



Japan  
International  
Cooperation  
Agency

# Formulation of Area Business Continuity and Recovery Programs in Partnership of Public and Private Sector

*Dr. Hitoshi BABA*

Ph.D. Environment and Resource Engineering  
Senior Advisor, Japan International Cooperation Agency  
email: [Baba.Hitoshi@jica.go.jp](mailto:Baba.Hitoshi@jica.go.jp)



## High-Level Dialogue Communiqué Ahead of the Wave: Leading the Way to Resilience GPDRR, Geneva, May 2013

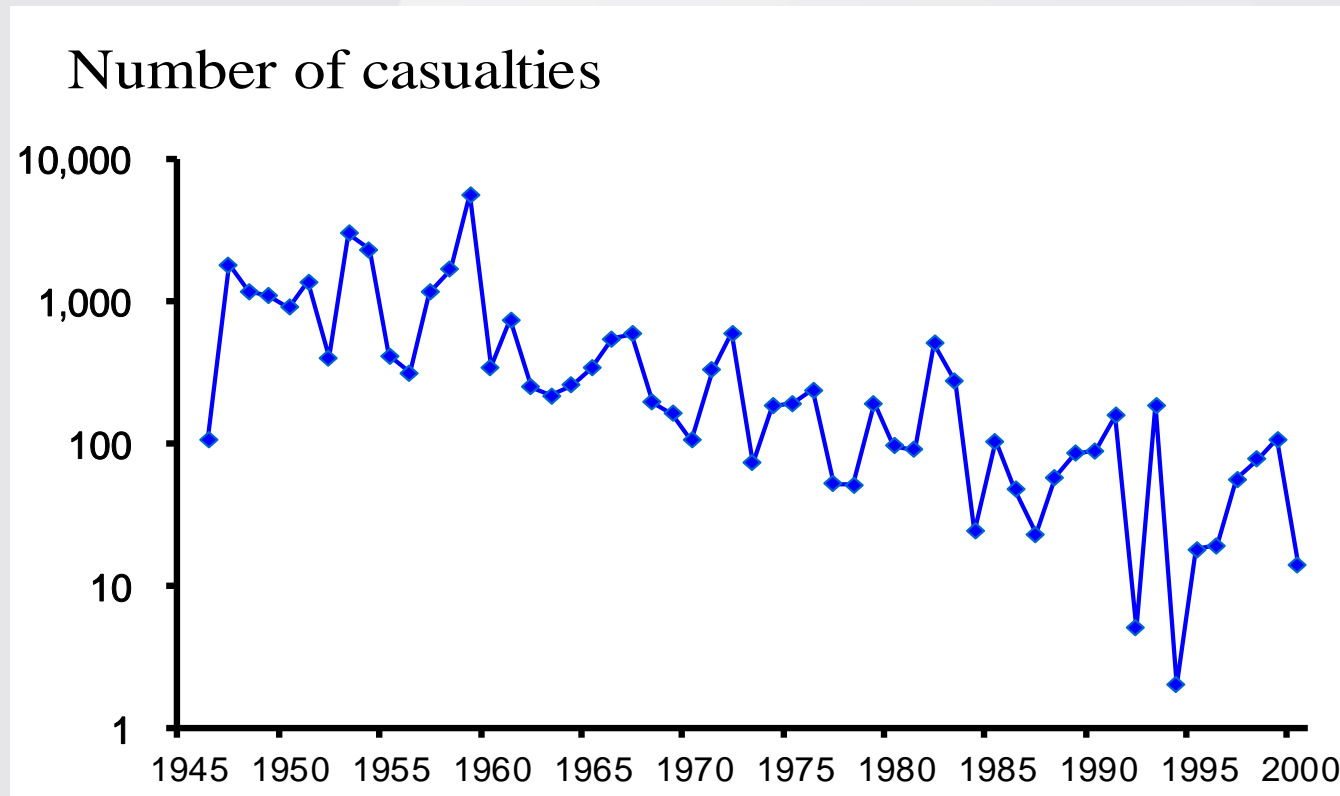
1. Advocate for disaster risk reduction and the building of resilience to be a central part of the future we want in sustainable development; the post-2015 development agenda; and the mitigation of, and adaptation to, climate change. All of which are to be supported by a post-2015 framework for disaster risk reduction.
2. Call on countries to develop nationally agreed standards for hazard risk assessments **especially of critical infrastructure (including schools, health centers, electricity and water supply systems, nodal ITC data centers, and road and transport systems).**
3. Start a global safe schools and safe health structures campaign in disaster-prone areas with voluntary funding and commitments to be announced at the World Conference for Disaster Risk Reduction for 2015.
4. Call on the **private sector** to integrate disaster risk considerations in risk management practices.
5. Stimulate collaboration among the **public and private** sectors at local and national levels in risk management.

## Chair's Summery

### 4<sup>th</sup> session of the GPDRR, Geneva, May 2013

Highlighted action points:

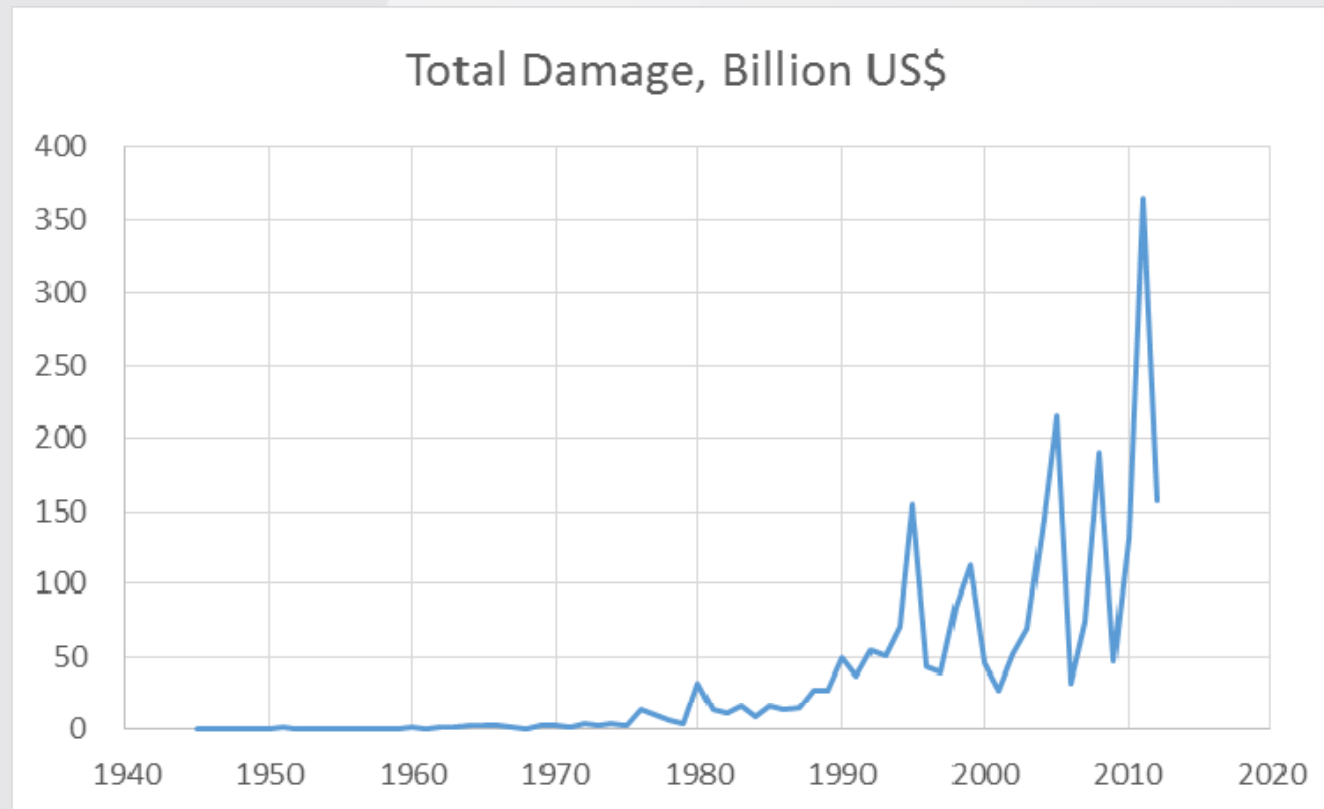
- **Assessing Risk;** global economic losses, small local events
- **Targeting the root causes of risk:** price fluctuations, unemployment, violence, conflict, health burden
- **Including Communities for results:** women, youth, disabilities
- **Leading at the local level:** municipalities, schools and hospitals
- **Recognizing private sector as actor and partner:** economic growth, resilient business and investment
- **Strengthening risk governance:** communities and local governments
- **Strengthening scientific and technical support:** analysis, knowledge, data, tools, method
- **Building mutually reinforcing agendas:** sustainable development, environment, climate change impact, economic and social development



This is the significant outcome of the comprehensive flood risk management under the rapid urbanization

## Increasing Economic damage by flood

### Economic Damage by Climatological Disasters, global total



Source: EMDAT

## Why Area BCP ?

- Increasing economic loss by disaster
- Expanding impact of business interruption on from local to global economy
- Awaking importance of the business continuity in disaster management
- Agglomerating industries in areas vulnerable to natural disasters
- Continuity of operations in industry agglomerated area is depending on:
  - Capacity of each enterprise trying to continue operation or to promptly restart the business, based on the BCP if prepared,
  - External resources, such as energy, water, transportation, communication, which are critical for operations of industries in the area at risk of disaster,
  - Area scale management in coordination between public and private sectors of preparedness measures and contingency plans.
- Two aspects of Area BCP:
  - **External Resource(s) management** for business continuity of companies of the area
  - **Regional disaster prevention** (Risk Reduction) by redundant resource management (backup system)

## Why ASEAN ?

- ASEAN is the region where industrial agglomerations are taking place and the regional economy is interactively expanding
- The industrial agglomeration however could increase vulnerability and risk of natural disasters
- In recent large scale disasters in ASEAN and JAPAN showed the evidences of economic and social damages that affected not only in the local scale but in regional and global scale
- Japan, under the cooperation with ASEAN, is a responsible nation who can provide with DRR precedents in practice from the recent large events
- ASEAN is assertively taking actions on disaster management under the regional coordination framework of AADMER

## Agreed to initiate the Area BCP project in ASEAN

### Industrial Agglomerated Area



SOURCE: BANKOKPOST

### Chain of Supply and Trade



### Risk of Business Termination



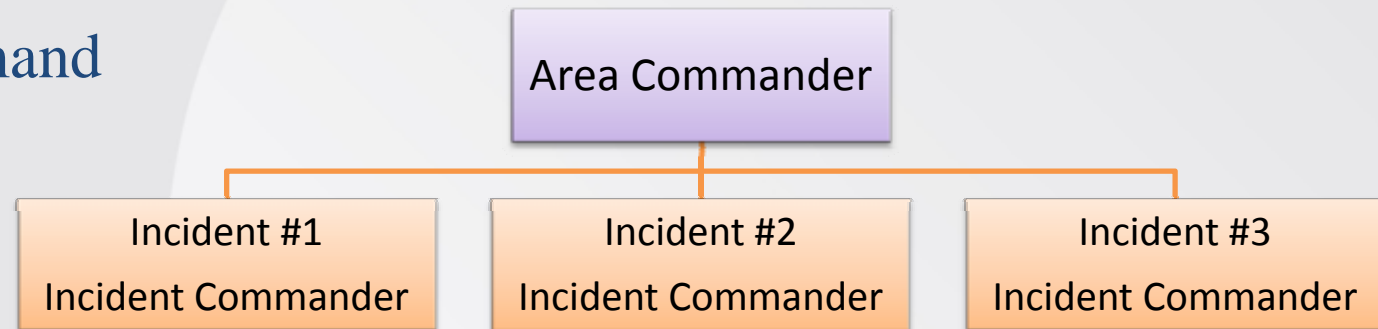
### Economic loss and impacts

- The 2011 the Great Eastern Japan Earthquake and the Flood of the Chao Phraya reminded **high risks of business interruption** by natural disasters
- Impacts spreaded to **the national, regional and global level** by disruption of **supply chains**.
- **Increasing Economic loss** by recent natural disasters hampers sustainable development in national, local and community level.

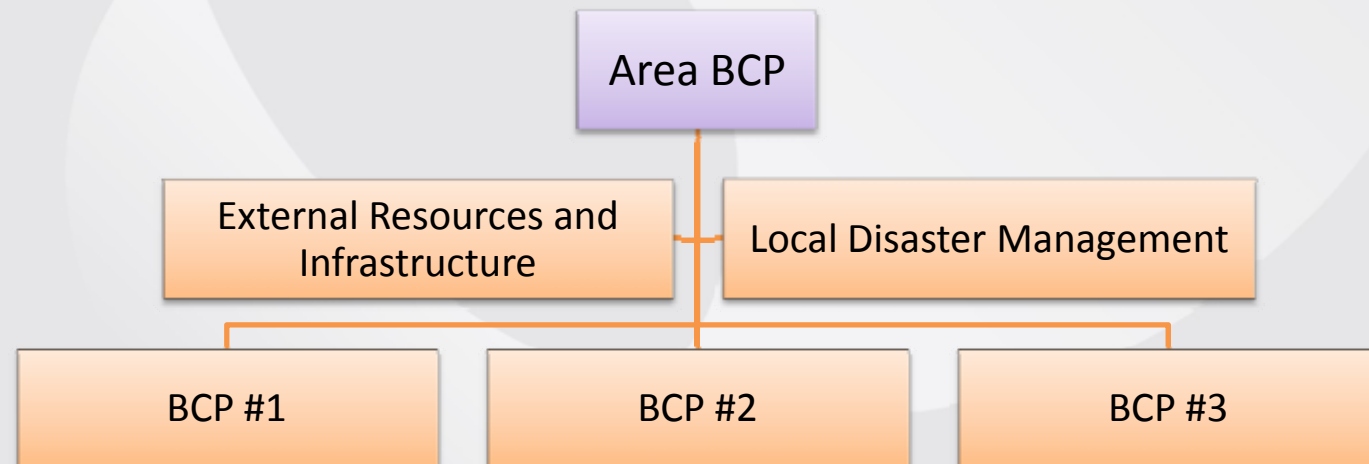


## Concept of Area BCP

- Area Command



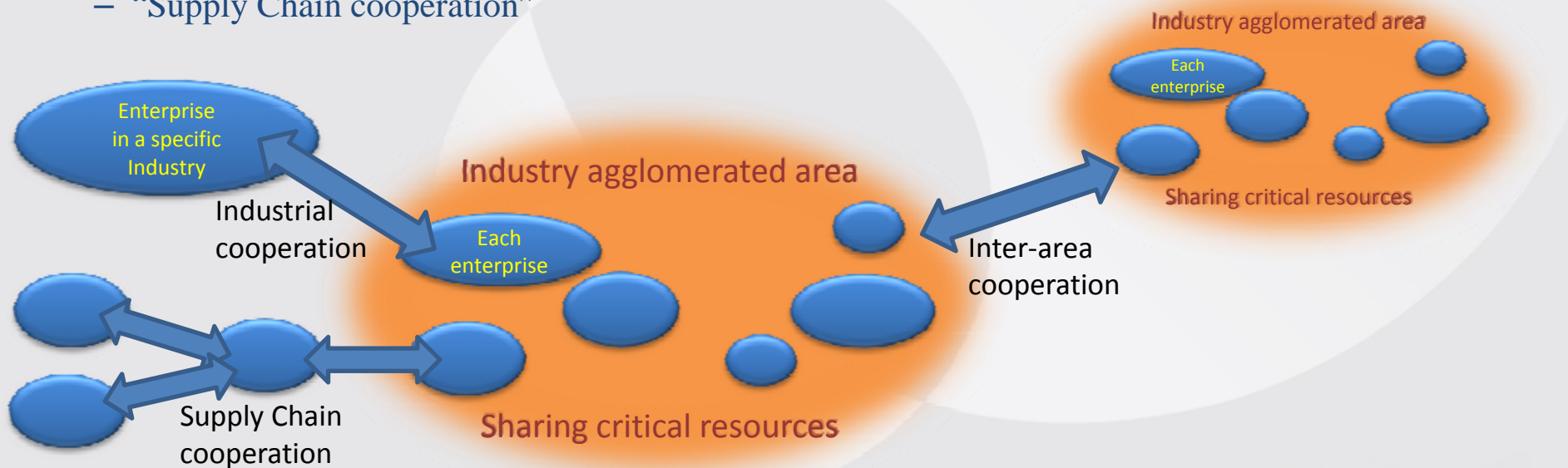
- Area BCP



## Concept of the Area BCP

Various means of cooperation, unified management to share critical resources for business continuation

- Sharing the External Resources under
  - “Industrial agglomeration area cooperation” and
  - “Inter-area cooperation”
- Redundant operation of each enterprise or industry by
  - “Industrial Cooperation” and
  - “Supply Chain cooperation”





**AHA CENTRE**  
ASEAN Coordinating Centre  
for Humanitarian Assistance  
on disaster management

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# “Natural Disaster Risk Assessment and Area Business Continuity Plan Formulation”

Joint Project by JICA and AHA Centre



**AHA CENTRE**  
ASEAN Coordinating Centre  
for Humanitarian Assistance  
on disaster management

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## Objectives of the project

- Assess the **natural disaster risks of 10 ASEAN Member States**
- Share **the concept** of Area BCM and develop **methodology** for making Area BCP through the pilot studies in Indonesia, the Philippines and Viet Nam
- Develop **Area BCP** for Pilot Industrial Agglomerated Areas
- **Disseminate and promote** Area BCM and its benefit

# Components of the project

## ASEAN 10 Countries (Component 1)

- Mapping of industrial agglomerated areas
- Assessment of vulnerability of infrastructure of distribution system
- Assessment of natural disaster risks of countries

## Indonesia, Philippines, Viet Nam (Component 2)

- Assessment of natural disaster risk of pilot industrial agglomerated areas
- Formulation of Area BCP for the pilot areas based on business impact scenario
- Preparation of guidelines

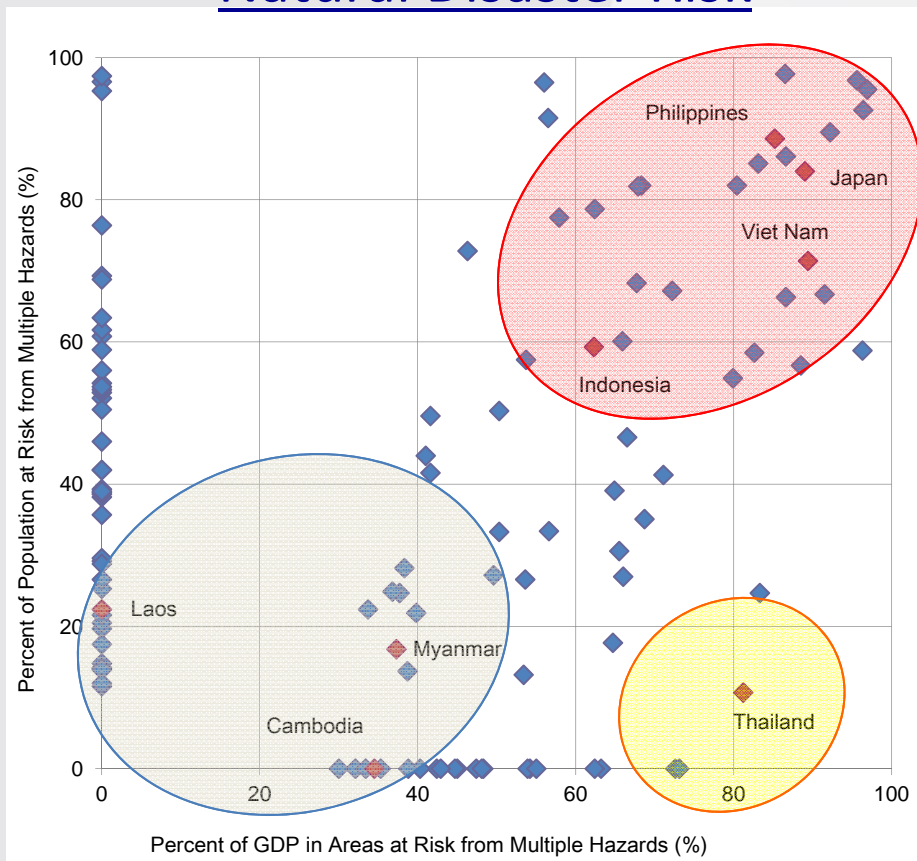
- Advisory Committee (Japan)
- Panel of Experts (ASEAN)

## Dissemination and Promotion

- Workshops
- Seminars
- Leaflets
- Video

# ASEAN at High Risks

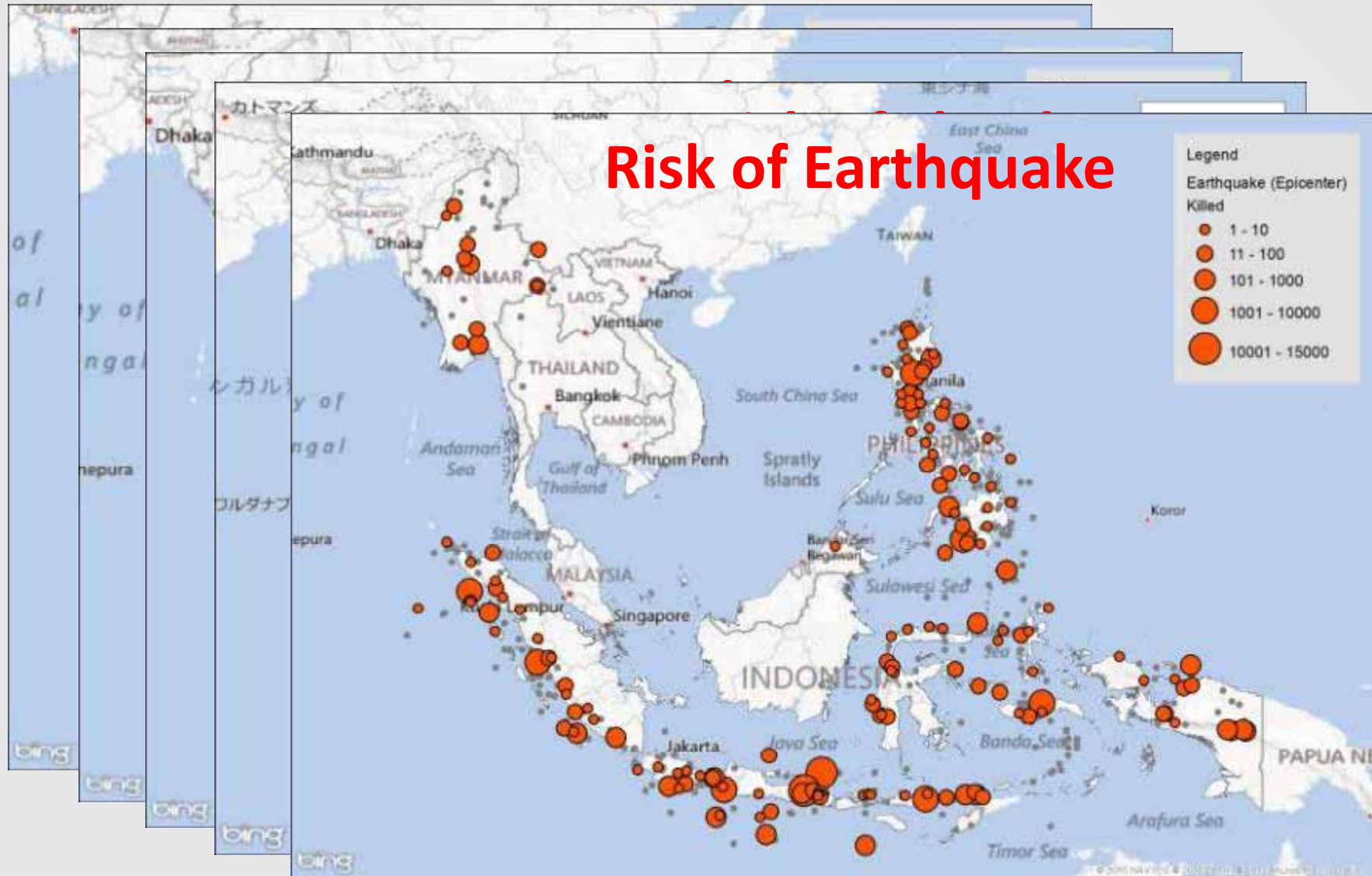
## Natural Disaster Risk



- \* Hydro-meteorological Hazards
  - ✓ Floods, Typhoon, Costal Storm Surges
- \* Geological Hazards
  - ✓ Earthquakes, Volcanic Activities and Emissions, Landslides
- \* Tsunamis

Prepared by the Study Team used information form Natural Disaster Hotspots, Global Risk Analysis, The World Bank, 2005.

# GIS Mapping of Disaster Risks



# Pilot Site, Indonesia

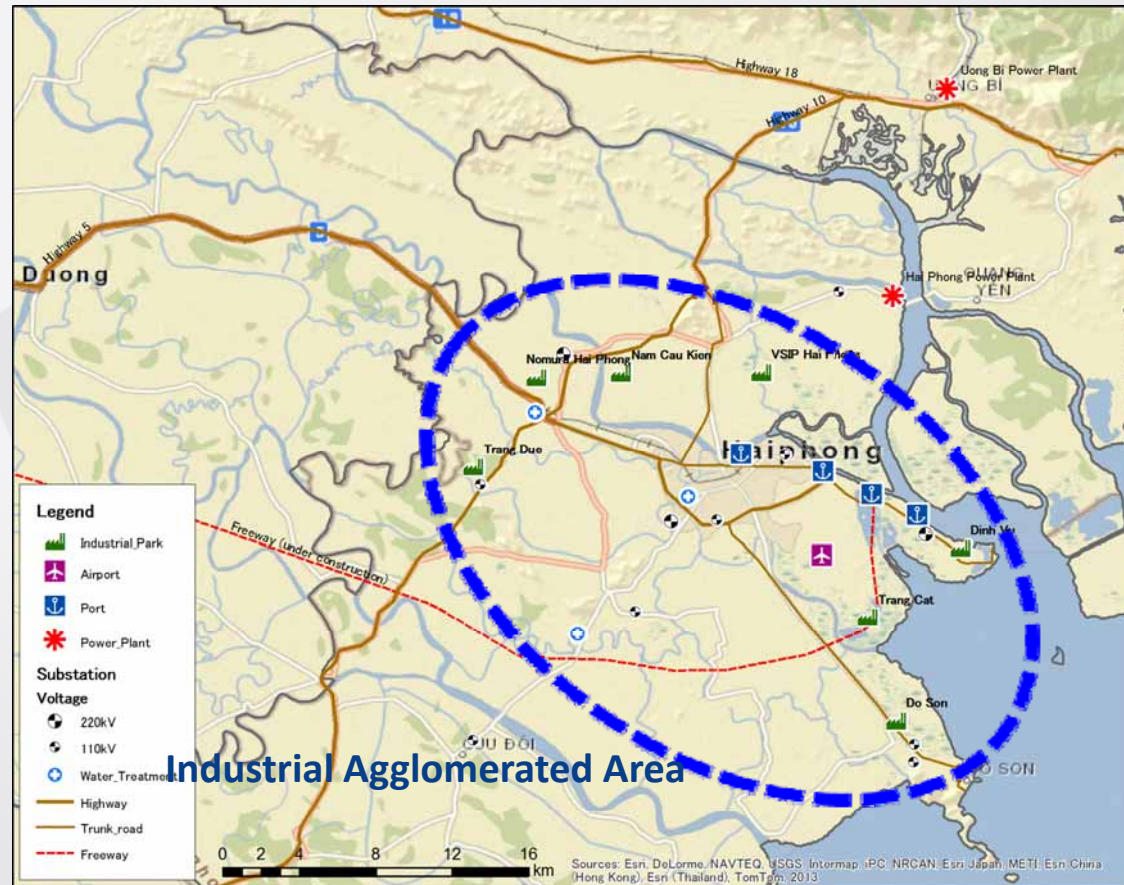




# Pilot Site, the Philippines



## Pilot Site, Viet Nam

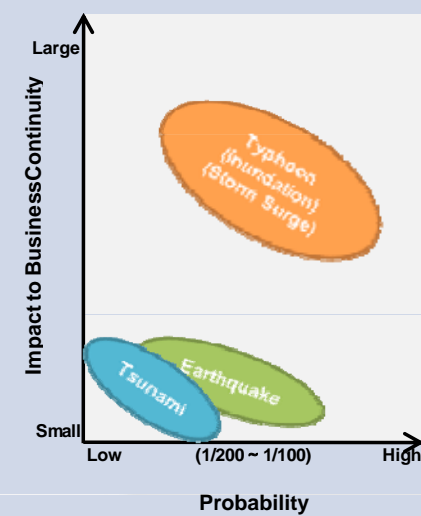
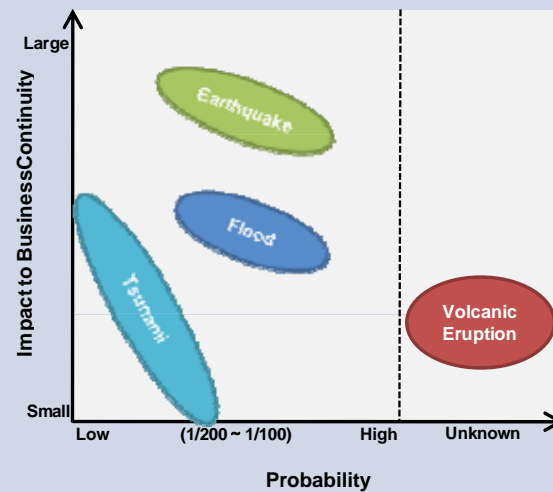
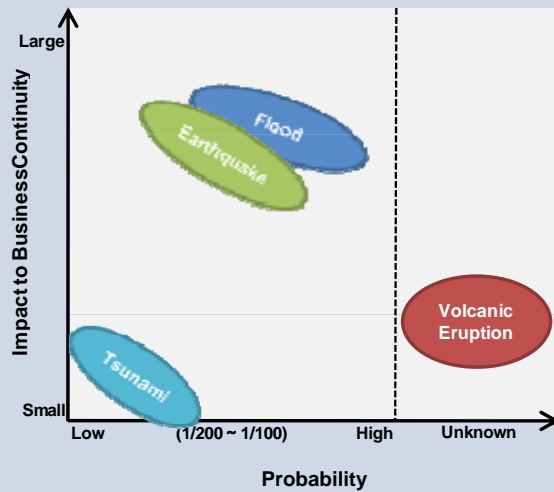


## Risks and Scenario

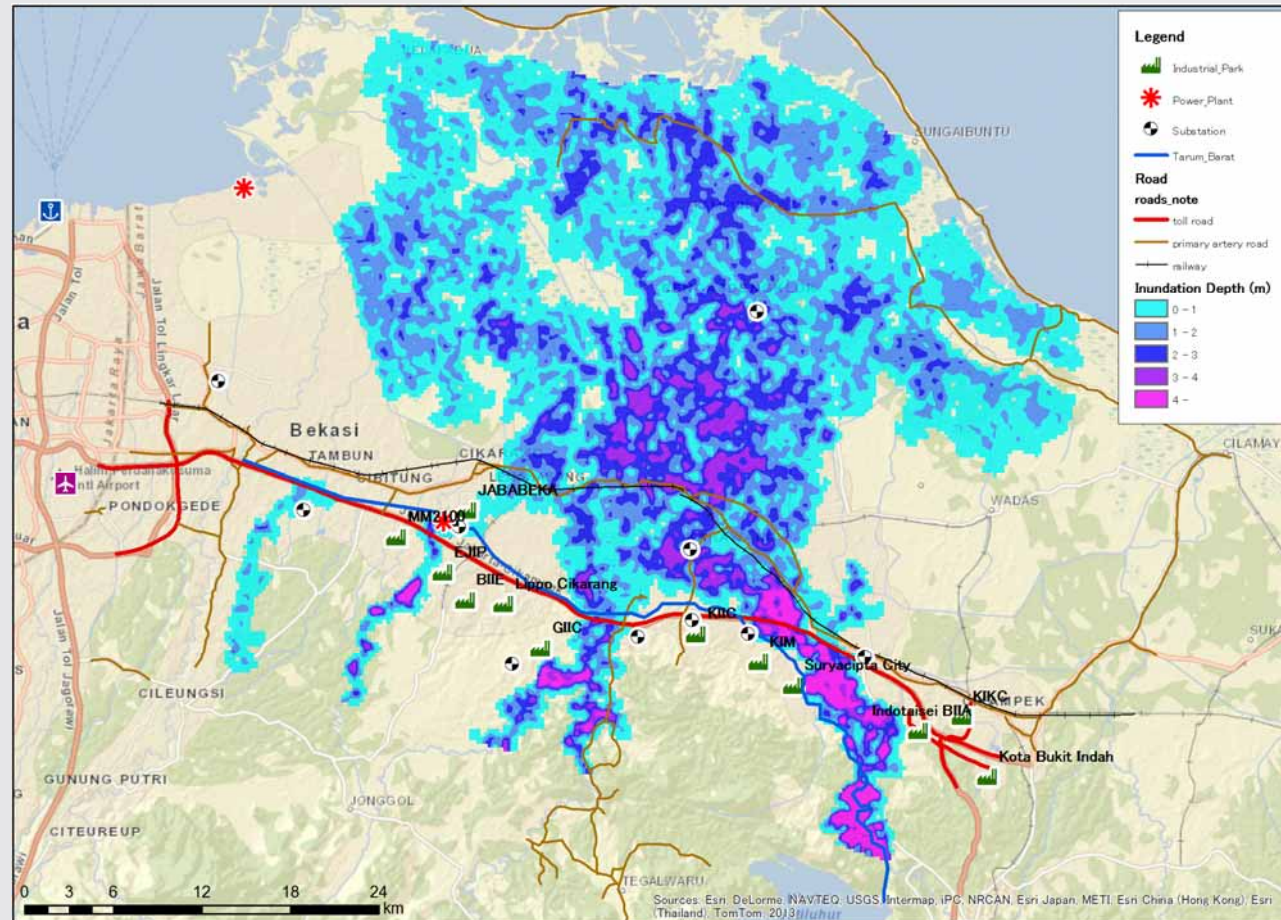
**Flood** is the predominant hazard in Bekasi and Karawang, Indonesia

**Earthquake** is the predominant hazard in Cavite, Laguna and Metro Manila, Philippines

**Inundation and Storm Surge by Typhoon** is the predominant hazard in Hai Phong, Vietnam

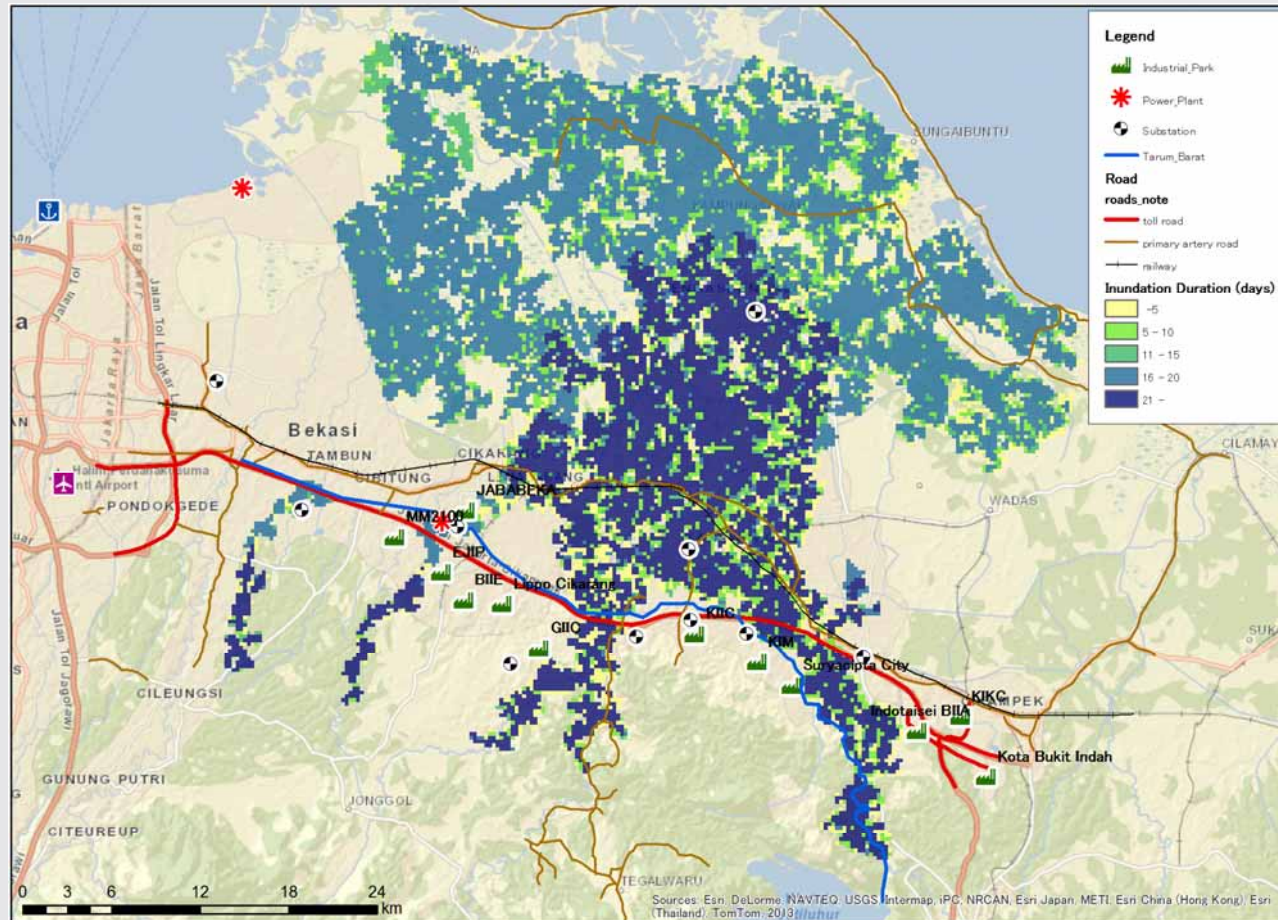


## Inundation by Flood (Depth)



- Maximum inundation depth is more than 4m

## Inundation by Flood (Duration)



- Inundation duration is more than 2 weeks

## What is an Area BCP

- **Definition of Area BCP**

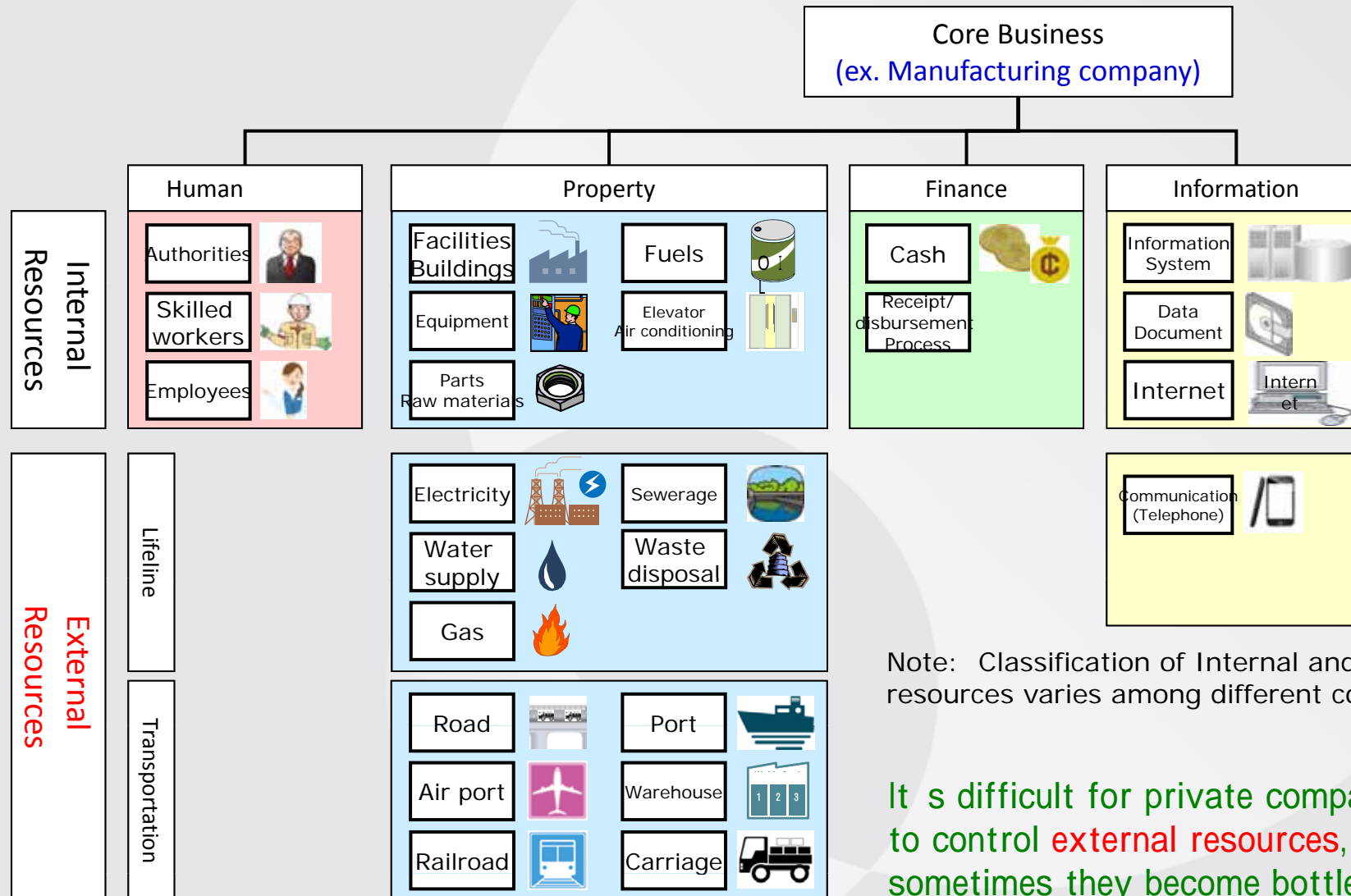
Area BCP is a framework and direction of actions of stakeholders including individual enterprises, industrial area managers, local authorities and administrator of the infrastructures in order for business continuation of a certain area as a whole such as an industrial agglomerated area.

- **Geographical scope of Area BCP**

It depends on local conditions of vulnerability, risks and impacts. An industrial park, an industrial agglomerated area, and a nation can be its scope.

- **Area BCP should be improved through Area Business Continuity Management (Area BCM).**

# Business Resources

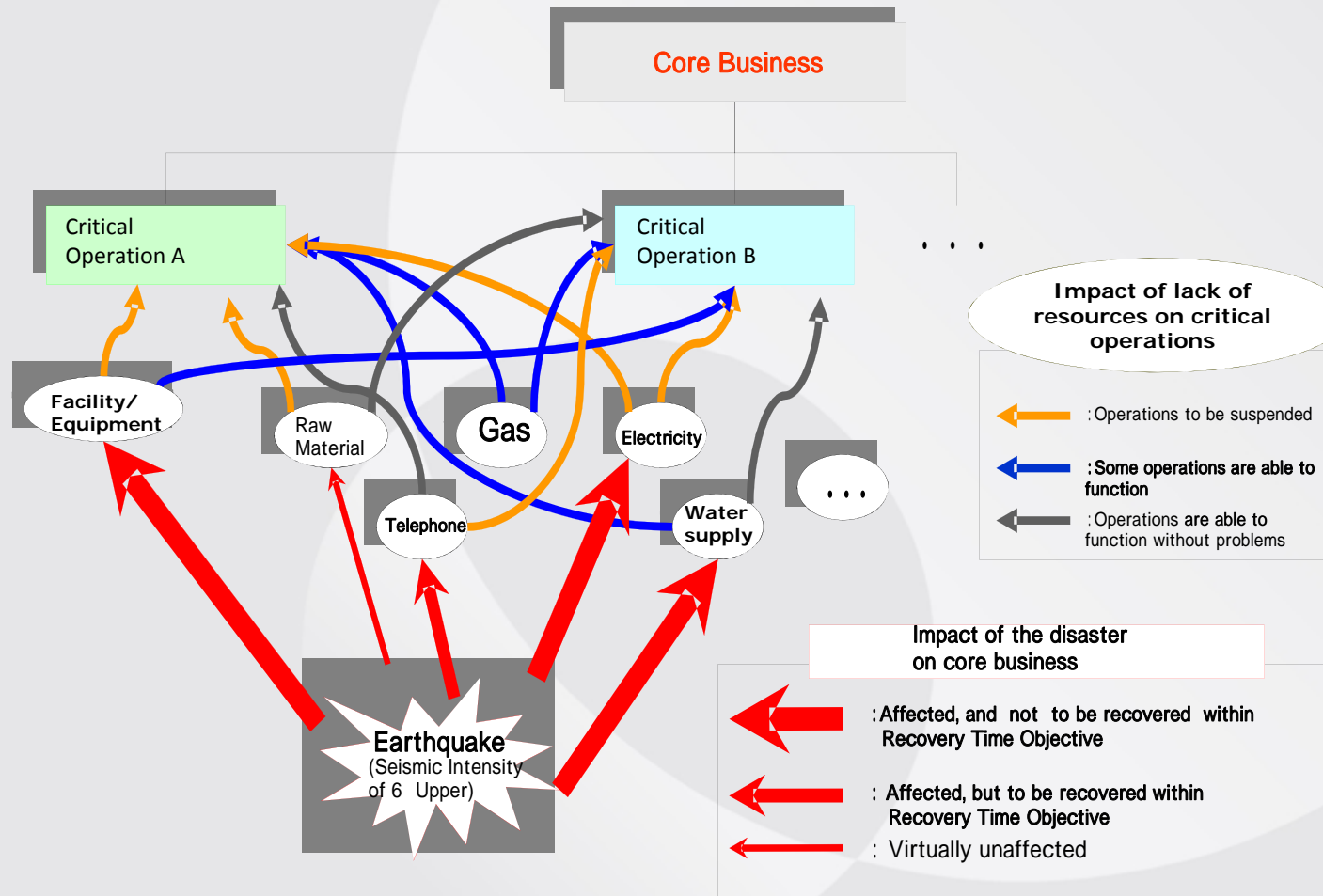


Note: Classification of Internal and External resources varies among different companies

It is difficult for private companies to control external resources, and sometimes they become bottleneck.

# Business Impact Analysis = BIA

(Analysis of damages to business resources and impact on core business)





## Information for Discussion WS1

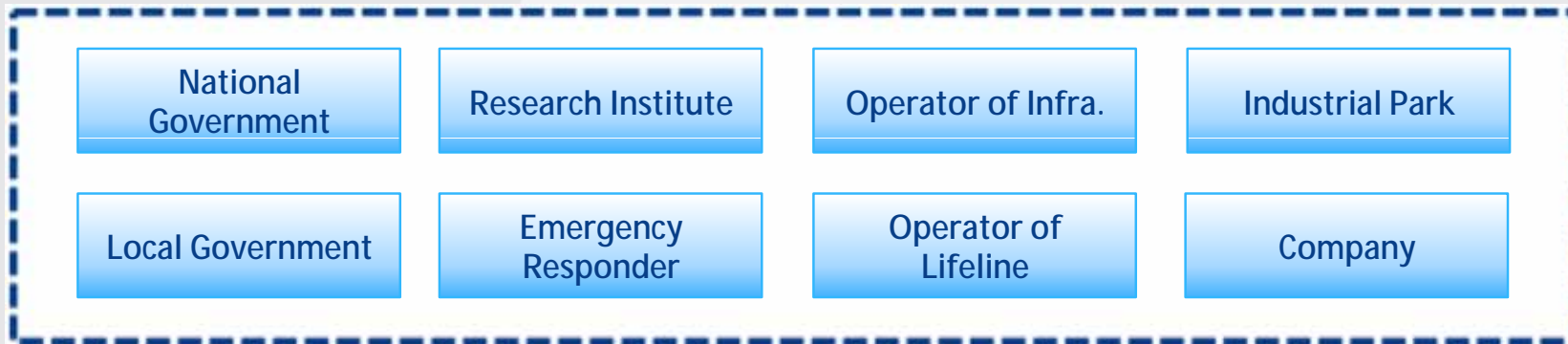
EXAMPLE

### Scenario

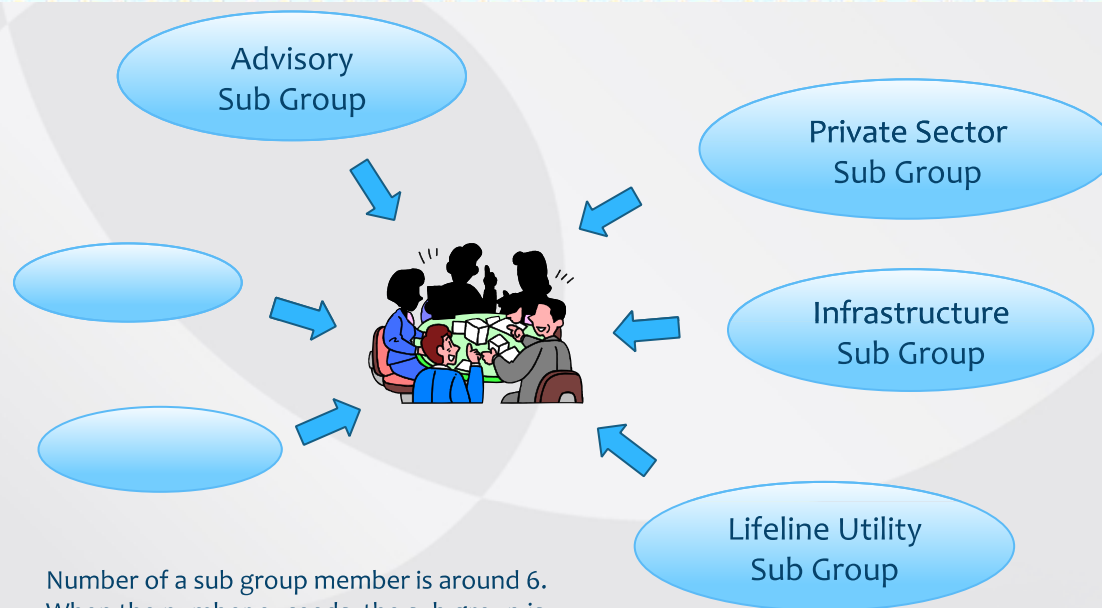
- Industrial parks are not inundated
- Freeway and highway 1 are closed more than 2 weeks due to inundation
- Karawang City and surrounding area are inundated more than 2 weeks
- Substation in Kawawang City is inundated over 2 meters
- Some of base stations of telephone / mobile phone stop their operation because of the shortage of electric power
- Many employee of the factories will be absent because of the inundation of their houses

# Working Group Members

## Organizations Consisting of Working Group



## Divide into Sub Groups



Number of a sub group member is around 6.  
When the number exceeds, the sub group is  
Divided into two or more.

## Topics of Discussion at Workshops

Workshops	Topics of Discussion
WS1	<ul style="list-style-type: none"> <li>■ Hazards Affecting the Industrial Agglomerated Area</li> <li>■ Business Environment during Disaster Situation</li> <li>■ Limitations of BCP at Individual Level</li> </ul>
WS2	<ul style="list-style-type: none"> <li>■ Impact of Disaster on Industries in the Industrial Agglomerated Area</li> <li>■ Weakness of the Industrial Agglomerated Area for Business Continuity</li> </ul>
WS3	<ul style="list-style-type: none"> <li>■ Direction of Approaches as the Industrial Agglomerated Area</li> <li>■ Future Action Plan</li> </ul>

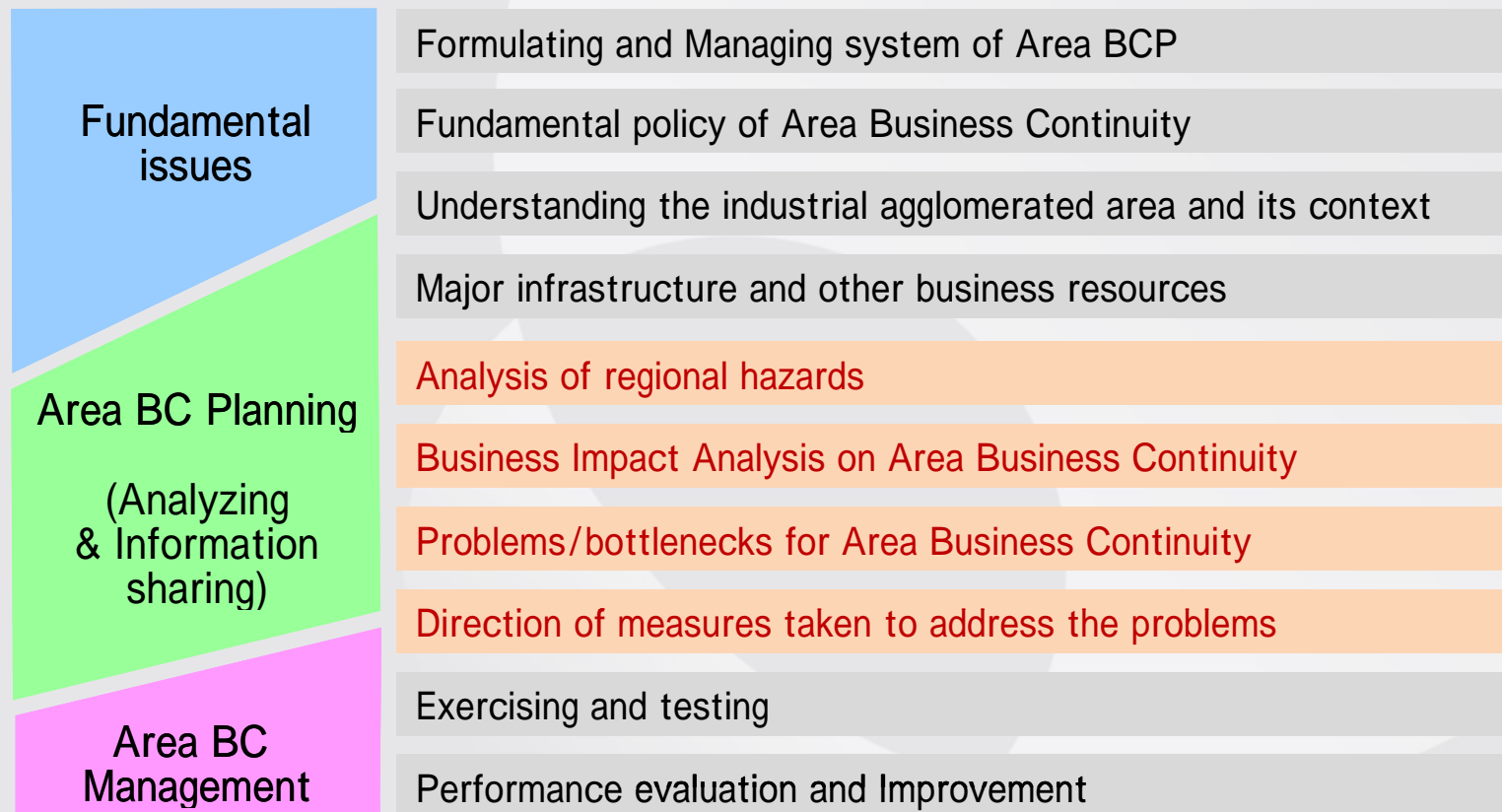


**Sharing  
 a Common Destiny !!**

## Method of Area BCP Formulation

**The fundamental idea of ISO22301(\*) is referred.**

(\*) ISO22301 = Societal security — Business continuity management systems — Requirements



# Planning of Area Business Continuity

## Area BCM Framework

Understand  
Vulnerability and  
Risk of the Area

Strategy of Area  
BCM

Formulate the Area  
BCP

Implement measures  
and Evaluate the  
performance

## Planning Guide of Area Business Continuity

Area BCM organizational structure

Leading industry of the area

Dominant hazard, risk and impact

Business impact analysis

Challenges in the Area BC

Direction of actions

Area BCP, including preparedness  
and contingency plans

Performance evaluation

Continuous improvement

Definition of Area BCP,  
Area BCM

- Multi Hazard Assessment
- Hazard Simulation
- Risk mapping
- Disaster scenario

# Schedule of the Project

Year and Month	2013												2014												
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9				
Data / Information Collection						[Green Bar]																			
Hazard / Risk Assess & Scenarios							[Green Bar]																		
Area BCP Formation						[Blue Circle]	[Blue Circle]						[Red Circle]	[Red Circle]	[Red Circle]										
Guideline																									

Manila Dec. 03  
 Hai Phong Dec. 11  
 Bandung Dec. 17

Forming of WG

Developing Area BCP

Key : : Meeting : Workshop