

Baseline Survey Report

Ayeyarwady Region

Myanmar



Prepared for Japan International Cooperation Agency (JICA)
Written by Polly Newall
for Community Development Association (CDA)

Table of Contents :		Page
Acknowledgements		2
Limitations of the survey		3
Introduction		4
Executive Summary		5
Overview of Myanmar and hazard risk in the country		6
Purpose of this baseline survey		8
Methodology and process of the survey		8
Summary of findings		11
Hinthada District	Hinthada Township	12
	Lemyethna Township	16
Labutta District	Labutta Township	20
	Mawlamyinegyun Township	32
Pathein District	Kangyidaunt Township	34
	Pathein Township	37
	Ngapudaw Township	41
Pyapon District	Bogale Township	45
	Pyapon Township	50
	Dedaye Township	55
Conclusion		57
References		58



Acknowledgements

Community Development Association would like to thank the Ministry of Social Welfare, Relief and Resettlement, Ayeyarwady Regional Government, the individuals and community members who took part in this baseline survey, without whose cooperation the survey would not have been possible.



Limitations of the study

While this study provides some key and important insights, there are several limitations. These include but are not limited to:

- A large amount of missing data from township, village tract and village levels
- Some unreliable and inconsistent data from all levels
- Individuals unable to understand or unable to answer some of the questions



Introduction

As part of the project 'Establishment of end-to-end early warning systems for natural disaster in the Republic of the Union of Myanmar', Japan International Cooperation Agency (JICA) requested Community Development Association (CDA) to carry out a baseline survey in 10 townships in the Ayeyarwady Region.

The purpose of this baseline survey was to gather and assess disaster related information that would inform the selection of, in addition to a pilot village, further villages in Ayeyawady region in which to conduct community-based disaster risk management (CBDRM) activities.

The survey was conducted in 10 townships. 440 individuals were surveyed from 67 villages and 3 wards across 10 village tracts and 1 town. As well as providing an overview of the natural hazards that Myanmar is exposed to and the methodology of the survey process, this report attempts to provide a summary of key findings at the township, village tract/ town and village/ ward levels.



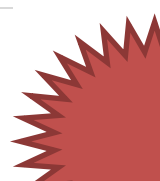
Executive Summary

Cyclone Nargis struck Myanmar on 2 May 2008 and traveled through the Ayeyarwady Delta all the way up to Yangon. Over 140,000 people lost their lives and over 800,000 were displaced- homes and businesses destroyed. Nargis was by far the most devastating natural disaster in the living memory of the country and a harrowing reminder of how vulnerable Myanmar is to cyclones. It also brought into focus how exposed the country is to a plethora of natural hazards- not just cyclones, but also tropical storm/ storm surges, earthquakes, floods, droughts, tsunamis, landslides and tornadoes. Since then, a number of disaster related activities have been conducted in the Delta and elsewhere in the country by a number of organizations. These include but are not limited to some infrastructure, such as shelters; some awareness raising and training within communities; support to set up disaster management committees; assistance with tools for early warning; and some training of government officials. However, while some progress has been made, the survey revealed that there are still enormous gaps on all levels, particularly on the local level, both in terms of capability as well as capacity to manage disaster risk, leaving communities at serious risk, both in terms of their lives and livelihoods.

Township and relevant Village Tract surveys were collected from 10 townships; Village/Ward surveys from 67 villages and 3 wards; and a total of 440 individual surveys were conducted across the villages and wards in 10 village tracts and 1 town across the 10 townships. Pyapon, Bogale, Labutta, Ngapudaw, and Mawlamyinegyun were preselected by Japan International Cooperation Agency (JICA). Hinthada and Lemyethna in Hinthada District; Pathein and Kangyidaunt in Pathein District; and Dedaye in Pyapon District were then selected following discussion between Relief and Resettlement Department, JICA and Community Development Association.

Education levels across townships were reasonably consistent, with the exception of Dedaye Town (urban area) where the level was markedly higher. Not surprisingly since the majority of people reside in rural areas, the main source of income comes from farming and/or fishing, often combined with casual labour and trading. The survey results revealed that while not all of the villages and wards were affected by Nargis, all of them have suffered a disaster of some description, often yearly because of persistent flooding. That said, the large majority of the respondents, especially in rural areas demonstrated little or no knowledge of disaster and disaster management, suggesting a need for more or improved training and support. It should be noted that the vast majority of support and assistance to date in the Delta has been given to those townships and village tracts affected by Nargis, which is perhaps not unexpected and is reflected in the survey findings. However, in addition to a variety of other disasters that all survey townships have experienced, there are some townships in the Delta, notably Pathein township that have experienced other cyclones prior to 2008, reinforcing the fact that the path that Nargis took could have been very different and assistance and prioritization should take this into account. Areas along the coast particularly should be assessed more thoroughly on their ability to absorb any potential disaster.

Moreover, all communities, even those who have had or currently have disaster related support, either from the government or external organizations identified key areas where more support is needed and/or areas that need strengthening, suggesting that no community in the survey scope has comprehensive coverage for the resources- human, financial and technical- capacity and support needed to manage disaster risk. Across the board, the focus



was largely on infrastructure needs; more awareness and training required on disasters and disaster management; need for improved communication mechanisms and accuracy of information; need for improved health and education facilities; need for enhanced access to safe water and electricity; and since many of the villages are hard to access, need for much improved transportation.

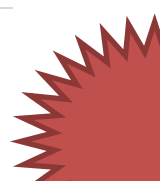
Overview of Myanmar and hazard risk in the country

Total population		47.9 million
Population under 18 years		14.9 million (31%)
Human Development Index (HDI rank (2011))		149 (out of 187)
Least Developed Country status		Member (out of 49)
Population below poverty line (2007)		33% (est.)
Ethnic groups	Burman / Bamar	68%
	Shan	9%
	Karen / Kayin	7%
	Rakhine	3.5%
	Chinese	2.5%
	Mon	2%
	Kachin	1.5%
	Indian	1.25%
	Kayah	0.75%
	Other groups including Wa, Naga, Lahu, Lisu and Palaung	4.5%
Labour force (est. 2001)	Agriculture	70%
	Industry	7%
	Services	23%

Source: CIA Factbookⁱ, Myanmar Ministry of Hotels and Tourismⁱⁱ

Myanmar is exposed to a multitude of natural hazards. The largest and most catastrophic disaster in Myanmar was Cyclone Nargis. Making landfall at around midnight on 2 May 2008, the UN estimated that around 135,000 people were killed with another 2.4 million people severely affected. Out of those severely affected, 1.4 million people were in Ayeyarwady Region (formerly Division), representing around a third of the region's population.

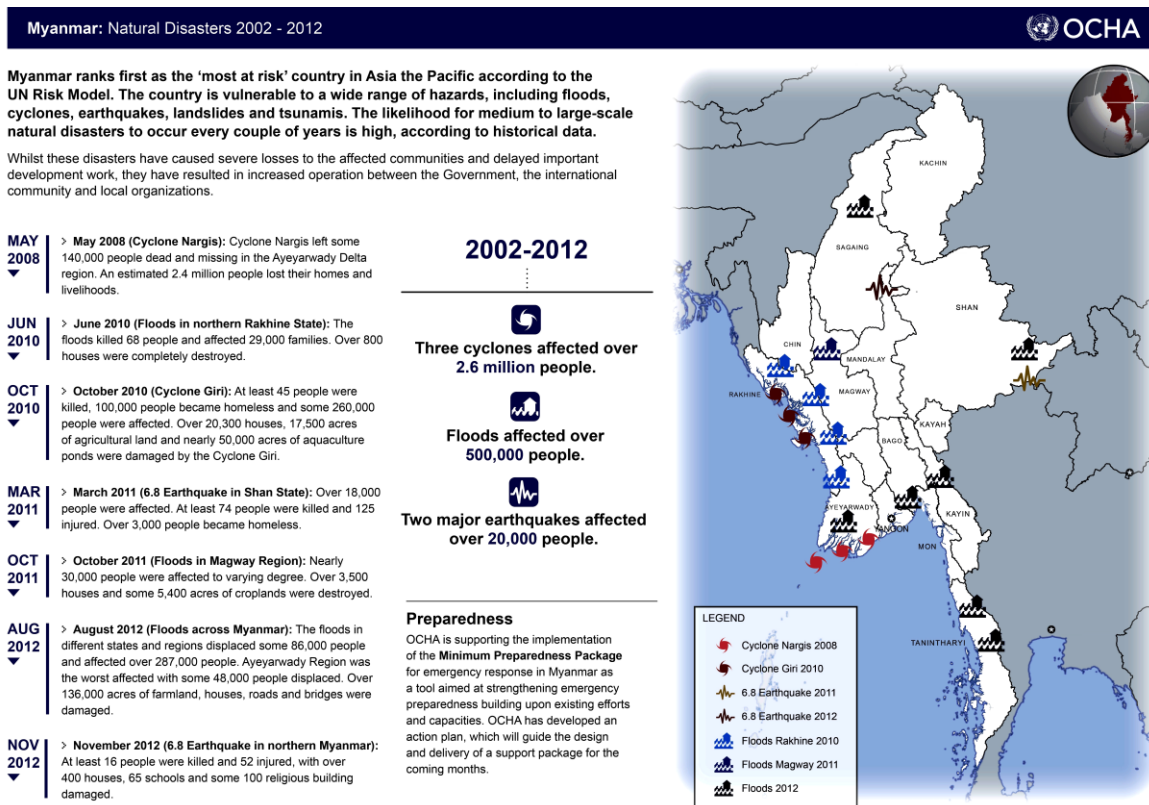
Not only in the Ayeyarwady Delta, the vulnerable communities residing in different locations of the country are exposed to and affected by different types of small scale to large-scale disasters. There have been 31 natural disasters between 1980 and 2013, killing a total of approximately 140,000 people. While the vast majority of these deaths were as a result of



Cyclone Nargis in 2008, during this same period, approximately 3.9 million people have been affected by disasters triggered by natural hazards; an average of 125,000 people a year. These have included Cyclone Giri (2010), Tarlay Earthquake (2011), Shwebo Earthquake (2012), heavy floods in Rakhine (2010), Magway (2011) and across the country (2012 and 2013)ⁱⁱⁱ. It is estimated that around 870,000 people in Myanmar live in areas that are exposed to cyclones, with a similar proportion exposed to earthquakes, with two fault lines running through the middle of the country. Furthermore 440,000 people are vulnerable to flooding and 390,000 are exposed to drought^{iv}.

As in many other countries, the most obvious impacts of disasters in Myanmar are the loss of lives, disruption or complete loss of livelihoods and destruction of public and private infrastructure. The socio-economic impacts of disasters can be further exacerbated by the resulting disruption to production activities and loss of productive assets, which can have an effect on the development process of the country as a whole. Along with Bangladesh, the Philippines, India and Vietnam, Myanmar is among the ten countries with the greatest proportion of their economic output exposed to natural hazards. In addition, they also demonstrate poor capability to recover from a significant event exposing investments in those countries to risk of supply chain and market disruptions^v. Reconstruction after Nargis was relatively slow, as many townships were repeatedly affected by further flooding. One of the reconstruction priorities was to ensure that schools and health facilities were repaired, as over 50% of schools and 75% of health facilities were either destroyed or badly damaged in the affected areas^{vi}. Two years on from Nargis, in 2010, there was still much work to be done to improve the lives of those living in the affected areas: an estimated 150,000 households were still in need of shelter assistance. Furthermore, access to clean drinking water was still greatly insufficient in some townships, schools in many areas remained damaged and 1.1 million people were reliant on food aid^{vii}.

Map 1: Myanmar: Natural Disasters 2002-2012



Purpose of this baseline survey

This baseline survey forms part of the overall 'Project for Establishment of End-to-End Early Warning System for Natural Disaster in the Republic of the Union of Myanmar' managed by the Japanese International Cooperation Agency (JICA).

The purpose of this baseline survey was to gather and assess disaster related information that would inform the selection of, in addition to a pilot village, further villages in Ayeyawady region in which to conduct community-based disaster risk management (CBDRM) activities.

The activities in the pilot and further villages will include Training of Trainer Workshops on CBDRM and follow up sessions and be linked to other capacity building activities, including for select government officials.

Methodology and process of the survey

10 Townships in total in the Ayeyarwady Region were selected for the baseline survey.

Pyapon, Bogale, Labutta, Ngapudaw, and Mawlamyinegyun that were severely damaged by the Indian Ocean Tsunami in 2004 and Cyclone Nargis in 2008 were preselected by JICA. Hinthada and Lemyethna in Hinthada District; Pathein and Kangyidaunt in Pathein District; and Dedaye in Pyapon District were then selected following discussion between Relief and Resettlement Department (RRD), JICA and Community Development Association (CDA).

Within each township, the following Towns/ Village Tracts and Villages/ Wards were selected through consultation between RRD and JICA:

Hinthada District:

Township	Village Tract/ Town	Village/ Ward
Hinthada	Pe Gyi Kyun	Aye
		Koke Ko Su
		Let Pan Su
		Pe Gyi Kyun
		U Yin Su
		Yae Le Su
Lemyethna	Htein Ngu	Gway Taunk Kwin
		Hnget Pyaw Taw
		Htein Ngu
		Kant Lant Kone
		Kone Su
		Yae Le

Labutta District:

Township	Village Tract/ Town	Village/ Ward
Labutta	Kone Gyi (Pyinsalu Sub-township)	Aung Hlaing
		Htan Pin Kone
		Kan Gyi Daunt
		Kone Gyi
		Kwin Yar
		Kyar Chaung
		Lay Yin Kwin
		Na That Kone
		Ah Wa Kar
		Tha Pyay Chaing
	War Boe Kone	
	Hlwa Zar (Pyinsalu Sub-township)	Daunt Gyi Kone
		Hlwa Zar
		Ka Nu Ka Mar
		Kan Thar Yar
		Kwa Kwa Lay
		Let Pan Kone
		Myin Ka Kone
		Shwe Kyun Thar
	Zin Pyun Kyun	
Tha Mae Chaung		
Mawlamyinegyun	Kyet Shar	Kyet Shar

Pathein District:

Township	Village Tract/ Town	Village/ Ward
Kangyidaunt	Kwin Yar (West)	Kone Su
		Kyun Char
		Seik Gyi
		Taw Win Su
		Kwin Yar Lay
		Tha Yet Taw
Pathein	Ma Gyi Zin (Shwethaungyan Sub-township)	Ah Kye Zin Hpyar
		Gyaing Lel
		Ku Lar Chaung
		Ma Gyi Zin
		Pauk Hla Kyaing
		Pauk Tu Kwin
Ngapudaw	Chaung Wa (Hainggyikyun Sub-township)	Tha Man Kyaing
		Chaung Wa
		Gway Tauk Gyi
		Kan Seik
		Kyin Kaw
Tha Pyay Ngu		
Tha Hmeit Hpyu		

Pyapon District:

Township	Village Tract/ Town	Village/ Ward
Bogale	Daunt Gyi	Daunt Gyi
		Kan Su
		Kat Tha Hmyin Sar Hpyu
		Kwin Bone = Tha Mar San Da
		Ngwe Nyi Naung
		Kat Tha Baung (New Village)
		Kat Tha Baung (Old Village)
		U Ni Ah Su
Pyapon	Daw Nyein (Ah Mar Sub-township)	Aung Hlaing
		Ban Dar Pin
		Daw Nyein
		Ka Man Tar
		Khar Pyat
		Pet Pye
		Tha Yet Pin Seik
Dedaye Town	Dedaye Town	No (1) Ward
		No (2) Ward
		No (3) Ward

Questionnaires were developed for 1) Township and Village Tract Profile Level Survey; 2) Village/ Ward Profile Survey; and 3) Individual Profile Survey

Township profile and Village Tract profile survey:

This survey focused on:

- Basic information on the township and village tracts including population; age groups; infrastructure; means of transportation in dry and rainy seasons; and economic conditions
- History of disasters including type of disaster; history; damage and losses in Nargis
- Donor and other information including DRR plan; donor profile; evacuation facilities; and existing materials (CBDRM; HRD and record of trainings conducted)

Village/ Ward profile:

This survey focused on:

- Basic information on the village including population; economic activity; basic infrastructure; facilities; disaster related resources and social profile of the village
- Loss and damage including human and property loss and damage and condition of evacuation

Individual Profile:

This survey focused on:

- Basic information including number of people in household; degree of education; major source of income; era of migration; and place of origin
- Disaster related information including knowledge of disaster; experience of disaster; recognition of risk; recognition of importance of DRR in their home/ village;

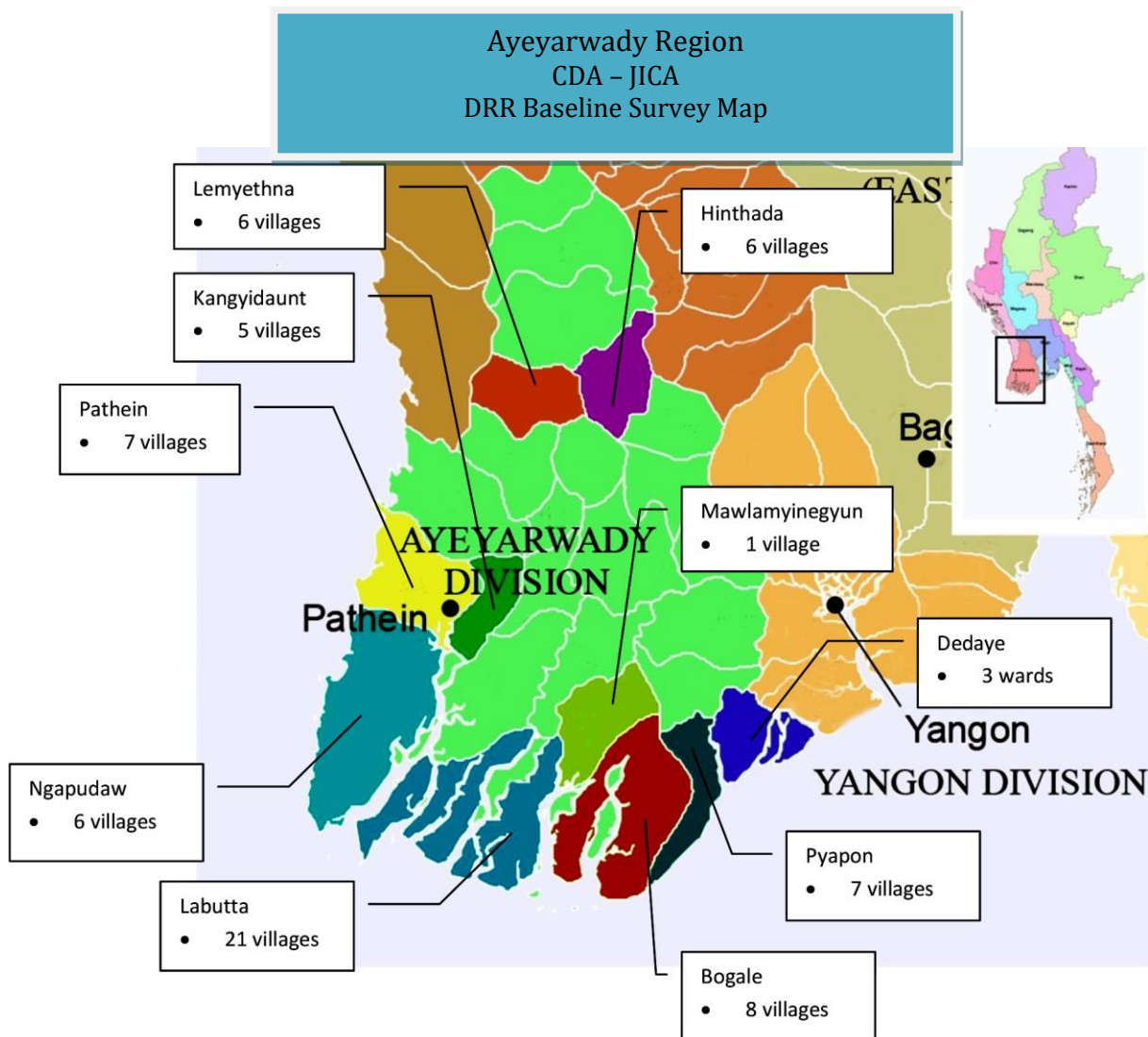
participation in DRR activities; availability of activities and willingness to participate if available and request for disaster support and related activities

The questionnaires for the baseline survey were developed in both English and Myanmar languages.

Summary of findings

Township and relevant Village Tract surveys were collected from 10 townships; Village/Ward surveys from 67 villages and 3 wards; and a total of 440 individual surveys were conducted across the villages and wards in 10 village tracts and 1 town across 10 townships.

Map 2: Baseline Survey Map



Ayeyarwady Delta

Ayeyarwady Region covers an area of nearly 36,000 km^{viii}, and is situated in the centre of the country in what is known as Ayeyarwady Delta, or the Delta region, south-west of Yangon Region. The Delta comprises three regions, Yangon, Bago and Ayeyarwady. Ayeyarwady Region has a coastline of about 2,000km stretched over distributaries of Myanmar's longest river the Ayeyarwady, known as 'the Mouths of the Ayeyarwady', which flows north-to-south from mountainous Kachin State, Myanmar's northern-most state, south into the Andaman Sea. It has a population of almost 8 million^{ix} most of whom rely on generating an income as farmers, fishermen and casual labourers or a combination, and 32% of which live in poverty^x. The region contributes 20% of national rice production^{xi}. Ayeyarwady Region has 6 Districts, 26 townships; 34 Towns; 252 Wards; 1939 Village Tracts; 12,194 villages^{xii}.

Hinthada District

Hinthada District has 6 townships. Two townships were selected in Hinthada District- Hinthada and Lemyethna.

Hinthada Township

Hinthada township has 1 town; 21 wards; 104 village tracts; and 820 villages.

There is not a great deal of detail available for this township overall but population is approximately 368,174 MIMU 2011 (198,500 (M 95,520; F103055) in rural areas according to the township profile and over a third of those are under 18)

There is little to no electricity in rural areas. There is 100% radio coverage but only around 65% have radios. Few people if anyone has a landline and less than 3% own a cellphone. Main means of transport for all village tracts is by boat in rainy season and by motorcycle in dry season. No details were available on the poverty rate for any village tract but income was set at 'middle'. Most people engage in farming; fishing; casual labour, trading or as government staff.

Although Hinthada was not affected by Nargis, yearly flooding occurs in some village tracts and villages and some villages have experienced landslides. According to the township profile, a Township DRR committee does exist and is supported by Myanmar Red Cross Society covering all VTs. Although the number of evacuation facilities across the township was not known, schools and monasteries were cited. No information was known or given about existing materials across village tracts. According to MIMU, some organizations are working in Hinthada, namely UNICEF in education; Norwegian People's Aid in governance; Myanmar Red Cross Society/ IFRC, PSI, UNICEF, and UNFPA in health; Terre des Homme Italia in protection; and UNICEF in WASH.

Pe Gyi Kyun Village Tract

Population: Total: 4, 202: Male: 2,012; Female: 2,190

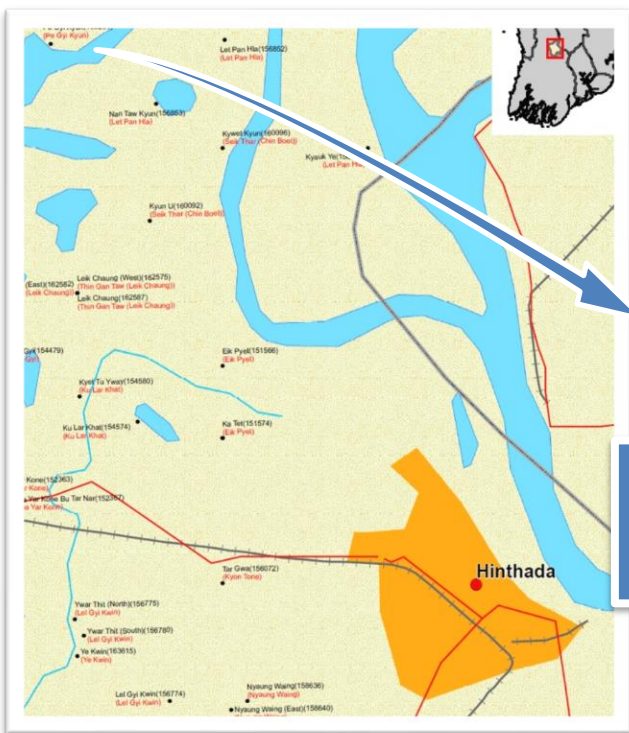
Number of villages: 7

A total of 47 people were surveyed across 6 villages in Pe Gyi Kyun village tract in Hinthada township.

All those surveyed had moved to the area before 1998, didn't know or said a long time ago. Household numbers ranged from 2 to 9, with most having 3 or 4. All but three people were at least secondary school educated with 9 out of 47 educated above. The large majority engage in farming or casual labour or a combination of the two, 4 in trading and 3 in fishing. Most of the respondents said they have 'little' knowledge of disasters yet most of them had experienced flooding on a yearly basis and/ or landslides suggesting that there is a need to improve people's knowledge and understanding of disasters and disaster risk management. Some demonstrated some knowledge of risks in the home and community; most either said they already participated in some village activities even if it just meant helping each other or would do more; and all but one had comments or suggestions for improvements.

Damage/Loss in Nargis or Major disaster in 10 years and

Hinthada – Pe Gyi Kyun



Death nil	Injured nil	House damage nil
Evacuate nil	Shelter nil	Knowledge about disaster low

Most of the respondents said they have 'little' knowledge of disasters yet most of them had experienced flooding on a yearly basis and/ or landslides suggesting that there is a need to improve people's knowledge and understanding of disasters and disaster risk management

Villages:

Aye Village

Nine people were surveyed in Aye.

Aye has a population of 486 people over 124 households. The village is made up of Buddhist Bamar. 60% of the population engage in agriculture; 20% in fishing and 20% are seasonal workers. According to the village profile, there is recorded 20% land ownership.

It is 13.2 miles to the nearest major road. It takes approximately one hour by motorcycle in dry season and 2 hours by boat in rainy season to reach the nearest city. As for the rest of the township, there is around 90% coverage for radio, with 50% of the population owning one. There is a handpump in the village for water supply. No information was given about early warning systems or communication methods in the village. There is no health facility in the village but there is one school that is supposed to be used for evacuation and a monastery that



serves as a community centre. There is also a committee for disasters and a youth group in the village.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding that happens yearly and landslides to be their main challenges. Many respondents made reference to the need for an embankment to protect from landslides; more knowledge on how to prevent disasters; and the need to build a secondary school and support the current school.

Koke Ko Su Village

Six people were surveyed in Koke Ko Su.

Koke Ko Su has a population of 278 people over 79 households. The village is made up of Buddhist Bamar. 60% of the population engage in agriculture; 20% in fishing and 20% are seasonal workers. According to the village profile, there is recorded 30% land ownership.

It is 13.5 miles to the nearest major road. It takes approximately one hour by motorcycle in dry season and 4 hours by boat in rainy season to reach the nearest city. There is 70% coverage for radio with only 25% of the population owning one. Early warning messages are generally given over the loud speaker across the village. There is a handpump in the village for water supply. No health, educational or evacuation facility in the village was recorded but there is a monastery that serves as a community centre. There is a youth group and woman's group in the village.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding to be their main challenge.

The majority of suggestions or comments focused on the need for more exact information from the weather and forecast station.

Let Pan Su Village

Ten people were surveyed in Let Pan Su.

Let Pan Su has a population of 527 people over 133 households. The village is made up of Buddhist Bamar. 70% of the population engage in agriculture and the rest in fishing and seasonal work. According to the village profile, there is recorded 5% land ownership.

It is 16-18 miles to the nearest major road. It takes approximately one hour by motorcycle in dry season and 2 hours in rainy season to reach the nearest city. 75% of the population owns a radio. There is a handpump in the village for water supply. No information was recorded on early warning system mechanism. No health facility in the village was recorded but there is a monastery, a library and a school that serve as a community centre and an evacuation facility. There is a Village Development Committee but no information on what they have done and a youth group in the village.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding to be their main challenge.

Some suggestions or comments referred to putting in mechanism to make travel easier; the need for electricity and a clinic in the village; and for more knowledge on disaster prevention.

Pe Gyi Kyun Village

Eight people were surveyed in Pe Gyi Kyun.

Pe Gyi Kyun has a population of 1673 people over 461 households. The village is made up of Buddhist Bamar. 65% of the population engage in agriculture, 25% in seasonal work and the rest in fishing and trading.

It is 13 miles to the nearest major road. It takes approximately one and a half hours by motorcycle, 3 hours by boat in dry season and 3 hours by boat in rainy season to reach the nearest city. 90% of the population owns a radio. Early warning systems include passing messages over a loud speaker. There is a handpump in the village for water supply. There is 1 rural health centre in the village. There is also 1 monastery, 2 chapels, 1 school and 5 rest houses in the village that serve as community centres. One youth group exists in the village.

There is very little data available on loss and damage in the village from disasters. Despite the fact that those who were surveyed have all experienced flooding yearly and some landslides, having no electricity was recorded to be their main challenge in the village profile.

In addition to needing a shelter in the village, more knowledge about disasters and disaster preparedness and accurate information about the weather and forecast were also cited as needs for the village.

U Yin Su Village

Seven people were surveyed in U Yin Su.

U Yin Su has a population of 294 people over 80 households. The village is made up of Buddhist but a mixture of Bamar and Kayin ethnic groups. 60% of the population engage in agriculture, 30% in fishing and seasonal work. According to the village profile, there is recorded 35% land ownership.

It is 13 miles to the nearest major road. It takes approximately one hour by motorcycle in dry season and 5 hours by boat in rainy season to reach the nearest city. 70% of the population owns a radio. There is a handpump and tubewell in the village for water supply. No information was recorded on early warning system mechanism. No health or evacuation facility in the village was recorded but there is one school and a monastery that serves as a community centre. One youth group exists in the village.

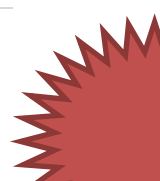
Although there is very little data available on loss and damage in the village from disasters, the village considers flooding that happens yearly and landslides to be their main challenges.

In addition to needing a shelter or safe place to go in the event of a disaster in the village, more knowledge about disasters and disaster preparedness and accurate information about the weather and forecast were also cited as needs for the village.

Yae Le Su Village

Seven people were surveyed in Yae Le Su.

Yae Le Su has a population of 960 people over 150 households. The village is made up of Buddhist but a mixture of Bamar and Kayin ethnic groups. 75% of the population engage in agriculture and the rest in trading, fishing and/or seasonal work. According to the village profile, there is recorded 20% land ownership.



It is 13 miles to the nearest major road. It takes approximately one and a half hours by motorcycle in dry season and 6 hours by boat in rainy season to reach the nearest city. There is a handpump in the village for water supply. 60% of the population owns a radio and 7% have mobile phones. Early warning messages are generally given over the loud speaker across the village. There is one school and a monastery that serves as a community centre. One youth group and one woman's group exists in the village.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding that happens yearly and landslides to be their main challenges.

More knowledge about disasters and disaster preparedness (particularly for landslides) was cited as a need for the village.

Lemyethna Township

Lemyethna Township has 1 Town; 5 Wards; 41 Village Tracts; and 284 Villages.

There is not a great deal of detail available for this township overall but population is approximately 107,588 MIMU 2011 (101,385 (M49,458; F51,927) in rural areas according to the township profile and two thirds are over 18)

There is little to no electricity in rural areas. There is 100% radio coverage and 85% own one. Few people if anyone has a landline and less than 2% own a cellphone. Main means of transport for all village tracts is by boat in both dry and rainy seasons. No details were available on the poverty rate for any village tract but income was set at 'middle'. Most people engage in farming; fishing; casual labour, trading or as government staff.

Although the township was not affected by Nargis, flooding did occur when the embankment burst. According to the township profile, a Township DRR committee does exist that takes care of emergency response, CBDRM and early warnings. Evacuation drills are done by the social and youth groups. Although the number of evacuation facilities across the township was not known, schools and monasteries were cited as shelter. No information was known or given about existing materials across village tracts. According to MIMU, some organizations are working in Lemyethna, namely UNICEF in health; and Terre des Homme Italia in protection.

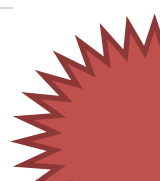
Htein Ngu Village Tract

Population: Total: 1,047; Male: 518; Female: 529

Number of villages: 6

A total of 39 people were surveyed across 6 villages in Htein Ngu village tract in Lemyethna township.

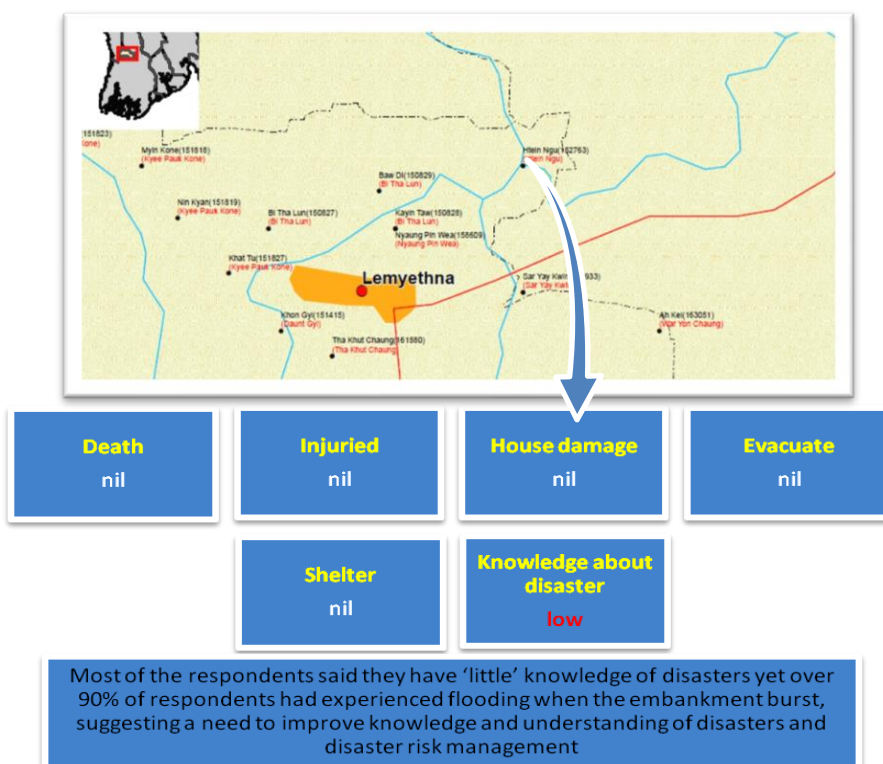
All except one of those surveyed had moved to the area before 1999, didn't know or said a long time ago. One had moved to the area in 2012. Household numbers ranged from 1 to 9, with most having 3, 4 or 5. All were at least primary school educated and two-thirds were secondary school educated. The large majority engage in farming or casual labour or a combination of the two, the rest in fishing and/or trading. Most of the respondents said they have 'little' knowledge of disasters yet over 90% of respondents had experienced flooding when the embankment burst, suggesting a need to improve knowledge and understanding of disasters and disaster risk management. Some demonstrated some knowledge of risks in the home and community; most either said they already participated in some village activities



even if it just meant helping each other or would do more; and all but one had comments or suggestions for improvements.

Damage/Loss in Nargis or Major disaster in 10 years

Lemyethna – Htein Ngu village tract



Villages:

Gway Taunk Kwin Village

Six people were surveyed in Gway Taunk Kwin.

Gway Taunk Kwin has a population of 60 people over 36 households although it was difficult for the village to answer this question. The village is made up of Buddhist Bamar. 50% of the population engage in agriculture and 30% in casual labour.

It is only 1 mile to the town that takes 30 minutes by foot in dry season and one hour by foot in rainy season. There is a handpump in the village for water supply. 50% of the population owns a radio but less than 1% have mobile phones. Early warning messages are generally passed through the village by word of mouth. There is no record of a school, health or evacuation facility but there is a monastery that serves as a community centre. One youth group exists in the village.

Although there is very little data available on loss and damage in the village from disasters, the village considers the threat of the embankment bursting again and cyclones to be challenges for the village.

Securing the dam to avoid it breaking was a suggestion from all respondents, while two also made reference to the need for a health centre in the village.

Hnget Pyaw Taw Village

Six people were surveyed in Hnget Pyaw Taw.

Hnget Pyaw Taw has a population of 42 people over 14 households although it was difficult for the village to answer this question. The village is made up of Buddhist Bamar. 80% of the population engage in agriculture and/ or casual labour.

It is only 4 miles to the town that takes 30 minutes by motorcycle in dry season and 45 minutes in rainy season. There is a handpump in the village for water supply. 80% of the population owns a radio but few if anyone has a mobile phone. Early warning messages are generally passed through the village by word of mouth or by bike. There is no record of a school, health or evacuation facility but there is a monastery that serves as a community centre.

Although there is very little data available on loss and damage in the village from disasters, the village considers the threat of the embankment bursting again to be a challenge for the village.

Securing the dam to avoid it breaking was a suggestion from all respondents, while three also made reference to the need for a health centre in the village.

Htein Ngu Village

Six people were surveyed in Htein Ngu.

Htein Ngu has a population of 274 people over 68 households although it was difficult for the village to answer this question. The village is made up of Buddhist Bamar. 55% of the population engage in casual labour, 30% in agriculture and the rest in trading or fishing.

It is 6 miles to the town that takes 45 minutes by boat in dry season and one hour in rainy season. There is a handpump and tubewell in the village for water supply. 60% of the population owns a radio and there are 2 CDMA phones in the village. Early warning messages are generally passed through the village by word of mouth. There is no record of a health facility but there is a monastery and a school that both serve as a community centre and evacuation facility. There is also a religious and youth group in the village.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding to be a key challenge.

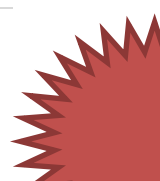
Securing the dam to avoid it breaking was a suggestion from all respondents, while two also made reference to the need for a health centre in the village.

Kant Lant Kone Village

Six people were surveyed in Kant Lant Kone.

Kant Lant Kone has a population of 105 people over 25 households although it was difficult for the village to answer this question. The village is made up of Buddhist Bamar. 40% of the population engage in casual labour, 40% in agriculture and the rest in trading or fishing.

It is 7 miles to the town that takes 2.5 hours by boat in dry season and 3.5 hours in rainy season. There is a handpump and river in the village for water supply. Few if any own a mobile phone and very few people own a radio. Early warning messages are generally passed



through the village by word of mouth. There is no record of a school, health or evacuation facility or community centre.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding to be a key challenge.

Securing the dam to avoid it breaking was a suggestion from all respondents, while five also made reference to the need for clean drinking water and some mentioned the need for a health centre in the village.

Kone Su Village

Six people were surveyed in Kone Su.

Kone Su has a population of 1850 people over 250 households although it was difficult for the village to answer this question. The village is made up of Buddhist Bamar. Large percentage of the population engage in agriculture, as well as casual labour, trading or fishing.

It is 3 miles to the town that takes 20 minutes by motorcycle in dry season and 30 minutes in rainy season. There is a handpump in the village for water supply. 50% of the population owns a radio and a few people in the village own a landline or mobile phone. Early warning messages are generally passed through the village by word of mouth. There is no record of a health facility but there is a chapel, monastery and a school that serve as a community centre and evacuation facility. There is also a youth group in the village.

Although there is very little data available on loss and damage in the village from disasters, the village considers the threat of the embankment bursting again to be a challenge for the village.

Securing the dam to avoid it breaking was a suggestion from all respondents.

Yae Le Village

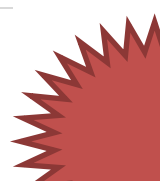
Eight people were surveyed in Yae Le.

Yae Le has a population of 290 people over 77 households although it was difficult for the village to answer this question. The village is made up of Buddhist Bamar. 60% of the population engage in casual labour, 40% in agriculture and the rest in trading or fishing.

It is 4 miles to the town that takes 30 minutes by motorcycle in both dry and rainy seasons. There is a tubewell in the village for water supply. 60% of the population owns a radio and there are 3 CDMA phones in the village. Early warning messages are generally passed through the village by word of mouth. There is no record of a health facility but there is a monastery and a school that both serve as a community centre and evacuation facility. There is also a religious group in the village.

Although there is very little data available on loss and damage in the village from disasters, the village considers the embankment bursting and flooding to be key challenges.

Securing the dam to avoid it breaking was a suggestion from all respondents.



Labutta District has 2 townships. Both Labutta and Mawlamyinegyun townships were selected for this baseline survey.

Labutta Township

Labutta Township has 2 Towns; 13 Wards; 115 Village Tracts; and 684 Villages.

The population is approximately 310,099 MIMU 2009 (291,227 M150,317; F140,910 in rural areas according to the township profile and over half are over 18)

There is no data on electricity in rural areas. There is 95% radio coverage and 65% own one. Few people if anyone has a landline and less than 4% own a cellphone. Main means of transport for all village tracts is by boat in both dry and rainy seasons with some village tracts being able to use vehicles and other modes of transport in dry season. No details were available on the poverty rate for any village tract but income was set at 'middle'. Most people engage in farming; fishing; casual labour, trading or as government staff.

Labutta was affected by Nargis as well as the Tsunami of 2004. 25 people died and 166 pieces of infrastructure were destroyed in the tsunami and 81,775 people died or are still missing and 106,675 pieces of infrastructure and houses were destroyed in Nargis (Reference - GAD Labutta Township report).

DRR plan exists for some village tracts, supported by various agencies namely UNDP; Mercy Corp; and World Concern Myanmar. Emergency response is supported across the township by Myanmar Red Cross Society; 12 village tracts have had CBDRM (Save: 8; Bridge Asia: 4; Karuna: 1; Action Aid: 2 (including 2 village tracts for this baseline survey). There is no information on early warnings but Save the Children has done evacuation drills in the two village tracts of this baseline survey. There is a cyclone shelter in Kone Gyi (Stockpile: Food, loud-speaker; medicine, and first aid accessories) and cyclone shelter and school in Hlwa Zar (Stockpile: drinking water).

Many agencies were working in Labutta in 2009 in a variety of sectors following Nargis but many have since moved away.

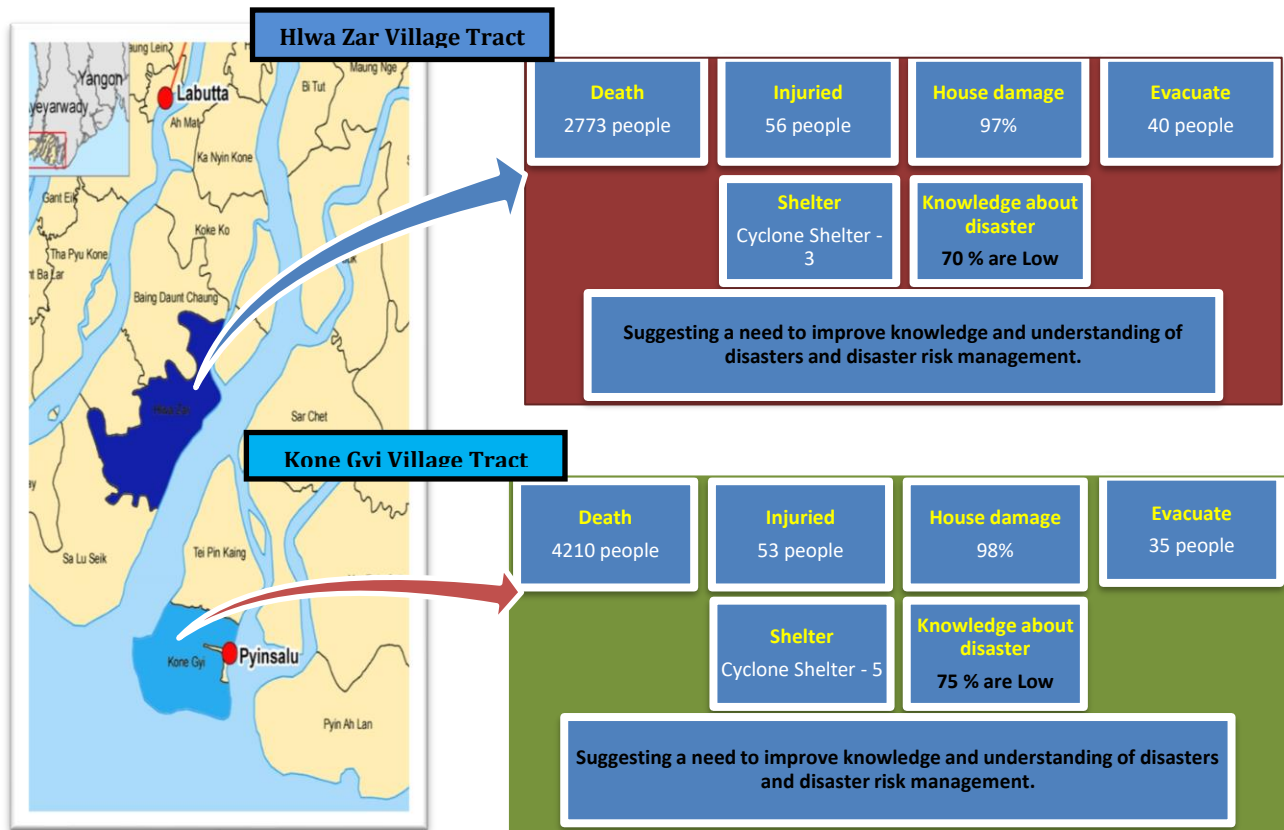
Existing materials include:

Kone Gyi- CBDRM (Acton-Aid; UNDP; Save the Children, Myanmar Red Cross Society); HRD (JICA, Eco-Dev, Thitagu Monastery)

Hlwa Zar- CBDRM (Save the Children; Action Aid; and World Concern); HRD (JICA, Thitagu Monastery)

Damage/Loss in Nargis or Major disaster in 10 years

Labutta – Hlwa Zar and Kone Gyi village tract



Kone Gyi (Pyinsalu Sub-township)

Population: Total: 6,213; Male: 3,408; Female: 2,805

Number of villages: 11

A total of 77 people were surveyed across 11 villages in Kone Gyi village tract in Labutta township.

All except two of those surveyed had moved to the area before 2007, didn't know or said a long time ago. Household numbers ranged from 1 to 10, with most having 3, 4, 5 or 6. All were at least primary school educated, over 70% were secondary school educated and 10% advanced further than secondary school. The large majority engage in farming, fishing or casual labour or a combination of the three, the rest in trading. Over 75% of respondents said they have 'no' or 'little' knowledge of disasters yet all but two had experienced Nargis, suggesting a need to improve knowledge and understanding of disasters and disaster risk management. Some demonstrated some knowledge of risks in the home and community; most either said they already participated in some village activities even if it just meant helping each other or would do more; and all but one had comments or suggestions for improvements.

Villages:

Aung Hlaing Village

Six people were surveyed in Aung Hlaing.

Aung Hlaing has a current population of 390 people over 78 households. Before Nargis the population was around 584 but 420 people lost their lives or are missing and the population dropped to 156. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Buddhist Bamar. 50% of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 5 miles to the town that takes 30 minutes by motorcycle in dry season and 1.5 hours in rainy season. There is a tubewell, pond and drinking pond in the village for water supply. 60% of the population owns a radio but there are few if no phones in the village. Early warning messages are generally passed through the village by using a flag, loudspeaker and/or radio. There is no record of a health facility or school but there is a monastery and a shelter that both serve as a community centre and evacuation facility. There is also a youth group in the village.

Communication and lack of phones in the village was cited as a major challenge. The respondents in the village mentioned the need for a strong shelter, electricity, and provision of goods for an emergency situation such as life jackets.

Htan Pin Kone Village

Seven people were surveyed in Htan Pin Kone.

Htan Pin Kone has a current population of 568 people over 175 households. Before Nargis the population was around 750 but 325 people lost their lives or are missing and the population dropped to 425. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar with a mix of Buddhist and Muslim. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 3.7 miles to the town that takes 2 hours by foot or 20 minutes by motorcycle in dry season and 3 hours by foot in rainy season. There is a handpump in the village for water supply. 35% of the population owns a radio but less than 4% in the village has a phone. 40% of the village has electricity in the evenings from two generators. Early warning messages are generally passed through the village by using a loudspeaker and posters and notes on notice boards. There is one health facility, a school, as well as a monastery and a mosque that both serve as a community centre and evacuation facility. There are also religious groups in the village, as well as baseline survey, 1st aid and early warning sub-committees.

Being so close to the gulf was cited as a major challenge for this village. The respondents in the village mentioned the need for a strong shelter, clean water and better communication.

Kan Gyi Daunt Village

Six people were surveyed in Kan Gyi Daunt.

Kan Gyi Daunt has a current population of 242 people over 85 households. Before Nargis the population was around 400 but 360 people lost their lives or are missing and the population dropped to 40. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar and Kayin with a mix of Buddhist and Christian. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 1 mile to the town that takes 45 by foot or 10 minutes by motorcycle in dry season and 1.5 hours by foot in rainy season. There are two ponds in the village as well as a water collection tank for water supply. 35% of the population owns a radio but less than 1% in the village has a phone. 10% of the village has electricity in the evenings from a generator. Early warning messages are generally passed through the village by word of mouth, the radio or Skynet TV. There is no health facility but there is a school, as well as a monastery and a library that both serve as a community centre and evacuation facility. There are also religious groups in the village. Various trainings and awareness sessions have been carried out in the village by various organizations.

Insufficient tools for early warning were cited as a major challenge for this village. The respondents in the village mentioned the need for a strong shelter, clinic and provision for farm accessories.

Kone Gyi Village

Seven people were surveyed in Kone Gyi.

Kone Gyi has a current population of 1219 people over 315 households. Before Nargis the population was around 1850 but 700 people lost their lives or are missing and the population dropped to around 1020. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar, Kayin and Rakhine with a mix of Buddhist, Christian and Muslim. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 3.7 miles to the town that takes 1.5 hours to reach by foot, 20 minutes by motorcycle or 3 hours by boat in dry season and over 2 hours by foot in rainy season. There are two water collection tanks for water supply. 35% of the population owns a radio and there are 4 CDMA phones in the village. 40% of the village has electricity in the evenings from a generator. Early warning messages are generally passed through the village by word of mouth, by loudspeaker or on the radio. There is a sub-rural health centre, 1 primary school and one early childhood development centre, as well as a church and warehouse that both serve as a community centre and evacuation facility. The monastery was destroyed in Nargis. There are various committees that have been set up in the village- namely the village administration; rescue; first aid; and cleaning and rebuilding. Various trainings and awareness sessions have been carried out in the village by various organizations.

No proper shelter was cited as a major challenge for this village. The respondents in the village also mentioned the need for a strong shelter, better water supplies and provision for emergencies such as life jackets.



Kwin Yar Village

Eight people were surveyed in Kwin Yar.

Kwin Yar has a current population of 733 people over 151 households. Before Nargis the population was around 739 but 131 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar and Kayin with a mix of Buddhist and Christian. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 6 miles to the town that takes 2 hours to reach by foot or 20 minutes by motorcycle in dry season and over 3 hours by foot in rainy season. There are tubewells and two water collection tanks for water supply. 75% of the population owns a radio and there are 3 CDMA phones in the village. 20% of the village has electricity in the evenings from a generator. Early warning messages are generally passed through the village by word of mouth, flag or by loudspeaker. There is no health centre, but there are 2 schools and 2 churches that serve as a community centre and evacuation facility. There is a youth group in the village. Some training and awareness sessions have been carried out in the village by various organizations.

No proper shelter was cited as a major challenge for this village. The respondents in the village also mentioned the need for a strong shelter, better water supplies, better tools for early warning, more training on preparedness and provision of accessories such as boats.

Kyar Chaung Village

Six people were surveyed in Kyar Chaung.

Kyar Chaung has a current population of 363 people over 97 households. Before Nargis the population was around 627 but 317 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar Buddhists. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 3.5 miles to the town that takes 1 hour to reach by foot or 15 minutes by motorcycle in dry season and 1.5 hours by foot or 30 minutes by motorcycle in rainy season. There is one pond for drinking water and 2 ponds for bathing. 75% of the population owns a radio and there are 2 CDMA phones in the village. 10% of the village has electricity in the evenings from a generator. Early warning messages are generally passed through the village by word of mouth. There is no health centre, but there is a shelter (in which a school is housed), a monastery and a chapel that serve as a community centre and evacuation facility. There is a youth group in the village. There are various committees that have been set up in the village—namely the village administration; rescue; and first aid. Various trainings and awareness sessions have been carried out in the village by various organizations.

The respondents in the village mentioned the need for a stronger shelter, better water supplies, better tools for early warning, stronger communication mechanisms, more training on preparedness and provision of accessories such as boats.

Lay Yin Kwin Village

Eight people were surveyed in Lay Yin Kwin.

Lay Yin Kwin has a current population of 1814 people over 418 households. Before Nargis the population was around 2588 but 750 people lost their lives or are missing. Most, if not all



infrastructure, communications and houses were destroyed. The village is made up of Bamar and Kayin with a mix of Buddhist and Christian. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 2 miles to the town that takes 20 minutes by motorcycle in dry season and 30 minutes by motorcycle in rainy season. There is one pond for drinking, 3 ponds for bathing and water collection tanks in the village. 75% of the population owns a radio and there are 40 CDMA phones in the village. 50% of the village has electricity in the evenings from a generator. Early warning messages are generally passed through the village using a flag, by word of mouth and increasingly more, by phone. There is no health centre, but there are 2 schools (primary and pre-middle school), a shelter and a monastery that serve as a community centre and evacuation facility. There is a sub DRR committee, and social and religious groups in the village. Some training and awareness sessions have been carried out in the village by various organizations.

The respondents in the village mentioned the need for a nurse or medical facilities in the village, better water supplies, improved communications, more training on preparedness and provision of accessories such as boats.

Na That Kone Village

Eight people were surveyed in Na That Kone.

Na That Kone has a current population of 312 people over 78 households. Before Nargis the population was around 504 but 211 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar and Kayin with a mix of Buddhist and Christian. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

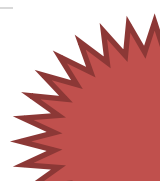
It is 1.5 miles to the town that takes 15 minutes by motorcycle or 45 minutes by foot in dry season and 15 minutes by motorcycle in rainy season. There are 3 ponds for drinking and 2 for bathing in the village. 50% of the population owns a radio and there are no phones in the village. Only 3 houses in the village have a generator. Early warning messages are generally passed through the village using a loudspeaker, by word of mouth and radio. There is no health centre, but there is 1 school and a church that serve as a community centre and evacuation facility. There is a sub DRR committee, and women and youth groups in the village. Some training and awareness sessions have been carried out in the village.

The respondents in the village mentioned the need a proper shelter, better water supplies, improved communications, more training on preparedness and provision of accessories such as boats and farming and fishing tools.

Ah Wa Kar Village

Eight people were surveyed in Ah Wa Kar.

Ah Wa Kar has a current population of 328 people over 115 households. Before Nargis the population was around 510 but 340 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar and Kayin with a mix of Buddhist and Christian. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.



It is 8 miles to the town that takes 45 minutes by motorcycle in dry season and 1 hour by motorcycle in rainy season. There is a handpump and a marble well for water supply in the village. 80% of the population owns a radio but only one villager has a CDMA phone in the village. Only 2 houses in the village have a generator. Early warning messages are generally passed through the village using a loudspeaker, by word of mouth and radio. There is no health centre or school but there is a monastery serve as a community centre and evacuation facility. There was a group formed in the village to take care of cyclone.

The respondents in the village mentioned the need a proper shelter, a school, better water supplies, improved communications, more training on preparedness and provision of accessories such as boats and farming and fishing tools.

Tha Pyay Chaing Village

Five people were surveyed in Tha Pyay Chaing.

Tha Pyay Chaing has a current population of 348 people over 165 households. Before Nargis the population was around 700 but 396 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar and Kayin with a mix of Buddhist and Christian. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 2 miles to the town that takes 3 hours by boat in dry season and 4 hours by boat in rainy season. There are 2 drinking ponds for water supply in the village. 75% of the population owns a radio but there are only 2 CDMA phone in the village. Only 2 houses in the village have a generator. Early warning messages are generally passed through the village using a loudspeaker and by word of mouth. There is no health centre but there is 1 school, 2 churches and one shelter that serve as a community centre and evacuation facility. There is a sub DRR committee in the village.

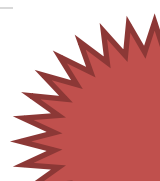
The respondents in the village mentioned the need for strong shelter and houses, electricity, better water supplies, improved communications, more training on preparedness and provision of accessories such as boats and farming and fishing tools.

War Boe Kone Village

Eight people were surveyed in War Boe Kone.

War Boe Kone has a current population of 258 people over 58 households. Before Nargis the population was around 520 but 262 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Kayin Christians. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 1 mile to the town that takes 45 minutes to reach by foot or 15 minutes by motorcycle in dry season and 1 hour by boat in rainy season. There is one drinking pond and 3 handwells for water supply in the village. 60% of the population owns a radio and there are 3 CDMA phone in the village. 30% of the village have electricity in the evenings using a generator. Early warning messages are generally passed through the village by word of mouth, radio or phone. There is no health centre but there is 1 school and 1 church that serve as a community centre and evacuation facility. There is a sub DRR committee in the village, as well as a Christian youth group.



The respondents in the village mentioned the need for a strong shelter, better health facilities, better water supplies, improved communications, and provision of accessories such as boats and farming and fishing tools.

Hlwa Zar (Pyinsalu Sub-township)

Population: Total: 4,138: Male: 2,442; Female: 1,696

Number of villages: 14

A total of 69 people were surveyed across 10 villages in Hlwa Zar village tract in Labutta township.

All except three of those surveyed had moved to the area before 2008, didn't know or said a long time ago. Household numbers ranged from 1 to 10, with most having 3 or 5. All were at least primary school educated, over 60% were secondary school educated and one advanced further than secondary school. The large majority engage in farming, fishing or casual labour or a combination of the three, the rest in trading. Over 70% of respondents said they have 'no' or 'little' knowledge of disasters yet all but one person had experienced Nargis and lost close family in the disaster, suggesting a need to improve knowledge and understanding of disasters and disaster risk management. Some demonstrated some knowledge of risks in the home and community; most either said they already participated in some village activities even if it just meant helping each other or would do more; and all but one had comments or suggestions for improvements.

Villages:

Daunt Gyi Kone Village

Eight people were surveyed in Daunt Gyi Kone.

Daunt Gyi Kone has a current population of 307 people over 120 households. Before Nargis the population was around 550 but 430 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar with a mix of Buddhist and Christian. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 11 miles to the town that takes 4 hours to reach by boat in dry season and 4.5 hours in rainy season. There is a drinking pond, and five wells for water supply in the village. 75% of the population owns a radio but there are no phones in the village. There is no electricity in the village. Early warning messages are generally passed through the village by word of mouth. There is no health centre but there is a monastery and school serve as a community centre and evacuation facility. There is a village and school committee in the village that work on development issues.

The respondents in the village mentioned the need a proper strong shelter and other infrastructure, better water supplies, improved communications (phones), and provision of accessories such as boats and farming and fishing tools.

Hlwa Zar Village

Seven people were surveyed in Hlwa Zar.

Hlwa Zar has a current population of 1476 people over 437 households. Before Nargis the population was around 1570 but 575 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar

Buddhists. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 10 miles to the town that takes 1.5-2 hours to reach by boat in dry season and 2-2.5 hours by boat in rainy season. There are 3 ponds for bathing and 4 ponds for bathing and at least one rain water collection tank for water supply in the village. 85% of the population owns a radio and about 60% of the population have electricity but few have a phone in the village. Early warning messages are generally passed through the village by word of mouth. There is a rural health centre, a school, a monastery, a warehouse and a shelter that serve as a community centre and evacuation facility. There is a DRR committee in the village with sub-committees that focus on administration, early warning, baseline surveys, and rescue.

The respondents in the village mentioned the need more strong shelters and other infrastructure, better water supplies, improved and more accurate information and communication, and provision of accessories such as boats and farming and fishing tools.

Ka Nu Ka Mar Village

Seven people were surveyed in Ka Nu Ka Mar.

Ka Nu Ka Mar has a current population of 236 people over 66 households. Before Nargis the population was around 300 but 144 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar and Kayin with a mixture of Buddhist and Christian. The majority of the population engage in casual labour and some in agriculture, trading or fishing.

It is located 3 hours by boat in dry season and 4 hours by boat in rainy season from the town. There are 3 drinking water ponds, and 1 pond for bathing in the village. 25% of the population owns a radio, 2 people have a phone and 40% have access to electricity in the evenings from a generator in the village. Early warning messages are generally passed through the village by word of mouth. There is no rural health centre or school, but there is a monastery that serves as a community centre and evacuation facility.

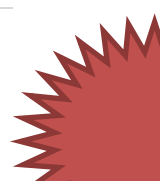
The respondents in the village focused on the need for more knowledge on disasters and disaster management, strong shelters and other infrastructure, better water supplies, improved and more accurate information and communication (for early warning), and provision of accessories such as boats and farming and fishing tools.

Kan Thar Yar Village

Three people were surveyed in Kan Thar Yar.

Kan Thar Yar has a current population of 110 people over 46 households. Before Nargis the population was around 350 but 300 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar Buddhists. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 15 miles to the town that takes 3 hours to reach by boat in dry season and 4 hours by boat in rainy season. There are two points for water supply in the village. 90% of the population owns a radio but there are few if any phones in the village and only 3% have electricity. Early warning messages are generally passed through the village by word of mouth, or through a



handspeaker. There is no health centre or school but there is a monastery that serves as a community centre and evacuation facility.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, a school, and provision of accessories such as boats and farming and fishing tools.

Kwa Kwa Lay Village

Eight people were surveyed in Kwa Kwa Lay.

Kwa Kwa Lay has a current population of 602 people over 160 households. Before Nargis the population was around 986 but 543 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar and Kayin with a mixture of Buddhist and Christian. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is located 3.5 hours by boat in dry season and 4 hours by boat in rainy season from the town. There are 3 drinking water wells, and a JICA rain water collection tank for water supply in the village. 70% of the population owns a radio but few have a phone in the village. Early warning messages are generally passed through the village by word of mouth. There is no rural health centre but there is a school, a church, a monastery, a library and a shelter that serve as a community centre and evacuation facility. There is a GAD led DRR committee in the village and a youth group.

The respondents in the village focused on the need for more knowledge on disasters and disaster management, strong shelters and other infrastructure, better water supplies, improved and more accurate information and communication (for early warning), and provision of accessories such as boats and farming and fishing tools.

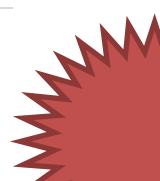
Let Pan Kone Village

Seven people were surveyed in Let Pan Kone.

Let Pan Kone has a current population of 298 people over 83 households. Before Nargis the population was around 750 but 650 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar and Kayin, with a mixture of Buddhists and Christians. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 4 miles to the town that takes 3 hours to reach by boat in dry season and 3.5 hours by boat in rainy season. There are two drinking water ponds and 4 ponds for bathing in the village. 25% of the population owns a radio, only 2 households have a phone, and only 2 houses have a generator in the village. Early warning messages are generally passed through the village by word of mouth, or through a loudspeaker. There is no health centre or school but there is a monastery and a UNDP office that serve as a community centre and evacuation facility.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, a school, improved and more accurate communication, more training on disasters and disaster management and provision of accessories such as boats and farming and fishing tools.



Myin Ka Kone Village

Eight people were surveyed in Myin Ka Kone.

Myin Ka Kone has a current population of 270 people over 67 households. Before Nargis the population was around 308 but 252 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar and Kayin, with mostly Buddhists. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 13 miles to the town that takes 2 hours to reach by motorcycle in dry season and 4 hours by boat in rainy season. There are two drinking water ponds and 1 for bathing in the village. 60% of the population owns a radio, less than 1% has a phone, and only 4% has access to electricity in the village. Early warning messages are generally passed through the village by word of mouth, the radio or through a loudspeaker. There is no health centre or school but there is a monastery and a Buddhist ordination hall that serve as a community centre and evacuation facility. There is a DRR Committee (for rescue) and a woman's group in the village. Some activities have been done on CBDRM.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, a school, improved and more accurate communication, more training on disasters and disaster management and provision of accessories such as boats and farming and fishing tools.

Shwe Kyun Thar Village

Eight people were surveyed in Shwe Kyun Thar.

Shwe Kyun Thar has a current population of 677 people over 213 households. Before Nargis the population was around 1200 but 800 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar and Kayin, with a mixture of Buddhists and Christians. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 2 hours from town by boat in dry season and 2.5 hours by boat in rainy season. There are three drinking water ponds and 5 ponds for bathing in the village. 65% of the population owns a radio, only 3 households have a phone, and 4% have access to electricity in the village. Early warning messages are generally passed through the village by word of mouth, or through a loudspeaker. There is no health centre but there is one school, a monastery and a warehouse that serve as a community centre and evacuation facility. There is an administration committee, fire brigade committee, a health assistant group and a women affairs association in the village, as well as a White Heart clan working on health and social affairs.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, improved and more accurate communication, more training on disasters and disaster management and provision of accessories such as boats and farming and fishing tools.



Zin Pyun Kyun Village

Five people were surveyed in Zin Pyun Kyun.

Zin Pyun Kyun has a current population of 478 people over 91 households. Before Nargis the population was around 324 but 300 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar and Kayin, but mostly Buddhists. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 3 hours from town by boat in dry season and 3.5 hours by boat in rainy season. There is one drinking water pond, 1 pond for bathing and one rain water collection tank in the village. 70% of the population owns a radio, only 3 households have a CDMA phone, and there are only 2 generators in the village. Early warning messages are generally passed through the village by word of mouth, or through a loudspeaker, through the early warning committee. There is no health centre but there is one school, a monastery and a shelter that serve as a community centre and evacuation facility. There is an early warning committee, food supply committee and a first aid committee.

The respondents in the village mentioned the need for a strong shelter nearer to the village and other infrastructure, improved and more accurate communication, more training on disasters and disaster management and provision of accessories such as boats and farming and fishing tools.

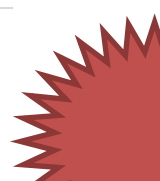
Tha Mae Chaung Village

Nine people were surveyed in Tha Mae Chaung.

Tha Mae Chaung has a current population of 308 people over 101 households. Before Nargis the population was around 470 but 360 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar Buddhists. The majority of the population engage in casual labour and agriculture and the rest in trading or fishing.

It is 3 hours from town by boat in dry and rainy seasons. There are three drinking water wells for water supply in the village. 99% of the population owns a radio, 2 households have a CDMA phone, and some houses have a generator in the village. Early warning messages are generally passed through the village by word of mouth, or through a hand or loudspeaker. There is no health centre or school but there is a monastery and a chapel that serve as a community centre and evacuation facility. There is a Village Development Committee in the village, supported by a social group.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, better health facilities, improved and more accurate communication, more training on disasters and disaster management and provision of accessories such as boats and farming and fishing tools.



Mawlamyinegyun Township

Mawlamyinegyun Township has 1 Town; 13 Wards; 109 Village Tracts; and 708 Villages.

The population is 339,083 MIMU 2009 (224,683 M111, 235; F113,448 in rural areas according to the township profile)

There is no data on electricity or landline. There is 100% radio coverage and 76% own one. Few people if anyone has a landline and less than 2% own a cellphone. Main means of transport is by boat in both dry and rainy seasons; No details were available on poverty rate but income set at 'middle'. Most people engage in farming; fishing; casual labour, trading or as government staff.

Mawlamyinegyun was affected by Nargis. Over 5000 people died or are missing and 150,000 were injured. At least 337 pieces of infrastructure were damaged.

Activities that have been conducted in the township since Nargis include:

Agriculture: Proximity Designs, GRET and METTA

DRR: Save the Children, Church World Service and KMSS

Education: Save the Children, UNICEF and METTA

Governance: UNDP

Health: MERLIN, MRCS & IFRC, IOM, PSI, SCI, UNICEF and UNFPA

Non-agricultural livelihoods: Metta, PACT and Thingaha

Protection: Terre des Hommes Italia

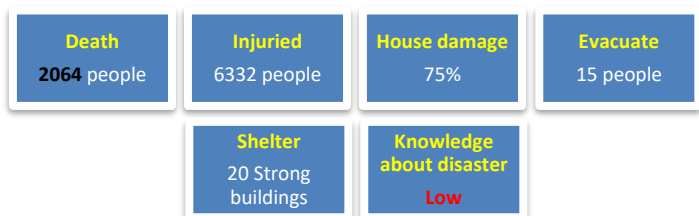
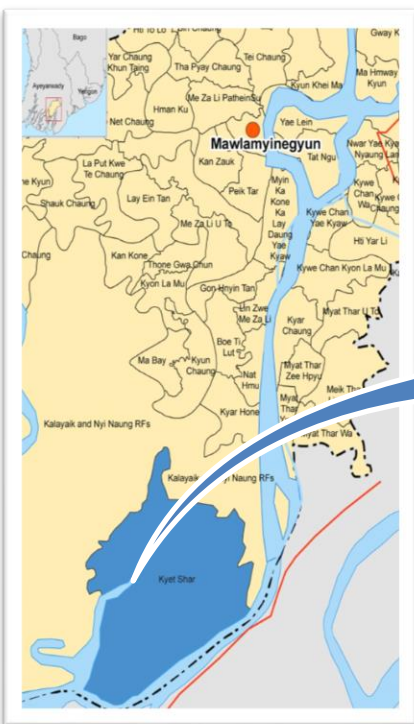
Kyet Shar Village Tract

Population: Total: 7,260: Male: 3,595; Female: 3,665

Number of villages: 15

Damage/Loss in Nargis or Major disaster in 10 years

Mawlamyinegyun- Kyet Shar Village Tract



The respondents in the village mentioned the need for a strong shelter and other infrastructure, better health facilities, improved and more accurate communication, more training on disasters and disaster management and provision of accessories such as boats and farming and fishing tools.

Kyet Shar Village

Eight people were surveyed in Kyet Shar village in Kyet Shar village tract in Mawlamyinegyun.

All except one of those surveyed had moved to the area before 1988, didn't know or said a long time ago. Household numbers ranged from 3 to 7, with most having 3 or 4. All were at least primary school educated and one was secondary school educated. The large majority engage in farming, casual labour or trading or a combination of the three, one in fishing. The respondents ranked their knowledge of disasters and the need to prepare relatively high which is not surprising since they had all experienced Nargis. All said that they already participate in some village activities and all had comments or suggestions for improvements.

Kyet Shar has a current population of 876 people over around 400 households. Before Nargis the population was around 912 but 200 people lost their lives or are missing. Most, if not all infrastructure, communications and houses were destroyed. The village is made up of Bamar and Kayin with mainly Buddhists but some Christians and some Muslims.

It is 2 hours from town by boat in dry season and 3 hours by boat in rainy season. There are 3 wells for drinking and 1 pond for bathing in the village. 70% of the population owns a radio, 9 households have a CDMA/GSM phone, and 55% of the village has electricity in the evenings through a generator. Early warning messages are generally passed through the village by word of mouth, or through a hand or loudspeaker. There is a MRCS office with one health assistant, one school, a monastery and a cyclone shelter that serve as a community centre and evacuation facility. There are also two boats for an emergency. The village has received some support for DRR from IOM and MRCS. There is a social affairs group, a woman affairs association, a fire brigade, and a youth group.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, better health facilities, improved and more accurate communication, more training on disasters and disaster management and provision of accessories such as boats and farming and fishing tools.

Pathein District has 7 Townships. Three townships were selected in Pathein District- Kangyidaunt, Pathein and Ngapudaw.

Kangyidaunt Township

Kangyidaunt Township has 1 Town; 7 Wards; 74 Village Tracts; and 386 Villages.

The population is 165,706 MIMU 2011 (88,725 (M18,217 F70,508) in rural areas according to the township profile)

There is little to no electricity in rural areas. There is 100% radio coverage and around 73% have radios. Few people if anyone has a landline and less than 1% own a cellphone. Main means of transport varies from village tract to village tract in both rainy and dry seasons. No details were available on the poverty rate for any village tract but income was set at 'middle'. Most people engage in farming; fishing; casual labour, trading or as government staff.

The township is prone to flooding yearly. A Township DRR plan has existed since 2012. According to MIMU, some organizations are working in Kangyidaunt, namely: Agriculture- METTA; Education- Caritas-Thailand; Health- Caritas and UNICEF; DRR- HelpAge International; Non-agricultural livelihoods- HelpAge International; WASH- CDA

Kwin Yar (West) Village Tract

Population: Total: 1,396: Male: 670; Female: 726

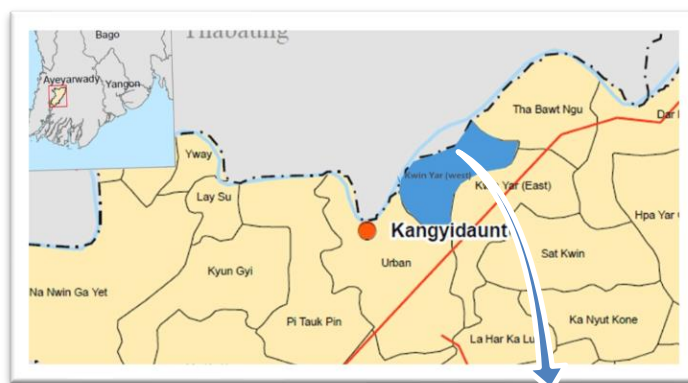
Number of villages: 6

A total of 28 people were surveyed across 5 villages in Kwin Yar (West) village tract in Kangyidaunt township.

All those surveyed had moved to the area before 1987, didn't know or said a long time ago. Household numbers ranged from 1 to 9, with most having 4 or 5. All were at least primary school educated, over 60% were secondary school educated and four advanced further than secondary school. The large majority engage in farming or casual labour or a combination of the two, the rest in trading and fishing. All respondents said they have 'no' or 'little' knowledge of disasters yet all but one person had experienced heavy flooding when a dam broke, suggesting a need to improve knowledge and understanding of disasters and disaster risk management. All demonstrated a little knowledge of risks in the home and community; most either said they already participated in some village activities even if it just meant helping each other or would do more; and all but one had comments or suggestions for improvements.

Damage/Loss in Nargis or Major disaster in 10 years

Kangyidaunt – Kwin Yar (west) Village Tract



Death nil	Injured nil	House damage nil	Evacuate nil
Shelter nil	Knowledge about disaster Low		

All respondents said they have 'no' or 'little' knowledge of disasters yet all but one person had experienced heavy flooding when a dam broke, suggesting a need to improve knowledge and understanding of disasters and disaster risk management.

Villages:

Kone Su Village

Six people were surveyed in Kone Su.

Kone Su has a population of 429 people over 108 households. The village is made up of Bamar and Kayin and predominantly Buddhist. 20% of the population engage in casual labour, 60% in agriculture, 20% in fishing and trading.

It takes one hour by motorcycle in dry season and 1.5 hours in rainy season to the city. There is a handpump and well in the village for water supply. 90% of the population owns a radio and there is 1 CDMA phone in the village. Early warning messages are generally passed through the village by word of mouth or loudspeaker. There is no record of a health facility but there is a monastery and a school that both serve as a community centre and evacuation facility.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding to be a key challenge.

Securing the dam to avoid it breaking was a suggestion from all respondents, while some also made reference to the need to secure roads and transport facilities in the village.

Kyun Char Village

Eight people were surveyed in Kyun Char.

Kyun Char has a population of 765 people over 198 households. The village is made up of Bamar Buddhists. 75% engage in agriculture, the rest in fishing, trading and casual work.

It takes one hour by motorcycle and 2.5 hours to walk to the city in dry season and 1.5 hours by motorcycle in rainy season. There are 22 handpumps and 5 wells in the village for water supply. 80% of the population owns a radio and there are 7 CDMA phones in the village. Early warning messages are generally passed through the village by word of mouth. There is no record of a health facility or school but there is a monastery and chapel that serve as a community centre and evacuation facility.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding to be a key challenge.

Securing the dam to avoid it breaking was a suggestion from all respondents, while some also made reference to the need to secure roads and transport facilities in the village, as well as improved health facilities.

Seik Gyi Village

Six people were surveyed in Seik Gyi.

Seik Gyi has a population of 292 people over 67 households. The village is made up of Bamar and Kayin. 60% engage in agriculture, the rest in fishing, trading and casual work.

It takes 45 minutes to walk to the city in dry season and 1 hour to walk in rainy season. There is a tubewell and 2 ponds in the village for water supply. 80% of the population owns a radio and there are 11 CDMA phones in the village. Early warning messages are generally passed through the village by word of mouth. There is no record of a health facility or school but there is a chapel that serves as a community centre and evacuation facility. NLD, Pyi Khin Phyo and a woman affairs association are all active in the village.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding to be a key challenge.

Securing the dam to avoid it breaking was a suggestion from a lot of respondents, while some also made reference to the need to have improved health facilities and a school.

Kwin Yar Lay Village

Six people were surveyed in Kwin Yar Lay.

Kwin Yar Lay has a population of 132 people over 56 households. The village is made up of Bamar and Kayin. 95% engage in casual work, the rest in fishing, farming and trading.

It takes 45 minutes to walk to the city in dry season and 1 hour to walk in rainy season. There are tubewells and ponds in the village for water supply. 50% of the population owns a radio and there are 2 CDMA phones in the village. Early warning messages are generally passed through the village by word of mouth. There is no record of a health facility or school but there is a monastery that serves as a community centre and evacuation facility.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding and the dam breaking again to be a key challenge.

Securing the dam to avoid it breaking was a suggestion from a lot of respondents, while some also made reference to the need to have improved health facilities, a school, a library and enhanced access to electricity.

Tha Yet Taw Village

Two people were surveyed in Tha Yet Taw.

Tha Yet Taw has a population of 178 people over 78 households. The village is made up of Bamar Buddhists. 60% engage in agriculture, 20% in fishing and 20% in casual work.

It takes 1 hour by motorcycle to the city in dry and rainy seasons. There is a handpump and well in the village for water supply. There is 1 CDMA phone in the village. Early warning messages are generally passed through the village by word of mouth. There is no record of a health facility but there is a monastery and a school that serve as a community centre and evacuation facility.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding and the dam breaking again to be a key challenge. Securing the dam to avoid it breaking was a suggestion from both respondents.

Pathein Township

Pathein Township has 3 Towns; 22 Wards; 60 Village Tracts; and 236 Villages.

The population is 359,292 (MIMU 2009).

There is little to no electricity in rural areas. There is 100% radio coverage and around 73% have radios. Few people if anyone has a landline but some have a cellphone. Main means of transport are by boat and/ or motorcycle in both dry and rainy season. No details were available on the poverty rate for any village tract but income was set at 'middle'. Most people engage in farming; fishing; casual labour, trading or as government staff.

According to the Township profile, there are DRR plans in place in 12 village tracts- World Vision (4); Help Age (8 including Ma Gyi Zin); Emergency response taken care of by MRCS in all village tracts; CBDRM in 12 village tracts- World Vision (4); Help Age (8 including Ma Gyi Zin); there is no information on early warning systems; and Action Aid is operating in 6 village tracts on a gender equality program.

Ma Gyi Zin (Shwethaungyan Sub-Township)

Population: Total: 4,421 Male: 2,191; Female: 2,230

Number of villages: 8

A total of 42 people were surveyed across 7 villages in Ma Gyi Zin (Shwethaungyan Sub-Township) in Pathein township. Although this village tract/ sub-township comes under the administrative function of Pathein township, centred in Pathein Town, it is actually on the coast and is closer in proximity to and easier to access Thabaung town in Thabaung township next door to Pathein township.

All those surveyed had moved to the area before 1991, didn't know or said a long time ago. Household numbers ranged from 1 to 9, with most having 3 to 5. All were at least primary school educated, over 90% were at least secondary school educated and 12% advanced further than secondary school. The large majority engage in farming or casual labour or a combination of the two, the rest in trading and fishing. Most respondents said they have 'little' knowledge of disasters yet all have experienced heavy flooding either yearly and/or a cyclone of 1975, 1982 and 2006, suggesting a need to improve knowledge and understanding of disasters and disaster risk management. All demonstrated a little knowledge of risks in the home and community; many either said they already participated in some village activities even if it just meant helping each other or would do more; and all had comments or suggestions for improvements.

Damage/Loss in Nargis or Major disaster in 10 years

Pathein- Ma Gyi Zin Village Tract



Death 1 people	Injured 11 people	House damage 10%
Evacuate nil	Shelter nil	Knowledge about disaster Low

Most respondents said they have 'little' knowledge of disasters yet all have experienced heavy flooding either yearly and/or a cyclone of 1975, 1982 and 2006, suggesting a need to improve knowledge and understanding of disasters and disaster risk management.

Villages:

Ah Kyee Zin Hpyar Village

Six people were surveyed in Ah Kyee Zin Hpyar.

Ah Kyee Zin Hpyar has a population of 134 people over 39 households. The village is made up of Bamar Buddhists. 80% engage in farming and the rest in casual work and trading.

It takes 11 hours to cycle and take a boat to the city in dry season and 13 hours in rainy season. There is one pond for drinking water and two wells in the village for water supply. 25% of the population owns a radio. Early warning messages are generally passed through the village by word of mouth or radio. There is no record of a health facility but there is a monastery and a primary school that serve as a community centre and evacuation facility.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding to be a key challenge.

The need for a strong shelter, sufficient transportation means and improved health facilities were all cited as priorities for the village.



Gyaing Lel Village

Six people were surveyed in Gyaing Lel.

Gyaing Lel has a population of 96 people. The village is made up of predominantly Bamar Buddhists. 75% engage in farming and the rest in casual work and trading.

It takes 12 hours to cycle and take a boat to the city in dry season and 14 hours in rainy season. There is one well for drinking water and a number of other wells in the village for bathing. 35% of the population owns a radio. Early warning messages are generally passed through the village by word of mouth or radio. There is no record of a health facility but there is a monastery and a primary school that serve as a community centre and evacuation facility. There is a youth group that is very active in the village.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding and high winds to be key challenges.

The need for a strong shelter and improved transportation were all cited as priorities for the village.

Ku Lar Chaung Village

Six people were surveyed in Ku Lar Chaung.

Ku Lar Chaung has a population of 62 people. The village is made up of Bamar and Arakan Buddhists. 80% engage in farming and the rest in casual work and trading.

There is one pond for drinking water and two other wells in the village for bathing. Most of the population owns a radio and there are 7 phones in the village. Early warning messages are generally passed through the village by word of mouth or radio. There is a rural health centre, a monastery, a chapel and a primary school that serve as a community centre and evacuation facility. There are both religious and youth groups that are very active in the village.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding and cyclone to be key challenges.

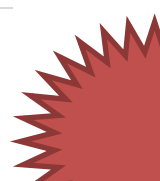
The need for a strong shelter, better water facilities and improved transportation were all cited as priorities for the village.

Ma Gyi Zin Village

Six people were surveyed in Ma Gyi Zin.

Ma Gyi Zin has a population of 690 people. The village is made up of Bamar, Kayin and Arakan Buddhists. Almost half the population engage in casual work and trading and the rest in fishing or farming.

There are 3 wells for drinking water and over 200 other wells in the village for bathing. Most of the population owns a radio and around 30% have access to electricity in the evenings through a generator. Early warning messages are generally passed through the village by word of mouth or loudspeaker. There is a rural health centre, a library, two monasteries and a school that serve as a community centre and evacuation facility. There are religious groups active in the village.



Although there is very little data available on loss and damage in the village from disasters, the village considers flooding, cyclone and strong winds to be key challenges.

The need for a strong shelter, more precise information about the weather and improved transportation were all cited as priorities for the village.

Pauk Hla Kyaing Village

Six people were surveyed in Pauk Hla Kyaing.

Pauk Hla Kyaing has a population of 160 people. The village is made up of Bamar and Arakan Buddhists. Around 70% engage in fishing or other farming activities while the rest engage in casual labour or trading.

There are 10 wells drinking water and a number of other wells in the village for bathing. Most of the population owns a radio, there are thought to be 6 phones in the village and around 30% have access to electricity in the evenings through a generator. Early warning messages are generally passed through the village by word of mouth or loudspeaker. There is no health centre but there are a number of monasteries and schools that serve as a community centre and evacuation facility. There are religious and youth groups active in the village.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding, cyclone and strong winds to be key challenges.

The need for a strong shelter, more precise information about the weather, better health and educational facilities and improved transportation were all cited as priorities for the village.

Pauk Tu Kwin Village

Six people were surveyed in Pauk Tu Kwin.

Pauk Tu Kwin has a population of 244 people. The village is made up of Bamar and Arakan Buddhists. Around 75% engage in fishing or other farming activities while the rest engage in casual labour or trading.

There are a number of wells in the village for both drinking water and bathing. Most of the population owns a radio. Early warning messages are generally passed through the village by word of mouth or loudspeaker. There is no health centre but there is a monastery and a school that serve as a community centre and evacuation facility. There are youth groups, a woman affairs association and the Red Cross team that are active in the village.

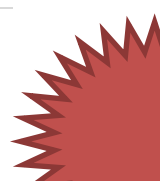
Although there is very little data available on loss and damage in the village from disasters, the village considers flooding and cyclone to be key challenges.

The need for a strong shelter, more precise information about the weather, better health and educational facilities and improved transportation were all cited as priorities for the village.

Than Man Kyaing Village

Six people were surveyed in Than Man Kyaing.

Than Man Kyaing has a population of 120 people. The village is made up of Bamar and Arakan Buddhists. Around 95% engage in fishing or other farming activities while the rest engage in casual labour or trading.



There are 2 wells in the village for drinking water and 5 for bathing. Half the village owns a radio. Early warning messages are generally passed through the village by word of mouth. There is no health centre or school in the village.

Although there is very little data available on loss and damage in the village from disasters, the village considers flooding and cyclone to be key challenges.

The need for a strong shelter, health and educational facilities and improved transportation were all cited as priorities for the village.

Ngapudaw Township

Ngapudaw Township has 3 Towns; 7 Wards; 83 Village Tracts; and 412 Villages.

The population is 343,343 (MIMU 2009).

There is approximately 45% electricity coverage. There is 100% radio coverage and 70% own one. Few people if anyone has a landline and less than 1% own a cellphone. Main means of transport is by boat in both dry and rainy seasons. Poverty rate was recorded as 35% and income set at 'middle'. Most people engage in farming; fishing; casual labour, trading or as government staff.

Ngapudaw was affected by Nargis. 5,348 people died and 435 were injured. 80% of houses and 75% of other infrastructure were destroyed. A township DRR plan was devised in 2008, that should cover emergency response, early warning and CBDRM. There are 15 cyclone shelters in the township, but no information was available on stockpiles, or existing materials, relating to CBDRM or HRD.

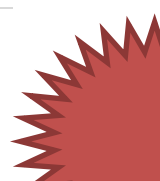
Chaung Wa (Hainggyikyun Sub-township)

Population figures not available for Chaung Wa

Number of villages: 6 Villages

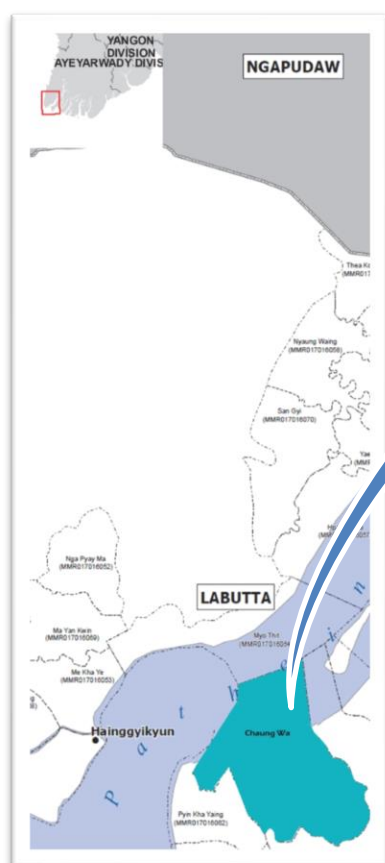
A total of 39 people were surveyed across 6 villages in Chaung Wa (Hainggyikyun Sub-township) in Ngapudaw township.

All except two of those surveyed had moved to the area before 2008, didn't know or said a long time ago. Household numbers ranged from 2 to 7, with most having 3, 4 or 5. All were at least primary school educated, almost 80% were at least secondary school educated and 21% advanced further than secondary school. The large majority engage in farming, fishing or casual labour or a combination of the three, the rest in trading. Most respondents said they have 'little' knowledge of disasters yet all were affected by Nargis, suggesting a need to improve knowledge and understanding of disasters and disaster risk management. All demonstrated a little knowledge of risks in the home and community; most either said they already participated in some village activities even if it just meant helping each other or would do more; and all had comments or suggestions for improvements.



Damage/Loss in Nargis or Major disaster in 10 years

Ngapudaw – Chaung Wa village tract



Death 400	Injured 300	House damage 75	Evacuate nil
	Shelter 7	Knowledge about disaster low	

Most respondents said they have 'little' knowledge of disasters yet all were affected by Nargis, suggesting a need to improve knowledge and understanding of disasters and disaster risk management.

Villages:

Chaung Wa Village

Six people were surveyed in Chaung Wa.

Chaung Wa has a current population of 768 people over 200 households. 15 people lost their lives or are missing from Cyclone Nargis. Most of infrastructure, communications and houses were destroyed. The village is made up of Bamar Buddhists. 70% engage in fishing or farming and the rest in casual labour and trading.

It is approximately 8 hours to the city in dry season and 9 hours in rainy season. There are several handpumps, ponds for drinking, and wells for water supply in the village. 80% of the population owns a radio, 50 households have a CDMA phone, 60% have access to electricity in the evening from generators in the village. Early warning messages are generally passed through a loudspeaker. There is one rural health centre, one school and two monasteries serve as a community centre and evacuation facility. There is a DRR Committee and plan, a social affairs committee, health assistant groups, and two religious groups in the village. Some agencies have done some activities in this village.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, improved transportation and provision of accessories such as boats.

Gway Tauk Gyi Village

Seven people were surveyed in Gway Tauk Gyi.

Gway Tauk Gyi has a current population of 500 over around 30 households. It is thought that around 400 people lost their lives or are missing from Cyclone Nargis. Most of infrastructure, communications and houses were destroyed. The village is made up predominantly of Bamar Buddhists. 95% engage in fishing, farming and casual labour and 5% in trading.

It is approximately 8 hours by boat to the town in both dry and rainy seasons. There are some ponds for water supply in the village but it is not for drinking. 50% of the population owns a radio and a very large number of households are thought to have a cellphone. No information was given on early warning messages. There is no health centre, but there is one school and a monastery that serve as a community centre and evacuation facility. Some agencies have done some activities in this village.

The respondents in the village mentioned the need for a strong shelter and other infrastructure and improved transportation for the village.

Kan Seik Village

Seven people were surveyed in Kan Seik.

Kan Seik has a current population of 271 over around 74 households. It is thought that around 22 people lost their lives or are missing from Cyclone Nargis. Most of infrastructure, communications and houses were destroyed. The village is made up predominantly of Bamar Buddhists. 70% engage in fishing, farming and casual labour and the rest in trading.

It is approximately 1 hour by boat to the town in dry season and 2 hours by boat in rainy season. There are some ponds and other water sources in the village. 90% of the population owns a radio and around 4 households are thought to own a cellphone. Early warning messages are generally passed through a loudspeaker. There is no health centre, but there is one school and a monastery that serve as a community centre and evacuation facility. Some agencies have done some activities in this village.

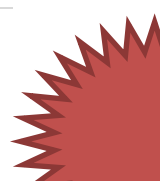
The respondents in the village mentioned the need for a strong shelter and other infrastructure, better health facilities and improved transportation for the village.

Kyin Kaw Village

Six people were surveyed in Kyin Kaw.

Kyin Kaw has a current population of 346 people over 86 households. It is thought that around 70 people lost their lives or are missing from Cyclone Nargis. Most of infrastructure, communications and houses were destroyed. The village is made up predominantly of Bamar Buddhists. 70% engage in fishing, farming and casual labour and the rest in trading.

It is approximately 7 hours by boat to the town in both dry and rainy seasons. There are thought to be around six wells for water in the village. 90% of the population owns a radio and around 3 households are thought to own a cellphone. Early warning messages are generally passed through a loudspeaker. There is no health centre, but there is one school and a monastery that serve as a community centre and evacuation facility. Some agencies have done some activities in this village.



The respondents in the village mentioned the need for a strong shelter and other infrastructure, better access to drinking water and improved transportation for the village.

Tha Pyay Ngu Village

Six people were surveyed in Tha Pyay Ngu.

Tha Pyay Ngu has a current population of 979 people over 297 households. Few people lost their lives or are missing from Cyclone Nargis but a lot of infrastructure, communications and houses were destroyed. The village is made up predominantly of Bamar Buddhists, with some other ethnic groups and religions. 80% engage in fishing, farming and casual labour and the rest in trading.

It is approximately 10 hours by boat to the town in both dry and rainy seasons. There are thought to be around 5 wells and water collection tanks in the village. 75% of the population owns a radio and around 6 households are thought to own a cellphone. Early warning messages are generally passed through a loudspeaker and by word of mouth. There is no health centre, but there is one school, a shelter and a monastery that serve as a community centre and evacuation facility. Some agencies have done some activities in this village. There is an administration department; a transportation group; a food security group; a health assistant group; village guard group; and social welfare association group in the village.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, better access to drinking water and improved transportation for the village.

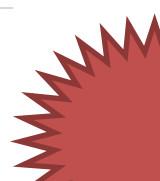
Tha Hmeit Hpyu Village

Seven people were surveyed in Tha Hmeit Hpyu.

Tha Hmeit Hpyu has a current population of 243 people over 61 households. Around 70 people lost their lives or are missing from Cyclone Nargis and most of the infrastructure, communications and houses were destroyed. The village is made up predominantly of Bamar Buddhists. 80% engage in fishing, farming and casual labour and the rest in trading.

It is approximately 10 hours by boat to the town in both dry and rainy seasons. There are thought to be around 5 ponds and water collection tanks in the village. 60% of the population owns a radio and around 2 households are thought to own a cellphone. Early warning messages are generally passed through a loudspeaker and by word of mouth. There is no health centre, but there is one school (that is thought to be a strong building) that serves as a community centre and evacuation facility. Some agencies have done some activities in this village.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, better access to drinking water and health services and improved transportation for the village.



Pyapon District has 4 Townships. Three townships were selected in Pyapon District- Bogale, Pyapon and Dedaye Town.

Bogale Township

Bogale Township has 1 Town; 10 Wards; 71 Village Tracts; and 589 Villages.

According to the General Administration Department, the population is 353,866 (compared with 349,427 MIMU 2009). This is broken down as follows:

Male 177,124; Female 177,743

Above 18 – 217,574

Under 18 – 137,293

Electricity coverage varies from village tract to village tract with a mixture of solar energy and generator. Cellphone ownership also varies from village tract to village tract from between 1% to 15%. There is 100% coverage for radio with 60% owning one. Means of transport dry season included all modes of transport but in rain season, some village tracts can only be accessed by boat while others can be accessed by vehicles and motorcycles. No details were available on poverty rate but income set at 'middle'. Most people engage in farming; fishing; casual labour, trading or as government staff.

Bogale was affected by Nargis. The total number of deaths/ missing was recorded as 37,852 by GAD. All villages tracts are supposed to have DRR Plan at township level. Emergency plans for all village tract are led by MRCS.

DRR Plans have been designed for 26 village tracts by a number of agencies (SEEDs 6; UNDP 14; LWF 3; Care 1; Caritas Thailand 1; Ar Yone Oo 2; Sopyar 1; Myanmar's Heart Development Org 1). The same organizations do CDRM and HRD and have existing materials- except for Daunt Gyi- Care for CDRM; ADRA and UNICEF for HRD. Early warning and evacuation drills taken care of by the Township DRR Committee. At least 1 shelter exists in 39 village tracts (15 in Daunt Gyi (3 shelters and 12 school shelters with capacity for 80-1000 people). Stockpiles were only recorded for Daunt Gyi (Food, Medicine, Firewood, First Aid Kit, Knife, Rope, Torchlight and Radio Etc)

Daunt Gyi Village Tract

Population figures not available for Daunt Gyi village tract

Number of villages: 27

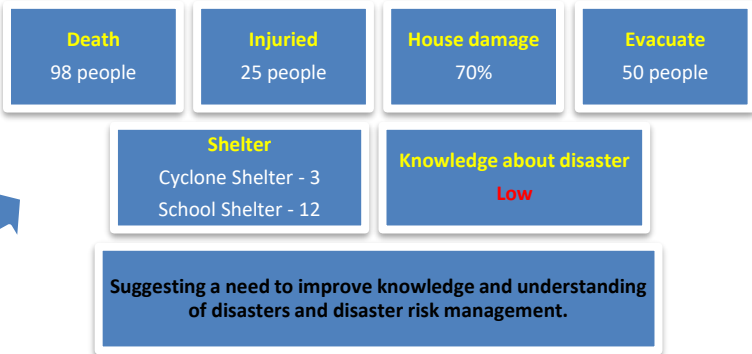
A total of 38 people were surveyed across 8 villages in Daunt Gyi village tract in Bogale township.

All those surveyed had moved to the area before 2000, didn't know or said a long time ago. Household numbers ranged from 2 to 8, with most having 2 or 3. All were at least primary school educated, almost 90% were at least secondary school educated and 26% advanced further than secondary school. The large majority engage in farming or casual labour or a combination of the two, the rest in fishing or trading. Most respondents said they have 'no' or 'little' knowledge of disasters yet all were affected either by Nargis or suffered strong winds where houses were destroyed, suggesting a need to improve knowledge and understanding of disasters and disaster risk management. All demonstrated a little knowledge of risks in the

home and community; most either said they already participated in some village activities even if it just meant helping each other or would do more; and all had comments or suggestions for improvements.

Damage/Loss in Nargis or Major disaster in 10 years

Bogalay- Daunt Gyi Village Tract



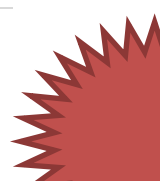
Villages:

Daunt Gyi Village

Six people were surveyed in Daunt Gyi.

Daunt Gyi has a current population of 750 people over 158 households. While two people lost their lives or are missing from Cyclone Nargis, most of the infrastructure, communications and houses were destroyed. Additionally mice and other pests destroyed farmland following Nargis. The village is made up of Bamar and Kayin with a mixture of Buddhists and Christians. 90% engage in fishing, farming and casual labour and the rest in trading.

It is approximately 3 hours by boat to the town in both dry and rainy seasons. There are thought to be around 4 ponds in the village. 35% of the population owns a radio and around 8 households are thought to own a cellphone. 7 households are thought to have a generator and 20 households solar electricity. Early warning messages are generally passed through the radio and by word of mouth. There is a rural health centre, one school, several barns, a monastery and a church that serve as a community centre and evacuation facility. Some agencies have done some activities in this village.



The respondents in the village mentioned the need for a strong shelter and other infrastructure, better access to drinking water, electricity and health services, more training on disasters and disaster management and improved transportation for the village.

Kan Su Village

Three people were surveyed in Kan Su.

Kan Su has a current population of 455 people over 102 households. A lot of the infrastructure, communications and houses were destroyed in Nargis. Additionally mice and other pests destroyed farmland following the cyclone. The village is made up of Bamar and Kayin with a mixture of Buddhists and Christians. 90% engage in fishing, farming and casual labour and the rest in trading.

It is approximately 4 hours by boat to the town in dry season and 5 hours in rainy season. There are thought to be around 3 ponds in the village. 80% of the population owns a radio and only 1 household owns a cellphone. 9% of the population is thought to have access to electricity. Early warning messages are generally passed through the radio, handspeaker and by word of mouth. There is no rural health centre or school but there is a monastery and a church that serve as a community centre and evacuation facility. Some agencies have done some activities in this village. There are committees for DRR and health in the village.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, better access to drinking water, electricity and health services and improved transportation for the village.

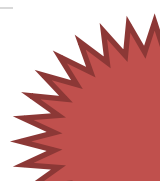
Kat Tha Hmyin Sar Hpyu Village

Six people were surveyed in Kat Tha Hmyin Sar Hpyu.

Kat Tha Hmyin Sar Hpyu has a current population of 1198 people over 205 households. There is no record of deaths but a lot of the infrastructure, communications and houses were destroyed in Nargis. Additionally mice and other pests destroyed farmland following the cyclone. The village is made up of Kayin Christians. 90% engage in fishing, farming and casual labour and the rest in trading.

It is approximately 4 hours by boat to the town in dry season and 5 hours in rainy season. There are thought to be around 8 ponds in the village (1 for drinking). 95% of the population owns a radio and 2 households own a cellphone. 5 households are thought to have a generator. Early warning messages are generally passed through a loudspeaker from the church and youth groups and by word of mouth. There is one rural health centre, two schools, a church and a shelter that serve as a community centre and evacuation facility. Some agencies have done some activities in this village. There are youth; health assistant; and farmers groups in the village, as well as a social affairs association.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, more training on disasters and disaster management, better access to drinking water, electricity and health services and improved transportation for the village.



Kwin Bone = Tha Mar San Da Village

Five people were surveyed in Kwin Bone.

Kwin Bone has a current population of 883 people over 163 households. There were around 46 deaths but a lot of the infrastructure, communications and houses were destroyed in Nargis. Additionally mice and other pests destroyed farmland following the cyclone. The village is made up of a mixture of Kayin and Bamar and Buddhists and Christians. 90% engage in fishing, farming and casual labour and the rest in trading.

It is approximately 3 hours by boat to the town in dry season and 4 hours in rainy season. There are thought to be around 5 ponds in the village (3 for drinking). Some people own a radio and 8 households own a cellphone. 1 household is thought to have a generator and 4 are thought to have solar power. Early warning messages are generally passed through a loudspeaker and by word of mouth. There is no rural health centre or shelter but there are two churches, a chapel and one school that serve as a community centre and evacuation facility. Some agencies have done some activities in this village. There is a DRR and School committee and various youth groups.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, more training on disasters and disaster management, better access to drinking water, electricity and health services and improved transportation for the village.

Ngwe Nyi Naung Village

Three people were surveyed in Ngwe Nyi Naung.

Ngwe Nyi Naung has a current population of 996 people over 95 households. There were around 32 deaths but a lot of the infrastructure, communications and houses were destroyed in Nargis. Additionally mice and other pests destroyed farmland following the cyclone. The village is made up of a mixture of Kayin and Bamar and Buddhists and Christians. 90% engage in fishing, farming and casual labour and the rest in trading.

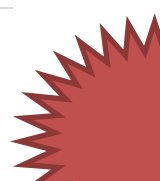
It is approximately 4 hours by boat to the town in dry season and 5 hours in rainy season. There are thought to be around 7 water sources in the village (all for drinking). 80% of the population own a radio and 6 households are thought to own a cellphone. 15 households are thought to have solar power. Early warning messages are generally passed through a radio and by word of mouth. There is no rural health centre or shelter but there is one chapel, one monastery and one school that serve as a community centre and evacuation facility. Some agencies have done some activities in this village. There is a DRR committee but it is considered weak and various youth groups in the village.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, more training on disasters and disaster management, better access to drinking water, electricity and health services and improved transportation for the village.

Kat Tha Baung (New Village)

Five people were surveyed in Kat Tha Baung (New Village).

Kat Tha Baung (New Village) has a current population of 1062 people over 212 households. Although only 7 deaths, a lot of the infrastructure, communications and houses were destroyed in Nargis. The village is made up of a mixture of Kayin and Bamar and Buddhists and Christians. 95% engage in fishing, farming and/ or casual labour.



It is approximately 3 hours by boat in dry season and 3.5 hours by boat in rainy season to the town. There are thought to be around 4 water sources in the village. 70% of the population own a radio and 45% of households are thought to have access to electricity through a generator in the evenings. Early warning messages are generally passed through a radio and by word of mouth. There is no rural health centre but there are 2 health assistants, one church, one monastery and one school that serve as a community centre and evacuation facility. Some agencies have done some activities in this village. There is a DRR committee in operation.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, more training on disasters and disaster management, better access to drinking water, electricity and health services and improved transportation for the village.

Kat Tha Baung (Old Village)

Five people were surveyed in Kat Tha Baung (Old Village).

Kat Tha Baung (Old Village) has a current population of 692 people over 128 households. There were around 45 deaths and a lot of the infrastructure, communications and houses were destroyed in Nargis. The village is made up of a mixture of Kayin and Bamar and Buddhists and Christians. 90% engage in fishing, farming and/ or casual labour.

It is approximately 3 hours by boat to town in dry and rainy seasons. There are thought to be around 3 water sources in the village (one for drinking). 75% of the population own a radio and 30 households are thought to have solar energy. Early warning messages are generally passed through a radio and by word of mouth. There is no rural health centre but there is 1 health assistant, 2 churches and one school that serve as a community centre and evacuation facility. Some agencies have done some activities in this village. There is a DRR committee in operation.

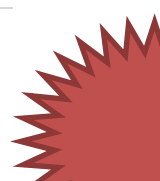
The respondents in the village mentioned the need for a strong shelter and other infrastructure, more training on disasters and disaster management, better access to drinking water, electricity and health services and improved transportation for the village.

U Ni Ah Su Village

Five people were surveyed in U Ni Ah Su.

U Ni Ah Su has a current population of 1372 people over 275 households. Although only one death, a lot of the infrastructure, communications and houses of the village were destroyed in Nargis. Additionally mice and other pests destroyed farmland following the cyclone. The village is made up of a mixture of Kayin and Bamar and Buddhists and Christians. 90% engage in fishing, farming and/ or casual labour.

It is approximately 4 hours by boat to town in dry season and 5 hours in rainy season. There are thought to be around 4 water sources in the village. 60% of the population own a radio and 8 households are thought to have a cellphone. 60% of households are thought to have access to electricity from generators. Early warning messages are generally passed through a radio and by word of mouth. There is no rural health centre but there are 2 health assistants, 2 schools (primary and middle), 4 barns, a church, and a monastery that serve as a community centre and evacuation facility. Some agencies have done some activities in this village. There is a DRR committee and youth groups in operation.



The respondents in the village mentioned the need for a strong shelter and other infrastructure, better access to drinking water, electricity and health services and improved transportation for the village.

Pyapon Township

Pyapon Township has 2 Towns; 23 Wards; 52 Village Tracts; and 211 Villages.

The population is 310,321 MIMU 2009.

No details on electricity or landlines but 1500 cellphones are recorded across all village tracts. There is 100% radio coverage and 50% own one. The main means of transportation is by boat and motorcycles in dry and rainy seasons. Vehicles can access some but not all areas in both seasons. No details were available on poverty rate but income set at 'middle'. Most people engage in farming; fishing; casual labour, trading or as government staff.

Pyapon township was affected by Nargis but no data is available as a township. DRR plans known to be active in 15 village tracts (Seeds 4; Action Aid 5; Plan 1; LWF 4; UNDP 2; Oxfam 3; Action for Social Age 3). These organizations do CBDRM but very little information on materials; Action Aid, Action for Social Age, Oxfam and Plan operate on CBDRM in Daw Nyein. Emergency response and early warnings are taken care of by MRCS in all village tracts. There is no information on evacuation drills. 35 shelters exist across village tracts (26 school shelters; 9 Cyclone shelter- capacity 500). Details of stockpiles include food, firewood, medicine , emergency tool kits etc.

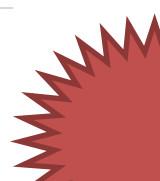
Daw Nyein (Ah Mar Sub-township)

Population figures not available for Daw Nyein (Ah Mar Sub-township)

Number of villages: 8

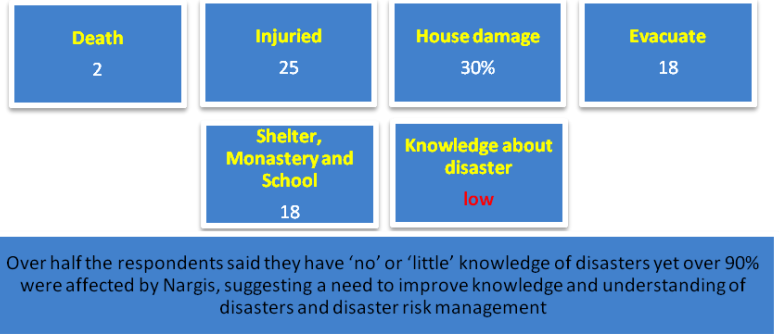
A total of 37 people were surveyed across 7 villages in Daw Nyein (Ah Mar Sub-township) in Pyapon township.

All but two of those surveyed had moved to the area before 2007, didn't know or said a long time ago. Household numbers ranged from 1 to 7, with most having 2. Of those who answered the question (all except 4) were at least primary school educated, almost 60% were at least secondary school educated and 24% who advanced further than secondary school. The large majority engage in trading or casual labour or a combination of the two, the rest in farming or fishing. Over half the respondents said they have 'no' or 'little' knowledge of disasters yet over 90% were affected by Nargis, suggesting a need to improve knowledge and understanding of disasters and disaster risk management. Most demonstrated a little knowledge of risks in the home and community; most either said they already participated in some village activities even if it just meant helping each other or would do more; and most had comments or suggestions for improvements.



Damage/Loss in Nargis or Major disaster in 10 years

Pyapon- Daw Nyein village tract



Villages:

Aung Hlaing Village

Five people were surveyed in Aung Hlaing.

No population figures were available for Aung Hlaing. However, a lot of the infrastructure, communications and houses were destroyed in Nargis. Additionally mice and other pests destroyed farmland following the cyclone. The village is made up of a mixture of Rakhine, Shan and Bamar and majority Buddhists. 85% engage in fishing, farming and casual labour and the rest in trading.

It is approximately 2.5 hours by boat to the town in dry season and 3 hours in rainy season. There are thought to be around 3 water sources in the village (2 for drinking). 50% of the population own a radio and several households are thought to own a cellphone. 10% of the population is thought to have access to free electricity. Early warning messages are generally passed through a handspeaker and by word of mouth. There is no rural health centre or shelter but there is a middle school and one monastery that serve as a community centre and evacuation facility. Some agencies have done some activities in this village. There is a social affairs and youth group in the village, as well as the Red Cross.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, better access to drinking water, electricity and health services and improved transportation for the village.

Ban Dar Pin Village

Five people were surveyed in Ban Dar Pin.

Ban Dar Pin has a current population on 1413 over 300 households. Although the number of deaths is not known, a lot of the infrastructure, communications and houses were destroyed in Nargis. Additionally mice and other pests destroyed farmland following the cyclone. The village is made up of Bamar Buddhists. 97% engage in farming, fishing and casual labour and the rest in trading.

It is approximately 1.5 hours to the town by car and motorcycle in dry season and 6 hours by boat in rainy season. There are thought to be no proper water sources in the village. 45% of the population own a radio and several households are thought to own a cellphone. 25% of the population is thought to have access to electricity in the evenings. Early warning messages are generally passed through a handspeaker and by word of mouth. There is a rural health centre but without a nurse. There are two monasteries and 1 shelter that serve as a community centre and evacuation facility. Teaching is also done at the shelter. Some agencies have done some activities in this village. A social affairs association and Phyu Sin Myitta blood donation group are in operation in the village.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, better access to drinking water, electricity and health services and improved transportation for the village.

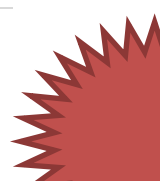
Daw Nyein Village

Six people were surveyed in Daw Nyein.

Daw Nyein has a current population on 6478 over 1461 households. Although the number of deaths is not known, a lot of the infrastructure, communications and houses were destroyed in Nargis. Additionally mice and other pests destroyed farmland following the cyclone. The village is made up of Bamar, Shan and Kayin Buddhists. 97% engage in farming, fishing and casual labour or trading or a combination of all.

It is approximately 3 hours to the town by car and motorcycle in dry season and 4 hours in rainy season. There are thought to be 3 ponds and 1 water tank in the village. 70% of the population own a radio and several households are thought to own a cellphone. 70% of the population is thought to have access to electricity in the evenings. Early warning messages are generally passed through a handspeaker and by word of mouth. There is one hospital and two clinics. There is also one high school, two monasteries and one pagoda that serve as a community centre and evacuation facility. Some agencies have done some activities in this village. A DRR committee is active in the village.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, better access to drinking water, more training on disasters and disaster management and improved transportation for the village.



Ka Man Tar Village

Six people were surveyed in Ka Man Tar.

Ka Man Tar has a current population on 1378 over 314 households. Although the number of deaths is not known, a lot of the infrastructure, communications and houses were destroyed in Nargis. Additionally mice and other pests destroyed farmland following the cyclone. The village is made up of Bamar (and Kayin) Buddhists. 90% engage in farming, fishing and casual labour and the rest in trading.

It is approximately 2.5 hours to the town by car and motorcycle in dry season (5 hours by boat) and 3.5 hours by car and motorcycle (6 hours by boat) in rainy season. There are thought to be 3 wells for drinking water in the village. 50% of the population own a radio and several households are thought to own a cellphone. 6% of the population is thought to have access to electricity in the evenings. Early warning messages are generally passed through a handspeaker and by word of mouth. There is no rural health centre but there are two monasteries and 1 school that serve as a community centre and evacuation facility. Some agencies have done some activities in this village. A social affairs association is in operation in the village.

The respondents in the village mentioned the need for a strong shelter and other infrastructure, better access to drinking water, electricity and health services and improved transportation for the village.

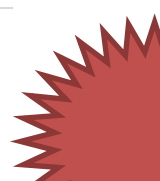
Khar Pyat Village

Five people were surveyed in Khar Pyat.

Khar Pyat has a current population 7466 over 1617 households. Although the number of deaths is not known, a lot of the infrastructure, communications and houses were destroyed in Nargis. Additionally mice and other pests destroyed farmland following the cyclone. The village is made up of Bamar Buddhists. 90% engage in farming, fishing and casual labour and the rest in trading.

It is approximately 3 hours to the town by car and motorcycle in dry season and 4 hours by car and motorcycle in rainy season. There are thought to be 4 wells for drinking water in the village. 80% of the population own a radio and several households are thought to own a cellphone. 60% of the population is thought to have access to electricity in the evenings. Early warning messages are generally passed through a handspeaker and by word of mouth. There is a rural health centre, two monasteries, two schools, two shelters, and one Red Cross office that serve as a community centre and evacuation facility. Some agencies have done some activities in this village. A social affairs association and two youth groups are in operation in the village.

The respondents in the village mentioned the need for more strong shelters and other infrastructure, more training on disasters and disaster management, more teachers, better access to drinking water, electricity and health services and improved transportation for the village.



Pet Pye Village

Five people were surveyed in Pet Pye.

Pet Pye has a current population 2438 over 478 households. Although the number of deaths is not known, a lot of the infrastructure, communications and houses were destroyed in Nargis. Additionally mice and other pests destroyed farmland following the cyclone. The village is made up of Bamar Buddhists. 90% engage in farming, fishing and casual labour and the rest in trading.

It is approximately 3 hours to the town by car and motorcycle in dry season and 4 hours by car and motorcycle in rainy season. All households are thought to have a handpump and there is 1 pond for drinking water in the village. 70% of the population own a radio and several households are thought to own a cellphone (up to 70%). 50% of the population is thought to have access to electricity in the evenings. Early warning messages are generally passed through a handspeaker and by word of mouth. There is no rural health centre but there is one middle school and two monasteries that serve as a community centre and evacuation facility. Some agencies have done some activities in this village. A social affairs association, youth groups and Red Cross are active in the village.

The respondents in the village mentioned the need for strong shelters and other infrastructure, more training on disasters and disaster management, better access to drinking water, electricity and health services and improved transportation for the village.

Tha Yet Pin Seik Village

Five people were surveyed in Tha Yet Pin Seik.

Tha Yet Pin Seik has a current population 1781 over 338 households. Although the number of deaths is not known, a lot of the infrastructure, communications and houses were destroyed in Nargis. Additionally mice and other pests destroyed farmland following the cyclone. The village is made up of Bamar Buddhists. 90% engage in farming, fishing and casual labour and the rest in trading.

It is approximately 2 hours to the town by car and motorcycle in dry season and 3.5 hours by car and motorcycle in rainy season. There is thought to be one water source in the village (not for drinking). 90% of the population own a radio and several households are thought to own a cellphone. Around 15% of the population is thought to have access to electricity in the evenings. Early warning messages are generally passed through a handspeaker and by word of mouth. There is no rural health centre but there is one primary school and 1 monastery that serve as a community centre and evacuation facility. Some agencies have done some activities in this village. A social affairs association and a youth group are active in the village.

The respondents in the village mentioned the need for strong shelters and other infrastructure, more training on disasters and disaster management, better access to drinking water, electricity and health services, more teachers for the school and improved transportation for the village.



Dedaye Township

Dedaye Township has 1 Town; 3 Wards; 93 Village Tracts; and 390 Villages.

The population is 216,959 MIMU 2009.

Dedaye Town (Urban Area)

Population: 17,796

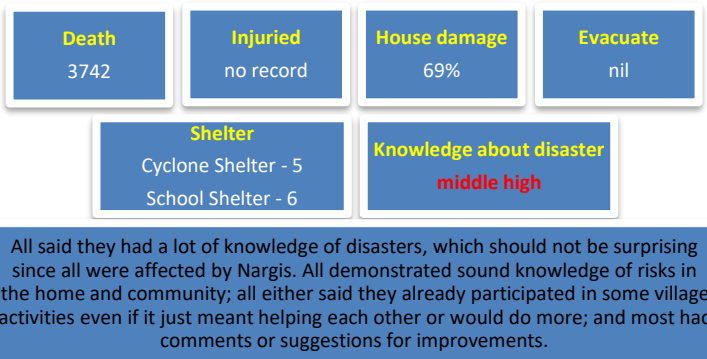
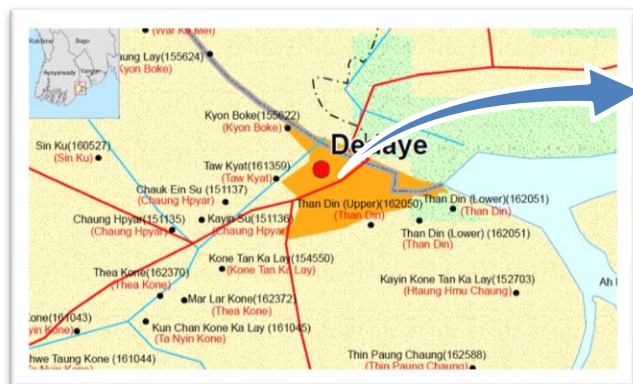
Number of wards: 3

A total of 15 people were surveyed across 3 wards in Dedaye Town in Dedaye township.

All those surveyed had moved to the area before 1985, didn't know or said a long time ago. Household numbers ranged from 2 to 5, with most having 2 or 3. All respondents were at least secondary school educated and nearly 50% advanced further than secondary school. The large majority engage in trading or casual labour or a combination of the two, the rest in farming or fishing. All said they had a lot of knowledge of disasters, which should not be surprising since all were affected by Nargis. All demonstrated sound knowledge of risks in the home and community; all either said they already participated in some village activities even if it just meant helping each other or would do more; and most had comments or suggestions for improvements.

Damage/Loss of Nargis or Major disaster in 10 years

Dedaye - ward (1) ,ward (2) and ward (3)



Wards:

No (1) Ward

Five people were surveyed in Ward 1.

Ward 1 has a population of 4,396 over 957 households. Although few people died, a significant amount of the infrastructure, communications and houses were destroyed in Nargis. The ward is made up of Bamar, Kayin and other ethnic groups, with a mixture of Buddhists, Christians, Muslim and Hindus. Around 90% engage in casual labour and trading and the rest in fishing and farming.

It is approximately 10 minutes to the town on foot. There are thought to be 3 wells for drinking water in the ward. 40% of the population own a radio and several households are thought to own a cellphone. At least 80% of the population have access to electricity through

the government system. Early warning messages are generally passed through a loudspeaker and by word of mouth. There is one clinic, a monastery, a church, a mosque, four primary schools and two shelters that serve as a community centre and evacuation facility. There are also 2 boats for emergencies. Some agencies have done some activities in this ward. There is a DRR committee and plan in place.

The respondents in the village mentioned the need for improved transportation, more training on disasters and disaster management, and more knowledge and accessories for early warning.

No (2) Ward

Five people were surveyed in Ward 2.

Ward 2 has a population of 8,361 over 1916 households. Although few people died, a significant amount of the infrastructure, communications and houses were destroyed in Nargis. The ward is made up of Bamar, Kayin and other ethnic groups, with a mixture of Buddhists, Christians, Muslim and Hindus. Around 90% engage in casual labour and trading and the rest in fishing and farming.

It is approximately 10 minutes to the town on foot. There are thought to be 8 wells for drinking water in the ward. 80% of the population own a radio and several households are thought to own a cellphone. 90% of the population are believed to have access to electricity through the government system. Early warning messages are generally passed through a loudspeaker and by word of mouth. There are several clinics and one hospital, four monasteries, a town hall, four primary schools, 1 nursery and 1 high school that serve as a community centre and evacuation facility. Some agencies have done some activities in this ward. There is a DRR committee and plan in place as well as active youth and religious groups in the ward.

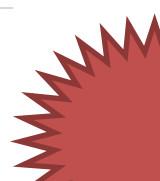
The respondents in the village mentioned the need for a proper shelter, improved transportation, more training on disasters and disaster management, and more knowledge and accessories for early warning.

No (3) Ward

Five people were surveyed in Ward 3.

Ward 3 has a population of 5,039 over 985 households. Although few people died, a significant amount of the infrastructure, communications and houses were destroyed in Nargis. The ward is made up of Bamar and Kayin, with a mixture of Buddhists and Christians. Around 90% engage in casual labour and trading and the rest in fishing and farming.

It is approximately 10 minutes to the town on foot. There are thought to be 8 ponds for drinking water in the ward. 45% of the population own a radio and several households are thought to own a cellphone. 90% of the population are believed to have access to electricity through the government system. Early warning messages are generally passed through a loudspeaker and by word of mouth. There is no health clinic, but there is 1 high school, 1 primary school, 1 shelter, 5 monasteries and 2 chapels that serve as a community centre and evacuation facility. Some agencies have done some activities in this ward. There is a DRR committee and plan in place as well as active youth and religious groups in the ward.



The respondents in the village mentioned the need for a proper shelter, improved transportation, more training on disasters and disaster management, and more knowledge and accessories for early warning.

Conclusion

The overall survey results revealed that while not all of the villages and wards were affected by Nargis, all of them have suffered a disaster of some description, be it a different cyclone, landslides or flooding and often yearly because of persistent flooding. However, despite this, the large majority of the respondents, especially in rural areas demonstrated little or no knowledge of disaster and disaster management, suggesting gaps across the board and a need for more or improved awareness, training and support. It needs to be noted and is reflected in the findings that the vast majority of support and assistance to date in the Delta has been given to those townships and village tracts affected by Nargis, which is perhaps not unexpected. However, in addition to a variety of other disasters that most if not all townships in the Delta have experienced, there are other townships, notably Pathein township that have experienced other cyclones prior to 2008, reinforcing the fact that the path that Nargis took could have been very different and this should be acknowledged. Those who live in areas on the coast also expressed their heightened risk and vulnerability.

Education levels across townships were reasonably consistent, with the exception of Dedaye Town (urban area) where the level was markedly higher. Not surprisingly since the majority of people in the survey scope reside in rural areas, the main source of income comes from farming and/or fishing, often combined with casual labour and trading.

The survey results also revealed that all communities, even those who have had or currently have disaster related support, either from the government or external organizations recognize key areas that need strengthening, suggesting no community interviewed has comprehensive coverage of support, capacity or resources to manage the risks they are exposed to. Across the board, the focus was largely on infrastructure needs; more awareness, training and support required on disasters and disaster management; need for improved communication mechanisms and accuracy of information; need for improved health and education facilities; need for enhanced access to safe water and electricity; and since many of the villages are hard to access, need for much improved transportation.



References

- ⁱ CIA Factbook (2012) "Burma". Available online: <https://www.cia.gov/library/publications/the-world-factbook/geos/bm.html>.
- ⁱⁱ Myanmar Ministry of Hotels and Tourism (2012) "Myanmar Facts". Available online: www.myanmar.gov.mm/ministry/hotel/fact/race.htm
- ⁱⁱⁱ UN OCHA: Natural Disasters 2002-2012
- ^{iv} PreventionWeb (2011) "Myanmar – Disaster Statistics". Accessed online: <http://www.preventionweb.net/english/countries/statistics/?cid=118>
- ^v Maplecroft News (15/08/2012): Economies of Bangladesh, Philippines, Myanmar, India, Viet Nam at highest risk from natural hazards – Risk Atlas
- ^{vi} UNICEF (2009) "One year after Cyclone Nargis: Myanmar on hard road to recovery". Available online: http://www.unicef.org/media/media_49541.html
- ^{vii} UNDP (2009) "Myanmar, Cyclone Nargis: 2 Years On" [picture] Available online: http://unic.un.org/imucms/userfiles/yangon/file/Nargis_2_Years_On_Snapshot.pdf
- ^{viii} Union of Myanmar (2009) "Township Health Profile". MIMU data tracking files, 30/9/12
- ^{ix} Central Statistical Organisation, Department of Agricultural Planning (CSO/DAP) (2011) "Myanmar Agricultural Statistics (1997-98 to 2009-2010)" MIMU data tracking files, 30/9/12
- ^x UNDP, UNICEF, SIDA and MNP (2011) "Integrated Household Living Conditions Survey in Myanmar, Poverty Profile" Available online http://www.mm.undp.org/ihlca/01_Poverty_Profile/index.html
- ^{xi} Tha, HpyoWai (2012) "Fierce flooding disrupts delta life" The Irrawaddy. Available online: www.irrawaddy.org/archives/12235
- ^{xii} Ministry of Home Affairs (MOHA) (2011) "WVL, Wards, Villages, Town, Townships and Districts in State/Region". MIMU data tracking files, 30/9/12

