competition for their businesses due to government influence over resources, such as financial, logistical and government news sources.

Seven FM broadcasters were introduced in 2009 after the damage caused by Cyclone Nargis. The stations broadcast to the three major cities and generally one other 'focal' state. Many initially began production from within the MRTV headquarters in Tatkone but gradually they are all moving their production to Yangon. Only Bagan FM, Cherry FM and Padamyer FM still broadcast from within MRTV, however they are working to move production.

The national broadcaster still has some control over these new FM stations as they are required to play the MRTV national news two to three times a day as well as airing important speeches from the President and parliament.



None of the FM radio stations consulted for this report have developed standard operating procedures (SOPs) for broadcasting during emergencies and in practice respond in an ad hoc manner with varying levels of commitment. All emergency broadcast content is produced by MRTV and the FM stations only produce occasional interviews.

After Cyclone Giri in 2010, the Myanmar Red Cross Society (MRCS) conducted research to determine how people received early warning messages. That research showed that FM radio was a more reliable dissemination method in an emergency as the AM transmission from MRTV was more affected by the storms. This, along with their popularity, shows the necessity to increase the capacity of FM broadcasters to be effective emergency broadcasters.

First Response Radio, an organisation that installs temporary, short-range radio stations in disaster affected areas is hoping the expected new broadcast laws will create a space for this service to operate which would support the many communities that live in remote areas with little access to mass media.

Other donor initiatives supporting disaster broadcasting in the past have included a disaster scenario workshop provided by BBC Media Action for MRTV. Japan Broadcasting Corporation (NHK) and the Japanese International Cooperation Agency (JICA) have a three year technical cooperation plan to improve TV production skills and the Myanmar Red Cross Society (MRCS) runs two sessions a year to educate journalists on DRR and highlight areas that require increased cooperation between the organisations.

Media coverage of disasters

The radio and television departments of national broadcaster, MRTV, have been providing emergency broadcasting to Burma's population for several years. While there are no formal SOPs for the provision of disaster related information, both broadcasters transmit warnings received from the Department of Meteorology and Hydrology (DMH).

Before cyclone Nargis, MRTV would generally just broadcast the government issued warning and not accompany it with any further information. However, the event illustrated the important role media could have played in disseminating life saving information to affected communities and as a result, practices have now improved. Broadcasters are now incorporating talkback into emergency broadcasting, interviewing local experts and authorities to gain a better insight into the disaster and inform citizens.

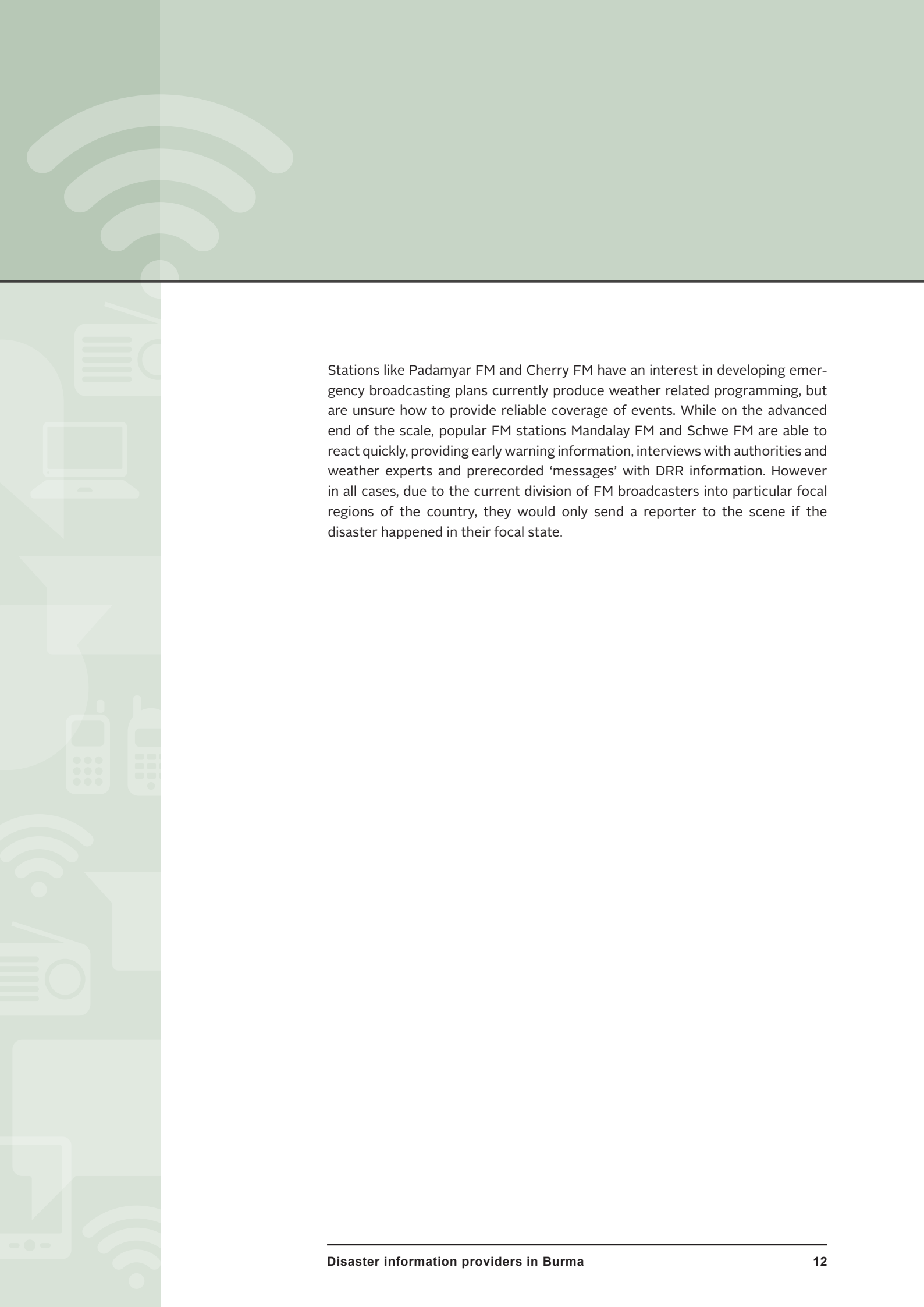
When the stations receive a disaster warning from the DMH, via fax, email or phone, the message is generally put to air with minimal delay or scrolled on a ticker in the case of television. A color coded warning system dictates the frequency as to how often the warning should be played. For red and brown level alerts, the most serious warning levels, broadcasters should repeat messages four to six times an hour. Orange level is broadcast three to four times and yellow and green levels are broadcast two to three times an hour.

Before a disaster, MRTV radio and television provide some DRR educational programming. DRR messages may be incorporated into monthly weather related programming or within weekly radio plays that address issues such as heat stroke and pandemics.

The radio division has some pre-recorded key messages produced by the NDPCC relating to disaster preparedness that can be played as part of initial emergency coverage. The radio division also relies on their network of 'Radio Fan Clubs' located across the country to report in with information on the ground until a reporter can reach the scene.

MRTV has a website and Facebook account however social media is generally not used to disseminate disaster related information. With social media usage predicated to rapidly increase in Burma, this is an opportunity for broadcasters to reach audiences with information on DRR.

FM stations respond to disasters in an adhoc manner with varying levels of commitment and capacity. At one end of the scale Bagan FM, which does not broadcast live, has a very small newsroom and therefore have difficulty providing timely emergency information. However, it will prerecord early warning messages from the government and send them to their broadcast station in Tatkone for broadcast.



Stations like Padamyar FM and Cherry FM have an interest in developing emergency broadcasting plans currently produce weather related programming, but are unsure how to provide reliable coverage of events. While on the advanced end of the scale, popular FM stations Mandalay FM and Schwe FM are able to react quickly, providing early warning information, interviews with authorities and weather experts and prerecorded 'messages' with DRR information. However in all cases, due to the current division of FM broadcasters into particular focal regions of the country, they would only send a reporter to the scene if the disaster happened in their focal state.

Observations on disaster managers as information providers

The Government of Burma is committed to disaster risk reduction (DRR) and has systems and procedures at National, State/Division, District, Township, Wards and Village Tracts levels for disaster management. Within Burma the National Disaster Preparedness Central Committee (NDPCC), under the Prime Minister, is the 37-member apex body for Disaster Management.

The National Disaster Preparedness Management Working Committee (NDPMWC) and Sub-Committee, under the Secretary of State Peace and Development Council, supervise the implementation of disaster management activities and also coordinate the activities of NDPCC. The Director General of national broadcaster MRTV is the media chair of the Information and Communication subcommittee for the NDPCC, however there are no media members of the Emergency Communication Subcommittee which has a focus on maintaining communication infrastructure in a disaster.

The roles and responsibilities of the Information and Communication Subcommittee are to educate the public on disaster preparedness, disseminate information before, during and after disasters and review and improve awareness activities.

Since cyclone Nargis, legislation, early warning systems and disaster response have improved. Earlier this year, Burma has received US\$40 million from Japan to establish three weather radar stations in Yangon, Mandalay and Kyaukpyu (a major town in disaster prone Rakhine State), as well as 30 automatic weather observation stations across the country by 2017. When Nargis struck there was only one radar station in the country which had not been operational since 1997.

DMH established the National Multi-hazard Early Warning Centre (NMHEWC) in July 2006. The Centre is the focal point in government for issuing early warnings to all public, authorities and stakeholders covering all weather, geological and maritime-related hazards. All levels of government, authorities, media and other stakeholders are contacted via a range of technology. The DMH also posts warnings on their website but is yet to embrace social media.

Burma's National Disaster Management Law was enacted in mid 2013³. It does not mention the role of broadcasters or the media in the dissemination of early warnings or disaster related information to the public. However a priority of the law is listed as:

“educating and motivating the public in order to get wide knowledge and to participate more in natural disaster management and guiding to conduct seminars, conferences and talks;”

³ Republic of the Union of Myanmar (2013) Natural Disaster Management Law
http://www.themimu.info/sites/themimu.info/files/documents/Ref_Doc_Natural_Disaster_Management_Law_31Jul2013.pdf

and

“issuing early warning information to the public to enable to evacuate in time and move their properties and cattle to the safety area”

Twice a year the DMH hold a ‘Monsoon Forum’ with local journalists to explain disaster-related concepts and explore predictions for the coming season and reflect on the season past. This event has been useful in building a stronger relationship between the DMH and broadcasters.

The government, in collaboration with the UNDP, is in the process of investigating the possible implementation of a short message service (SMS) based early warning system.

Myanmar Post and Telecommunications (MPT) has the ability to push-text their users and both Ooradoo and Telenor's contracts include provisions to allow emergency push text messaging from the government. With this in mind, hypothetically early warning SMS messages are possible, however the UNDP and the Myanmar Red Cross are both in discussion with the NDMCC, the department of Posts and Telecommunications and the Ministry of Social Welfare Relief and Resettlement (MSWRR) to explore what method would best suit Burma.

The Ministry of Social Welfare Relief and Resettlement (MSWRR) Relief and Resettlement Department is a key link in the dissemination of early warning messages through township level focal points. It has a lead role in capacity building for DM and DRR, and is currently working to establish a DM Training Centre.

The MRCS is one of the oldest humanitarian agencies in Burma and operates as an auxiliary to the government. MRCS greatest strength is its well-institutionalized system of Red Cross Volunteers (RCVs) with 120,166 lifelong members (2012) and over 200,000 Youth RCVs. The volunteers are organized into brigades with strength of at least 20-50 RCVs per township, which work closely with the auxiliary fire brigade.

Besides the significant work the MRCS does in community engagement and education in DRR and DM, the organisation recognises the important role media can play in the dissemination of emergency warning messages.



Observations on international Actors

Many international humanitarian agencies are actively involved in DM and DRR activities, both for natural and conflict related disasters within Burma. International organisations and UN agencies coordinate DRR and DRM activities through the Inter-Agency Standing Committee – Myanmar (IASC-Myanmar) which developed its Disaster Contingency Plan in 2009.

While there has been engagement from international media development organisations with MRTV to build their capacity for emergency broadcasting, FM stations have received little assistance, despite their growing audience.

The Government's relationship with international actors has changed dramatically since Cyclone Nargis in 2008, when international assistance was prevented from entering the country in the weeks following the disaster. Disaster management is now a government and donor priority.



Summary

There are opportunities to increase community resilience, improve how citizens get information during disasters and enhance two-way communication between affected people and support providers via the media. This can be achieved by improving strategic connections between all information providers, and remembering that disaster prevention is as important as response and recovery phases.

Burma's democratic transition process has strengthened disaster management substantially and media development is also a priority. This provides ideal timing to capitalise on the country's need and desire to strengthen emergency broadcasting with a dual focus on the national broadcaster and FM radio.



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Further information:

www.abcinternationaldevelopment.net.au/research