MYANMAR

COUNTRY PROFILE

Cyclone Mocha 2023	Typhoon Yagi 2024	Mandalay Earthquake 2025

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List of Abbreviations

AHA	:	The ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management
ASEAN	:	Association of South East Asia Nations
BOB	:	Bay of Bangel
CRI	:	Climate Risk Index
DDM	:	Department of Disaster Management
DMC	:	Disaster Management Center
DMH	:	Department of Meteorology and Hydrology
DMTC	:	Disaster Management Training Centre
DRR	:	Disaster Risk Reduction
EM-DAT	:	The Emergency Event Database
EMT	:	Emergency Medical Team
EOC	:	Emergency Operation Centre
HFA	:	Hyogo Framework for Action
MAPDRR	:	Myanmar Action Plan on Disaster Risk Reduction
MDA	:	Myanmar Disaster Alert Mobile Application
MMT	:	Mynamar Time
MSWRR	:	Ministry of Social Welfare, Relief and Resettlement
NDMC	:	National Disaster Management Committee
NDPCC	:	National Disaster Preparedness Central Committee
RDC	:	Reception and Departure Centre
SFDRR	:	Sendai Framework for Disaster Risk Reduction
USAR	:	Urban Search and Rescue Team

1. Introduction

The Republic of the Union of Myanmar, the second-largest country in ASEAN, is situated in Southeast Asia. Myanmar is surrounded by China to the north and northeast, Laos to the east, Thailand to Southeast, Bangladesh to the west, and India to the northwest. It also has maritime boundaries along the Admen Sea and the Bay of Bengal. The occupied area is over 676,000 km^2 with a population of over 51.3 million (46.9 % of Male and 53.1 % of Female) according to the 2024 census. Two-thirds of the whole population live in rural areas, and the remaining live in urban areas. Agriculture, farming, and fishing-related activities dominate the economy.

Figure 1.1. Location of Myanmar

There are eight major ethnic races with 135 different ethnic groups. 90 percent are Buddhist, 10 percent are Christian, Muslim, Hindu, and other. Myanmar is administratively divided into one Union Territory (Naypyitaw), seven States, and seven Regions, 74 districts, 330 Townships, 469 towns, and 13590 village tracts. The capital city is Naypyitaw. Yangon is the former capital city of Myanmar. It has a tropical climate with three seasons: summer, rainy, and winter. As a geographical feature, Myanmar has a northern mountainous region, western ranges, eastern plateau, central basin, lowlands, and coastal plains.

2. Disasters Overview of Myanmar

Myanmar is prone to many types of disasters according to its geographical features. The World Risk Report 2025 indicates that Myanmar ranks sixth globally, with a World Risk Index score of 36.91, placing the country among those facing a high level of disaster risk.

Rank	Country	WorldRiskIndex	Exposure	Vulnerability	Susceptibility	Lack of Coping Capacities	Lack of Adaptive Capacities
1.	Philippines	46.56	39.99	54.20	50.10	58.54	54.30
2.	India	40.73	35.99	46.10	34.56	54.08	52.43
3.	Indonesia	39.80	39.89	39.71	24.80	51.27	49.24
4.	Colombia	39.26	31.54	48.86	47.85	50.87	47.91
5.	Mexico	38.96	50.08	30.31	44.39	12.53	50.07
6.	Myanmar	36.91	22.43	60.74	55.42	64.47	62.72
7.	Mozambique	34.39	18.10	65.33	65.91	63.33	66.79
8.	Russian Federation	31.22	28.35	34.38	26.49	39.99	38.36
9.	China	30.62	64.59	14.52	8.96	11.44	29.85
10.	Pakistan	26.82	13.11	54.85	40.52	63.30	64.34

Figure 2.1. Rank Status According to The World Index Report 2025

According to the Climate Risk Index (CRI) 2026, Myanmar ranked as the second most affected country by extreme weather events over the period from 1995 to 2024. In addition, among the top ten countries most affected by extreme weather events in 2024, Myanmar ranked ninth.

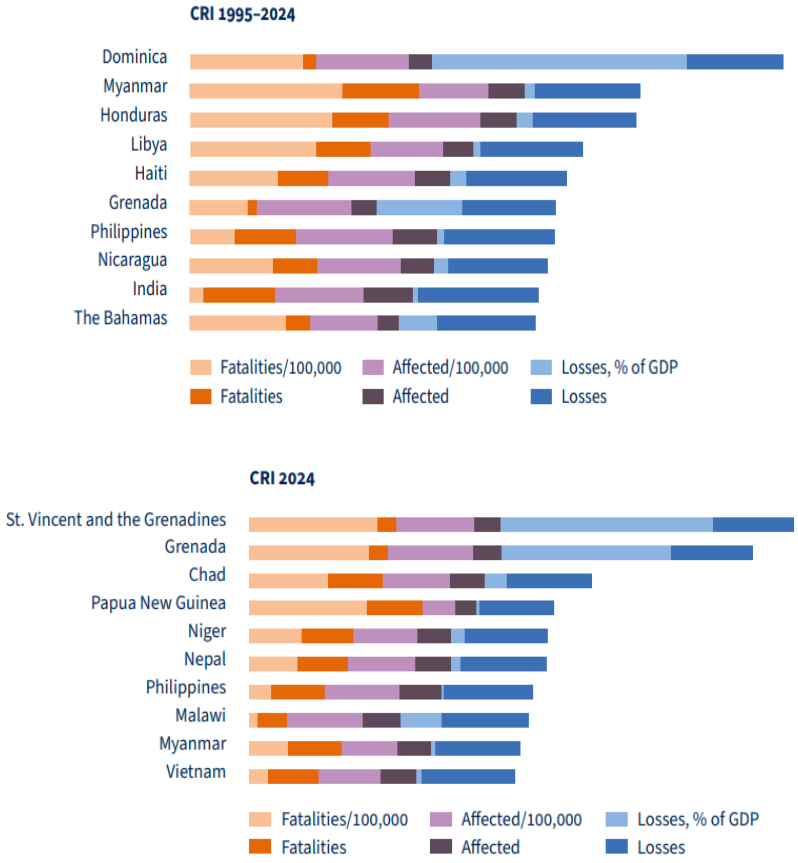


Figure 2.2. Rank Status according to the Climate Risk Index

Fires, floods, storms, strong winds, thunder and lightning strikes, earthquakes, tsunamis, landslides, and droughts frequently occur in Myanmar. Data recorded by the Emergency Event Database (EM-DAT) indicate that floods are the most frequent disaster in Myanmar, accounting for 47% of total disaster occurrences from 2005 to 2025, followed by tropical cyclones at 13%, earthquakes 7%, and other hazards comprising the remaining 33%. EM-DAT records human and economic losses from disasters at the country level worldwide when at least one of the criteria is met: 1) the occurrence of 10 or more fatalities, 2) at least 100 people affected, 3) declaration of a state of emergency, or 4) a call for international assistance.

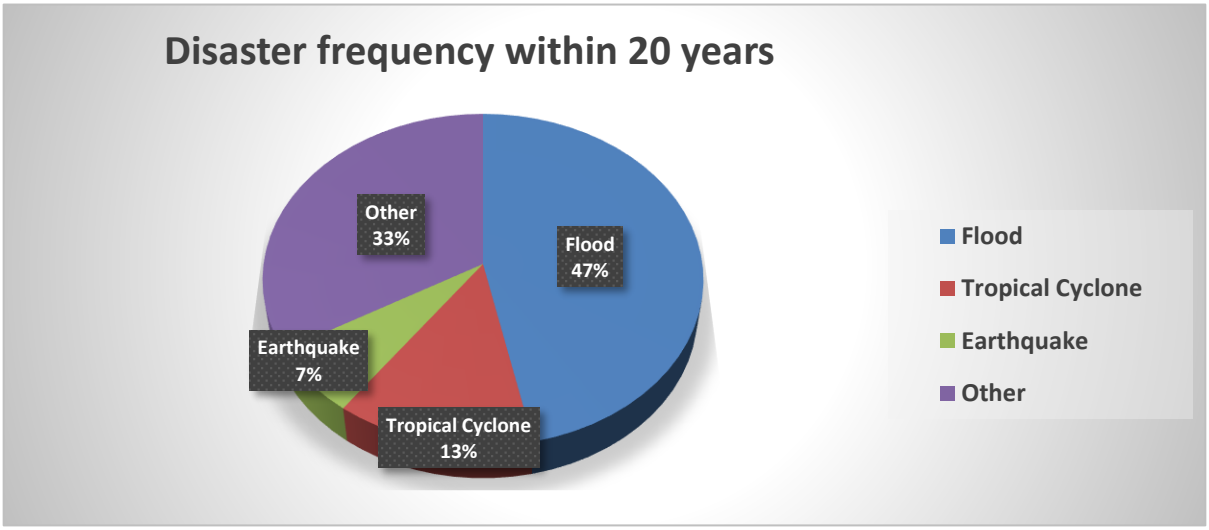


Figure 2.3. Data from EM-DAT (Disasters in Myanmar 2005-2025)

In Myanmar, floods mainly occur during the monsoon season. Two types of floods are defined: the widespread flood and the flash flood. Widespread flooding occurs mainly along the Ayeyarwady, Chindwin, Sittaung, and Thanlwin Rivers, which are the crucial river systems, while flash floods typically occur along small rivers and streams. Observations by the Department of Meteorological and Hydrological (DMH), the occurrence of floods exceeding danger levels in Myanmar's medium and large rivers is distributed as: 6 percent in June, 23 percent in July, 49 percent in August, 14 percent in September, and 8 percent in October.

Figure 2.4 Four Major Rivers in Myanmar

Intense and prolonged heavy rainfall resulting from a pronounced monsoon trough persisting for at least three days

over northern Myanmar, and heavy rainfall related to cyclonic storms across the Myanmar and Bangladesh coast during the early and late monsoon, cause flooding along the Ayeyarwady and Chindwin rivers. When the remnants of typhoons and tropical storms originating in the South China Sea move from east to west across the country, floods occur along the Sittaung and Thanlwin Rivers.

Sometimes, high rainfall intensity in mountainous regions increases pore water pressure and groundwater levels, thereby triggering landslides.

There are two cyclone seasons in Myanmar: pre-monsoon months of mid-April to mid-May and post-monsoon months of October and November. Cyclones in the South Asian region originate primarily from the Bay of Bengal (BOB). Due to the geographical characteristics of the BOB, the typical lifetime of a cyclone in this area is approximately four to five days.

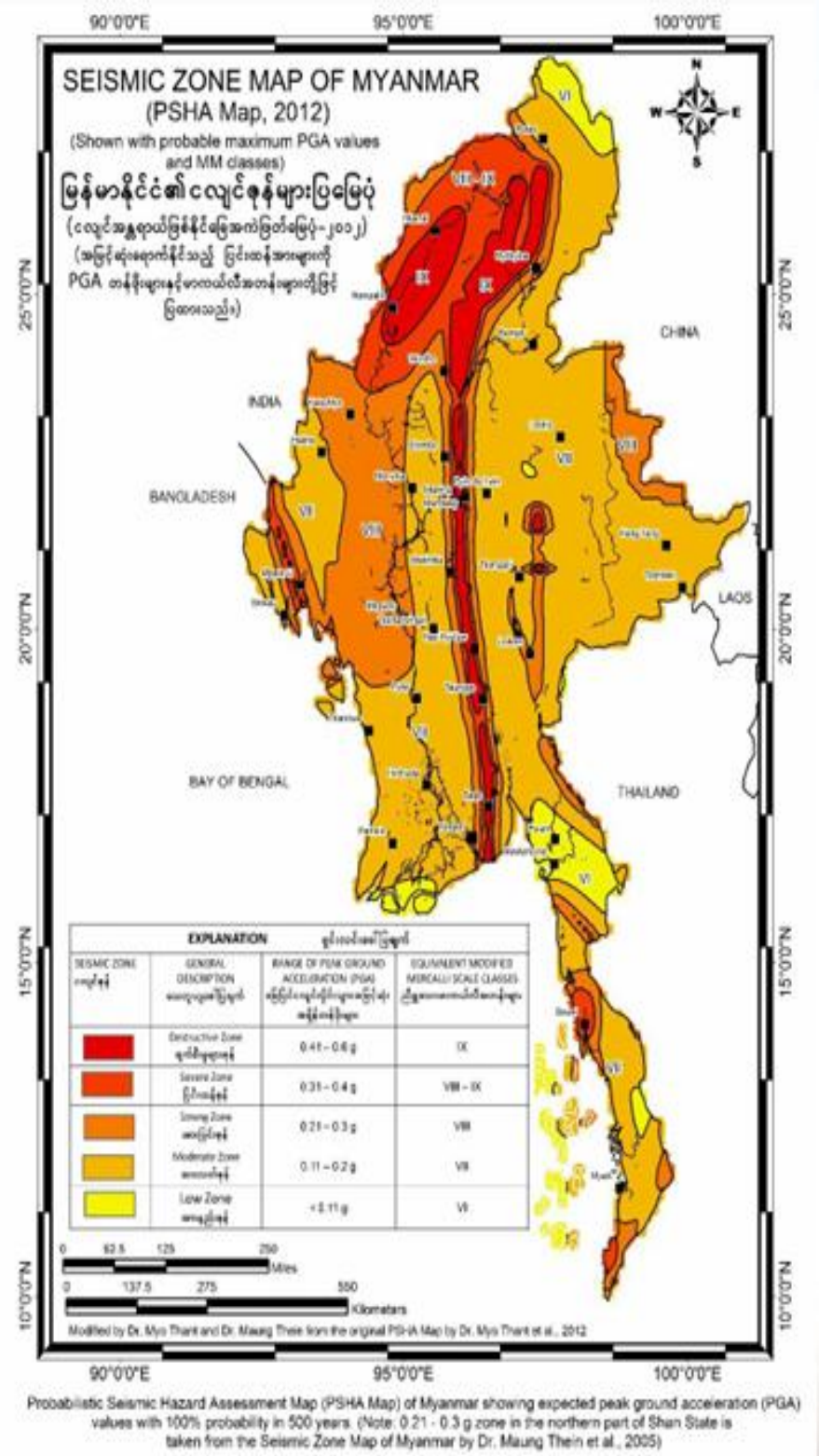
In Myanmar, cyclone early warning is issuing the following color code.

Yellow Color	A storm is formed, but it is not moving towards the Myanmar Coasts
Orange Color	Storm is heading towards the Myanmar Coasts
Red Color	The storm is heading towards the Myanmar Coasts and is expected to cross within the next twelve hours
Brown Color	The storm is crossing the Myanmar Coasts currently
Green Color	The storm abated, and the situation is clear storm

Figure 2.5 Cyclone Color Coding in Myanmar

Myanmar is located in a seismically complex region where active north-south convergence along the Himalayas interacts with east-west convergence and folding within the Indo-Burmese Ranges, driven by the collision of the Indian Plate and the Eurasian Plate. The country's seismic location is quite complicated by several active faults: Sagaing Fault, Kyaukkyan, Papun, and Kabaw faults. The Sagaing fault is the longest and most active; it crosses major urban areas, including Naypyidaw, Yangon, and Mandalay. Since the 1839 Inwa Earthquake, it has been twelve recorded historical earthquakes along the Sagaing Fault. Based

on peak ground acceleration values and historical seismic records, areas are classified into Low, Moderate, Strong, Severe, and Destructive zones. And the zones are shown in Figure 2.6:



Probabilistic Seismic Hazard Assessment Map (PSHA Map) of Myanmar showing expected peak ground acceleration (PGA) values with 100% probability in 500 years. (Note: 0.21 - 0.3 g zone in the northern part of Shan State is taken from the Seismic Zone Map of Myanmar by Dr. Maung Thein et al., 2005)

Figure 2.6. Earthquake Zone Maps

The Dry Zone extends across the southern part of Sagaing Region, the western and central parts of Mandalay Region, and most areas of Magway Region. Approximately 51 townships in those areas are prone to drought.

Fire hazards account for approximately 70 percent of disasters in Myanmar. High incidences of urban fires are generally attributed to climatic conditions such as high temperatures, the widespread use of flammable construction materials, rapid urbanization, and unsafe fire-use practices. Yangon, Bago, Ayeyarwaddy, Mandalay, and Sagaing Regions are prone to a high risk of fire. Forest fires, which are typically surface fires rather than intense crown fires, occur most frequently during the dry season from December to May, when forests are dry, and trees shed their leaves.

2.1 Past Major Disasters

Owing to its geographical and geological characteristics, Myanmar has experienced a wide range of major disasters in the past.

The tremendous destructive power of Cyclone Nargis, a category 4 (wind speed120 mph) storm, hit Myanmar in 2008, especially in the Ayeyarwaddy Delta Region. It caused 138,373 people to die. The estimated 7.35 million people living in the affected townships, about 2.4 million were severely impacted. Thirty-seven townships in Ayeyarwaddy and Yangon Regions were severely affected, with extensive damage to housing and critical infrastructure, including roads, water and sanitation systems, fuel supplied, and electricity networks. Lessons learned from Cyclone Nargis offer an opportunity to strengthen Myanmar's disaster management systems.

Two years beyond Cyclone Nargis, Cyclone Giri hit Rakhine State, Myanmar, on 22nd October 2010, and 57 people died. The government and local authorities undertook preparedness measures to enable a timely response, including search and rescue planning. Early warnings were disseminated to communities through radio and television, and local authorities facilitated the evacuation of people to safer locations. As a result, the number of fatalities was significantly lower than that recorded during Cyclone Nargis.

Myanmar is highly prone to earthquakes. The Tarlay Earthquake, with a magnitude of 6.8, hit in 2010, followed by the Thabaikkyin Earthquake of the same magnitude in 2012. As a

result of these events, 76 people died, and 100 people were injured in the Tarlay Earthquake, while the Thabeikkyin Earthquake caused 18 people to die and 114 people to be injured.

In 2015, Cyclone Komen struck in Bangladesh, bringing strong winds and heavy rainfall to Myanmar, which caused widespread flooding across 12 of the country's 14 States and Regions. On 31 July, the President declared Chin and Rakhine States and Magway and Sagaing Regions as natural disaster-affected areas. The flood and landslides resulted in 125 fatalities and the temporary displacement of approximately 1.7 million people.

In August 2019, two low-pressure areas in the Bay of Bengal brought unusually heavy rainfall to Myanmar. Triggering floods and landslides that affected twelve states and regions and impacted approximately 0.2 million people. Mon state was the most affected area with a huge impact from landslides, with 75 people dead, 40 missing, and 175 affected by the landslide on 9th August 2019. Twenty-seven houses and one religious building were destroyed.

On 2 July 2020, the deadliest landslide occurred at the Wai Khar open-pit jade mine in Hpakant Township, Kachin State, the northern part of Myanmar. An enormous amount of quarry slope material collapsed into a flooded open pit, burying jade miners working along the slopes. At least 172 miners died as a result of the incident.

2.2 Recent Major Disasters

2.2.1 Cyclone Mocha (May 2023)

During the first week of May 2023, a low-pressure area was observed in the Andaman Sea, which is connected to the southeastern Bay of Bengal. It was predicted that a strong cyclonic storm would be formed. Hence, the National Disaster Management Committee (NDMC) held an emergency coordination meeting on 6 May 2023, before the onset of Cyclone Mocha. The National news channels and the DMH continuously disseminated the warning five days before the cyclone hit.

On the other hand, the NDMC activated the Disaster Management Centre (DMC) on 8 May 2023, to carry out cyclone Mocha preparedness, emergency response, reconstruction, and rehabilitation. Emergency food supplies, search and rescue equipment, and essential medicines for emergency medical care were pre-positioned at areas along the cyclone path, and evacuation places were identified.

Cyclone Mocha hit Rakhine State on 14th May 2023, affecting a total of 12 States and Regions. The cyclone resulted in 156 casualties and impacted nearly 2.9 million people. More than 93,000 houses were destroyed, while over 179,000 houses were partially destroyed. Total damages and losses were estimated at 543 billion Myanmar Kyat, of which Rakhine State accounted for approximately 98 percent. School buildings, health facilities, governmental offices, and religious buildings were destroyed. Moreover, farmland and rice fields were inundated, and fish ponds and shrimp ponds were also damaged. Seventeen Townships in Rakhine State were designated as disaster-affected areas on 15 May 2023, and four townships in Chin State were designated on 16 May 2023.

Cyclone Mocha preparedness, emergency response, and recovery measures were being taken by local governments and working committees led by the NDMC. The ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre) provided technical assistance and humanitarian assistance. Hygiene kits, household goods, emergency foods, medicines, etc., were received as international assistance. The reconstruction processes are being carried out with the Natural Disaster Management Fund, in addition to local and international donors. The DMC was operated for about six months.

2.2.2 Typhoon Yagi-Related Flooding (September 2024)

Due to the remnant clouds of Typhoon Yagi in the South China Sea, Myanmar experienced flooding on 11 and 12 September 2024. Rapid runoff from mountainous streams occurred, triggering severe floods across Naypyitaw Union Territory and seven States and Regions. That event was unprecedented and has not been experienced for approximately 50 years. The NDMC held an emergency meeting with committee members and chief ministers from the affected areas on 13 September 2024, and the DMC was activated on the same day.

The impacts of Typhoon Yagi-related floods caused damage and losses with an estimated amount of 484 billion Myanmar Kyat. Shan State was the most affected, with 28.59 percent of the total flood damage and loss, followed by Naypyitaw Union Territory with 25.67 percent. Four hundred and fifty-five people were dead, and 48 were injured, while over 770,000 were affected. The most damaged sectors are key infrastructures, housing, agriculture and livestock, transportation and communication, as well as electricity and water supply.

Immediately after the disaster, search and rescue activities were conducted, food and non-food items, emergency medical care, shelters, and safe drinking water were provided to

the affected people. Same as the Cyclone Mocha measures, the AHA Centre and local or international well-wishers were provided with humanitarian aid. The government undertook measures to support livelihood restoration, physical and mental health care, the rehabilitation of lifeline systems, and the reconstruction of critical infrastructures. The DMC was operated for about four months.

2.2.3 Mandalay Earthquake (March 2025)

On 28th Mar 2025, at 12:50:52 MMT, Myanmar faced a devastating earthquake, called the Mandalay Earthquake, with a magnitude of 7.7, that struck the Sagaing Region, with its epicenter located at a depth of 10 km beneath the ground. As the Mandalay Earthquake impacted, 3818 people died, 5104 people were injured, 40,019 houses were partially destroyed, and 11,995 houses were totally destroyed. The total amount of damage and loss is 7,979 billion Myanmar Kyats. Mandalay was the most severely affected area, accounting for 45.51% of the total damage and losses, followed by Naypyitaw at 43.95%, Sagaing at 7.09%, and the remaining areas at 3.45%. Public housing, religious buildings, key infrastructures, the agriculture and livestock sector, the public transportation and communication sector, the education sector, and the health sector were damaged. In addition, the electricity and water supply systems were also adversely affected.

Prompt actions were undertaken by the government, with the NDMC holding an emergency meeting on 29 March 2025, and the DMC being activated on the same day. The Reception and Departure Center (RDC) was operated to receive incoming search and rescue teams and emergency medical teams from ASEAN countries, the AHA Centre, and partner countries who came to assist the people affected by the earthquake, as well as to store and distribute humanitarian aid.

The relevant working committees coordinated with international Urban Search and Rescue (USAR) teams and Emergency Medical Teams (EMT) to conduct the rescue operation and provide medical care, with a total of 25 partner countries offering assistance. Local governments provided emergency food and shelter for the affected people. Updated information on emergency response, rehabilitation, and reconstruction activities was shared with the public through situation reports, social media platforms, and the national news channel. Emergency and recovery measures are carried out under the guidance of the NDMC. The DMC was operated for about six months.

3. Disaster Management System in Myanmar

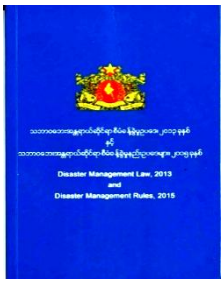
Due to limited experience in disaster preparedness, the 2008 Cyclone Nargis resulted in the loss of over 130,000 lives and became a historical disaster in Myanmar. Based on lessons learned from the 2008 Cyclone Nargis, the public, government departments and organizations, technical groups, the private sectors, and civil society organizations are increasingly mainstreaming disaster risk reduction across all sectors.

In 2009, the Standing Order for Natural Disaster Management in Myanmar was issued by the National Disaster Preparedness Central Committee (NDPCC) to ensure that, when a disaster occurs, emergency relief and rehabilitation activities are carried out in accordance with the prepared plans and that people are mobilized at the national level for participation in response and recovery efforts. It is aimed at minimizing losses from an unexpected natural disaster. Disaster management committees and working groups have been established at the national level, regional/state, district, and township levels to enhance coordination, preparedness, and effective disaster management across the country.

In accordance with the current disaster risk management practices, the DM law and rules, the 2009 Standing Order was revised and updated in 2022. The Standing Order on Disaster Management (2022) is intended to be a key reference for the implementation of disaster management activities. The Standing Order specifies the conditions for declaring a disaster-affected area, the operation of the Disaster Management Centre (DMC), the duties and responsibilities of the twelve working committees, Union Territory, State, and Region Disaster Management Bodies in preparedness, emergency response, and recovery. Moreover, civil-military coordination and collaboration with local and international organizations on disaster risk reduction was also identified.

Figure 3.1 Revised from 2009 Standing Orders on Disaster Management to 2022 Standing Orders on Disaster Management

The Disaster Management Law was adopted on 31st July 2013 to implement effective and efficient disaster management tasks for disaster risk reduction, to collaborate and coordinate with line ministries, local or international organizations, and Civil Society Organizations. The DM law aims 1) to implement natural disaster management programmes systematically and expeditiously in order to reduce disaster risks, 2) to form the National Committee and local bodies in order to implement disaster management programs systematically and expeditiously, 3) to coordinate with national and international government department and organizations, social organizations, other non-government organizations or international organizations and regional organizations in carrying out disaster management activities, 4) to conserve and restore the environment affected by disaster, and 5) to provide health, education, social and livelihood programmes in order to bring about better living conditions for victims.



The formation of the National Disaster Management Committee (NDMC) and its Duties and Powers, the formation of Disaster Management Bodies and their Duties and Powers, the Declaration of a disaster-affected area, Disaster Management, the Disaster Management Fund, and Offences and Penalties are set out in the Disaster Management Law.

To enhance the effectiveness of disaster management, the National Disaster Management Fund has been established at the national, state, and regional levels. Furthermore, a person who violates the provisions of the Disaster Management law may be subject to legal action in accordance with Chapter 8 of the Law.

According to section 43 (a) of the Disaster Management Law, the Disaster Management Rules were promulgated on 7 April 2015 by the Ministry of Social Welfare, Relief, and Resettlement with the agreement of the Union Government.

3.1 Declaration of Being a Disaster-Affected Area

According to Disaster Management law Chapter V, section 11, the President is empowered to declare an area as a Natural Disaster Affected Area, based on a report submit by the NDMC or by other means that a severe natural disaster has been occurred, resulting in extensive loss of lives and properties and environmental damage in the whole or any part of a state or region. The Disaster Management Rules 26 (a & d) stated that the duration of the first declaration shall extend up to 2 months, not back to normalcy declaration shall cause to extend

up to 2 months again if necessary, and if the whole or part of the affected area is back to normalcy, the declaration may be withdrawn within such duration.

3.2 Key Planning Documents for Disaster Risk Reduction in Myanmar

Since 2008, Myanmar has been advancing development and disaster risk reduction initiatives at a rapid pace. In this context, the Myanmar Disaster Risk Reduction Action Plan (MAPDRR-2012) was formulated in 2012 in line with the goals of the Hyogo Framework for Action (HFA).

In 2017, the MAPDRR was drafted and implemented for a second time, with a vision of protected lives, the economy, cultural heritage, and the environment, through an inclusive approach towards sustainable development in Myanmar. It is leading a long-term plan through building resilience until 2030. The Action Plan identifies 32 priority actions under four main pillars, with each priority action clearly defining its objectives, activities, expected outputs, implementation timeframe, and the responsible lead ministry or department.

The action plan focuses on the four main pillars, in line with the Sendai Framework for Disaster Risk Reduction (SFDRR): Assessing Disaster Risk, including Extreme Weather Events and Creating Public Awareness on Disaster Risk Reduction, Strengthening Disaster Risk Governance to Reduce and Manage Risk, Mainstreaming Disaster Risk Reduction for Resilient Development, and Enhancing Disaster Preparedness for Effective Response and Resilient Rehabilitation and Reconstruction.

The Myanmar National Framework for Community Disaster Resilience, adopted in 2016, emphasizes the attainment of people-centered, inclusive, and sustainable socio-economic development in disaster contexts. The framework aims to strengthen the community's resilience by encouraging a common understanding, introducing a coherent approach, and classifying potential opportunities.

The National Earthquake Preparedness and Response Plan was adopted in 2019 to enhance national capacities to cope with earthquake hazards and to guide preparedness and response actions in case of an earthquake. The vision of the plan is to reduce loss of lives and properties, injuries, and enable affected communities to recover promptly. It specifies roles and responsibilities across relevant ministries, departments, and response agencies, and sets the

framework for coordinated response functions, including activation of emergency mechanisms and operational procedures at the national, state, and regional levels.

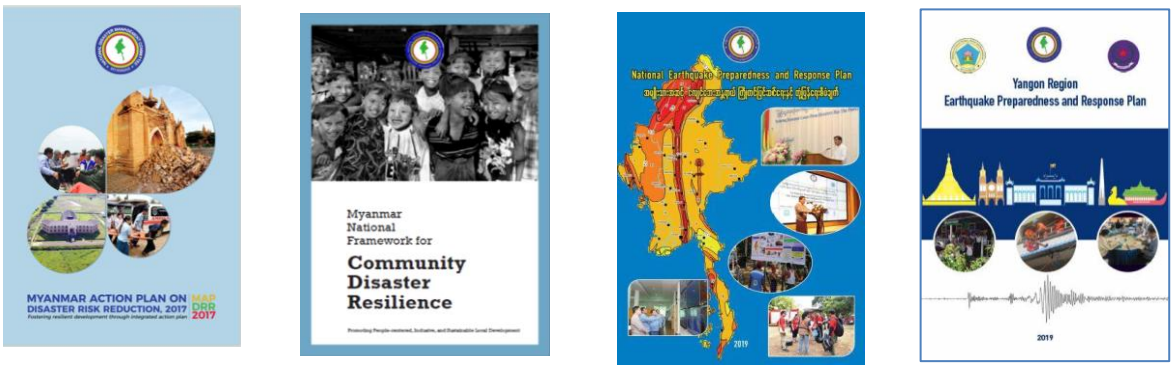


Figure 3.2. Key Planning Documents for Disaster Risk Reduction

3.3 Formation of the National Disaster Management Committee (NDMC)

According to the Disaster Management Law Chapter 3, Section 4, the Union Government has established a National Disaster Management Committee (NDMC) chaired by a Vice-President and composed of suitable persons for the effective and successful implementation of the provisions of the Disaster Management Law. The Union Government may also reconstitute the NDMC as necessary.

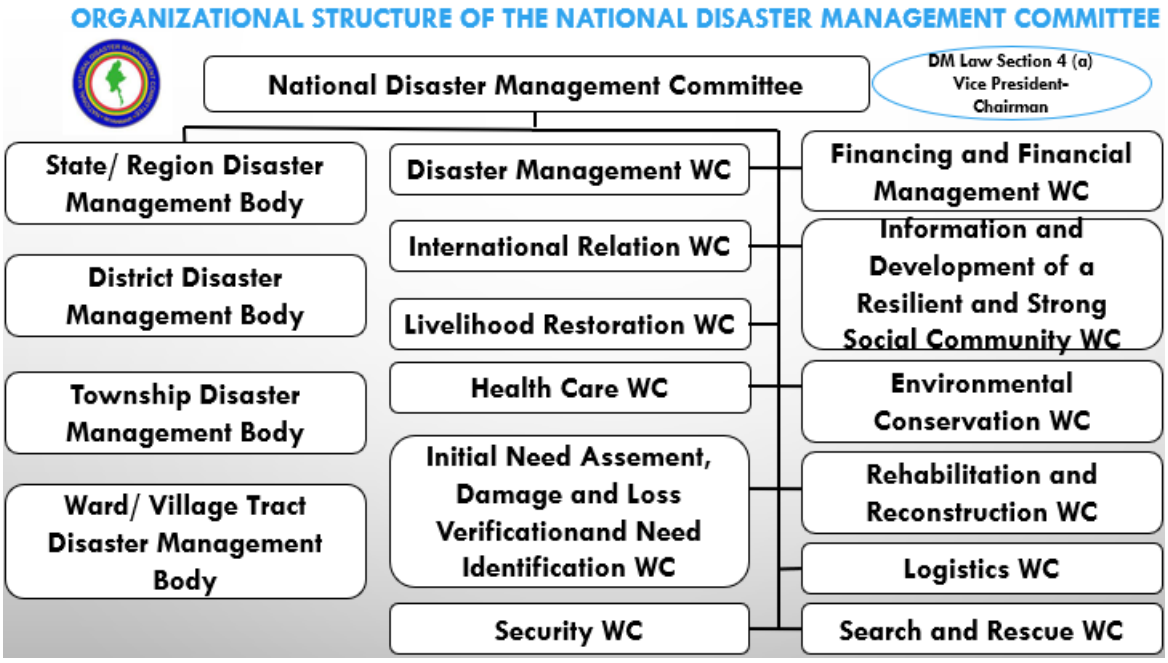


Figure 3.3. Organizational Structure of the National Disaster Management Committee

The NDMC is led twelve working committees: 1) Disaster Management Work Committee; 2) Financing and Financial Management Working Committee; 3) International Relation Working Committee, 4) Information and Development of a Resilient and Strong

Social Community Working Committee, 5) Livelihood Restoration Working Committee, 6) Environmental Conservation Working Committee, 7) Health Care Working Committee, 8) Rehabilitation and Reconstruction Working Committee, 9)Initial Needs Assessment, Damage and Loss Verification and Need Identification Work Committee, 10) Logistic Work Committee, 11) Security Working Committee, and 12) Search and Rescue Work Committee. Each working committee is chaired by the respective Union Minister; however, as an exception, the last four working committees are chaired by Deputy Ministers.

Under the Disaster Management Law's Chapter 4, Section 7, Disaster Management Bodies have been established at the state/region, district, township, ward, and village tract levels. At the state and regional levels, the respective Chief Ministers serve as the Chairpersons of the disaster management bodies. On the other hand, the administrators of the respective districts, townships, wards, and village tracts also serve as the Chairpersons of the respective levels of disaster management bodies. The following figure shows the organizational structure of the disaster management bodies in Myanmar.

3.4 Level of Emergency Response

According to the Disaster Management Rules 30, emergency response activities, including search and rescue during the disaster stage, can be classified as follows;

1) Emergency Status Level 5: if a disaster is considered to be controlled by ward or village tract level
2) Emergency Status Level 4: if a disaster is considered to be controlled by township level
3) Emergency Status Level 3: if a disaster is considered to be controlled by the Self-administered Division or Self-administered Zone level or district level
4) Emergency Status Level 2: if a disaster is considered to be controlled by State or Region level
5) Emergency Status Level 4: if a disaster is considered to be controlled by the National level

3.5 Disaster Management Centre (DMC)

Activation of the Disaster Management Centre is stated in the Standing Order on Disaster Management 2022. When a situation requires a national-level response, DMC is

activated to ensure that natural disaster response operations are carried out in a timely, rapid, and effective manner, with proper coordination and supervision. According to the DM Rules (6), the Ministry of Social Welfare, Relief and Resettlement (MSWRR) establishes the DMC at the ministry office to perform the disaster management tasks effectively and promptly. The ministry carries out the duties of the DMC.

According to Disaster Management rules 12, sub-rule (k), the Department of Disaster Management (DDM) is responsible for carrying out the functions of the DMC in line with the guidelines of the NDMC and the MSWRR to ensure that disaster management activities are carried out in a timely and effective manner when a disaster occurs. Moreover, DM rules 12, sub-rule (a), DDM takes a crucial role in coordinating with the working committees and relevant ministries. When the DMC is operated, the representative from the working committees, relevant ministries, and organizations serves at the DMC 24/7.

3. 6 Dissemination Mechanism of Early Warning in Myanmar

The Department of Meteorology and Hydrology (DMH) under the Ministry of Transport and Communications is a focal department for the dissemination of early warning. The DMH monitors weather forecasts and issues warnings to the public via radio, television, and social media. On the other hand, the DHM also provides forecasts and warnings to higher authorities, including NDMC, to support decision-making, as well as to local governments and the Ministry of Social Welfare, Relief, and Resettlement to take precautionary measures if necessary.

3.6.1 Myanmar Disaster Alert Mobile Application

The Department of Disaster Management under the Ministry of Social Welfare, Relief, and Resettlement also shares the weather conditions and focuses via social media platforms and the Myanmar Disaster Alert (MDA) mobile application to the public. In addition, the local governments share these forecasts and warnings with the public through their respective subordinate offices.

The Myanmar Disaster Alert (MDA) mobile application serves as a platform for disseminating early warning information and weather updates. It also provides information on disaster risk reduction (DRR) activities undertaken by the DDM, emergency contact details,

relevant disaster management documents, including laws and rules, and guidance on disaster preparedness and precautions. In addition, the application can access the official websites of the Ministry of Social Welfare, Relief and Resettlement and the Department of Disaster Management.

3.6.2 Emergency Operation Centre

During normal weather conditions, the Emergency Operations Centre (EOC) is responsible for collecting meteorological information and reporting disaster-related data. When a natural disaster occurs, it gathers, analyzes, and presents critical information to decision-makers, provides technical support to the NDMC, and produces infographics and maps. These functions enable decision-makers to access accurate and timely data, thereby supporting more effective disaster management efforts. Within the ASEAN region, the DDM EOC is linked with the AHA Centre's EOC, facilitating real-time access to and the exchange of disaster-related information.

Figure 3.4. Emergency Operation Centre in DDM

3.7. Conducting Public Awareness Programmes

A wide range of public awareness programmes are conducted in Myanmar, including educational talks, drills, and simulation exercises in schools, vocational schools, universities, and communities; disaster-related trainings; disaster management forums and talk shows. In addition, informative pamphlets and posters are widely distributed nationwide to enhance public awareness and preparedness. On the other hand, animated videos and disaster-related information are disseminated to the public not only through the national media and social platforms but also directly at the grassroots level through community-to-community outreach.

Disaster education talks are generally conducted by the DDM through its State/ Region, District and Township offices. Disaster risk management trainings are also organized at the State/Region, District, and Township levels. Participants are selected from individuals involved in disaster management activities in their respective areas, members of civil society organizations, and community members with an interest in disaster management. In addition,

the Disaster Risk Reduction Youth Volunteer refresher level (DRRYV) programme is conducted targeting youths in a community.

Drills are conducted at all administrative levels in accordance with identified hazard profiles and potential disaster types. The DDM takes a focal role in organizing and coordinating these drills, in close collaboration with the Fire Services Department, the Department of Public Health, the General Administrative Department, the Myanmar Red Cross Society, volunteer firefighters, and local communities. In line with “no one left behind” and “all inclusive”, awareness activities are conducted with preschool students, people with disabilities, and older persons.

3.7.1 Disaster Management Training Centre (DMTC)

According to sub-component 7.9 of the Myanmar Action Plan on Disaster Risk Reduction (MAPDRR, 2012), the provision of technical assistance in disaster management to all ministries, departments, and organizations, at both horizontal and vertical levels, is a designated role of the Disaster Management Training Center (DMTC) in Myanmar. The establishment of DMTC was a significant outcome of the experience gained from Cyclone Nargis, providing an opportunity to strengthen disaster-related knowledge and practices. In December 2015, the DMTC was established in the Ayeyarwaddy Region, aiming: 1) to create a resilient society by increasing the knowledge of natural disasters among the people, 2) to train and develop human resources, and 3) to enhance the capacity of those involved in disaster management. Many courses are conducted in DMTC to promote disaster-related knowledge and good practices in disaster management. Training is provided to government officials, social organizations, and youth engaged in disaster risk management to enhance their capacity.

Figure 3.5 Training at the Disaster Management Training Centre

3.8. Shelters and Other DRR Works

Based on lessons learned from Cyclone Nargis, shelters have been implemented since 2008 in storm and flood-prone States and Regions. Three types of shelters are constructed in those areas, namely cyclone shelters, multipurpose shelters, and school-cum shelters under the guidance of the Chairman of the NDMC. These facilities are intended to support community and social activities during normal times and to provide safe places for affected populations during emergencies. The effectiveness of these shelters is evident in the significant reduction in fatalities compared with the impacts of Cyclone Nargis in 2008 and Cyclone Mocha in 2023.

Preventive and preparedness measures are being carried out, including repairing bridges, strengthening retaining walls to prevent riverbank erosion, and constructing box culverts to reduce the risk of natural disasters.

Figure 3.6 Shelters in Cyclone and Flood -Prone Areas

3.9. Warehouses for Emergency Relief Items

Relief items and humanitarian aids are stored in the two central warehouses, namely the Yangon central warehouse for lower Myanmar and the Mandalay central warehouse for upper Myanmar, 15 states and region warehouses, 56 district level warehouses, and 74 township warehouses to be ready during emergency time.

4. Conclusion

Myanmar experienced various serious disasters in the past. Those experiences are key drivers of strengthening the disaster management system in Myanmar. Myanmar has been able

to systematically manage recent disasters through effective institutional structures and coordinated actions. A comparison between Cyclone Nargis in 2008 and Cyclone Mocha in 2023 indicates that although Cyclone Mocha recorded stronger wind speeds and affected a wider area, the resulting fatalities and overall damage were significantly lower than those from Cyclone Nargis. It can be pointed out that lessons learned from Cyclone Nargis have strengthened the disaster management system, in terms of developing legal and policy documents, raising public awareness, preparations, and prevention of cyclone impacts. Myanmar continues learning from past disaster experiences and makes steady efforts to strengthen preparedness and build resilience against future disasters.

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