



**Asia-Pacific  
Economic Cooperation**

**Dialogue among APEC economies, business community,  
Key International and Regional Partners  
on Emergency Preparedness**

**APEC Task Force for Emergency Preparedness**

**April 2008**



## **APEC WORKSHOP**

**Dialogue among APEC economies, business community,  
key international and regional partners  
on emergency preparedness**

**Ha Noi, Viet Nam  
24 – 25 April 2008**

**Australia, China, Indonesia, Peru, Viet Nam**

**APEC Task Force for Emergency Preparedness**

**April 2008**

TFEP02/2008A Project

Dialogue among APEC economies, business community, key international and regional partners on emergency preparedness

Printed in April 2008

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## AGENDA

### **DIALOGUE AMONG APEC ECONOMIES, BUSINESS COMMUNITY, KEY INTERNATIONAL AND REGIONAL PARTNERS ON EMERGENCY PREPAREDNESS**

*(HA NOI, 24-25 APRIL 2008)*

*Organized by: Ministry of Foreign Affairs of Viet Nam  
Viet Nam's National Committee for Search and Rescue*

<b>24 April 2008</b>  8.30 - 9.00	<b>Registration</b>	
	<b>Opening Session</b>	
9.00 – 9.10	Welcoming remarks	H.E. Mr. Vu Dzong, Vice Minister, MOFA, Viet Nam
9.10 – 9.20	Keynote speech	Lieutenant General Tran Quang Khue, Vice Permanent President, National Committee for Search and Rescue (VINASARCOM)
9.20 – 9.30	Keynote speech	Ambassador Juan Carlos Capunay, 2008 Executive Director of the APEC Secretariat
	5 minutes break	
9.30 – 11.00	<b>Session 1: Disasters in the Asia – Pacific region and difficulties for APEC members in risk reduction and emergency preparedness</b>	Chaired by Mr. Tabrani, TFEP Co-chair

9.30 – 10.00	Hazards, disasters and vulnerability in the Asia - Pacific region: reality and challenges.	By Mr. Wei Sen Li Ph.D, Deputy Executive Secretary, National S&T Center for Disaster Reduction
10.00 – 10.30	The Evolution of Task Force for Emergency Preparedness (TFEP) of APEC	By Mr. Vincent Liu, Program Director of TFEP
10.30 – 11.00	Difficulties in addressing social and economic impacts of natural disasters in developing economies	Dr. Hoang Minh Hien, Deputy Director, Center of Disaster Management.
11.00 – 11.30	Coffee break	
11.30 – 12.00	Difficulties and challenges for risk reduction and emergency preparedness based on Da Nang city's experience	Mr. Huynh Van Thang, Vice Director, Department of Fishery, Aquaculture and Forestry; Vice Director, Department for Storm, Flood Control and SAR of Da Nang City
12.00 – 12.30	Discussion	
12.30 – 14.00	Lunch	Hosted by MOFA, Viet Nam
14.00 – 17.30	<b>Session 2: Information and experiences sharing on risk reduction and emergency preparedness among member economies, business community and key international and regional partners.</b>	Co-chaired by Dr. Hoang Minh Hien, Deputy Director, Center of Disaster Management and Mr. Chris Chiesa, Chief Information Officer, Pacific Disaster Center
14.00 – 14.30	How to build up a comprehensive preparedness strategy for risk disaster reduction based on Thailand experience	By Mr. Adthaporn SINGHAWICHAJ, Director, Department of Disaster Prevention and Mitigation, Research and International Cooperation Bureau of Thailand
14.30 – 15.00	Experience in Search and Rescue activities in Vietnam	By Colonel Do Van Son, Deputy Chief of the Vietnam's

		National Search and Rescue Committee
15.00 – 15.30	On Achieving Community-based Risk Reduction and Emergency Preparedness through Information Technologies and Applications	By Chris Chiesa, Chief Information Officer, Pacific Disaster Center
15.30 – 16.00	Coffee break	
16.30 – 17.00	Relief, Recovery and Reconstruction after catastrophic events - best practices and experiences sharing	By Dr. Liang-Chun Chen, Director, National Science and Technology Center for Disaster Reduction
17.00 – 17.30	Discussion	
19.00 – 21.00	Official Dinner	Hosted by DMEC and VINASARCOM
25 April 2008	<b>Session 3: Future for collaboration among APEC member economies, business community and key international and regional partners</b>	Chaired by Mr. Neil Head, Director, Policy Projects & Information, Emergency Management Australia (EMA)
9.00 – 9.30	Chair's remarks on APEC's vision of disaster management and emergency preparedness and response	Mr. Neil Head, Director, Policy Projects & Information, Emergency Management Australia (EMA)
9.30 – 10.00	Discussant 1: Reaching for a global framework in disaster reduction- reflection from the Hyogo Framework for Action (HFA)	By Ms. Christel Rose, Regional Program Officer, UN International Strategy for Disaster Reduction for Asia & Pacific
10.00 – 10.30	Discussant 2: How to incorporate businesses' responsibility on emergency preparedness into the APEC agenda of 2008 on Corporate Social Responsibility	By Mr. Raul Salazar Cosio, Special Assistant to the SOM Chair, Diplomatic Academy, Lawyer from the Catholic University of Lima
10.30 – 11.00	Coffee break	
11.00 – 11.30	Discussant 3: Institutional Collaboration Mechanisms for Emergency Preparedness	By Chris Chiesa, Chief Information Officer, Pacific Disaster Center

11.30 – 12.00	Discussion on possible recommendations	
12.00 – 12.30	Wrap –up	By VINASARCOM, TFEP
13.00 – 14.00	Lunch	Hosted by VINASARCOM



**TFEP02/2008A/02**

# **Hazards, Disasters and Vulnerability in the Asia - Pacific region: reality and challenges**

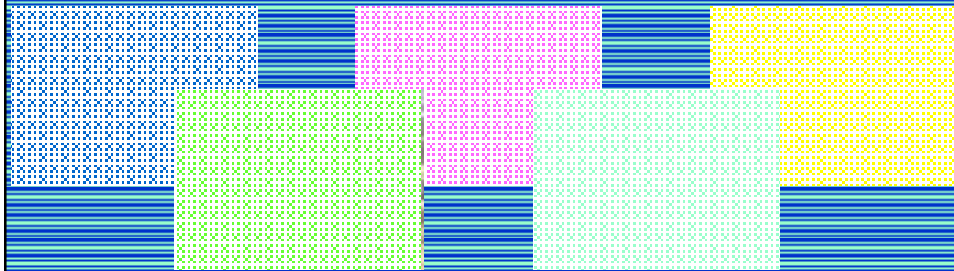
Submitted / Presented by: Chinese Taipei

**Dialogue among APEC economies, business community,  
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**Ha Noi, Viet Nam  
24-25 April 2008**

# Hazards, Disasters and Vulnerability in the Asia - Pacific region: reality and challenges

- Are we moving toward more disasters?!





**Wei-Sen Li**

*Science and Technology Center for Disaster Reduction (NCDR)*  
Chinese Taipei

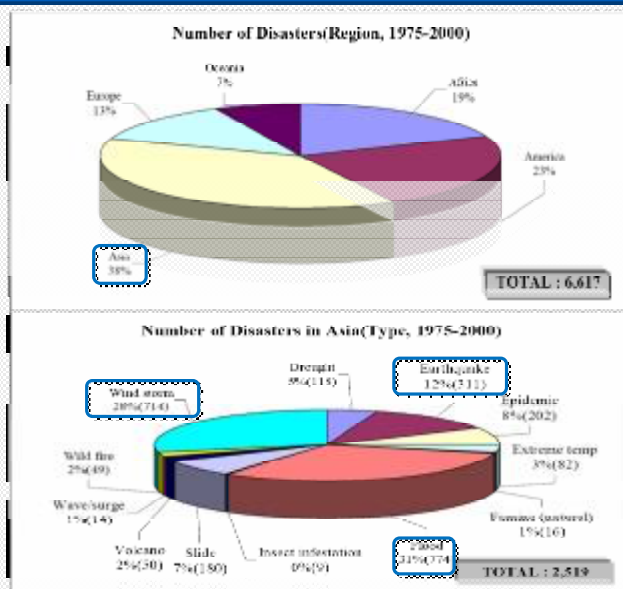
## Outline

- n Disaster profiles in Asia
  - Occurrence, Causalities, Damage
- n Disasters induced by Urbanization
  - Growth tendency, Induced problems
- n Climate Change
  - Possible threats, Strategies
- n Future Prospects of Disaster Risk Reduction
  - Technology, International Cooperation, policies...
- n Conclusions
  - Learn from disasters, not taught by disasters

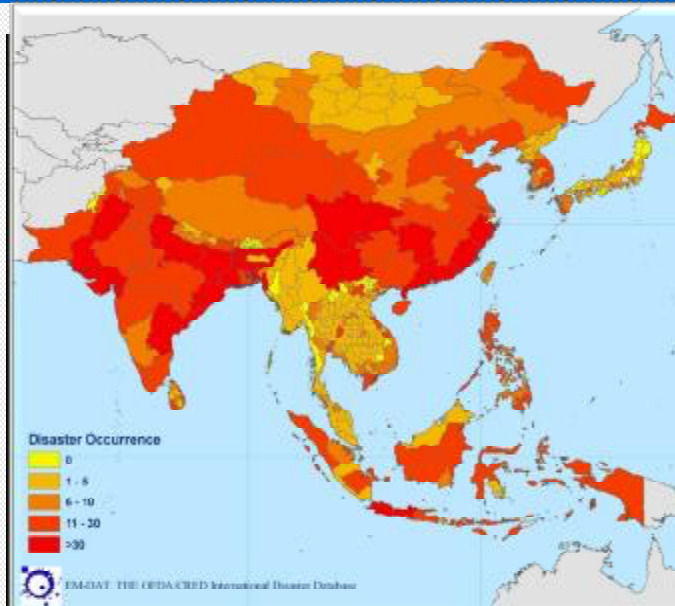
## Disaster Profile

Origin	Phenomena / Examples
<p><b>Hydro-meteorological hazards</b></p> <p>Natural processes or phenomena of atmospheric, hydrological or oceanographic nature.</p> 	<ul style="list-style-type: none"> <li>Floods, debris and mudflows</li> <li>Tropical cyclones, storm surges, wind, rain and other severe storms, blizzards, lightning, snow storm</li> <li>Drought, desertification, wildfires, temperature extremes, sand or dust storms</li> <li>Permafrost, snow avalanches</li> </ul>
<p><b>Geological hazards</b></p> <p>Natural earth processes or phenomena that include processes of endogenous origin or tectonic or exogenous origin, such as mass movements.</p> 	<ul style="list-style-type: none"> <li>Earthquakes, tsunamis</li> <li>Volcanic activity and emissions</li> <li>Mass movements, landslides, rockslides, liquefaction, sub-marine slides</li> <li>Surface collapse, geological fault activity</li> </ul>

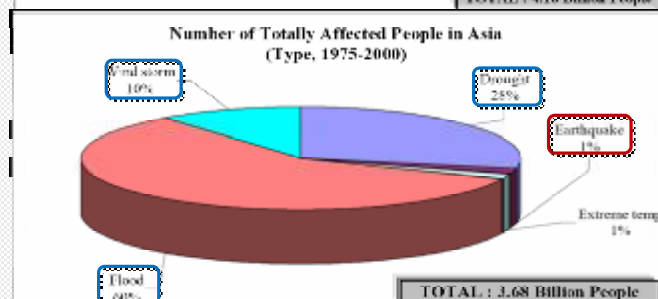
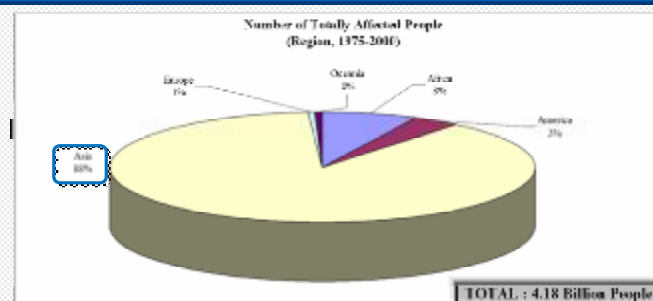
## Disaster Occurrence



## National disaster occurrence by first administrative level boundaries: 1975-2004

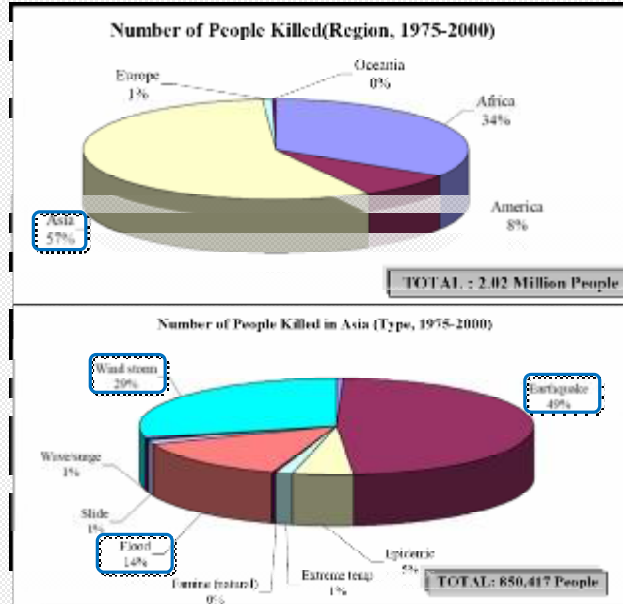


## Affected People

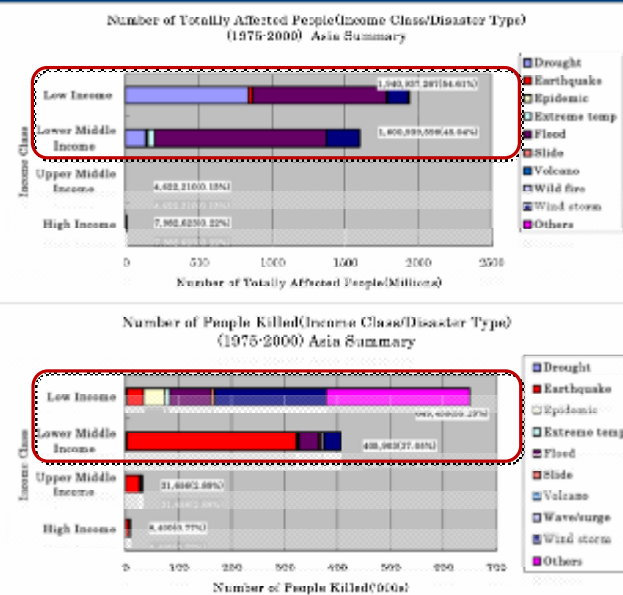




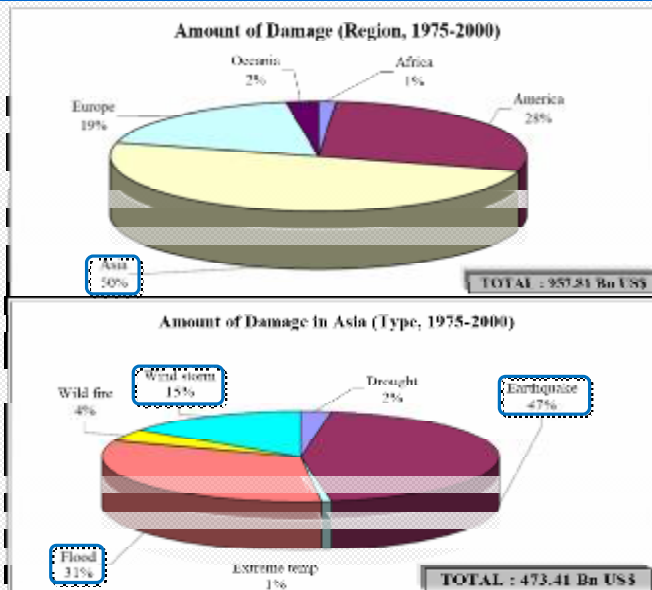
## Killed People



## Incomes vs. Affected & Killed People



## Damage Analysis



## Brief Summary about Natural Disaster in Asia

### n Disaster Occurrence:

- Flood(31%), Wind Storm(28%), Earthquake(28%)
- *Sum of above: 71%*

### n Affected People:

- Flood(60%), Drought(28%), Wind storm(10%)
- *Sum of above: 98%, Earthquake(1%)*

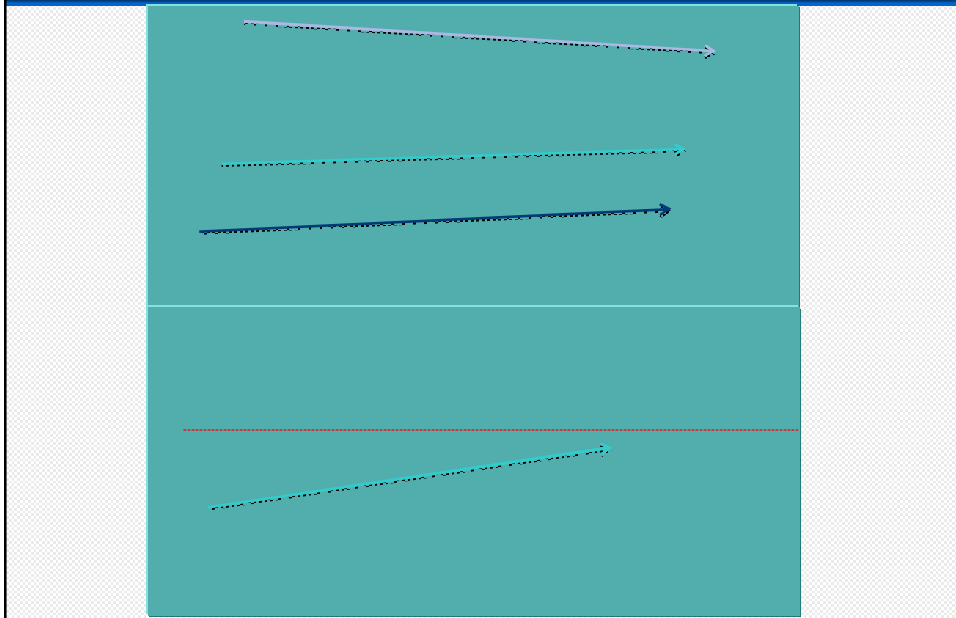
### n Killed People:

- Earthquake(49%), wind storm(29%), Flood(14%)
- *Sum of above: 92%*

### n Damage:

- Earthquake(47%), wind storm(31%), Flood(15%)
- *Sum of above: 93%*

## Tendency of Urbanization (1/2)



## Tendency of Urbanization (2/2)

### n Milestone in 2008:

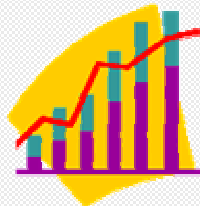
- The first time, over half global population, 3.3 billion people, will be living in urban areas.
- Almost 5 billion by 2030.

### n In the 20<sup>th</sup> century:

- The world's urban population grew from 220 million to 2.8 billion.

### n Growing trend in urban area

- 2008 50%
- 2003 48%
- 1950 30%
- 1800 2%



## Issues for Urban Area

### Property

- Infrastructures: Buildings, Public utilities
- Lifeline: Bridges, Communications, Pipeline
- Service: Public, Commercial

### Population

- High density: Social-economic impact
- **Aging population**: Create new demand
- Globalization: cultural diversity
- Social relationship

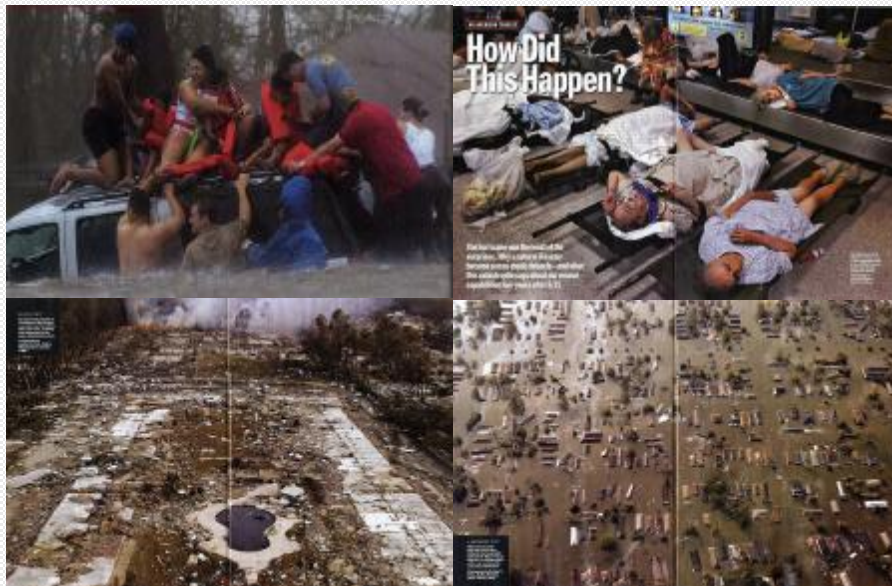
### Resources

- Hardware: Construction & Installation
- Software: Awareness, Education
- Emergency Relief: Stockpiles, Shelters

### Plans

- Reasonable scenario-based planning
- Practical performance-based evaluation
- All-hazard approach
- Urban plan, Land use, development, **aging city**

## Hurricane Katrina



## In New Orleans Before Katrina

- n **Decision:** The mayor decided to issue an evacuation order over 48 hours before landfall.
- n **Hesitation:** dissemination of the order was delayed for almost 30 hours because of staff confusion about issues that should have been resolved in the planning process.
- n **If not:** If most households had not left before the official evacuation order, the death toll would have been even higher.
- n **Under- & over- estimate:** too many households remained because they underestimated their danger (overestimated the protection from the levees).
- n **Low income citizens:** There was inadequate transportation support for those with unreliable automobiles or none at all (at least one-third of households in the city).

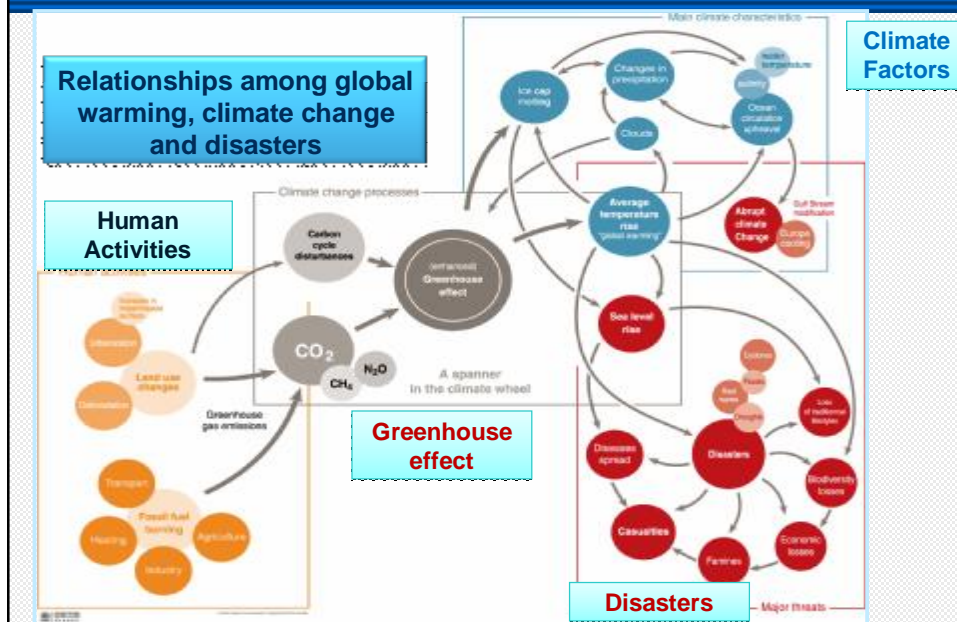
## In New Orleans After Katrina (1/2)

- n **Below-standard shelters:** After the city flooded, many of those who remained were forced out of their homes and into the Superdome and Convention Center.
  - Neither of these facilities was stocked with food and water or had emergency generators.
- n **Poor coordination:** U.S. Coast Guard helicopters were immediately active in search and rescue operations.
  - These were supported later by search and rescue teams from other states, which experienced significant coordination problems.
- n **Displaced families:** Victims were transported to mass care facilities throughout the country; some separated households took weeks to reconnect with family members.

## In New Orleans After Katrina (2/2)

- n **Medical and elders:** Medical care was a serious problem during the storm and immediately afterward.
  - The staff of some nursing homes abandoned their patients before the hurricane struck and some of these patients drowned when the city flooded.
  - A few hospitals remained in operation during the emergency, but few people in the city could reach them.
- n **Evacuee settlement:** Finally, access into New Orleans and other impact areas was tightly controlled in the storm's aftermath.
  - Counties with minimal damage (St. Charles and Jefferson, west of New Orleans) prohibited entry until a week later.

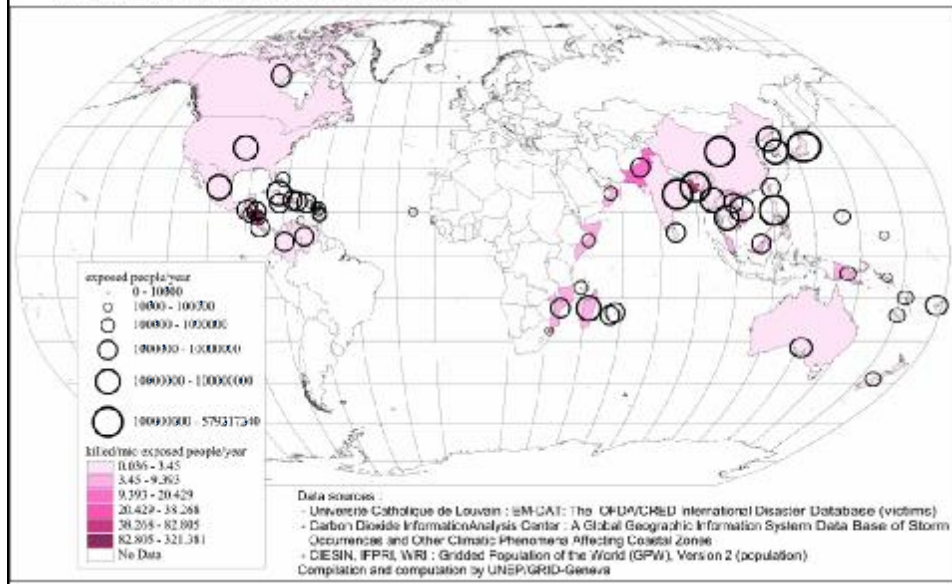
## Global warming and Climate change





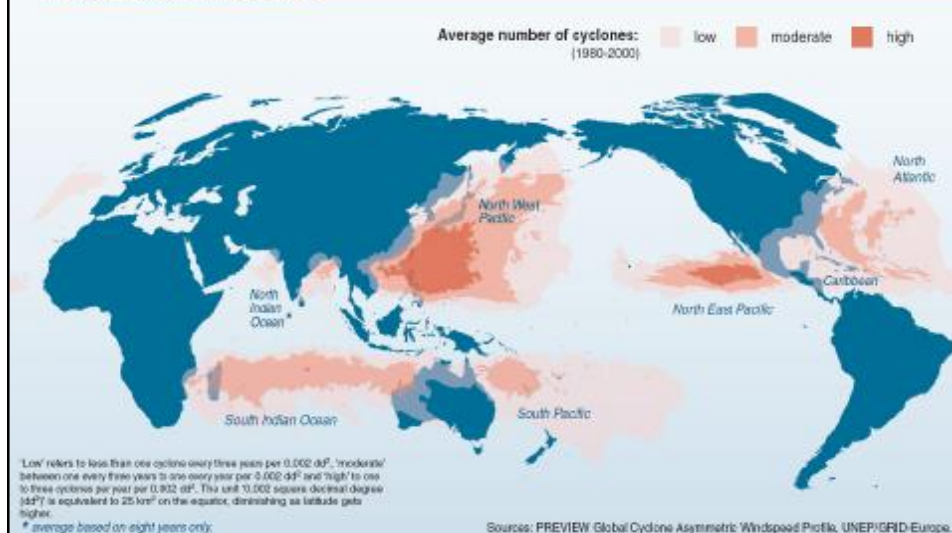
# Exposure to cyclones

Figure 10: Map of Vulnerability and Physical Exposure to Cyclones

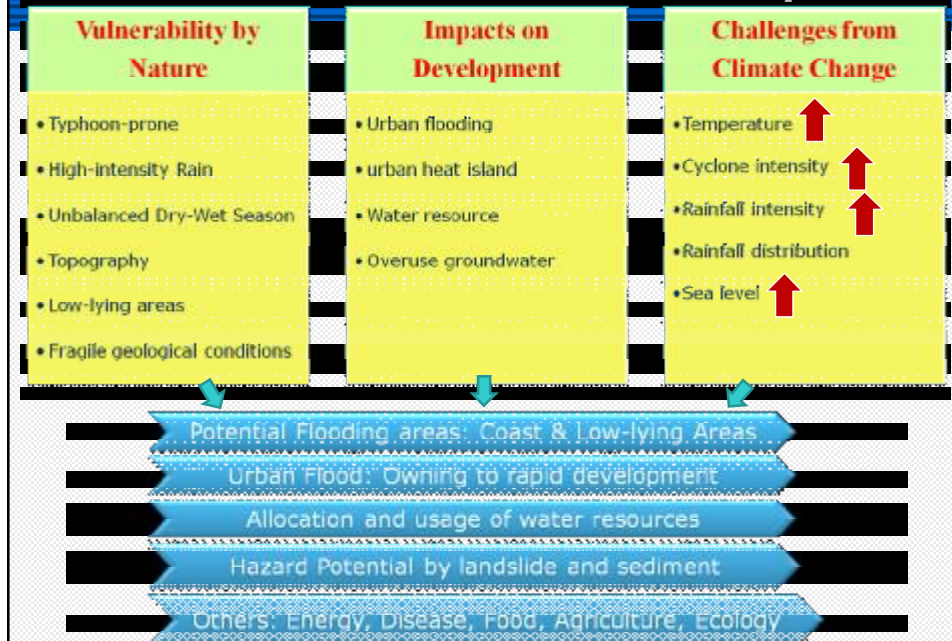


# Tropical Cyclone Risk

## Tropical cyclone frequency



## Potential Risk in Chinese Taipei



## Disaster reduction and climate change

### Hyogo Framework for Action 2005-2015 (In Kobe, 2005)

- Reduce the underlying risk factors: Disaster risks related to changing social, economic, environmental conditions and land use, and the impact of hazards associated with geological events, weather, water, climate variability and climate change, are addressed in sector development planning and programmes as well as in post-disaster situations.

### United Nations Climate Change Conference (in Bali, 2007)

- UN/ISDR suggests "Adaption of Climate Change" be the basis of future agreements for post-Kyoto Protocol period and disaster reduction and management of climate risk should be the core issues of adaption of climate change.



# Disaster Risk Reduction

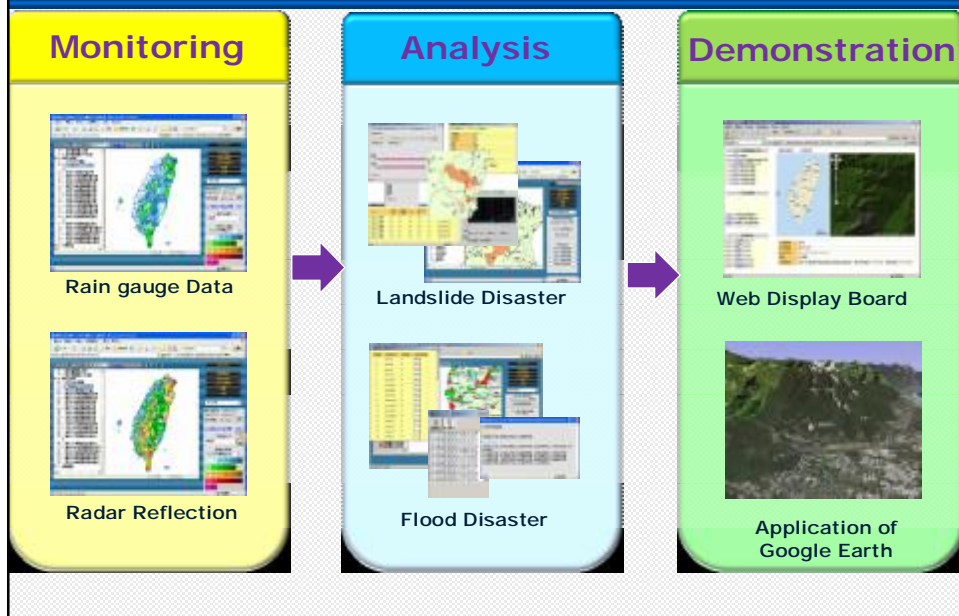
## n Tools

- Risk Assessment to indentify the risk potential
- Information-Communications-Technology based (ICT based) systems using GIS demonstration to demonstrate vulnerability and help decision.
- End-to-End information dissemination to facilitate timely response.

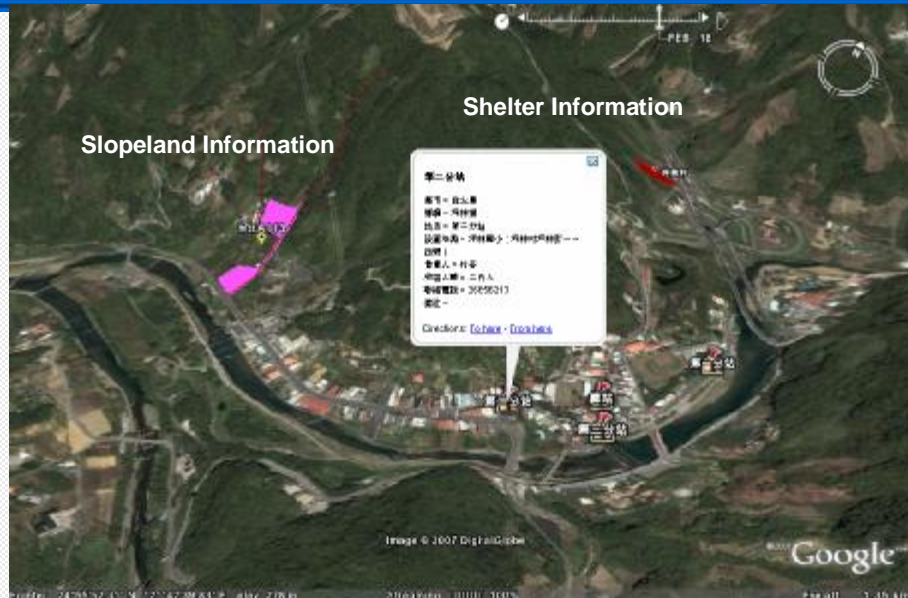
## n Concepts

- Pre-disaster recovery plan not just post-disaster recovery
- Education, disaster perception, public awareness,

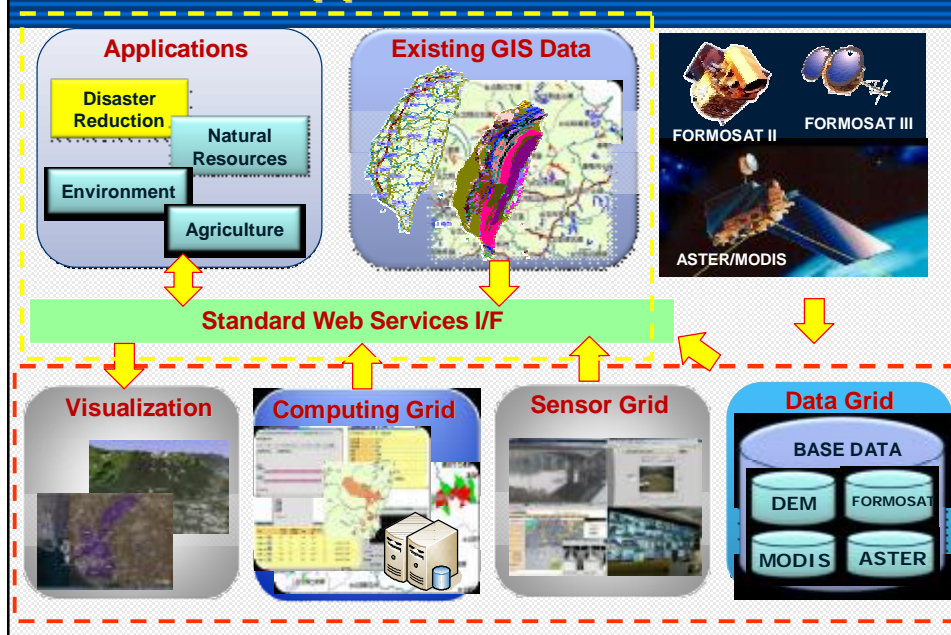
## Elements of Integrated Information System



## Display of Disaster Information in 3D Google Earth



## Future Applications in Geo GRID



## Elements in pre-disaster recovery plan

- |   |                                  |   |
|---|----------------------------------|---|
| 1 | Coordination plus response       | Consensus on timely response originating from efficient and effective deployment including public and private sectors                         |
| 2 | Information through Facilitation | Platform for information exchange to cross boundaries and provide abundant references on reduction, preparedness, response, recovery          |
| 3 | Training by Experience           | Specific training courses provide by economies to cover regional disasters with the best practice from historical events                      |
| 4 | Technology with Management       | Development and sharing of technology to ensure the better understanding of hazard distribution and provide directions for disaster reduction |

## Public Private Partnership for Disaster Reduction

- n Public sectors: power, administration and determination
  - Plans, laws, regulations, incentives, intra- and inter- governmental coordination
- n Private sectors: resources, flexibility
  - NGOs, NPOs
  - International enterprises: Corporate Social Responsibility, CSR
  - Academic field: research results and participation
  - Community: Under sustainability and prosperity to build disaster-resilient community

## Community-Based Strategy

- Community residents are the executors
- Through various activities to encourage participation
- Provide needed knowledge and resources



discussion



lecture



meeting



parties



field survey



mapping



training



## Community-Based Strategy

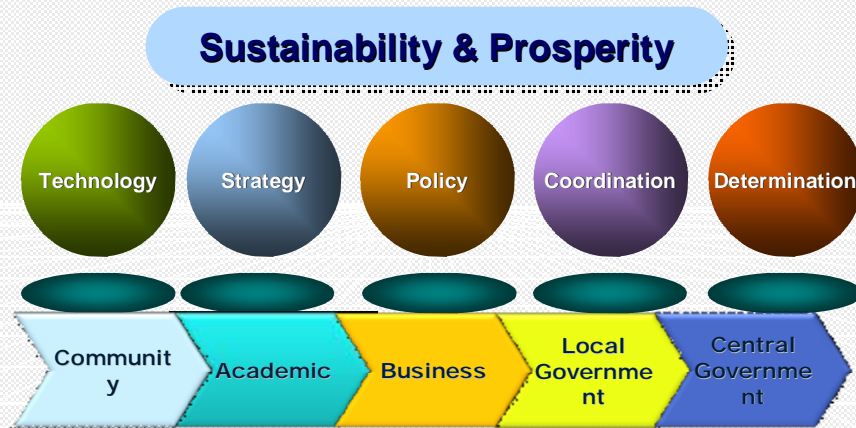


## Empower the local-level capability

- **Local to help Local**
- 4-year 3-phase Project
- Reasonable Regional Plan



## Cores of Disaster Risk Reduction



## Conclusions for the future

### n Teamwork by APEC TFEP

- Developed economy members to support
- Developing economy members to participate
- International Organizations to collaborate

### n Directions for TFEP

- Adopt cores and indicators of HFA to inventory capacity in APEC members, **Peru's Project**
- Identify required instruments, procedures and documents needed for emergency relief
- Design and development appropriate strategies for individual economy
- Best practices sharing for capacity building, **Study Course in China , Dialogue in Vietnam**

# The End

***Thanks for your attention***

*Learning from disasters, not taught by disasters*

**TFEP02/2008A/03**



# **The Evolution of Task Force for Emergency Preparedness (TFEP) of APEC**

Submitted / Presented by: APEC Secretariat

**Dialogue among APEC economies, business community,  
key international and regional partners  
on emergency preparedness**

**Ha Noi, Viet Nam  
24-25 April 2008**






# The Evolution of Task Force for Emergency Preparedness (TFEP) of APEC (April 19, 2008)

*Presented by*  
**Vincent Liu**  
Program Director, APEC Secretariat


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# Chronological Review of the TFEP since 2005

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## TSUNAMI IN 2004

As part of APEC's response to the Indian Ocean Tsunami in 2004, the TFEP was established by Senior Officials in 2005 to coordinate and facilitate emergency and disaster preparedness and response within APEC.

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## 2005

**In the Bali conference in May 2005 which brought together senior officials and aid and emergency response officers to discuss ways and means of building emergency response capacity in the region;**

**First stocktake of APEC's work in this area to assess gaps and identify priorities;**

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**2006**

a highly successful *APEC Pandemic Response Exercise 2006* to test regional communications networks,

In late 2006, the TFEP identified areas for improvement to ensure the ongoing effective development of emergency preparedness and response capacities in APEC.

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**2006**

These improvement were later on implemented in 2007, and have included:

- Enhanced participation in the TFEP by emergency management and technical experts*
- Improved project coordination*
- Closer coordination with the business community*

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2007  
First CEO Meeting in Cairns, Australia

The TFEP recognized the need for greater involvement by emergency management experts to help steer the work of the task force and to ensure appropriate coordination of activities both within APEC and more broadly across the region.

To meet this need Australia hosted a Seminar for Emergency Management CEOs in Cairns in August 2007.

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2007  
Cairns Meeting

**The seminar brought together APEC disaster management and equivalent agencies. The holding of a TFEP meeting back-to-back with the seminar helped identify key areas for building capacity and expertise within and across APEC economies.**

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2007

The conclusion and consensus made in the Cairns meeting by TFEF to:

- ensure its activities did not duplicate the work of others;*
- seek outcomes to improve the capacity of economies to build preparedness and manage responses effectively; and,*
- to engage the private sector in preparedness and response programs.*

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**Political Imperative**

APEC Leaders and Ministers reiterated in September 2007 their desire for APEC to continue its work agenda in emergency preparedness, and encouraged a stronger focus on cooperation between practitioners and engagement with the business sector.

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**APEC Economic Leaders in Sydney in  
September 2007 stated:**

***“We recognised that we all face new risks and challenges to people and economies - including from the potential spread across borders of terrorism, pandemics, illicit drugs and contaminated products, and the consequences of natural disasters. ... We agreed on the need to further strengthen APEC's efforts to build community resilience and preparedness for emergencies and natural disasters.”***

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**APEC Ministers also stated:**

***“ We agreed on the importance of strengthening our capacity to build community resilience and preparedness for emergencies and natural disasters. In this regard, we welcomed new initiatives to further cooperation between our senior emergency and disaster management officials, business and international partners to ensure we are able to respond in a timely and effective manner. We agreed on the importance of further building public-private partnerships in this area.***

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The header of the slide features the APEC logo on the left, which includes a globe and the text "Asia-Pacific Economic Cooperation". To the right of the logo are four circular images: the first shows two people in white lab coats in a laboratory; the second shows three people in business attire in a meeting; the third shows a person walking in a modern building; and the fourth shows a person in a dark suit in a dark setting.

## Future challenges for APEC

a) **TFEP of APEC will need to implement Leaders' and Ministers' instructions to further strengthen community resilience and preparedness for emergencies and natural disasters, as most recently outlined in the 2007 AELM and AMM statements.**

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b) **TFEP is binding to play a useful role in coordinating and facilitating APEC projects across all APEC fora on emergency preparedness.**


c) **APEC Ministers also have called for further cooperation between senior emergency management officials, business and international partners.**

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**However, identifying gaps and ensuring complementarity with other regional and international efforts rests primarily with emergency preparedness practitioners and experts..**

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**The 2007 Emergency Management CEOs' Seminar proved to be an effective early model for such cooperation. Future meetings between such practitioners could provide guidance on areas where gaps and capacity may be addressed, and develop new project proposals for TFEF consideration and endorsement.**

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**Active participation and engagement including project proposal submission and the advocacy of innovation by CEO, Experts, Professionals of Emergency Preparedness Agency form 21 APEC Member Economies will become crucial for future development of TFEP.**

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**TFEP 2008 Workplan**

Further focusing and refining the work of the TFEP

Implementing APEC-endorsed capacity-building activities

Facilitating further cooperation in APEC on emergency preparedness

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**Study Course on Disaster Emergency  
Response and Recovery in China.**

**Dialogue among APEC Economies,  
International Organizations and the Private  
Sector on Emergency Preparedness in Vietnam**

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***“Formulation of the Strategy for  
Disaster Risk Reduction and  
Emergency Preparedness and  
Response of the Asia - Pacific  
from 2009 to 2015” and 2nd  
TFEP CEO Seminar in Peru.***

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We have high hope on Peru's proposal which can help TFEF to more precisely position itself in the global framework of Emergency Preparedness Efforts.

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### Hyogo Framework of Action

This Action Plan defined the following Priority Action Lines:

- a) Disaster Reduction as local and national priority.
- b) Knowledge, innovations and education to build a culture of prevention and resilience;
- c) Monitoring hazards, risk assessments and early warning;
- d) Involving Risk Assessments of the Planning for Sustainable Development; and
- e) Strengthen disaster preparedness to ensure an effective Response.

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## Submission of projects for funding approval at BMC3 (22-23 October)

### **September 4**

- Deadline for submission of project proposals to the Secretariat

### **September 23**

- Secretariat Project Assessment Panel completes assessment. Comments to be sent to proponents for improvement, if necessary

### **October 1**

- Deadline for final submission of revised projects. Project proposals be uploaded for BMC consideration

### **October 8**

- Secretariat's recommendation be circulated

### **October 22-23**

- BMC meets and considers funding applications



**TFEP02/2008A/04**

# **Difficulties and challenges for risk reduction and emergency preparedness based on Danang city's experience**

Submitted / Presented by: Viet Nam

**Dialogue among APEC economies, business community,  
key international and regional partners  
on emergency preparedness**

**Ha Noi, Viet Nam  
24-25 April 2008**





DIALOGUE AMONG APEC ECONOMIES,  
INTERNATIONAL ORGANIZATIONS, AND THE PRIVATE  
SECTOR ON EMERGENCY PREPAREDNESS

HANOI, 24-25 APRIL 2008

**Difficulties in addressing Social and Economic  
Impacts of Natural Disasters in Developing  
Economies & Vietnam**

Dr. Hoang Minh Hien  
Deputy Director, Disaster Management Center (DMC)  
Department of Dyke Management, Flood and Storm Control (DDMFSC)  
Ministry of Agriculture and Rural Development (MARD)  
No. 2, Ngoc Ha street, Ba Dinh District, Hanoi, Vietnam  
Tel: (84-4)-7335686 Fax: (84-4)-7336647 Email: [hmh@netnam.vn](mailto:hmh@netnam.vn) [www.ccfsc.org.vn](http://www.ccfsc.org.vn)

**The Major Natural Disasters in Vietnam**

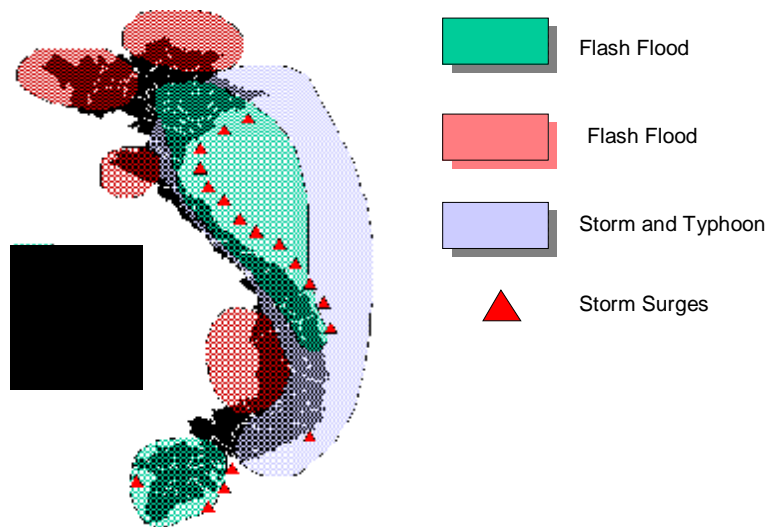
- |                        |                                   |
|------------------------|-----------------------------------|
| 1. Storm & Storm Surge | 8. River bank erosion             |
| 2. Flood               | 9. Flash Flood                    |
| 3. Inundation          | 10. Landslide                     |
| 4. Drought             | 11. Earthquake                    |
| 5. Salt Invasion       | 12. Tsunami                       |
| 6. Whirlwind           | 13. Forest fire                   |
| 7. Shoreline erosion   | Other &<br><b>Climate Change!</b> |

\* The main natural disasters in Vietnam are Flood and Tropical Storm which take more than 80% of total damages cause by all of natural disasters

\* Recently Vietnam pays very much attention on **Climate Change** and its Impact; Adaptation etc...

\* For Vietnam at present, the forest fire is not defined as a natural disaster.

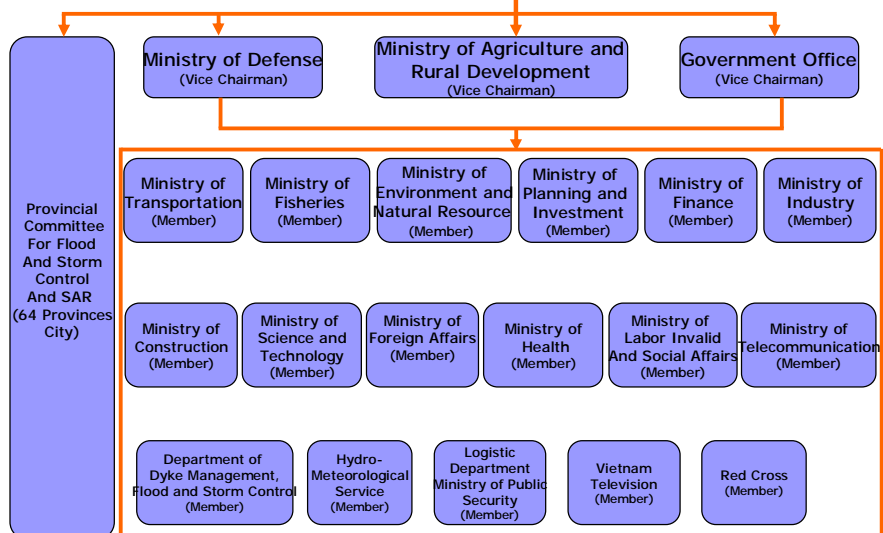
## Map view of some Major Disasters in Vietnam



CCFSC

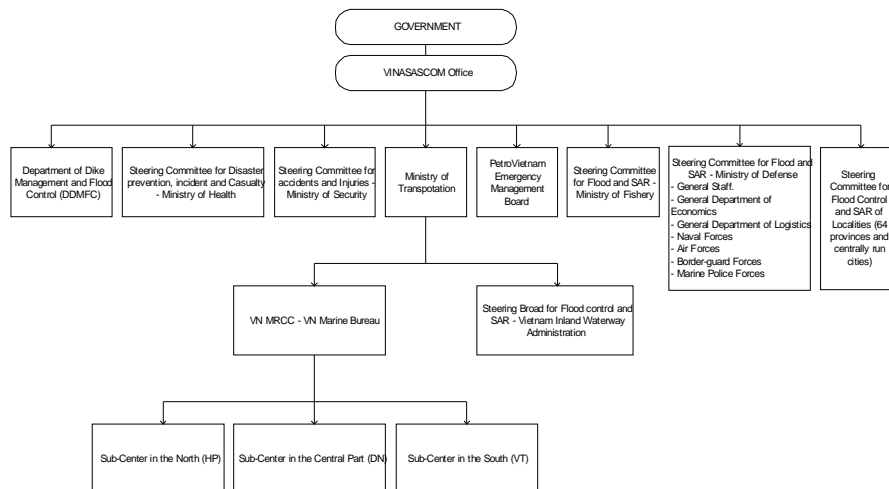
Government

Central Committee For Flood&Storm Control





## NATIONAL COMMITTEE FOR SEARCH & RESCUE



## First Coverage of Strategy Document

### Socialist Republic of Vietnam



## NATIONAL STRATEGY FOR NATURAL DISASTER PREVENTION RESPONSE AND MITIGATION

(Signed by the Prime Minister of Vietnam in 2007)

[www.ccfsc.org.vn](http://www.ccfsc.org.vn)

## UTILIZATION OF SPACE TECHNOLOGY & REMOTE SENSING INFORMATION

- NEW APPROACH ON UTILIZATION OF SPACE TECHNOLOGY AND RS DATA.
- IN SERVICE FOR HYDRO-MET FORECASTING, ESPECIALLY FOR TROPICAL AND FLOOD
- NATURAL DISASTER MANAGEMENT AND REDUCTION
- DETECTION OF LAND SLIDE TRACE
- ESTIMATION OF SOCIO-ECONOMICAL IMPACTS OF NATURAL DISASTER
- ESTIMATION AND PREDICTION OF AGRICULTURAL PRODUCTS
- OCEAN RELATED ISSUES
- OTHER...

### Vietnam's Space Technology: Starting with 1kg Satellite

*The Institute for Space Technology (STI) of Vietnam Academia of Science and Technology (VAST) was established on November 20, 2006*

*Dr. Pham Anh Tuan (middle; Deputy Director of STI) at Tsukuba Space Center in Japan*





## Satellite Ground Receiving Station

### Remote Sensing Center Ministry of Natural Resources and Environment (MONRE)

\* Satellite Ground Receiving Station (VNGS) is one component of the Environment and Natural Resources Monitoring System in Vietnam located in Minh Khai commune, Tu Liem district, Hanoi, which is under management and operation of RSC.

\* VNGS supplies all kind of imagery data for civil organization all over the country for investigation, planning of natural resources and environment, environment monitoring, calamities warning and supporting rescue activities in a case disaster.

\* VNGS can supply: SPOT 2,4,5 (HRV, HRVIR and HRG) and ENVISAT (ASAR & MERIS).

## FOREST PROTECTION DEPARTMENT (FPD) MODIS RECEIVING STATION IN MARD HOT SPOT DETECTION FOR FOREST FIRE MANAGEMENT

MARD's  
New SeaSpace  
Antenna  
Installed  
25 Jan. 2007  
Producing a new  
view of Indo-China

Every day

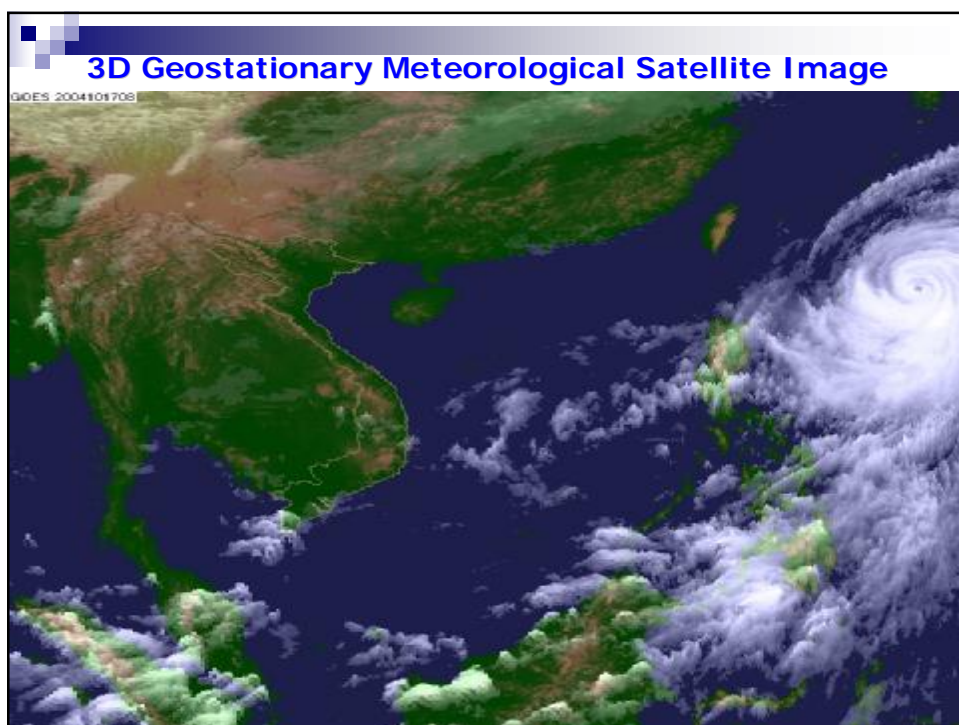
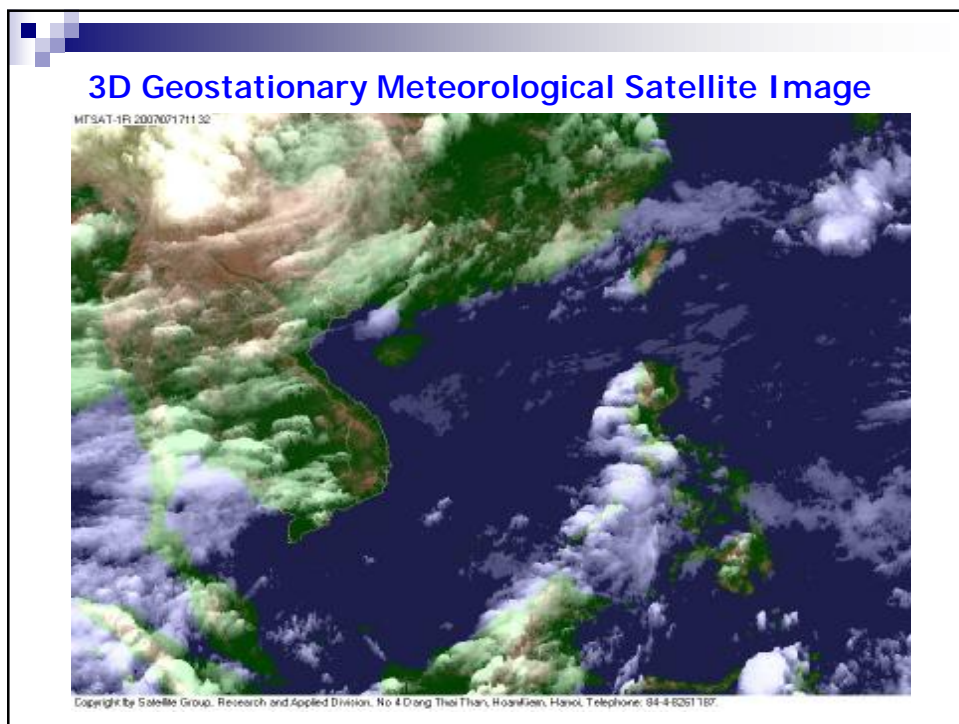
Data is free

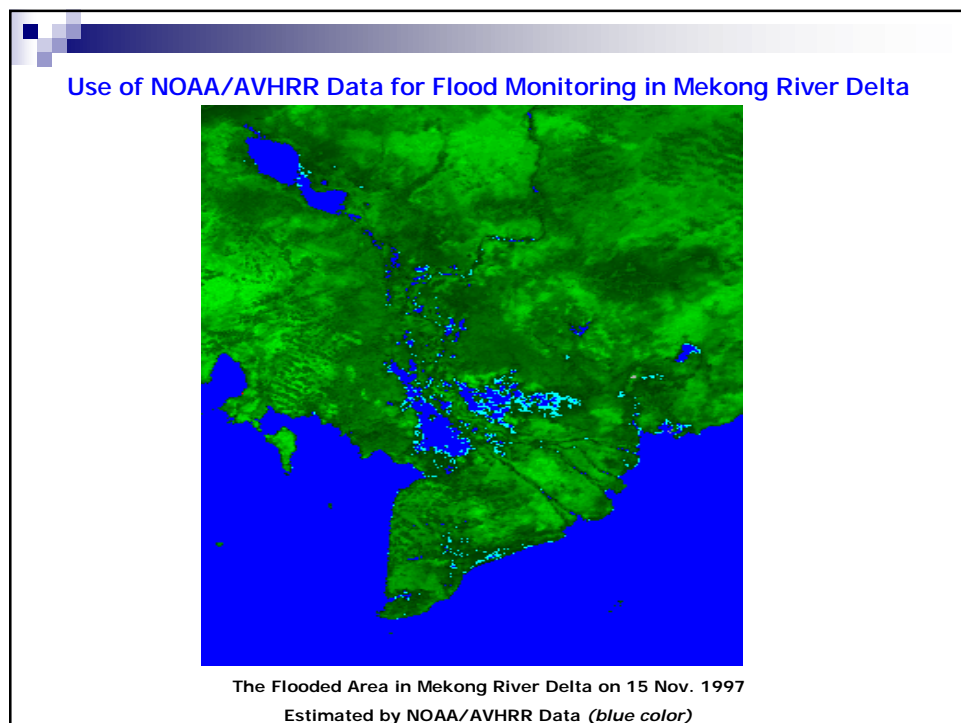
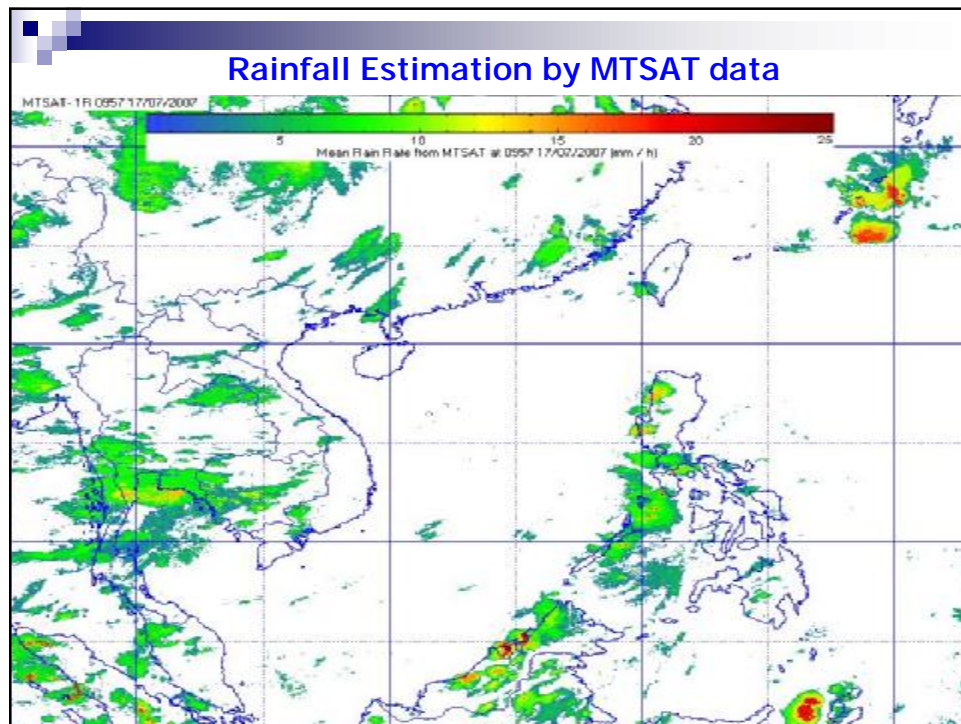




Fire Product with wind vectors produced from MODIS image collected at MARD, Hanoi, Vietnam at 22.12 local time on 25 January 2007.

## Some other Products from Meteorological Satellite Information







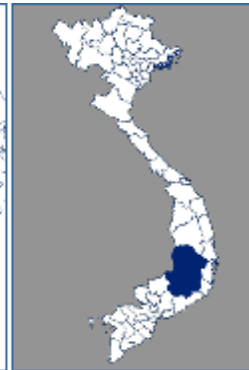
## Request of high-resolution images for emergency situation with natural disaster to International Charter

### “Space and Major Disasters”

#### The activation of International Charter “Space and Major Disasters” by PDC in 2007 (ID No. 170)

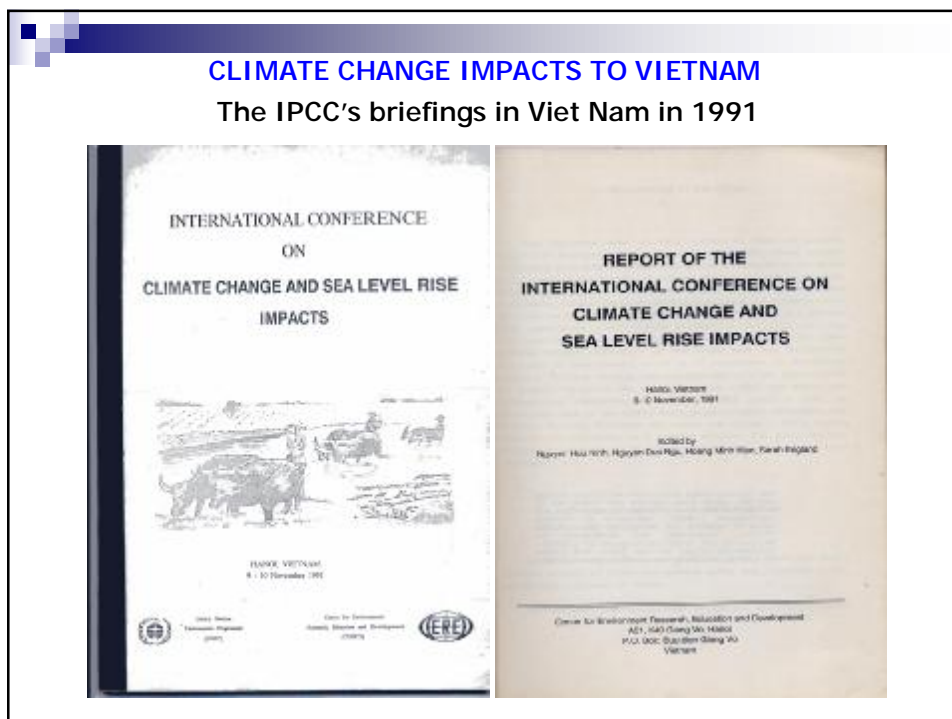
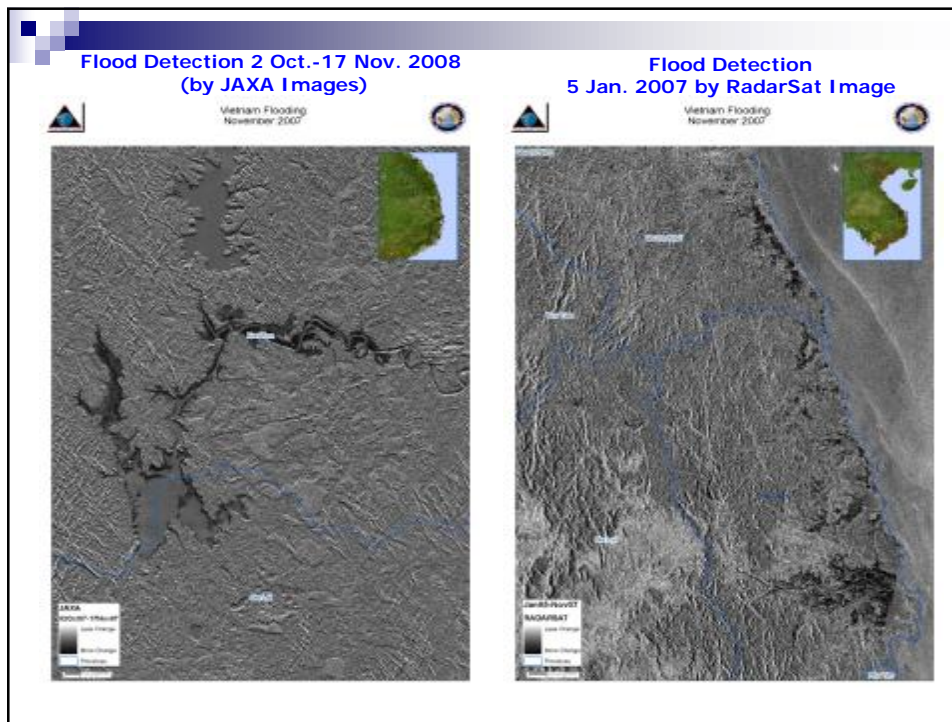


Pacific Disaster Center (PDC) asked the United States Geological Survey (USGS) to activate the International Charter “Space and Major Disasters” for the ongoing flooding event in Vietnam which began on August 4. On August 8, the Charter was activated, and PDC was nominated to manage the collecting and dissemination of data products for relief purposes.



**Left:** The map shows the districts, in green, in central Vietnam's Dak Lak and Lam Dong provinces where the deadly flooding has been most severe for several days.

**Right:** The highlighted area shows the position of Dak Lak & Lam Dong provinces in Vietnam. (Images: PDC).





## CLIMATE VARIABILITY AND ENSO IMPACTS

El Nino & La Nina  
Typhoon, Flood, drought, Forest fire, Agricultural  
Impacts  
Etc.

## NOWMELTH IMPACTS

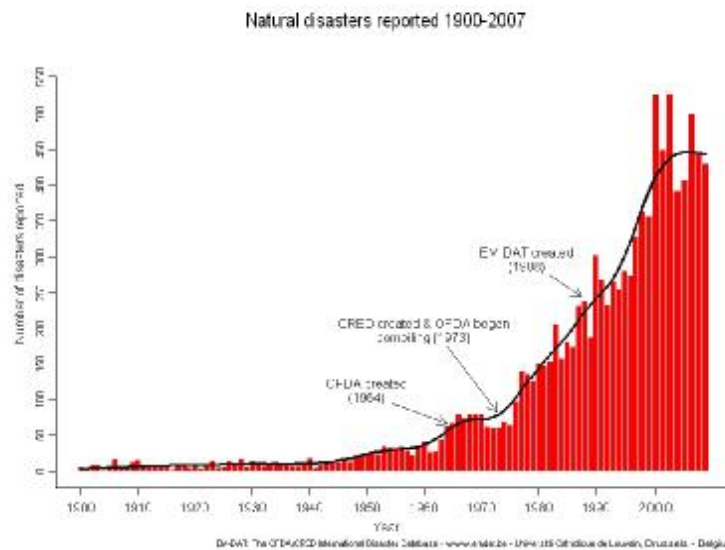
Mekong River Delta, Red River Delta and what about  
Middle Vietnam?  
Hydrological Modeling  
Snowmelt Risk Map  
Etc...

CLIMATE PREDICTION CHALLENGE  
PROBLEMS ON ESTIMATION OF SOCIO-ECONOMICAL  
IMPACTS OF CLIMATE CHANGE AND NATURAL DISASTER

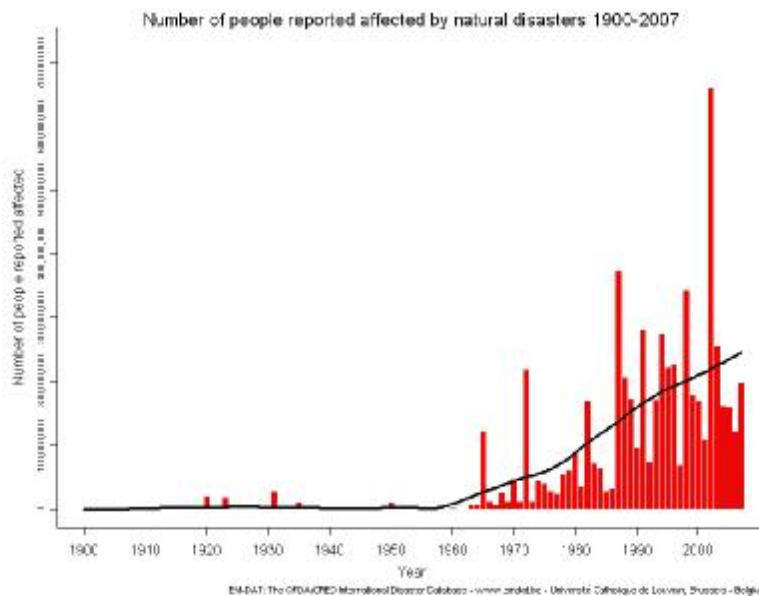
The ten most flooded provinces of Vietnam following  
the WB's study with scenario of sea level rise by 1m

Province name	Total Area (km <sup>2</sup> )	Total Flooded Area (km <sup>2</sup> )	Flooded area (%)
Bến tre	2,257	1,131	50.1
Long An	4,389	2,169	49.4
Trà Vinh	2,243	1,021	45.7
Sóc Trăng	3,259	1,425	43.7
Hồ Chí Minh	2,003	862	43.0
Vĩnh Long	1,528	606	39.7
Bạc Liêu	2,475	962	38.9
Tiền Giang	2,397	783	32.7
Kiên Giang	6,224	1,757	28.2
Cần Thơ	3,062	758	24.7
<b>Total</b>	<b>29,827</b>	<b>11,474</b>	<b>38.5</b>

The number (of reported) disaster events are increasing ...



So are the number of people impacted...



## Still, only have Limited Disaster Impact Data...

### Box 12: Shortcomings in disaster data

There is a great lack of data globally on disaster occurrence, the preconditions that lead up to individual disasters and the losses that are spread through social systems following an initial trigger. Reinsurance companies collect detailed data on disasters for their own purposes, but these are deemed to be too commercially sensitive to be made public. They are also skewed towards their particular purpose of assessing insurance risk, and so focus less on developing countries where insured values are low.

Global assessments have been forced to use national level statistics, and produce a distorted picture of disaster impacts in several ways:

- They support the widespread impression that hazards and disasters are rare in any given place. The multitude of small and medium scale disasters are invisible to this scale of analysis, as is the diversity of smaller events associated with large disasters.
  - Reporting systems for disasters are not adequately developed in many countries, or do not have sufficient information about past disasters to be able to assess risks and learn lessons.
  - There is no standardised methodology for collecting data on disasters or definitions for what constitutes a 'disaster' or a 'disaster-affected' person. Data on numbers affected is especially open to political manipulation or uncertainties due to extrapolation from historical data.
  - Often there is no follow-up on disaster impacts that emerge only some time after the event.
- These factors limit the reliability of the one publicly accessible global database on disasters – CRED's widely-used EM-DAT database. With more donor support much could be done to remedy these deficiencies.

From "Disaster risk reduction: A development concern poverty and development,"  
UK Department for International Development (DFID), 2005.

## For example, for Viet Nam:

Disaster	Date	Total Affected
Wind Storm	15-Sep-1980	9,027,174
Wind Storm	23-Jul-1980	6,624,710
Flood	Jul-2006	
Wind Storm	Oct-1996	
Flood	25-Oct-1999	
Drought	Dec-1997	
Flood	7-Sep-1997	
Wind Storm	6-Sep-2006	
Wind Storm	13-Nov-1997	
Flood	2-Dec-1999	

Disaster	Date	Damage US\$ ('000's)
Wind Storm	27-Sep-2006	624,000
Wind Storm	2-Nov-1997	470,000
Wind Storm	30-Nov-2006	456,000
Drought	Dec-1997	407,000
Wind Storm	24-Jul-1996	362,000
Flood	10-Nov-2007	350,000
Flood	28-Oct-2007	300,000
Flood	Jul-2000	250,000
Flood	25-Oct-1999	237,000
Wind Storm	14-Aug-1996	227,000

Please note that the CRED/EM-DAT team is currently working on enhancing the economic damage figures. Therefore, we suggest that these figures are treated with caution. Visit our website regularly for updated information.

Source: EM-DAT: The OFDA/CRED International Disaster Database, [www.emdat.be](http://www.emdat.be) - Université catholique de Louvain - Brussels - Belgium

## How to compare with another country?

**Top 10 Natural Disasters in United States  
for the period 1979 to 2008  
sorted by numbers of total affected people:**

Disaster	Date	Total Affected
Wind Storm	5-Sep-2004	5,000,000
Wind Storm	13-Sep-1999	3,000,010
Wind Storm	30-Aug-1985	1,000,000
Wild Fires	21-Oct-2007	640,064
Wind Storm	29-Aug-2005	500,000
Epidemic	Jan-15	
Wind Storm	23-Sep-	
Wind Storm	24-Aug-	
Wind Storm	18-Sep-	
Flood	15-Jan-	

Less people "impacted"  
(as compared to Viet  
Nam during same  
period) ...

but more direct  
economic damaged.

**Top 10 Natural Disasters in United States  
for the period 1979 to 2008  
sorted by economic damage costs:**

Disaster	Date	Damage US\$ ('000's)
Wind Storm	29-Aug-2005	125,000,000
Earthquake	17-Jan-1994	30,000,000
Wind Storm	24-Aug-1992	26,500,000
Wind Storm	15-Sep-2004	18,000,000
Wind Storm	23-Sep-2005	16,000,000
Wind Storm	13-Aug-2004	16,000,000
Wind Storm	24-Oct-2005	14,300,000
Flood	24-Jun-1993	12,000,000
Wind Storm	5-Sep-2004	11,000,000
Wind Storm	25-Sep-2004	8,000,000

## Issues

- n Highest Priority to Human Life?
- n As good as EM-DAT is, only includes # of deaths, # of impacted people, direct economic costs
- n What about indirect and secondary effects?
  - .. What is link between disaster event and economy, institutions, people?
  - .. How to measure impacts against societal and developmental goals?
    - n What is effect of missed school?
    - n What is effect of loss of health clinic?
- n How to effectively assess potential benefits of mitigation if you can't truly measure the cost of disaster impacts?
- n How can progress of recovery be measured/assessed?
- n Completed procedure from monitoring, hydro-met prediction and impact assessment.



### What to do?

- n Work towards a more comprehensive reporting of disasters by national governments
  - .. Standardized and expanded reporting elements
  - .. More details on area-impacted (via GIS/maps) including people, communities, institutions, infrastructure, etc.
- n Develop disaster recovery indicators for key sectors
  - .. Education
  - .. Health
  - .. Housing/Shelter
  - .. Employment
  - .. Agriculture
- n Perform post-event recovery surveys to measure and report progress
  - .. On-the-ground survey (health, education, etc.)
  - .. Use of remote sensing (agriculture, housing, etc.)



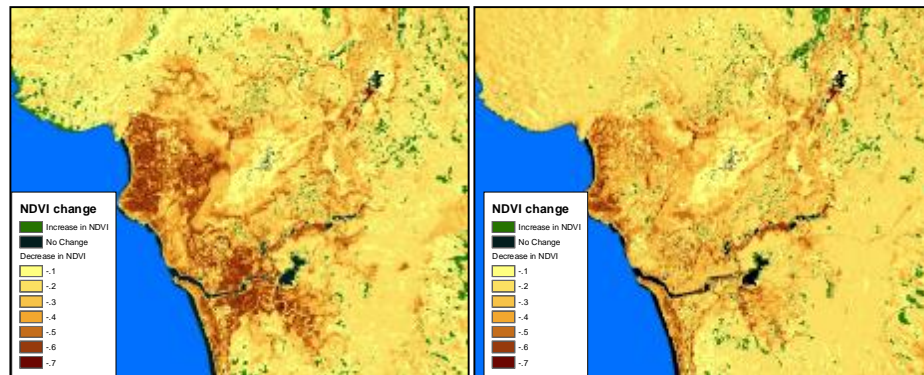
### NEW APPROACH

TOTAL DISASTER MANAGEMENT  
AREA INFORMATICS  
CATCHMENT BASED MANAGEMENT  
CBDRM  
GEO-GRID  
ETC...

## Recovery Monitoring Example: Change Detection

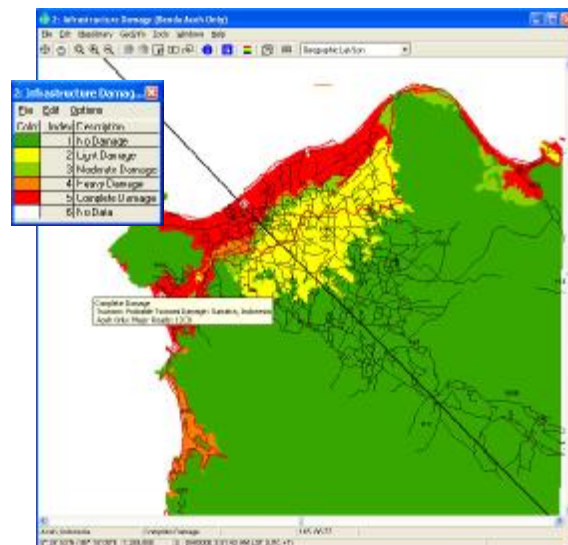
Pre Tsunami - Immediately After

Pre Tsunami – 6 Months After



RECOVER AND UPGRADING

## Recovery Monitoring Example: IDSI



### Infrastructure Damage Severity Index (IDSI)

- Developed by PDC
- Documents relative damage in affected areas
- Prepared through manual interpretation of high-resolution (~1m) satellite imagery



## SOURCES OF INFORMATION USED FOR THIS REPORT

*MARD & CCFSC: MARD, DDMFSC, DMC, FPD,  
NDMP, WRU...*

*MONRE: HMSV, NCHMF, RSC, IMH...*

*VAST: STI, IOP, IG...*

*HAWAII UNIVERSITY: PDC*

*AND OTHER*



THANK YOU FOR  
YOUR KIND ATTENTION

# **Difficulties and challenges for risk reduction and emergency preparedness based on Danang city's experience**

Submitted / Presented by: Viet Nam

**Dialogue among APEC economies, business community,  
key international and regional partners  
on emergency preparedness**

**Ha Noi, Viet Nam  
24-25 April 2008**



The People's Committee of Danang  
**Board on Storm Prevention and Rescue**

**SPEECH on  
PREVENTION AND CONTROL OF NATURAL  
DISASTERS IN DANANG**

---

Presented by: Mr. Huỳnh Vạn Thắng  
Deputy Head of the Steering Board on Storm Prevention and  
Rescue of Danang city  
*Hà nội , 24 -25/4/2008*

## **Contents**

- I. OVERVIEW
- II. RECENT NATURAL DISASTERS AND CONSEQUENCES
- III. THE CHARACTERS OF NATURAL DISASTERS IN DANANG
- IV. THE IMPORTANCE OF THE TASK ON STORM PREVENTION AND NATURAL DISASTER RELIEF
- V. DIFFICULTIES AND CHALLENGES
- VI. EXPERIENCES

## I. OVERVIEW

- A tropical country with monsoon climate, near the Pacific storm area and a place where oceanic and continental climate meets, Vietnam has frequently been faced with natural disasters. Danang is located in the middle of the Central Coastal Region and is one of the country's three main gates to the ocean.



- Geographical area: 1,279,6 km<sup>2</sup>, population 850,000 people
- Suffer the most from natural disasters in comparison to other regions of the country

## II. RECENT NATURAL DISASTERS AND CONSEQUENCES

- Over the past 10 years, there have been 5 series of natural disasters, which caused severe damages to human and assets of the city
- The Great Flood in 1998:



- The flood peak in Ai Nghia was 10.37 metres- only 0.19 metres lower than the historical level in 1964; in Cam Le was 3.31 metres, which was 1.61 metres higher than the Warning level III

- The 1998 flood claimed the lives of 32 people, destroyed and swept away 158 houses. 19,029 houses were deeply inundated. The total loss reached 182.3 billion dong.

## II. RECENT NATURAL DISASTERS AND CONSEQUENCES

- The Great Flood in 1999:

ü The flood peak in Cam Le was 4.28 metres, which was 2.58 metres higher than the Warning level III, equivalent to that of 1964.



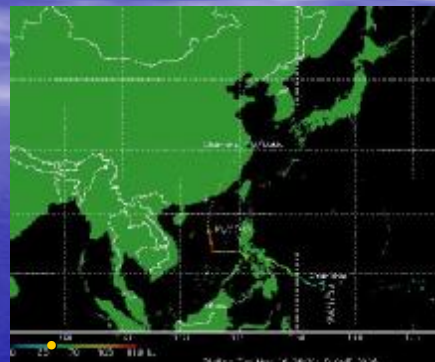
ü The flood in 1999 claimed the lives of 37 people, injuring 61 others, sweeping away 4,579 houses and sinking 46,333 others. Transport, irrigation, power and telecommunications infrastructures were badly damaged. The total loss was 611 billion dong.

## II. RECENT NATURAL DISASTERS AND CONSEQUENCES:

- The Storm No.1 in 2006 (Chanchu):

ü Chanchu was a very strong storm with the wind power at level 12 and gust stronger than level 12

ü Though not directly landed in the territory of Vietnam, the storm inundated 10 fishing boats sheltering in Dong Sa Island and claimed the lives of 227 fishermen





## II. RECENT NATURAL DISASTERS AND CONSEQUENCES



Ū The Xangsane storm killed 33 people and injured 289 others; 41,884 houses collapsed, among which 8,990 were totally destroyed; stores, offices, schools, medical stations, transport and irrigation infrastructures were seriously damaged; and trees, farm produce and more than 25,000 ha of wood fell off. Workshops of many enterprises collapsed. Production was stagnant. The total loss reached 5,290 billion dong.

## II. RECENT NATURAL DISASTERS AND CONSEQUENCES

- **The Great Flood in 2007:**

The flood made 28,269 households, with 108,000 people stuck in flood water. It killed 3 people, injured 3 others and inundated 28,269 houses. 9500 tons of rice were swept away, 760 ha of vegetables and crops fell off. Transport and irrigation infrastructures were severely damaged. The total loss was 1,534 billion dong.



### III. THE CHARACTER OF NATURAL DISASTERS IN THE CITY

- Natural disasters happen with the higher frequency, unpredictability and severity



- The more socio-economic development is pushed, and the more infrastructures, means of production and rural areas are built up, the more severe consequences of natural disasters become. They hinder economic growth and lead to several environmental and social problems. The most cruel consequences often go to the poor.

### IV. THE IMPORTANCE OF THE TASK ON STORM AND FLOOD PREVENTION

Natural disaster prevention and relief:

- One of the most important tasks
- Must be annually checked
- Be put into all programmes and projects for socio-economic development
- Steering Board on Storm Prevention at all levels are strengthened and assigned clear tasks and responsibilities, with high synchrony
- Forecast, warning, especially the building of an early warning system is the most effective measure to relieve natural disasters.

### III. DIFFICULTIES AND CHALLENGES POSED BY NATURAL DISASTERS

1. In addition to storms, **Danang has frequently been faced with flood and sweeping flood**
  - Located in the lower section of the Vu Gia-Thu Bon River, one of the largest rivers of Vietnam, which has medium length, steep slope and quick flood.
  - The area's rainfall is among the highest in the country, which in several years reached over 5000 nm/year.



### III. DIFFICULTIES AND CHALLENGES POSED BY NATURAL DISASTERS:

#### 2. Speedy urbanization

- Accelerated since 1998
- The speedy urbanization also led to the building of new residential areas without appropriate planning. Many routes and other infrastructures and residential areas are located in the corridors for flood release, which led to larger areas and longer time affected and deeper level of inundation. Due to high population density and large infrastructures, losses caused by natural disasters have always been tremendous.





### III. DIFFICULTIES AND CHALLENGES POSED BY NATURAL DISASTERS

#### 3. Forest burning-off for cultivation:

- Still rampant
- while the pace of forestation is low and the result has not been tested yet, a large area of forest only serves economic purposes and does not help regulate floodwater.
- The destruction of watershed is not managed well in the valleys in other provinces' territory (Quang Nam and Kon Tum).

### III. DIFFICULTIES AND CHALLENGES POSED BY NATURAL DISASTERS

#### 4. The inadequacy of fishing boats

- The city has nearly 2,000 boats, among which nearly 900 are offshore fishing ones. The majority of those do not comply with safety standards for the body, engine
- Inadequately-trained captains, lack of communications equipment and life-buoys and poor fire safety.

### III. DIFFICULTIES AND CHALLENGES POSED BY NATURAL DISASTERS

#### 5. Poor infrastructures:

When storm or flood happens:

- many routes are inundated, interrupting circulation and causing difficulties to rescuing and repairing works
- communications is broken off, posing difficulties to the steering work
- Means for storm prevention and rescuing are in restraint; there has not been any standing professional agency on storm and flood prevention and rescue
- there has not been any standing professional agency on storm and flood prevention and rescue. The current pool of Flood Prevention and Rescue personnel is still in plurality.

### III. DIFFICULTIES AND CHALLENGES POSED BY NATURAL DISASTERS

#### 6. Early forecast and warning

- Over the past years, due to the much-improved forecast of storms and tropical low pressure and the reference of information of other countries' meteorological agencies, the steering work on storm prevention has gained better efficiency.
- However, the work still faces difficulties due to the quick flood, similar to sweeping flood, of the Central coastal region. The time for forecast is only 6-12 hours ahead. This has put the prevention work in a passive position.
- It is highly recommended that more investment be poured into the flood forecast of the Center coastal provinces so that the time for forecast can be extended to 24 hours in advance.

#### IV. SOME EXPERIENCES IN REACTION TASKS

##### 1. Enhance public awareness

- In practice, despite the good prevention, accurate forecast or even detailed prevention plan, the calamity prevention tasks will be little effective if there is lack of active participation of the public.
- The People's Committee has focused on propaganda: cooperate with local mass media to broadcast programs improving knowledge of calamity to people; equip fisherman with basic understanding about storm and storm control measures for boats and rafts at sea; co-ordinate with humanitarian organizations and NGOs to improve public awareness in villages and help people make plan to prevent calamity; and require people to be highly cautious.

#### IV. SOME EXPERIENCES IN REACTION TASKS

2. "the four at-spot"  
(local command, local force, local materials and facilities and local logistics) carried out by the Central Committee for Calamity Prevention is the most effective measure in calamity prevention, rescue and damage recovery.

The more detailed and practical the local calamity prevention plans are, the more effective they will be.



• An experience from the 1998 Great Flood in Da nang is "evacuation". People moved from their houses to the safer at local. The plans were built by local people and families so that they knew in advance where to move in case of hurricane.



#### IV. SOME EXPERIENCES IN REACTION TASKS

##### 2. The four at-spot guideline

- The plans were built by local people and families so that they knew in advance where to move in case of hurricane. Therefore, though the water level of flood in 1999 was 1 meter higher than that in 1998, there was no human loss (human losses in 1999 were caused by storm from the mountain). The Storm Number 6 (Xangsane) in 2006 recorded the success of local people in holding the biggest and fastest evacuation. During 7 hours, 10,257 households and 40,000 people were evacuated (not including thousands of households moved to their neighbors or relatives' houses) and supplied with food, water, healthcare and sanitary...

#### IV. SOME EXPERIENCES IN REACTION TASKS

##### 3. Layered and active direction

The People's Committee assigns tasks to offices, departments, and branches; allocated responsibilities among presidents of districts, who is responsible to the President of the People's Committee and considered as the leader of local forces, central and local supporting forces implementing the program of storm and flood prevention at localities.

#### IV. SOME EXPERIENCES IN REACTION TASKS

##### 4. Setting contact regulations between offshore fishing boats and mainland and establishing supporting group

In order to overcome the above shortcomings, the City's People's Committee has paid much attention to enhancing and improving the safety for fishing boats: equipping offshore fishing boats with communication facilities; setting communication regulations between fishing boats and mainland; holding training courses to improve professional skills and award certificates to captains, chief engineer; improving knowledge of marine law and basic skills to cope with storm for captain and people on boats when they are offshore. Besides, the People's Committee has built nearly 100 groups to support offshore fishing. Each group includes 4 to 5 boats and limits the scale of catching in order to help each other in case of calamity or accidents on the sea. In offshore catching, the support from mainland may be late and not effective. The past 3 years has witnessed the significant success in supporting fisherman. This is also named "the four at-sea" guidelines.

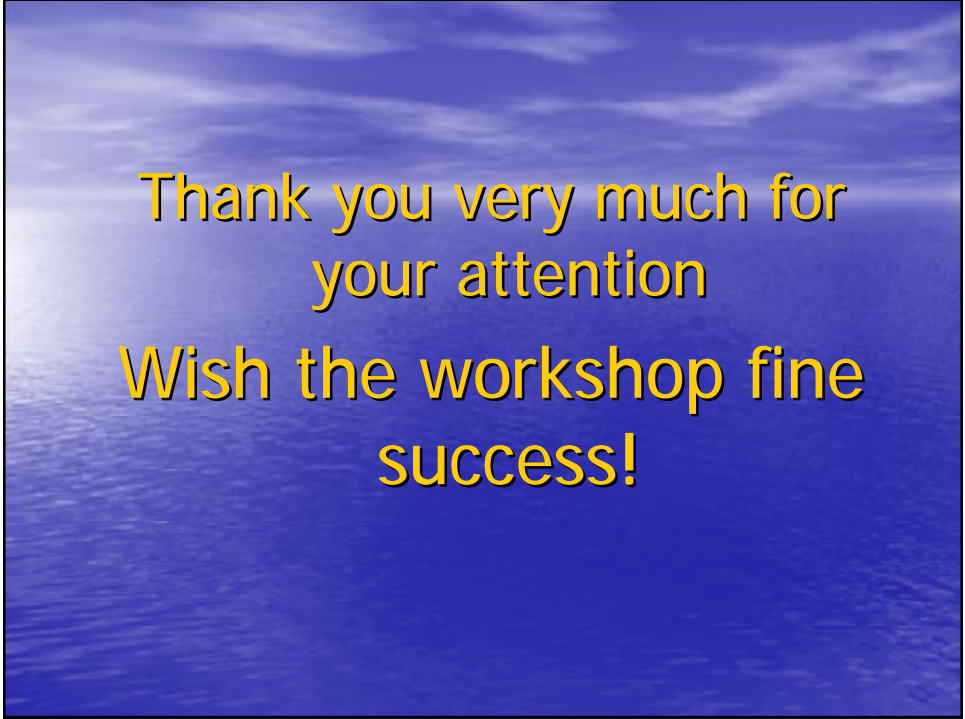
#### IV. SOME EXPERIENCES IN REACTION TASKS

##### 5. Over the past few years, the course of storm prevention, rescue and damage recovery has gained important achievements. There are some reasons as follows:

- The in-time and determined guidance of the Government, National Committee of Rescue and Central Steering Committee for Storm Prevention. In recent years, the Government has established the Fore-front Steering Committee to guide directly at calamity areas.
- The military, police, coastguard are always the core forces.



- The fight against natural disasters has always been receiving assistance from the Centre, the Vietnamese Fatherland Front, communes and the whole people, social-political groups, religions, armed forces, the media, and the business circle.



Thank you very much for  
your attention  
Wish the workshop fine  
success!



**TFEP02/2008A/05**

# **How to build up a comprehensive preparedness strategy for risk disaster reduction**

Submitted / Presented by: Thailand

**Dialogue among APEC economies, business community,  
key international and regional partners  
on emergency preparedness**

**Ha Noi, Viet Nam  
24-25 April 2008**



# How to build up a comprehensive preparedness strategy for risk disaster reduction based on Thailand experience

*Presentation by*

**Mr. Adthaporn SINGHAWICHAI**

*Director of Research and International Cooperation Bureau*

**Department of Disaster Prevention and Mitigation,  
Ministry of Interior, Thailand**



1

## Overview of Thailand's Mitigation System

Department of Disaster Prevention and Mitigation (DDPM), as the intermediary agency under a umbrella of the Ministry of Interior, is mandated according to section 11 of Disaster Prevention and Mitigation Act B.E.2550, to function the task and responsibility of national disaster prevention and mitigation, including formulate a national disaster prevention and mitigation plan; develop effective measures for disaster prevention and mitigation; implement, coordinate, and support the operations of government agencies, local administrations and private sectors in relating to disaster prevention and mitigation; provide guidance, advice, and training on disaster prevention and mitigation to all agencies concerned so that they will be well aware and well prepared for emergencies.

2

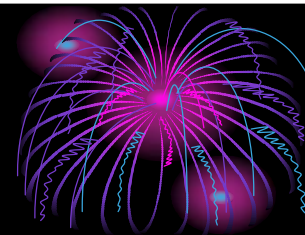
## **Actions undertaken for Disaster Preparedness and Response**



In 2000, the flashflood and inundation in Hat Yai metropolis of Songkhla province, province, Southern of Thailand and a year later in 2001, the flashflood, sedimentary-slide and land-slide in Prae and Petchaboon provinces, North and Northeastern of Thailand. And the strike of Tsunami in 2004, Thailand has launched a number of activities to mitigate the impact, prevent potential risks and build up disaster preparedness capacities of the nation, which are;

3

## **1. Hardware Module**



4

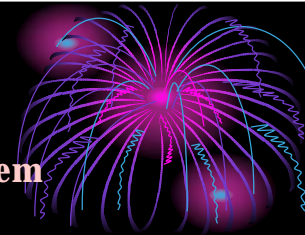
## Materializing Early Warning System



Department of Disaster Prevention and Mitigation has introduced telecommunication system to support the implementation of disaster prevention, mitigation and rehabilitation activities. In this regard, more telephone lines will be installed in our provincial offices and regional centers.

5

## Materializing Early Warning System



Following the catastrophic tsunami disaster, Thailand took immediate action to establish National Early Warning Center which will cover the warning of both natural and man – made disasters. In this connection the construction of the first 33 of 76 warning towers have been completed at Patong beach in Phuket(9), Phang Nga(8), Krabi(7), Ranong(3), Satun(4), and Trang(2). The rest will be completed in the next few months.

6



## 2. Software Module

7



### Provincial Evacuation Plan and Drill

Minister of Interior, in the capacity of National Civil Defence Committee chairman, has encouraged every province to formulate Provincial Evacuation Plan which is in line with the types of disaster threatening local people. Concurrently, each province is obliged to conduct evacuation drill at least twice a year.

8

## GIS and Database

Recently, the Department has adopted Geographic Information System (GIS) to develop our disaster related information technology system. This adoption will enable us to avail more accurate information of risk areas throughout the country. As the consequences, disaster prevention, mitigation and rehabilitation activities can be launched more effectively and timely. Since the last fiscal year, three disaster related information database have been formulated.

- 1. Chemical risk area database.
- 2. Network of agencies concerned and experts database.
- 3. Flood and mudslide database.

9

## 3. Human Module

10

## Enhancing the Capacity of Local Authorities



**Since local authorities are at the front line to respond all types of disasters, Thailand has put forward the efforts to enhance the capacity of local authorities to effectively manage disasters through,**

- Developing know – how and skills of local authority staffs in disaster management through training.
- Equipping local authority with disaster management related equipments and tools.

11

**- Allocating the annual central budget to local authority for disaster management.**

**- Increase the numbers of community – based Civil Defence Volunteers. Currently there are approximately 500,000 Civil Defence Volunteers to assist government officials in preventing, mitigating, and rehabilitating disaster**

**- Ministry of Interior approved “One Tambon One Search and Rescue Team: OTOS” scheme proposed by Department of Disaster Prevention and Mitigation. This scheme has targeted that every Tambon in Thailand (approximately 7,255) will have its own search and rescue team (10 persons) within 3 years.**

12

## **The Focus on Prevention**

Thailand has stepped forward to adopt proactive disaster management approach which can reduce the damage and inspect of disaster substantially.

## **Creation of More Regional and International Network**

More networking will benefit local and national government in terms of gaining experiences and technical know – how from well developed countries.

13

## **Highlighted works of DDPM at present**

14





### **Community-based Disaster Risk Management (CBDRM)**

- Trained over 1,400 communities at risk on CBDRM

### **One Tambon One Search and Rescue Team (OTOS)**

- This project aims to establish at least one SEARCH and RESCUE Team in all 6,000 Tambons in Thailand

### **Promotion of Roles of Civil Defense Volunteers in Disaster Management Activities**

- To increase the number of Civil Defense Volunteers to 2 percents of the population by 2009

15



### **Disaster drills and simulation exercises**

- Every province must conduct disaster exercise at least once a year

### **Mr. Disaster Warning**

- The main objective of this program is to setup people- centered flash flood and landslide warning system. Up to January 2008, over 6,200 volunteers were trained and worked as “Mr. Disaster Warning”

16



**Thank You**  
**Sawaddee**

17

**TFEP02/2008A/06**

# **Experience in Search and Rescue activities in Vietnam**

Submitted / Presented by: Viet Nam

**Dialogue among APEC economies, business community,  
key international and regional partners  
on emergency preparedness**

**Ha Noi, Viet Nam  
24-25 April 2008**



The Socialist republic of Vietnam

# **Vietnam National Committee for Search and rescue (VINASARCOM)**

## **Experiences in Search and Rescue activities and Emergency Response in Vietnam**

**Senior Col. Do Van Son**

Deputy Director General  
National Committee for Search and Rescue  
of the Socialist Republic of Vietnam  
Hanoi, April 24<sup>th</sup> -25<sup>th</sup> 2008

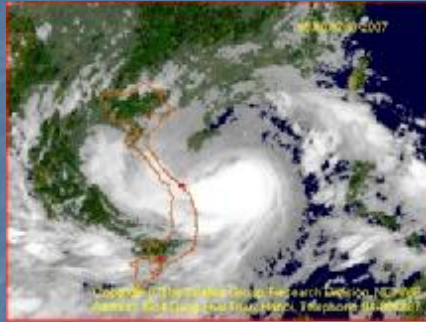
# Contents

- Natural Disaster in Vietnam
- Search and Rescue System in Vietnam
- Experience in Search and Rescue activities in Vietnam
- Future Development

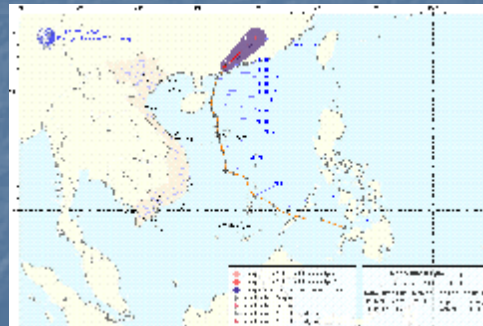
## Natural Disaster in Vietnam



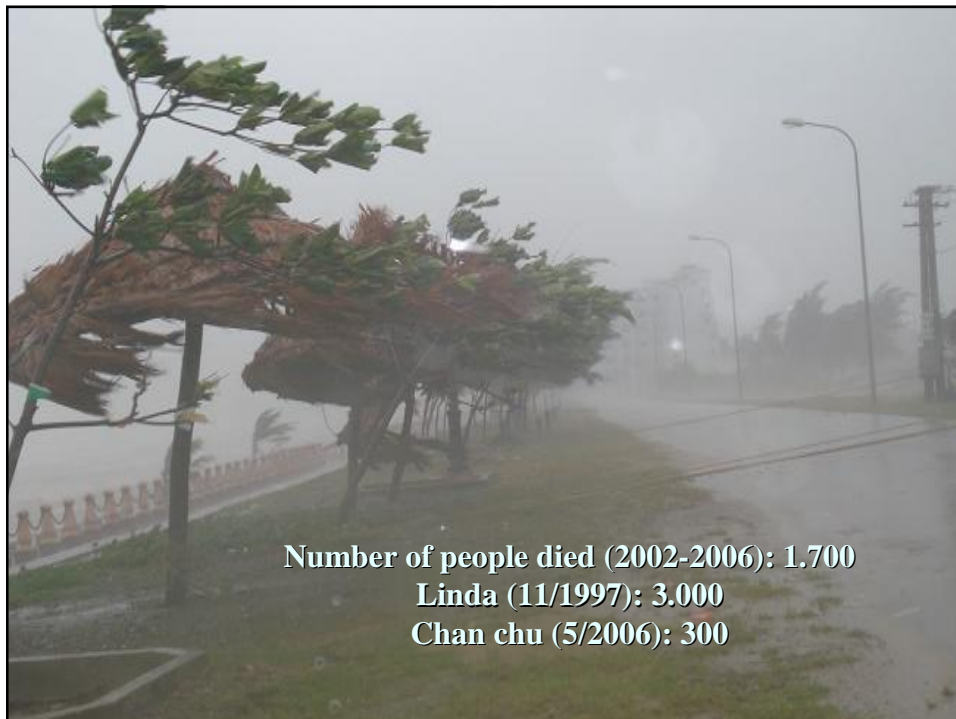
# Typhoons



1954-2006:  
380 Typhoons



Neoguri (15-19/4/2008)



Number of people died (2002-2006): 1,700  
Linda (11/1997): 3,000  
Chan chu (5/2006): 300









## Others disasters

- n Earthquake
- n Drought
- n Firing disasters
- n Aeronautical and maritime accidents.
- n Urban fire, industrial zone fire and forest fire.
- n Oil spill incidents.
- n River waterway accidents and other incidents.

## data in 2007

- n Natural disasters: 7 typhoons, 3 tropical low pressures and 8 huge floodings. Damages: 495 p dead, nearly 1000 others wounded, 700.000 houses; approximatedly VND11.500 billions
- n Maritime accidents: 983 cases/ 4552p/ 834means, 285p died and missing; 563p wounded; 385 missing and sunken boats; in which there are 26 cases/11 means/ 127 foreigners. Result of SAR activities: 4267p and 209means (reached at 93.7%).
- n Inland waterway accidents: 154 cases, 133 dead p; 131 sunken boats.
- n Explosion and Fire: 2318 cases, forest fires: 726 cases/4184ha, 310 dead and wounded p.
- n Collapsed building, mining: 23 cases (Cantho bridge)



**Flooding in central** (11/2007)



**Flooding in central** (11/2007)





Chan Chu typhoon (5/2006)



Chan Chu typhoon (5/2006)



Chan Chu typhoon (5/2006)



**Flooding in central** (11/2007)













**Flooding in central** (11/2007)











# SAR System in Vietnam

National Committee for  
Search and Rescue of  
Vietnam  
(Vinasarcom)



## SAR sytem in Vietnam History of Vinasarcom

- n Be established 23 Oct 1996 as **National Committee for Air and Sea Search and Rescue**
- n In the year 2000 it was renamed and added more tasks as **National Committee for Search and Rescue (Vinasarcom)** (its Office based in Ministry of Defense).
- n Vinasarcom: The highest lead Agency on Search and Rescue of the Government

## SAR system in Vietnam Leaders of vinasarcom

- n President of Vinasarcom ( by Deputy Prime Minister) (now mandated to MOD)
- n Standing Deputy president (by Vice Minister of Defense) (now mandated to Deputy Chief of General Staff of MOD).
- n Other vice-presidents and members come from different ministries.

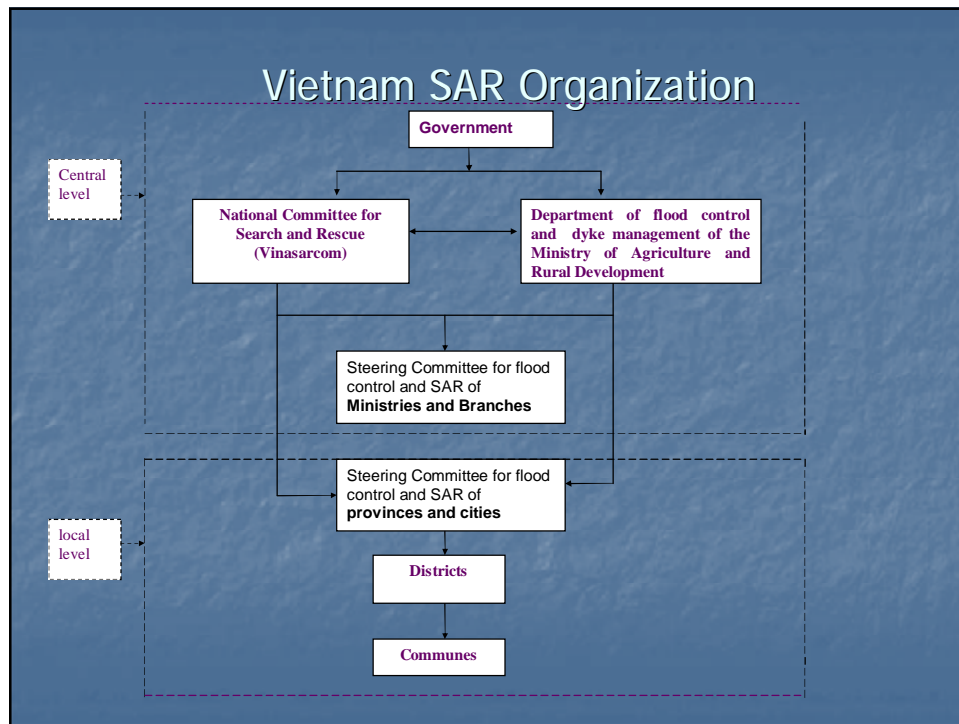
## SAR sytem in Vietnam Functions and tasks (cont.)

- n Governmental-level committee formed to operate and coordinate civil search and rescue (SAR) matters of interagency interest within Vietnam.
- n To provide support and rescue in case of oil spills.
- n To mobilize and coordinate forces and assorted means of the ministries, branches and localities for prompt search and rescue.

## SAR sytem in Vietnam Functions and tasks

- n To elaborate plan for search and rescue ensuring promptness and effectiveness.
- n To organize search and rescue exercises as well as professional training.
- n To cooperate with the regional countries and international organizations and To coordinate with the regional countries for search and rescue.





## Experience in SAR activities in Vietnam

- Guideline: *Proactive prevention, timely response, effectively recovery, in which prevention is better than cure.*
- 4 on-scene principles
  - on-scene forces
  - on-scene material
  - on-scene facilities
  - on-scene command



## Experience in SAR activities in Vietnam (cont.)

### ● Measures.

#### n Before disasters:

- We have to build strategy, long-term programming, planning, projects for responding emergencies on disasters.
- To prepare all forces, facilities and training for professional and semi-professional forces.
- To enhance public awareness of disaster preparedness and response.
- To maintain doing 24/24 on duty for search and rescue

## Experience in SAR activities in Vietnam (cont.)

### ● Measures (cont.)

#### During disasters:

- Prompt evacuation of the people from the dangerous area.
- To set up the command post and communication.
- To give emergency aid and rescue
- To arrange the logistics and techniques.
- To ensure security.

#### After disasters:

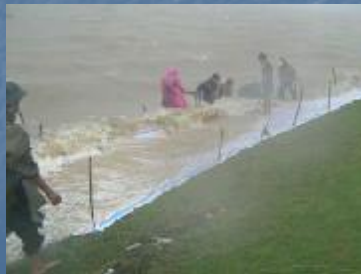
- Environmental sanitation for epidemic prevention.
- To rehabilitate infrastructure.
- Urgently stabilize livelihood and usual activities

## Experience in SAR activities in Vietnam (cont.)

### ● The army forces to be the key force for disaster prevention and response and SAR nation-wide.

- Military is always unified force with high sense of combating.
- Nation-wide forces
- Military means can be used for disaster response such as information, motobikes, boats, vessels, mobile aircrafts. Also, means for collapsed response, bridging in case of the interrupted transportation and other tools.
- Military has strict discipline and command.

### SAR activities of Military force in typhoon No 5







## SAR activities of Military force in Typhoon No 5



**Flooding in central** (11/2007)



Chan Chu typhoon 5/2006



Chan Chu typhoon (5/2006)





Chan Chu typhoon (5/2006)



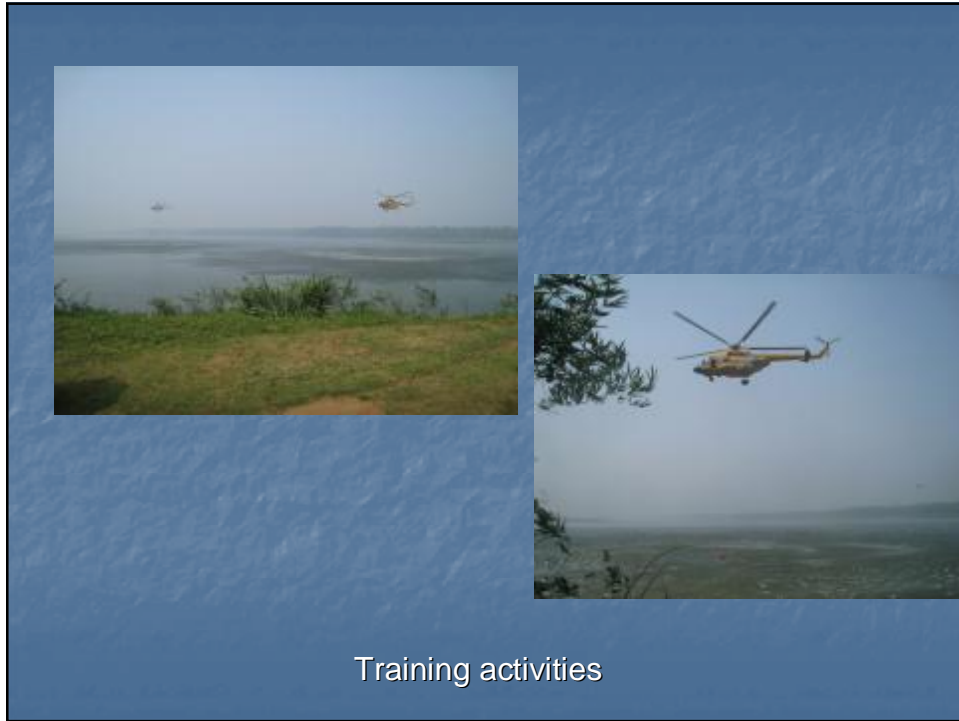
Chan Chu typhoon (5/2006)



Chan Chu typhoon (5/2006)



Chan Chu typhoon (5/2006)







Training activities



Air forces on Duty in Danang city



Air Forces on Duty in Danang city



Engineering Services



Can the bridge incident and SAR activities







## Oil spill response




















Chan chu typhoon (5/2006)



## Responses Mechanism

-  Civil and Military coordination mechanism
- n Be led by the Communist Party
- n Executive by the Government
- n Armed Forces work as a staff organ
- n Annually Typhoon, Flood prevention and SAR exercises.
- n Set up an unified Command Post.

## International Cooperation

*Vietnamese Government has policy for gradually joining multilateral cooperation for enhance its capacity of disaster response.*

- n In March 2001: signed MOU with Russia on disaster relief and SAR
- n In 2005: Vietnam has become an official member of ASEAN disaster management Agreement.
- n 2006 Joint Statement on Partnership in Oil Spill Preparedness and Response in the Gulf of Thailand (1/2006).
- n In 2007: Be an official member of 79 SAR convention.

## Future Development

- n To perfect disaster management, SAR system and organization (strengthen the legislation and build the capacity).
- n To Raise the socialized and specialized capacity: invest in infrastructure, facilities, and training for specialized SAR forces.
- n To enhance public awareness of risk management and response at the wide range.
- n To strengthen cooperation with all countries, global and regional organizations in this field.

## Conclusion

Natural disaster prevention and search and rescue (SAR) is not only a great humanitarian work but also spiritual obligation for every nations, organizations, all forces and everyone.

Thank you for your  
attention



**TFEP02/2008A/07**

# **On Achieving Community-based Risk Reduction and Emergency Preparedness through Information Technologies and Applications**

Submitted / Presented by: Pacific Disaster Center

**Dialogue among APEC economies, business community,  
key international and regional partners  
on emergency preparedness**

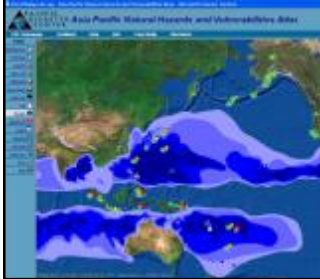
**Ha Noi, Viet Nam  
24-25 April 2008**

APEC Dialog / Emergency Preparedness  
Hanoi, Viet Nam  
24 April 2008



*Fostering Disaster-Resilient Communities*

## On Achieving Community-based Risk Reduction and Emergency Preparedness through Information Technologies and Applications



Mr. Chris Chiesa  
Chief Information Officer  
Pacific Disaster Center

[cchiesa@pdc.org](mailto:cchiesa@pdc.org)

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## Presentation Outline

- n Overview of Pacific Disaster Center
- n Risk Reduction / Emergency Preparedness
  - Risk Assessment
  - Risk Communication
- n PDC CBDRM Experiences in SE Asia
  - American Samoa
  - Marikina City (Philippines)
  - Phu Tho Province (Vietnam)

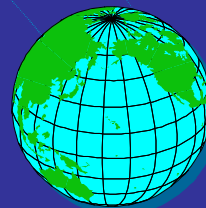
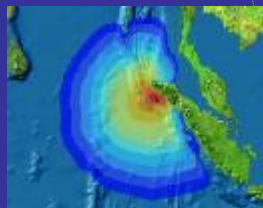
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# PDC Mission ...

Provide applied information research and analysis support for the development of more effective policies, institutions, programs and information products for the disaster management and humanitarian assistance communities of the Asia Pacific region and beyond.

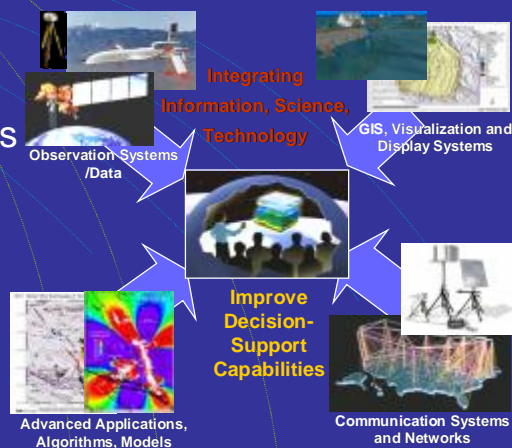


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# Our Center ...

- n Applied Science & Technology
- n Information Products Supporting:
  - Policy & Decision Makers,
  - Disaster Managers
  - Humanitarian Assistance



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# Risk Reduction / Emergency Preparedness

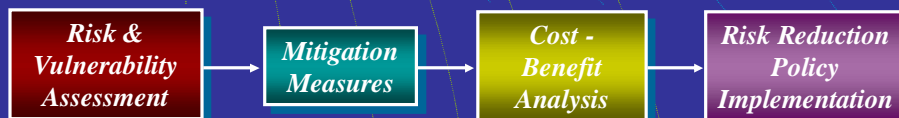
- n Risk Assessment
- n Risk Communication

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## Risk Reduction Framework

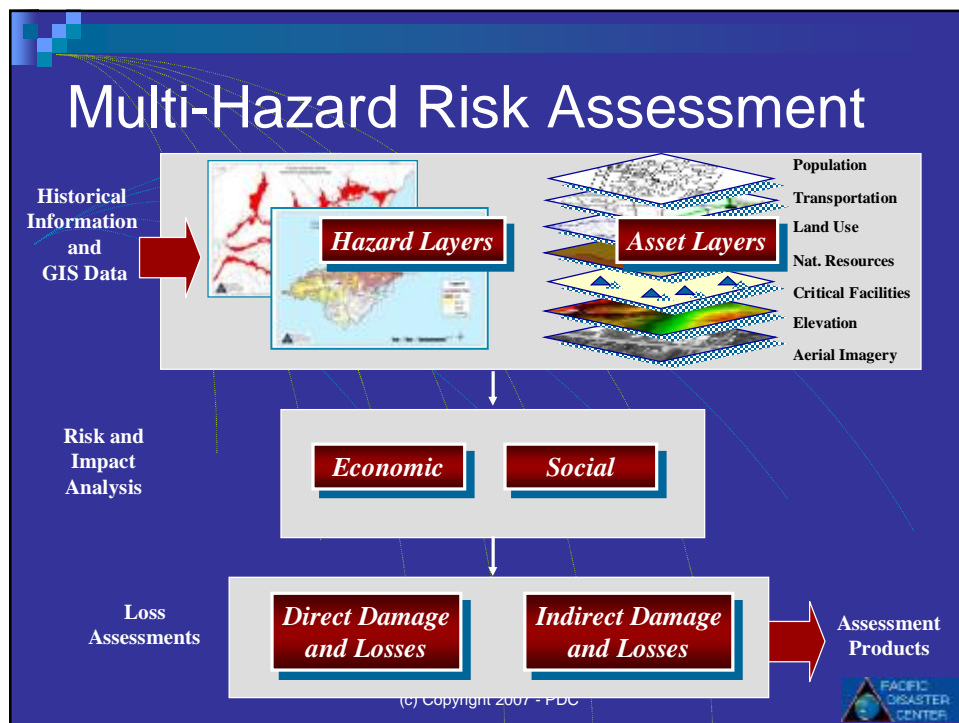
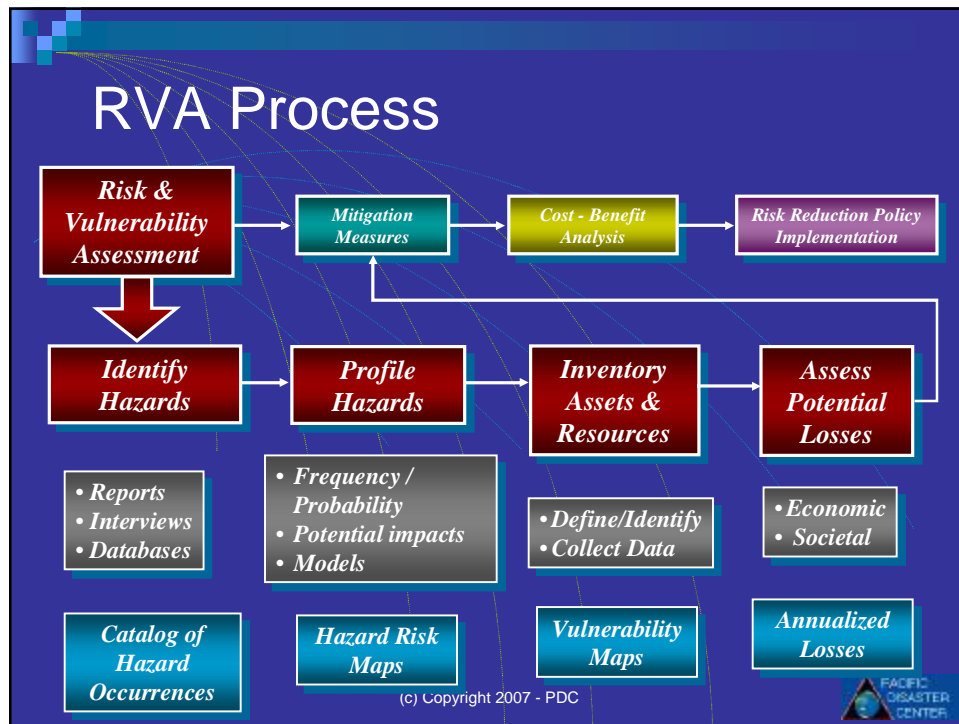
*The goal: To manage risk, reduce vulnerability, and  
promote sustainable and resilient communities.*

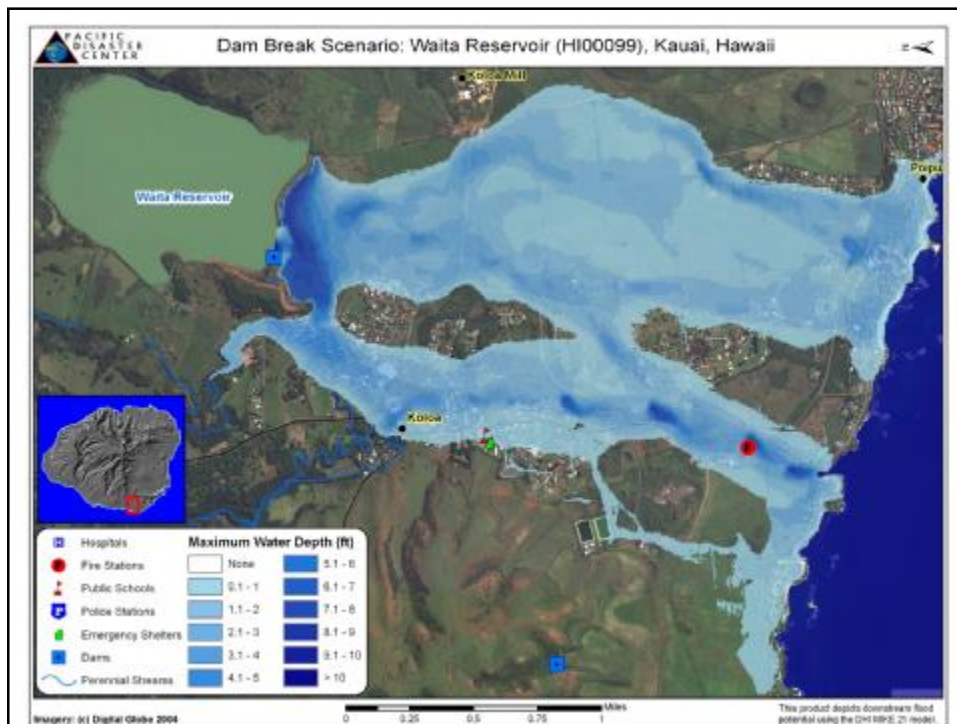
*~ Establish the Risk Management Context ~  
Advocate whole-of government participation.  
Identify national/municipal/community development priorities.  
Develop strategic and organizational objectives that promote risk reduction.*



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## Tsunami Impact Assessment

**Port Vila – Mele Bay Flood Losses  
in AU Dollars by Building Type**

Building Type	Building Count	Total Losses
A	60	10,964,400
B	137	28,529,760
C	181	26,510,400
D	11	485,750
<b>Total</b>	<b>389</b>	<b>66,490,310</b>

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# Risk Communication

n Risk Awareness  
n Early Warning

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## Asia Pacific Natural Hazards Atlas

*Web-based, Geospatial Information Application Supporting Regional  
Hazard and Vulnerability Assessments*



### Natural Hazards

- Tropical Storms
- Wildfires
- Earthquakes
- Tsunamis
- Volcanoes
- Floods

### Risk Exposure

- People
- Infrastructure

<http://atlas.pdc.org>

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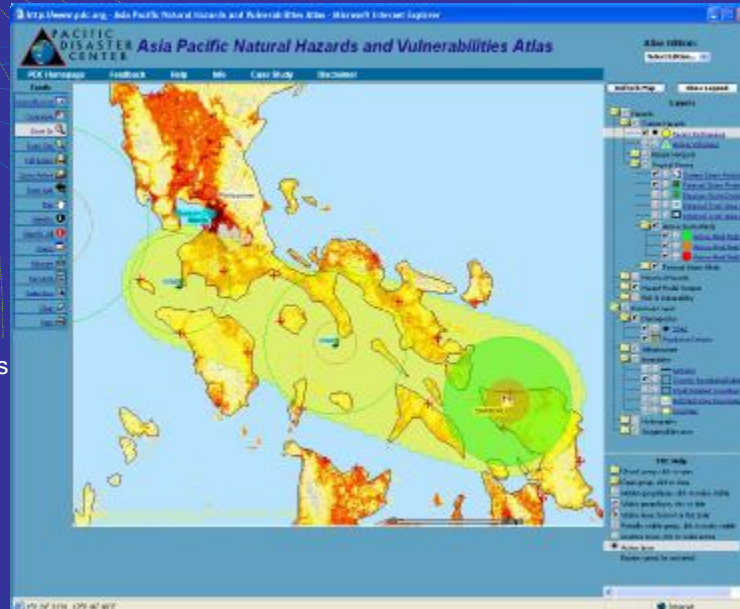




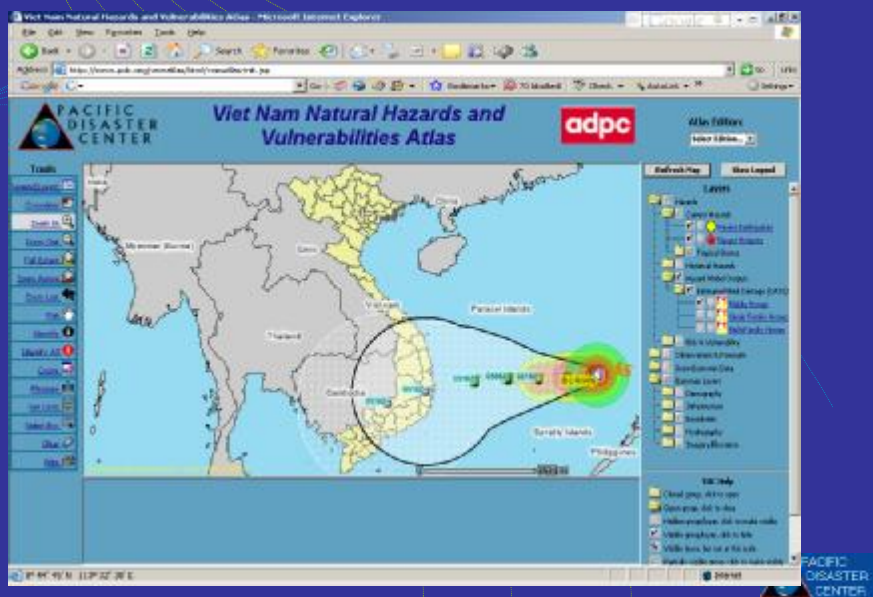
# Simplify, Integrate, Understand Risk ...

May 11, 2006

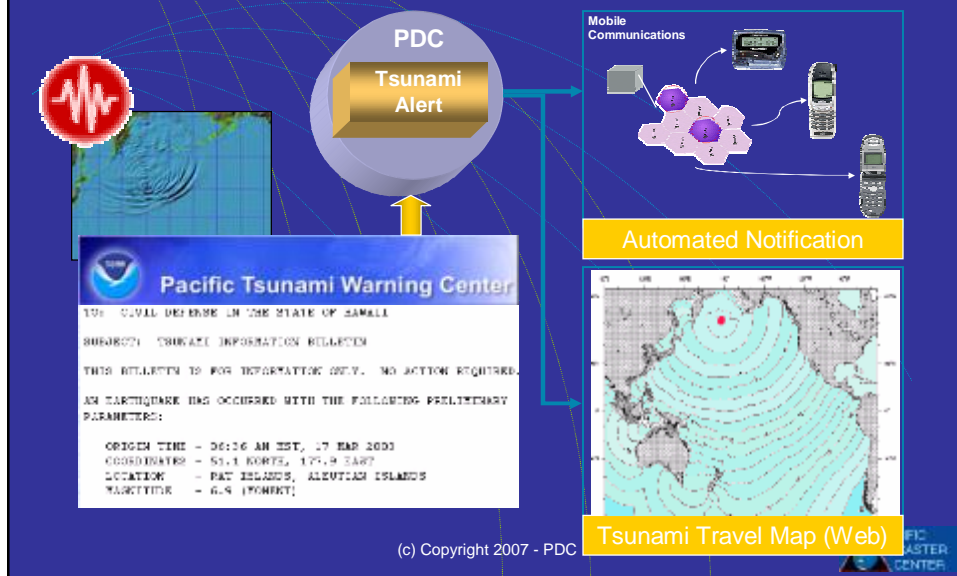
- ✓ Simplify
- ✓ Integrate ...
- ✓ Intensity Zones (EQ & Storms)
- ✓ Infrastructure
- ✓ Danger Zones
- ✓ Population at Risk



## Vietnam Hazards Atlas



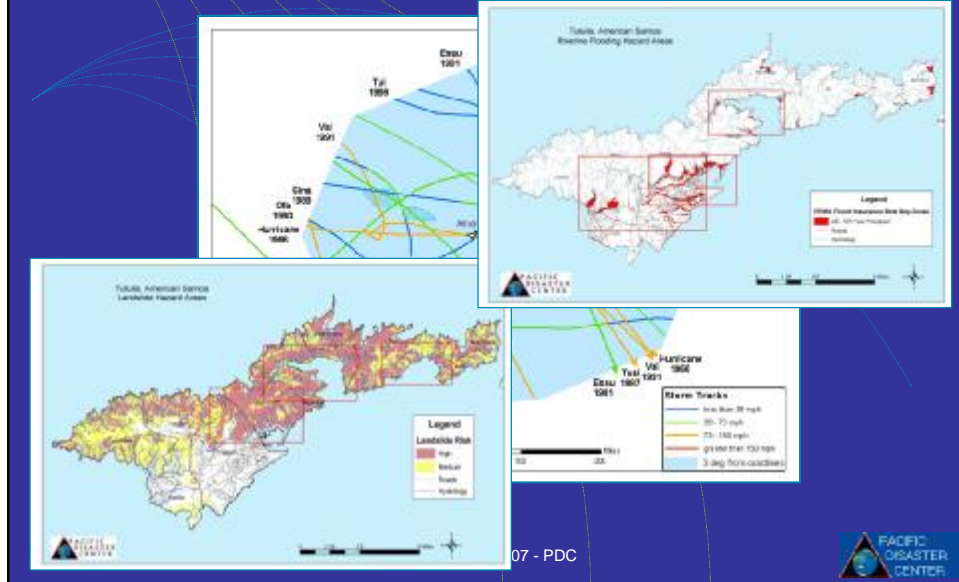
## Early warning dissemination ...



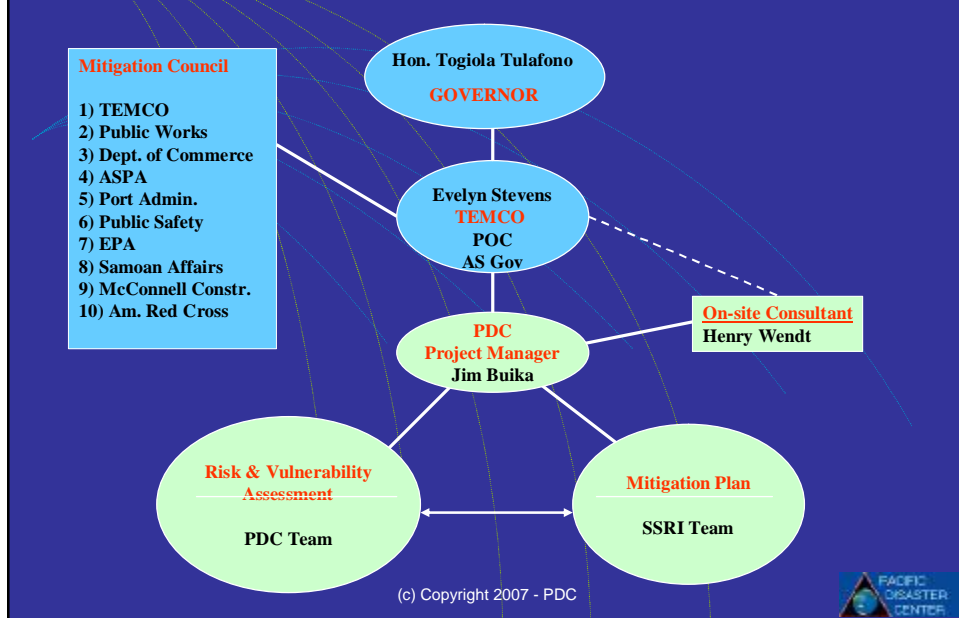
## Community-based Risk Reduction / Emergency Preparedness Case Studies

- American Samoa
- Marikina City (Philippines)
- Phu Tho Province (Viet Nam)

# American Samoa RVA

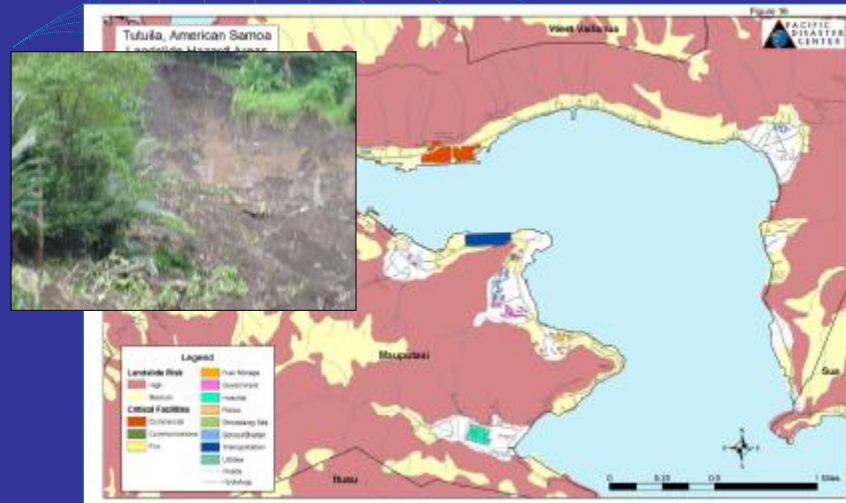


# Project Organization



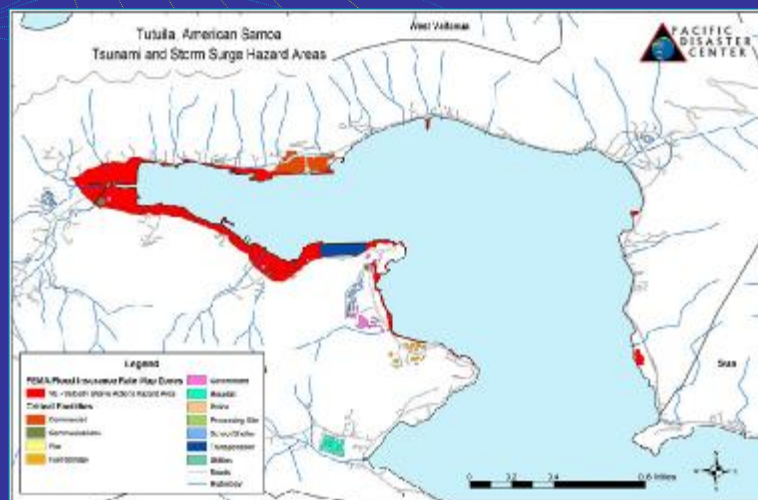
# Landslide Hazard

Landslide Hazard displayed in context with Critical Facilities and basic infrastructure



# Tsunami & Storm Surge Hazard

Velocity Wave Hazard (VE) Zones displayed in context with Critical Facilities and basic infrastructure



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# Critical Facilities Inventory



FACILITY TYPE	NAME	LOCATION	ESTIMATED VALUE
Church/Shelter	CCCAS Hall	Sailele	\$486,000
Church/Shelter	CCCAS Hall	Fagasa	\$784,000
Church/Shelter	CCCAS Hall	Fagasa	\$784,000
Commercial	Star Kist Samoa Co.	Satala	
Communications	KSBS Radio Station	Fagaalu	\$384,000
Government	Governor's House	Fagatogo	
School/Shelter	Fagaitua High School	Fagaitua	
School/Shelter	Pago Pago Elementary	Pago Pago	
School/Shelter	Alofau Elementary School	Alofau	
School/Shelter	Alofau Elementary School	Alofau	
School/Shelter	Alofau Elementary School	Alofau	
School/Shelter	Alofau Elementary School	Alofau	
School/Shelter	Laulii Elementary School	Laulii	
School/Shelter	Laulii Elementary School	Laulii	
School/Shelter	Seetaga Elementary School	Seetaga	
School/Shelter	Seetaga Elementary School	Seetaga	
School/Shelter	Seetaga Elementary School	Seetaga	
School/Shelter	Seetaga Elementary School	Seetaga	
School/Shelter	Seetaga Elementary School	Seetaga	
Transportation	Container Dock	Fagatogo	

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# Vulnerability Summary

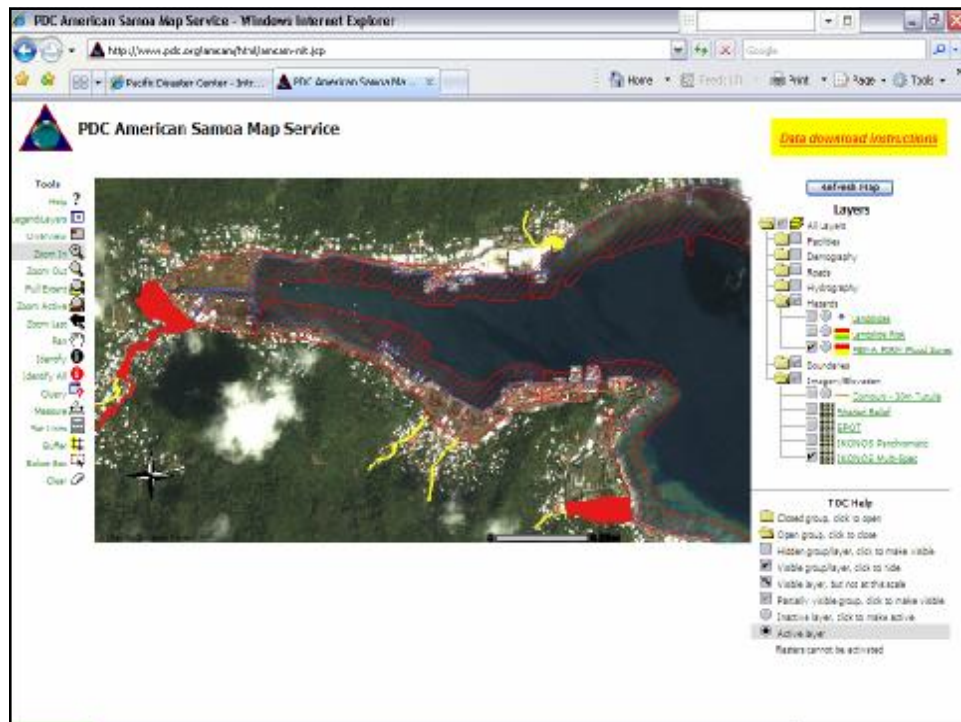


County	Village	Facility Name	Number of Buildings	Function	Earthquake	Flood	Landslide	Storm Surge / Tsunami
Maoputasi	Fagatogo	American Samoa Telecom.	1	Communications	Medium	Low	Low	High
Maoputasi	Utulei	Dept of Ed.	1	Government	Medium	Low	Medium	High
Maoputasi	Fagatogo	High Court	1	Government	Medium	Low	Low	High
Maoputasi	Fagatogo	Inter-island Ferry Terminal	1	Transportation	Medium	Low	Medium	High
Maoputasi	Fagatogo	DPS Fire Division	2	Fire	Medium	Low	Medium	High
Maoputasi	Fagatogo	Container Dock	1	Transportation	Medium	Low	High	High
Maoputasi	Pago Pago	District Court	1	Government	Medium	Low	Low	High
Maoputasi	Satala	Star Kist Samoa Co.	2	Commercial	Medium	Medium	Medium	High

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# MARIKINA

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**City Government**

## Hon. Maria Lourdes Carlos Fernando

**River Digest Sign-up**

**Personal Information**

Married to : Engr. Dayani D.  
Contact No 1932) 546-1634  
Email Address: mlc@marikina.gov.ph

**Educational Attainment**

MASTER OF PROFESSIONAL  
In Hotel Administration 1988  
Cornell University, Ithaca, NY

B.S IN HOTEL & RESTAURANT ADMINISTRATION  
University of the Philippines 1979 (Deans List)  
UP Diliman, Quezon City

PRIMARY AND SECONDARY EDUCATION

Year	Value
1990	100,000
1991	110,000
1992	120,000
1993	130,000
1994	140,000
1995	150,000
1996	160,000
1997	170,000
1998	180,000
1999	190,000
2000	200,000
2001	210,000
2002	220,000
2003	230,000
2004	240,000
2005	250,000
2006	260,000
2007	270,000

**E-Procurement**

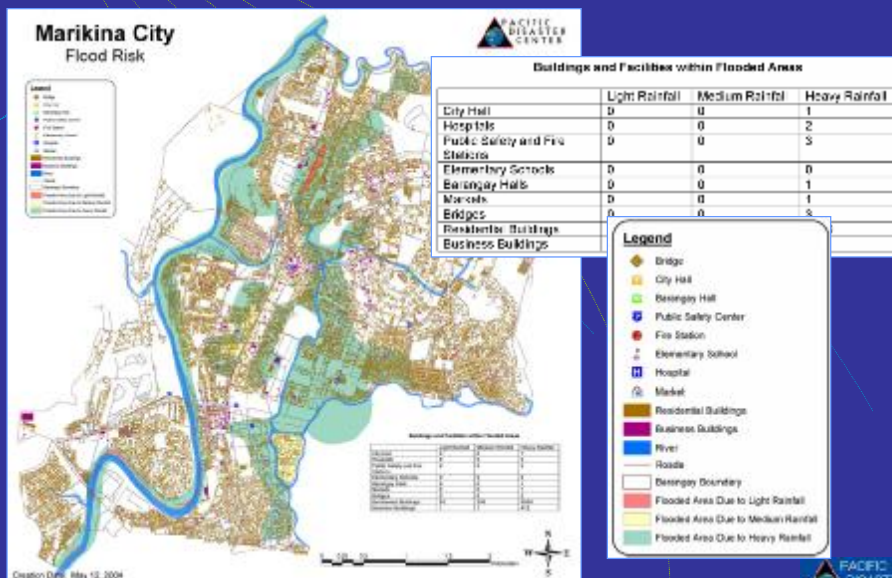
# Hazard Occurrences

Event Type	Date and Duration	Geographical Extent	Impacts	Deaths	Estimated Losses (\$)
Flood	June 22-30, 1985	Luzon Island. Provinces - Rizal, Bataan & Pampanga; Cities - Manila, Quezon, Santa Cruz	Flooding due to Typhoons Hal & Irma	98	\$60,000,000
Flood	July 9-13, 1986	Luzon Island. Provinces: Nueva Ecija, La Union, Cagayan, Tarlac, Pangasinan. Low-lying areas in Manila, Baguio.	Flooding due to Typhoon Peggy	103	\$165,500,000
Flood	November 4-8, 1988	Luzon Island. - Bicol Peninsula. Camarines Sur province. Pasacao. Pasig in Metro Manila area. Panay Island - Capiz & Aklan provinces. Palawan Island - Rizal. Flooding also reported on Cebu, Leyte, Visayas & Romblon islands	Flooding due to Tropical Storm Tess, and Typhoon Skip/Yoning	255	\$400,000
Flood	July 30 to August 8, 1999	Philippines Provinces: Rizal, Pampanga, Bulacan and Pangasinan. Cities/towns: Manila	Flooding due to brief torrential rain	152	\$675,000,000
Flood	October 28-31, 2000	Southeastern Luzon. Manila and nearby areas.	Flooding due to brief torrential rain	41	\$12,500,000
Flood	September 4-5, 2000	Northern and eastern Manila city, Districts of Caloocan, Quezon, Malabon.	Flooding due to heavy rain	47	\$169,000,000
Flood	July 1-19, 2001	Luzon Island - Provinces: La Union, Benguet, Mountain. Cordillera, Ilocos regions. Baguio city. Metro Manila.	Flooding due to heavy rain	178	\$2,980,000,000

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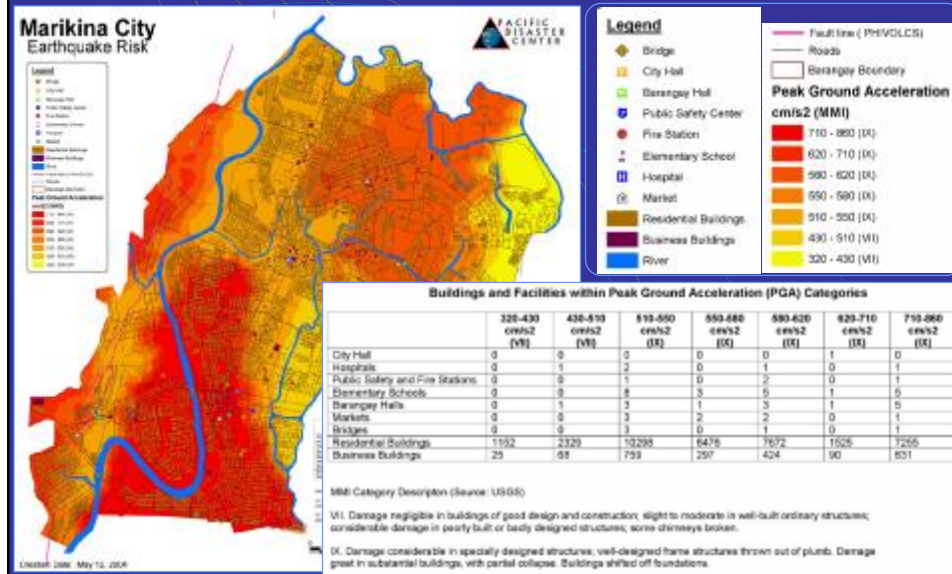
# Riverine Flood Vulnerability Map



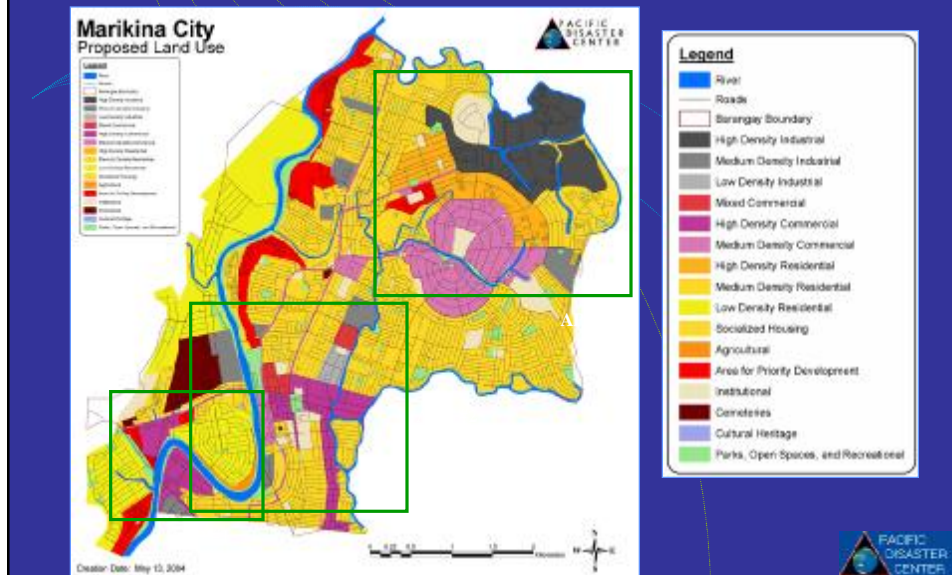
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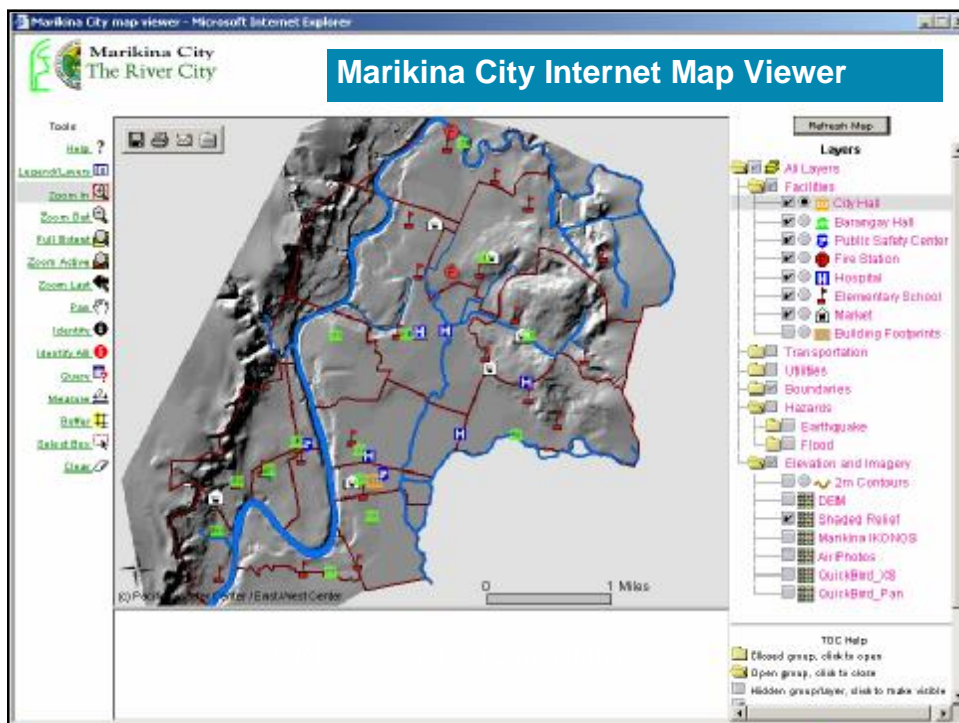
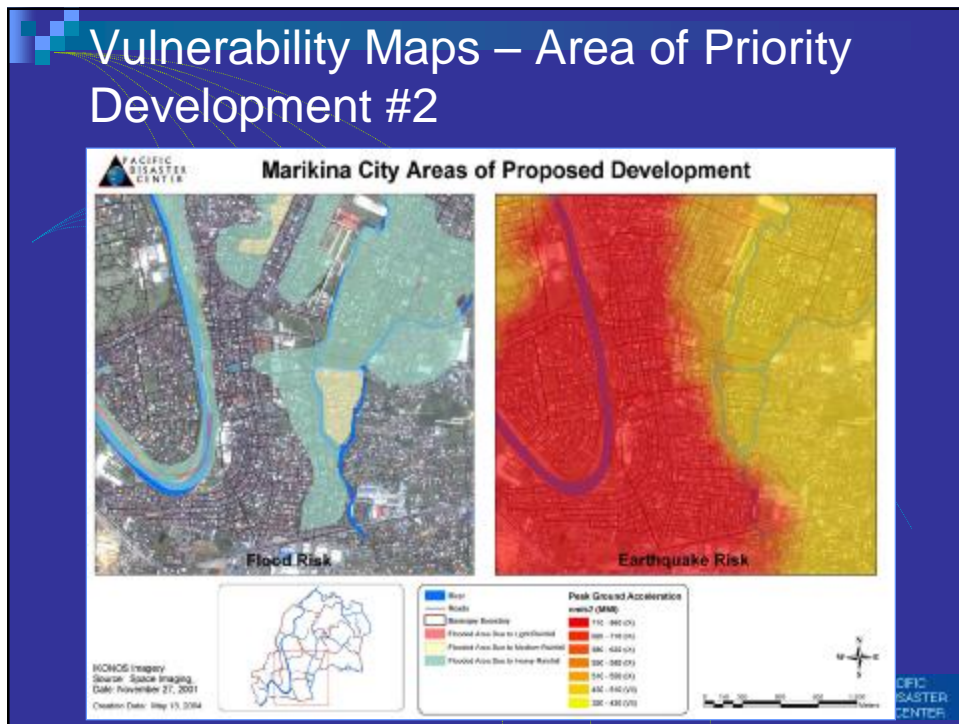
# Earthquake Vulnerability Map

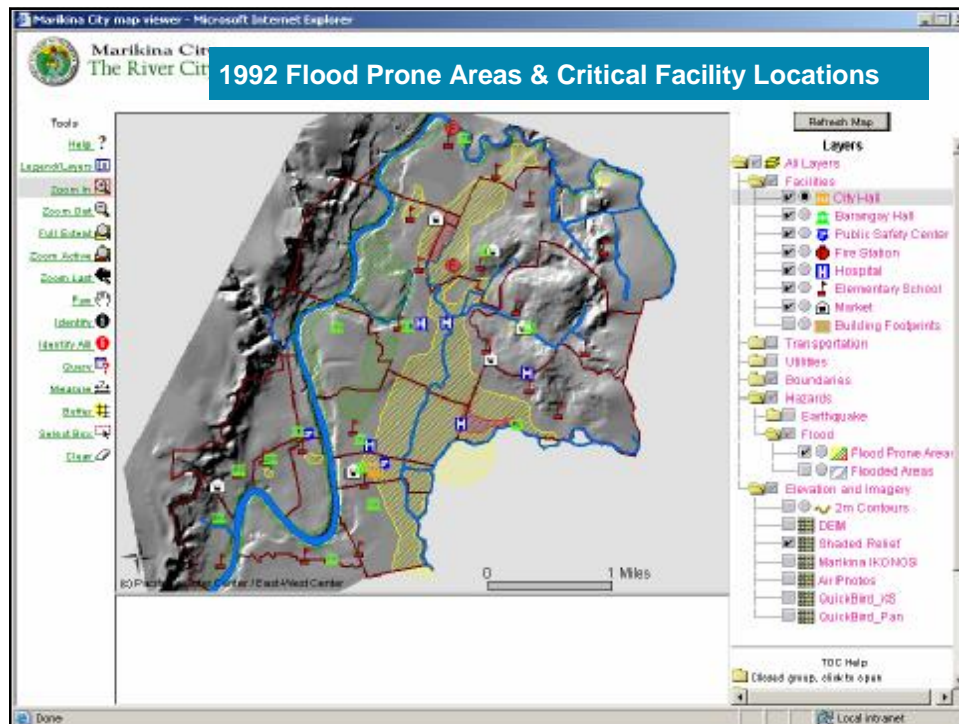


# Proposed Land Use Areas









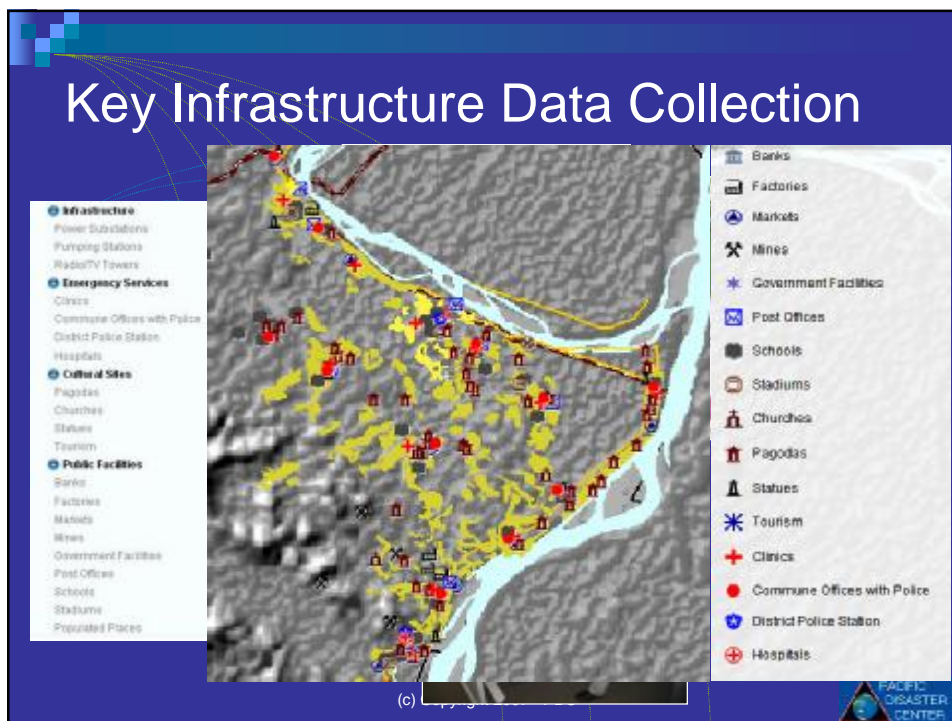
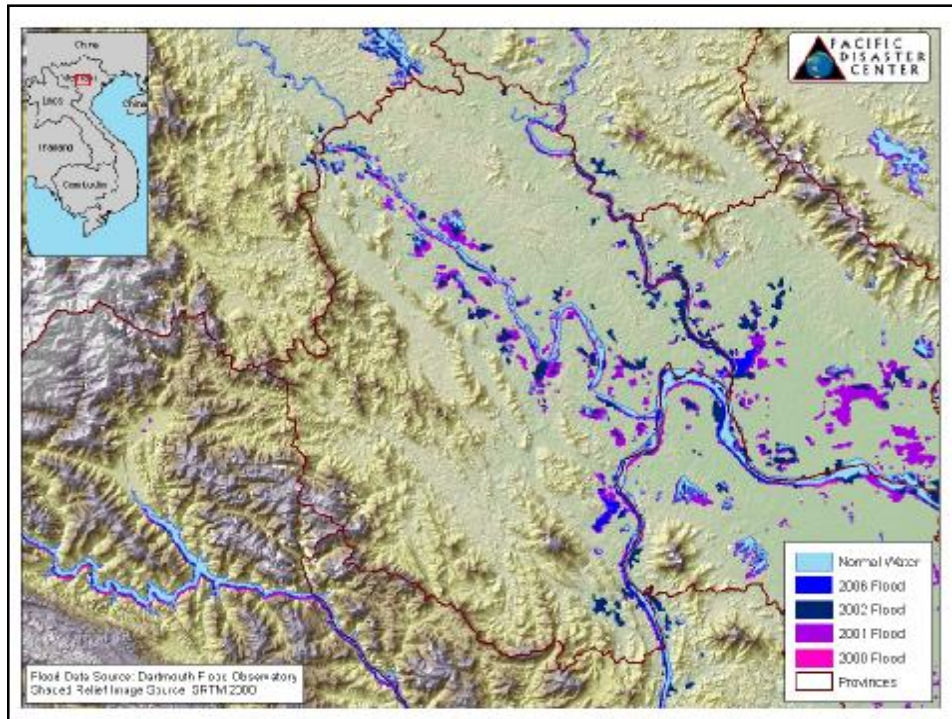
## Phu Tho Province Flood Inundation

Purpose: To better understand potential inundation areas and resulting impacts of flooding

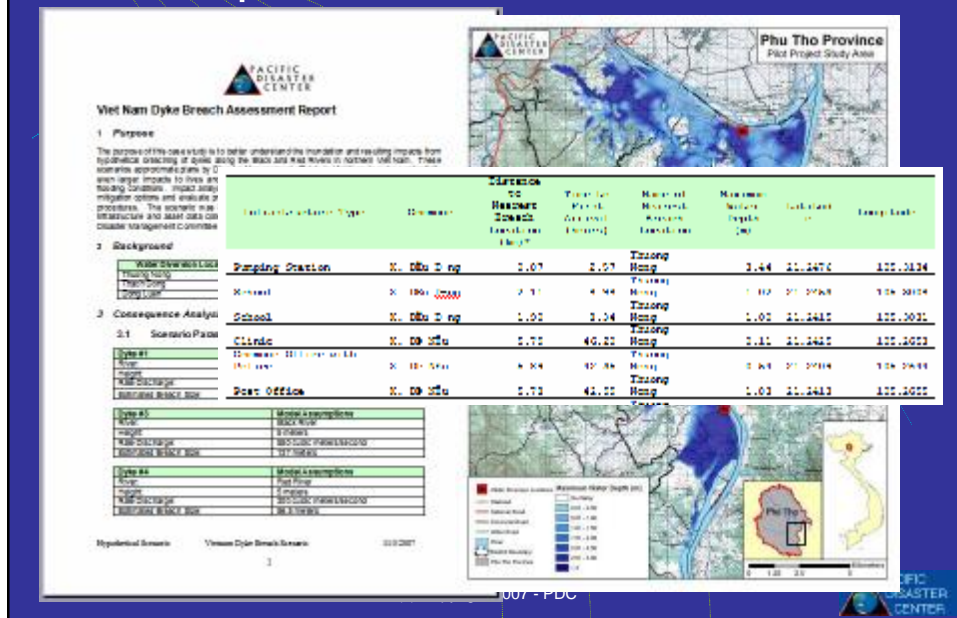
- Scenario: hypothetical breaching of dykes along Black & Red rivers
- Reduce impacts to lives and property
- Allow Disaster Management officials to refine mitigation options and evaluate preparedness plans, including warning systems and evacuation procedures
- Modeled using the DHI MIKE 21 Flood model



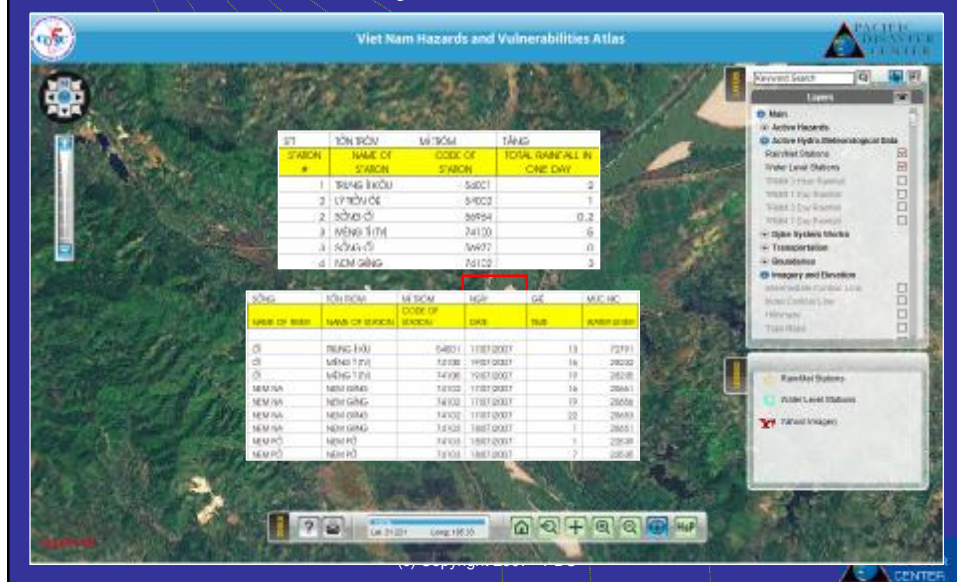




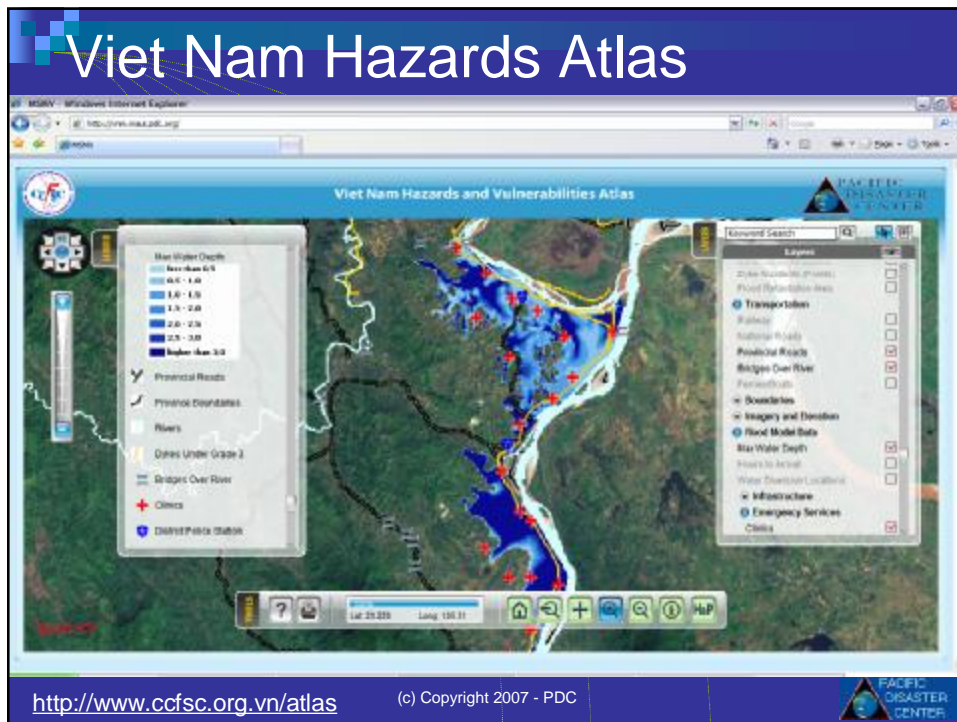
# Consequence Assessment



# Real-Time Hydro/Met Data



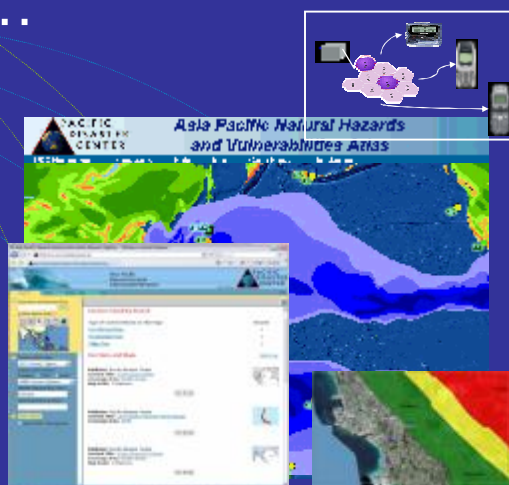
# Viet Nam Hazards Atlas



## In Summary ...

### Reducing Impacts By:

- Integrate, Simplify, & Expedite Processes
- Understand Dangers and Risks
- Disseminate Warnings
- Share Information
- Decide & Act on Latest Assessments



Multi Hazard Information and Warning



# Contact Information

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<http://atlas.pdc.org>

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**TFEP02/2008A/08**

# **Relief, Recovery and Reconstruction after catastrophic events - best practices and experiences sharing**

Submitted / Presented by: Chinese Taipei

**Dialogue among APEC economies, business community,  
key international and regional partners  
on emergency preparedness**

**Ha Noi, Viet Nam  
24-25 April 2008**



# Relief, Recovery and Reconstruction after Catastrophic Events

*Chinese Taipei's community recovery process after the Chi-Chi Earthquake*

Dr. Liang-Chun Chen

Director, National Science & Technology Center for Disaster Reduction  
Professor, Graduate Institute of Building and Planning, National Taiwan University

## PART 1

### Recovery Issues after the Chi-Chi EQ



# Discover Chinese Taipei



Chinese Taipei



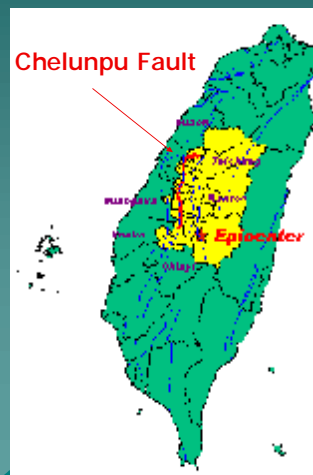
【Capital】	【Population density】
Taipei City	632 per km <sup>2</sup> (US 28.32 per km <sup>2</sup> )
【Area】	【Jurisdictions】
36,000 km <sup>2</sup>	25 counties/cities & 319 townships
【Population】	【GPD/capita】
23 million	\$16,030 (US \$ 44,197)

## The devastation of Chi-Chi EQ

### ■ General Description (1)

- **Time** : Sep.21 1999  
(1:47 local time)
- **Epicenter** : Chi Chi
- **Magnitude** : ML 7.3

Chelunpu Fault expressed significant energy and caused strongest earthquake in the last hundred years period



# The devastation of Chi-Chi EQ

## ■ General Description (2)

- **Death** : 2455
- **Missing** : 50
- **Injured** : 11305
- **Property loss** : US\$11.1 billion
- **Housing Collapsed** :
  - 50,644 (households)
  - 38,935 (buildings)
- **Housing Damaged** :
  - 53,317 (households)
  - 45,320 (buildings)



## Characteristics of Damage

### ■ Complicated Damage situation

**Area** : 90.5 km  
**Affected Town** : 28

- Affected areas included urbanized areas, small villages, agriculture areas
- Countryside took majority of affected area



Urbanized area



Countryside in Mountain area

## Characteristics of Damage

### ■ characteristic of Countryside Areas

- geologic sensitive areas between the Chelunpu Fault and the Central Mountain area.
- low urbanized area with few commercial activities for daily living or scenic industry.



## Issues of Social Impacts

- The earthquake also arouse lots of hidden social problems existing for quite a long time:
  - out-migration population and change of population structure
  - aborigine people and disappearing aboriginal culture.
  - complicated property rights of lands and inaccurate land data



These situations got worse after earthquake and might even disturb process of recovery.

## Issues of Social Impacts

### ■ Challenge of Recovery

- Existing problem worsened earthquake damage
- Low social standard of most affected area is disadvantageous to recovery affairs
- No cases of community empowerment movement in countryside areas before



## Issues of Economical Impacts

- no major impact on global economic growth of Chinese Taipei for 1999 ; recovery of industries turned out the economic growth rate
- however, agricultural area or small village suffered significant loss and got worse than before, such as:
  - great impact on its original industry such as agriculture and tourism industry
  - serious unemployment for local inhabitants and farmers with higher age





## Chi-Chi EQ Recovery

- n Public infrastructure reconstruction
- n Geological engineering reconstruction
- n Livelihood reconstruction
- n Revitalization of agriculture, industry, commerce and tourism
- n Housing reconstruction and community recovery

## PART 2

### Community Recovery



## Overview of Community Recovery

The affairs of recovery are extremely complicated, which not only require administration support, but also depend on private power. Especially the effort from affected communities is the key to recovery. Before Chi-Chi Earthquake, “community empowerment movement” has already been promoted. In that way, communities can improve their living environment, create own community culture, and reinforce their activity through participation.

In the Chi-Chi Earthquake, traditional agriculture villages with better human communication took majority of affected areas. But before this significant disaster, there was no case of “communities empowerment movement” among these villages yet. However, we still recognized this movement as main strategy for community recovery.

## Community Recovery - Taomi Village

### ■ About Taomi (1)

**Location** : a small village located in countryside of mid-Chinese Taipei, in basin of Taomi River and Chung-Kwa River.

**Area** : 18 km<sup>2</sup>

**Population** : 1200 people, used to be a community with senior residents mostly

**Hazard experience:**

1999 Chi-Chi Earthquake

2000 Tao-Chi Typhoon



## Community Recovery - Taomi Village

### ■ About Taomi (2)

**Industry** :used to be famous for red tea, sugar and so on; now with declining sightseeing and agriculture such as bamboo shoot

**Social issues:**

- distant social relationships
- poor public facilities
- lack of vitality and hope before Chi-Chi earthquake.



## Community Recovery - Taomi Village

### ■ Taomi in Chi-Chi EQ

**Time** :On September 21, 1999, the earthquake measuring 7.3 on the Richter Scale

**Location** :the Taomi Community is located near the epicenter.

**Damage**: About 62 percent of the community buildings, mostly homes, collapsed and partial collapsed. Chi-CHI earthquake wrecked the lives and livelihood of the residents and natural environment .



## Recovery Process – the beginning

### ■ Assistance

1999.10

New Homeland Foundation  
participated and assisted recovery

2000.01

the recovery committee of Taomi  
Community was established

2000.04:

more support from schools and  
civic organizations.



## Recovery Process – the beginning

### ■ a Crisis? a Turning point ?

" What should we rebuild ? "

" how should we rebuild ? "

Two practical problems came  
right after disaster

Confusion and anxiety spread  
between local people constantly



## Recovery Process – the beginning

### ■ Consensus of recovery

- The New Homeland Foundation helped residents to integrate their ideas of about the best development through constantly communication and discussion.
- Investigations on community resources around this beautiful valley were hold at the same time .



## Recovery Process – the beginning

### ■ Inspiring result of investigation

**Frog :**  
22 of 29 species in Chinese Taipei

**Dragonfly :**  
45 of 143 species in Chinese Taipei

- " The Taomi Ecovillage "**
- Advantageous resource
  - Spirit of recovery
  - New identity of Taomi





## Recovery Process – the beginning

### ■ Concept of “Ecovillage”

Ecology

Production

Livelihood

Life

these four concepts should be combined in harmony as development goal.



## Recovery Process – the beginning

### ■ Educational Training

In order to erase hesitation from community about new concept of recovery,

- ecology and ecological ethics, promotion of ecotechnology, and practice of ecological philosophy were all required
- process of educational training and concepts negotiation to put recovery with features into practice as strategy of recovery.



## Recovery Process – the implementation

2001 ~

- Eco-potential environmental reconstruction started
- Taomi ecotourism promotion project started (left pic.)

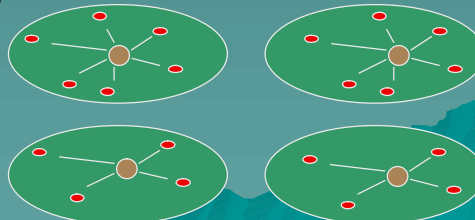
2002 ~

- Chinese Taipei native plants field project started
- Taomi Earthquake memorial hall open (mid pic.)
- Local featured food exhibition hold, Guesthouse open
- 15 local people finished training ,got license of Eco-tour guides and more activities and joined operation ( right pic.)



## Community Recovery Strategies

- 1. Financial aid for community recovery from government and private foundation
- 2. Academic institute and NGOs went into community in damaged areas, and have kept assisting recovery in a long period of time
- 3. Regional community empowerment centers(●) were established in 4 regions(○), and local residents were picked up to receive training for community empowerment workers to offer communities ( - ) support for recovery



Thank you for your listening J

**TFEP02/2008A/09**

# **APEC's Vision of Disaster Management and Emergency Preparedness and Response**

Submitted / Presented by: Australia

**Dialogue among APEC economies, business community,  
key international and regional partners  
on emergency preparedness**

**Ha Noi, Viet Nam  
24-25 April 2008**



# APEC's Vision of Disaster Management and Emergency Preparedness and Response

Mr. Neil Head  
Director, Policy Projects & Information  
Emergency Management Australia

*[representing both TFEP Co-chair Helena Studdert & Australian Head of Delegation to APEC Emergency Management CEO's Forum, Tony Pearce, Director-General, Emergency Management Australia]*

## Introduction

- § TFEP revived by Senior Officials 2005 in response to 2004 tsunami
- § 2 primary objectives:
  - Intra-APEC cooperation
  - Capacity-building to prepare for emergencies
- § Key APEC strengths
  - Multi-sectoral participation
  - High-level political commitments
  - Private-sector partnerships
  - Broad regional reach
  - Conduit for cooperative response to regional disasters

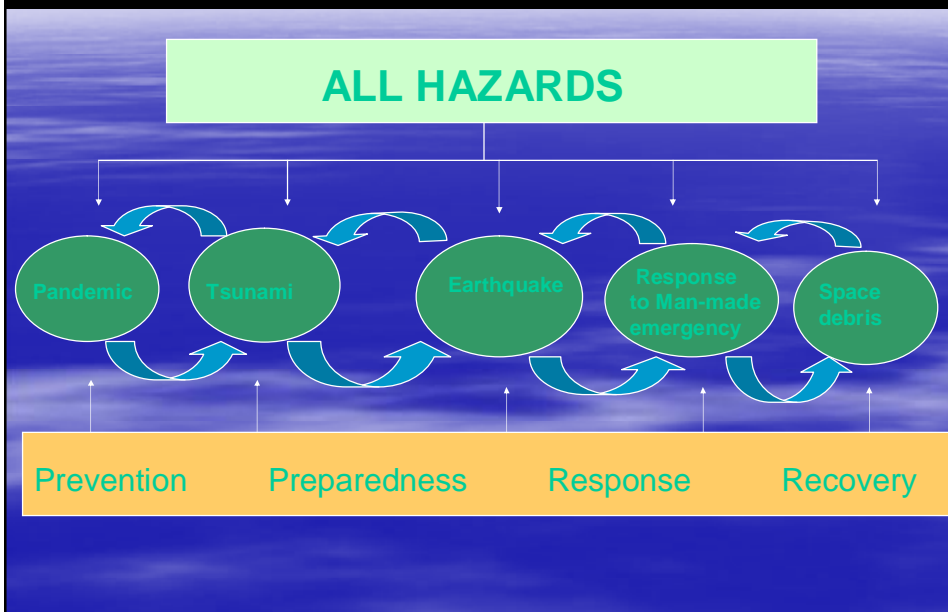




## APEC's Vision of Emergency Preparedness

- § Develop **best practice capacity** in the region to better prepare economies for future disasters
- § Support community-based disaster response plans to minimise **economic disruption**
- § Promote intra-APEC **information sharing** and communication of outcomes
- § Share information and resources through **disaster management experts**
- § Ensure APEC **complements** and does not duplicate the work of other international organisations

## Emergency Preparedness Planning Framework



## Ongoing Significance

### § APEC Leaders 2007:

- “We agreed on the need to further strengthen APEC’s efforts to build **community resilience** and preparedness for emergencies...”

### § APEC Ministers 2007:

- “Strengthening emergency preparedness is an abiding priority for APEC and promoting the **economic benefits** of investing in risk reduction is an important means to achieve this.”
- “... we welcomed new initiatives to further **cooperation** between our senior emergency and disaster management officials, business and international partners...”

## A Role for APEC as a Regional Organisation

### § UN Hyogo Framework for Action establishes a key role for regional organisations – to develop:

- Programmes to support disaster risk reduction
- Baseline assessments and progress reviews
- Early warning capacities
- Information sources including examples of best practice

### § APEC facilitates unique North-South cooperation

### § Asia remains most severely affected by natural disasters

## Economic Dimensions of Emergency Preparedness

- § *Hyogo Framework* recognises need to address economic impact of emergencies
- § APEC's broad agenda is trade liberalisation and business facilitation – impeded by natural disasters
- § APEC can add value to emergency preparedness by coordinating with the business community
  - Business resilience to disasters contributes to sustainable development
  - Public-private partnerships can reduce the overall impact of disasters

## Key APEC Achievements – Past and Present

- § APEC Pandemic Response Exercise 2006
  - All 21 APEC economies participated together with observers from international fora – including the WHO
- § APEC Emergency Management CEO's Forum 2007 Australia
- § Women in Times of Disaster 2008
  - Ongoing project to ensure women are able to sustain their livelihood after a disaster event
- § ABAC project to foster emergency preparation by business 2008
  - Focus on protecting critical infrastructure
- § APEC Emergency Management CEO's Forum 2008 Peru





## Emergency Management CEOs' Forum 2007

- § Brought together senior emergency management officials from APEC economies for the first time
- § Created a unique opportunity for engagement between APEC economies and international partners including UN organisations
- § Facilitated reporting to Leaders on cooperation from a practitioners' point of view
- § Generated agreement to engage the private sector in building capacity for emergency preparedness

## APEC Emergency Management 2008

- § TFEP facilitates high-level implementation of APEC's vision of emergency preparedness
- § CEOs' Forum is run by practitioners – plays a key role in capacity-building and information exchange
- § Peru is leading the TFEP to formulate a Strategy for emergency preparedness in the Asia-Pacific
  - To promote cooperation between member economies
  - To develop synergies between diverse regional actors
  - Will incorporate a 2<sup>nd</sup> CEOs' Forum



## TFEP Looking Forward

### § To progress regional emergency management:

- Economic impact of disasters
- Community and business resilience
- Regional exercising
- Training/secondments/exchanges
- Sub-regional emergency strategic planning

### § CEOs' Forum 2008

- Build on work of 2007 CEOs' Forum
- Respond to Ministers' call for greater cooperation between emergency management practitioners
- Report to APEC Senior Officials and Leaders



Australian Government  
Attorney-General's Department  
Emergency Management Australia

[www.ema.gov.au](http://www.ema.gov.au)



*'safer sustainable communities'*



**TFEP02/2008A/10**

# **Reaching for a global framework in disaster reduction- reflection from the Hyogo Framework for Action (HFA)**

Submitted / Presented by: UN ISDR

**Dialogue among APEC economies, business community,  
key international and regional partners  
on emergency preparedness**

**Ha Noi, Viet Nam  
24-25 April 2008**



## **Dialogue Among APEC Economies, Business Community and key International and Regional Partners on Emergency Preparedness**

**24-25 April, Hanoi, Vietnam**

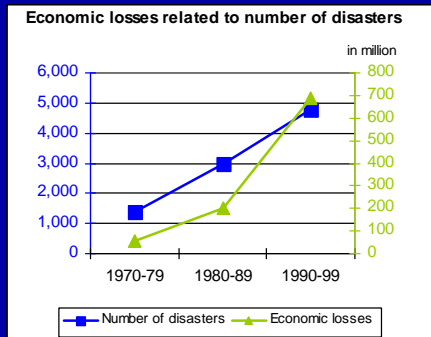
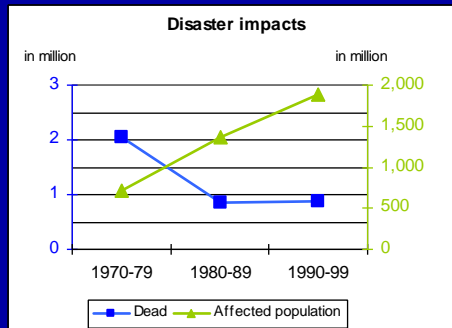
*Christel Rose, United Nations International Strategy for Disaster Reduction (UN/ISDR), Asia Pacific, Bangkok*

## **CONTENT**

- **Disaster Risk Reduction**
  - Trends
  - ISDR Framework
  - UN/ISDR – Who are we ?
- **Hyogo Framework for Action and status of implementation**
- **Key international and regional processes on Disaster Risk Reduction**
- **Economic aspects of DRR**
- **Added value of APEC in DRR**
- **Proposed Areas of Cooperation with APEC**

# Disaster reduction - trends

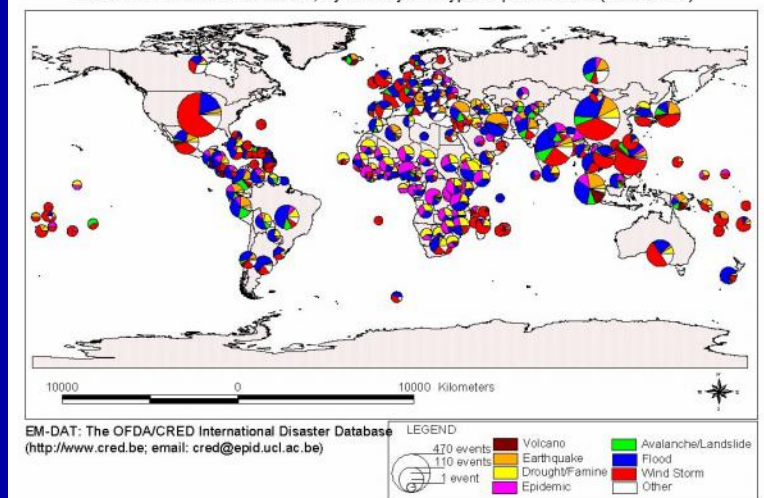
Less people die from disasters, but increased number of disasters, economic losses and affected population.



Source: OFDA/CRED International Disaster Database

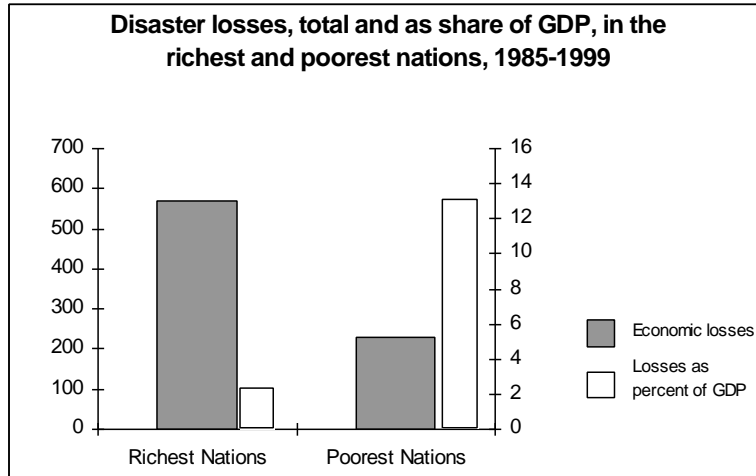
# Disaster reduction - trends

Distribution of natural disasters, by country and type of phenomena (1975-2001)



# Disaster reduction - trends

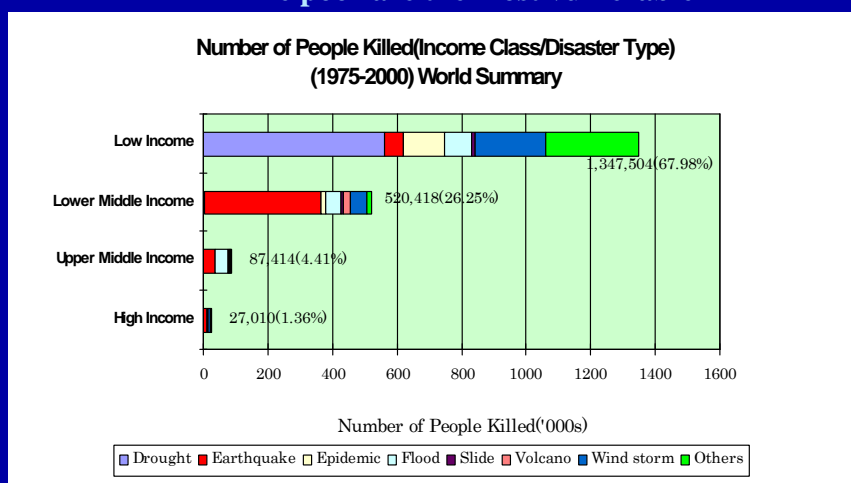
## Trends in economic impact of disasters



Source: MunichRe, Abramovitz, 2002

# Disaster reduction - trends

## The poor are the most vulnerable



Source: ADRC, OFDA/CRED



## Disaster Risk Reduction and Climate Change

1. The Intergovernmental Panel on Climate Change (IPCC) has recognized that **global warming and climate variabilities will exacerbate the frequency and intensity of disasters worldwide**, including through climatic phenomena like El Nino and La Nina
2. Climate change will **increase societal vulnerabilities** to hazards arising from stresses on water availability, agriculture and degrading systems
3. **Low land countries such as Vietnam in SEA and Maldives in the Indian Ocean will be the primary target of climate change and related sea-level rise** - *Up to 16% of Vietnam territory, 35% of its population and 35% of its GDP can be affected if sea level rises by 5 metres (World Bank Study "The impact of sea level rise on developing countries : a comparative analysis")*
4. Many **disaster risk reduction activities contribute to climate change adaptation**, as recognized in the Bali Action Plan (2007) – early warning, risk assessment and sustainable management of natural resources  
-> current efforts to link DRR national strategies to national CC adaptation Plans

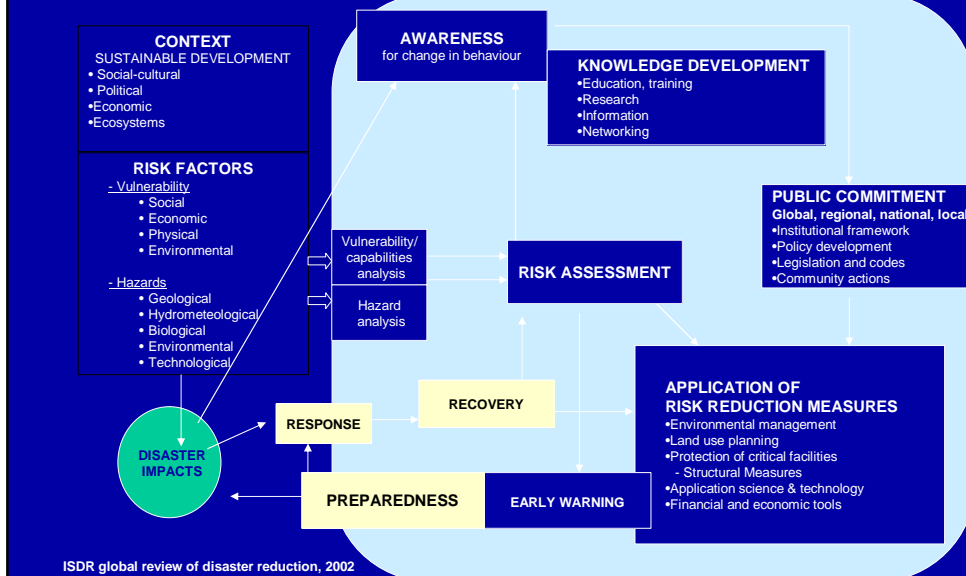
## Disaster Reduction - framework

### What is disaster risk reduction ?

The sum of measures, which can be undertaken to reduce human and social vulnerability and build communities' resilience to disasters through a multi-disciplinary and multi-stakeholder approach.

-> Measures include *risk assessments, education and information management, land use planning, environmental management, protection of critical facilities, application of science and technology in all fields, including for early warning.*

# Disaster Reduction - framework



## UN/ISDR – Who are we?

• **Successor arrangements to IDNDR** - Mandated by UNGA as UN coordinating mechanism for DRR worldwide to coordinate disaster risk reduction worldwide

**Disaster Risk Reduction (DRR)** is a **long-term development activity** - Recognized as **integral part of Sustainable Development** at WSSD (Johannesburg, 2002)

• **Thematic:** - Platform for the Promotion of Early Warning (PPEW), Bonn  
 - Knowledge and Education Cluster, Geneva  
 - International Recovery Platform (IRP)-UNDP/OCHA/ISDR, Kobe

• **HQs in Geneva and regional programmes** (LAC, Africa, Europe, WANA and Central Asia) – starting work at sub-regional level

• **UN/ISDR Asia and Pacific** in June 2005 - Based in Bangkok, Thailand, covers around 60 countries spread over Asia and Pacific region

-> **Mandate:**

Strengthening regional partnerships and capacities in support of implementing the Hyogo Framework for Action (HFA) at national, regional and sub-regional levels through policy guidance, advocacy and technical assistance to build the capacity and knowledge of Governments, regional and sub-regional organizations in implementing DRR

## HYOGO FRAMEWORK OF ACTION (HFA) 2005-2015

Main Outcome of the World Conference on Disaster Reduction January 2005, Kobe, Hyogo, Japan was **The Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters** – Recognized global guide to facilitate effective implementation of DRR at int'l, regional, national and local levels next 10 years



**Expected Outcome:** *The substantive reduction in losses in lives and in the social, economic and environmental assets of communities and countries.*

**Political commitment of 168 Governments to implement HFA, allocate necessary resources and set up the appropriate institutional and legislative frameworks to facilitate its implementation** – reiterated recently at UNGA in NY (Thailand, Indonesia, Iran and China) and in SG's Report 2007

Importance of political commitment to engage action and necessary reforms – but **DRR is everybody's business** - DRR in daily life and work, especially of communities

## Hyogo Framework for Action

### 3 Strategic goals

- Integrate disaster reduction into sustainable development
- Strengthen institutions and mechanisms to build resilience
- Incorporate risk reduction into emergency management and recovery

**5 Priorities for action** - adopted at WCDR by members countries to guide the implementation of HFA and translate political commitment into action

- 1) Disaster risk reduction as a priority with strong institutional basis for action
- 2) Identify, assess and monitor disaster risks and enhance early warning
- 3) Knowledge, innovation, education for culture of safety and resilience
- 4) Reduce the underlying risk factors
- 5) Strengthen disaster preparedness for effective response

### Cross cutting issues

- ❑ Multi-hazard approaches
- ❑ Gender responsiveness & cultural diversity
- ❑ Community & volunteer participation
- ❑ Capacity building & technology transfer

•**Priority 1: Ensure that disaster risk reduction is a national and local priority with a strong institutional basis for implementation.**

-> develop **national institutional framework including policies and legislation on DRR**, develop national coordination mechanisms for DRR (National Platform for DRR) and allocate appropriate resources and budget for DRR

•**Priority 2: Identify, assess and monitor disaster risks and enhance early warning.**

-> **assess vulnerabilities and risks** and promote **reliable and timely people centered Early Warning Systems** as well as **effective space technology applications**

•**Priority 3: Use knowledge, innovation and education to build a culture of safety and resilience at all level.**

-> **Education** through integration of DRR in school curricula and school safety, collection and dissemination of good practices, build on traditional knowledge, develop educational material in local languages, exchange of info and data & facilitate media engagement

-> **Training** through courses, skills management / development, drills, simulation exercise etc.

•**Priority 4: Reduce the underlying risk factors**

-> Poverty reduction strategy, land-use management, infrastructure strengthening as part of national development plan

-> **Promote the establishment of public private partnership to better engage the private sector in Disaster Risk Reduction towards a global Culture of Prevention**

•**Priority 5: Strengthen disaster preparedness for effective response at all levels.**

-> develop DRR, including contingency plans and SOPs to improve relief operations and response activities' cost effectiveness

#### **STATUS OF HFA IMPLEMENTATION - Institutional and policy levels**

- **At international level** – restructuring of ISDR into ISDR System comprising of:
  - Global Platform for DRR: Governments, UN, scientific and technical institutions and civil society: advise and commit to devise strategies for DRR and HFA implementation (5-7 June 2007)
  - MOB - Management Oversight Board: Strategic, managerial, financial guidance-Head:USG
  - PAC – Programme Advisory Committee - support and coherence, workplan

- **At regional level:**

- Several regional mechanisms adopted HFA for implementation and reporting on DRR (ACDR, RCC and key UN partners in selected areas - UNESCAP, UNESCO, UNICEF, IFRC etc) - **APEC Task Force on Emergency Preparedness (TFEP) in process**
- Asian Ministerial Conferences on DRR (China 2005, India 2007, Malaysia 2008)
- Setting up **regional platform for DRR** under new ISDR system – intergovernmental process steering DRR implementation and monitoring at regional level (**ISDR Asia Partnership- IAP**) – To promote a more effective coordination and harmonization on DRR – **APEC Secretariat part of IAP**

- **At sub-regional level:** all partners have adopted HFA as part of policy frameworks

- Pacific Framework for Action (SOPAC) – aligned with HFA priorities
- ASEAN Agreement on Disaster Management and Emergency Response and ASEAN Regional Programme on Disaster Management – along HFA priorities
- SAARC Comprehensive Regional Framework for Action 2006-2015 and creation of SAARC Centre for DRM

## Status of HFA Implementation (cont'd)

**At the national level** - Different stages of development – Since WCDR and thanks to above joint regional efforts, major institutional changes have taken place – new shift paradigm from reaction into pro-action and from relief towards DRR:

- India, Indonesia, Pakistan, Mongolia, Sri Lanka, Brunei are **revising their legislation and institutional framework** on disaster management - emphasis on disaster risk reduction

- Other countries are **developing their national plan / strategy for DRM along the lines of HFA**: Nepal (National Strategy), Sri Lanka (Roadmap), India (Emerging Framework), Vietnam (National Strategy), Thailand (SNAP), Mongolia (National Action Plan), Indonesia (SNAP), Vanuatu (NAP), Maldives (NDMC)

- **National Platforms under establishment**: Indonesia, Thailand, Maldives, Pakistan, Mongolia, Nepal, Sri Lanka etc.

## Implementing the Hyogo Framework for Action at the national level **Development of National Strategies for Disaster Risk Reduction**

Joint approach and assistance to Governments in the **formulation of a comprehensive and inclusive national strategy for DRR along the lines of HFA as part of national development plan - Identify, builds on, enhances and support ongoing** successful disaster reduction initiatives and projects to ensure their sustainability – In Govt's and Donors' interest

Holistic approach with **long-term vision** and **short-term action**

**All national partners**, including Government line Ministries, in-country UN (UNCT, UNRC), technical experts, civil society (incl. NGOs), local communities, private sector, media, donors should be involved in its development and implementation

**Country-led and country-oriented initiative** – reflects a **commitment by Government** to implement DRR at the national level along the lines of HFA and to commit resources to it – **Government takes the leadership** in identifying its national priorities and committing resources - but **all national and in-country actors contribute to its formulation and implementation**

**No “one-size fits all”** - depends on level of development, must start with existing governance arrangements in each disaster-prone country and must be integrated into ongoing development efforts to be sustainable



## National arrangements for HFA implementation, monitoring & reporting: National Platforms for Disaster Risk Reduction

*National multidisciplinary and multi-sectoral arrangement officially recognized and designated by highest national authority to assist the Government in the coordination and implementation of DRR at national level – Commitment to HFA implementation – brings all range of expertise (representatives from key line Ministries, scientific and technical experts, academic institutions, civil society, NGOs, local governments, media, private sector and donors)*

Role & benefits - Support Government in coordinating and implementing DRR through:

- Advocacy, awareness-raising, mobilization / coordination and networking–
- Ensures multi-stakeholder approach to national strategy and framework for DRR developed by the Government
- Facilitate the **mainstreaming of DRR** into national development plans (including CCA/UNDAF, PRSPs) and sectors (education, health, infrastructures, agriculture, tourism..)
- Build consensus at national level on DRR priorities - **ownership and long-term commitment** from all involved partners, including donors and local Govts
- Provide a **framework for regular cross-sectoral reflection on DRR and for enhanced collaboration and coordination** among national AND Local stakeholders to increase level of skills and knowledge on DRR

## ISDR support to Early Warning

The Platform for Promotion of Early Warning in Bonn, Germany, is leading the ISDR early warning support with the mandate to:

- Advocate for the **enhancement of early warning systems** at all levels,
- Collect and disseminate information on best practices,
- Stimulate cooperation among stakeholders.

### **Key concerns** and efforts

1. Need to ensure establishment of effective **end-to-end and people centred** early warning systems, that fully address the capacities of governments and communities.
2. Need to **shift focus** from hazard-specific to **multi-hazard** early warning systems
3. Need to ensure that early warning systems are **integrated into public policy and development planning**
4. **Improve data availability** for investigating, forecasting/predicting and managing risks on different time scales
5. Facilitate the strengthening of mechanisms for **sustaining the early warning dialogue**

## Key International Processes for DRR

### 1. Global Platform on Disaster Risk Reduction, June 2009, Geneva

- Meeting of ISDR system partners: Govts, UN, regional orgs, sub-regional partners, NGOs, Academic institutions, National Platforms for DRR, thematic platforms
- **Assess status of DRR worldwide** and contribute to a global work-planning process with ISDR system partners to ensure optimum coordination and complementarity of DRR initiatives at all levels
- **Global reporting process on HFA implementation from national, regional and sub-regional levels and on thematic aspects** – Online reporting process available as of March 2008 through Prevention Web
  - > In process through Permanent Missions in Geneva and NY, sub-regional organizations and UN Resident Coordinator's Office – Assistance of National Platforms and HFA Focal Points will be sought to support consultative process Governments

### 2. World Bank's Global Facility for Disaster Reduction and Recovery (GFDRR) – to meet global demand for investment in DRR and coordinate effective action in recovery

- ISDR coordinating **Track 1** ("Global and Regional Deliverables" up to USD5 Million
- **Green Cities Guidelines** development to empower local governments /municipalities in addressing DRR and climate change adaptation
- **South South Partnership for Mainstreaming DRR** – to provide technical assistance to low and middle income countries for inter-country partnership that will help build and share capacities to mainstream DRR into development planning
- **WB's interest in economic aspects of DRR** – Funding can be sought

## KEY REGIONAL EFFORTS IN DRR

### 1. Regional Platform for DRR composed of two arms:

- **Asian Ministerial Conferences on DRR** – highest biennial regional political foras on DRR at Government's initiative (Beijing 2005, India 2007, Malaysia 2008) - Seek **political leadership and commitment** to DRR in A&P
- **ISDR Asia Partnership (IAP)** as operational arms – Coordinated by ISDR - 50 members from UN partners, Regional Orgs, sub-regional partners (ASEAN, SAARC, SOPAC, **APEC St**), IFRC and NGO Networks (ADRRN, Duryog Nivaran)

#### Activities:

- **Devise joint activities and programmes on DRR**
- **Promote increased coordination** of DRR and HFA implementation in the Asian region
- **joint reporting and stocktaking** on HFA Implementation in Asia Pacific – Building on Initial stocktaking initiative carried out by ADPC and ADRC with ISDR support – to be pursued with ADB's assistance
- Ultimate goal: **joint work-programming and resource mobilization for DRR**

## **2. Regional HFA Reporting Process towards 2<sup>nd</sup> Global Platform on DRR (June 2009, Geneva)**

- Global Assessment Review (GAR) under development to inform the 2<sup>nd</sup> meeting of the Global Platform for DRR on the progress in implementing HFA worldwide – regional process going on in Asia Pacific
- Responsibility for global reporting with **states/national authorities, regional and international organisations, ISDR system partners and secretariat**
- Sub-regional / regional organisations **take the lead in regional reporting** and support national HFA reporting -> **ASEAN for SEA**
- Key partners invited to lead **thematic reporting** responsibilities (UNESCO, ADRRN - – **APEC for economic aspects\_?**)
- **On-line HFA Monitor** – Template to guide the monitoring process online
- Support to countries and regional partners through **IAP WG on Reporting Process and UNDP Country Offices**

## **Global Reporting Timeframe**

- **September - December 2007:** Consultation with sub-regional / regional partners
- **January - March 2008:** Guidance to sub-regional organisations and national authorities - Letter seeking their support being sent around
- **April - June 2008:** National, sub-regional, regional reports prepared - Online reporting tool for guidance - to be launched in March for national reporting
- **July - September 2008:** Compilation of national information, regional analysis and drafting of Global Assessment Report
- **September - November 2008:** Review of Global Assessment Report
- **December 2008:** Production and dissemination of GAR
- **January - May 2009:** Re-opening of reporting process to up-date information by GPDRR2

### 3. Third Asian Ministerial Conference on DRR, 2-4 December 2008, Kuala Lumpur, Malaysia

- Unique regular high-level foras on DRR at Governments' initiative – Political commitment and leadership for DRR
- **Focus: “From National to Local DRR implementation”** and **Public Private Partnership for DRR** – First announcement to be issued shortly
- **Last regional opportunity to assess progress on DRR / HFA implementation in A&P before the Global Platform (June 2009, Geneva)**
- Address core functions of IAP (reporting) and key themes linked to Public Private Partnership for DRR, Climate Change Adaptation and other key issues (role of NGOs and Local Authorities in implementing DRR at the local level, EWS, Education, resource mobilization for DRR etc.)
- **Structure** (see attachment)

### 4. Fruitful cooperation with the ASEAN Secretariat

- Strong sub-regional partner in promoting and implementing DRR along the lines of HFA in ASEAN region (AADMER and ARPDM)
- Technical assistance supported by ISDR through **placement of a technical expert to deliver DRR components of ARPDM and AADMER**
- **Commitment to coordinate the regional reporting process on HFA implementation for the ASEAN region.**

## Economic aspects in DRR

1. **Disasters will be our daily reality in the near future** -are on the rise worldwide due to increased vulnerability of communities and nations linked to population growth, development of mega-cities, unsafe management practices in terms of land-use planning and deforestation, human settlements in disaster prone areas – exacerbated by climate change impact
2. **Transborder nature of disasters and globalization** – we are all affected by disasters – Migration movements to disaster prone countries – we need to be aware
3. **Disasters wipe out decades of development efforts in seconds**
  - > destroy vital economic lifelines (roads, bridges, railways) and infrastructures (schools, hospitals) paralyzing local economies (snow storm in China in 2008, Xangsane storm in 2006)
  - > disasters severely impact on livelihoods, depriving communities of their most basic means of survival: fishermen lose their boats, crops are destroyed, tourism industry and infrastructure are affected and takes time to re-build trust
  - > represent a **serious threat to sustainable development, economic prosperity and stability**
  - > they represent a **significant challenge to business development and continuity**
  - > They also endanger world peace through the increase of environmental refugees and the search for available natural resources and safe havens
4. Recognized **cost effectiveness of DRR** in reducing long term impact of disasters -> 1 USD invested in DRR saves 7 USD in relief operations (Tearfund)

## APEC's added value

### 1. APEC's mandate: *Increase Asia Pacific Prosperity, Stability and Security through Partnerships and Cooperation*

-> very much along the lines of the Hyogo Framework for Action's objective to **build communities and nations' resilience to disasters and a global culture of prevention towards a safer world**

### 2. Cairns TFEP's meeting conclusions and references to Hyogo Framework for Action (August 2007) and APEC Secretariat Chair's recognition of HFA as a possible reference basis for TFEP's work

### 3. APEC as unique regional mechanism bringing together Economies and business community network through Ministries of Trade and Economies – strong added value and niche for APEC in the DRR arena

### 4. Direct link with APEC Leaders

-> ample room for cooperation APEC / ISDR in building a safer world for all

## Proposed initial steps of cooperation

### 1. Congratulate APEC Secretariat and TFEP for their recognition and understanding of DRR and HFA

### 2. Encourage APEC Secretariat to adopt HFA as part of APEC Policy Framework and reporting process so as to further mainstream disaster risk reduction as part of APEC's activities

- Offers ISDR's full support to this process

### 3. Invite APEC Secretariat and TFEP to consider integrating DRR and HFA references as possible selection criteria for project submissions

### 4. Welcome APEC Stocktaking Initiative and its outcome – encourage an increased harmonization and support of this initiative to the global reporting process on HFA Implementation led by ISDR



## Proposed initial steps of cooperation – Cont'd

5. Invite APEC Secretariat and TFEP co-Chairs to participate in:
    - ISDR Asia Partnership discussions to contribute and be involved in the regional decision-making process on DRR and HFA implementation
    - Global Platform on Disaster Risk Reduction (June 2009, Geneva) as regional business community liaison partner
  6. Invite the APEC Secretariat to consider taking the leadership in building a Regional Public Private Partnership for Disaster Risk Reduction with APEC Economies and in cooperation with UN/ISDR in support of current efforts on this subject:
    - a) PPP E-ListServ developed with ResponseNet and Aid Matrix as part of Prevention Web - Database of regional initiatives on PPP for DRR
    - b) Good practices on PPP for DRR
    - c) Joint UNEP/ISDR Global Platform on PPP for DRR – Vietnam is part of the Pilot countries to possibly receive support to promote the subject.
- > Invites the APEC Secretariat and TFEP co-Chairs to participate and contribute to Third Asian Ministerial Conference on DRR – One High Level Roundtable on PPP for DRR

“One of the lessons learnt from the tsunami is that **thousands of lives and billions of dollars could have been saved had adequate disaster reduction strategies been in place**....I urge all stakeholders to implement the Hyogo Framework for Action, and to do it now”

*Bill Clinton, Special Envoy for Tsunami recovery, 2005*

**Thank you !**

“We also recognize the **important role played by the UN/ISDR** UNDP, UNEP, UNICEF, OCHA, WFP, WHO, FAO and WMO ....recognize that **early-warning systems need to be multi-hazard and global** and they need to coordinate their activities. ...We will work together with the UN, World Bank and other multi-development banks and developing countries **to help them tackle disaster risk reduction more effectively**”

*Excerpt from G8 Summit in Gleneagles, UK, 2005*

More information at: [www.unisdr.org/asiapacific](http://www.unisdr.org/asiapacific) and [www.unisdr.org](http://www.unisdr.org)

**TFEP02/2008A/11**

# **How to incorporate businesses' responsibility on emergency preparedness into the APEC agenda of 2008 on Corporate Social Responsibility**

Submitted / Presented by: Peru

**Dialogue among APEC economies, business community,  
key international and regional partners  
on emergency preparedness**

**Ha Noi, Viet Nam  
24-25 April 2008**

## Corporate Social Responsibility & APEC



Raul Salazar  
APEC Peru 2008 SOM Chair Office



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## Globalization as an unavoidable historical trend

- Territorial Expansion: Alexander the Great, Julius Ceasar, Genghis Khan .
- The Age of Discovery: Marco Polo, Portuguese Explorers and Cristopher Columbus.
- Cultural Expansion: Greece and Rome (Developments in Philosophy, Law and Politics); Venice Merchants (Trade Practices, Insurance), the British Empire, US Economic Ascedency
- Economic Structures: Industrial and Technological Revolutions, Economic and Trading Blocks (EU, NAFTA, APEC). The successful completion of the Doha Round could further boost trade and investment flows.

## The Upside of the Globalization Process

- The spread of market-based reforms: developing countries are pursuing business friendly policies, opening their economies to international trade and trying to attract investment through sound policies fiscal and promotional schemes, and less regulation.
- Economic growth and increased social mobility in open economies. Success stories in New Zealand, Ireland, Finland Costa Rica, Chile, China, and Vietnam . Peru is experiencing the longest and deepest cycle of economic expansion in its economical history, close to Asian standards (latest registered rate of growth, 11.9% annually).
- New Actors: Multinational Entreprises (MNEs). Powerful players on the international stage that often exert a level of influence previously only held by governments.

## Winners and Losers in the Globalization Process

- A smaller role for the state in the economy can free up private sector investment and boost economic growth.
- There have been significant reductions in poverty in the APEC region over the last decade.
- Income and technological gaps have widened between those economies embracing globalisation and those that do not.
- MNEs in the extractive activities in developing countries often operate in remote and impoverished areas without a strong local economy and government services.

# CSR: the Human Face of Globalization

## What is Corporate Social Responsibility?

- The contemporary corporate social responsibility (CSR) agenda is founded in a recognition that businesses are part of society, and they have the potential to make a positive contribution to societal goals and aspirations. CSR is at heart a process of managing the costs and benefits of business activity to internal and external stakeholders—from workers, shareholders, and investors through to customers, suppliers, civil society, and community groups.

Source: 2004 World Bank Report on Public Sector Roles in Strengthening CSR

- Reflecting and responding to the concerns of consumers, investors, and other stakeholders is good business strategy. Investors and financial analysts often view a sophisticated approach to CSR as a sign of sound, long term corporate planning and risk management – and firms can benefit from investing in this area
- CSR can be defined as the practices of the corporation that, as part of their corporate strategy, and in support of the main business activities, explicitly seek to avoid damage and promote the well-being of stakeholders by complying with current rules and regulations and voluntarily going beyond those requirements.

Source: Vives, A. (2004) 'The role of multilateral development institutions in fostering corporate social responsibility', (Society for International Development).

# CSR Development

- In recent years, the concept of Corporate Social Responsibility (CSR) has transitioned from mere philanthropy to a more systematic corporate response.

Source: Carlo Cici and Federica Ranghieri, "CSR practices in SMEs", feb. 2008

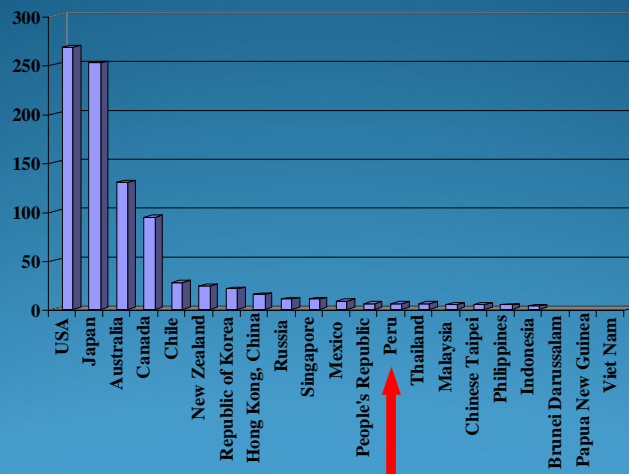
- CSR is not viewed as a cost but as "good business". It improves the sustainability of business operations and is rewarded by capital markets, consumers and public opinion.
- Good CSR practices and developing relations with all stakeholders can help companies acquire a "social license" for their activities.
- A strong culture of CSR can assist firms attract and retain staff, improve work force motivation and improve overall performance.



# CSR and APEC

- APEC has been successful in promoting free and open trade in the Asia Pacific, improving the business environment and helping it become the most economically dynamic region in the world.
- APEC provides a powerful platform in the region in which to raise awareness of issues such as CSR
- Peru intends to introduce the concept of CSR to the APEC agenda in 2008 as part of the theme: “A New Commitment to the Development of the Asia Pacific.”
- It is an emerging and social issue that complements and supports APEC’s agenda of promoting economic development and improving the business environment in the region.
- A robust CSR policy is likely to become an increasingly important aspect of doing business in the 21st Century, the Asia Pacific Century.

## SUSTAINABILITY REPORTING IN APEC COUNTRIES



Note: APEC economy companies represent 38.6% of all GRI 'registered' Sustainability Reports, with only Brunei Darussalam, Papua New Guinea and Viet Nam not having representation on the global database.

## SUSTAINABILITY REPORTING IN APEC COUNTRIES

COUNTRY	REPORTS	COUNTRY	REPORTS
UK	310	Ireland	12
USA	268	Singapore	10
Japan	252	Russia	10
Australia	130	Mexico	8
Italy	123	Argentina	8
Spain	119	India	7
Germany	117	Thailand	6
France	94	Sri Lanka	6
Canada	94	Peru	6
The Netherlands	84	People's Republic of China	6
Switzerland	62	Hungary	6
South Africa	60	Slovenia	5
Brazil	56	Malaysia	5
Finland	49	Czech Republic	5
Sweden	44	Colombia	5
Austria	41	Taiwan	5
Portugal	39	Slovakia	4
Norway	35	Poland	4
Denmark	32	Philippines	4
Chile	27	Luxembourg	4
Belgium	25	Croatia	4
New Zealand	24	Venezuela	3
South Korea	21	Pakistan	3
Hong Kong (China)	16	Indonesia	3
Greece	15	United Arab Emirates	2

## Ministerio de Relaciones Exteriores del Perú

### CSR and Emergency Rehabilitation

- Governments must take overall responsibility for responding to emergencies but promoting CSR can assist in the development of partnerships and alliances with the private sector.
- Private companies are often able to provide quick responses to emergencies as they are operating in the affected communities. Involvement in an emergency response can help restore business activity as soon as possible, and ensure the work force continues to have a source of income. There are also reputational benefits for good corporate citizenship that can assist customer loyalty.
- Companies can assist in logistical planning and preparedness, information and awareness educational campaigns for staff and families, and the establishment of early warning systems .



## Ministerio de Relaciones Exteriores del Perú Case Study of CSR & Emergency

### Preparedness

- WHEN catastrophic floods hit Bangladesh last November, TNT's emergency-response team was ready. The logistics giant, with headquarters in Amsterdam, has 50 people on standby to intervene anywhere in the world at 48 hours' notice. This is part of a five-year-old partnership with the World Food Programme (WFP), the UN's agency that fights hunger. The team has attended to some two dozen emergencies, including the Asian tsunami in 2004. "We're just faster," says Ludo Oelrich, the director of TNT's "Moving the World" programme.
- Why does TNT do these things? "People feel this is a company that does more than take care of the bottom line," says Mr Oelrich. "It's providing a soul to TNT." In a 2006 staff survey, 68% said the pro-bono activities made them prouder to work at the company. It also helps with recruitment: three out of four graduates who apply for jobs mention the WFP connection. Last year the company came top in the Dow Jones Sustainability Index.

*Just Good Business, The Economist, 17 January 2008*



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## Ministerio de Relaciones Exteriores del Perú

### CSR in the Vietnamese Textile Industry

- Leaders among 24 surveyed enterprises [in the Vietnamese footwear and textile sectors], 18 enterprises are implementing one or more codes of conduct, of which 9 are textile enterprises and 9 footwear enterprises. Of the 18 code-of-conduct performed enterprises, 11 enterprises are practicing 2 codes of conduct or more, [with] 2 firms applying 6 codes of conduct.

*Source: Government of Vietnam, Ministry of Labor, Invalids, and Social Affairs and Institute of Labor Science and Social Affairs 2003.*

- A new U.S.-Vietnam textiles agreement, signed in May 2003, incorporates an obligation for the Vietnamese authorities to encourage implementation of CSR codes in return for access to the U.S. market (now Vietnam's top market, after just two years of formal trade relations). This appears to be the first time that an international trade agreement has included a government obligation to encourage CSR codes, as opposed to requiring additional regulation or enforcement, as in earlier U.S.-Cambodia textile agreement

*Source: Public Sector Roles in Strengthening Corporate Social Responsibility: Taking Stock Halina Ward, World Bank Group, January 2004*



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Thank you very much



**TFEP02/2008A/12**

# **Institutional Collaboration Mechanisms for Emergency Preparedness**

Submitted / Presented by: Pacific Disaster Center

**Dialogue among APEC economies, business community,  
key international and regional partners  
on emergency preparedness**

**Ha Noi, Viet Nam  
24-25 April 2008**

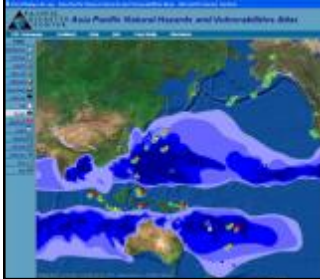


APEC Dialog / Emergency Preparedness  
Hanoi, Viet Nam  
25 April 2008



*Fostering Disaster-Resilient Communities*

## Institutional Collaboration Mechanisms for Emergency Preparedness



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Pacific Disaster Center

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## Presentation Outline

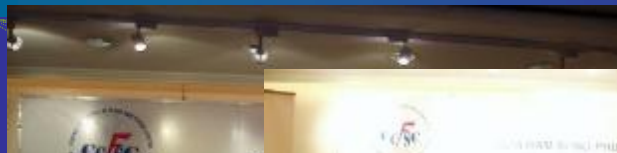
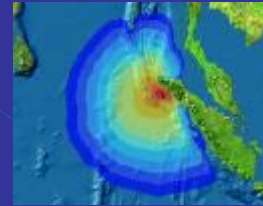
- n Challenges for Disaster Preparedness and Response
- n Information Sharing as Foundation for Institutional Collaboration
- n PDC Experiences in AP Region Sharing:
  - “ GIS Data and Map Services (APNHIN)
  - “ Disaster Impacts (ASEAN/OSADI)
  - “ Institutional ‘Sound Practices’ (EMI/DRMKB)

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# Lessons of Mega Disasters

- Disasters are Global Concerns
- Effective preparedness & response involves
  - Whole of Gov't: Civ & Mil; Nat'l/Provincial/Municipal
  - NGOs; International Agencies; Private Sector
- Technology can help Reduce Impacts
  - Increasing Situational Awareness
  - Information Preparation, Coordination and Sharing
- Continued Need for additional:
  - Understandable and Actionable Info
  - Integrated Multi-Hazard Decision Tools
  - Mechanisms for Sharing Effective Solutions



SỞ KHOA HỌC VÀ CÔNG NGHỆ VIỆT NAM - SỞ NGHIÊN GIỚI HOA KỲ  
 "NHỮNG NGÀY KHOA HỌC VÀ CÔNG NGHỆ VIỆT NAM - HOA KỲ"  
 SỞ NỘI VỤ, 2011



This year, the United States celebrates the 10th anniversary of normalization of relations with Vietnam. We look back at the path that has brought us so far in these ten years, and we also look ahead with anticipation of new achievements. We now have many success stories to tell as the United States and Vietnam continue to create significant ties in many

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# The Asia Pacific Natural Hazards Information Network (APNHIN)

Search

Review

Understand

Consume

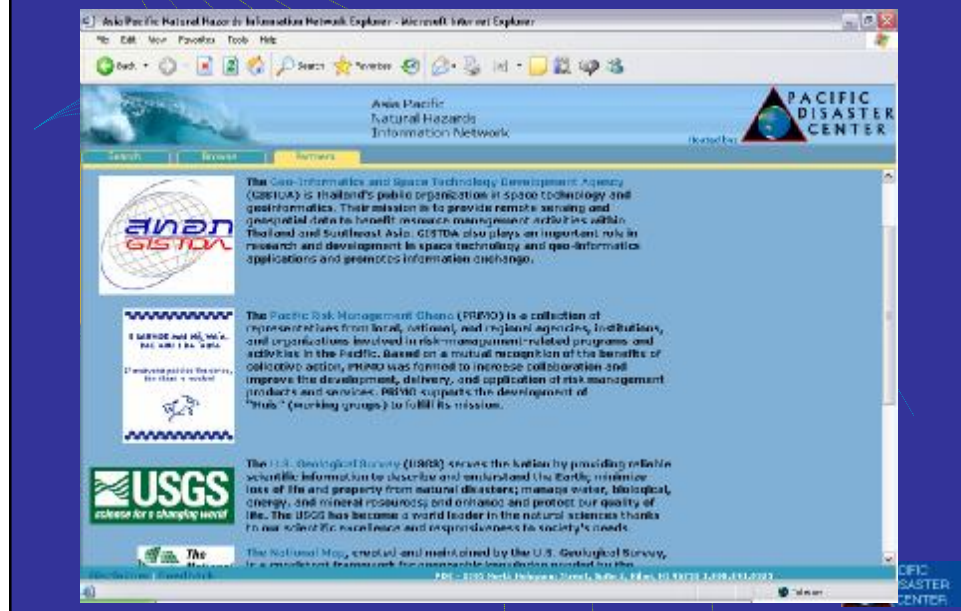
Obtain


<http://apnhin.pdc.org>

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PACIFIC DISASTER CENTER

# APNHIN Partners





**ASEAN  
Committee on  
Disaster Management**



## TENTH MEETING OF THE ASEAN COMMITTEE ON DISASTER MANAGEMENT (ACDM)

### Online Southeast Asia Disaster Inventory (OSADI) Training Program

23 October, 2007  
Singapore



Prepared By:  
Ray Shirkhodai, Executive Director,  
Pacific Disaster Center, Maui, Hawaii  
[RShirkhodai@PDC.Org](mailto:RShirkhodai@PDC.Org)

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# Background

- The Online Southeast Asia Disaster Inventory (OSADI) is a web-based disaster database that compiles historical records of disasters in ASEAN Member Countries, hazard maps and other spatial disaster-related data.
- OSADI is part of the ASEAN Disaster Information Sharing and Communication Network (ASEAN DISCNet) project, which is a priority activity under the ASEAN Regional Programme on Disaster Management (ARPD), 2004-2010.
- It is expected that OSADI will facilitate disaster management information sharing among ASEAN Member Countries and support decision making processes at all levels of disaster management – from policy making to preparedness, mitigation, response and recovery activities.
- OSADI is developed by the ASEAN Committee on Disaster Management (ACDM) with technical assistance of the Pacific Disaster Center (PDC).

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# Home Page

<http://www.pdc.org/osadi>



The screenshot shows the home page of the Online Southeast Asia Disaster Inventory (OSADI). At the top, there is a header with the ASEAN logo and the text "Online Southeast Asia Disaster Inventory (OSADI)". Below the header, there is a brief description of OSADI as a web-based disaster database. A "Login" button is visible. Below the login button, there is a "Disclaimer" section. At the bottom, there are logos for the ASEAN Committee on Disaster Management and the Pacific Disaster Center, along with contact information and copyright notice.

Association of Southeast Asian Nations

Online Southeast Asia Disaster Inventory (OSADI)

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OSADI is developed by the ASEAN Committee on Disaster Management (ACDM) in collaboration with the Pacific Disaster Center (PDC).

Login

Please send questions or comments to [osadisupport@pdc.org](mailto:osadisupport@pdc.org). Include "New Account" in the email subject line to request consideration for account privileges. A member of ACDM will review your request and respond.

Disclaimer

This application provides information solely as a resource for its users without any form of assurance. While every effort is made to provide accurate information and to ensure security, ACDM and PDC do not guarantee that there will be no errors in the information and contents in the database, nor is the possibility of errors that result in the sharing of the contents produced. This site also includes content, data, other information, and materials provided by third parties for which ACDM and PDC claim no responsibility. ACDM and PDC therefore will not be liable in any capacity for damages or losses to the users that may result from the use of this information.

ASEAN Committee on Disaster Management

OSADI is developed by the ASEAN Committee on Disaster Management in collaboration with the Pacific Disaster Center.

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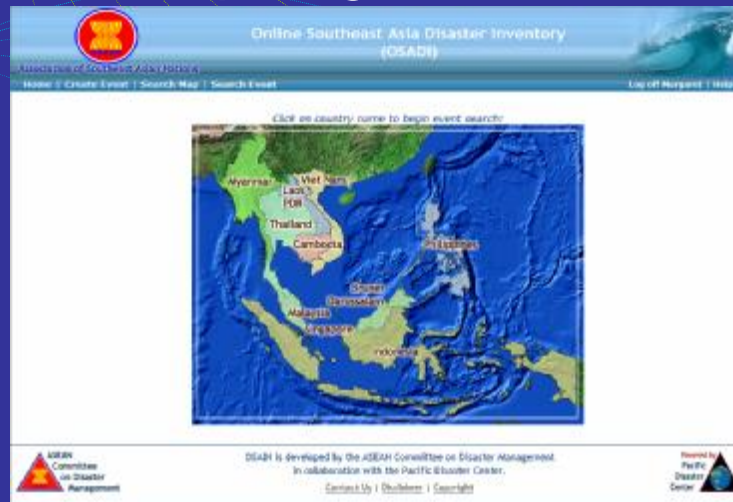
Powered by Pacific Disaster Center

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## Search Map Page



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## Detailed Search Form

**SEARCH**

ASEAN countries ☐ All Event Types ☐ All

BRUNEI DARUSSALAM ☐ Drought ☐  
 CAMBODIA ☐ Earthquake ☐  
 INDONESIA ☐ Epidemic ☐

Int'l Event Name  Begins with

Disaster Date (dd/mm/yyyy)  
 between  and

Dead  Greater than  700  
 Missing  Greater than  1  
 Injured  Greater than  -1  
 Displaced  Greater than  -1  
 Aid Contributions  Greater than  -1.0  
 Origin  Region with

Source Type & Name  Begins with

ASEAN Responded? ☐ Yes ☐ No ☐ N/A  
 Declared Disaster? ☐ Yes ☐ No ☐ N/A  
 Appeal for Int'l Aid? ☐ Yes ☐ No ☐ N/A

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## Search Results/Event ID Hyperlink

Refine Search | Export

Result: 14 record(s) found.

Event ID	Country	Event Type	Name	Date (GMT)	Dead	Missing	Injured
<a href="#">721</a>	INDONESIA	Earthquake	undefined	28/03/2005	011	0	1,346
<a href="#">852</a>	INDONESIA	Earthquake	undefined	10/11/2004	33	0	311
<a href="#">828</a>	INDONESIA	Earthquake	undefined	09/02/2004	37	0	662
<a href="#">824</a>	INDONESIA	Earthquake	undefined	04/06/2003	103	0	2,714
<a href="#">887</a>	INDONESIA	Earthquake	undefined	17/02/1994	184	0	421
<a href="#">811</a>	INDONESIA	Earthquake	undefined	07/03/1995	64	0	1,898
<a href="#">856</a>	INDONESIA	Earthquake	undefined	02/06/1994	234	0	446
<a href="#">529</a>	INDONESIA	Earthquake	undefined	19/02/1994	207	0	1,480
<a href="#">722</a>	INDONESIA	Earthquake	undefined	12/12/1993	2,509	0	2,830
<a href="#">733</a>	INDONESIA	Earthquake	undefined	29/12/1992	18	0	417
<a href="#">732</a>	INDONESIA	Earthquake	undefined	10/12/1979	32	0	618
<a href="#">849</a>	INDONESIA	Earthquake	undefined	14/02/1876	579	0	4,702
<a href="#">532</a>	INDONESIA	Earthquake	undefined	25/07/1943	113	0	2,896
<a href="#">1820</a>	PHILIPPINES	Earthquake	undefined	16/07/1990	2,412	0	3,512
<a href="#">1833</a>	PHILIPPINES	Earthquake	undefined	18/08/1878	6,999	0	6,348
<a href="#">2348</a>	PHILIPPINES	Earthquake	undefined	01/04/1855	408	0	2,300

Refine Search | Export

- Note that the Event ID is a hyperlink
- Click on this link to access individual records
- Event ID has no relevance outside the application

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## Create New Event

CREATE DISASTER FOR

**\* required fields**

INT Event Name   
 GLIDE number (Z)   
 Disaster Type   
 Magnitude   
 Disaster Date   
 Time   
 Latitude/Longitude   
 Province/State (Choose all that apply)   
 Town/District

Dead   
 Missing   
 Injured   
 Displaced   
 ASEAN Responded? ☐  
 Declared Disaster? ☐  
 Appeal for Int'l Aid? ☐  
 Holiday? ☐  
 Warning Time (minutes)   
 Aid Contribution   
 Origin   
 Source Type & Name

Essential Services  
 Level of Impact   
 Airport ☐  
 Seaport ☐  
 Roads ☐  
 Bridges ☐  
 Tele-Comm Network ☐  
 Power Grids ☐  
 Government ☐  
 Water Supplies ☐  
 Health Centers ☐  
 Housing Loss, Economic Losses (All currency must be in US dollar amount)  
 Number of Houses   
 Housing   
 Infrastructure   
 Agriculture   
 Tourism   
 Other   
 Total

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# Internationally Recognized Data

- n The field “Int’l Event Name” is used to record the official names of disaster events. It can also be used to provide descriptive information where an official name has not been assigned.
- n The GLIDE number, if one has been assigned, can be researched online. A link is provided on the data entry screen to allow easy access to the website

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# Document and Share “Sound Practices” for Disaster Management

## Megacities Disaster Risk Management Knowledge Base

<http://www.pdc.org/emi>



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# DRM Knowledge Base

- n Provides a Global Knowledge Base
  - Organized (Content is presented in specific template formats)
    - Searchable information
    - Discussion Papers
    - Field Trip Reports
    - Contact Database of city officials and researchers from network
  - Developed by PDC and EMI through Cluster City Intern Program
- n Key Features
  - Sound Practices & City Profiles for Megacities
  - Highlights 12 Disaster Risk Management City Profiles
  - Goal is to collect Sound Practices and City Profiles for 20 cities in network

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NAME OF THE CITY	Sound Practices	
	Name of the Practice	Category
<b>METRO MANILA</b>	§Saving the Streams in Quezon §Makati Emergency Medical Services §Quezon, Barangay Disaster Brigades §Health Networking	Risk Reduction and Mitigation Emergency Response and organizational Risk Reduction Emergency Response
<b>BOGOTA</b>	§Urban Search and Rescue §DRM Information system SIRE §Disaster Management Indicators §Post Eq. Building Inspection §Others	Response Management Information Management Policy Response Management Various
<b>KATHMANDU</b>	§The school Seismic Safety Program §The Nepal Forum for Earthquake Safety §Mandatory Implementation National Building Code §Disaster Mitigation in the 5-year Development Plan §Disaster Information System in Nepal §PEER Program in Kathmandu	Education, building practice, risk reduction Policy Regulatory Policy Information Management Response Management
<b>QUITO</b>	§Quito's essential elements §Healthy schools §Reducing flooding and landslides, Pichincha slopes §Cotopaxi Plan §Rain and Fire DR Plans §Identifying the Vulnerabilities in Quito	Risk Reduction, policy Education, building practice, risk reduction Risk Reduction and mitigation Risk Reduction and Mitigation Risk Reduction and Mitigation Risk Reduction, Policy
<b>GREATER MUMBAI</b>	§ial 108 §arthquake Simulation, EqSim §	Response Management Education, awareness creation Response Management Various

PDC EMI - DRM City Profile - Windows Internet Explorer

http://www.pdc.org/emi/edi/displaycityprofile.html

PDC PFI - DRM City Profile

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### Disaster Risk Management (DRM) City Profiles

Each City Profile emphasizes the megacity's complex coordination mechanisms and its relationship with the national level. The basic information was collected through a set of questionnaires prepared by the 3rd Implementation Team and distributed among the 20 cities in the EMI network. These are living documents that will grow as additional feedback is provided by local informants.

City	Profile (Click link to read PDF file)
Ammar	<a href="#">CP-Ammar-Jul-2006.pdf</a>
Bogota	<a href="#">CP-Bogota-update-Jul-2006.pdf</a>
Chania	<a href="#">CP-Chania-Jul-2006.pdf</a>
Greater Mumbai	<a href="#">CP-Mumbai-02-03.pdf</a>
Istanbul	<a href="#">CP-Istanbul-03-05.pdf</a>
Kathmandu	<a href="#">CP-Kathmandu-06-09.pdf</a>
Kobe	<a href="#">CP-Kobe-April-06.pdf</a>
Metropolitan Manila	<a href="#">CP-Manila-Manila-18-05.pdf</a>
Manila City	<a href="#">CP-Manila-Manila-18-05.pdf</a>
Quito	<a href="#">CP-Quito-06-09.pdf</a>
Sakil	<a href="#">CP-Sakil-1st-2006.pdf</a>
Tehran	<a href="#">CP-Tehran-Jul-2006.pdf</a>

**3rd Program**

- Overview
- F.A.Q.s
- What's New?

The DRM City Profile contains basic information related to institutional arrangements, legal frameworks, current delivery, risk knowledge and communication and roles in the megacity's or local government's disaster risk management systems. PDF documents can be read using Adobe Reader.

**Other Partners**

- Earthquake Disaster Mitigation and Research Center, EMI-Team1
- Kobe University - Research Center for Urban Safety and Security, RCUS

**Sponsors**

- United Nations Development Program, UNDP (BCPR/DRM)
- Disaster Mitigation Consortium
- World Bank - Hazard Management Unit, HPM
- U.S. International Strategy for Disaster Reduction, ISDR

PDC EMI - DRM Sound Practice - Windows Internet Explorer

http://www.pdc.org/emi/edi/displaycitygroup.html?city=2

PDC PFI - DRM Sound Practice

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### Disaster Risk Management (DRM) Sound Practice Profiles

A Sound Practice is any proven idea, program, technique, mechanism, method, practice or procedure for assessing, managing and reducing risk in complex urban areas. These may be in areas related to legislation, and law practice, education, building practices, enforcement, response management, risk reduction, hazard assessment, any combination of these or under review. Click Sound Practice link to read to PDF file with Adobe Reader.

**Other Partners**

- Earthquake Disaster Mitigation and Research Center, EMI-Team1
- Kobe University - Research Center for Urban Safety and Security, RCUS

**Sponsors**

- United Nations Development Program, UNDP (BCPR/DRM)
- Disaster Mitigation Consortium
- World Bank - Hazard

\* Table currently sorted by denoted column

City	Primary Category*	Other Applicable Category(s)	Sound Practice Name (Click link to read PDF profile)
Kathmandu	Community Awareness	Planning, Political, Regulatory, Technical	<a href="#">Development of the Disaster Information System in Nepal</a>
Manila City	Community Awareness	Instructional, Organization-Managerial	<a href="#">Manila Flood Warning System</a>
Kathmandu	Community Awareness	Technical, Instructional	<a href="#">The School Earthquake Safety Program (SESP)</a>
Metropolitan Manila	Community Awareness	Organization-Managerial, Planning	<a href="#">Creation of Barangay Disaster Broads</a>
Manila City	Community Awareness		<a href="#">Program of Competency for the Construction Sector</a>
Metropolitan Manila	Community Awareness	Instructional, Regulatory	<a href="#">Achieving Fire Safety in the City of Manila</a>
Quito	Community Awareness		<a href="#">Healthy Schools</a>
Quito	Community Awareness	Instructional	<a href="#">Cyclone Plan</a>
Metropolitan Manila	Community Awareness	Organization-Managerial, Regulatory, Technical	<a href="#">Saving the Streams in Quezon City</a>
Bogota	Community Awareness	Organization-Managerial	<a href="#">Emergency Prevention and Attention Plan for Bogotá</a>
Kathmandu	Emergency Response		<a href="#">Program for the Enhancement of Emergency Response (EPER)</a>
Metropolitan Manila	Emergency Response		<a href="#">Mekah Emergency Management System</a>



PDC EMI - DRM Library - Windows Internet Explorer

http://www.pdc.org/en/mediaplatform/drmlib.html

PDC EMI - DRM Library

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### Disaster Risk Management (DRM) Library

The DRM Library aims at compiling specialized and selected methodological papers, field trip reports and, most importantly, any manuscript that documents the disaster risk management process in megacities. It provides an opportunity to the local and international partners to share their perspectives in the long-term workshop, promotes distance learning and makes available essential materials prepared for and resulting from the city workshops. PDC documents can be used using Adobe Reader.

**3rd Program Overview**  
**F.A.Q.s**  
**What's New?**

**Other Partners**

- Earthquake Disaster Mitigation and Research Center, EMI-Teosant
- Kobe University - Research Center for Urban Safety and Security, RCUSIS

**Sponsors**

- United Nations Development Program, UNDP (DCHP/DRM)

Name	Description	Document / Link
<b>General Documents</b>		
3rd Metro Manila, Mumbai and Beyond	Early findings of the 3rd Program in Metropolitan Manila and Mumbai, 2004.	<a href="#">3rd-Metro-Manila-Mumbai-and-Beyond-2004.pdf</a>
3rd Program Definition ver. 3.2	A planning guide for the 3rd Program, its scope, objectives and implementation framework, S. Matigalinga, R. Posingkayon, P. Benavidez	<a href="#">3rd-Program-Definition-V3-2.pdf</a>
3rd Program one year report	Activities and accomplishments of the 3rd Program after a year of its implementation.	<a href="#">3rd-Program-One-year-report.pdf</a>
3rd un año de implementación	Una evaluación de los logros del Programa 3do luego de un año de implementación.	<a href="#">3rd-un-año-de-implementación.pdf</a>
AF06, Disaster Risk Reduction and Management Implementation Process	This paper, presented at the Asian Forum held in Kobe on Nov/04, summarizes the process of implementation for DRR and DRM followed by the 3rd Program.	<a href="#">AF06-3rd-Implementation.pdf</a>
AF06, Applications of Disaster Risk Management Master Planning	UNEP applications in several participating cities to the Asia Forum are presented.	<a href="#">AF06-DRM-Applications.pdf</a>
AF06, Disaster Risk Management Master Plan Model	Shirley Matigalinga, 3rd Program Director presents in the Asian Forum a Model for Disaster Risk Management.	<a href="#">AF06-DRM-model.pdf</a>
AF06, Indicator System for DRM, application in Metro Manila	An application of a disaster risk management index and an urban seismic risk index for Metro Manila is presented.	<a href="#">AF06-Metro-Indicator-application.pdf</a>
AF06, Sound Practices for RR and RM in Asia	This brochure includes key elements of sound practices for risk reduction and management in Asia.	<a href="#">AF06-DRM-summery.pdf</a>
AF6, MEQA-KNOW a Knowledge base for DRM	A collection relevant information to get your DRM System organized, learn from practices from around the world.	<a href="#">AF06-Metro-Knowledgebase.pdf</a>
City Profile Template	A template to collect standardized information related to URM organization and delivery in megacities.	<a href="#">template-CR.pdf</a>

PDC EMI - City Contacts - Windows Internet Explorer

http://www.pdc.org/en/mediaplatform/contacts.html

PDC EMI - City Contacts

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### Contact Directory

Contact Directory advances direct exchange among 3rd partners, news clerk, practitioners and city officials from 20 megacities around the world, this contact list has been approved by city and by institution. URLs from megacities have also been posted to facilitate internet access.

**Other Partners**

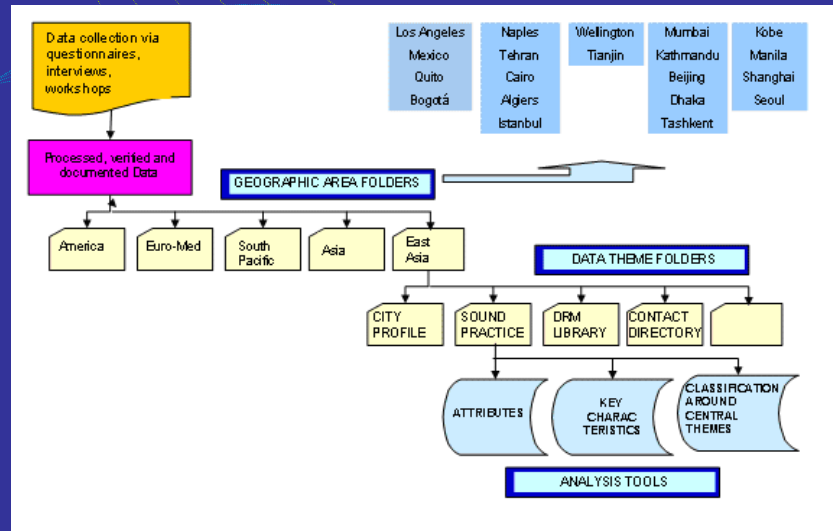
- Earthquake Disaster Mitigation and Research Center, EMI-Teosant
- Kobe University - Research Center for Urban Safety and Security, RCUSIS

**Sponsors**

- United Nations Development Program, UNDP (DCHP/DRM)
- Professionals Associations
- World Bank - Hazard Management Unit, HPMU
- U.N. International Strategy for Disaster Reduction, ISDR

Agency	Type	Contact Name	Title	Contact Info
<b>Barcelona</b>				
University of Catalonia	TECH	Alex Berbat	Director DCHP	URL: <a href="#">www.upc.edu</a> E-mail: <a href="#">alex.berbat@upc.edu</a>
University of Catalonia	TECH	Uliana Centeno		URL: <a href="#">www.upc.edu</a> E-mail: <a href="#">Uliana@sema.upc.edu</a>
<b>Bogota</b>				
Direction Prevention attention de Emergencias DPAG	TECH	Diana Gonzalez	Cooperation Informacion	URL: <a href="#">www.focsa.gov.co</a> E-mail: <a href="#">dgonzalez@focsa.gov.co</a> Phone: +4297414
Direction Prevention attention de Emergencias DPAG	TECH	Fernando Ramirez	Director	URL: <a href="#">www.focsa.gov.co</a> E-mail: <a href="#">fernando@focsa.gov.co</a> Phone: +4297414
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<b>Kathmandu</b>				
Disaster Management Section-DMC	ADPR	Harman Rai	Section Officer	URL: <a href="#">www.kathmandu.gov.np</a> E-mail: <a href="#">hrai@dmpl.com.np</a> Phone: 4238426 Int: 2,33

# MDRM-KB Architecture



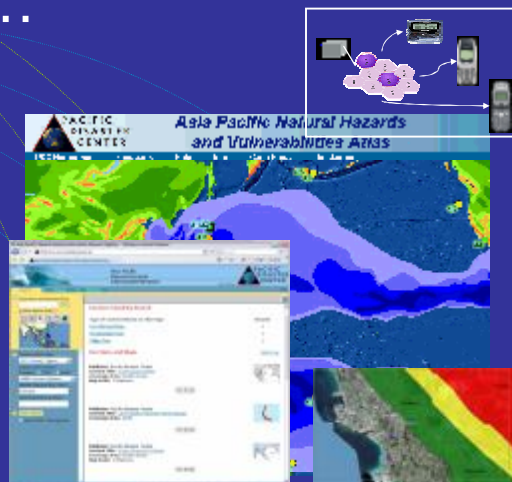
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## In Summary ...

### Reducing Impacts By:

- Integrate, Simplify, & Expedite Processes
- Understand Dangers and Risks
- Disseminate Warnings
- Share Information
- Decide & Act on Latest Assessments



Multi Hazard Information and Warning

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# Contact Information

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<http://www.pdc.org>

Visit APNHIN OSADI at:  
<http://apnhin.pdc.org/>

Visit ASEAN OSADI at:  
<http://www.pdc.org/osadi>

Visit DRM Knowledge Base at:  
<http://www.pdc.org/emi>

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**TFEP02/2008A/13**

## **Summary Report On The Dialogue**

Submitted by: Viet Nam

**Dialogue among APEC economies, business community,  
key international and regional partners  
on emergency preparedness**

**Ha Noi, Viet Nam  
24-25 April 2008**

## **SUMMARY REPORT ON THE APEC WORKSHOP**

### **Dialogue among APEC economies, business community, international and regional partners on emergency preparedness**

*(24-25 April 2008, Ha Noi, Viet Nam)*

The APEC TFEP workshop entitled “**Dialogue among APEC economies, business community, international and regional partners on emergency preparedness**” was held in Ha Noi, Viet Nam from 24-25 April 2008. Participants from APEC member economies, the APEC Secretariat, the World Food Program, UN ISDR, Pacific Disaster Center, and businesses attended the workshop.

Main objectives of the Workshop were to strengthen coordination and cooperation among APEC economies, business community and key international and regional partners on disaster risk reduction, emergency preparedness; to discuss possible cooperation mechanisms among the above mentioned stakeholders; and to improve capacity for APEC member economies, especially the developing ones, through experiences and lessons sharing with international relevant institutions.

The Workshop was opened by HE. Vu Dung, Deputy Minister for Foreign Affairs of Viet Nam and Lieutenant General Tran Quang Khue, Vice Permanent President, National Committee for Search and Rescue. H.E. Ambassador Juan Carlos Capunay, APEC Executive Director also delivered opening remarks. The workshop was then divided into three main sections:

#### **Session outcomes and key issue**

#### **Session 1: Disasters in the Asia – Pacific region and difficulties for APEC members in risk reduction and emergency preparedness**

Four presentations shed a light on the common hazards, disasters and vulnerability in the Asia-Pacific region. These were followed by difficulties and challenges in coping with



those problems, particularly from grass-root level. During this session APEC Secretariat reviewed the on-going and future works of APEC in the area disaster management and emergency preparedness in APEC, including the current on-going second stocktake process, which is meant to identify economies emergency preparedness capacity building needs.

**Session 2: Information and experiences sharing on risk reduction and emergency preparedness among member economies, business community and key international and regional partners.**

Representatives from Viet Nam, Thailand, Chinese Taipei and the Pacific Disaster Center shared their experience in building up a comprehensive preparedness strategy for risk disaster reduction and lessons learnt in rescue, relief and recovery activities. The application of information and technology in those activities was also highlighted.

**Session 3: Future for collaboration among APEC member economies, business community and key international and regional partners**

This session envisaged the future vision of disaster management and emergency preparedness and response as well as potential collaborative frameworks. The role of private sector in responding to emergencies is also mentioned and discussed.

**After two days, participants agreed on the following recommendations:**

1. Note that climate change vulnerability and adaptation are key issues for the Asia Pacific region in the future.
2. Stress on the need to further engage the private sector (e.g. insurance, tourism, transport, micro economic financing schemes) on APEC's endeavor to enhance TFEP's effort in emergency preparedness. Encourage the APEC Emergency Management CEO Seminar 2008 to further explore the possibility for cooperation between APEC and the private sector on this issue. Recommend SOM to take into account the involvement of the private sector in risk reduction

- and response in drafting the Corporate Social Responsibility (CSR) Report in 2008.
3. Recommend that APEC Emergency Management CEO Seminar 2008 look closely at disaster resilient infrastructure and the UN Hyogo Framework for Action 2005-2015. Recommend that TFEP give priority to analyzing cost and economic impacts of disasters, including damage analysis and loss assessments. World Bank analysis is a source for reference.
  4. Emphasize the need to institutionalize cooperation and coordination between APEC TFEP and international organizations, particularly UN/ISDR (ISDR Asia Partnership), Pacific Disaster Center, World Bank, and NGOs such as the Red Cross Society. Encourage to explore the applicability of existing mechanisms for disaster information sharing, such as ASEAN DISC Net, EMI knowledge base and PDC Asia Pacific Natural Hazards Information Network as models for APEC's activities
  5. Encourage TFEP projects for capacity building for the local authorities often hit hard by natural disaster.
  6. Encourage projects that promote coherence, preparedness and response such as "Asia Pacific Emergency Preparedness and Response initiative - WFP".
  7. Propose further dialogue between public and private sectors as well as NGOs partnership in disaster risk reduction and recovery.
  8. Advocate that disaster-prone economies mainstream disaster risk reduction policies into their long-term development plans
  9. Outcomes of the Dialogue be sent to TFEP meeting and TFEP Emergency Management CEO Seminar 2008 (Peru, August 2008). Report from China Study Tour and report from Russia on a new National Crisis Management Centre in Moscow also be sent to these events.

Finally, Peru indicated that, as a ‘next step forward’ for the APEC Task Force for Emergency Preparedness, the APEC Emergency Management CEO Forum 2008 would convene in Peru at a time and date to be announced, possibly August 11-13 in Lima.

In conclusion, Mr. Do Van Son, Deputy Chief of the Viet Nam’s National Committee of Search and Rescue delivered concluding remarks, summing up what have been discussed and achieved in three workshop sessions and noted that the 1st draft of the workshop report would be circulated for TFEP’s comments and the final report would be submitted to the coming TFEP meeting and CEO’s Seminar for information. Mr. Son also thanked member economies for their active participation and valuable contributions to the Workshop.

Member economies appreciated the discussion and outcomes of the Dialogue and thanked Viet Nam very much for her good organization and hospitality. Members also commented on the capability and capacity of the Vietnam emergency sector authorities.