

Water Risks and Resilience

ICHARM

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Actions for better Preparedness/Resilience - What we plan to promote through APWS-

Positioning “water and disaster” high in global political agenda

- ✓ Water and Disaster input in Bonn+10
- ✓ Water and Disaster input in Report to Rio+20
- ✓ Discussion on water and disaster in UN-General Assembly

Delivering Asian voice to global process

- ✓ Creating water & disaster message at APWS2
- ✓ Delivering Asian message to WWF6, Tokyo DRC and Hyogo+10

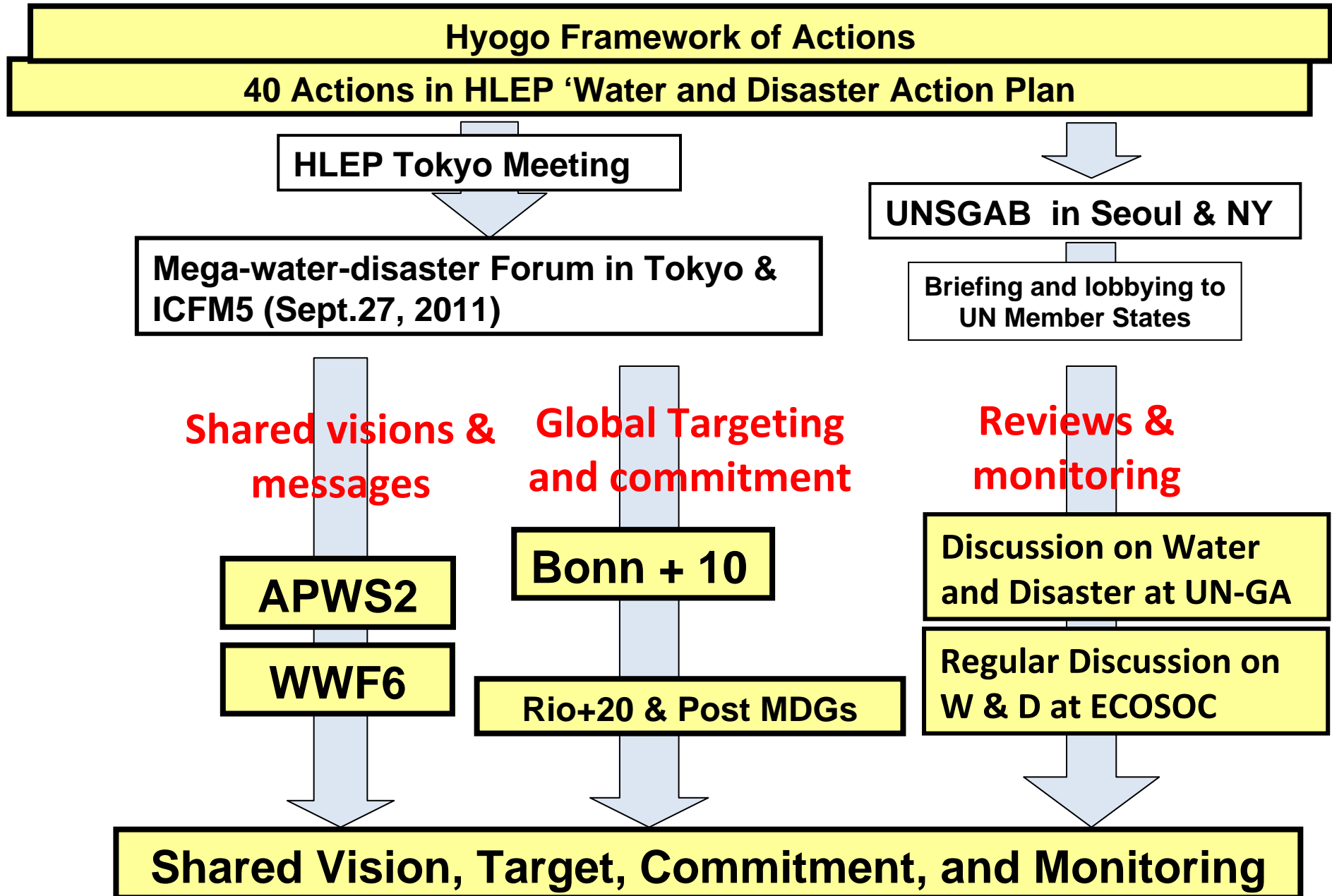
Linking water community with disaster community

- ✓ Communicating our priority actions to disaster community at Tokyo DRC 2012 and Hyogo+10

Facilitating review & monitoring

- ✓ Establishing regular discussion process in UN-ECOSOC
- ✓ Creation of standardized “Water Disaster Index” by 2012

Facilitating global actions on water and disaster



Water Risks and Resilience

Changes and Progress after APWF-GC9

Changes to be taken into account

- ✓ **Bangkok Flooding**

Events after APWF10

- ✓ **International Forum on Mega-Water Disasters**

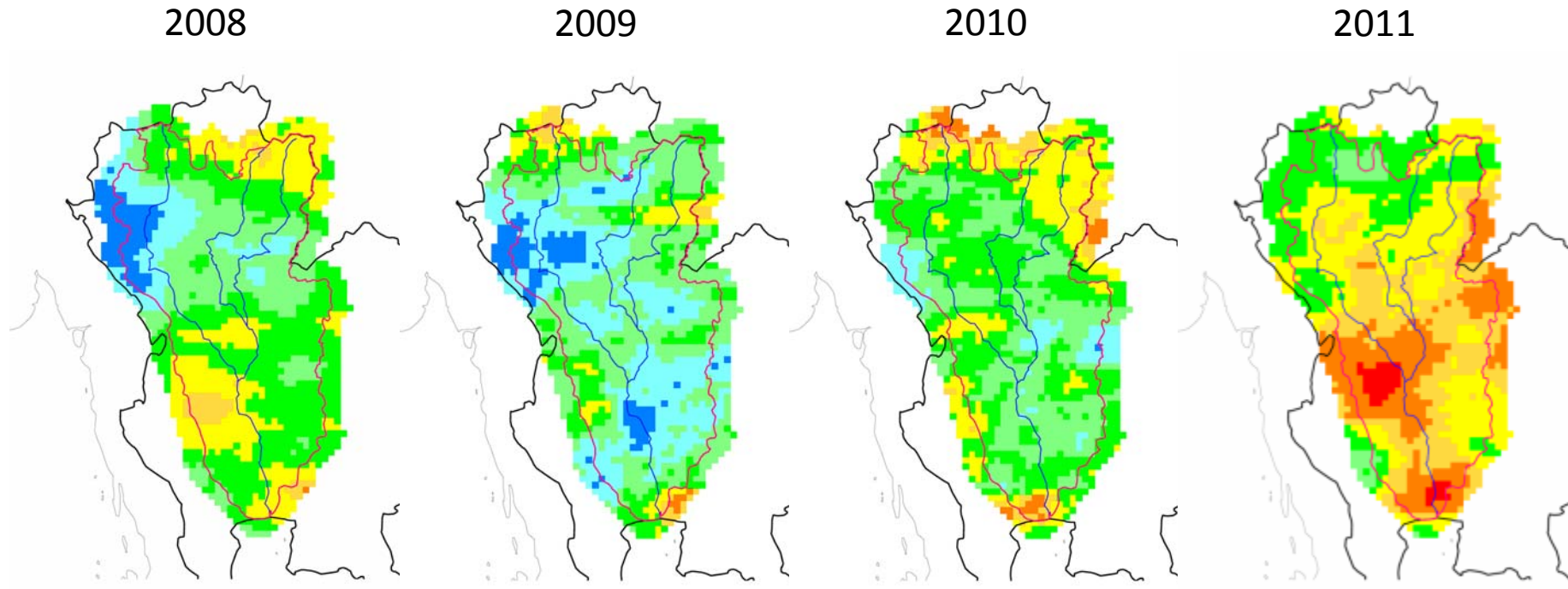
Synergy with the other dialogue process

- ✓ **Link with RIO+20**
- ✓ **Link with UN-GA**

Progress of Session Preparation

Comparison of Cumulative Precipitation from July to September in the Chao Phraya River Basin

DATA/ GSMaP MVK(2008)
GSMaP NRT(2009-2011)



Basin mean precipitation in Chao Phraya River Basin from July to September

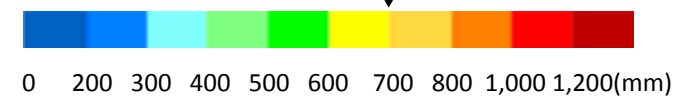
518mm

424mm

527mm

710mm

Average (Bangkok)

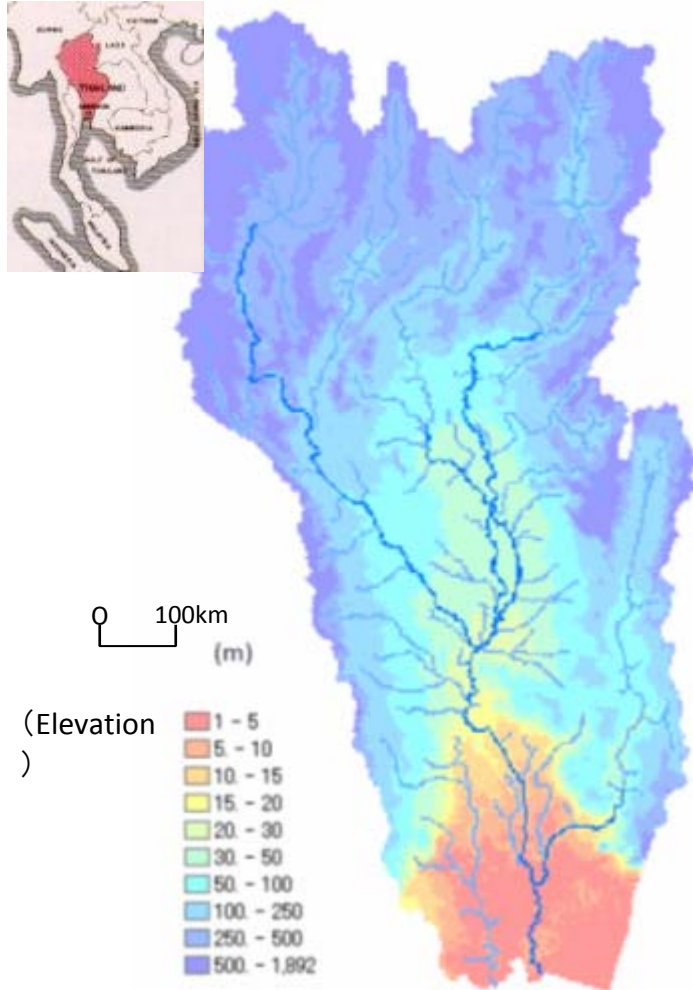


Analysis conducted by Infrastructure Development Institute and CTI Engineering Co., Ltd. using the data, "GSMaP Rainfall Product" (<http://sharaku.eorc.jaxa.jp/GSMaP/>) of "Global Rainfall Watch" observed by the satellite developed by Japan Aerospace Exploration Agency (JAXA)

Chao Phraya River Basin and its Inundation Areas

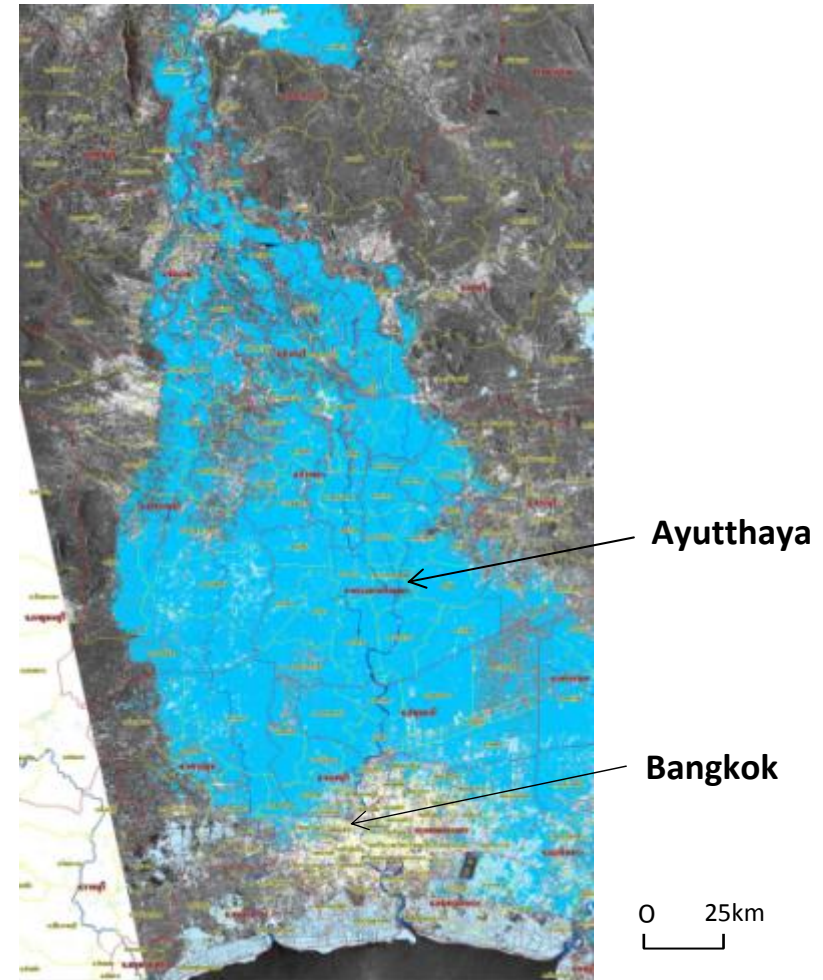
Vast low-lying areas extend over the lower Chao Phraya river basin.
The elevation difference of Bangkok and Ayutthaya, approx.100km apart, is only 2m.

Geographical features of CHAO PHRAYA river basin



Produced by ICHARM (International Centre for Water Hazard and Risk Management under the auspices of UNESCO) based on HydroSHEDS (USGS)

Inundation in the lower CHAO PHRAYA river basin



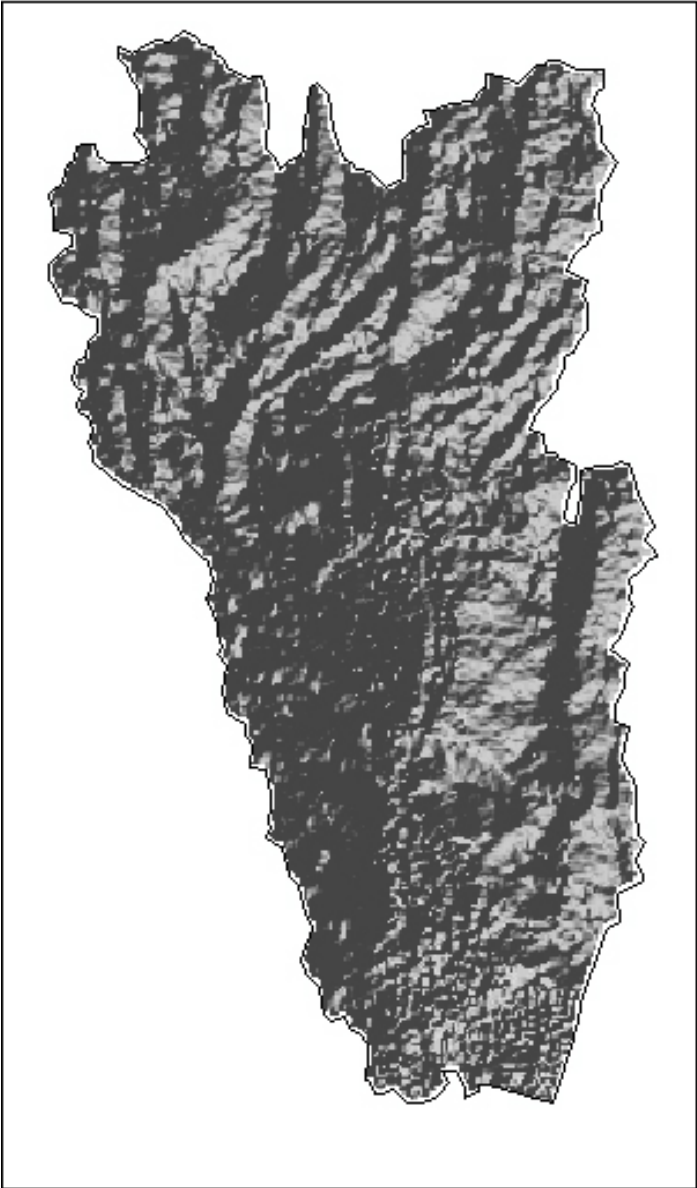
Satellite image of Thailand on Oct. 30, 2011 (Blue zone shows inundated area)
Source: Geo-Information and Space Technology Development Agency, Thailand (<http://www.gistda.or.th>)

Inundation Simulation (July-November)

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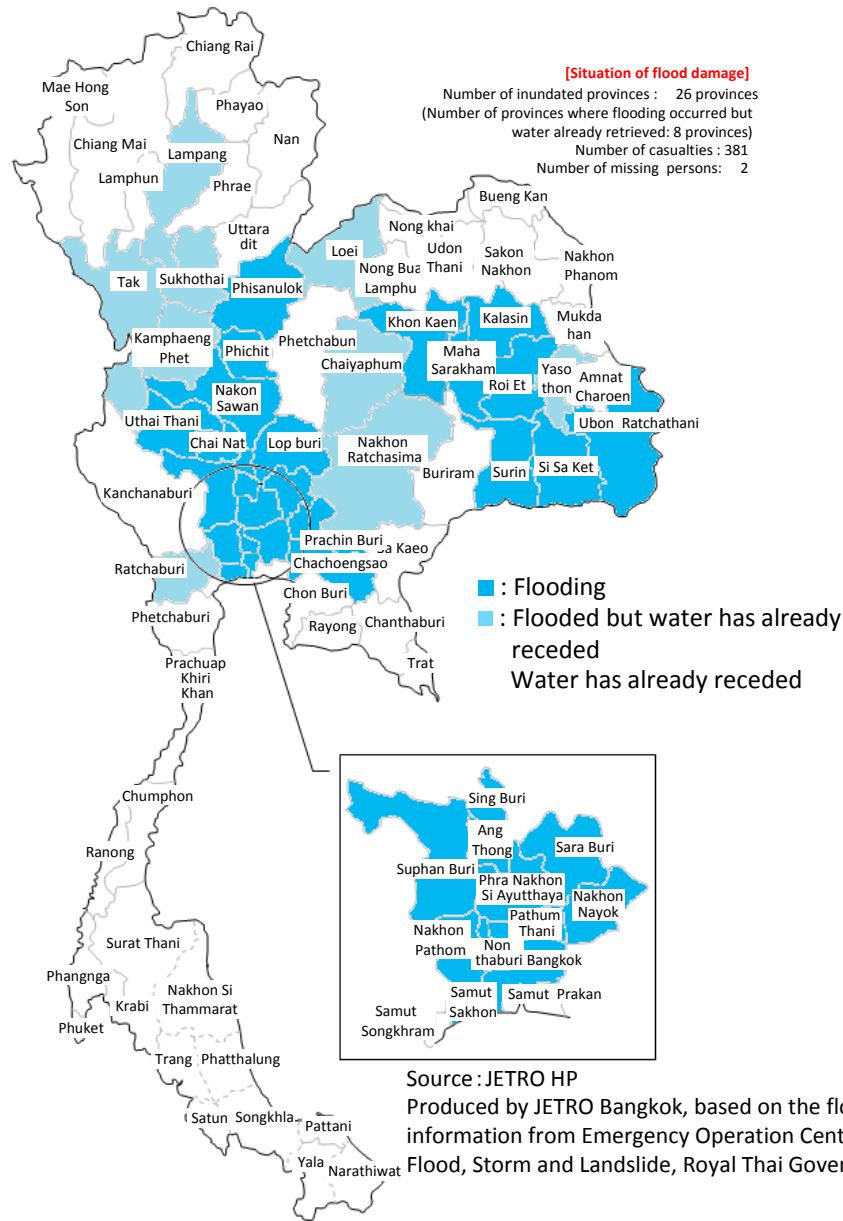
1	: July 1
31	: Aug 1
62	: Sep 1
92	: Oct 1
123	: Nov 1
152	: Nov 30



5 m

0 m

Flood Damage in Thailand and Industrial Estates (As of Oct. 31, 2011)



Flooded provinces of Thailand



Map of industrial estates in Ayutthaya province and Bangkok
 (Source :JETRO HP (produced by JETRO using TICON's map with permission of TICON))

To be incorporated in APWS2...

- **Experiences and lessons**
- **Status of recovery and needs for help, if any**
- **Message to International Community**
- **Regional cooperation**
- **International steps to raise water and disaster in global discussion**

**International Conference on Mega-Water-Disasters
September 27, 2011 at UNU, Tokyo
Bullet Points of “Tokyo Statement”**

- ✓ **International community, especially the UN, should conduct regular dialogue and promote actions**
- ✓ **Governments should build systems to be “prepared for unexpected event” especially those to ensure “best mix” of structural and non-structural measures.**
- ✓ **Regional bodies should establish mechanisms for regional cooperation for disaster response.**
- ✓ **Plenary discussion session on water and disaster at the UN General Assembly should takes place**

Progress of Links with the other Process

Water Input in Rio+20

Japan and Tajikistan to facilitate water input in Rio+20 → APWS message to be incorporated in the water Input to Rio+20

Water and Disaster Session in UN-General Assembly

Briefing Session at Friends Meeting in July, 2011

Briefing to Head of Missions to UN in October, 2011

Discussion with President of UN-GA in January, 2012

Water and Disaster Plenary Session in April, 2012

Plenary Session on Water Risks and Resilience at APWS2

Organizers

HLEP/UNSGAB, ICHARM,...

Speakers/Panelists

Head of States (tbc)

Ministers (Thailand, Philippines, Vietnam, Japan, Indonesia...)

Head of International Institutions (UN-GA, OECD, ADB...)

Perspectives of Discussion

Promoting Green Growth

Preempting Future Shocks

Enhancing Regional Stability and Cooperation

Sharing Experiences , Tools and Technology

Agenda

Key-note Speeches

High Panel Discussion

High Panel Discussion Questions (examples)

Your lessons and
experiences of mega-water-

Q1. What are ~~disasters~~ lessons your
country/organization has learned
from past mega-water-disasters?

Can we prepare for “unexpected” events?

**Q2. Mega-disasters often strike as
“surprise”. How can we be better
prepared for “unexpected” events like
mega-water-disasters?**

International solidarity: Who does what?

Q3. Do we need International Solidarity in managing mega-disasters? If yes, how and who does what?

Suggestions to be better prepared

**Q4. Do you have any message/
proposal/suggestion for us to be
better prepared for mega-water-
disasters?**

Follow-up of the Session Output

- Where will the output go? -

- **To Summit Statement at APWS2**
- **(To WWF6: through Major Theme Plenary on Water and Disaster)**
- **To Rio+20: through “Water Friends’ Input” by Member States (facilitated by Japan and Tajikistan)**
- **To UN-GA, New York: through UN-GA Plenary Session on Water and Disaster**

Next Steps

“Water Risks and Resilience Team” to Visit BKK on December 18-19, 2011

- To investigate flood situations in the Chao Phraya**
- To discuss session agenda and output with Thai Partners (and help Summit substance if needed)**
- To discuss logistics at APWS2**

To contact partners of Water Risks and Resilience

To contact Speakers for logistics/substance

Thank you