Disaster Management in
MALAYSIA

NATIONAL DISASTER MANAGEMENT AGENCY

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   o Pre-Disaster
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INTRODUCTION

NATIONAL DISASTER MANAGEMENT AGENCY

Prime Ministers Department

- In **December 2014**, Malaysia faced its worst monsoon flood affecting several states with Kelantan being the worst off.
- **541,896 people** were affected **RM2.58 billion** in losses causing extensive damage to infrastructure.
- Cabinet consider the memorandum of the Prime Minister dated **26th August 2015** agreed :

"the establishment of the **National Disaster Management Agency (NADMA)** under the Prime Minister's Department taking over the responsibility from the National Security Council."

- **NADMA officially formed on 1st October 2015** with the consolidation of the Disaster Management Division of the National Security Council, Post-Flood Recovery Unit of the Prime Minister's Department and the Special Malaysia Disaster Assistance and Rescue Agency (SMART)
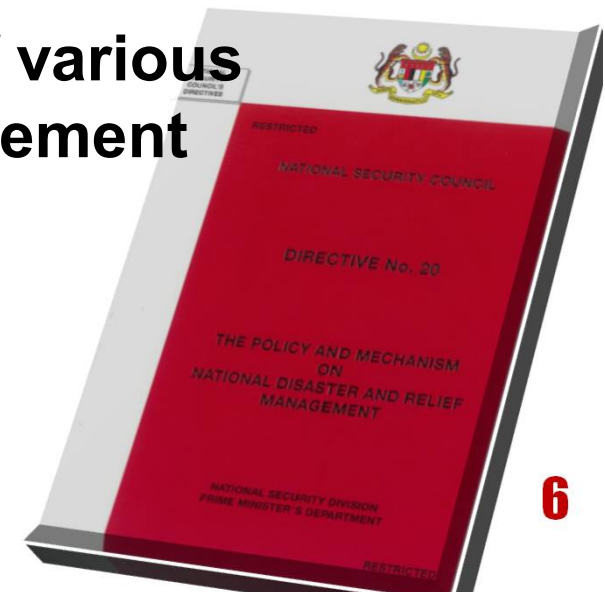
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NADMA MALAYSIA ROLES AND RESPONSIBILITIES

OBJECTIVES

- **Outlines:** Policy and Mechanism on Disaster Management on **Land** holistically

- **Covering:** at the stage of **pre, during & post disaster**

- **Determine roles & responsibilities** of various agencies involved in disaster management

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Roles & Responsibilities

1 Malaysia's National Focal Point for Disaster Management

2 Formulation National Disaster Management Policy

3 Regulate the Implementation of policies

4 Coordinate Disaster Risk Reduction Initiative

5 Cohere Disaster Relief Exercise

6 Implement Public Awarenes Programme

7 *After Action Review* (AAR)

8 Managing Disaster Relief Trust Funds

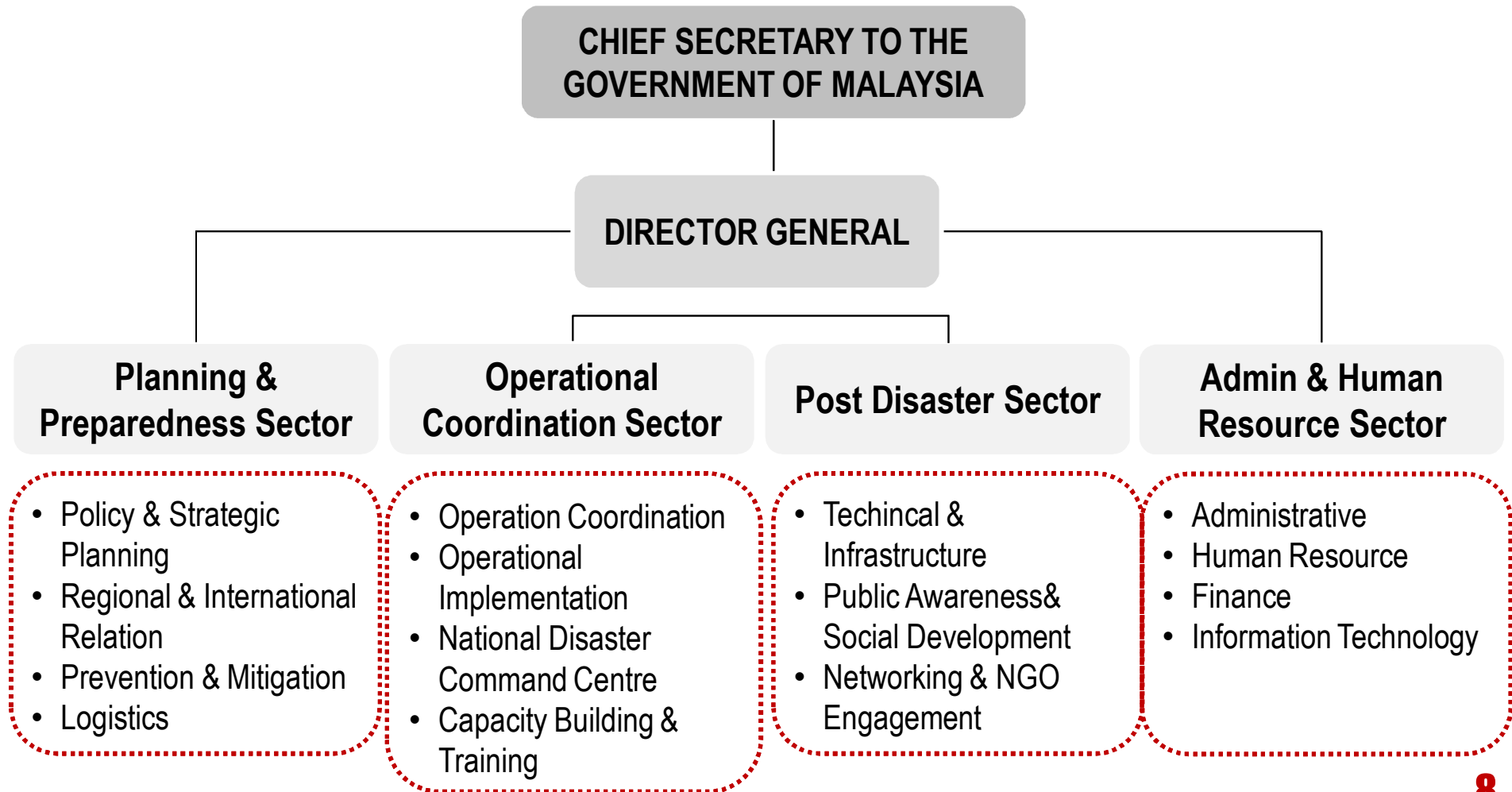**9** Secretariat of National Disaster Management Committee

10 Head of Humanitarian Assistance Disaster Relief delegation

11 Deployment of SMART team

Organizational Structure

CHIEF SECRETARY TO THE GOVERNMENT OF MALAYSIA

DIRECTOR GENERAL

Planning & Preparedness Sector	**Operational Coordination Sector**	**Post Disaster Sector**	**Admin & Human Resource Sector**
• Policy & Strategic Planning • Regional & International Relation • Prevention & Mitigation • Logistics	• Operation Coordination • Operational Implementation • National Disaster Command Centre • Capacity Building & Training	• Techincal & Infrastructure • Public Awareness& Social Development • Networking & NGO Engagement	• Administrative • Human Resource • Finance • Information Technology

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NATIONAL SECURITY COUNCIL DIRECTIVE NO. 20

9% of Malaysia's total land area is flood-prone areas

4.8 million people live in areas at risk of flooding

PERLIS
27 KM2

KEDAH
209 KM2

KELANTAN
1840 KM2

PULAU PINANG
297 KM2

PERAK
883 KM2

TERENGGANU
2223 KM2

PAHANG
8271 KM2

SELANGOR
1789 KM2

KUALA LUMPUR
13 KM2

NEGERI SEMBILAN
129 KM2

MELAKA
81 KM2

JOHOR
2387 KM2

SABAH
3284 KM2

SARAWAK
10895 KM2

PETUNJUK
☐ Sempadan Negeri
■ Kawasan Banjir
Sungai
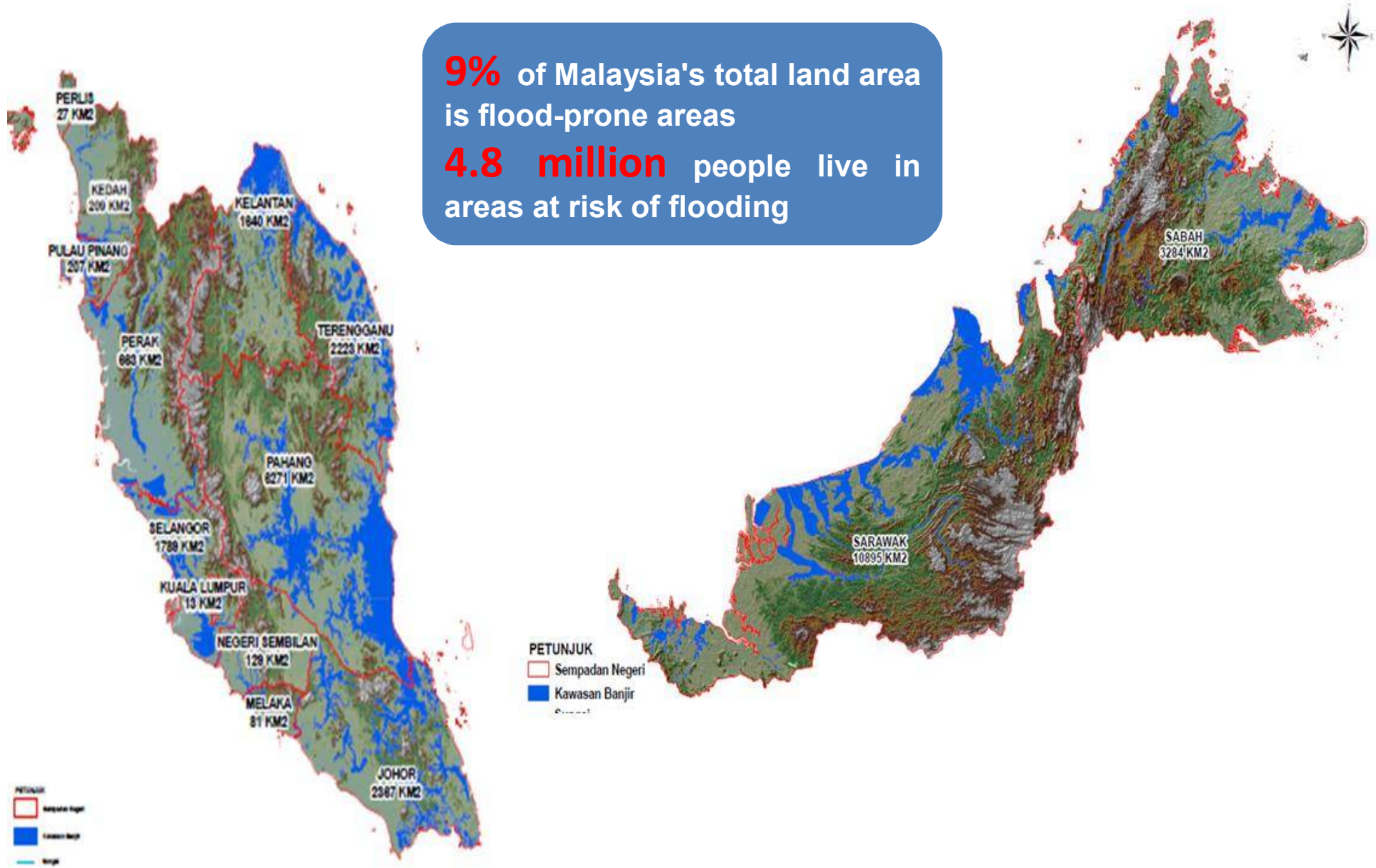
Disaster Management Framework
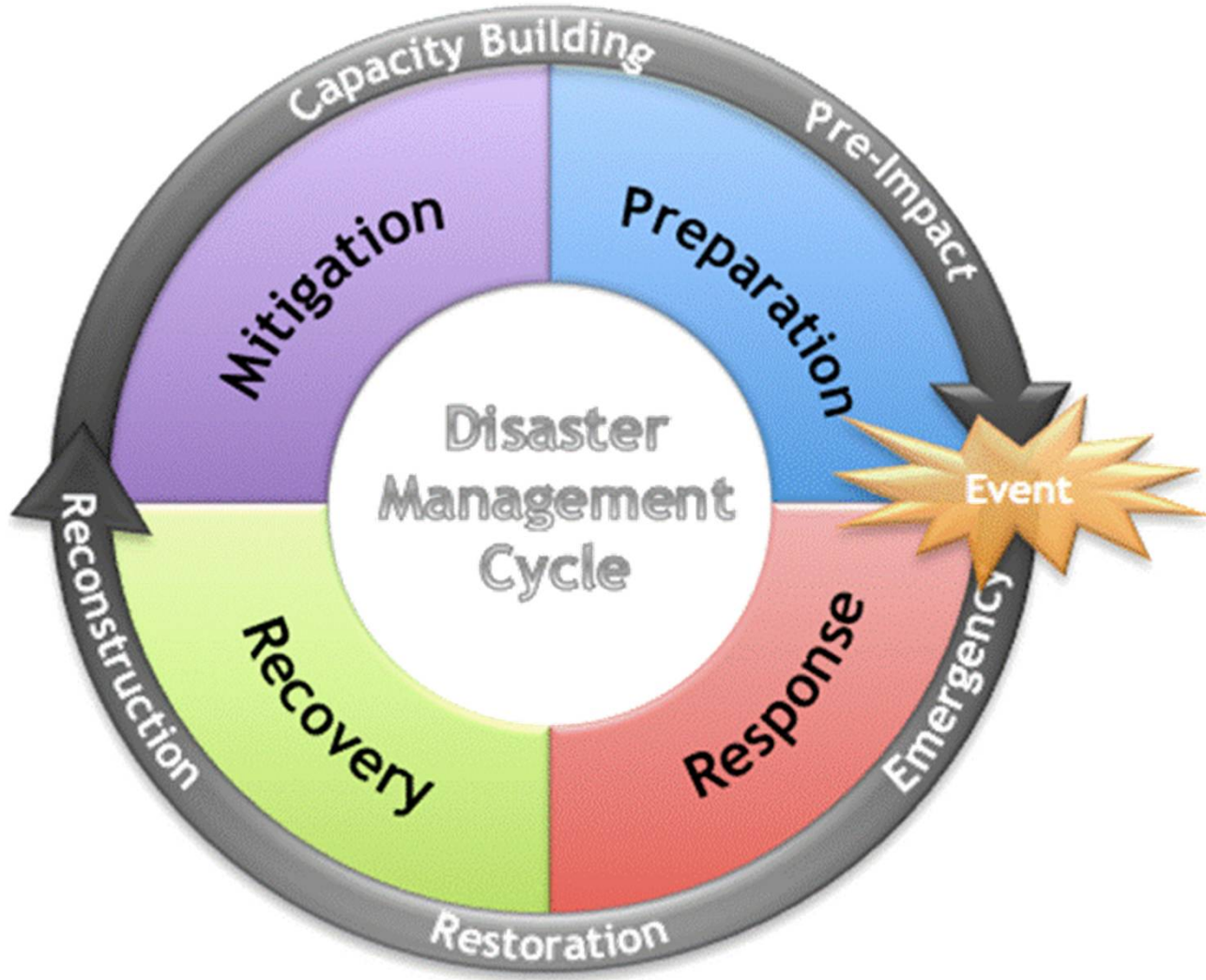
- **Experience the collapsed of Highland Towers in 1993;**

- **NSC Directive No. 20 came into force in 11 May 1997;**

- **Reviewed on 30 Mac 2012;**

- **Needs to manage:**
    - Total Disaster Risk Management (TDRM);
    - increase in complexity;
    - engage private, NGO and community;
    - take into account AADMER & other international arrangement.

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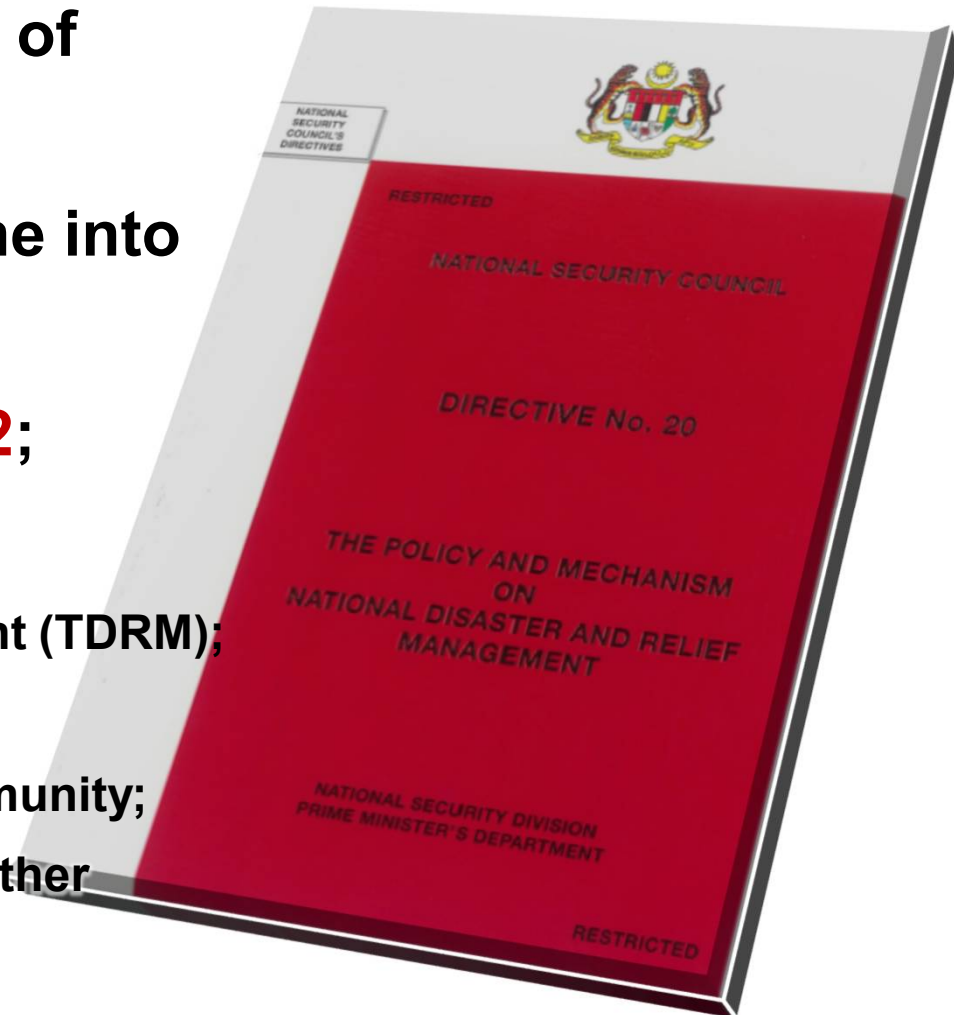
Total Disaster Risk Management

Aims Of Directive No. 20

Outlines:

Policy and Mechanism on Disaster and Relief Management on Land

Based on:

Levels of Government Administration

By:

Establishing a holistic management mechanism during pre, during & post disaster; and

determining roles & responsibilities of various Government Agencies, statutory bodies, the private sector and voluntary bodies in disaster management in disaster management.

Definitions

"Disaster" means an event that constitute a serious disruption of the functioning of a community or national affairs involving widespread human, material, economy or environmental losses and impacts which exceeds the ability of the affected community or society to cope using its own resources and requires extensive mobilisation of resources.

"Disaster Risk Reduction" means the concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, sustainable management of land and the environment and improved preparedness of individuals, community and agencies to face Disasters.

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Types Of Disaster

DISASTER INCIDENTS

Natural Disaster	Industrial Disaster	Hazardous Material Transportation Accident	Structural Collapse
Air Crash Accident	Train Collision/ Derailment	Fire Outbreak	Burst Hydro Dam/ Reservoirs
CBRN Accident/Mishaps	Haze	Uncontrollable Epidemic/ Pandemic	Other Disasters Declared by the Government

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Prevention & Mitigation

"Each party shall, individually or jointly..."

prepare & update DRR policies, action plans and guidelines

→

implement development programs to prevent

→

Implement mitigation measures including R&D

↓

implement other necessary initiatives

←

sharing the Prevention & Mitigation information

←

enforce laws & regulations and effective governance

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Preparedness

"Each party shall, individually or jointly…"

Preparedness Initiatives	Early Warning System	Inter Agency Exercise/Drill	Awareness	Training
• Identify, monitor update disaster risk profile; • Improve human resource and competency, equipment, communication and networking, technology, finance and others for effective disaster Response; • Prepare own ERP & BCP.	• Plan for effective warning system; • Share information with related parties.	• Inter-agency or Intra-agency; • Involve multi-sectoral stakeholders; • Plan & organize continuously (periodically).	• Participate communities at risk areas; • Enhance capacity building against disaster; • Manipulate media influence.	• Internal capacity building; • Enhance understanding & capabilities on handling disaster.

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Early Warning System

- **Malaysian Meteorological Department (MMD)**
  - Tsunami Early Warning System
  - Weather Forecasting
  - Fixed-Line Alert System (FLAS)

- **Malaysian Department of Irrigation and Drainage (DID)**
  - Telemetry System - Flood Forecasting Models and Infobanjir

- **Malaysian Centre for Remote Sensing (MACRES)**
  - Disaster Management Applications System

- **Department of Environment (DOE)**
  - Air Pollutant Index (API) - Haze

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Malaysian Tsunami Early Warning System

- After the Asian Tsunami in Dec 2004;

- Developed by Malaysian Meteorological Dept;

- Dissemination System: Sirens, Fixed-Line Alert System, Short Messaging System (SMS) to response agencies, mass media, telephone, fax and website.

Flood Forecasting and Warning System

- Developed by Malaysian Drainage and Irrigation Dept.

- Flood forecasting models have been applied e.g the Linear Transfer Function Model (LTFM) at Pahang River and the Tank Model at Kelantan River

- The agencies involve in flood relief have use the information to decide when they should mobilize their staffs and equipments to the areas that are potentially hit

- Dissemination System: Warning siren, Short Messaging System (SMS), telephone, fax and website **http://infobanjir.water.gov.my**

Disaster Management Mechanism

DISASTER MANAGEMENT PLATFORM

LEVEL III

Central Disaster Management Committee (JPBP)
- Chaired by the Minister in the Prime Minister's Department
- Setting up policy and strategy in disaster management , mobilize assets, monetary assistance and human resources

LEVEL II

State Disaster Management Committee (JPBN)
- Chaired by the State Secretary
- Assist the District level in terms of assets, monetary assistance and human resources

LEVEL I

District Disaster Management Committee (JPBD)
- Chaired by the District Officer
- Ensure coordinated actions, sufficient assets and human resources, and manage the media

Disaster Management Mechanism

Disaster Management Tiers

DISASTER MANAGEMENT LEVEL III (*CENTRAL*)

- Complex and covering wide area or more than two (2) States
- Greater financial, human resources and assets coordination

DISASTER MANAGEMENT LEVEL II (*STATE*)

- Incident covering two (2) or more Districts but no potential to spread
- Coordinate assistance at the State levels to the affected Districts

DISASTER MANAGEMENT LEVEL I (*DISTRICT*)

- Localized incident, controllable and has no probability to spread
- Disaster manage by the authorities at the District Level

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Disaster Response Mechanism

NADMA MALAYSIA

On-Scene Command Post (OSCP)

- To be set up as soon as an incident is declared a disaster;
- The OCPD is responsible to set up the OSCP;
- Disaster Operations Commander:
  - Responsible to establish a communication and information network with the DOCC;
  - Coordinates Search and Rescue operations;
  - Can appoint a Forward Commander to lead the SAR operations;
- All Agencies involved are to report to the OSCP

Disaster Operations Control Centre (DOCC)

- To be set up by the Disaster Management Committee Secretariat;
- Shall convene regularly to monitor the progress of a disaster and decide on actions to tackle it;
- District DOCC shall report to the Stet and Central DOCC;
- Government Agencies involved are required to assign liaison officers at the DOCC to facilitate the smooth handling of disasters.
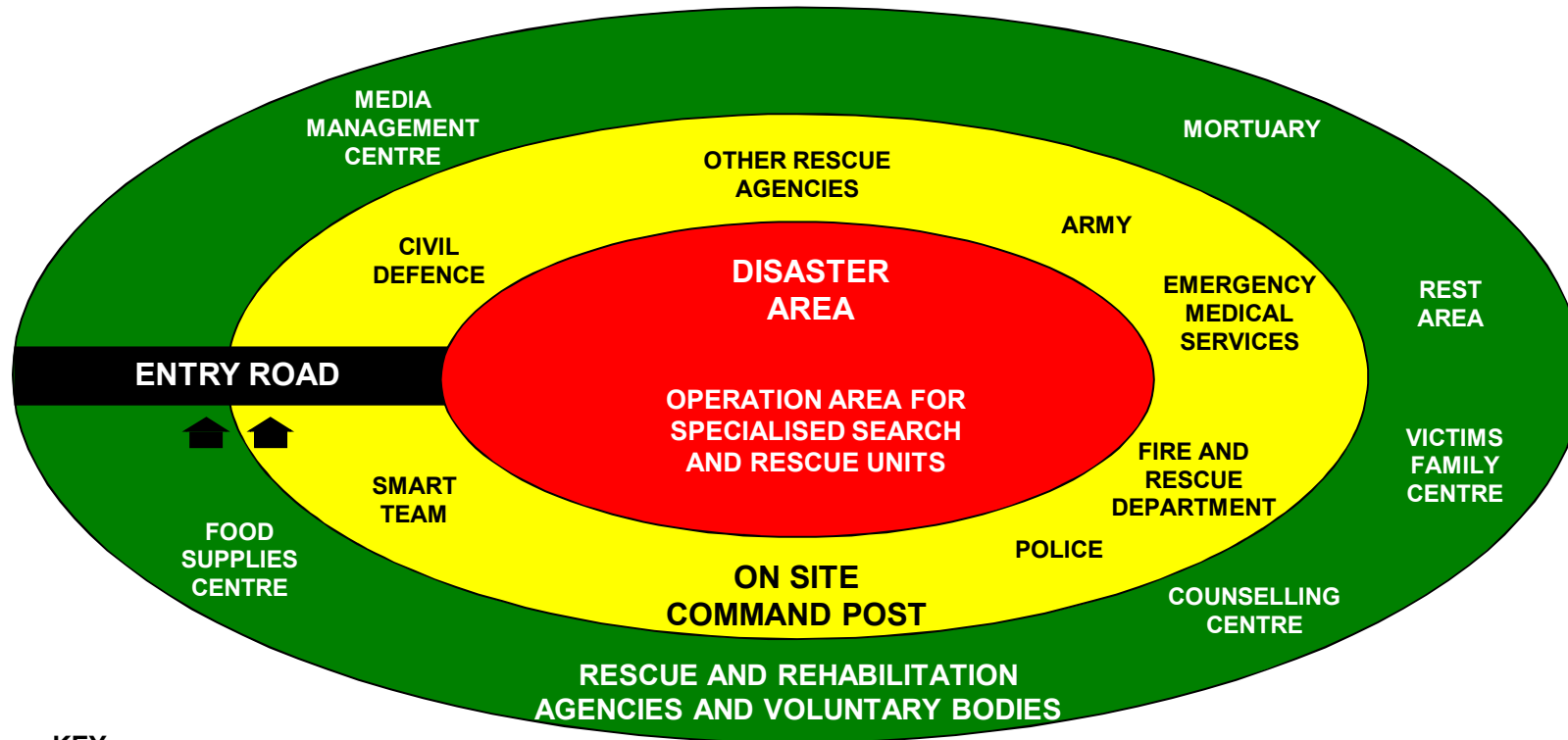
Disaster Response Mechanism

THE CHART FOR DISASTER MANAGEMENT AT THE SCENE OF INCIDENT ACCORDING TO ZONES

MEDIA MANAGEMENT CENTRE

MORTUARY

OTHER RESCUE AGENCIES

ARMY

CIVIL DEFENCE

DISASTER AREA

EMERGENCY MEDICAL SERVICES

REST AREA

ENTRY ROAD

OPERATION AREA FOR SPECIALISED SEARCH AND RESCUE UNITS

SMART TEAM

FIRE AND RESCUE DEPARTMENT

VICTIMS FAMILY CENTRE

FOOD SUPPLIES CENTRE

POLICE

ON SITE COMMAND POST

COUNSELLING CENTRE

RESCUE AND REHABILITATION AGENCIES AND VOLUNTARY BODIES

KEY

🟥	RED ZONE	: Work area for Specialised Rescue Teams with Special Expertise
🟨	YELLOW ZONE	: Placement area for On Site Command Post, and Main and Supporting Rescue Post
🟩	GREEN ZONE	: Placement area for Media Management, Victims Family Centre, Counselling Centre, Food Supplies Centre, Mortuary, Rest Area, Supporting and Rehabilitation Agencies and Voluntary Bodies
⬠	SENTRY POST	

NOTE : Movement from one Zone to another is not allowed except with the permission of the Commander of Disaster Operations

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Roles & Responsibilities

NADMA MALAYSIA

ON SCENE COMMAND POST (COMMANDER & DEPUTY COMMANDER OF DISASTER OPERATIONS)

SEARCH AND RESCUE

- SPECIAL MALAYSIA DISASTER ASSISTANCE AND RESCUE TEAM (SMART)
- FIRE AND RESCUE DEPARTMENT
- ROYAL MALAYSIAN POLICE (RMP)
- MALAYSIAN ARMED FORCES
- CIVIL DEFENCE DEPARTMENT
- MINISTRY OF HEALTH
- OTHER AGENCIES

- SEARCH AND RESCUE OF VICTIMS

HEALTH AND MEDICAL

- MINISTRY OF HEALTH
- MALAYSIAN ARMED FORCES
- MALAYSIAN RED CRESENT
- CIVIL DEFENCE DEPARTMENT
- OTHER AGENCIES

- MANAGEMENT OF EMERGENCY TREATMENT
- MANAGEMENT OF FORENSIC SERVICES
- MANAGEMENT OF PUBLIC HEALTH

WELFARE

- WELFARE DEPARTMENT
- MINSITRY OF HEALTH
- CIVIL DEFENCE DEPARTMENT
- MALAYSIAN RED CRESCENT
- IKATAN RELAWAN RAKYAT MALAYSIA (RELA)
- MINISTRY OF TOURISM
- OTHER RELATED AGENCIES

- EVACUATING VICTIMS
- PREPARING FOOD FOR VICTIM / DUTY OFFICERS
- PROVIDING / MANAGING PLACES OF EVACUATION
- PROVIDING FIRST AID AND COUNSELLING SERVICES

SUPPORT

- DISTRICT OFFICES
- MUNICIPAL / TOWN COUNCILS
- TENAGA NASIONAL BERHAD
- TELEKOM MALAYSIA BERHAD
- MALAYSIAN ARMED FORCES
- ROYAL MALAYSIAN POLICE (RMP)
- PUBLIC WORKS DEPARTMENT
- OTHER RELATED AGENCIES

- LOGISTIC SUPPORT
- COMMUNICATION AND OTHER ASSISTANCE FOR SMOOTH CONTROL OF OPERATION AND OVERCOMING OF DISASTER

SECURITY CONTROL

- ROYAL MALAYSIAN POLICE (RMP)
- RELA

- PROVIDE CONTROL AT THE SCENE ON INCIDENT
- CONDUCT INVESTIGATION
- FACILITATE COMMUNICATION

MEDIA

- INFORMATION DEPARTMENT
- BROADCASTING DEPARTMENT

- PRESS COVERAGE
- ELECTRONIC AND MEDIA COVERAGE
- MEDIA CONTROL

EXPERT AND TECHNICAL AGENCIES

- EXPERT ON SUBJECT MATTERS

- PREPARING EXPERT AND TECHNICAL SERVICES ON RELATED INCIDENTS
- ADVISING THE SEARCH AND RESCUE TEAM ON DISASTER RESPONSE AND ASSISTANCE

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Rehabilitation

- Rehabilitation & Development Programs shall be implemented immediately;

- Government Agencies, statutory bodies, the private sector and voluntary bodies involved are responsible to conduct damage assessment and implement Rehabilitation and redevelopment of public infrastructures under their jurisdiction;

- DDMC and SDMC are responsible to carry out assessment, planning and endorse Rehabilitation and redevelopment programs to the CDMC while incorporating the concept of Disaster Risk Reduction; and

- CDMC is responsible to decide which Rehabilitation and redevelopment programs to be implemented.

Financial Management

- Central and State Governments through their respective agencies are responsible to allocate funds for the purpose of Disaster management and Disaster Risk Reduction;

- Organization of donation drives for a specific Disaster may channel the financial contribution to the National Disaster Relief Trust Fund (NDRTF).

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NATIONAL DISASTER MANAGEMENT AGENCY
Prime Ministers Department

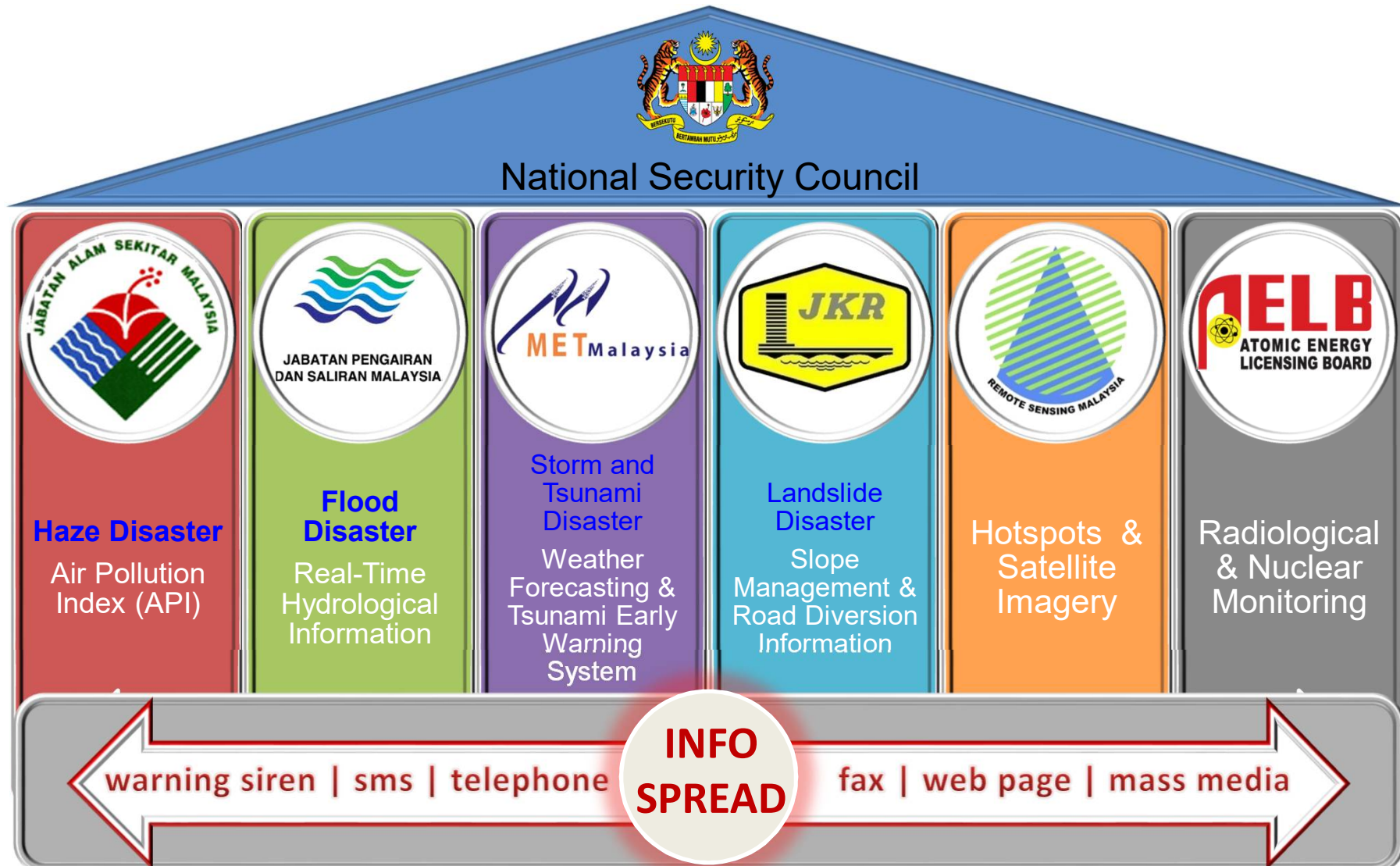# STANDARD OPERATING PROCEDURES (SOP)

National Focal Points On DM

NADMA MALAYSIA

National Security Council

Haze Disaster	Flood Disaster	Storm and Tsunami Disaster	Landslide Disaster	Hotspots & Satellite Imagery	Radiological & Nuclear Monitoring
Air Pollution Index (API)	Real-Time Hydrological Information	Weather Forecasting & Tsunami Early Warning System	Slope Management & Road Diversion Information		

INFO SPREAD

warning siren | sms | telephone   fax | web page | mass media

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CONCLUSION

Conclusion

"The success and effectiveness of disaster management efforts depend on the cooperation, understanding and ability of all agencies/departments the to carry out their responsibilities as outlined in National Directive No. 20 of the NSC.

Community-based education and awareness on disaster risk management could also lead to reducing the impact of disaster."

Thank you

NATIONAL DISASTER MANAGEMENT AGENCY