Myanmar Baseline Assessment Country Report

Program for Strengthening Capacity of Governments, Local Humanitarian Organizations and the Private Sector on Preparedness for Emergency Response in Asia
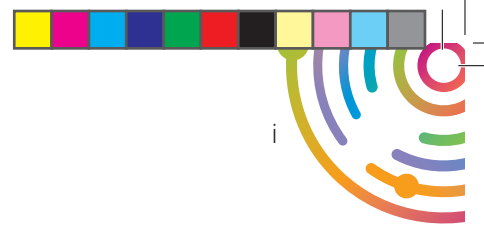
ADPC
September 2018

Acknowledgements

Foreword

The capacity of government, local humanitarian organizations and private sector on preparedness for emergency response is crucial in every country. This Baseline Assessment Country Report has been conducted in 16 districts of the nine most vulnerable regions and states when it comes to natural hazards in Myanmar. The findings and recommendations will be helpful in strengthening the capacity of local humanitarian actors to prepare for and respond to disaster emergencies.

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Director
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Contents

Acronyms and Abbreviations

ADPC	Asian Disaster Preparedness Center
APP	Asian Preparedness Partnership
CCA	Climate Change Adaptation
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CHS	Core Humanitarian Standards
CCCM	Camp Coordination and Camp Management
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EOC	Emergency Operation Centre
FA	First Aid
FDI	Foreign Direct Investment
FGD	Focus Group Discussion
GAR	Global Assessment Report
GDI	Gender Development Index
GDP	Gross Domestic Product
GNI	Gross National Income
HAP	Humanitarian Accountability Partnership
HCT	Humanitarian Country Team
HDI	Human Development Index
IASC	Inter-Agency Standing Committee
ICT	Information and Communication Technology
IDPs	Internally Displaced Persons
IFRC	International Federation of the Red Cross
IMF	International Monetary Fund
INGO	International Non-Government Organization
IOM	International Organization for Migration
KII	Key Informant Interview
LNGO	Local Non-Government Organization
MDG	Millennium Development Goal
M & E	Monitoring and Evaluation
MSWRRD	Ministry of Social Welfare and Relief and Resettlement
OCHA	Office for the Coordination of Humanitarian Affairs
RRD	Relief and Resettlement Department
SDG	Sustainable Development Goal
S & R	Search and Rescue
SFDRR	Sendai Framework for Disaster Risk Reduction
SOP	Standard Operation Procedures
UN	United Nations
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNISDR	United Nations International Strategy for Disaster Reduction
UNICEF	United Nations Children's Fund
WFP	World Food Programme
WHO	World Health Organization

Executive Summary

The Asian Disaster Preparedness Center (ADPC) in collaboration with the Bill and Melinda Gates Foundation has launched the program "*Strengthening Capacity of Government, Local Humanitarian Organizations, the Private Sector and the Media on Preparedness for Response*" in six Asian countries: Cambodia, Myanmar, Nepal, Pakistan, the Philippines and Sri Lanka. Each country has undertaken a Country Specific Baseline Survey to understand the current context and engagement of government entities, local NGOs/civil society organizations, international organizations, academia and the media in emergency response. Baseline Survey will serve as a benchmark to inform decisions on interventions to be carried out. It will also be useful to assess the impact of the interventions at the end of the program and is, therefore, an important component for monitoring and evaluation. Baseline data will be used to define roadmaps towards strengthening emergency response capacities of local actors at country level which will be aggregated at the regional level for the program.

The baseline survey mainly focused on key local actors in emergency response in Myanmar, including government organizations, local non-government organizations, and private sector entities. Following sections provide key findings from the survey against the above three sectors which were the basis to develop the roadmap for the country in order to strengthen the emergency response capacities of local actors.

This report aims to summarize the findings from the sample baseline survey in Myanmar in order to understand key areas for strengthening identified capacities for a more effective humanitarian response.

The report presents a snapshot of the country profile inclusive of the hazard and disaster profiles, policy, legal and institutional frameworks for disaster risk management and prevalent vulnerability. It details the findings of the survey, Focus Group Discussions and Key Informant Interviews. The Myanmar Country office worked with a prominent local NGO for collaboration and cooperation over the process of this baseline survey. Although a standard pre-designed questionnaire for the region was used in all six countries in English, this questionnaire was translated into Myanmar which is the official language in Myanmar. Translated questionnaires were also presented at the inception workshop on May 16, 2017 in Yangon, where terminology and word usage were discussed and edited based on feedback from participants. Members of the government, academic institutions, the UN, INGOs, LNGOs, CSOs, and the media attended the inception workshop.

The findings have revealed several areas of concern. These are gaps in existing capacity, the low level of coordination among stakeholders, and the need for augmentation of knowledge sharing. The following recommendations were developed based on the study findings:

› Conduct training on Humanitarian Coordination for stakeholders

› Implement the SFDRR call for National and Local Coordinating Platforms

› Establish a national to local comprehensive Emergency Response Database

› Enhance capacity building for emergency response of all stakeholders

› Enhance the capacity of stakeholders, in the compilation of knowledge products.

In addition to recommendations, an M & E strategy for implementing these recommendations is also provided in this report.

Myanmar Baseline Assessment Country Report

Preamble

The program on *Strengthening Capacity of Government, Local Humanitarian Organizations, and the Private Sector on Preparedness for Response* is being implemented by ADPC in collaboration with the Bill and Melinda Gates Foundation (BMGF) to improve emergency response preparedness in six Asian countries: Cambodia, Myanmar, Nepal, Pakistan, the Philippines, and Sri Lanka. Selection of the countries was based on the extent of each country's current vulnerability and risk.

The objectives of the program are as follows:

› To improve humanitarian leadership and coordination through systematic and local institutional strengthening

› To attain better coordination of humanitarian actions by enhancing humanitarian information management and knowledge exchange

› To establish more effective partnerships among national and local humanitarian actors

The goal is to improve the collaboration and south-south knowledge and information exchange between participating countries leading to the formation of the **Asian Preparedness Partnership** (APP) in the region.

Outline of the Baseline Survey

The Baseline Survey has the following objectives:

› To map the status of humanitarian capacity for managing humanitarian crises at the institutional, organizational, strategical, and operational levels and provide a baseline for tracking progress and impacts of the program

› To establish a strategic roadmap for strengthening the humanitarian institutional leadership capacity based on country needs to streamline the responses and early recovery

The Methodology for the Baseline Survey

For this stakeholder assessment, nine out of the 15 states and regions[1] in Myanmar were selected based on the vulnerability to natural hazards. Sixteen districts from those nine states and regions were targeted for the survey based on their disaster history.

The sample included the following:

› Local Government Authorities - 63

› Local NGOs - 70

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1   see explanation under administrative system

> Private Sector Organizations - 30

> Academic Institutions - 19

> Media - 4

> INGOs - 17

> UN Organizations - 5

The instruments used for data collection were as follows:

> Literature Review

> 137 Structured Questionnaires

> 208 Key Informant Interviews (KIIs)

Myanmar language was used based on the preference of the interviewees. Data analysis was carried out using Survey Monkey.[2] The results were validated at a workshop with participating stakeholders.

Country Overview

The Republic of the Union of Myanmar is located in South East Asia and shares land borders with five countries: India, China, Bangladesh, Thailand, and Lao People's Democratic Republic. The country covers 653,508 square kilometers of land and 23,070 square kilometers of water, making it the 40th largest nation in the world with a total area of 676,578 square kilometers. Myanmar is the second largest country in Southeast Asia. Figure 1 depicts its location relative to its neighbors.
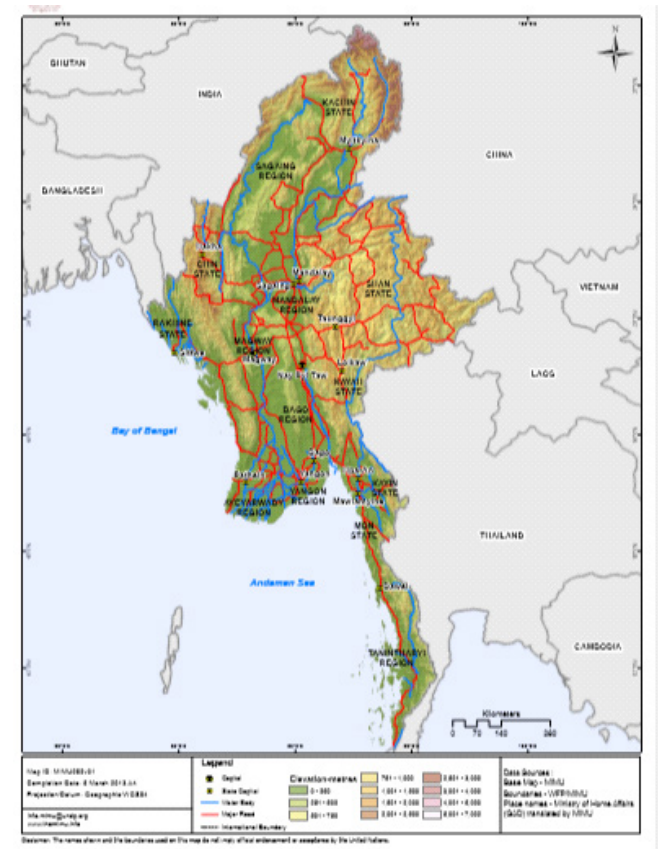
The topography of Myanmar is displayed in Figure 2.

Myanmar's main geographical features can be divided into four categories: highlands in the east, mountains in the west, plains in the central

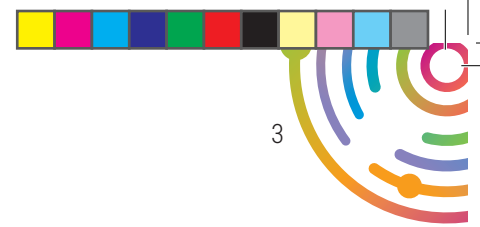Figure   1   Geographic Location of Myanmar

Figure   2   Topography of Myanmar

region, and a continuous coastline of nearly 3000 km extending along the Bay of Bengal and the Andaman Sea.

The four largest rivers are the Ayeyarwady, Thalwin, Chindwin, and Sittaung. Ayeyarwady the country' longest river is the most important commercial waterway in Myanmar with a length of 1238 miles.

Climate

Myanmar has a tropical monsoon climate. The northeast monsoon lasts from November to April, bringing the cooler dry season. The southwest monsoon, which blows off the Indian Ocean and lasts from May to September or October is the hotter wet season.

Differences in altitude within the country and the extent of exposure to the rainy southwest monsoon are responsible for differences of climate within Myanmar. The major climatic zones are depicted in Figure 3. In the lowlands and along the coast, temperatures are hot throughout the year. The weather is hottest from March to May. Temperatures are cooler in the mountains, but even so, the weather in places

below 4000ft (1200m) is hot and tropical most of the year.

Demography and Culture

The majority of Myanmar's population lives in rural areas, with the density of settlement in each region related to agricultural production, particularly rice. Thus, the most populous regions are the Ayeyarwady delta and the dry zone, and the highest densities are found in the upper delta, between Yangon and Hinthada (see Figure 4).

Figure 4   Population Density Myanmar

Figure 3   Myanmar (Burma) Map of Köppen Climate Classification
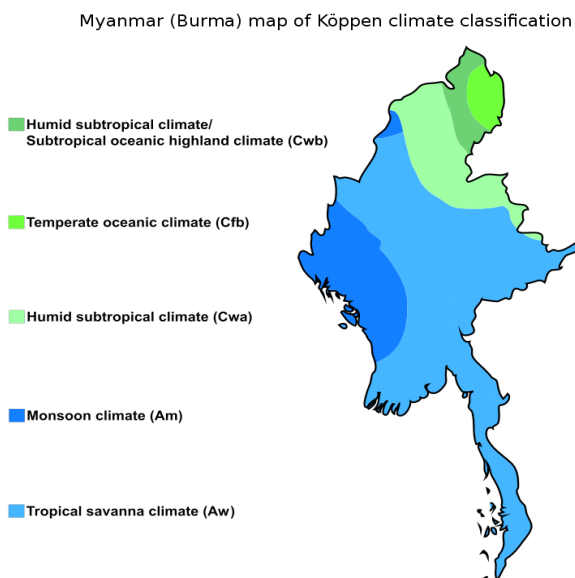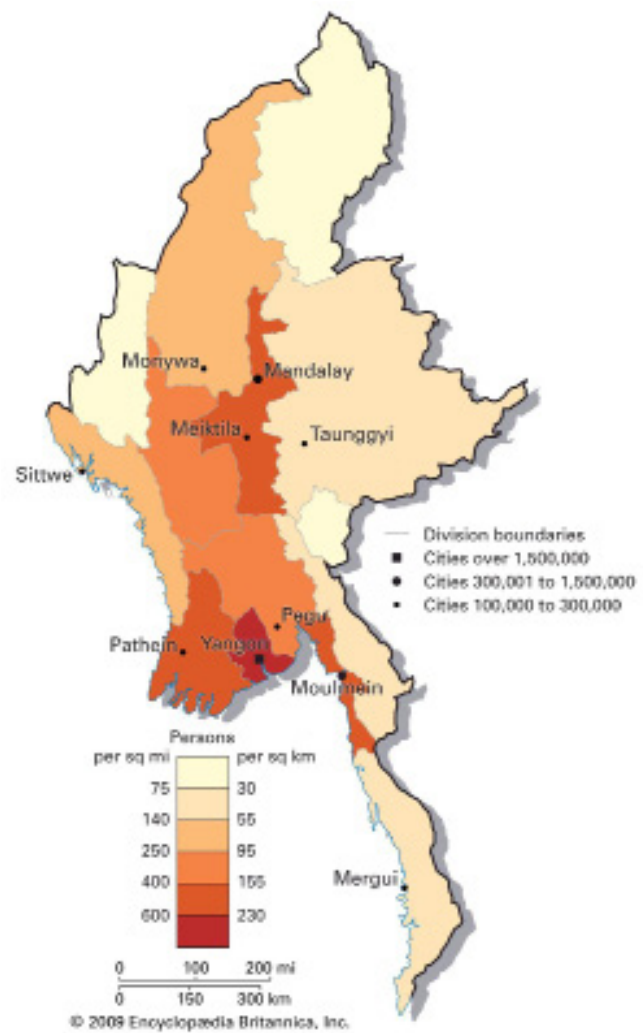
Myanmar is an ethnically diverse nation with 135 distinct ethnic groups officially recognized by the government. Each ethnic group has its own history, culture, and language. The majority Bamar ethnic group makes up nearly two-thirds of the population.

Buddhism is the dominant religion, where 88% of the population identifies as Buddhist. Ethnic minorities practice Christianity (6.2%), Islam (4.3%), and Hinduism (0.5%).

Administrative System

The administrative structure comprises the single union territory of Nay Pyi Taw plus seven states and seven regions. States and regions are of equal status. States have large ethnic minority populations and regions are mostly populated by the national majority Bamars. States and regions are divided into districts that include townships, towns, wards, and village-tracts (which are groups of adjacent villages). Figure 5 depicts this division.

Each state or region has a regional or state government consisting of a Chief Minister, other Ministers and an Advocate General.
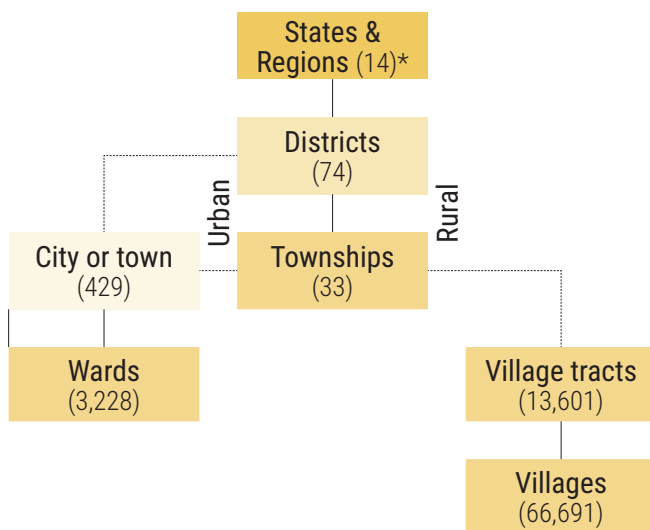
Legislative authority resides with the State Hluttaw or Regional Hluttaw made up of elected civilian members and representatives of the Armed Forces.

Self-Administered Zones and Self-Administered Divisions are administered by a Leading Body, which consists of at least ten members and includes State or Regional Hluttaw members elected from the Zones or Divisions and other members nominated by the Armed Forces. The Leading Body has both executive and legislative powers. A Chairperson is head of each Leading Body.

The constitution mandates the capital Naypyidaw to be a Union Territory under the direct administration of the President. Day-to-day functions are carried out on the President's behalf by the Nay Pyi Taw Council led by a Chairperson. The Chairperson and members of the Naypyidaw Council are appointed by the President and include civilians and representatives of the Armed Forces.

While the 2008 Constitution and subsequent reforms have delegated some administrative functions to the 14 newly-established state and region governments and established new mechanisms at the township level, Myanmar remains a highly centralized state.

The General Administration Department (GAD) is central to the functioning of the administrative mechanism across the country. GAD supports coordination and communication among the union government's 36 ministries and also connects the capital, Nay Pyi Taw, to approximately 16,700 wards and village tracts. The 14 new state and region governments, which were created by the 2008 Constitution, rely upon the GAD to serve as their civil service. A GAD Deputy Director General, is the senior civil servant in each state and region. Its hierarchical composition of Executive Secretaries, District Administrators, and Township Administrators are displayed in Figure 6.

Figure 5   Administrative Structure of Myanmar

Figure 6 Hierarchy of GAD

Ministry of Home Affairs GAD	Union ministries	President's office

S/R Executive Secretary	S/R Chief Minister	S/R Huttaw
S/R Government, S/R Huttaw, S/R GAD offices		

District Administrator	Local committees	
District Administrative Office		

Township Administrator	Local committees	
Township Administrative Office		

Village Administrator Village Tract clerk	Local committees	

Municipal governance is a key exception to the current structure, as these agencies are the only fully decentralized bodies in the country. All of Myanmar's townships now have Development Affairs Organizations (DAOs). DAOs comprise two complementary entities: a township development affairs committee (TDAC) and a township DAO office. DAOs are the only local government actors with a dedicated local committee, the TDAC that has decision-making power and a majority of its members elected by local communities. These urban agencies provide a significant range of social services and oversee local economic governance. They provide services that range from urban water, sewage, garbage collection, roads, and bridges, to street lighting and drainage, and they also oversee local economic governance through issuing licenses and permits to local businesses, collecting taxes and fees, and holding auctions to operate local ferries and toll roads.

Hazards

Myanmar suffers from nine major hazards, which are described in the Hazard Profile of Myanmar (2009). These are cyclones, droughts, earthquakes, fires, floods, forest fires, landslides, storm surges and tsunamis. In recent years, floods were the major hazard, followed by landslides. In August 2015, the death toll due to floods was 103 and 1,000,000 people were affected. Flooding usually occurs in June, August, and from late September to October with the risk highest in August during the peak of the monsoon season. Landslides in Myanmar are mostly triggered by heavy rainfall and earthquakes.

Cyclone Nargis, which made landfall in Myanmar on May 2, 2008, devastated the entire Ayeyarwady delta region. According to official figures, it resulted in a total death toll of over 130,000 people. The UN estimates that as many as 2.4 million people were affected. Thirty-seven townships were significantly affected by the cyclone.

Myanmar rests on a major earthquake belt and is subject to small earthquakes on a regular basis. On August 24, 2016, a magnitude 6.8 Richter Scaleearthquake struck Myanmar 25 km (16 mi) west of Chaukon. Several temples in the nearby ancient city of Bagan were damaged and four people were reported dead.

Geo-morphologically, the Western Ranges, and the Eastern Highlands are considered vulnerable to landslides.

Myanmar suffers from the burden of infectious diseases and non-communicable diseases (NCDs). Fifty-nine percent of all deaths in Myanmar are due to NCDs. Communicable, maternal, perinatal, and nutritional conditions account for nearly 30% of deaths. Maternal and under-five mortality rates are still high, at 200 per 100,000 live births and 51 per 1,000 live births, respectively. Additionally, internal ethnic conflicts have become a major concern for the country.

Climate Change

In 2012 the government of Myanmar published the National Adaptation Program for Action (NAPA), which aimed to analyze past and expected impacts of climate change in Myanmar and identify priority actions for adaptation. According to NAPA, the observed climate variability and change in Myanmar over roughly the past six decades included the following:

> A general increase in temperatures across the whole country (approximately 0.08°C per decade), most notably in the northern and central regions

> A general increase in total rainfall over most regions, though with notable decreases occurring in certain areas (e.g., Bago Region)

> A decrease in the duration of the southwest monsoon season as a result of a late onset and early departure times

> Increases in the occurrence and severity of extreme weather events, including cyclones/strong winds, flood/storm surges, intense rains, extremely high temperatures, and drought.

Vulnerability

Vulnerability represents the conditions determined by physical, social, economic, and environmental factors or processes that increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.

Cardorna and Carreno[3] (2013) and Wisner[4] (2016) discuss the use of the Prevalent Vulnerability Index (PVI), which is comprised of a series of indicators to benchmark vulnerability that characterizes prevailing vulnerability conditions reflected in exposure in disaster prone areas, socioeconomic fragility, and the lack of resilience in general. The UNISDR publication - Global Assessment Report (GAR 2009) - categorizes them as Proxy Indicators (PIs), which cover economic status, population density, Human Development Index, income, literacy, poverty, inequality, and access to technology and natural resources. These are indicators that reflect relative weaknesses and conditions of deterioration that would increase the direct effects associated with hazard impacts. These proxy indicators are addressed under initiatives to achieve the Sustainable Development Goals (SDGs) (2016-2030).[5] Table 1 presents the status of selected proxy indicators. Unless otherwise stated, the values are extracted from the 2016 Human Development Report and provide values for the year 2015. These would be useful to make comparisons between the prevalent vulnerability of the six countries of focus in this study.

Beginning in 2011, Myanmar launched major political and economic reforms aimed at increasing transparency, empowerment, and inclusion. Considerable assistance by development partners has accelerated reform. Significant progress has been made in reforming the economy, with an estimated growth rate increasing from 5.3% in 2010/2011, to 7.3% in 2012/2013. The removal of trade and foreign exchange restrictions, coupled with rapidly rising domestic demands, have contributed to widening trade and current account deficits. Growth is expected to remain relatively strong

3   Cardona, O. & Carreño, M. (2013). System of indicators of disaster risk and risk management for the Americas: Recent updating and application of the IDB-IDEA approach. In J. Birkmann (Ed.), Measuring vulnerability to natural hazards (2d ed.) (pp. 251–276). Tokyo: United Nations University Press.

4   Wisner Benjamin (2016), Vulnerability as Concept, Model, Metric, and Tool, http://naturalhazardscience.oxfordre.com/view/10.1093/acrefore/9780199389407.001.0001/acrefore-9780199389407-e-25.

5   http://www.un.org/sustainabledevelopment/sustainable-development-goals/

Table 1

Proxy Indicators for Prevalent Vulnerability

Demography	
Population (millions)	53.9
% Urban Population	34.1
% below 15 years	30.6
% 15 – 64 years	63.4
% over 65 years	5.8
Economy	
Total GDP (2016)	$67.4 billion
GDP per Capita (2016)	$1420.5
Young age dependency ratio per 100 people	41.1
Old age dependency per 100 people	8
GNI per capita (2011 PPP $)	4.943
Total Debt Stock % GNI	10.2
Income Disparity	
Gini coefficient	N/A
Palma ratio	N/A
Human Development	
HDI (Medium)	0.555
HDI country ranking	143 out of 188
Gender	
Gender Development Index (GDI)	N/A
Gender Inequality Index (GII)	0.374
GII country ranking	80

Education	
Education index	0.371
Government expenditure on education (% of GDP)	N/A
Adult literacy rate (15 years and older)	93.1
Mean years of schooling	4.7
Population with some level of secondary education %	23.8
Pupil to teacher ratio	28
Female to male literacy rate	1.
Access to Technology	
ICT Development Index (IDI)	2.54
IDI World Ranking	140
Health	
Healthcare spending (% of GDP)	1
Doctors (per 10,000 people)	6.1
Child malnutrition	35.1%
Environment	
Percentage of forest area	44.5
Percentage of protected areas (proposed)	7.3
Population in the Low Elevation Coastal Zone (LECZ)	
% population in Low Elevation Coastal Zone	25.78

over the medium term. In the past two years, the government has increased spending on the social sectors. The agriculture sector, consisting of crops, livestock, and fisheries, contributes 26.6% of the national GDP to the Myanmar economy. It employs around 52% of the national labor force and provides livelihoods for over 70% of the population. In 2014–2015, the crops subsector alone accounted for 18.8% of the GDP. There have been improvements in agricultural output and productivity, and in the livestock and fisheries sector. The major agricultural product is rice, which covers approximately 60% of the country's total cultivated land area. Livestock plays a critical role in the smallholder mixed crop-livestock systems that prevail in Myanmar. Livestock production accounts for 7.5% of the overall GDP. Associated with Myanmar's water resources are substantial fisheries in the major rivers, along the 1,900 km of coastline, and in the 500,000 ha of mangrove swamps. By developing the potential for aquaculture in its delta region, Myanmar has doubled its fisheries production in the last decade. Fish and shrimp are now major export industries. According to the 2014 population census, 76% of Myanmar's poor live in rural areas, and internal rural-urban migration movements are starting to drive urbanization.

Land ownership is the main source of social and economic disparities in rural areas. Approximately 41.6% of rural households are landless.

Myanmar has made notable achievements in areas such as poverty and hunger reduction, the primary education net enrollment ratio, the literacy rate for 15-24 year olds, births attended

by skilled health personnel, improved sources of drinking water, sanitation, and the mortality rates for children under the age of 1 year and under the age of 5 years. Myanmar has improved its efforts to eliminate gender disparity in education, but is yet to achieve parity of women in wage employment in the non-agricultural sector. The country also has a lower proportion of national parliament seats held by women than many other countries. While child survival has improved in Myanmar, reducing the maternal mortality has been slow. The number of births attended by skilled personnel has increased.

Disaster Risk Profile

Disaster risk is the potential loss of life, injury, or destroyed or damaged assets which can occur to a system, society, or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability, and capacity. Myanmar is currently ranked 12th out of 191 countries on the Index for Risk Management (INFORM), and first in Southeastern Asia, which assesses the risk of humanitarian crisis and disasters that could overwhelm national capacity to respond. It was also ranked second on the Global Climate Risk Index of countries most affected by extreme events from 1995 to 2014. Table 2 provides cumulative losses of major hazard impacts for the period 1980-2014.

Recent major disasters are as follows[6]:

> Riverine flood, 2015, which led to a loss of 103 lives and affected up to 1,000,000 people. The total economic value of the effects of the floods and landslides was estimated to be approximately K 1.942 trillion (USD 1.51 billion).

> Tarlay earthquake (M: 6.8 RS), 2011, which led to the loss of 70 lives

> Cyclone Giri, 2010, which led to the loss of 74 lives

> Cyclone Nargis, 2008, which led to the loss of 84,537 human lives, 53,836 persons missing, and damage to property of approximately USD 4.1 billion

> Cyclone Mala, 2006, which led to the loss of 37 lives

> Indian Ocean Tsunami, 2004, which led to the loss of 61 lives

> Taungdwingyi Earthquake (M: 6.8 RS), 2003, which led to the loss of seven lives

Figure 7 provides a risk prioritization matrix compiled by the inter-agency Emergency Response Preparedness (ERP) Plan of the Humanitarian Country Team (HCT), Myanmar.

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6   *MIMU and Hazard Profile of Myanmar (2009)*

Table 2

Natural Disaster Profile of Myanmar from 1980-2014

Exposure	Event (event/year)	Total death (person)	Total affected (person)	Damage (US$ 1,000)
Flood	0.50	431	1,048,412	136,655
Tropical cyclone	0.17	138,709	2,866,125	4,067,688
Drought	0.11	NA	NA	NA
Landslide	0.11	125	146,367	NA

Source: EM-DAT, 2015
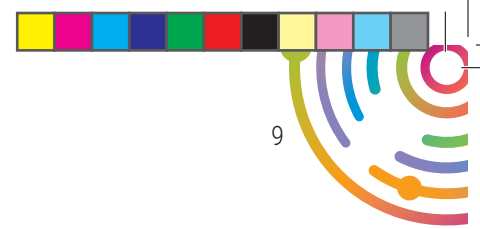
Figure 7   Risk Prioritization Matrix for Myanmar

		Very unlikely	Unlikely	Moderately likely	Likely	Very likely
Impact →	5. Critical		Tsunami	Earthquake	Cyclone	
	4. Severe			Conflict & civil unrest		Floods
	3. Moderate				Storm surge	
	2. Minor		Pandemics	Landslides & drought & fire		
	1. Negligible		Forest fire			
				Likelihood ⟶		

Likelihood
1=*Very unlikely* (a remote chance of an event occurring in the current year from 0.5%)
2=*Unlikely* (5-15%)
3=*Moderately likely* (15-30%)
4=*Likely* (30-50%)
5=*Very likely* (over 50%)

Impact
1=*Negligible* (minor humanitarian impact: government capacity sufficient to deal with the situation)
2=*Minor* (minor humanitarian impact; current country level inter-agency resurces sufficient to cover needs beyond government capacity)
3=*Moderate* (moderate humanitarian impact: new resources up to 30 of current operation needed to cover needs beyond government capacity - regional support not required)
4=*Severe* (substantive humanitarian impact: new resources up to 50% of current operations needed to cover needs beyond government capacity - regional support required)
5=*Critical* (massive humanitatian impact;: new resources over 80% of current operations needed to cover needs beyond government capacity - L3 scale emergenecy)

Floods top the list as very likely followed by cyclones. Earthquakes are rated moderately likely. All three are considered to have critical impact.

EM-DAT Risk Profile for Myanmar

The Centre for Research on the Epidemiology of Disasters (CRED) defines a disaster as "a situation or event that overwhelms local capacity, necessitating a request at the national or international level for external assistance; an unforeseen and often sudden event that causes great damage, destruction and human suffering".[7] For a disaster to be entered into the database, at least one of the following criteria must be fulfilled:

> 10 or more people reported killed;

> 100 or more people reported affected;

> Declaration of a state of emergency; and/or

> Call for international assistance.

UNISDR has recommended collecting data on Annual Average Loss (AAL) as an indicator of risk and resilience in order to highlight future losses that a country may experience.[8]

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7   EM-DAT distinguishes between two generic categories for disasters - natural and technological.
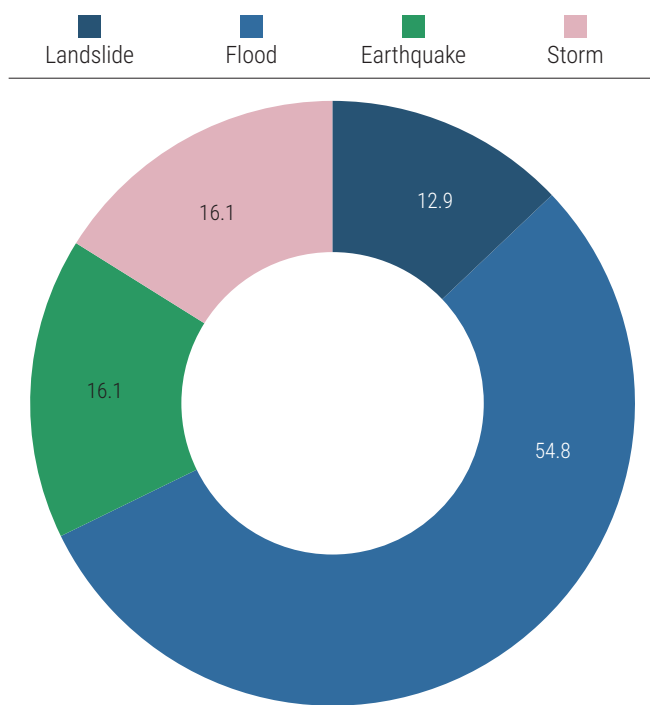
8   Insert Foot note here - https://www.unisdr.org/files/35716_newsystemofprogressindicatorsfordrr.pdf

Figure 8 displays the frequency of hazards and Figure 9 displays the AAL.

Figure 8   Frequency of Hazards

Landslide   Flood   Earthquake   Storm

12.9

54.8

16.1

16.1

Figure 9   Average Annual Loss

Wind   Flood   Other

94.2
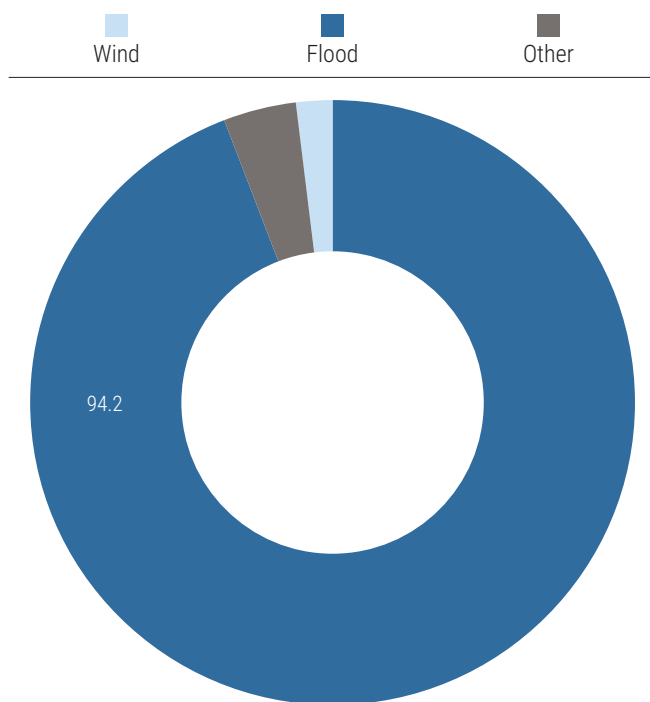
Floods are the most frequent hazard in Myanmar followed by earthquakes and storms.

AAL due to floods is the greatest. The annual expected losses linked to natural hazards are approximately USD 184.8 million, equivalent to 0.9% of the country's 2008 GDP; these were the highest annual expected losses relative to GDP in all Association of Southeast Asian Nations (ASEAN) countries. Impacts from disasters are felt across all sectors, and they present a challenge for Myanmar's quest for continued growth.

AAL is the expected loss per annum associated with the occurrence of future perils, assuming a very long observation timeframe. While there may actually be little or no loss over a short period of time, the AAL also accounts for much larger losses that occur less frequently. As such, AAL is the number of funds that need to be put aside annually in order to cumulatively cover the average disaster loss over time. It considers the damage caused on the exposed elements by small, moderate, and extreme events and results in a useful and robust metric for risk ranking and comparisons.

Probabilistic risk assessment gives an overview of estimated losses, which can provide guidance to predict and plan for future losses. This information can be used to plan and prioritize investments and strategies for managing disaster risk.

UNISDR, 2013[9]

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9   www.unisdr.org/files/35716_
   newsystemofprogressindicatorsfordrr.pdf

Legal and Institutional Arrangements for DRM

Myanmar enacted the Disaster Management Law in July 2013, and the Disaster Management Rule in 2015. In both the Disaster Management Law and Rule, there are chapters which highlight emergency response.

As per the Disaster Management Law, the National Disaster Management Committee (NDMC) was constituted on May 31, 2016 under the chairmanship of the Vice President and Union Minister of Home Affairs. The Union Minister of Social Welfare, Relief, and Resettlement is the Vice-chairman, while the Permanent Secretary of Ministry of Social Welfare, Relief and Resettlement is the Secretary of NDMC. The Director General of Relief and Resettlement is the Joint Secretary. There are 23 members in NDMC. The Union Minister of Foreign Affairs, the Union Minister of the President Office, the Union Minister of Defense, the Union Minister of Border Affairs, the Union Minister of Information, the Union Minister of Religious Affairs and Culture, the Union Minister of Agriculture, Livestock and Irrigation, the Union Minister of Transports and Communications, the Union Minister of Natural Resources and Environmental Conservation, the Union Minister of Electricity and Energy, the Union Minister of Labor, Immigration and Population, the Union Minister of Industry, the Union Minister of Commerce, the Union Minister of Education, the Union Minister of Health and Sports, the Union Minister of Planning and Finance, the Union Minister of Construction, the Union Minister of Hotel and Tourism, the Union Minister of Ethnic Affairs, the Chief Ministers of all Region/State Governments, Commander-in-Chief (Army), Commander-in-Chief (Navy) and Commander-in-Chief (Air Force) are the members of NDMC. There are several working committees under NDMC as depicted in Figure 10.

Chapter four of the Disaster Management Law describes the formation of Disaster Management Bodies at the subnational level.

Figure 10 Working Committees under the NDMC
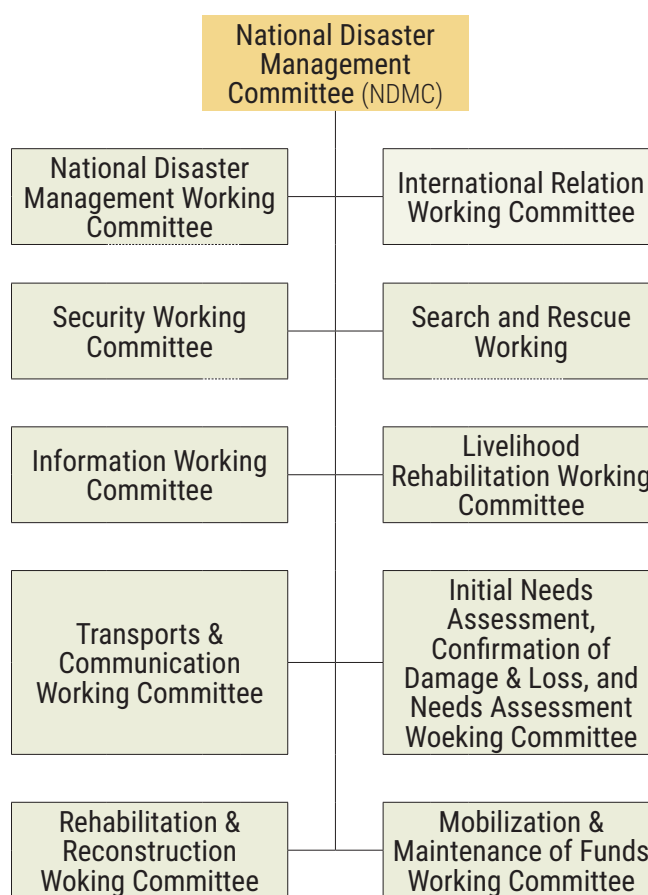
The Region or State Disaster Management Bodies are comprised of the Chief Ministers as the Chair, with other relevant stakeholder representatives. Department for Meteorology and Hydrology (DMH) is responsible for weather forecasting and early warning dissemination and is currently leading several new initiatives in the area of disaster risk identification, assessment, and monitoring. Other major partners for disaster risk management include the Myanmar Red Cross Society, the Departments of Health, Irrigation and General Administration, as well as the police and armed forces.

The Flood PDNA (2016) outlined the following concerns regarding the government's preparedness for response and recovery.

Insurance

After the impact of cyclone Nargis, some financial tools to transfer and share risk have been introduced by Myanmar Insurance under the Ministry of Finance. However, they do not cover all types of disasters. Currently, seven insurance companies in the country contribute to sharing the risk by offering non-life insurance policies for fire incidents.

Key issues:

› Low government institutional capacity

› Limitation of local implementation

› Need for strong inter-sector and inter-institutional coordination for recovery

› Financial constraints and prioritization of interventions

› Low harmonization of national priorities and those of international development partners

› Gap in ensuring recovery with longer-term development plans

› Lack of region-specific attention to socioeconomic, geographical, and physical contexts

Priorities:

› Use recovery as an opportunity to reinforce ongoing reforms

› Focus on specific needs among states and regions, townships, and village-tracts

› Respond quickly to agricultural replanting and winter crops

› Restore livelihoods by expanding microcredit, restructuring loans, and/or provision of debt relief for the affected small and medium-sized enterprises and farmers

› Support self-reconstruction of housing through the provision of materials and cash grants

› Implement integrated environmental and water resource management as a resilience-enhancing, risk-reducing strategy

› Apply disaster risk-sensitive land use/urban planning

› Implement specific measures to address increased vulnerabilities

› Strengthen institutional capacity of relevant institutions to lead and manage recovery

› Use and strengthen local capacities, indigenous knowledge, and diverse cultural richness

Regional Initiatives

The ASEAN Agreement on Disaster Management and Emergency Response (AADMER) provides opportunities for cooperation and collaboration among the ASEAN Member States in priority areas for action. The ASEAN Regional Programme on Disaster Management (ARPDM) provides a framework for promoting regional cooperation and outlines ASEAN's regional strategy, priority areas, and activities for DRR.

In the aftermath of the cyclone Nargis, a Tripartite Core Group (TCG) was formed by ASEAN, the UN, and the Government of Myanmar. TCG was the authority for the provision of all humanitarian assistance. The Post-Nargis Joint Assessment (PONJA) was also conducted by the TCG.
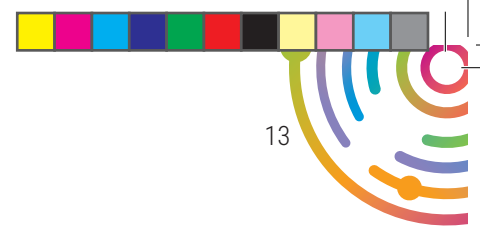
Humanitarian Initiatives after Nargis

After Nargis, a DRR working group was established with the support of international organizations, including UN agencies to spearhead DRM in Myanmar. UNDP took on the role of chair for the DRR working group.

There are currently two LNGO networks for emergency response called Myanmar NGO Consortium for Preparedness and Response (MNGOCPR) and Myanmar Consortium for Disaster Risk Reduction (MCDRR).

Findings from the Baseline Survey for Government Organizations

Purpose of the Organization

The purpose of relevant governmental organizations was assessed using the availability of a vision and mission statement for each organization. Responses obtained are depicted in Figure 11.

Figure 11 Responses for Purpose of Organization
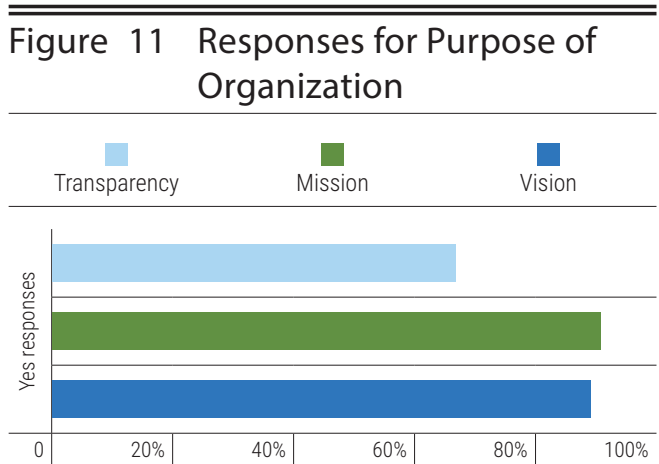
Nearly 90% of the government organizations have a mission and vision statement. Government organizations are regulated by the General Administration Department (GAD) and therefore comply with mandatory requirements.

Institutional Capacity

Institutional capacity was assessed based on several criteria (represented by numbers) and sub-criteria (represented by bullet points) as follows:

1. Organizational structure

2. Administrative processes

   ❖ Manuals on administrative procedures

   ❖ Manuals on human resource management

   ❖ Recruitment policies

   ❖ Code of conduct

   ❖ Workplace Harassment Policy

   ❖ Gender Sensitive Workplace Policy

   ❖ Adequacy of documented procedures

   ❖ Staff orientation in administrative procedures

The organizational structure of government organizations come under the purview of the General Administration Department (GAD) and therefore organizational structures are regulated. Responses to administrative processes are depicted in Figure 12 as a spider chart.

Responses reveal that over 70% of government organizations have recruitment policies, selection policies, and a code of conduct. Availability of manuals on human resource management and workplace harassment policy is around 50%. Availability of manuals on administrative procedures is around 40%, while gender-sensitive workplace policy has scored the lowest at 10%. Workplace harassment policy and gender-

Figure 12 Responses for Administrative Processes

1 Human resources	2 Recruitment policies	3 Selection policy	4 Staff orientation
5 Code of conduct	6 Work place harrassment policy	7 Gender sensitive work place policy	8 Manuals on administrative procedures
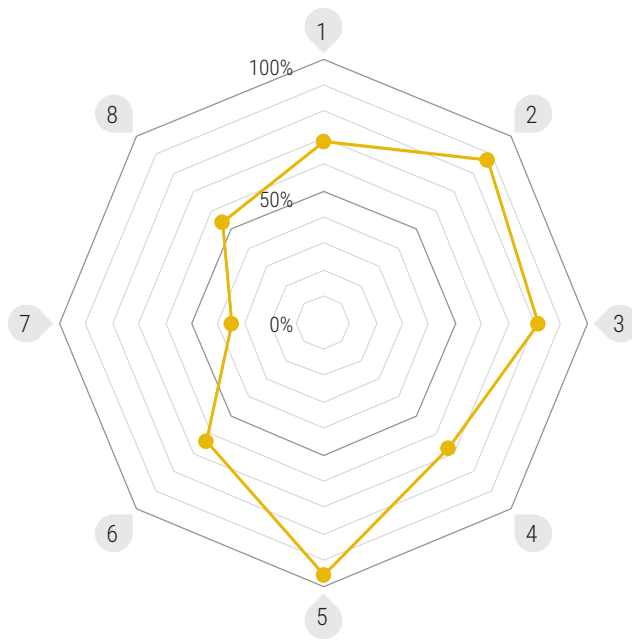
sensitive workplace policy are important areas for improvement.

According to the Asian Development Bank (2016),[10] the Ministry of Social Welfare, Relief, and Resettlement - the leading ministry for implementing women's advancement and empowerment - adopted the National Strategic Plan for the Advancement of Women 2013–2022, which includes 12 critical areas aligned with the Beijing Platform for Action.[11] Institutional mandates and corporate policies may address gender equality and women's rights, but these need to be further translated into specific gender-sensitive rules, regulations, procedures, and instructions in economic, social, and political institutions at the macro, meso, and micro levels to ensure substantive gender equality.

10 https://www.adb.org/documents/gender-equality-and-womens-rights-myanmar-situation-analysis
11 http://www.un.org/womenwatch/daw/beijing/platform/plat1.htm

Despite the generically framed reform agenda, there are several challenges to establishing gender equality and women's rights in the reform agenda. These include 1) the mismatch between the quick pace of reforms 2) the absorptive capacity of institutions at all levels and 3) the uneven political will to pervasively apply the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and Beijing Platform for Action so that a culture of gender equality and respect for women's rights is maintained.

Staff Security

Staff security was assessed to determine whether employees working in hazardous locations were covered by risk insurance. There were no responses to the questions, likely indicating the absence of risk insurance for staff. This issue requires further investigation.

Financial Management

Government organizations were requested to respond to the following criteria:

› Availability of an established financial reporting system

› Completion of annual financial audits

› Annual budget allocation for DRM

Responses obtained for these criteria are depicted in Figures 13 and 14.

Financial reporting is mandatory for all government organizations, yet 23% of government organizations expressed the lack of a financial reporting system. Further investigation is required to verify these results.

Government organizations are bound to audit their financial management and its absence in 16% of the organizations sampled requires further investigation.
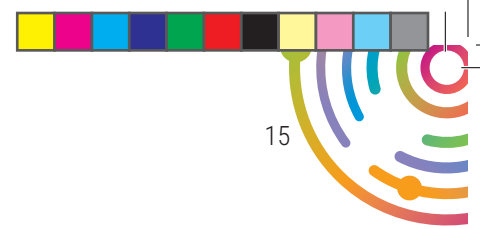
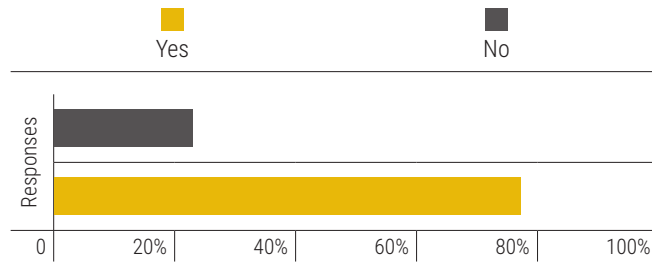## Figure 13   Availability of a Financial Reporting System

Yes   No

Responses

0   20%   40%   60%   80%   100%

Figure 14   Completion of Annual Financial Audits

Yes   No

Responses

0   20%   40%   60%   80%   100%

There were no responses to the availability of budgetary allocations for DRM.

Monitoring and Evaluation (M & E)

M & E capacity was evaluated based on the following criteria:

> Availability of a written monitoring, evaluation, and learning (MEL) policy.

> Availability of a communication strategy for disseminating lessons from monitoring, evaluation, and learning results.

Responses obtained are depicted in Figures 15 and 16.

Figure 15 highlights that 85% of organizations have written MEL policy.

Nearly 86% of the organizations have a communication strategy to disseminate lessons from monitoring and evaluation learning.

Figure 15   Availability of a Written MEL Policy

Yes   No

Responses

0   20%   40%   60%   80%   100%

Figure 16   Availability of a Communication Strategy for Disseminating Lessons Learned

Yes   No

Responses

0   20%   40%   60%   80%   100%

### Technical Capacity for Emergency Response

Organizational technical capacity for emergency response was assessed based on the following criteria, which also indicate organizational preparedness for emergency response:

> Staff adequacy to perform emergency response

> Established Standard Operation Procedures (SOPs)

> Availability of an emergency response plan

> Completion of simulation drills

> Staff training for preparedness in emergency response

Responses obtained for staff adequacy is displayed in Figure 17.

Figure 17 Adequacy of Staff
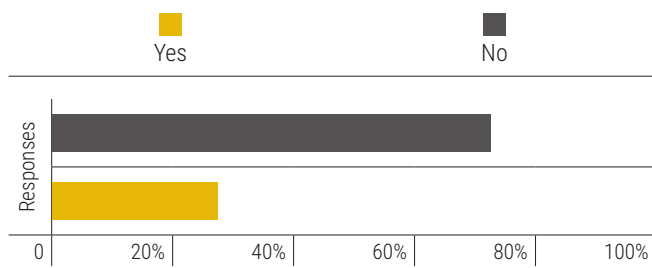
Close to 73% of the organizations expressed that staff is inadequate to perform emergency response.

Figure 18 depicts responses for the availability of SOPs.

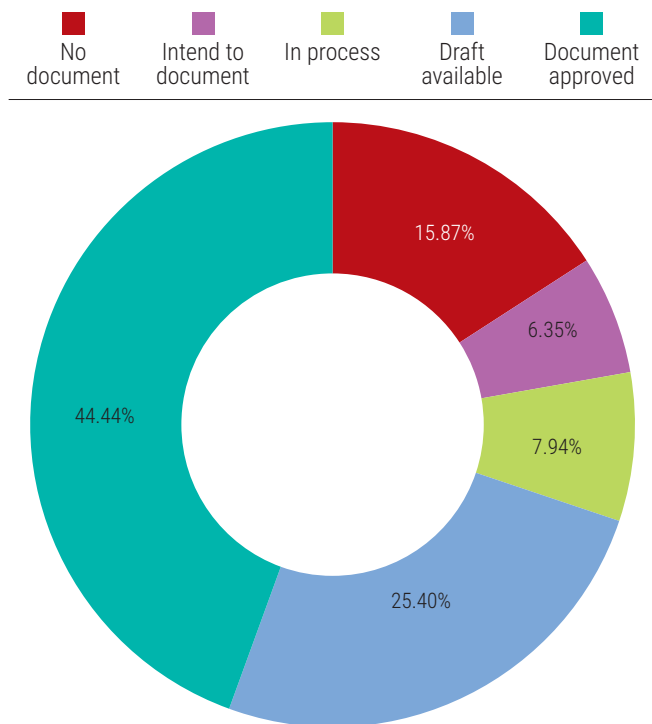## Figure 18 Availability of SOPs

Figure 18 shows that 44.4% of organizations expressed that they have documented SOPs, while 25.4% have SOPs drafted. Nearly 8% indicate

that they are in the process of formulating them, while 6.4% have intentions of developing SOPs.

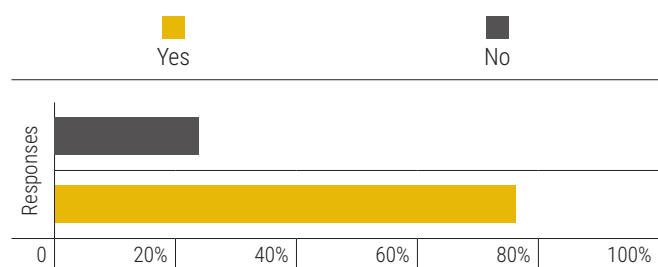Figure 19 depicts responses for the availability of emergency response plans.

Figure 19 Availability of Emergency Response Plans
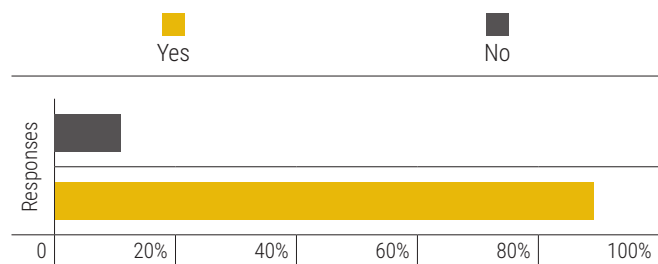
Nearly 90% of organizations have emergency response plans in place.

Figure 20 depicts responses for conducting simulation drills.

Figure 20 Conducting Simulation Drills

A total of 76% of the organizations expressed that they conduct regular mock drills.

Figure 21 depicts the types and level of staff training carried out.

Figure 21 reveals an inadequacy in both the types and numbers of such events undertaken for government organizations. The area in which most staff training is carried out is in search and rescue (14%).
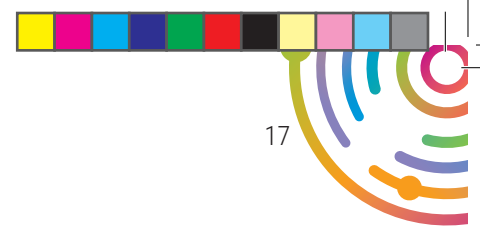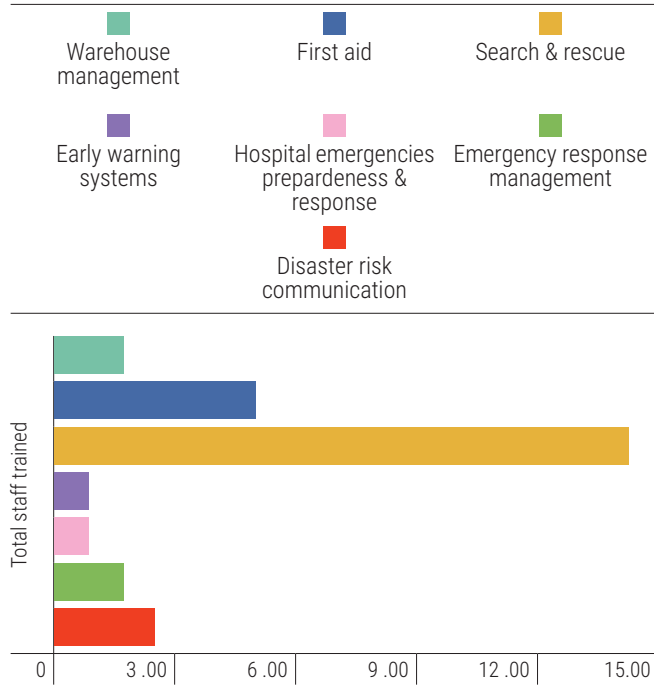
Figure 21 Types and Numbers of Staff Training Carried Out

Warehouse management

First aid

Search & rescue

Early warning systems

Hospital emergencies prepardeness & response

Emergency response management

Disaster risk communication

Total staff trained

| 0 | 3 .00 | 6 .00 | 9 .00 | 12 .00 | 15.00 |

Figure 22 depicts gender disaggregated data for capacity building/staff training.
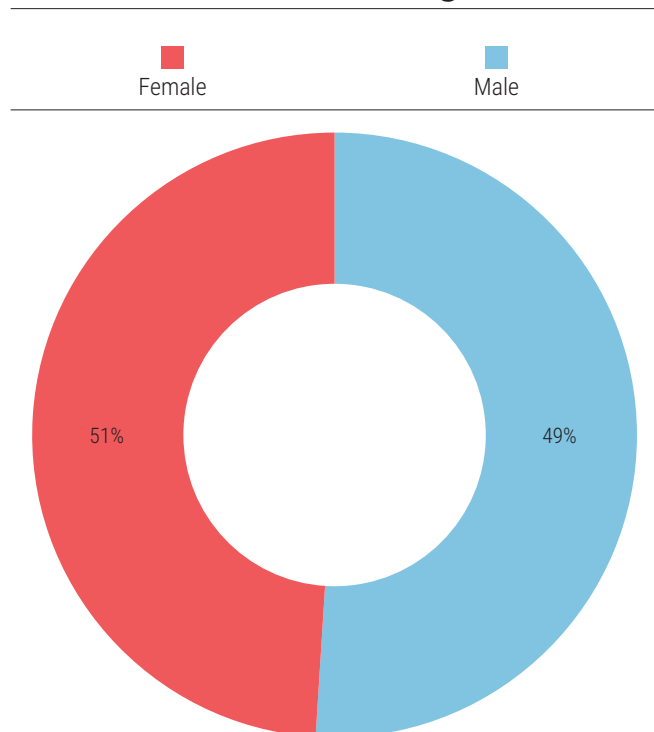
Figure 22 Gender-disaggregated Data for Staff Training

Female

Male

51%

49%

The female staff has had a slightly better opportunity for staff training (51%) compared to males (49%).

Coordination between Stakeholders

The level of coordination between stakeholder organizations during emergency management was studied based on the following two criteria:

› Inclusion in a disaster management coordination network

› Perception of the adequacy of its functional effectiveness

Responses for inclusion in a disaster management coordination network is given in Figure 23.

Figure 23 Inclusion in a DRM Coordination Network

Yes

No

Responses

| 0 | 20% | 40% | 60% | 80% | 100% |
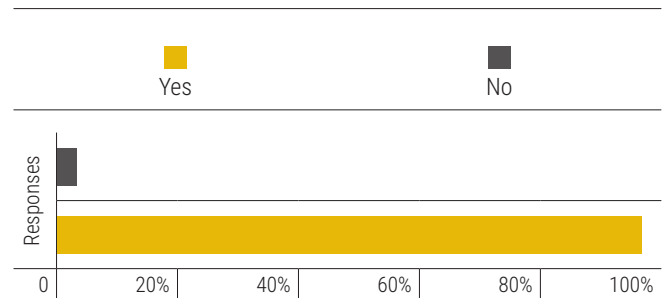
Nearly all of the organizations (97%) expressed that they are part of a disaster management coordination network.

The responses on the perception of its effectiveness are given in Figure 24.

Responses reveal that the perception regarding the effectiveness of the existing coordination is average or higher. However, the Flood

Figure 24 Perception of the Effectiveness of the Existing Coordination Network

■ High	■ Above average	■ Average	■ Below Average	■ Poor
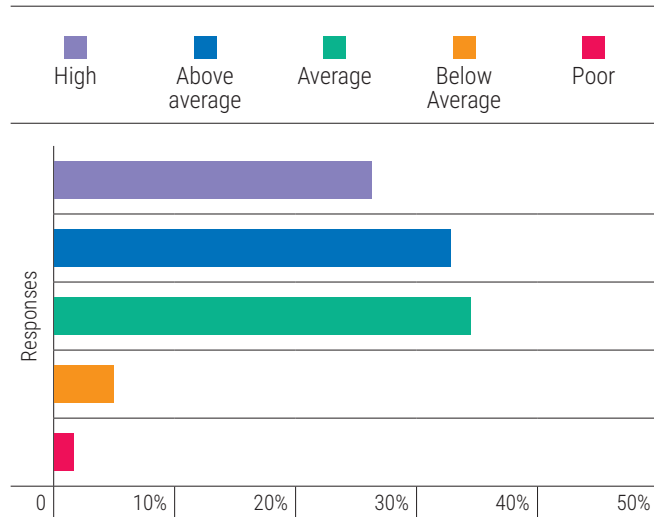
PDNA (2016)[12] revealed institutional capacity constraints which involve coordination lapses due to overlapping and /or contrasting mandates and competences of stakeholder institutions. There is a need for strong inter-sector and inter-institutional coordination for recovery.

The Humanitarian Country Team (HCT)

The HCT, under the Humanitarian and Resident Coordinator's leadership, is the strategic coordination mechanism in Myanmar to support the Government of Myanmar in responding to ongoing and future emergencies. The operational response is organized in 10 sectors/clusters, some of them to be activated depending on the needs.

Figure 25 depicts the coordination arrangement.

Table 3 provides the cluster leads.

Figure 25 The Emergency Response Coordination in Myanmar

Union level	
National Disaster Management Committee (NDMC) — EOC	Humanitaian Country Team (HCT)

state level

State/region Disaster management Committee	Inter Cluster/Sector Coordination Group (ICCG)
12 working committees	10 cluster/sectors
Search & rescue	Camp Coordination & Camp Management
Security	Education
Information	Emergency telecommunications
Communication & transport	Food security
Damages/losses & needs assessments	Health
Disaster management	Logistics
Health	Nutrition
Recovery-livelihoods	Protection
Recovery-rehabilitation & reconstruction	Shelter/NFI
Natural environment conservation	Water, sanitation & hygience (WASH)
International relations	
Fund raising & financial management	

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12 http://documents.worldbank.org/curated/en/646661467990966084/Myanmar-Post-disaster-needs-assessment-of-floods-and-landslides-July-September-2015
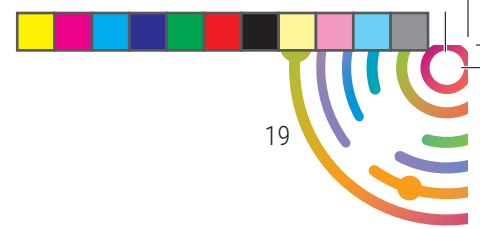
Table 3

Cluster Leads[7]

| Sector/cluster	Leads in Rakhine, Kachin & North of Shan States	Leads elsewhere
Camp Coordination & Camp Management (CCCM)	UNCHR	IDM
Education in emergencies	Save the Children & UNICEF	
Shelter & non-food items (NFI)	UNCHR	IFRC
Emergency telecommunications	WFP	
Food security	FAO/WFP	
Health	WHO	
• Reproductive health technical working group	UNFPA	
Logistics	WFP	
Nutrition	UNICEF	
Protection	UNCHR	
• Child protection sub-sector	UNICEF	
• Gender based violence sub-sector	UNFPA	
WASH	UNICEF	

Knowledge Management

The level of knowledge management for emergency response in the government sector was measured by assessing the following criteria and sub-criteria:

❯ Availability of institutional database for emergency response

❯ Production of knowledge material

❯ Sharing of the produced knowledge material

❯ Types of organizations with which knowledge material is shared, and the level of sharing

Responses obtained for criterion 1 are depicted in Figure 26.[13]
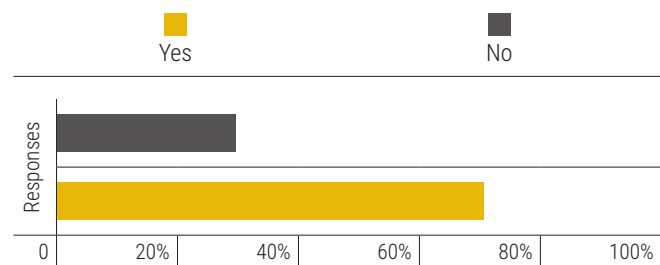
Figure 26   Availability of a Database
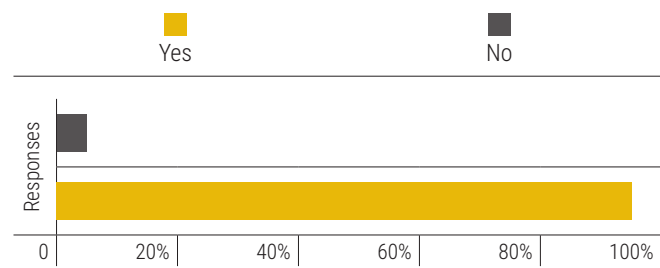
Nearly all of the organizations (95%) expressed that they have an institutional database for emergency response.

Figure 27 depicts the responses for production of knowledge material.

Figure 27   Production of Knowledge Material

Nearly 71% of the organizations responded that they produce knowledge material.

Figure 28 depicts the status of sharing the knowledge products.

Sharing is high with the media but sharing knowledge products with all of the other stakeholder groups requires significant improvement.

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13 HCT Inter-agency Emergency Response Preparedness (ERP) Plan, Myanmar June 2017

Figure 28 Status of Sharing Knowledge Products with Stakeholders

1 Government	2 International non-governmental organizations	3 Bilateral organization
4 Donor agencies	5 Local non-governmental organizations	6 United Nations organizations
7 Private organizations	8 Media	9 Academic institutions

Capacity Building Needs

As one of the key objectives of the program is to strengthen the capacity of the local actors, it was important for the baseline survey to capture capacity building needs of the staff of the concerned governmental agencies on preparedness for emergency response. The capacity building needs are as follows:

Advanced search and rescue

Awareness raising

Camp management

Dead body handling

Disaster preparedness

Emergency Response

Fire fighting

First aid

Leadership

Relief distribution

Water, sanitation and hygiene (WASH)
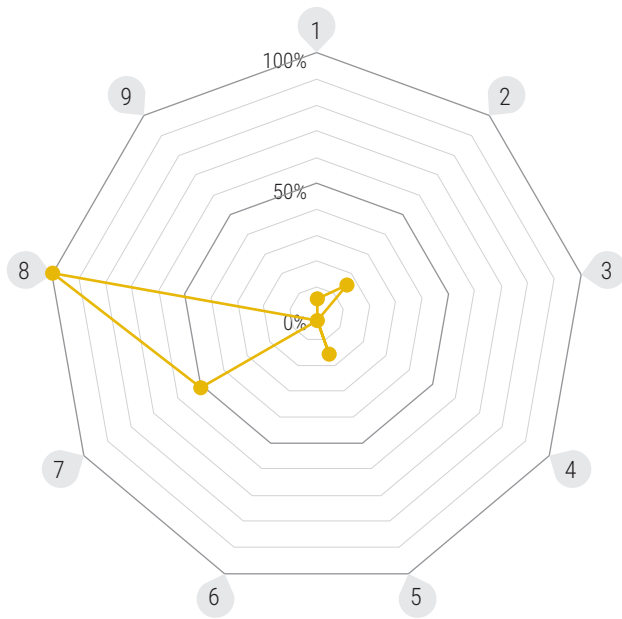
Findings from the Baseline Survey for LNGOs

LNGOs and Civil Society Organizations (CSOs) contribute significantly to emergency response through their proximity to disaster-affected communities, their understanding of culture and language, and their sensitivity to political and social dynamics. Therefore, baseline assessment of their existing capacities, their role in the coordination mechanisms for emergency response, and their knowledge and information exchange mechanisms were goals of the baseline assessment in Myanmar.

Legal Mandate

Responses were sought under the following criteria:

> Registration with the national government

> Geographical location(s) of emergency response activities

Registration

Responses for registration with the national government are depicted in Figure 29.

In Myanmar, there are two categories of non-governmental organizations that can be registered:

Figure 29 Registration with the National Government

Yes   No

*Note the restricted range of percentages on the X Axis

❯ Local Myanmar non-profit civil organizations with Myanmar citizen only as members, which are termed local organizations. They are treated as a local legal entity and must have at least five members when formed. Local organizations have the right to own immovable assets (i.e. land), and can also receive donations from foreign governments and other organizations.

❯ Organization formed in a foreign country with a mission to perform social activities in Myanmar must be registered as International Non-Governmental Organizations (INGOs). INGOs are treated as foreign entities and are registered in Myanmar. INGOs can include Myanmar citizens as members.

An application for a Registration Certificate must be submitted to the Union Registration Committee in Naypyidaw that is chaired by the Minister of Home Affairs. The registration certificate is valid for five years.

Figure 29 reveals that only 30% of the LNGOs in the survey sample are registered.

During the validation workshop, several LNGOs revealed that they are a social component of religious organizations. These are informal voluntary community-based associations working at the village level to perform social and religious functions, including health, education, and social services. There is no mandatory requirement for their registration. Some social components of these associations who participated in the

survey expressed the desire to be registered as fully pledged humanitarian organizations, while others expressed the desire to participate in humanitarian work only in the event of an emergency.

Geographical Locations of Work

Figure 30 depicts the geographic distributions of the LNGOs in the survey sample.

Figure 30 Geographic Location of the Survey Sample

Regional   National   Provincial   District   Vllage/local

The majority of LNGOs work at the district level (41.7%). The second highest percentage of LNGOs are operating at the regional level (20%), followed by provincial (15%), national (13.3%) and village level (10%) operations.
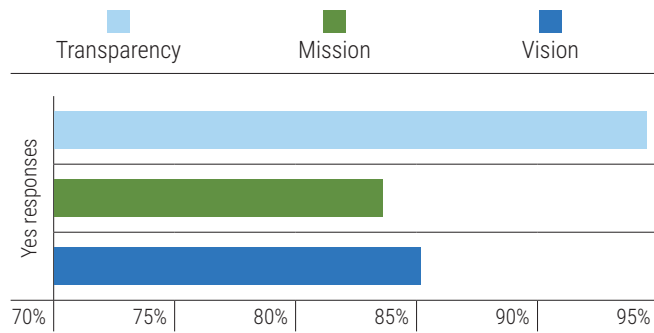
Purpose of the Organization

The purpose of the organization was assessed using the availability of a vision and mission statement. The responses are depicted in Figure 31.

Figure 31 Responses for Purpose of Organization

Transparency   Mission   Vision

*Note the restricted range of percentages on the X Axis

Over 80% responded that they have mission and vision statements, and 94% expressed that the organization was operating in a transparent manner.

Institutional Capacity

Institutional capacity was assessed based on several criteria (represented by numbers) and sub-criteria (represented by bullet points) as follows:

1. Organizational structure

2. Administrative processes

   ❖ Manuals on administrative procedures

   ❖ Manuals on human resource management

   ❖ Recruitment policies

   ❖ Code of conduct

   ❖ Workplace Harassment Policy

   ❖ Gender Sensitive Workplace Policy

   ❖ Adequacy of documented procedures
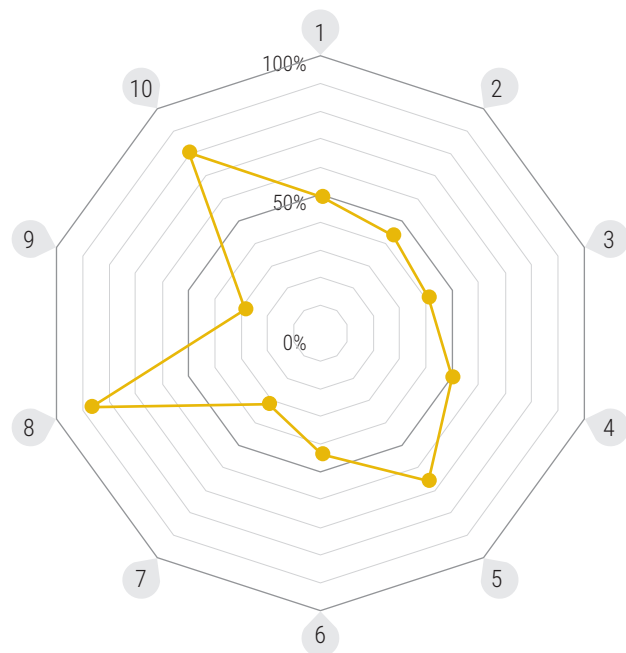
   ❖ Staff orientation in administrative procedures

Responses to the organizational structure are depicted in Figure 32.

Figure 32 Responses for Availability of Organizational Structure

Yes   No
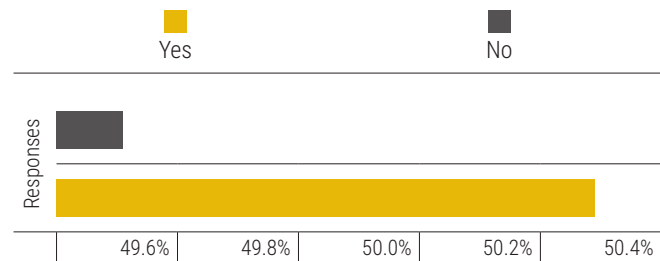
*Note the restricted range of percentages on the X Axis

Figure 33 Responses for Administrative Procedures

1 Human resources	2 Recruitment policies	3 Selection policy	4 Professional development procedures
5 Code of conduct	6 Work place harrassment policy	7 Gender sensitive work place policy	8 Administrative policies and procedures
	9 Adequacy of the written policies	10 Staff orientations in adminstrative procedures	

Nearly 90% of the responses indicate the availability of an organizational structure.

Responses to administrative procedures are depicted in Figure 33.

Apart from administrative policies and procedures at 60%, and staff orientation in administrative procedures at 50% all other areas had responses lower than 40%. Nearly 70% of the survey sample is comprised of informal and voluntary organizations, where registration is not mandatory, and therefore do not require formal administrative procedures. This may have led to low responses in many areas of administrative procedures.

Staff Security

Staff security was assessed by evaluating whether organizations have insurance coverage for their staff working in emergency response, and payment of compensation . Responses obtained are depicted in Figure 34.

Figure 34 reveals that only 10.5% of the organizations have risk insurance coverage for staff. 26.5%, have compensation schemes in place for staff.

Figure 34   Responses to Staff Security

Risk insurance for employees   Compensation for employees
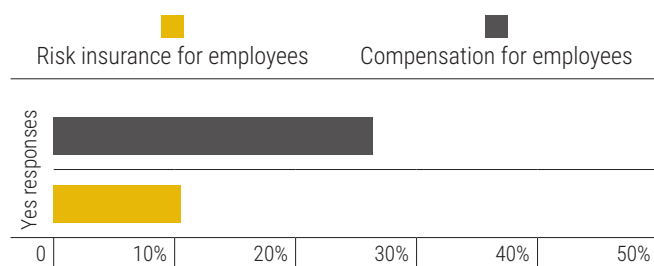
Financial Management

The study team assessed financial management of NGOs based on the responses to the following criteria:

› Availability of an established financial reporting system

› Completion of annual financial audits

› Annual budgetary allocation for DRM

Responses obtained for these criteria are depicted in Figure 35.

Figure 35   Responses for Financial Management

Established financial manual   Established system for conducting audits
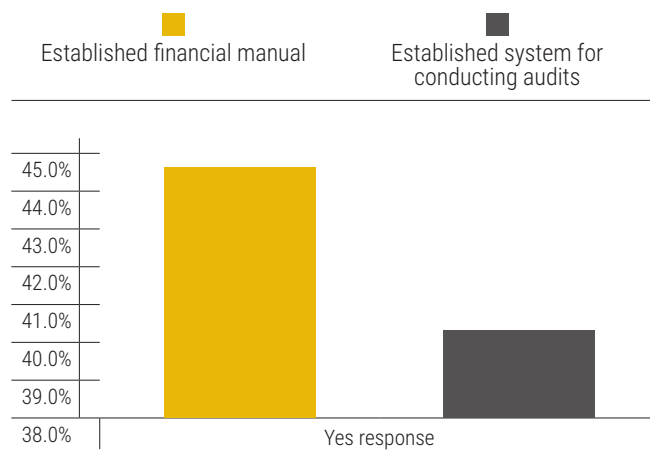
Only 44.6% of LNGOs have established manuals for financial management, and 40.3% have a system for financial auditing. These low responses may be related to the lack of mandatory registration with the government as explained under the legal status of the organizations.

Monitoring and Evaluation (M & E)

M & E capacity was evaluated based on the following criteria:

› Availability of a written monitoring, evaluation, and learning policy (MEL)

› Availability of a communication strategy for disseminating learning from monitoring, evaluation, and learning results. Responses obtained are depicted in Figure 36.

Figure 36   Responses to MEL Criteria
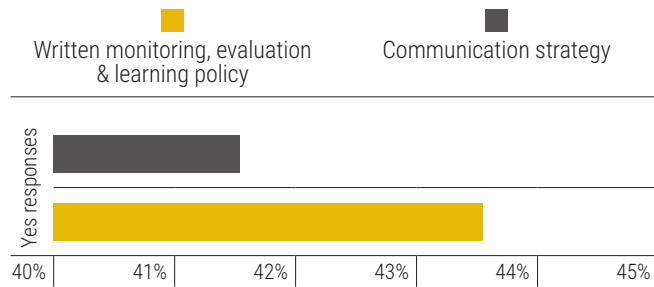
*Note the restricted range of percentages on the X Axis

Only 41.5% of the LNGOs have a written MEL policy. Additionally, only 43.6% have a communication strategy to disseminate lessons learned. The low responses may be due to the lack of mandatory registration with the government stated above.

Technical Capacity for Emergency Response

Organizational technical capacity for emergency response was assessed based on the responses to the following criteria, which also serve to indicate organizational preparedness for emergency response:

› Emergency response activities are undertaken by the organization

› Staff adequacy to perform emergency response

› Established Standard Operation Procedures (SOP)

› Availability of an Emergency Response Plan

› Completion of simulation drills

› Staff training carried out for preparedness in emergency response

Emergency response activities undertaken are given in Table 4 in descending order of responses.

Table 4

Emergency response activities

Pre-Disaster	
Early warning dissemination	55.71%
Creating risk awareness	48.57%
Contingency planning	34.29%
Warehouse management	11.43%
During Disaster	
Communication and information sharing	74.29%
Provision of WASH	71.43%
Provision of Non-Food Relief Items	62.86%
Evacuation assistance	60.00%
Transport assistance for relief material supply	60.00%
Provision of cooked food for the affected	58.57%
Collecting relief material	51.43%
Provision for Health Care	42.86%
Leadership for Coordination	38.57%
First Aid	35.71%
Camp Management	27.14%
Mass Casualty Management	25.71%
Post Disaster	
Rapid Needs Assessment	57.14%
Clearing rubble and debris	54.29%
Psycho-social counseling	50.00%
Disaster Victim Identification	48.57%
Dead Body Management	32.86%
Educational continuity	22.86%
Livelihood recovery	17.14%

Figure 37   Responses to Staff Adequacy
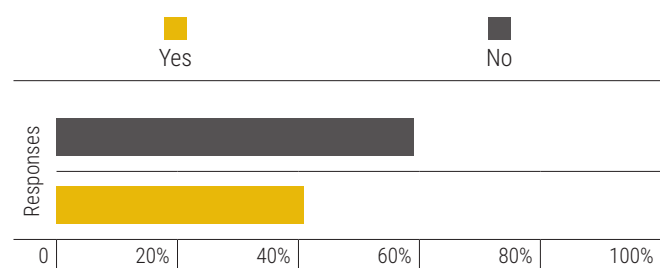
Responses for staff adequacy is depicted in Figure 37.
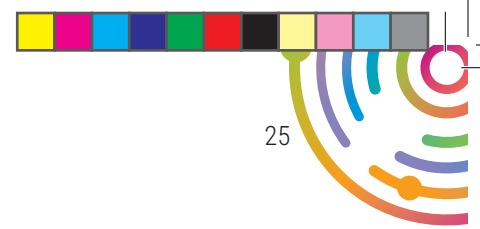
Nearly 41% responded staff was adequate, while the rest expressed that staff was inadequate to perform emergency response activities.

Staff training received by females are depicted in Figure 38 and males in Figure 39.
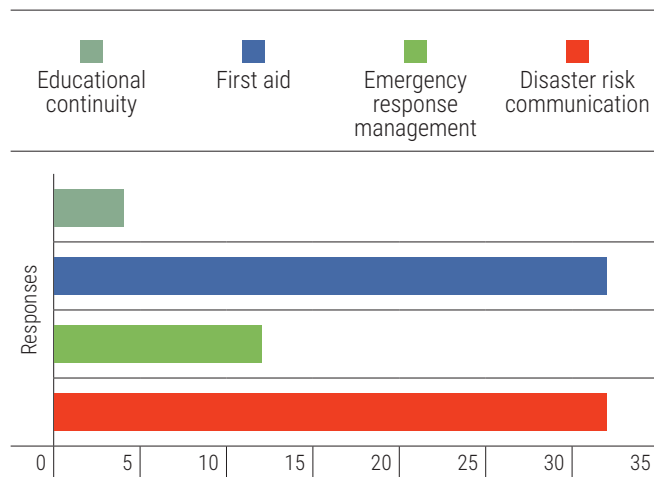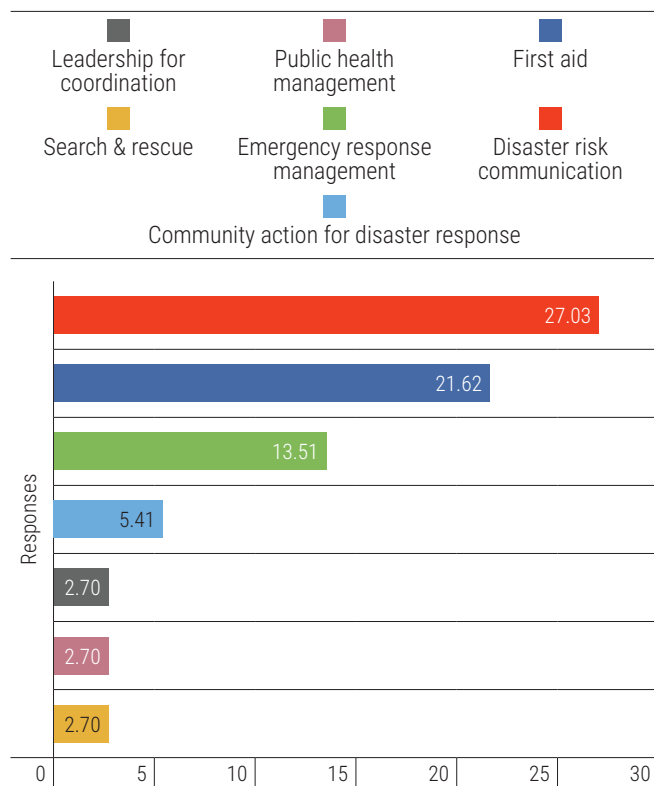
For both male and female staff, the highest percentage of training is in First Aid and Disaster Risk Communication. It should be noted, however, that the range of training options for male staff is greater than it is for females.

Gender disaggregated data for staff training is depicted in Figure 40.

Figure 38 Staff Training Received by Females

Figure 39 Staff Training Received by Males

**Figure 40 Gender Disaggregated Data for Training**
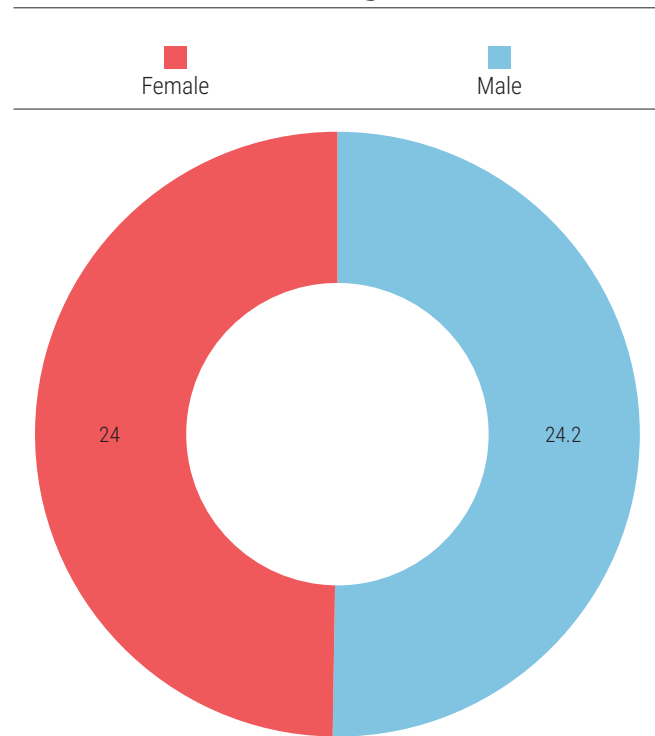
Based on the responses displayed in Figure 40, numbers of persons exposed to staff training is evenly split between male and female staff although in Figure 38 there is a variation in the types of training received by males and females.

Responses for providers of capacity building and training are depicted in Figure 41.

Figure 41 indicates that the National Government provides most of the training, whereas INGOs and LNGOs provide slightly less training opportunities but are still important providers of training.

Figure 41 Providers of Training
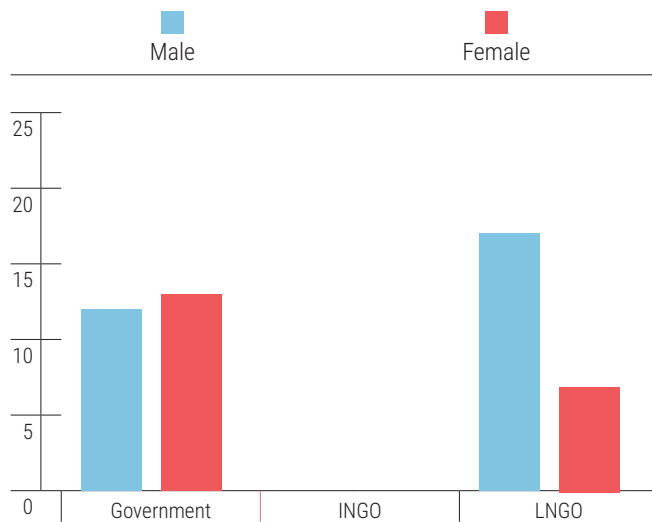
Coordination between Stakeholders

The level of coordination between stakeholder organizations during emergency management was requested based on responses to the following two criteria:

> Inclusion in a disaster management coordination network

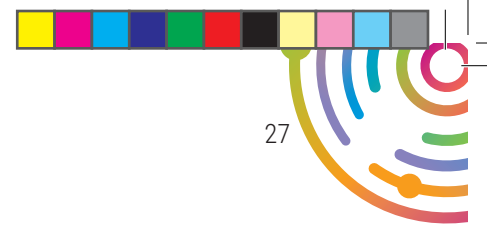> Perception of the adequacy of its functional effectiveness

The OCHA Myanmar Country Office was established in May 2008 in response to Cyclone Nargis. OCHA maintained its presence in the country after the end of Cyclone Nargis to focus on issues related to its core mandate, including support to humanitarian coordination at central and local levels, advocacy, humanitarian access, and principled humanitarian action. OCHA works closely with the Ministry of Social Welfare, Relief and Resettlement on disaster preparedness and response, and actively supports government efforts aimed at ensuring a more systematic, inclusive, and coordinated approach to humanitarian challenges in Myanmar. OCHA provides coordination and support to the humanitarian community as secretariat to the Humanitarian Country Team (HCT), which was established in 2010 and has helped improve

joint and coordinated planning among United Nations agencies, the Red Cross movement and international and national NGOs involved in humanitarian response. The Myanmar HCT is convened under the leadership of the Humanitarian Coordinator (RC/HC).

Myanmar NGO Network (MNN) operates to increase coordination and cooperation among NGOs, including an increased exchange of information, experiences, and ideas, and to effectively communicate with United Nations agencies, international organizations, and the Government of Myanmar. The MNN provides local NGOs with information, technology, and assistance that will assist in capacity development.

Women's Organizations Network (Myanmar), or WON, is a network of 27 women's community-based organizations. Its website states it is the first women's organization network in the country, formed in the aftermath of the Cyclone Nargis disaster in 2008 to facilitate the exchange of information and experiences, and to promote mutual learning and cooperation among women-led groups. WON is striving to improve the socioeconomic conditions of people in general and to empower and to promote the role of women in society.

Local Resource Center (LRC) was formed in 2008 by local and international NGOs to support the increased coordination of their emergency relief and humanitarian assistance after Cyclone Nargis struck the southern part of the country. The LRC, with a head office in Yangon and regional coordination offices in Lashio, Mandalay, and Mawlamyine, is now the coordinating body for more than 600 civil society organizations, with links to over 30 civil society networks. The LRC focuses on the development of indigenous organizations by promoting institutional development through capacity building and information sharing. The LRC creates opportunities for civil society organizations to engage and collaborate together with other public and private stakeholders. Through broad-based dialogue and research-based advocacy, the LRC works toward establishing a more

enabling policy environment for civil society engagement and a vibrant collective culture among organizations in Myanmar.

Responses on the perception of the adequacy of coordination are depicted in Figure 42.

Figure 43   Responses on the Effectiveness of Coordination
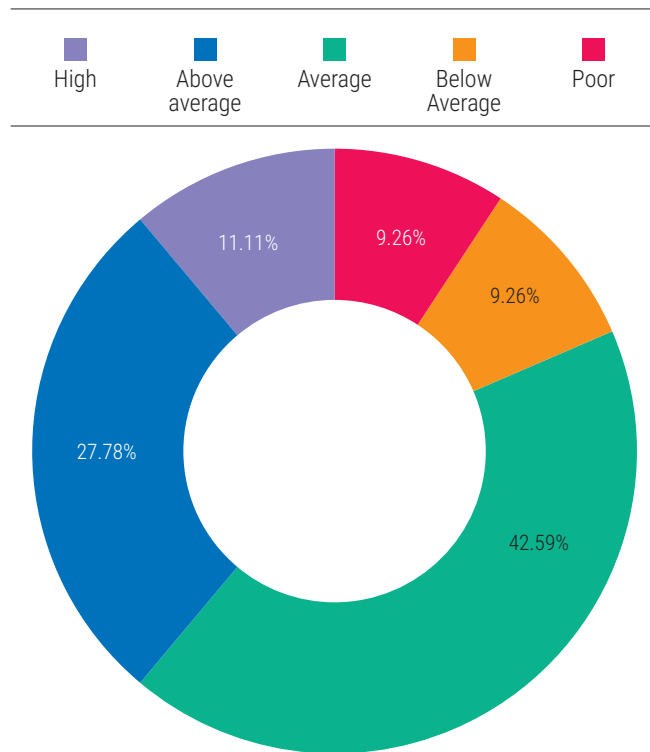
Majority of the LNGOs (70.4%) expressed that coordination is average or above average with 11.1% expressing that it is high.
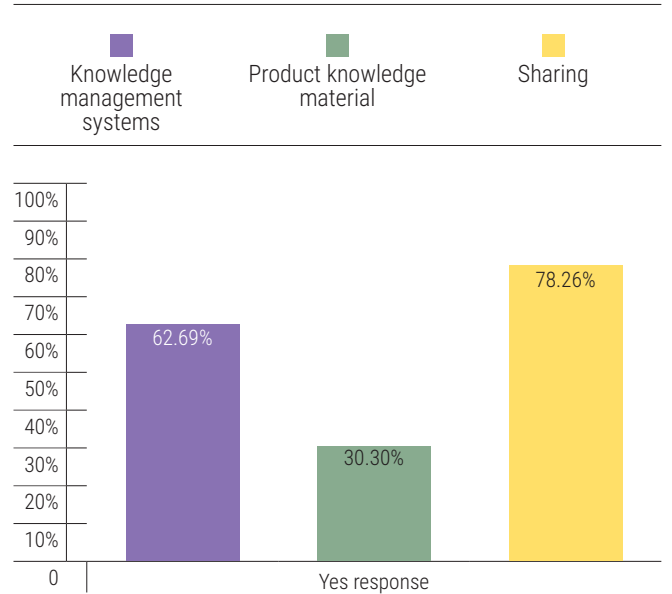
Knowledge Management

The level of knowledge management for emergency response in the government sector was measured by assessing the following criteria and sub-criteria:

> Availability of institutional database for emergency response

> Production of knowledge material

> Sharing of the produced knowledge material

> Types of organizations with which knowledge material is shared, and the level of sharing

Responses obtained for Criteria 1 to 3 are depicted in Figure 43.

Figure 42   Responses for Knowledge Management

Nearly 63% expressed that a knowledge management system is available, and 78.3% expressed that they share knowledge material. Only 30.3% expressed that they produced knowledge material.

The Myanmar Information Management Unit provides information management services to strengthen analysis and decision making within the humanitarian and development community. It maintains civil society databases by sector and based on nationwide, regional, township, village tract, and village location and provides information on which group is doing which activities where.

Capacity Building Needs

Since one of the key objectives of the program is to strengthen the capacity of the local actors, the baseline survey aimed to assess capacity building needs of LNGOs. The responses received are listed below.

Camp management

Child care in emergencies

Emergency Response Management

Dead body management

DRM

First aid

Fire fighting

Gender-based violence

Search and rescue

Warehouse management

Humanitarian Standards

Affiliation with humanitarian standards was assessed based on the following three criteria:

❯ Member of the Humanitarian Accountability Partnership (HAP)

❯ Acknowledgment of SPHERE Standards

❯ Acknowledgment of Core Humanitarian Standards (CHS)

Responses are depicted in Figure 44.

Forty percent indicated that they are a member of the HAP, 27% acknowledge CHS, and only about 15% acknowledge SPHERE standards.

Figure 44   Responses for Affiliation with Humanitarian Standards
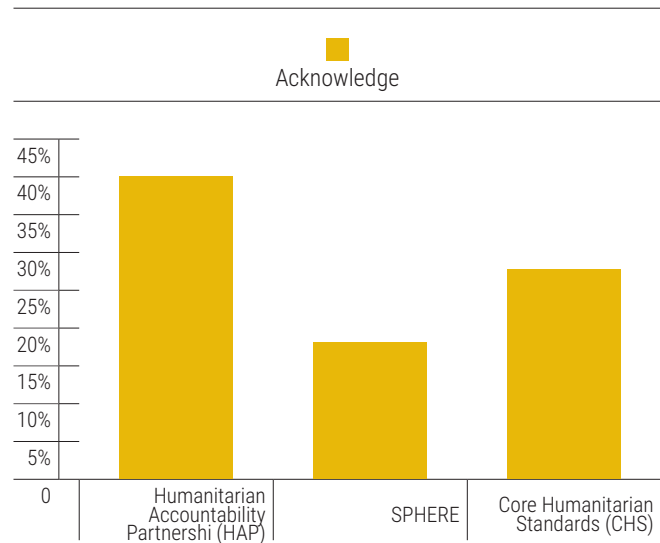
Perceptions of the INGOs

INGOs are becoming increasingly active in Myanmar, working in humanitarian response and longer-term development in a multitude of sectors, including the environment, health, education, livelihoods, rule of law, advocacy, and civil society capacity building. International NGOs, present in small numbers since the 1990s, have entered Myanmar in two recent waves: in the aftermath of Cyclone Nargis in 2008, and since the forming of the new government in early 2011.

In this study, 22 international humanitarian organizations participated in key informant interviews (KIIs). Over 90% confirmed that emergency response is part of their organizational policy.

INGOs expressed willingness to provide assistance for capacity building for both government and local humanitarian organizations. Accountability training was recommended for the government organizations while emergency response training was recommended for LNGOs.
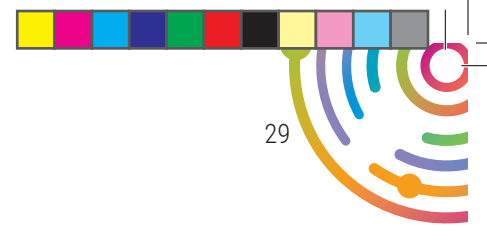
Perceptions of the Private Sector and the Media

Thirty-four respondents from the private sector and the media participated in KIIs. Private sector actors such as the Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI) and various business and trade associations have supported disaster relief and recovery but have been inactive in preparedness and mitigation. They are playing an increasingly important role in disaster relief, complementing the limited technical and financial capacities of the government. However, their actions have been uncoordinated. There are no formal channels for communication with government entities during disasters apart from *ad hoc* forums. The media played a role during emergencies by disseminating information and providing a voice for the affected.

In Myanmar, the government institutional and legal framework for disaster risk management

is well established. The presence of the General Administration Department (GAD) is ubiquitous at all levels and administrative procedures and financial management are well regulated. INGOs expressed that government entities should be trained in accountability. Affiliation with humanitarian standards needs to be improved, possibly through the provision of training. Although policies have focused on gender equity, these have not translated to ensuring gender equity. This is an area that requires continued attention.

Capacity for all aspects of disaster risk management in the government sector requires enhancement.

There are three types of civil society organizations in Myanmar: community-based organizations, LNGOs and INGOs. The community-based organizations are informal or voluntary associations formed at the village level to perform social and religious functions, including health,

education, and social services. These groups are not typically registered with the government. Approximately their administrative processes, financial management and monitoring and evaluation components are weak and require substantial inputs for institutional capacity building. Around 30% of the sample was comprised of registered LNGOs, where institutional capacities appear stronger than their nonregistered counterparts. However, both types of LNGOs require considerable capacity building in DRM, including emergency response.

Both governmental and non-governmental entities could benefit by enhancement of knowledge management. Coordination during emergencies has benefited from the presence of the HCT, Myanmar NGO Network (MNN), Women's Organizations Network (Myanmar WON) and Local Resource Center (LRC). Strengthening coordination appears beneficial.

Recommendations

Awareness of Humanitarian Coordination

It is recommended that a short course on Humanitarian Coordination be formulated and a Training of Trainers (ToT) be conducted to replicate the training at the district level for government, non-government personnel earmarked for response work. It is recommended to hold trainings with multiple stakeholders to also provide an opportunity for informal networking.

Coordinating Platforms at National and Local Levels

It is recommended to implement the SFDRR call for National and Local Coordinating Platforms: *"To establish and strengthen government coordination forums composed of relevant stakeholders at the*

national and local levels, such as national and local platforms for disaster risk reduction..."[14]

Development of a Comprehensive Emergency Response Database

Although the Myanmar Information Management Unit (MIMU) currently serves as a hub for information, it is recommended to establish or strengthen MIMU as a national to local comprehensive Emergency Response Database aligned with the call from SFDRR: *"To promote real-time access to reliable data, make use of space and in situ information, including geographic information systems (GIS), and use information and communications technology innovations to enhance measurement tools and the collection, analysis and dissemination of data."*[15]

Enhance Capacity Building of All Stakeholders

It is recommended to reach consensus with all stakeholders on the curriculum needed to improve preparedness for response and compile standardized capacity building and training manuals to be used by all stakeholders. A series of Provincial ToTs should be implemented as relevant.

Knowledge Management

It is recommended to enhance the capacity of stakeholders, especially LNGOs, in the compilation of knowledge products to share lessons learned in order to enhance disaster preparedness through the Asian Preparedness Partnership Web Portal.

Setting the Indicators for Monitoring and Evaluation

Monitoring and Evaluation is an important process in the program planning to make sure the implementation of the program is on track and in line with the set objectives. It is important to use the information derived through the baseline assessment to design project activities in each country with set targets within the program framework.

A results framework has been developed at the regional level to measure the progress of the project and achievements. Each country will contribute towards achieving the set objectives indicated in the results framework. For achieving that purpose, baseline data from each country will be used to define activities in their road maps towards strengthening emergency response capacities of local actors at national and local level which will be aggregated at the regional level for the program.

Program outcomes/impacts in each of the country is to be measured using three (3) common key measurement indicators (KMI) identified as follows:

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14   https://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf
15   https://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf

KMI 1: Number of agencies with improved operational systems (admin processes, financial reporting system, KM, M&E, etc.), technical capacity and access to information to act effectively in disaster response and recovery phases
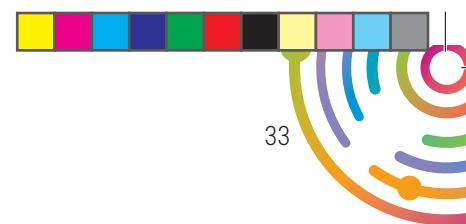
Unit of Measure	Number of agencies	Disaggregated by	• Type of agency - • Govt./LNGO/ Private Sector • Level of the agency - National/Sub-national
Definition:	This indicator measures the agencies that have new or increased ability to respond to disasters effectively. *Measuring institutional capacity in terms of administrative, financial, technical expertise, networks, etc. are important elements of enabling environment for ensuring effective response by those agencies.* Indications with improved capacity to act effectively in disaster response and recovery include, but are not limited to: • Improving operational systems (proper administration policy guidelines, financial systems, knowledge management systems, M&E systems, etc.) of humanitarian agencies which are transparent and accountable • Building in-house relevant technical expertise which can be utilized during disaster response and recovery • Improved participation in disaster management coordination networks/ committees with identified role • Engaging with related stakeholders and building networks for sharing of information • Devoting greater resources (human/financial) for Disaster Risk Management activities		
Baseline as of 2017:	The baseline assessment conducted through the program showed the following level of capacities among local actors in Myanmar: • Government agencies are having better operational systems while having low level of technical capacity for all aspects of disaster risk management functions including inadequate level of staff • Low level of institutional capacity (sufficient staff, financial capacity, operational systems, etc.) of LNGOs for disaster risk management		
Target 2019:	Through the program interventions, it is expected to have at least 3 institutions with improved capacity in terms of operational, technical and access to information to act effectively in disaster response and recovery phases		
Data Source	• Baseline report, Organizational Capacity Assessment survey results, evaluation reports		

KMI 2: Number of local rapid deployment teams established/strengthened with necessary capacity for better response

Unit of Measure	Number of teams	Disaggregated by	N/A
Definition:	This indicator measures the established/strengthened local rapid deployment teams which can be utilized in disaster response quickly. Strengthening capacities includes skill trainings, networking, identified roles and responsibilities, and access in case of an emergency._Rapid deployment teams can assist disaster affected communities within hours which is key in effective emergency response._Rapid deployment teams consist of professionals such as search and rescue experts, fire fighters, medical staff, troops, etc. and/or volunteers who can help communities during first 48 hours of a disaster		
Baseline as of 2017:	The baseline assessment conducted through the program showed the need for a well-organized team of professionals who are technically qualified to carry out response functions within first 48 hours.		
Target 2019:	Through the program interventions, it is expected to form a group of professionals and volunteers attached with the government and build their technical capacity to carry out functions in first 48 hours after a disaster.		
Data Source	• Country reports • Media reports		

KMI 2: Number of active emergency coordination committees/forums comprising of actors such as govt., LNGO and private sector with identified roles for each

Unit of Measure	Number of committees/ forums	Disaggregated by	• Level of the committee/forum - • National / Sub-National
Definition:	This indicator measures the engagement of different stakeholders in emergency coordination which is important for effective response._Emergency coordination committees can be at national level as well as at sub-national level comprise of local actors such as government, LNGO, private sector with identified role for each._Active emergency coordination committee is a one which meets at least once in 3 months bringing all members to discuss about preparedness for response activities in countries		
Baseline as of 2017:	The baseline assessment conducted through the program shows the coordination during emergencies has benefited from the presence of HCT, Myanmar NGO Network (MNN), Women's Organizations Network (Myanmar WON) and Local Resource Center (LRC). However private sector engagement has not been identified.		
Target 2019:	Through the program interventions, it is expected to improve the emergency coordination by engaging LNGO as well as private sector to the existing coordination mechanism with identified role for each actor.		
Data Source	• Government records • Media reports • Coordination meeting minutes • Interviews		

In order to monitor the activity progress in Myanmar a monitoring framework (Table 4) was developed, guided by the baseline data and the regional program results framework. It is expected that the country program team together with concerned stakeholders define targets considering short term, medium term and long term time frame for these indicators within the program framework. This framework will be a tool for monitoring the progress of activities and achievements towards set objectives while ensuring accountability and transparency of the progress of the country program.

Table 5

Indicators to measure progress

No.	Expected result/ Outcome	Baseline status	Recommendations	Indicators to measure the progress and impact
1	Strengthened emergency response coordination mechanisms and partnerships	• Coordination during emergencies has benefited from the presence of HCT, Myanmar NGO Network (MNN), Women's Organizations Network (Myanmar WON) and Local Resource Center (LRC). • Strengthening coordination appear beneficial	• It is recommended to implement the SFDRR call for National and Local Coordinating Platforms	• Regular coordination meetings organized by national/local platforms involving all concern stakeholders • % of LNGOs and Private sector entities in government led coordination platforms • SoPs for emergency response coordination reviewed/ updated • National/Sub-National Emergency Operations/Response Plans developed/ updated
2	Improved capacities on emergency response through priority training and learning actions	• Capacity for all aspects of disaster risk management in the government sector needs to be enhanced • LNGO require substantial inputs for institutional capacity building • Affiliation with humanitarian standards needs to be improved	• Training on Humanitarian Coordination to be formulated and replicated • Compile standardized capacity building and training manuals to be used by all stakeholders • Series of Provincial ToTs to be conducted	• Priority training programs (ToTs) developed and conducted • Number of people trained • Learning events, drills, simulations, and field visits/study tours facilitated
3	Learning and knowledge management systems on emergency response initiated and institutionalized	• The Myanmar Information Management Unit (MIMU) provides information management services to stakeholders • Production of knowledge materials by stakeholders is in a low level	• Compilation of knowledge products to share lessons learnt	• Knowledge products developed and available for public access • Strengthen Online platform at the national level for knowledge and information sharing