

NATURAL DISASTER EMERGENCY MANAGEMENT IN MYANMAR



Presented by

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Ministry of Social Welfare, Relief and Resettlement

5th International Forum on
Sustainable Future in Asia

Jan 23; 2020, Novotel Yangon Max,
Myanmar

PRESENTATION OUTLINES

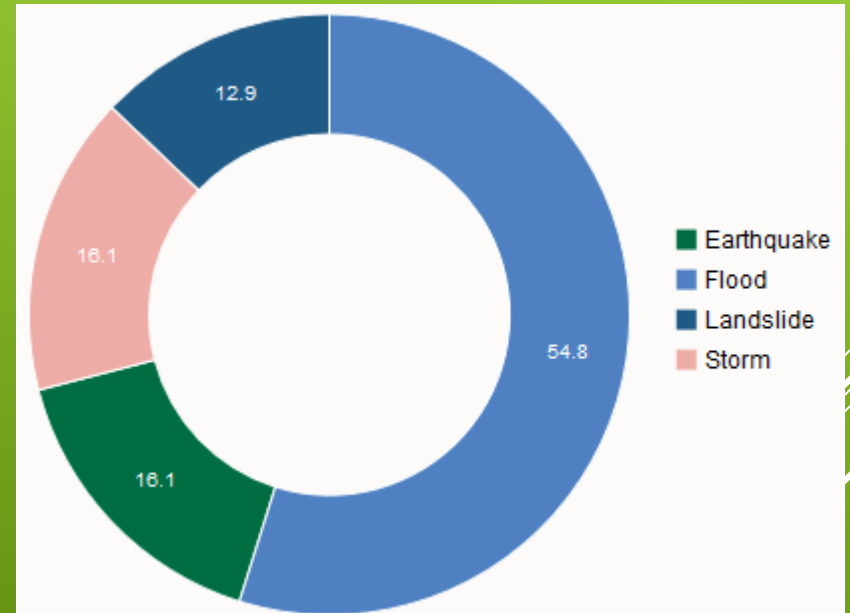


- ▶ Hazards in Myanmar
- ▶ Major Disasters in Myanmar
- ▶ Institutional Arrangement for Disaster Management
- ▶ Disaster Management Law, 2013 and Disaster Management Rules, 2015
- ▶ Establishment of EOC
- ▶ Roles and Functions of EOC
- ▶ Significant Disaster Events assisted by EOC

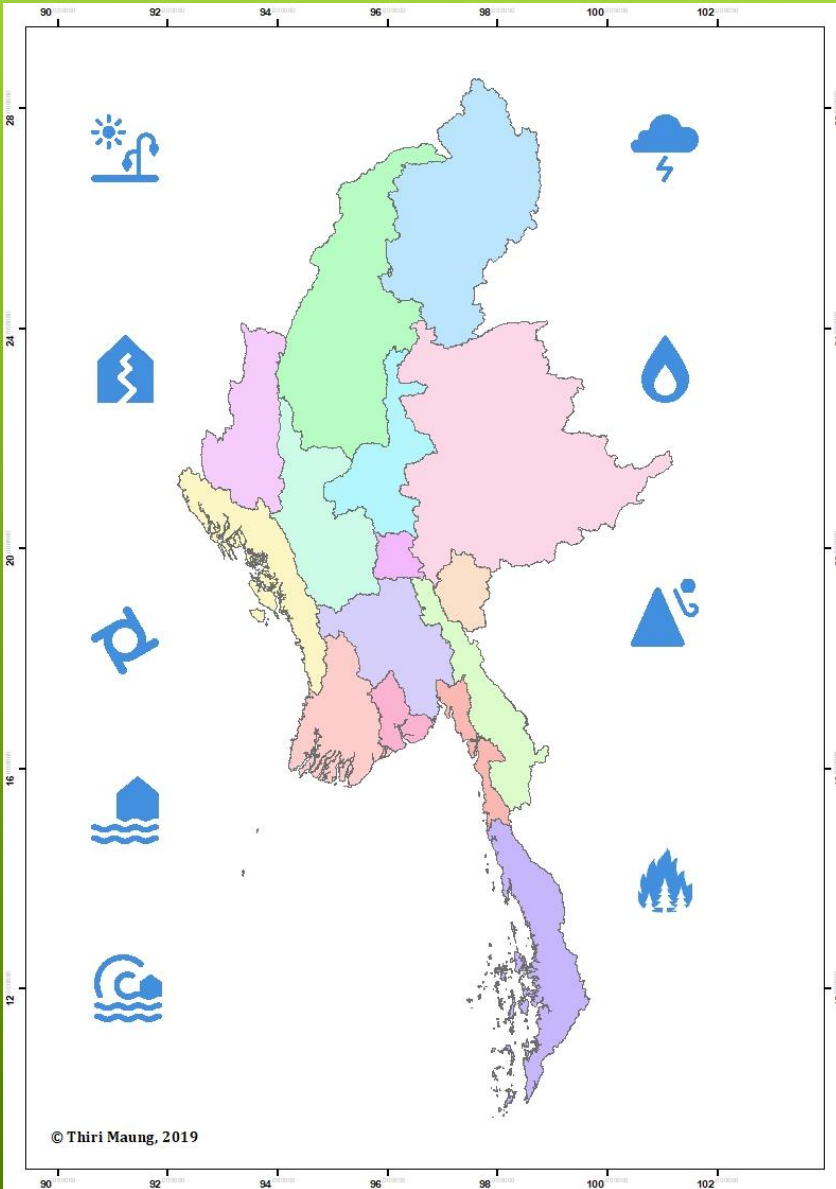
HAZARDS IN MYANMAR



▶ Disaster Frequency between (1990-2014)



Source: <https://www.preventionweb.net/countries/mmr/data/>
 Access Date: Jan 7; 2020



MAJOR DISASTERS IN MYANMAR AFTER CYCLONE NARGIS 2008

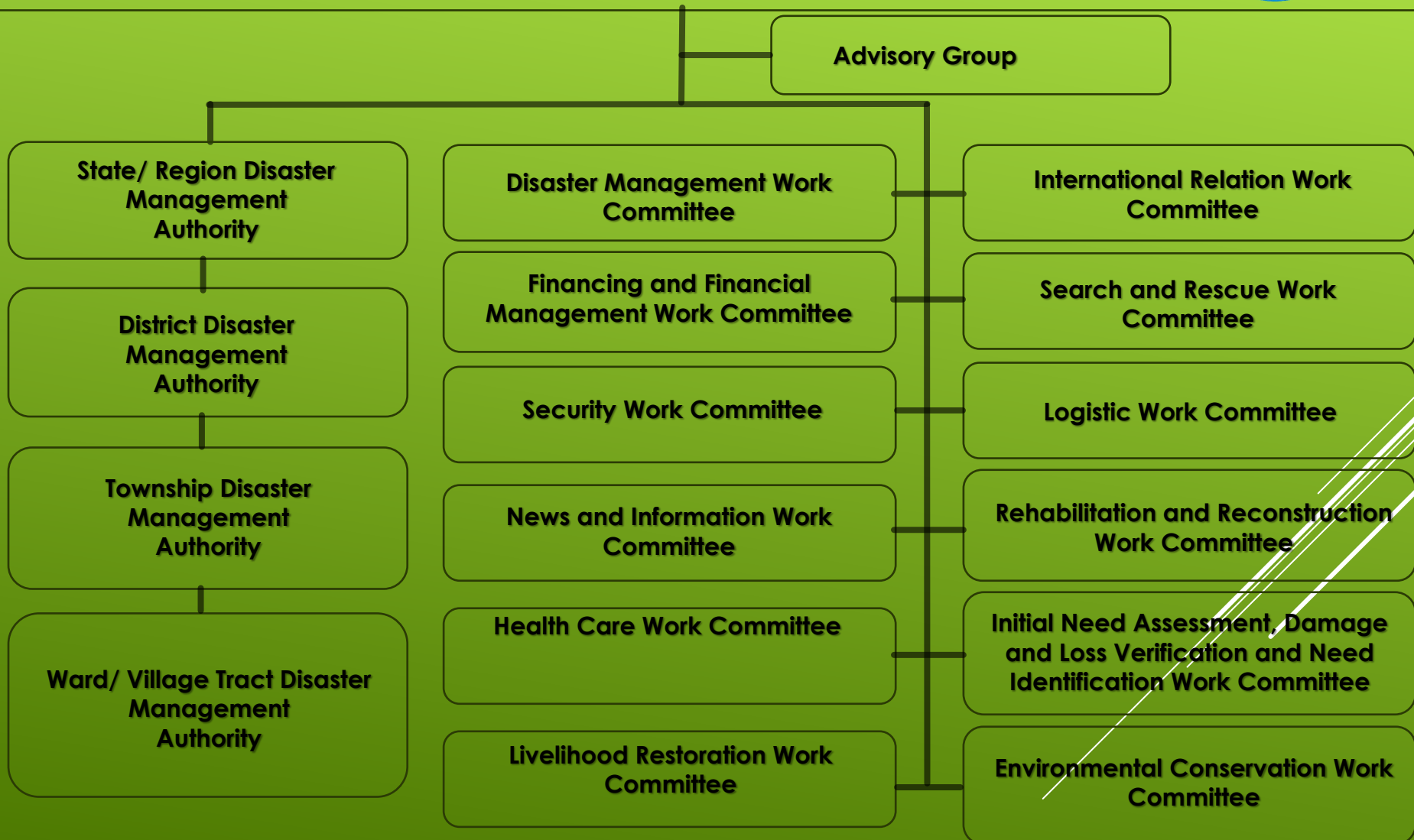


No.	Date	Disaster	Damage and Loss
1	2/3-May-2008	Cyclone Nargis	Death - (138,373) people Damage and Loss - (11.7)Trillion Kyats
2	22-10-2010	Cyclone Giri	Death – 57 people Damage and Loss - (0.024)Trillion Kyats
3	24-3-2011	Tahlay Earthquake	Death – 76 people, Injury – 100 people Damage and Loss - (3031.30)Million Kyats
4	19/20-10-2011	Magway Flash Flood	Death & lost – 161 people Damage and Loss - (15465.25)Million Kyats
5	11-11-2012	Tabaikkyin Earthquake	Death – 18 people, Injury – 114 people Damage and Loss - (8140.12)Millions
6	2015 June to August	Severe flood in 12 States and Regions	Death – 97 people, affected – over 1.6 million people, Damage and Loss – (4,424.3515) Million Kyats

INSTITUTIONAL ARRANGEMENT FOR DISASTER MANAGEMENT



National Disaster Management Committee (NDMC)



DISASTER MANAGEMENT LAW, 2013 AND DISASTER MANAGEMENT RULES, 2015



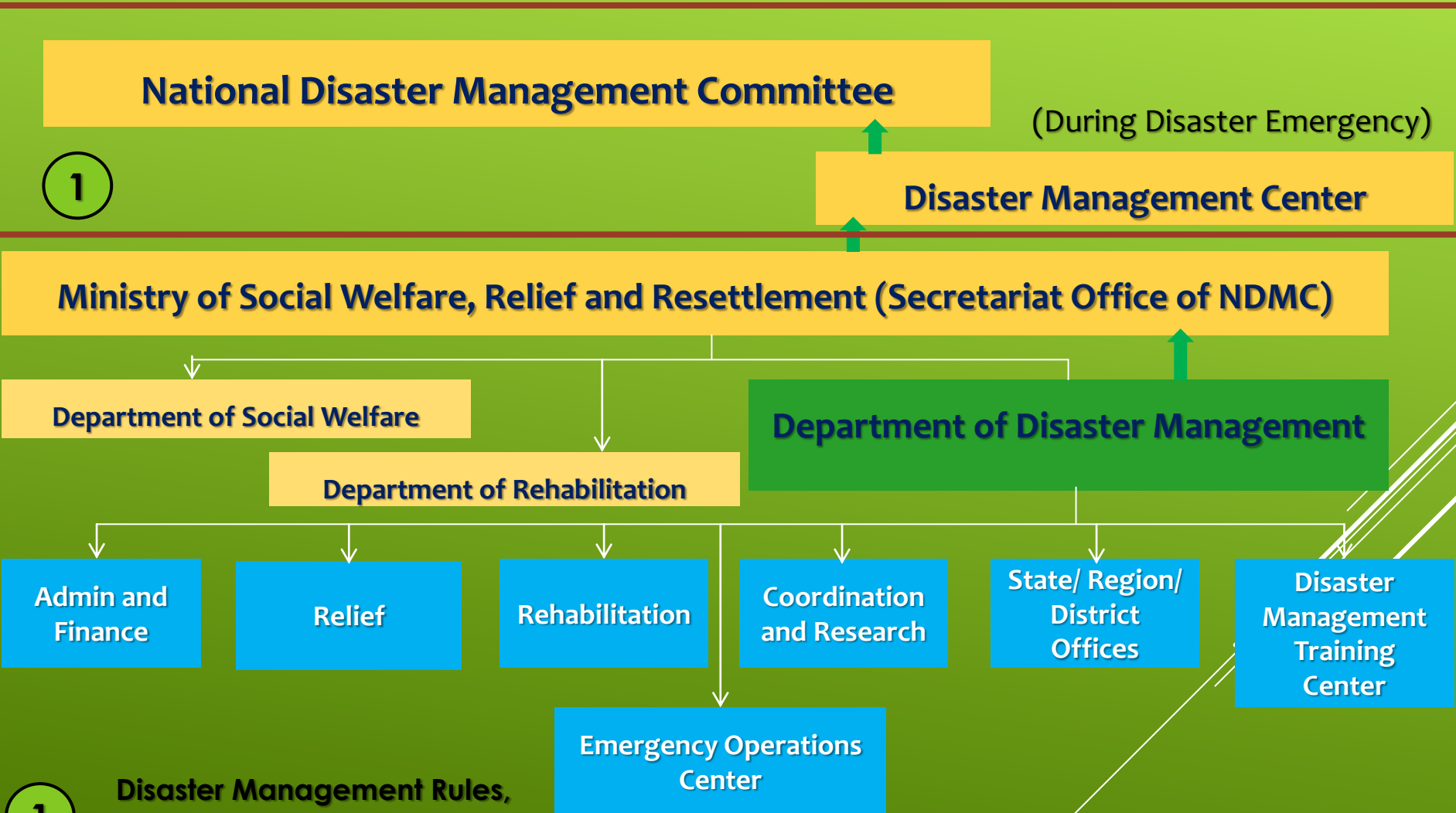
- ▶ DM Law, 2013 is comprised with 9 Chapters and 43 Sections
- ▶ DM Rules, 2015 is comprised with 12 Chapters and 70 Sections



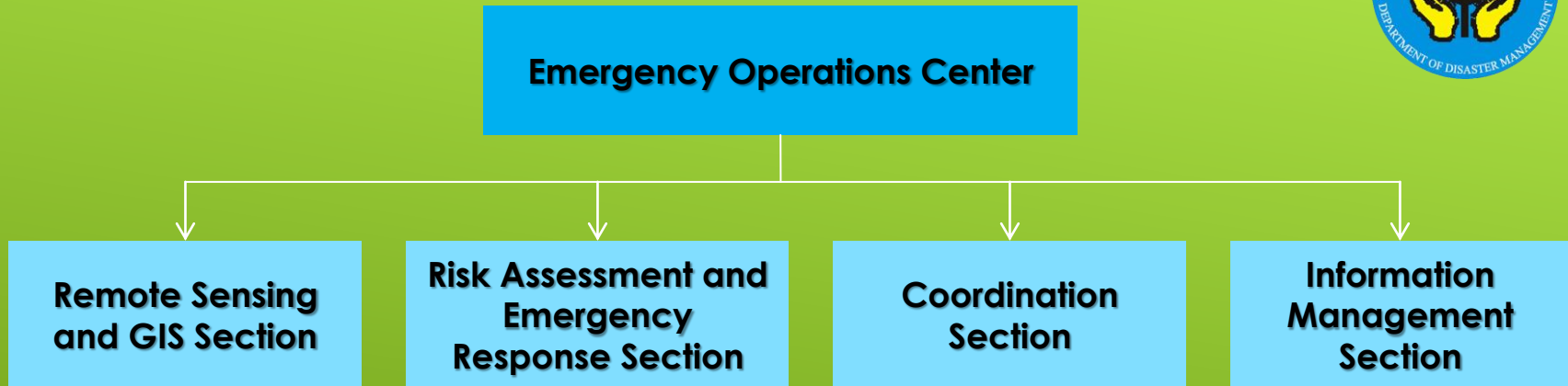
သဘာဝဘေးအန္တရာယ်ဆိုင်ရာ စီမံခန့်ခွဲမှုဥပဒေ၊ ၂၀၁၃ ခုနှစ်
နှင့်
သဘာဝဘေးအန္တရာယ်ဆိုင်ရာစီမံခန့်ခွဲမှုနည်းဥပဒေများ၊ ၂၀၁၅ ခုနှစ်

Disaster Management Law, 2013
and
Disaster Management Rules, 2015

ORGANIZATION CHART FOR THE MINISTRY OF SOCIAL WELFARE, RELIEF AND RESETTLEMENT



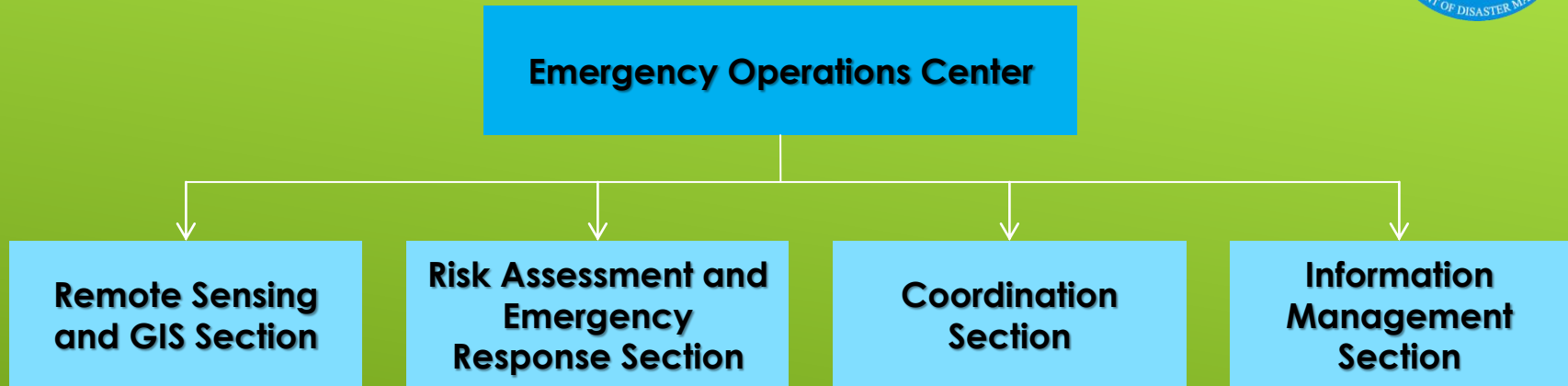
ESTABLISHMENT OF EMERGENCY OPERATIONS CENTRE



IN NORMAL TIME,

- ▶ EOC runs for disaster preparedness, information management and coordination for disaster risk reduction;
 - ▶ monitoring weather forecasts,
 - ▶ disseminating early warning,
 - ▶ developing and maintaining maps and databases relevant to disaster management;
 - ▶ Assisting in the development and maintenance of response plans,
 - ▶ Sharing information by releasing news related to on-going emergencies

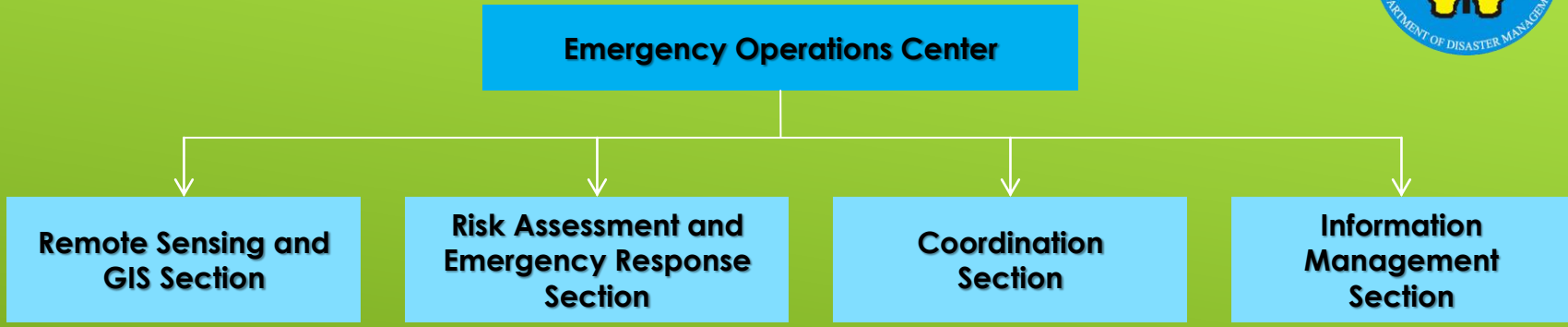
ROLES OF EMERGENCY OPERATIONS CENTRE (CONT'D)



DURING EMERGENCY, EOC

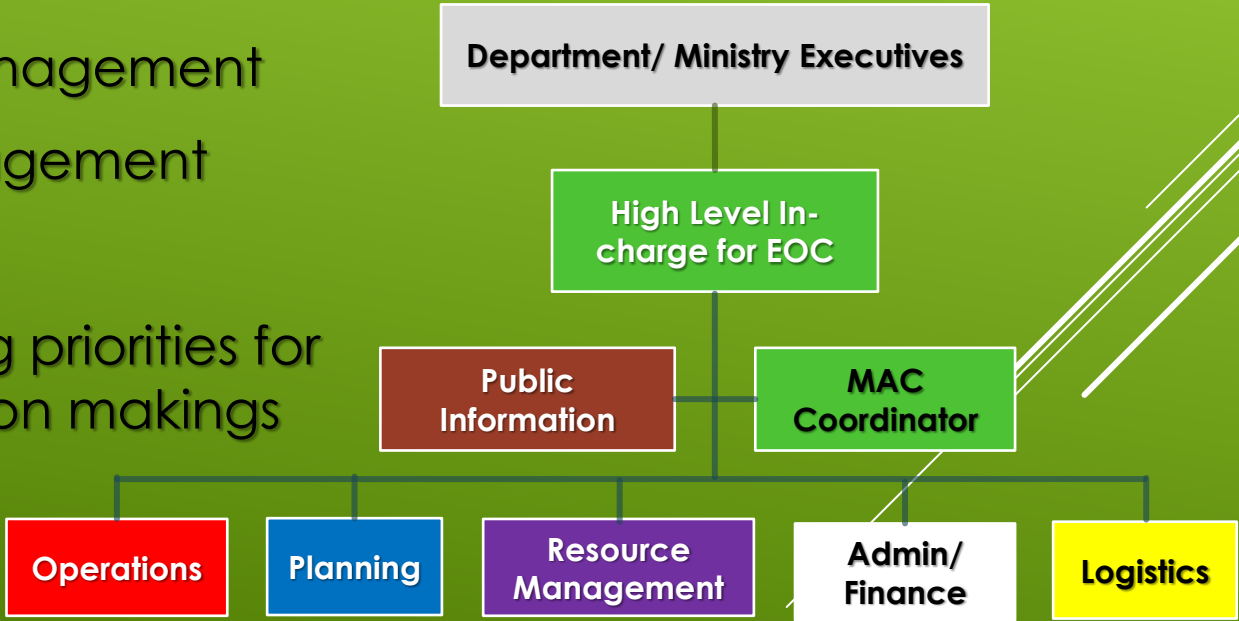
- provides the comprehensive solution to the decision makers by collecting necessary data and information for effective response
- supports for emergency management, response and logistic through information sharing on network and quick decision making.

ROLES OF EMERGENCY OPERATIONS CENTRE (CONT'D)

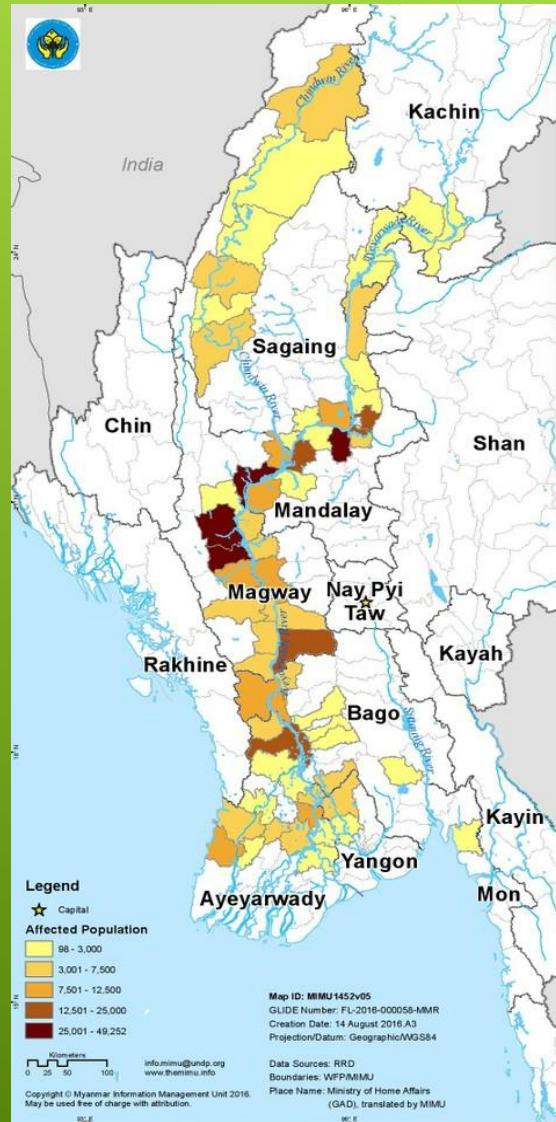


FUNCTIONS OF EOC DURING ACTIVATION,

- ▶ Information Management
- ▶ Resource Management
- ▶ Coordination
- ▶ Communicating priorities for effective decision makings



EOC ACTIVATION IN NATION-WIDE FLOOD, 2015



- ▶ Announcement of Being a Disaster Effectuated Area

According to the Chapter 5, Section 11 of the Disaster Management Law, 2013

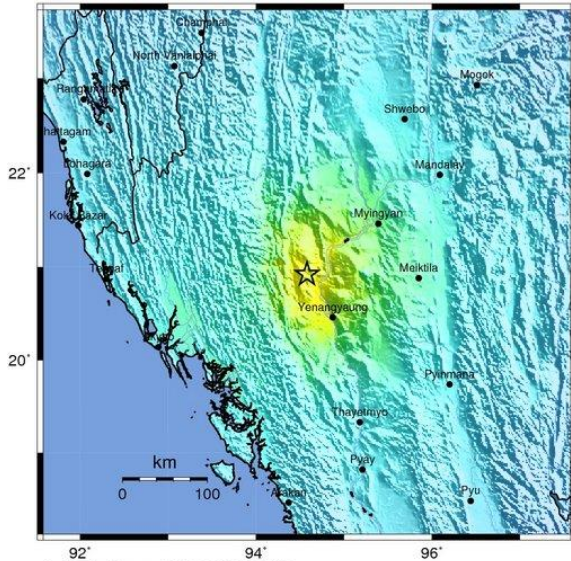
CHAUK EARTHQUAKE, 2016



- ▶ Date of Event: Aug 24; 2016
- ▶ Intensity: 6.8 M
- ▶ Depth: 84 km

USGS ShakeMap : MYANMAR

Aug 24, 2016 10:34:55 UTC M 6.8 N20.92 E94.58 Depth: 84.1km ID:us10006gbf



Map Version 1 Processed 2016-08-24 10:51:34 UTC

PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	none	none	none	Very light	Light	Moderate	Mod./Heavy	Heavy	Very Heavy
PEAK ACC.(%g)	<0.05	0.3	2.8	6.2	12	22	40	75	>139
PEAK VEL.(cm/s)	<0.02	0.1	1.4	4.7	9.6	20	41	86	>178
INSTRUMENTAL INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+

Scale based upon Worden et al. (2012)

EMERGENCY OPERATION CENTER



PREPAREDNESS MEETING FOR RESPOND CYCLONE MARRUTHA, 2017



တိုင်းဒေသကြီးနှင့်ပြည်နယ်တို့တွင် သဘာဝဘေးကြိုတင်ကာကွယ်ရေးအတွက် အဆင်သင့်ဖြစ်နေ



နေပြည်တော် ဧပြီ ၁၆
 ယနေ့ မွန်းလွဲပိုင်းအချိန် တိုင်းထွာချက်များအရ ဆိုင်ကလုန်းမုန်တိုင်း မာရုသာ (Tropical Storm Maarutha) သည် ယနေ့ (ဧပြီ ၁၆ ရက်) ညသန်းခေါင်ယံနှင့်

၂၀၁၇ ခုနှစ်၊ ဧပြီလ(၁၆)ရက်နေ့တွင် တိုက်ခတ်ခဲ့သော ဆိုင်ကလုန်း “မာရုသာ” နှင့်ပတ်သက်၍ သဘာဝဘေးအန္တရာယ်စီမံခန့်ခွဲမှုကော်မတီဝင်များနှင့် သဘာဝဘေးအန္တရာယ်စီမံခန့်ခွဲမှုအရေးပေါ်အစည်းအဝေးကျင်းပပြုလုပ်နေစဉ်

EMERGENCY COORDINATION MEETING FOR RESPONDING ANNUAL FLOOD, 2018



Vice President U Henry Van Thio attends coord meeting on recent flooding and inundation

VICE President U Henry Van Thio, who is also the Chairman of the National Natural Disaster Management Committee, attended and delivered a speech at an emergency coordination meeting on the recent flooding and inundations that occurred in Myanmar. The meeting was held yesterday morning at the National Disaster Management Committee in Nay Pyi Taw.

Present at the meeting were Union Ministers Lt-Gen Sein Win, Lt-Gen Ye Aung, Dr. Pe Myint and Dr. Aung Thu; Deputy Ministers U Min Thu, Maj-Gen Aung Thu, U Win Maw Tun and U Soe Aung; permanent secretaries; directors general and officials.

This meeting was held to ensure necessary coordination on the flooding and inundation currently occurring. Much was



Chairman of the National Natural Disaster Management Committee Vice President U Henry Van Thio checks images from the satellite on weather conditions received at the emergency management centre in Nay Pyi Taw yesterday. **PHOTO: MNA**

FRIDAY
27 April 2018
1800 UTC+7

MYANMAR, MAJOR FIRE IN YANGON DUMP SITE



SUMMARY OF EVENT

1. Major fire has broke out in Htain Pin Dump Site, Hlain Tharyar township, western part of Yangon, Myanmar, since Saturday, 21 April 2018 until today.
2. Smoke covered 20 townships across Yangon, directly threatening an estimate of 796,852 people (vulnerable pop: 290,850).
3. Possible complications arising from smoke inhalation may include: a) respiratory difficulties, b) eyes and nose irritation (may or may not result in allergic rhinitis and conjunctivitis) and c) shortage of N95 masks
4. Highly vulnerable population include: a) Patients with existing respiratory conditions such as bronchitis, acute asthma and other upper respiratory tract disorders, b) firefighter and responders, c) Children and elderly and d) those staying near the dumpsite (possibly within 30 km radius and 630 sqkm) – heat stress from the smother and burning flames.
5. A fire anomaly was detected via remote sensing (captured on 22 April 2018): Overlaying the data allows us to draw the heat stress zone (4km by 3km) around the dump site.

Vulnerable pop.



Male
388,395
(48.8%)



Female
408,457
(51.2%)



219,931
(27.6%)
under 15 y.o.d

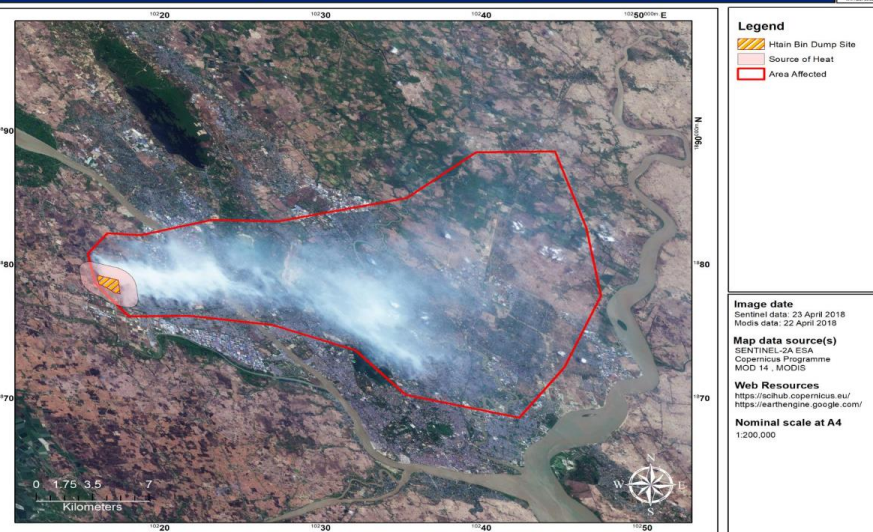


70,919
(8.89%)
above 60 y.o.d

AHA Centre and ASEAN Responses

1. ASEAN Emergency Response and Assessment (ASEAN-ERAT) is being mobilized to support Government of Myanmar in assessing the situation, fire fighting strategy and impact to public health.
2. AHA Centre will continue monitor the situation and provides additional updates once information becomes available.

Source of Heat from Major Fire in Htain Bin Dump Site, Yangon



DATA SOURCES

AHA Centre Disaster Monitoring & Response System (DMRS);
ASEAN Specialised Meteorological Centre (ASMC);
Myanmar: 1. Department of Disaster Management, 2. Department of Meteorology and Hydrology, 3. Myanmar Fire Services Department, 4. United Nations, 5. European Commission, 6. WorldPop, 7. HDX.

DISCLAIMER

The AHA Centre was established in November 2011 by the Association of South East Asian Nations (ASEAN) and ASEAN member states to facilitate cooperation and coordination among the Parties, relevant agencies of the United Nations and international organisations in disaster

management and humanitarian assistance.

The use of boundaries, geographic names, related information and political considerations for response are for reference only, not warranted to be error free or implying official endorsement from ASEAN Member States.

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INTERNATIONAL COORDINATION FOR EMERGENCY RESPONSE ON YANGON DUMP SITE FIRE, 2018





EMERGENCY COORDINATION MEETING ON PAUNG LANDSLIDE IN MON STATE, 2019

Landslide at Thae Phyu Kone Village, Paung Township, Mon State



Torrential rain in South-East of Myanmar in early August 2019 has caused severe flooding and many landslides in Mon, Kayah states and Tanintharyi region. A major landslide has occurred at the hillside of Thae Phyu Kone village in Paung township on 9th August 2019. It has caused a massive debris flow and has washed down buildings, including a row of standing vehicles with passengers on the road.
 Number of buildings damaged: 30
 Number of casualties: 56 (as of 12 August 2019)



Production Date: 12 August 2019



WAY FORWARD



▶ EOC's SOPs development

အရေးပေါ်အခြေအနေစီမံခန့်ခွဲမှုပဟိတ္တနု၏ အခြေခံလုပ်ငန်းစံသတ်မှတ်ချက်(မူကြမ်း) ရေးဆွဲမှုဆိုင်ရာညှိနှိုင်းဆွေးနွေးပွဲ ကျင်းပ

နေပြည်တော် ဒီဇင်ဘာ ၂၃

လူမှုဝန်ထမ်း၊ ကယ်ဆယ်ရေးနှင့် ပြန်လည်နေရာချထားရေးဝန်ကြီးဌာန ဘေးအန္တရာယ်ဆိုင်ရာ စီမံခန့်ခွဲမှုဦးစီးဌာန ၏ အရေးပေါ်အခြေအနေစီမံခန့်ခွဲမှုပဟိတ္တနု (EOC) အနေဖြင့် အရေးပေါ်အခြေအနေတွင် စီမံခန့်ခွဲမှုလုပ်ငန်းများ ဆောင်ရွက်ရာ၌ ဓနစ်တကျနှင့် လုပ်ငန်းစွမ်းဆောင်ရည် တိုးတက်ကောင်းမွန်စွာဆောင်ရွက်နိုင်ရန် လိုအပ်လျက်ရှိသော အခြေခံလုပ်ငန်းစံသတ်မှတ်ချက် (Standard Operation Procedure - SOP)(မူကြမ်း) ရေးဆွဲမှုဆိုင်ရာ ညှိနှိုင်းဆွေးနွေးပွဲကို ယနေ့နံနက်ပိုင်းတွင် နေပြည်တော်ရှိ အဆိုပါဝန်ကြီးရုံးအစည်းအဝေးခန်းမ၌ ကျင်းပသည်။

အစည်းအဝေးတွင် ဘေးအန္တရာယ်ဆိုင်ရာစီမံခန့်ခွဲမှုဦးစီးဌာန ညွှန်ကြားရေးမှူးချုပ်က အရေးပေါ်အခြေအနေ စီမံခန့်ခွဲမှုပဟိတ္တနု(EOC)၏ အခြေခံလုပ်ငန်းစံသတ်မှတ်ချက် (Standard Operation Procedure - SOP)(မူကြမ်း) ရေးဆွဲခြင်းကို ရှင်းလင်းတင်ပြပြီး EOC မှ တာဝန်ရှိသူတစ်ဦးက EOC ၏ ပုံမှန်အခြေအနေတွင် နေ့စဉ်ဆောင်ရွက်လျက်ရှိသည့် လုပ်ငန်းတာဝန်များ၊ သဘာဝဘေးအရေးပေါ်အခြေအနေတွင် ဆောင်ရွက်ရမည့်

လုပ်ငန်းတာဝန်များ၊ သဘာဝဘေးအရေးပေါ်အခြေအနေ ဖြစ်ပေါ်မှု နယ်မြေအနေအထား၊ ထိခိုက်ဆုံးရှုံးမှုပမာဏ၊ သဘာဝဘေးဖြစ်ပေါ်မှုကြောင့် ပြောင်းရွှေ့ရသည့်လူဦးရေ စသည့်အခြေအနေများအပေါ် မူတည်၍ EOC အနေဖြင့် အရေးပေါ်အခြေအနေတွင် ဆောင်ရွက်ရမည့်လုပ်ငန်းစဉ်များ အဆင့်အလိုက်ဆောင်ရွက်နိုင်ရေးဆိုင်ရာ အဆင့်အတန်းသတ်မှတ်ချက်များ၊ သတင်းအချက်အလက် စီမံခန့်ခွဲမှုဆိုင်ရာ စံလုပ်ငန်းစဉ်သတ်မှတ်ချက်များ စသည့် တို့ကို ရှင်းလင်းတင်ပြသည်။

ထို့နောက် ပြည်ထောင်စုဝန်ကြီး ဒေါက်တာ ဝင်းမြတ်အေးနှင့် ဒုတိယဝန်ကြီး ဦးစိုးအောင်တို့က တင်ပြချက်များအပေါ် ပြည့်စွက်ဆွေးနွေးမှာကြားကြပြီး အရေးပေါ်အခြေအနေစီမံခန့်ခွဲမှုပဟိတ္တနု (EOC)၏ ပုံမှန်အခြေအနေတွင် နေ့စဉ်လုပ်ငန်းဆောင်ရွက်နေမှုများကို ကြည့်ရှုစစ်ဆေးသည်။ (ယာဝု)

အရေးပေါ်အခြေအနေစီမံခန့်ခွဲမှုပဟိတ္တနု(EOC)၏ အခြေခံလုပ်ငန်းစံသတ်မှတ်ချက် (Standard Operation Procedure - SOP) (မူကြမ်း)ကို လမ်းညွှန်ချက်များနှင့်အညီ ပြင်ဆင်ပြည့်စွက်၍ ၂၀၂၁ ပြည့်နှစ် ဇန်နဝါရီလ



တတိယပတ်အတွင်း ယင်းမူကြမ်းကို အသုံးပြုလျက် အရေးပေါ်အခြေအနေ၌ EOC အနေဖြင့် လုပ်ငန်းဆောင်ရွက်မှု ပုံစံအား ဌာနတွင်းလက်တွေ့စစ်သပ်လေ့ကျင့်မှုအစီအစဉ်ကို ပြုလုပ်သွားမည်ဖြစ်ကြောင်း သိရသည်။ သတင်းစဉ်

▶ Aiming to provide interagency coordination and executive decision-making in support of disaster response by providing the relevant, timely and important information to decision makers for effectively setting priorities and allocating critical resources.



THANK YOU

