

Lessons Learned as ADRC Visiting Researcher

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Outlines

I Thailand Disaster Management System

II Thailand's experience from 2004 Tsunami

III Lessons learned from Japan

IV Report on Comparative Study of Flood Prevention Plan at Local Government Level in Thailand and Japan

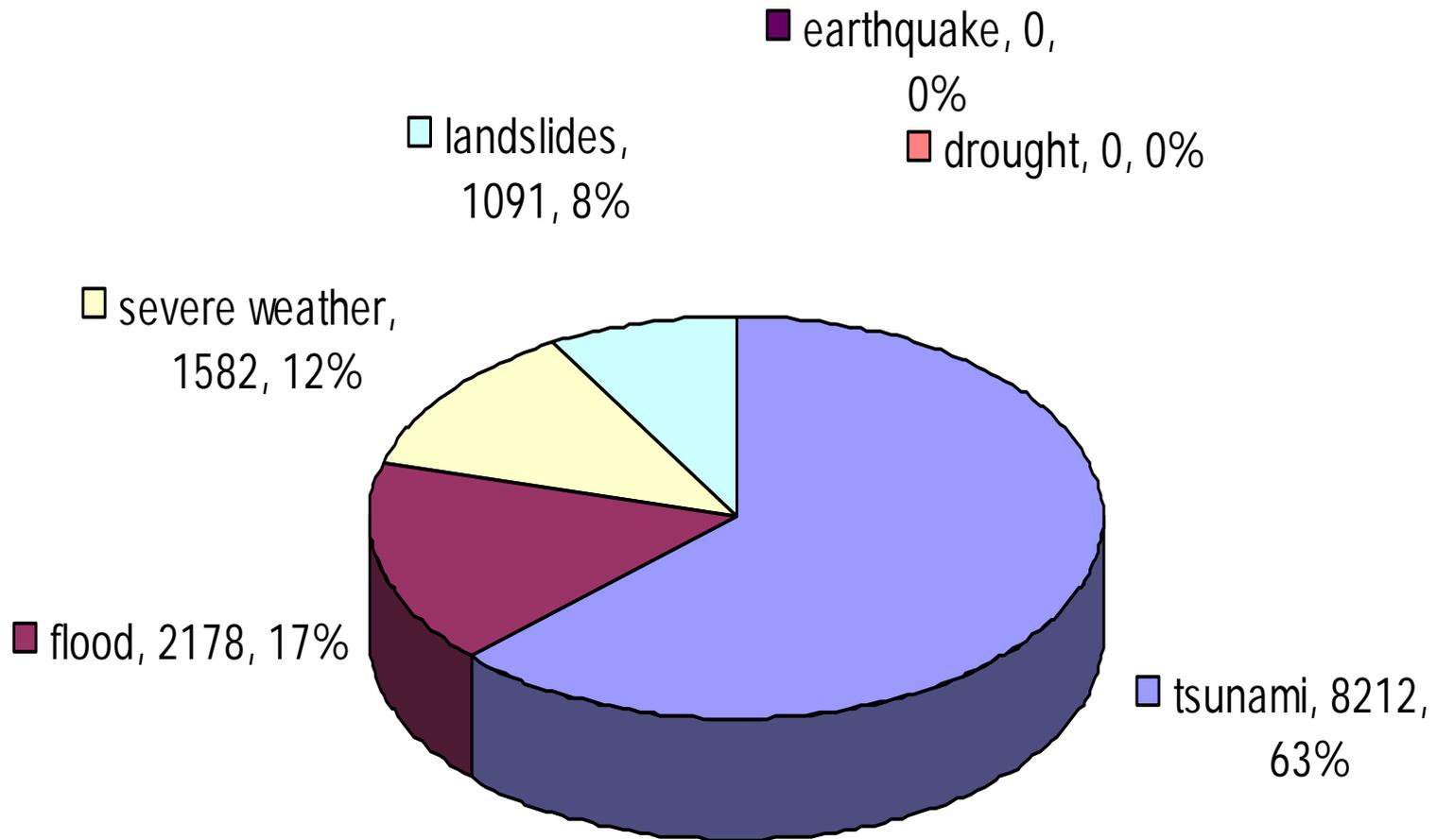
V Study Visit and impression of Japan

VI Welcome to Thailand

I. Thailand Disaster Management System



Deaths caused by types of disasters



Source: Report of Ministry of Interior

Typhoon Gay in 1989

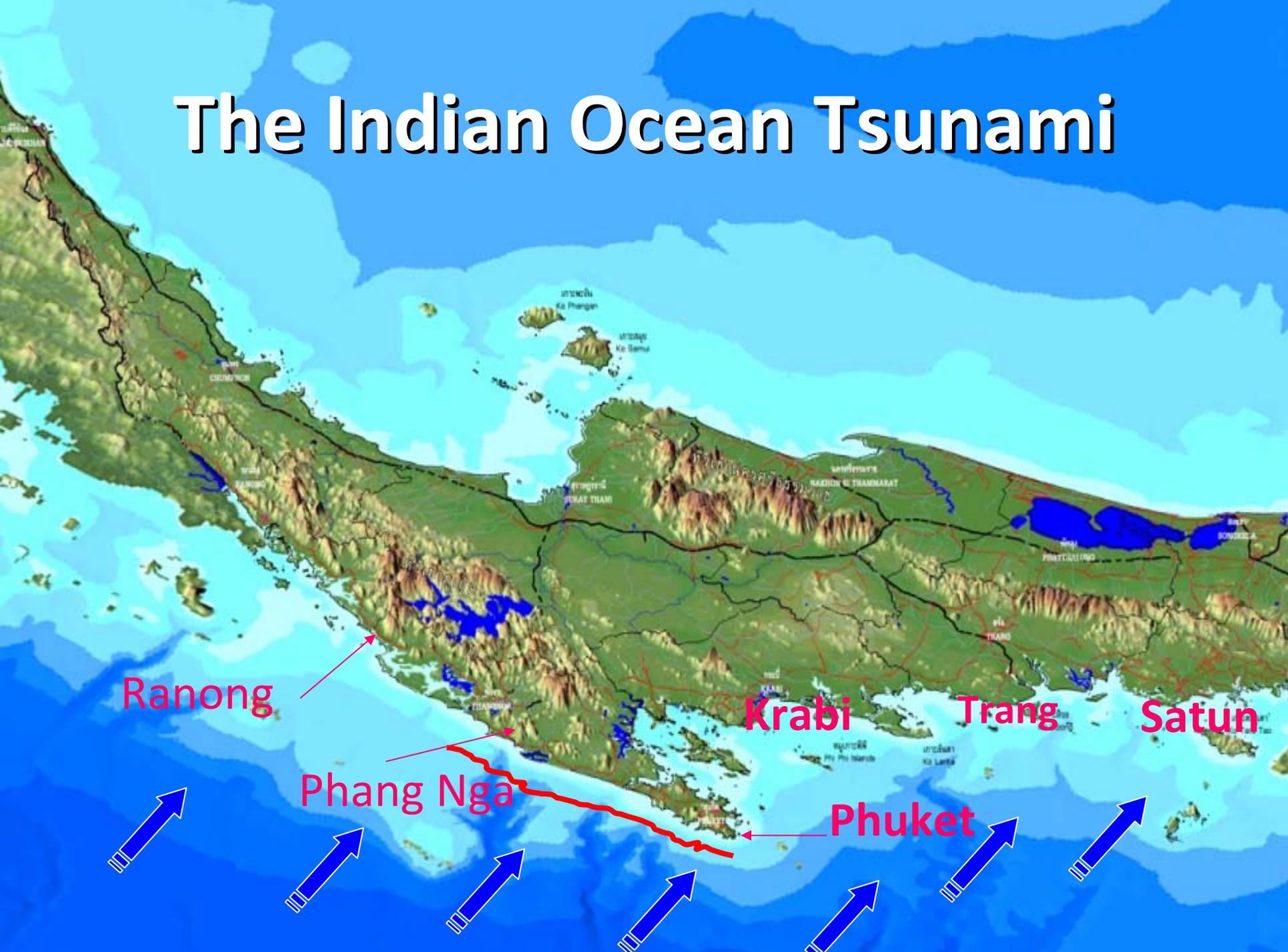


458 people in Chumporn province were killed

Namkor Landslide on 10th August 2001



The Indian Ocean Tsunami



Ranong

Phang Nga

Krabi

Phuket

Trang

Satun

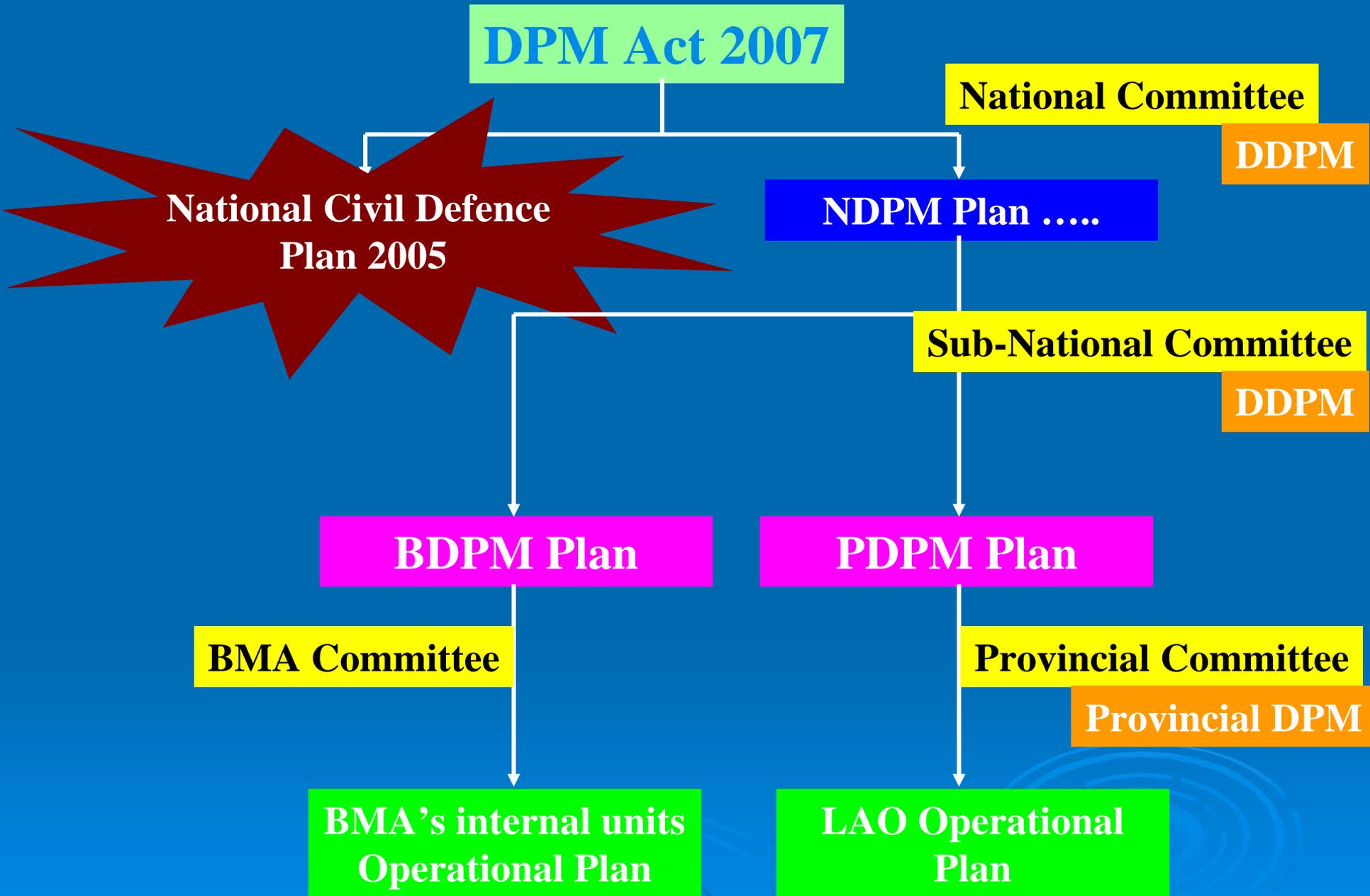
Thailand's Disaster Situation Summary in 2007

Disaster type	Frequency	People Killed	Total affected people	Damaged (USD)
Flood	13	36	2,326,197	48,224,742
Fire	1,901	45	9,761	25,022,622
Storm	2,233	10	245,619	6,701,347
Drought	1	n/a	16,754,980	5,665,849

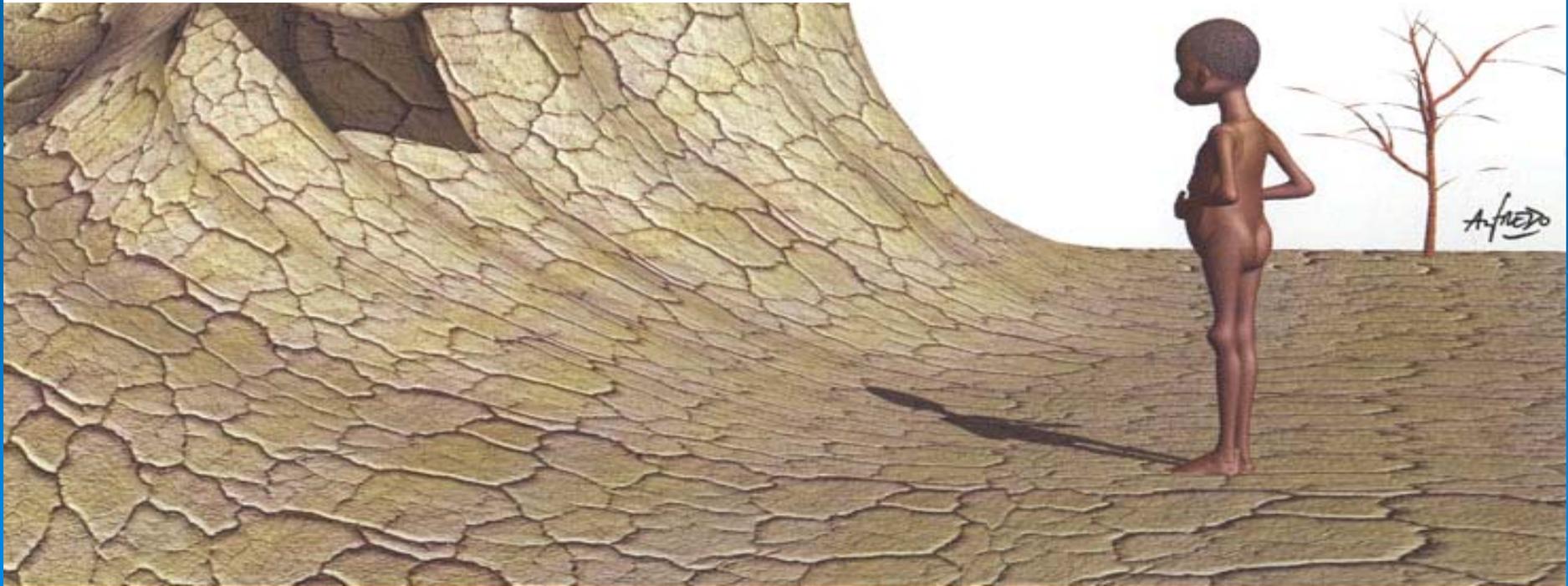
Source: DDPM, Ministry of Interior

Disaster Management System in Thailand

- **Disaster Prevention and Mitigation Act 2007**
 - **National Disaster Prevention and Mitigation Plan**
 - **National Civil Defence Plan B.E. 2548 (2005)**
- 



II. Thailand's experience from 2004 Tsunami





Response and relief

- Establishment of relief coordinating center
- Search and Rescue activities
- Assignment of institutions/ persons in charge
- Providing basic necessities to the victims
- Volunteer center

Tsunami 2004



**Volunteer Center in
Pang Nga, Thailand**



Temporary shelter



SAR Activity

Rehabilitation and Recovery

- Provision of compensation relief fund, dwelling houses, vocations, mental and physical care center
- Environment restoration



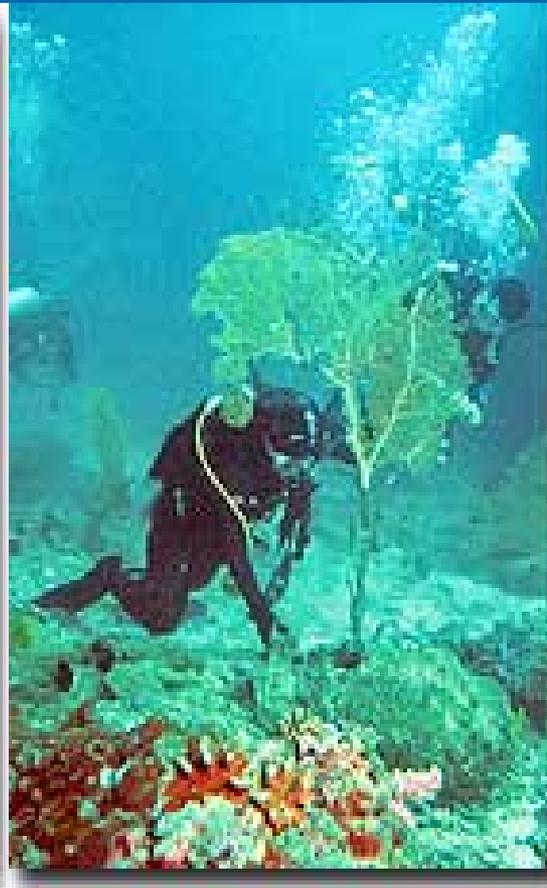
Beach clean up



Building temporary houses



- Rehabilitation of coral reefs, mangrove forests, sea grass, assessment of sea water quality and marine creature habitat clean - up



Preparedness

- Materializing Early Warning System.
- Public Awareness and Education.
- Enhancing the Capacity of Local Authority.
- Formulation of Evacuation Plan and Drill.
- Tsunami Memorial Parks and Museums Construction

➤ Tsunami Memorial Parks and Museums Construction



Evacuation drill

Early Warning Tower



International Tsunami Museum



III. Lessons Learned from Japan



National Disaster Management System

Disaster Countermeasure Basic Act 1961

Cabinet Off.

Prime Minister

Cabinet Sec.

Central DM Council

Formulate and promote implementation Basic DM Plan

Designated Gov. Org., Public Crps.

23 Mins

63 public

Formulate and promote implementation of DM operation Plan

Prefectural and Municipal Disaster Management System

Prefectural DM Council



Formulate and promote
impln. of DM Plan



Municipal DM Council



Formulate and promote
impln. of local DM Plan

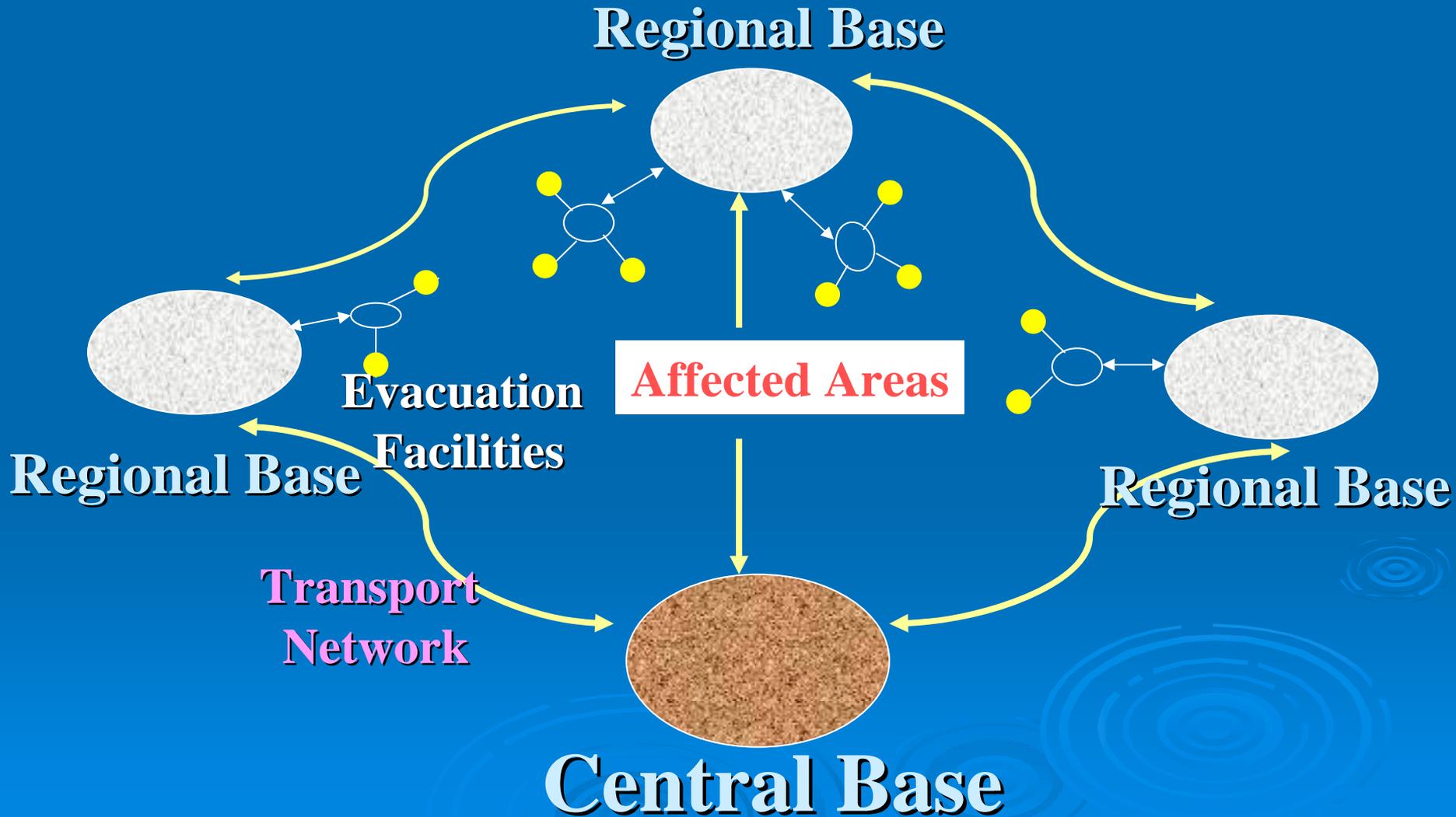


residents

Problems of DM System in Japan

- **lack of major stakeholders' involvement during the planning process**
- **lack of policy consideration**
- **lack of coordination system among jurisdiction in case of wide-area disaster**

Wide Area Disaster Management Base

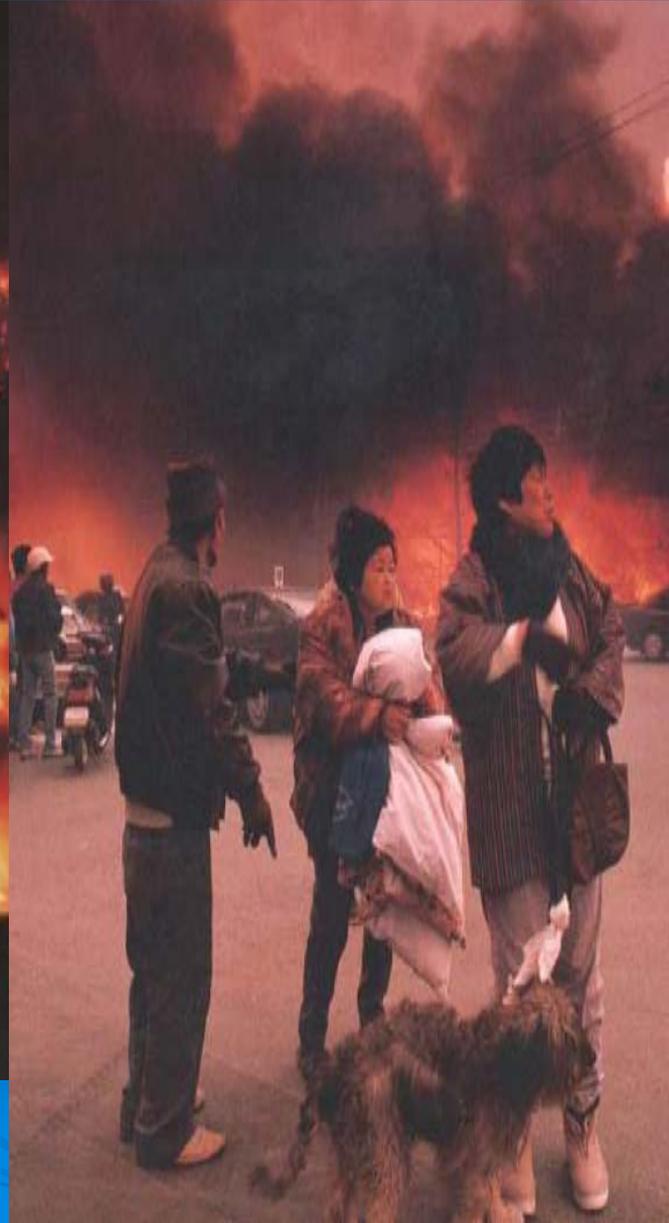


Establishment of Wide Area DM Base

Functions

- **Stockyard of food, goods, equipment**
- **Transport base**
- **Area for Search and Rescue (SAR) and Base Camp**
- **Communication Center**
- **Evacuation Place**
- **Emergency Medical Treatment (EMT)**
- **Base for Reconstruction & Rehabilitation**

Tragic loss of lives and properties



Great Hanshin-Awajj EQ

Lessons from Hanshin-Awaiji EQ

- Coordinate efforts between individual and government in Disaster Management
- Transmit the lessons through the next generation
- Apply lessons in Disaster Reduction Activities
- Focus on Activities of Community Based - Rescue and Fire-fighting, Wide-area Disaster Relief and Medical System, Volunteer, and Mental Care
- Set Evacuation Center
- Give significance of quick damage assessment, recovery infrastructure

Lessons from Hanshin-Awaiji EQ and the Way Forward

- Reopen the Stores and **Local Business Support**
- Recycle waste products that result from disaster
- Promote the development of **disaster-resistant urban infrastructure**
- Establish **laws** taking care of large-scale disaster
- Coordinate **financial supporting** by the Central Gov.

lessons from Japan and Thailand in handling unprecedented disaster

- **Learn** to gain knowledge on regional disaster and memorize the way to survive through disaster-fighting drill and education for disaster prevention
- **Protect** the everyday life by own way based on the educated knowledge
- **Plan** the town by in-area people and consider to the environmental effect together with the strength to face disaster
- **Enhance** the network of Volunteer
- **Build up** the strength of CBDRM

IV. Report on the Comparative Study of Flood Prevention Plan at local government levels in Thailand and Japan



➤ **Background:**

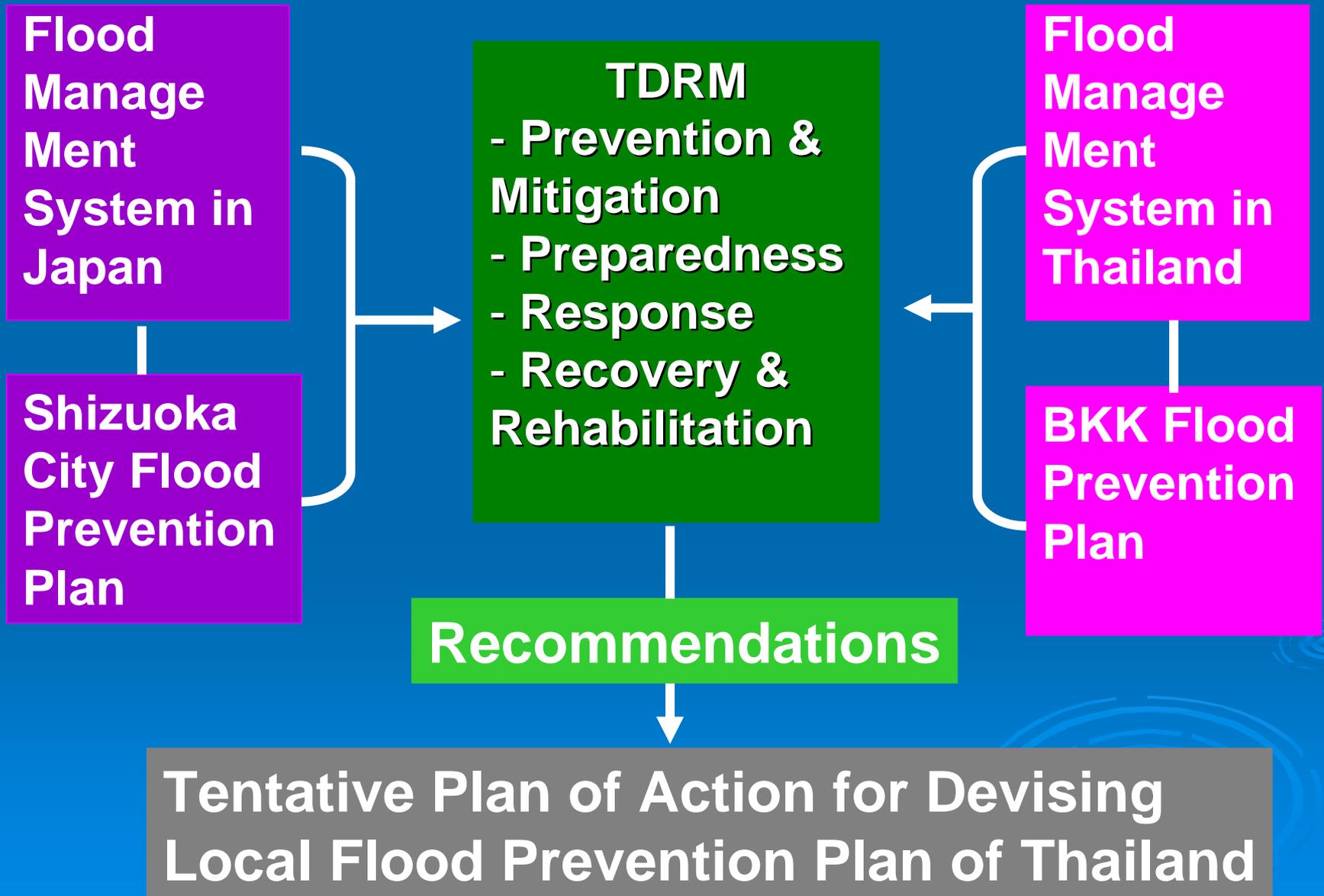
- It is a part of the tasks to be accomplished by ADRC's VR program. .
the study of flood prevention could help enhancing the capacity of government officials in the management of flood prevention
- Japan is one of the countries in the world that has the reputation of having advanced practices of flood disaster prevention

➤ **Purpose:** The local governments in Thailand can apply recommendations from the study for the establishment of the action plans as well as for the formulation of Local Disaster Prevention and Mitigation Plan.

➤ **Scope:** Shizuoka City Regional Disaster Prevention Plan was used to give a clear picture of Japanese system

➤ the Bangkok Prevention and Mitigation Plan was studied to reflect how a local government in Thailand has managed to cope with flood disaster.

Flowchart of Study Framework



➤ The issues of study

1. Flood Management System in Japan

- General Features and Types of River
- Legislation and Institution
- Basic Flood Management Strategies
- Comprehensive flood management measures
- Comprehensive flood control program

➤ **The issues of study (cont.)**

2. Flood Management System in Thailand

- Major causes of floods in Thailand**
- Organizations Responsible For Flood Control**
- Government Policies on Flood Control**
- Flood Management Master Plan**
- Flood Control Programs in Thailand**
- Flood Management Countermeasures**
- Problems of Flood Control Implementation and solving**

➤ **Recomendations**

- Flood Prevention Plan of Shizuoka City, Japan is perfectly completed with the a good many details of flood control measures in line with Total Disaster Risk Management (TDRM):
- Flood Prevention Plan of Bangkok is incompletely filled by few points of flood management

- The significant inputs:
- Flood prevention measures in line with TDPM
- Another issues: prevention of epidemic, water resource management, urban planning and zoning, agricultural management, influence of climate change, establishment of national responsible body, coordinating between various sectors concerned, encouraging responsibility of individual to flood solving
- National policy, strategy, and regulation of flood management

Tentative plan of Action for Devising Local Flood Management Plan of Thailand



V. Study Visit

By Taking part in JICA Course of Comprehensive Disaster Risk Management 2009

1. Crisis Management Office City of **Kobe**
2. Disaster Response Office, Network Operation Dept. NTT West Corporation
3. Kansai Electric Power Co.,Inc
4. **Osaka** Gas Engineering Co., Ltd.)
5. Hyogo Emergency Medical Center
6. Osaka Prefecture Office
7. Water Control Office- Nishi/West

V. Study Visit

8. Japan Broadcasting Corporation, NHK, Tokyo
9. Japan Meteorological Agency
10. Japan Research Institute
11. International Center for Water Hazard and Risk Management
12. Geographical Survey Institute
13. Arakawa River Flood Control Office
14. Tokyo Fire Dept.
15. Japanese Red Cross Society
16. Disaster Management of Temples in Kyoto
17. Nigawa-Yurino-cho Landslide Museum

V. Study Visit

18. Unzen Fugen Shiyakan and Ono-Koba Sabo Miraikan Museum, Akamatsutanigawa River Construction Site and Mt.Unzen Disaster Memorial Hall
19. **Nagasaki** Atomic Bomb Museum, Peace Park
20. Nojima Fault Preservation Museum
21. Kobe City Chuo Fire Station
22. Disaster Prevention Research Institute, Kyoto University,
23. Earthquake-proof Retrofit of Buildings in Migake

V. Study Visit

By ADRC's Program

1. Kobe University
2. "Weathercock House" affected by the Hanshin-Awaiji Earthquake
3. Disaster Reduction Museum
4. Kobe Monitoring Observatory Site
5. Participation in the JICA forum on climate change and disaster
6. Yodo River Off., and Yamato River Off .
7. Give lecture Yamaguchi University's students on DM
8. Akiyoshidai (Quasi-Natural Park and Special Natural Monument) and Akiyoshi Contrast, **Yamaguchi**
9. **Hiroshima** Peace Memorial Museum, and the world Heritage Itsukushima Shrine
10. Give lecture **Fujitokoha** University's students, on DM
- 11 Have lecture at **Shizuoka** Prefecture

Some photographs from Study Visits







V. Impression of Japan



magnificent places



Of four seasons

Japanese people





Strict self-control

Good looking always



Good at in cooking



Lively



Very kind



Religious belief





Welcome to Thailand



The Land of Smile



Delicious food



Buddhism and Happiness



Natural and Cultural Sightseeing



Thai's Beloved King

- **The King Bhumibol Adulyadej of Thailand**
- **the democratic king**
- **the world's longest reigning monarch over 60 years**
- **over 2000 royal projects established nationwide**
- **was presented UNDP Human Development Lifetime Achievement Award**



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