#### Disclaimer

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The views expressed in the report do not necessarily reflect the views of the ADRC. The boundaries and names shown and the designations used on the maps in the report also do not imply official endorsement or acceptance by the ADRC.



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ADRC Counterpart

## **General Information**

### Geography

- Total land area : 329, 847 sq km / 127, 355 sq miles. (source by : 2010)
- Located between 2°N and 7°N of equator in Southeast Asia.
- Two (2) geographically distinct areas; West (Peninsular) and East (Borneo) Malaysia, with South China Sea in between. 11 of its 13 states are in Peninsular Malaysia, bordering Thailand & Singapore. Whereas Sabah & Sarawak, as well as the federal territory of Labuan, form East Malaysia on the north of Borneo, bordering Indonesia & Brunei Darussalam.
- 4/5 of Peninsular Malaysia is covered by tropical rainforest & swamp. Sabah is split in two (2) by the Crocker Mountains, rising to over 4,100 m (13,450 ft) at Mount Kinabalu, the highest point in Malaysia. The rainforests cover the greater part of Sarawak & many of the rivers are navigable, with the famous – Rajang River (563km) as the longest river in Malaysia.



# **General Information**

### Demographics

- Total Population: 28.25 million (source by: 2010)
- Population Growth Rate: Dropped to 2.17 % for 2000 2010 period (Ref.: 2010 Population & Housing Census Report by Department of Statistics Malaysia)
- Multiethnic and Multicultural Population: Malay 61 %, Chinese 30 %, Indians 8 %, Others 1 %.
- **Religions:** Islam (60.4%), Buddhism (19.2%), Christianity (9.1%), Hinduism (6.3%), other/none (5.0%)
- Languages : Bahasa Malaysia (Malay language) / national language. 2<sup>nd</sup> language is English. Other languages include Chinese, Tamil and Iban.
- "1 Malaysia " "People First, Performance Now" concept introduced by our Prime Minister, Datuk Seri Najib Tun Razak



### **General Information**

### Climate of Malaysia

- tropical climate, uniform temperature (maximum =  $33^{\circ}$ C, minimum =  $23^{\circ}$ C)
- high humidity; mean monthly relative humidity = 70 90%
- average annual rainfall is 2400 mm for Peninsular Malaysia, 3,800 mm for Sarawak and 2,600 mm for Sabah
- Situated in equatorial doldrums area, it is extremely rare to have a full day with completely clear sky even during periods of severe drought.
- On the hand, it is also rare to have a stretch of a few days with completely no sunshine except during the Northeast Monsoon seasons.
- Divided by; (2) monsoon seasons which are Southwest/Summer Monsoon (May Sep), Northeast/Winter Monsoon (Nov Mar) and two (2) shorter periods of Inter-monsoon seasons (Apr & Oct).



### Monsoons in Malaysia

#### Southwest/Summer Monsoon

- May September
- Winds are southwesterly and light (< 15 knots)</li>
- Stable atmospheric condition in latitudes the Equatorial region
- Drier season except for State of Sabah
   Northwestern Pacific Subtropical High
- Sabah is wetter due to the tail effect of typhoons

#### 2 Inter – monsoon

Marskerian Hig

- April and October
- Winds are generally light and variable
- Besides, the equatorial trough lies over Malaysia.

#### Northeast/Winter Monsoon

- > November March
- Steady easterly wind and northeasterly wind (10-20 knots)
- Cold surges from Siberia (> 30 knots)
  - Northeast monsoon season is the major period of heavy rain activity over the east coast states of Peninsular Malaysia and west Sarawak
- Monsoon weather systems which develop in conjunction with cold air outbreaks from Siberia produce rains that last for days and often cause severe floods over east coast peninsular and Sarawak

## Natural Hazards affecting Malaysia

- **Weather related Hazards**
- Monsoonal Floods / Flash Floods
- Strong Wind and Rough Sea
- Thunderstorms / Lightings
- Tropical Storms / Typhoons
- Forest Fires / Haze
- Agricultural Droughts

#### **Geophysical Hazards** ≻

- Earthquakes •
- Local / Regional Tsunamis
- Landslides
- **Volcanic Eruptions**



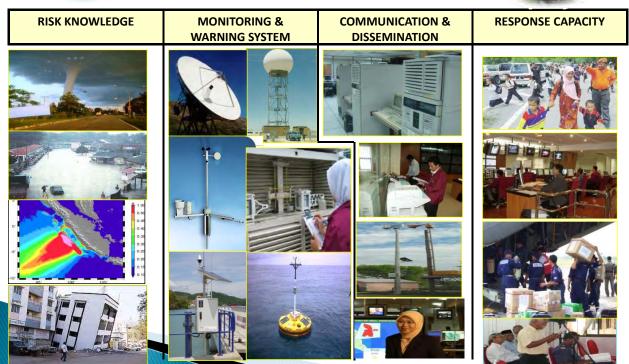
#### ROLE OF MALAYSIAN METEOROLOGICAL DEPARTMENT (MMD) mosti)





#### People-centered Early Warning Systems For Weather, Sea-State & Tsunamis





#### DISSEMINATION COMPONENT ADVISORY TV & Radio MARNIN EARTHQUAKE SMS Siren & **Fixed line Disaster Alert** System Fax & Telephone **SUNAMI 'TSUNAMI** NATIONAL SECURITY EARLY COUNCIL (NSC) WARNING STATE SECRETARY MMD Web **CENTRE' OFFICE/LOCAL AUTHORITIES DISASTER MANAGEMENT** VOLCANIC ERUPTIONS in **CONTROL CENTERS: Malaysian** Control Center (MCC), Police **Facebook & Twitter** MMD **RESCUE AGENCIES:** Civil Defence Dept, SMART, Fire & Rescue Dept, Red Crescent, Civil Defence Dept. Mass Media

### Among the Extreme Weather Events in Peninsular Malaysia : 2011-2010



# Among the Extreme Weather Events in Sabah & Sarawak : 2011 - 2010



### Among the Extreme Weather Events in Peninsular Malaysia : 2009 - 2005



e.g. The abnormal severe floods over Peninsular Malaysia during winter monsoon of 2008/2007 and 2007/2006

# Among the Extreme Weather Events in Sabah & Sarawak : 2009



Recent Severe Thunderstorm Event : 17 February 2011 in Petaling Jaya & Subang Jaya, Selangor



Methodist Girls' School, Sec. 5, PJ





University Road, PJ



Kewajipan Road, Subang Jaya

# Weather Extremes: Kedah and Perlis Flood 2010



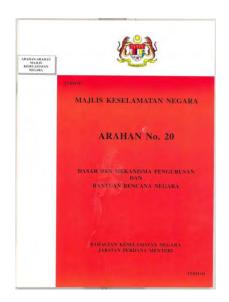
### Among the Water Spout Events: 2011 - 2006



#### ROLES OF THE NATIONAL SECURITY COUNCIL, PRIME MINISTER'S DEPARTMENT AS NATIONAL DISASTER MANAGEMENT ORGANISATION (NDMO)

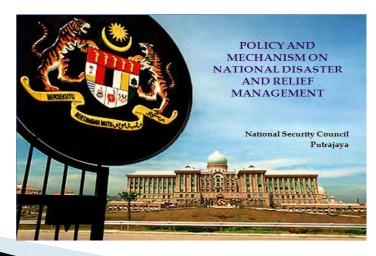


# Directive No. 20 (NSC No. 20): *The Policy and Mechanism for National Disaster and Relief Management*



established on May 11, 1997

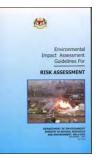
- Main guideline for DM in Malaysia.
- Mechanism on the management of disasters including the responsibilities and functions of related agencies under an integrated emergency management system.
- Supported by other S.O.P which outline the mechanism as well as roles & responsibility of various agencies for specific disasters, i.e. flood; open burning, forest fire, haze, industrial disasters and etc.



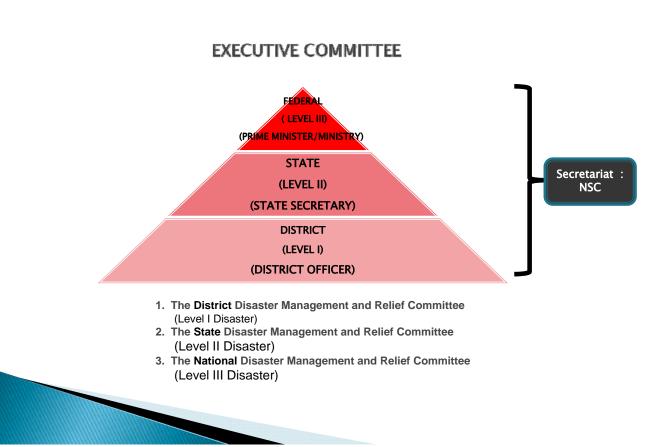
# Legal System and Framework

- Government Standard Operating Procedure (SOP)
  - SOP in Handling Flood Disaster (Volume I)
  - SOP in Handling Industrial Disaster (Volume II)
  - SOP in Handling Forest Fire/Open Burning and Haze (Volume III)
  - SOP in Handling Oil, Gas and Petrochemical Disasters
  - SOP in Handling Earthquake Disaster
  - SOP in Handling Tsunami Disaster
  - SOP in Handling Drought Disaster
- Police Act 1967
- Fire Services Act 1988
- Civil Defense Act 1951
- SOP on Pandemic/ Endemic Preparedness Plans MOH
- Malaysian Maritime Enforcement Agency Act 2004
- Land Conservation Act 1960
- Environment Quality Act 1974
- Local Government Act 1976
- Street, Drainage and Building 1974
- Occupational Safety and Health Act 1994
- Uniform Building By-Laws 1984
- Public Order Manual (POMAN)
- National Contingency Plan for Oil Spill Combat

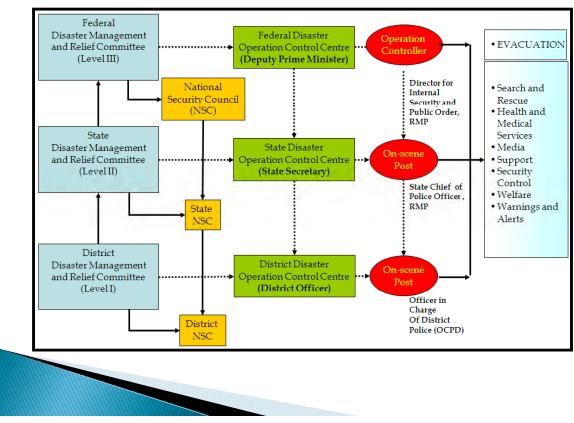




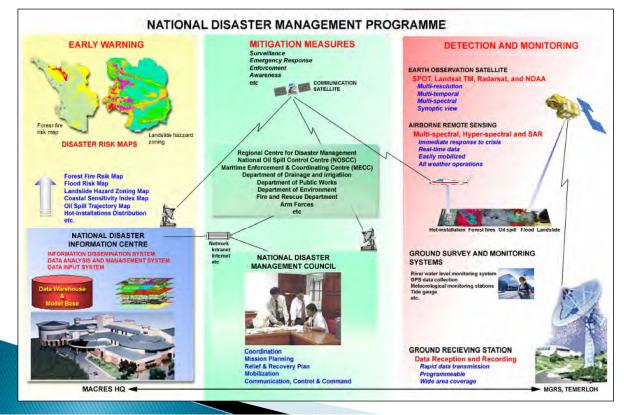
### Structure of Disaster Management



### Disaster Management Mechanism: Organizational Structures



### Strengthen Disaster Preparedness for Effective Response at All Levels



### Disaster Management Strategy, Policy and Plan

#### ASEAN-UN Strategic Plan on Disaster Management

- The 3rd ASEAN-UN Summit in October 2010 in Viet Nam adopted the Joint Declaration on ASEAN-UN Collaboration in DM. The ACDM and relevant UN bodies is expected to jointly prepare the ASEAN-UN Strategic Plan of Cooperation on DM (2011-2015).
- ASEAN Regional Disaster Emergency Response Simulation Exercise (ARDEX)
  - First simulation exercise (ARDEX-05) was conducted in Selangor, Malaysia in September 2005

#### The 3<sup>rd</sup> Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR)

- was successfully organized, on 2 - 4 December 2008 in Kuala Lumpur in collaboration with UNISDR and other partners. The main outcome of the Conference, the Kuala Lumpur Declaration highlighted the importance of Multi-Stakeholder Partnership for DRR with special emphasis on *Public-Private-Partnership for DRR & Community-Based Disaster Risk Reduction Actions.* The Conference was attended by Ministers and Government Officials from 43 countries as well as representatives from relevant international and regional organizations.

The 4th Asian Ministerial Conference on Disaster Risk Reduction (4th AMCDRR)

- on **25** - **28 October 2010** in Incheon, Republic of Korea with the main theme *"Climate Change Adaptation through DRR".* 

# **Budget Size on National Level**

- No specific allocation of budget for DRR in National Budget.
- 9<sup>th</sup> Malaysia Plan (2006 2010) : USD 2 billion (RM 6 billion) → flood mitigation, multi-hazards monitoring & early warning systems, etc.
- 10<sup>th</sup> Malaysia Plan (2011 2015): relevant effort
   ~ USD 1.7 billion (RM 5 billion) → flood mitigation,
   forecasting & warning facilities, flood hazard map
   & development of disaster preparedness &
   community awareness program.

# **Financial Aid**

#### Flood Mitigation Projects

- dual purpose Storm Water Management & Road Tunnel (SMART) projects
- Under 9<sup>th</sup> Malaysia Plan (2006 2010)  $\rightarrow$  RM5.81 billion
- Special Relief Guarantee Facility (SRGF)
  - Government through the Central Bank of Malaysia has allocated RM500
    million (USD140 million) as micro credits distributed → local commercial banks recovering business & rebuilding damaged infrastructure in areas affected by disasters. This facility is an example of *'Public Private Partnership'*
- Amanah Ikhtiar Malaysia (The Endeavor Trust of Malaysia)
  - established on 1987, provided services include micro-financing, compulsory savings & welfare funds for the poor & marginalized. Has enhanced the resilience of communities previously vulnerable to disasters - \*Trust Fund >180,000 families.
- National Disaster Relief Fund
  - Provided financial assistance to disaster victims Corporate sector & community contribution an average of RM20 million (USD5.7 million) annually to the fund.
- Business Continuity Management (BCM) System
  - Government linked companies, such as TELEKOM MALAYSIA, PETRONAS MALAYSIA, GAS MALAYSIA & other multinational companies.
  - consisting of crisis management, business continuity & disaster recovery planes

# Malaysia's National Progress Report on the Implementation of the HFA (2009-2011)

 Malaysia had submitted its national progress report on the implementation of the HFA on <u>May 05, 2011.</u>

Adopted the <u>'National Platform for DM'</u> during recept Disaster Awareness Day 2011 and it has been recognized in the Melaka Declaration on Disaster Risk Reduction held in Malaysia on February 2011. Malaysia is in the process of establishing the platform.

Benefits on Establishment of <u>'National Platform'</u>, includes: – advocating DRR at different levels

increasing levels of knowledge and skills related to DRR
 acting as a catalyst for national consultants and consensus building

- coordinating analyzing, and advising on areas that requires concerted action among others

facilitate the effort of mainstreaming DRR into policies, planning and development programs at various levels.



- 'National Policy on Climate Change', approved in 2009. Integration between DRR & Climate Change Adaptation ~ significant progress
- Currently, exploring the formulation of 'National Legislation for Disister Management'.

The Government of Malaysia is indeed committed to DRR and will continue its efforts towards implementing the riority areas of the HFA both at national and international acknowledge the ongoing effort by UNISDR to promote and accelerate the implementation of the HFA.

### Recent Major Projects on Disaster Risk Reduction

#### Establishment of the AHA Centre

- The 17th ACDM Meeting held <u>from 3-25 February 2011</u> concluded, the final draft of the ASEAN Agreement on the *Establishment of the AHA Centre* to be endorsed by respective Government of the ASEAN Member States.
- It was also agreed that Member States could provide additional voluntary financial contribution, such as through the ASEAN DM & Emergency Relief (ADMER) Fund or by providing other forms of contribution such as through secondment of experts to the AHA Centre. This is to compensate for the deficit in operational budge with the accumulated annual contribution of USD300,000.
- Malaysia is of the view that the AHA Centre, which was established in the ASEAN Agreement on DM and Emergency Response (AADMER), should have a legal personality, recognized and allowed to conduct its operation in all ASEAN Member States and not only in the host country:

## ADRC Counterpart

- Malaysia actively participates in regional platforms including the Asian Disaster Reduction Centre (ADRC); Asian Disaster Preparedness Center (ADPC) as well as Typhoon Committee (TC).
- As the focal point for DM, the National Security Council (NSC) also works closely with international organizations such as United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) and its subsidiary bodies, the United Nations Disaster Assessment and Coordination (UNDAC), International Search and Rescue Advisory Group (INSARAG) and the Asia Pacific Economic Cooperation (APEC) Task Force on Emergency Preparedness.



"...Success & effectiveness of crisis & DM efforts are depends on the cooperation, understanding & ability of all agencies/ departments to carry out responsibilities outlined..."

...NSC of Malaysia



# ありがとうございます TERIMA KASIH THANK YOU

MOSTI

