



Disaster prevention and management in Myanmar

Prof Hla Hla Win



Myanmar

- A sovereign state in Southeast Asia
- 55 million population
- 676,578 square kilometres (261,228 square miles) in size
- Myanmar is ethnically diverse. There are 135 distinct ethnic groups.
- Myanmar has been a member of the Association of Southeast Asian Nations (ASEAN) since 1997.

Classification of Disasters







 Myanmar borders India and Bangladesh to the west, China to the north, and Laos PDR and Thailand to the east.

 Myanmar has a long coastline of nearly 3000 km in the Bay of Bengal and in the Andaman Sea.



Myanmar's geographic position exposes to a variety of **natural hazards**.

THINK TANK & RESEARCH

BRIEFING PAPER

GLOBAL CLIMATE RISK INDEX 2019

Who Suffers Most From Extreme Weather Events? Weather-related Loss Events in 2017 and 1998 to 2017

David Eckstein, Marie-Lena Hutfils and Maik Winges

Vorderseite T&R



CRI Rank	Country	CRI score	Fatalities in 2017		Fatalities per 100 000 inhabitants		Losses in US\$ million (PPP)		Losses per unit GDP in %	
			Total	Rank	Total	Rank	Total	Rank	Total	Rank
24	Albania	35.83	5	78	0.174	34	275.47	43	0.765	13
123	Algeria	112.50	1	101	0.002	107	0.04	116	0.000	122
98	Angola	83.17	11	59	0.039	79	7.65	88	0.004	97
13	Antigua and Barbuda	20.67	3	86	3.297	4	1 101.44	24	45.932	3
49	Argentina	55.50	9	64	0.020	91	1 565.82	23	0.170	32
124	Armenia	116.00	0	108	0.000	108	0.00	124	0.000	124
18	Australia	30.33	31	30	0.125	43	3 418.74	10	0.274	28
42	Austria	52.67	5	78	0.057	69	654.09	30	0.148	35
111	Azerbaijan	95.33	5	78	0.051	72	0.08	112	0.000	119
124	Bahrain	116.00	0	108	0.000	108	0.00	124	0.000	124
9	Bangladesh	16.00	407	4	0.249	19	2 826.68	14	0.410	20
124	Morocco	116.00	0	108	0.000	108	0.00	124	0.000	124
28	Mozambique	37.67	26	38	0.088	48	162.39	54	0.438	19
69	Myanmar	68.33	22	44	0.042	77	86.53	66	0.026	73
124	Namibia	116.00	0	108	0.000	108	0.00	124	0.000	124
4	Nepal	10.50	164	15	0.559	10	1 909.98	18	2.412	
108	Netherlands	89.50	1	101	0.006	103	104.42	60	0.011	85





WorldRiskIndex 2018 Overview



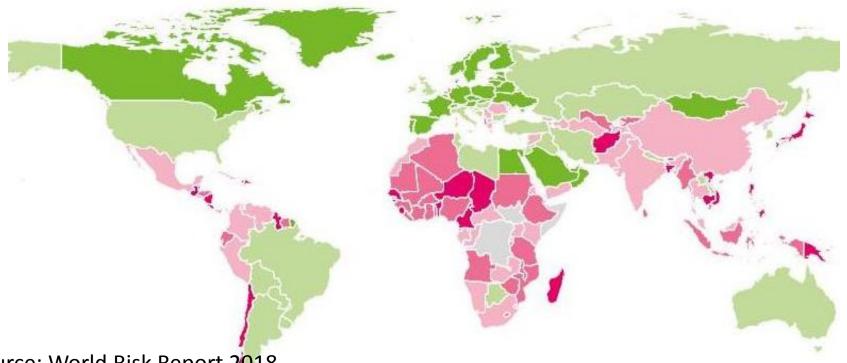
Classification	WorldRiskIndex	Exposure	Vulnerability	Susceptibility	Lack of coping capacities	Lack of adaptive capacities
very low 🧧	0.36 - 3.15	1.02 - 9.53	20.97 - 32.01	8.26 - 17.05	35.16 - 53.90	13.33 - 23.60
low	3.16 - 5.45	9.54 - 11.70	32.02 - 40.77	17.06 - 20.81	53.91 - 67.73	23.61 - 33.84
medium	5.46 - 7.13	11.71 - 14.50	40.78 - 48.60	20.82 - 28.80	67.74 - 76.73	33.85 - 41.82
high II	7.14 - 10.43	14.51 - 17.73	48.61 - 63.00	28.81 - 46.48	76.74 - 84.10	41.83 - 54.77
very high	10.44 - 50.28	17.74 - 86.46	63.01 - 76.47	46.49 - 70.00	84.10 - 92.28	54.78 - 72.52

Max. = 100%, Classification according to the quantile method.

Rank	Country	WorldRiskIndex	Exposure	Vulnerability	Susceptibility	Lack of coping capacities	Lack of adaptive capacities
1.	Vanuatu	50.28	86.46	58.15	36.07	86.37	52.00
2.	Tonga	29.42	55.92	52.61	28.93	80.06	48.82
3.	Philippines	25.14	49.94	50.33	29.58	81.57	39.83
4.	Solomon Islands	23.29	37.81	61.59	47.28	82.30	55.19
5.	Guyana	23.23	45.56	50.98	27.33	77.36	48.25
6.	Papua New Guinea	20.88	31.05	67.24	55.58	83,80	62.35
7.	Guatemala	20.60	38.50	53.50	32.98	81.35	46.17
8.	Brunei Darussalam	18.82	52.71	35.71	14.80	61.50	30.83
9.	Bangladesh	17.38	29.95	58.03	33.72	84.96	55.42
10.	Fiji	16.58	35.51	46.68	22.33	75.48	42.24
61.	Sri Lanka	7.65	16.01	47.81	24.62	76.44	42.38
62.	Bhutan	7.56	15.48	48.82	25.59	72.29	48.57
63.	Algeria	7.54	16.50	45.69	21.13	76.93	39.01
64.	Myanmar	7.49	13.30	56.29	33.74	85.23	49.90
65.	Netherlands	7.45	31.86	23.39	15.07	40.89	14.20
66.	Panama	7.28	17.26	42.21	25.24	66.03	35.36
67.	Kyrgyzstan	7.25	16.40	44.21	25.17	75.22	32.25

Country	WRI	Rank
Brunei	18.82	8
Cambodia	16.07	12
Indonesia	10.36	36
Laos	5.30	106
Malaysia	6.44	82

Country	WRI	Rank
Myanmar	7.49	64
Philippines	25.14	3
Singapore	2.31	158
Thailand	6.12	88
Vietnam	11.35	25



Source: World Risk Report 2018



 The low-lying south coast was struck by the 2004 Indian Ocean Tsunami, and again in May 2008 by Cyclone Nargis, which caused the country's worst natural disaster, killing 140,000 people.



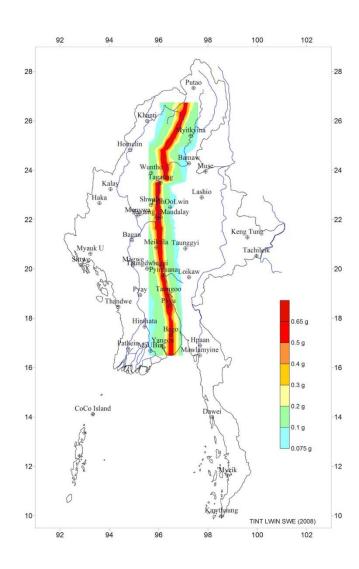
Cyclone Nargis 2008



Nationwide Flood 2015



- The Sagaing Fault is a major tectonic structure that cuts through the centre of Myanmar, broadly dividing the country into:
 - ➤ a western half moving north with the Indian plate and
 - ➤ an eastern half attached to the Eurasian plate.
- Recent large earthquakes are:
 - ➤ 2016 Mawlaik (6.9 Magnitude)
 - > 2012 Shwebo (6.8 Magnitude)
 - ➤ 2011 Thalay events (6.8 Magnitude)



The Sagaing Fault



EARTHQUAKES

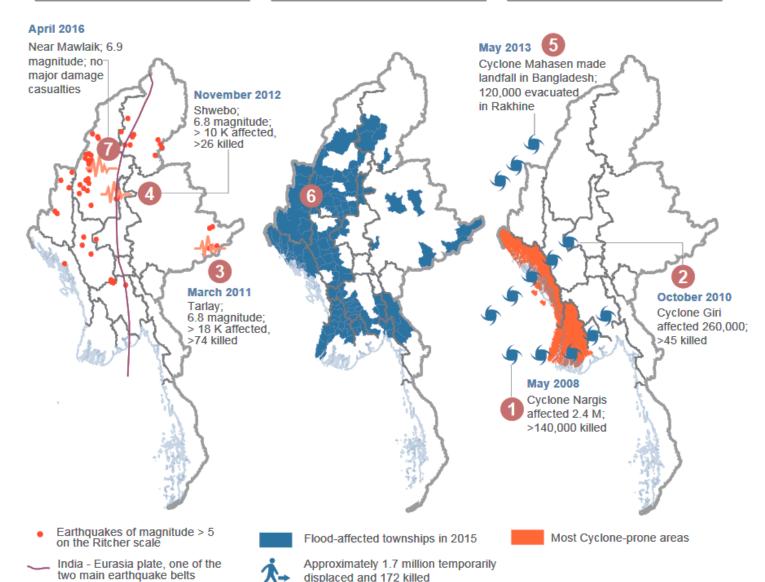


FLOODS AND LANDSLIDES



CYCLONES

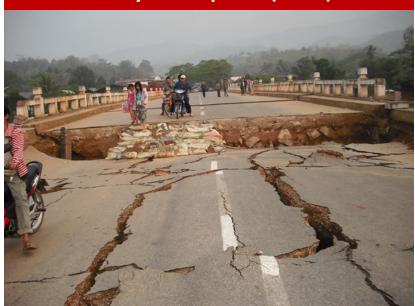




Cyclone Nargis (2008)



Tarlay Earthquake (2011)





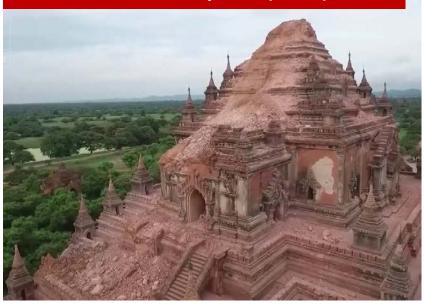


Shwebo Earthquake (2012)

Nationwide Flood (2015)



Chauk Earthquake (2016)





Nant San Fire (2016)



Htein Bin Damp Fire (2018)

Flood (2018)





Flood due to spill way destruction of Swar Dam (2018)





Flood Response Activities By MOHS (2019)







Flood Response Activities (2019)

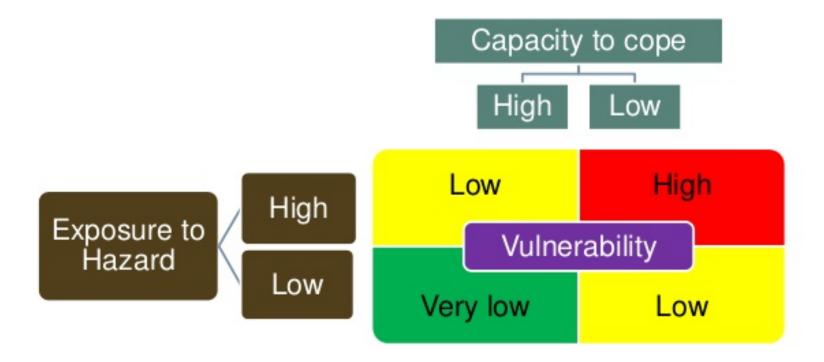




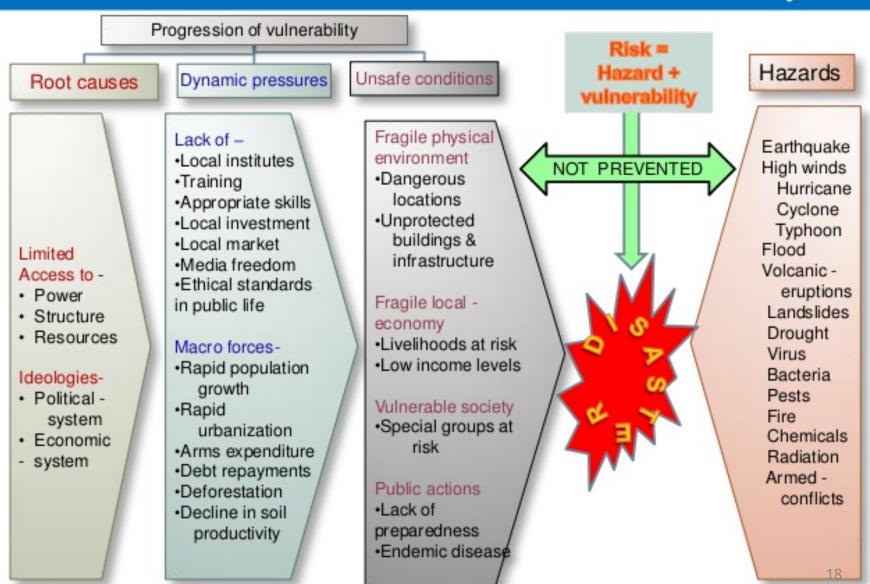


Vulnerability

The propensity of things to be damaged by a hazard.



Disaster occurs when hazards meet vulnerability



Activities that reduce effects of disasters

- Building codes & zoning
- Vulnerability analyses
- Public education

Preparedness

Activities prior to a disaster.

- Preparedness plans
- Emergency exercises
- · Training,
- Warning systems

Mitigation

Integrated Disaster Management

Response

Activities following a disaster.

- Temporary housing
- · Claims processing
- Grants
- Medical care

Recovery

Activities during a disaster.

- Public warning systems
- Emergency operations
- · Search & rescue

PHASES OF DISASTER MANAGEMENT

Disaster Preparedness

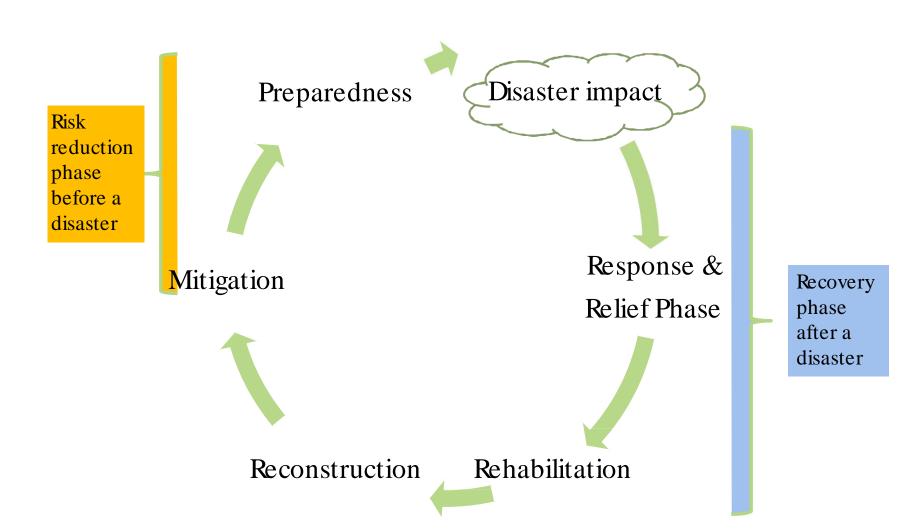
Disaster Impact

Disaster Response

Disaster Recovery

Disaster Mitigation

Disaster Management Cycle



Response & Relief phase

- Rescue
- Humanitarian supplies
- Epidemiological surveillance and disease control
- Vaccination
- Nutrition

Response & Relief phase

- Search and rescue
- First aid, Triage, and stabilization of victims
- Hospital treatment and redistribution of patients to other hospitals if necessary

Relief phase (cont.)

- Organize the health centre/ hospital to meet
 - The emergency
 - Immediate reporting of the local health personnel to their health establishment
 - Rapid assessment of damages to health establishments and facilities
 - Site selection for emergency health establishment
 - Prepare to relieve victims by setting spaces for triage of cases

Triage

- sorting the injured cases according to health needs,
- medical attention on the spot priority given to the most serious cases with a chance of surviving

Reliefphase-(cont) Humanitarian supplies

- Disaster managers must be prepared to receive large quantities of donations.
- There are four principal components in managing humanitarian supplies :
- (a) acquisition of supplies;
- (b) transportation;
- (c) storage; and
- (d) distribution.

Relief phase-(cont) Epidemiological surveillance and disease control

- Epidemiological surveillance and disease control: The principals of preventing and controlling communicable diseases after a disaster are to
- (a) implement as soon as possible all public health measures, to reduce the risk of disease transmission;
- (b) organize a reliable disease reporting system to identify outbreaks and to promptly initiate control measures; and
- (c) investigate all reports of disease outbreaks rapidly

Relief phase-(cont)

 Vaccination: Natural disasters may negatively affect the maintenance of on going national or regional eradication programmes against polio and measles.
 Disruption of these programmes should be monitored closely.

•

Relief phase (cont) Nutrition

Nutrition: Anatural disaster may affect the nutritional status of the population. The immediate steps for ensuring that the food relief programme will be effective include:

- assessing the food supplies after the disaster;
- gauging the nutritional needs of the affected population;
- calculating daily food rations and need for large population groups; and
- monitoring the nutritional status of the affected population.

Rehabilitation

- Rehabilitation and reconstruction are at the heart of disaster recovery phase, aiming at achieving long-term recovery.
- They provide a direct "connect" between disaster response and long-term development.
- Rehabilitation involves restoring local services related to the provision of immediate needs.

Rehabilitation-(cont.)

- Actions taken in the aftermath of a disaster
 - To enable basic services to resume functioning,
 - To assist victims' self-help efforts to repair physical damage,
 - To restore community facilities,
 - To revive economic activities and
 - To provide support for psychological and social well-being of the survivors.

Rehabilitation-(cont.)

- In first weeks after disaster, the pattern of health needs will change rapidly, moving from casualty treatment to more routine primary health care.
- Services should be reorganized and restructured.
- Priorities also will shift from health care towards environmental health measures as follow:
 - Water supply
 - Food safety
 - Personal Hygiene and sanitation
 - Vector control

Rehabilitation-(cont.)

- Water supply: The main public safety aspect of water quality is microbial contamination. The first priority of ensuring water quality in emergency situations is chlorination.
- Food safety: Poor hygiene is the major cause of foodborne diseases in disaster situations. Personal hygiene should be monitored in individuals involved in food preparation

- Personal Hygiene and sanitation: Many CDs are spread through faecal contamination of drinking water and food. Hence, every effort should be made to ensure the sanitary disposal of excreta. Washing, cleaning and bathing facilities should be provided to the displaced persons.
- Wector control: Control programme for vector-borne diseases should be intensified in the emergency and rehabilitation period, especially in areas where such diseases are known to be endemic.(dengue fever and malaria, leptospirosis and rat bite fever (rats), typhus (lice, fleas), and plague (fleas).

Reconstruction

- Long-term development assistance
 - Helping people in the affected area to rebuild their lives and meet their present and future needs
 - Reduction of future disaster risks
 - Replacement of temporary arrangements established as part of emergency response or the upgradation of infrastructure and systems from pre-disaster status.
 - Physical rehabilitation
 - Social rehabilitation
 - Psychological rehabilitation

Mitigation

- Emergency prevention and mitigation involves measures designed either to prevent hazards from causing emergency or to lessen the likely effects of emergencies.
- Direct responsibility of the health sector is limited to ensuring the safety of health facilities and public health services, including water supply and sewerage systems.
- Mitigation complements the disaster preparedness and disaster response activities.

Preparedness

- Emergency preparedness is "a programme of longterm development activities whose goals are to strengthen the overall capacity and capability of a country to manage efficiently all types of emergency. It should bring about an orderly transition from relief through recovery, and back to sustained development"
- Disaster preparedness is an on-going multi-sectoral activity.

Preparedness- (cont.)

1Evaluate the risk of the country or particular region to disaster

- 2 Adopt standards and regulations
- 3.Organize communication, information and warning systems
- 4. Ensure coordination and response mechanisms

Preparedness- (cont.)

5Adopt measures to ensure that financial and other resources are available for increased readiness and can be mobilized in disaster situation

6. Develop public education programmes;

7. Coordinate information sessions with news media and

8.Organize disaster simulation excercises that test response mechanisms.

National Disaster Management Committee Chaired by Vice-President 2

National Disaster Management Working Committee	Se	earch and Rescue Working Commit
Financing and Financial Management Working Committee		Security Working Committee
International Relations Working Committee		Transportation and Communication Working committee
News and Information Working Committee		Rehabilitation and Reconstruction Working Committee
Health Care Management Working Committee		nitial Need Assessment, Damage an Loss Verification and need Identification Working Committee
Livelihood Restoration Working Committee		Environmental Conservation Workii Committee
		Disaster Management Advisory Group

Working Committees under National Disaster Management Committee

S.N	Name of Working Committee	Chair
1.	National Disaster Management Working Committee	Union Minister(MSWRR)
2.	Financing and Financial Management Working Committee	Union Minister(MSWRR)
3.	Search and Rescue Working Committee	Union Minister(MoHA)
4.	Security Working Committee	Union Minister(MoHA)
5.	Transportation and Communication Working committee	Union Minister(MoTC)
6.	News and Information Working Committee	Union Minister(MoI)
7.	Rehabilitation and Reconstruction Working Committee	Union Minister(MoC)
8.	Health Care Management Working Committee	Union Minister(MoHS)
9.	Initial Need Assessment, Damage and Loss Verification and Need Identification Working Committee	Union Minister(MoPF)
10.	Livelihood Restoration Working Committee	Union Minister(MoALI)
11.	Environmental Conservation Working Committee	Union Minister(MoNREC)
12.	International Relations Working Committee	Deputy Minister(MoFA)

Ministry of Social Welfare, Relief and Resettlement



Department of Social Welfare

Department of Disaster Management

Department of Rehabilitation





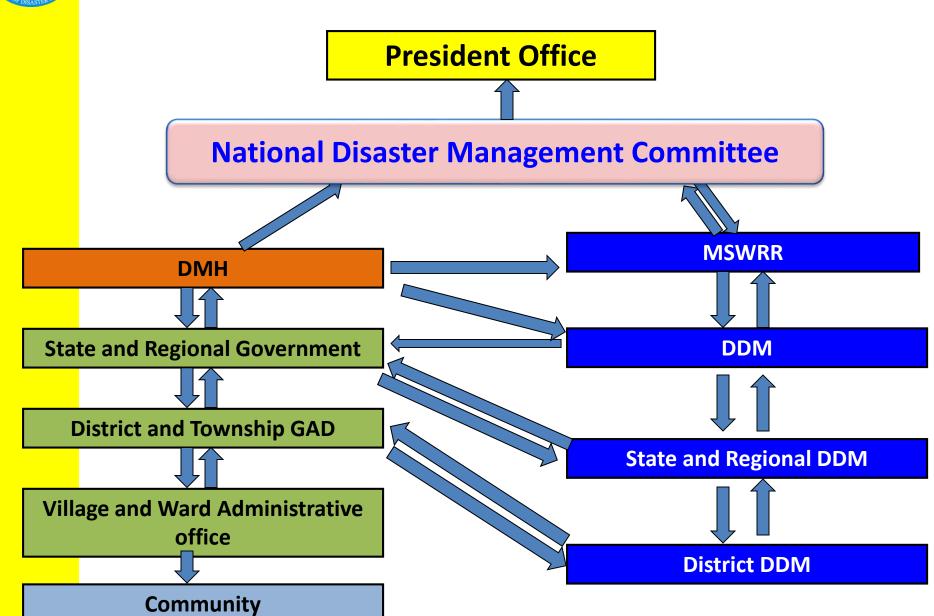


Coordination, Cooperation and Communication System For Disaster Management



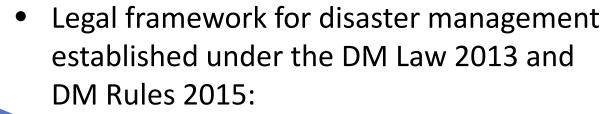


Warning Dissemination System





Disaster management Law and Rules in Myanmar



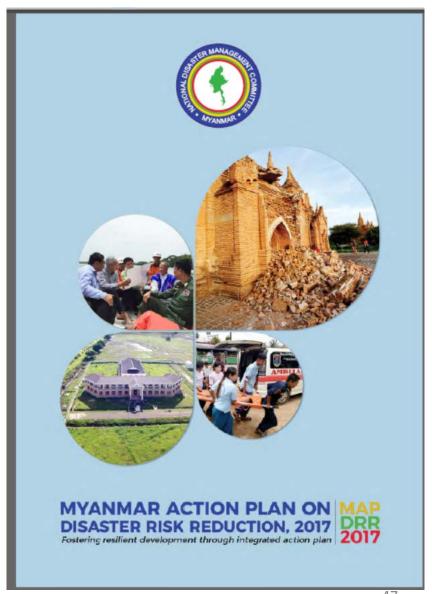
- Clear institutional structure and hierarchy for DM, and responsibilities are clearly assigned at national, regional and state levels.
- DM Rules establish a high-level framework for facilitation of international disaster assistance





Natural Disasters in Myanmar

Myanmar Action Plan on Disaster Risk Reduction MAPDRR -2017





Natural Disasters in Myanmar

Myanmar Action Plan on Disaster Risk Reduction MAPDRR -2017





Preparation for Emergency Health Response

3rd Regional Collaboration Drill in Manila, Phillipines





4th Regional Collaboration Drill in Bali, Indonesia

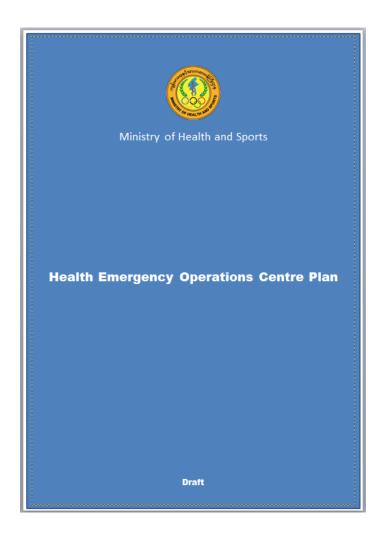




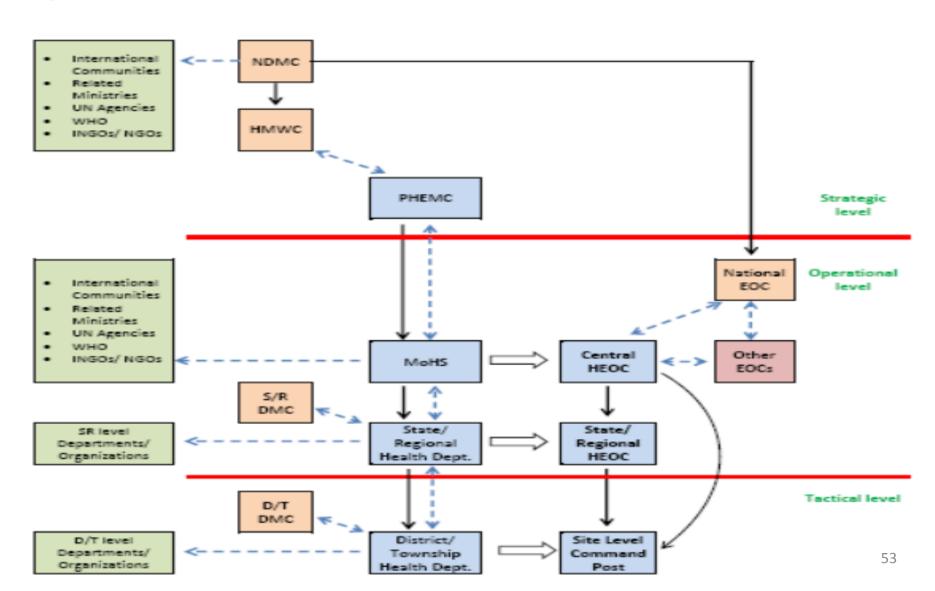
- Myanmar will be the Host Country for 5th Regional Collaboration Drill (RCD)
- Preliminary meetings with other Ministries and internal meetings within MoHS are going to be conducted accordingly for the preparatory stage

Strengthening Health Emergency Operations Centre (HEOC)

Final draft of the HEOC has been developed.



Operations Structure of HEOCs



Level (3) Emergency

Central level "PHEOC"



Level (2) Emergency

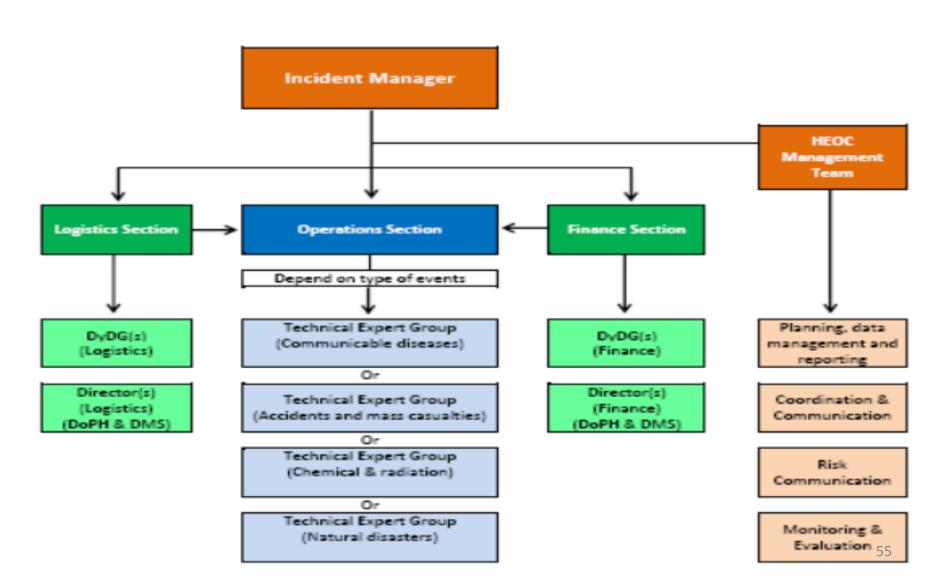
State/ Regional level "PHEOCs"



Level (1) Emergency

Township level "Site level command posts"

Operations Structure of Central HEOC



Strengthening Health Emergency Operations Centre (HEOC)

- In cooperation with WHO and Public Health England, the following activities were conducted in Nay Pyi Taw.
 - Training on Incident Management System (IMS)
 - Training on Health Emergency Operations Centre (HEOC)
 - Simulation Exercise on HEOC Plan (based on the scenario of pandemic influenza outbreak)







Strengthening Health Emergency Operations Centre (HEOC)

Video Conferencing System has been installed at the central level HEOC.



Strengthening Health Emergency Operations Centre (HEOC)

Video Conferencing System has been installed at the following State/ Regional level HEOCs.

- Kachin State
- Kayin State
- Mon State
- Rakhine State
- Shan State
- Yangon Region
- Ayeyarwaddy Region
- Nay Pyi Taw



Kachin State HEOC





It is planned to install the Video Conferencing System in other States and Regions in next years and currently, teleconferencing can be done.

Flood Response Activities By MOHS (2019)







Flood Response Activities (2019)







Disaster Management Training Center

- Situated at Hinthada township, Ayeyarwaddy Region
- Functioning since December 2015.
- Objectives- To enhance capacity of individuals and institutions participating in disaster management, To develop standardization in disaster management in accordance with international practice, To improve research and development in disaster management







Disaster Management Training Center (Cont)

- Curriculum development process led by DDM, supported by DRRWG and MCCDDM, took advise from Technical Working Group
- Various training programs
 - Basic Disaster Management Course (Basic/ToT)
 - CBDRM
 - Emergency Response
 - Camp Coordination and Camp Management
 - Post Disaster Needs Assessment
 - Recovery
 - Climate Change Adaptation and DRR
 - GIS
 - Early Warning System
 - Inclusive DRR











မြန်မာနိုင်ငံရဲ့သဘာဝဘေးအန္တရာယ်၊ မိုးလေဝသအရြေအနေနှင့် ကယ်ဆယ်ရေးသတင်းများအားလုံးကို အရိုန်နှင့်တစ်ပြေးညီသိရှိနိုင်ဖို့အတွက် ဒါန်မိုဘိုင်း Application ကို သင့်ဖုန်းလေးထဲမှာ ထည့်သွင်းထားရန် လိုအပ်ပါတယ်

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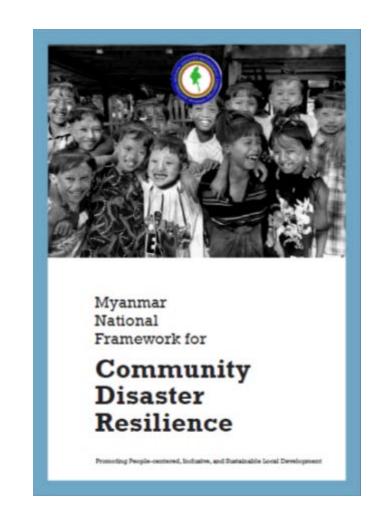


Andree ration



Myanmar National Framework for Community Disaster Resilience

- Based on Government's Reforms
 aimed at "Promoting People centered, Inclusive, and Sustainable
 Development"
- Supports Myanmar commitments to international frameworks –
 - Sustainable Development Goals,
 - Sendai Framework for Disaster Risk Reduction,
 - Paris Agreement on Climate Change,
 - ASEAN Agreement on Disaster Management and Emergency Response- AADMER



Key Sectors and Themes for Strengthening Community Disaster Resilience

- Selected based on opportunities for community engagement
 - 1. Rural Development
 - 2. Agriculture
 - 3. Urban Development
 - 4. Environmental Conservation and Forestry
 - 5. Financial Inclusion
 - 6. Social Protection
 - 7. Disaster Preparedness
- Sectors and Themes that provide opportunities to reduce risk and/or manage residual disaster risk





Health Responses in 2019 Flood

Ministry of Health and Sports The Republic of the Union of Myanmar

Flood Events in States and Regions, 2019

- Heavy season rain started in early July nation wide
- Resulted in flooding in some states and regions;
 Kachin, Kayin, Mon, Rakhine, Chin, Sagaing, Bago,
 Magway, Mandalay, Ayeyarwaddy, Thanintharyi,
 Shan (South), Naypyitaw and Yangon



No. of affected people and evacuation camps in 2019 flood

State /		No. of	el l	Affected		Camps data		
Sr	State/ Region	flooded Township	Flooded ward/village	household	people	No. of camps	household	people
1	Kachin	8	47	2814	13,971	72	3,168	15,008
2	Kayin	6	125	18,572	77,552	45	2,906	13,650
3	Mon	10	147	16,376	73,669	107	6,440	26,272
4	Rakhine	3	107	13,595	33,133	0	0	0
5	Chin	1	-	264	1,404	0	0	0
6	Sagaing	9	151	17,678	77,068	16	1,171	5,014
7	Mandalay	9	464	73,519	290,464	19	2,553	11,051

2/3/2020 DPHERD 68



No. of affected people and evacuation camps in 2019 flood

		No. of	_, ,	Affected		Camps data		
Sr	State/ Region	flooded Townships	Flooded ward/village	household	people	No. of camps	household	people
8	Magway	2	8	163	678	0	0	0
9	Bago	12	112	8,253	32,329	100	8,355	39,317
10	Ayarrwaddy	2	4	112	505	0	0	0
11	Tanintharyi	1	37	1,732	8,920	7	271	1,293
12	Yangon	1	7	546	2,137	13	546	2,137
13	Shan(South)	1	9	1,978	8,705	0	0	0
	Total	65	1,209	155,602	620,535	379	25,410	113,742

2/3/2020 DPHERD 69

No. of Flooded Health facilities in States and Regions (2019)

Sr.	State / Region	No. of flooded Township	No. of Flooded Health Facility
1	Kachin	8	16
2	Kayin	6	26
3	Mon	10	46
4	Rakhine	3	17
5	Chin	1	0
6	Sagaing	9	42
7	Mandalay	9	27
8	Magway	2	0
9	Ayarrwaddy	2	1
10	Bago	12	21
11	Tanintharyi	1	5
12	Yangon	1	0
13	Shan (S)	1	1
14	Naypyitaw	1	9
	Total	66	202 70

No. of injured and death during 2019 flood

Sr.	Event	Injured	Death
1	Paung Township (Ye Pyar Gone) Landslide	54	69
2	Flood	25	18
	Total	79	87

No. of Injured and Death according to State and Regions				
Sr.	State/ Region	Injured	Death	
1	Sagaing	0	2	
2	Mandalay	0	1	
3	Kayin	0	4	
4	Mon	79	78	
5	Tanintharyi	0	1	
6	Shan (S)	0	1	
2020	Total DPHERD	79	87 71	

Provision of Primary Health Care by BHS at Flood Evacuation Camps in 2019

Sr.	State / Region	No. of patients treated
1	Kachin	3,041
2	Kayin	2,406
3	Mon	7,258
4	Sagaing	394
5	Mandalay	546
6	Bago	3,195
7	Tanintharyi	378
8	Yangon	164
	Total	17,382

No. of chlorinated water sources in 2019 Flood

Sr.	State / Region	No. of water sources
1	Kachin	3,061
2	Kayin	1,936
3	Mon	3,631
4	Sagaing	6,603
5	Mandalay	12,984
6	Bago	4,993
7	Tanintharyi	205
8	Shan (S)	141
	Total	33,554

Coordination Meeting for health Response Activities for Flood events (10-8-2019), Yangon

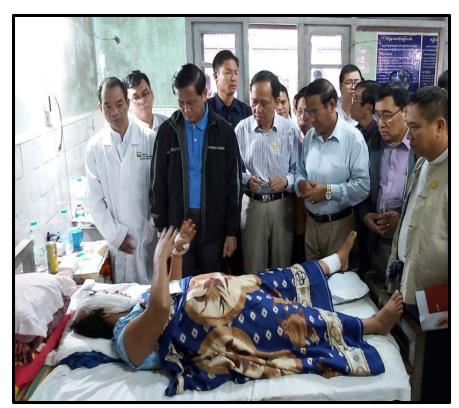








Supervision visit by vice president to flood affected areas (2019)







Supervision for health care activities in flood evacuation camps by permanent secretary of MOHS (2019)





Flood Response Activities by Medical Teams (2019)









Mental Health teams of MOHS providing mental health care during flood and landslide events





Public Health Emergency Operations Center Plan



2/3/20224/7 EOC Activation During Current 2019 Flooding 79

16th National Health Cluster Meeting on Flood 16-8-2019, Yangon



MOHS logistic Supply during 2019 Flood

Distributed logistic items before and during flood

No.	Items	Quantities
1.	Disaster/Emergency Medicine Kit	105
2.	Abate	194 drums
3.	Malathion	360 drums
4.	Life Jacket	1,000
5	Water Purification tab	65,000 tabs
6	Bleaching Powder	80 barrels

MOHS logistic Supply during 2019 Flood

Stockpiled Logistic items(ready for timely distribution to States and Regions

No.	Items	Quantities	
1.	Disaster/Emergency Medicine Kit	23	
2.	Water Purification tab	585,000	
3.	Life Jacket	400	
4.	Insecticide-treated net	8,000	

WHO supported logistic Supplies during 2019 Flood

No.	ltems	Quantities
1.	IEHK supplementary unit	18
2.	ASV (cobra)	2,000 vials
3.	ASV (viper)	2,000 vials
4.	Cholera central reference modules (3) modules (1 drug module, 1 equipment module, 1 renewable supply module)	3 modules
5	Oxytocin Inj vials	600 vials
6	Bleaching Powder	500 barrels

	UNICEF supported logistic Supplies during 2019 Flood			
No.	Items	Quantities		
1.	IEHK 2011, basic kit	10		
2.	Bleaching Powder	213		
3.	Amoxicillin 250mg disp.tab/PAC- (10x10)	2,618		
4.	ORS low osm. 20.5g/1L PAC/100	510		
5.	Zinc 20mg tablets/PAC-100	70		

Logistic Support from Other Partners during 2019 Flood			
No.	Source	Items	Quantities
1.	အထက်မြန်မာပြည်ပုဂ္ဂလိ ကလုပ်ငန်းရှင်များအသင်း	Bleaching Powder	210 barrels
2.	Save the Children	Water Purification tab	10,000 tabs

Emergency Fund Support to Flood Affected Population

No.	Funding Source	Content	Amount (in Kyats)
1.	WHO	Emergency Project (part-1), (23) Tsp	73,618,000
2.	WHO	Emergency Project (part-2), (25) Tsp	82,770,000
3.	GMS Health Security Project	(4) Tsp	32,452,000
4.	World Bank	(6) tsp	30,303,000
	Total		219,143,000

