



The Impact of Disruptive Disasters on Socioeconomic Activities and the Effectiveness of Regional BCM

“Discussions through a case study of the Area-BCM project (SATREPS) to build Interoperability and enhance resilience for sustainable employment”

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Background: Emerging Flood Risks in Socioeconomic Activities

Impacts of flood disaster has been getting severe with higher frequency by climate change

Germany (July 2021)



Newsweek JAPAN: (<https://www.newsweekjapan.jp/stories/world/2021/07/1201300.php>)

Turkey (August 2021)



AFP BB News (<https://www.afpbb.com/articles/-/3361755>)

Japan (August 2021)



NHK: <https://www3.nhk.or.jp/news/html/20210820/k10013213441000.html>

Thailand (September 2021)



<https://www.reuters.com/world/asia-pacific/thai-volunteer-takes-skies-drop-supplies-flood-victims-2021-09-28/>

Australia (March 2022)



Credit: [Wes Thompson, YouTube channel](#)

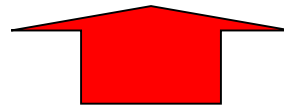
Pakistan (June 2022)



https://www.jrc.or.jp/international/news/2022/0906_028257.html

Background: Major flood in Thailand [Jul.-Nov., 2011]

“the connected the dots”



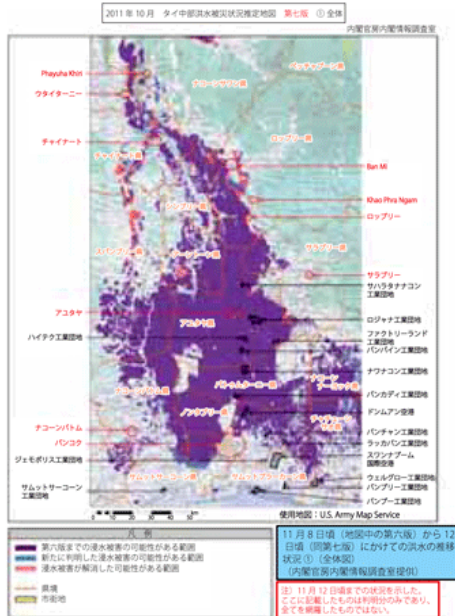
- Climate change as one of macro factors
- Concentration of and increasing interdependencies among urban functions
- Rapid growth of population in the large cities
- Delayed disaster information sharing among stakeholders
- Lack of synergies and interoperability among individual BCPs/BCMs

Cascading disaster damages through global supply chain and limitations of individual BCP(Business Continuity Plan) had been recognized.

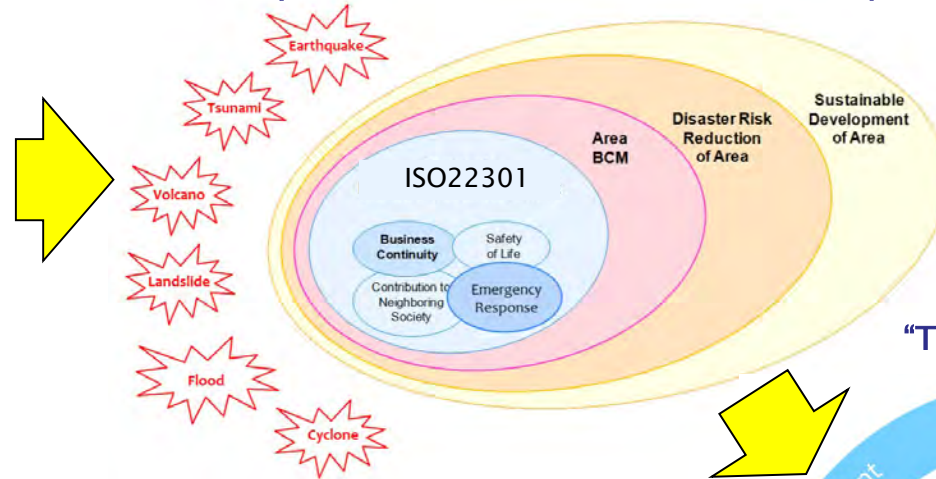
Case Study: SATREPS Area-BCM Project

Resilience enhancement of local industries as a sustainable platform for well-being of people

2011 Southern Thailand flood as a trigger event for Area-BCM



Limitation of individual BCMs with ISO22301 and necessity for Area-BCM for sustainable development*



“To be” of Area-BCM*



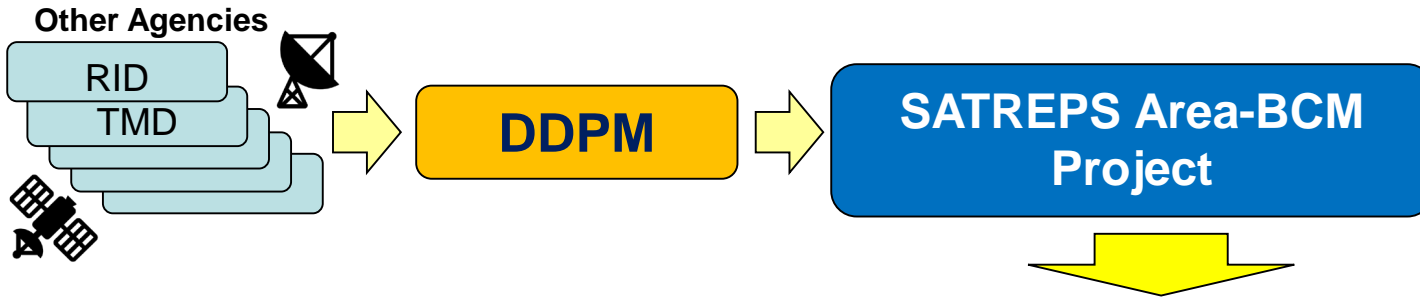
<http://www.meti.go.jp/report/tsuhaku2012/2012honbun/html/i2310000.html>

- The scope of our project includes disaster impacts of urban floods in the Bangkok and surrounding areas where socio-economic functionalities have been concentrated, and chain repercussions of disaster impacts in important production & logistics facilities in Thailand spread through global supply chains.
- We position those factors as our emerging disaster risks to be cared of and establish risk management operations with the Area-BCM framework.

* Planning Guide for Area Business Continuity[Area BCM Toolkits] JICA et.al

Objectives: Increase awareness of & readiness for flood risks

Resilience enhancement with incentives for sustainable society



- Disaster and Asset-Resource Visualization
- Business & Community Impact Analysis
- Public Private Partnership-based Framework

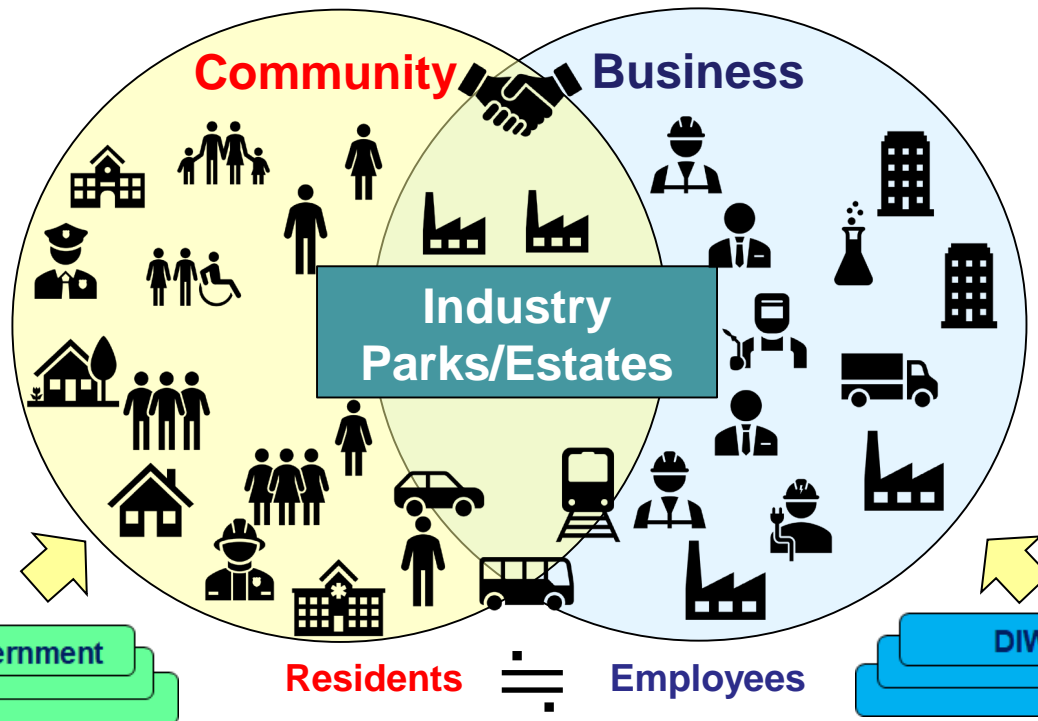
Increase awareness of the people in the community & business



Understand vulnerabilities and discuss how to work together for resilience



Prepare community & business continuity plan for sustainable society and start actions



Project Structure Overview: 4 Major R&D Items

Project Overview (Thailand-Japan Joint Team)

Research Item 1 : Disaster Risk Analysis and Assessment

- Data definition/acquisition and analysis/assessment
- Development of analysis/assessment framework for important risk factors
- Development of GIS-based tool-kit

Research Item 0 : Community Research

Clarification of relationship changes between enterprises and community by disasters and providing fundamental information

Research Item 2 : Business Impact Analysis

- Structural clarification and evaluation of the existing BIA frameworks
- Development of BIA framework and evaluation sheets
- Development of GIS-based tool-kit

Research Item 3 : Establishment and expansion of operational structure for Area-BCM

Module 3. 1 Establishment of operational structure

Development of establishment and expansion plans based on stakeholders and needs identifications

Development of training and exercise program through workshops

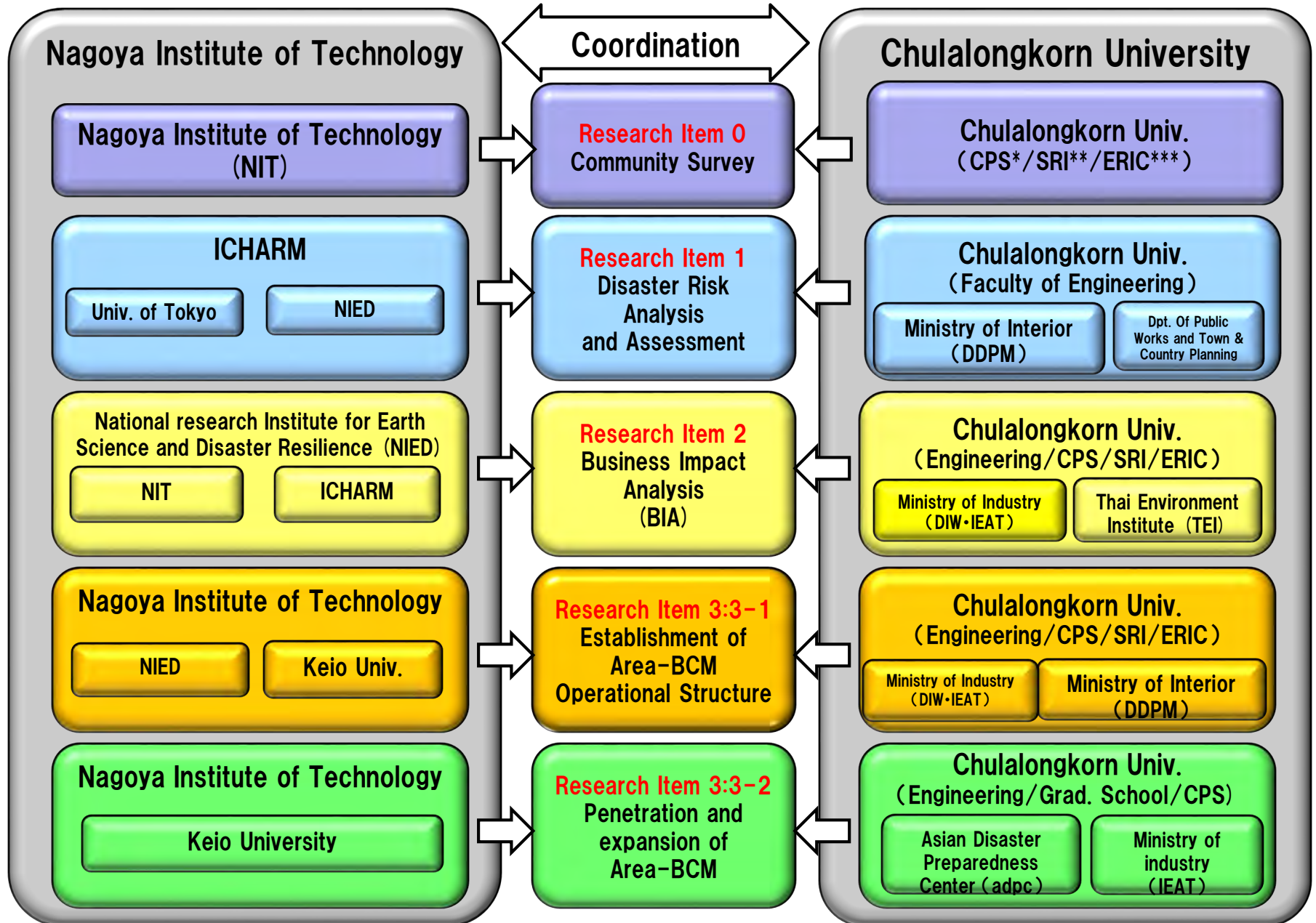
Implementation of training and exercise program into other sites and preparations for sustainable expansion to other areas

Module 3. 2 Penetration into and expansion to other areas

Project Objective : Establishment of a platform for sustainable economic growth through disaster resilience enhancement at industry complexes in Thailand

Project Structure Overview: Organizations

Project Overview (Thailand-Japan Joint Team)

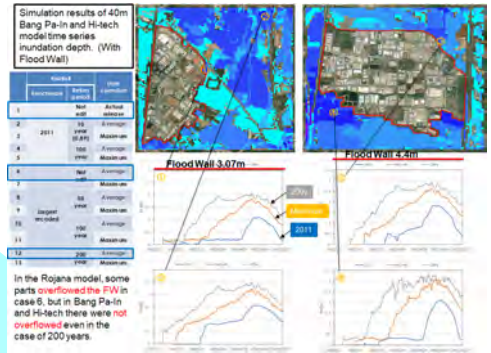


*College of Population Studies **Social Research Institute ***Environment Research Institute

Approach: Expanding Scope of Flood Risk Management

Impact areas of flood are expanding and multidisciplinary approach is required

- Flood Monitoring
- Flood Forecasting
- Hazard Mapping
- Water Management
- Hard Engineering
- Remote Sensing



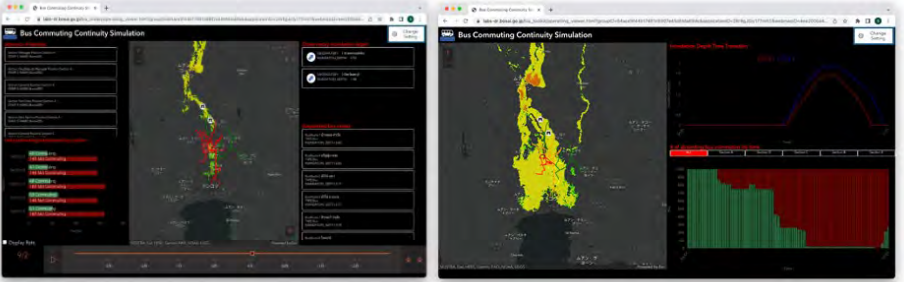
Science & Technology

- Economic Impact
- Business Continuity
- Resilience
- Competitiveness
- Sustainable Development
- Disaster Management

Social Science

- Safety & Security
- Community
- Employment
- Sheltering
- Population
- Healthcare
- Environment
- Well-being

Life & Well-being Science



Long-term Goals: UN & UNDRR actions-focused

High-level Project Targets focus on SDGs and SFDRR(Sendai Framework for Disaster Risk Reduction)



SUSTAINABLE DEVELOPMENT GOALS
17 GOALS TO TRANSFORM OUR WORLD



Make cities and human settlements inclusive, safe, resilient and sustainable



■ Because we could not completely prevent disasters.....

Priorities for Action 4 :

Enhancing disaster preparedness for effective response, and to **“Build Back Better”** in recovery, rehabilitation and reconstruction



Promote inclusive and sustainable economic growth, employment and decent work for all



■ In order to realize the above actions, we need.....

Priorities for Action 3 :

Investing in disaster risk reduction for resilience



Take urgent action to combat climate change and its impacts



■ And, in order to make investment decisions.....

Priorities for Action 1 :

Understanding disaster risks