

Thematic Workshop 4 :

Views from International Development Organizations to promote IWRM(TBD)

The importance of “ Disaster Risk Reduction”

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(Flood Management)

Why Japan cherishes the value for “Disaster Risk Reduction”

Sendai Framework for Disaster Risk Reduction 2015-2030

Priorities for Action

There is a need for focused action within and across sectors by States at local, national, regional and global levels in the following four priority areas.

Priority 1

Understanding disaster risk

Disaster risk management needs to be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment

Priority 2

Strengthening disaster risk governance to manage disaster risk

Disaster risk governance at the national, regional and global levels is vital to the management of disaster risk reduction in all sectors and ensuring the coherence of national and local frameworks of laws, regulations and public policies that, by defining roles and responsibilities, guide, encourage and incentivize the public and private sectors to take action and address disaster risk

Priority 3

Investing in disaster risk reduction for resilience

Public and private investment in disaster risk prevention and reduction through structural and non-structural measures are essential to enhance the economic, social, health and cultural resilience of persons, communities, countries and their assets, as well as the environment. These can be drivers of innovation, growth and job creation. Such measures are cost-effective and instrumental to save lives, prevent and reduce losses and ensure effective recovery and rehabilitation

Priority 4

Enhancing disaster preparedness for effective response, and to «Build Back Better» in recovery, rehabilitation and reconstruction

Experience illustrates that disaster preparedness needs to be strengthened for more effective response and ensure capacities are in place for effective recovery. Disasters have also demonstrated that the recovery, rehabilitation and reconstruction phase, which needs to be prepared ahead of the disaster, is an opportunity to «Build Back Better» through integrating disaster risk reduction measures. Women and persons with disabilities should publicly lead and promote gender-equitable and universally accessible approaches during the response and reconstruction phases

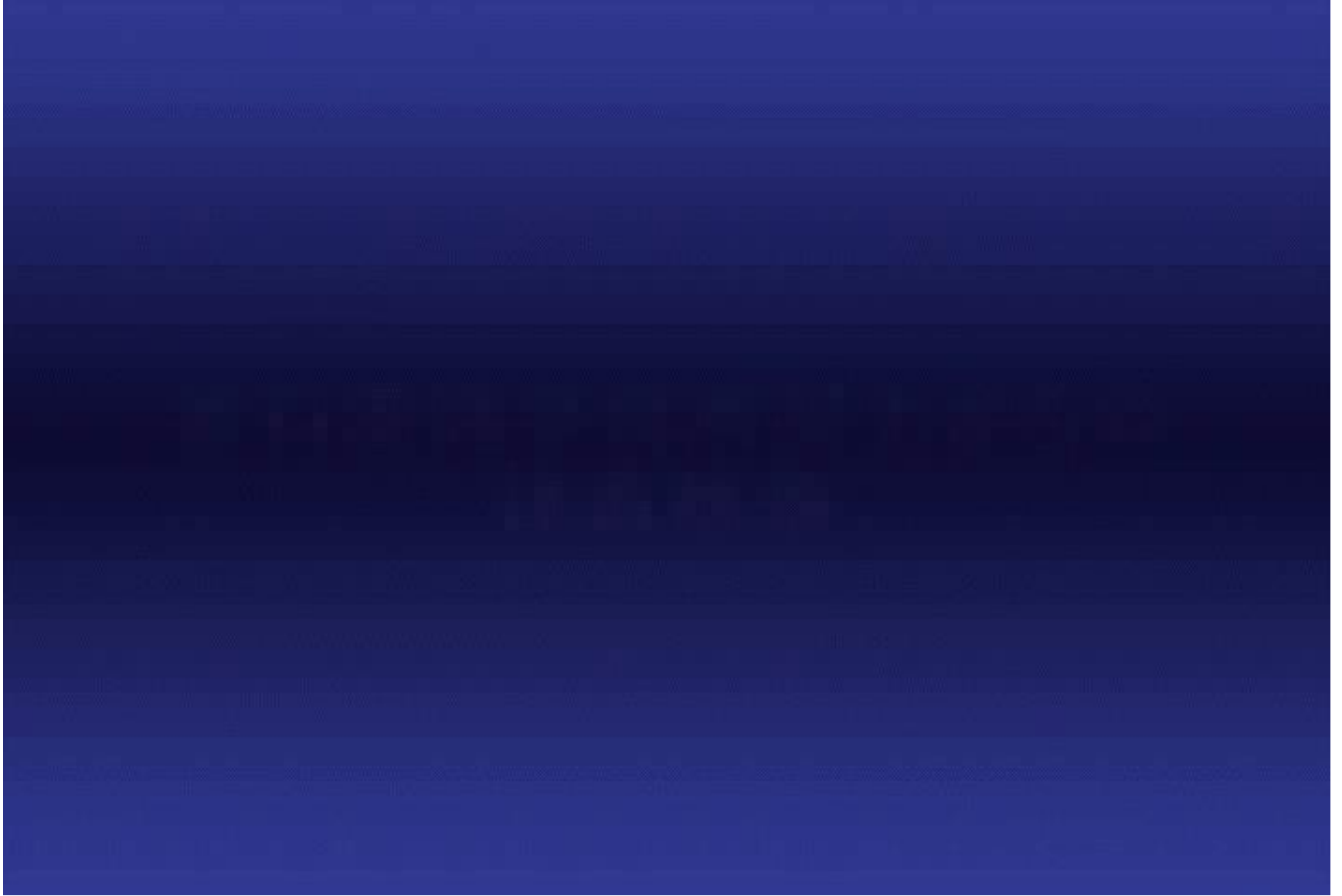
www.preventionweb.net/go/sdrr
www.unisdr.org
isdr@un.org



Priority 3 **Investing** in disaster risk reduction for resilience

Priority 4 Enhancing disaster preparedness for effective response, and to **“Build back better”** in recovery, rehabilitation and reconstruction

East Japan Great Earthquake and Tsunami in 2011



Why Japan cherishes the value for “Disaster Risk Reduction”

- Japan is one of the most prone to natural hazard in the world.
- More than 50% of population, living in the flood plain
- More than 75% of whole asset located in the flood plain
- To know how to prepare for typhoon, flood, earthquake and tsunami
- This is our countries key survival issue

History of flood control investment for Tone River (About 400 years ago)

Up to 15th Century, Tone River crossed the Kanto Plain from north to south and flew into Tokyo Bay



From 1594 to 1654 (60 years), Tone River was connected to Pacific Ocean by eastward channel



The flood risk in Tokyo area is dramatically reduced.

Tone River	Mindanao River
Stream Length:	322km (373km)
Catchment Area :	16,840km ² (23,169 km ²)

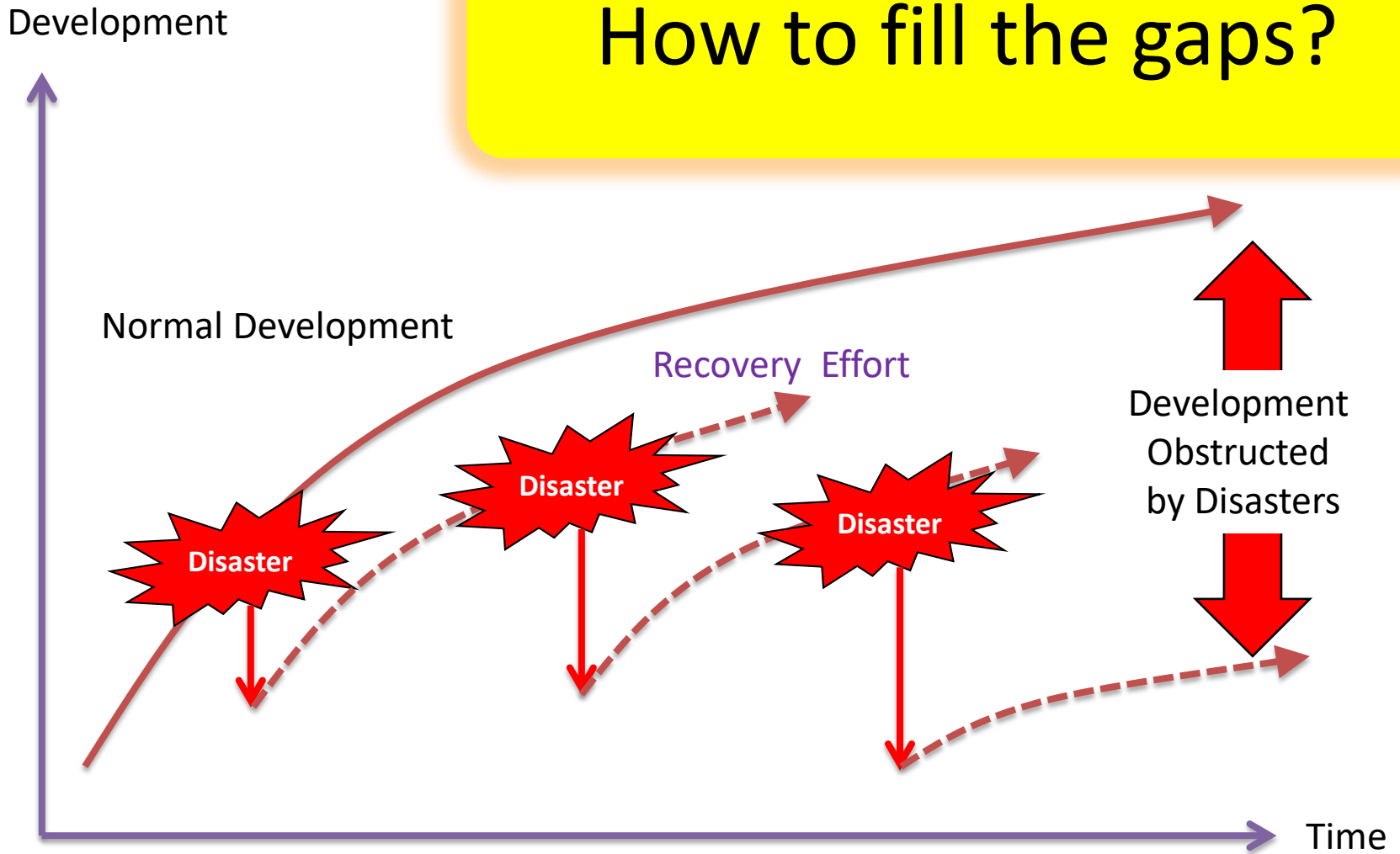


Disaster is a trigger for resilient world through “Build Back Better”

- How Japan conquered or coexists with disaster?
- Once serious disaster hit Japan, Japanese takes countermeasure such as revising building code, design criteria, land use plan, government institutional structure etc in order to prepare for next exposure.
- Japanese civil minimum or common sense is “prevent same kind of disaster, prevent same kind of vulnerability reborn again”, this is really the sense of “Build Back Better”.
- Japanese also notice that DRR is very important for not only saving lives also sustainable development through our history of tragic disaster.

Development Obstructed by Disasters

How to fill the gaps?

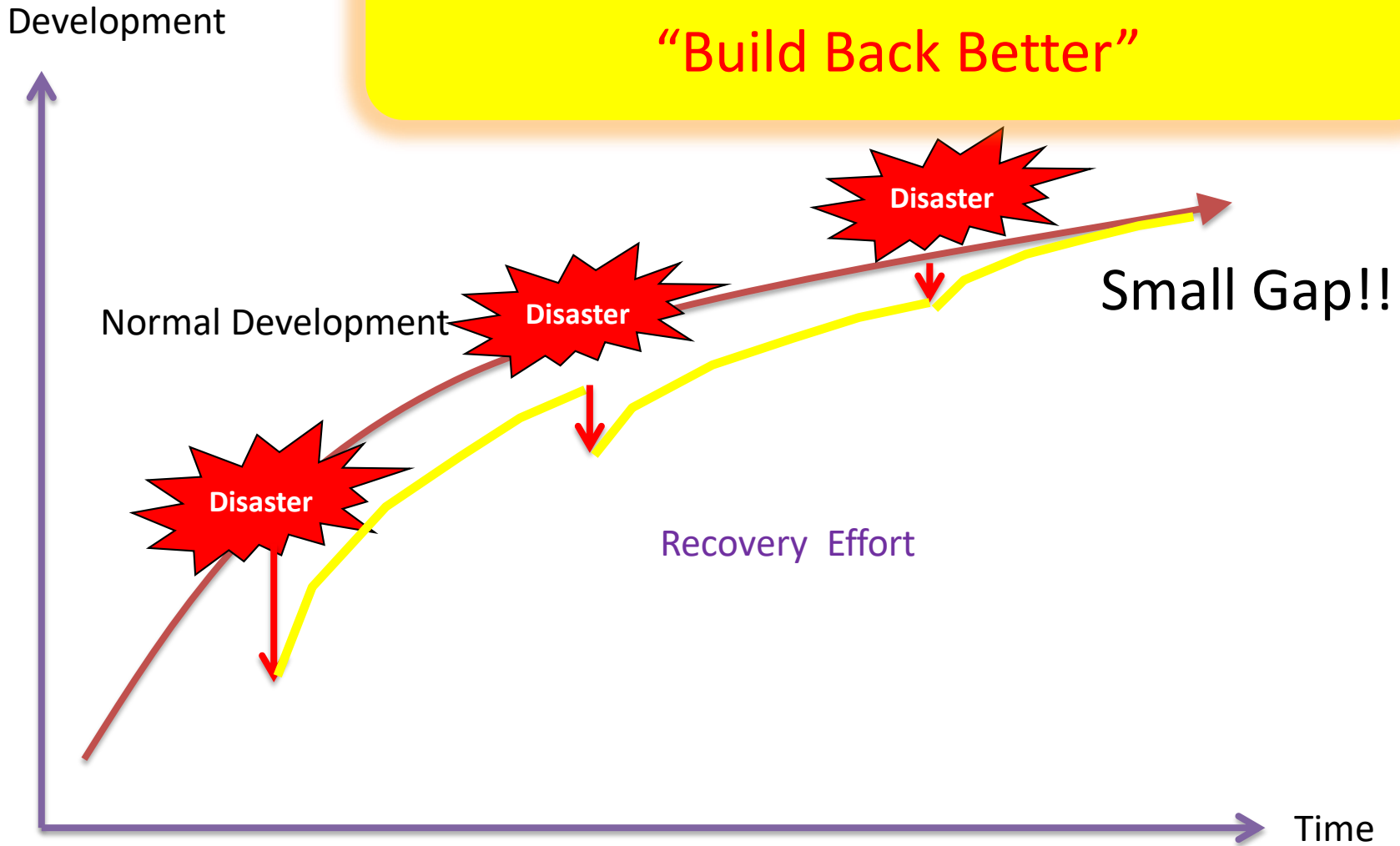


- By the UN report, it is said

**\$1 pre-disaster investment for
Disaster Risk Reduction
can save \$7 recovery cost**

Development Obstructed by Disasters

Prepare for the next exposure
“Build Back Better”



Ise Gulf Typhoon, 21 Sep. 1959 Japan

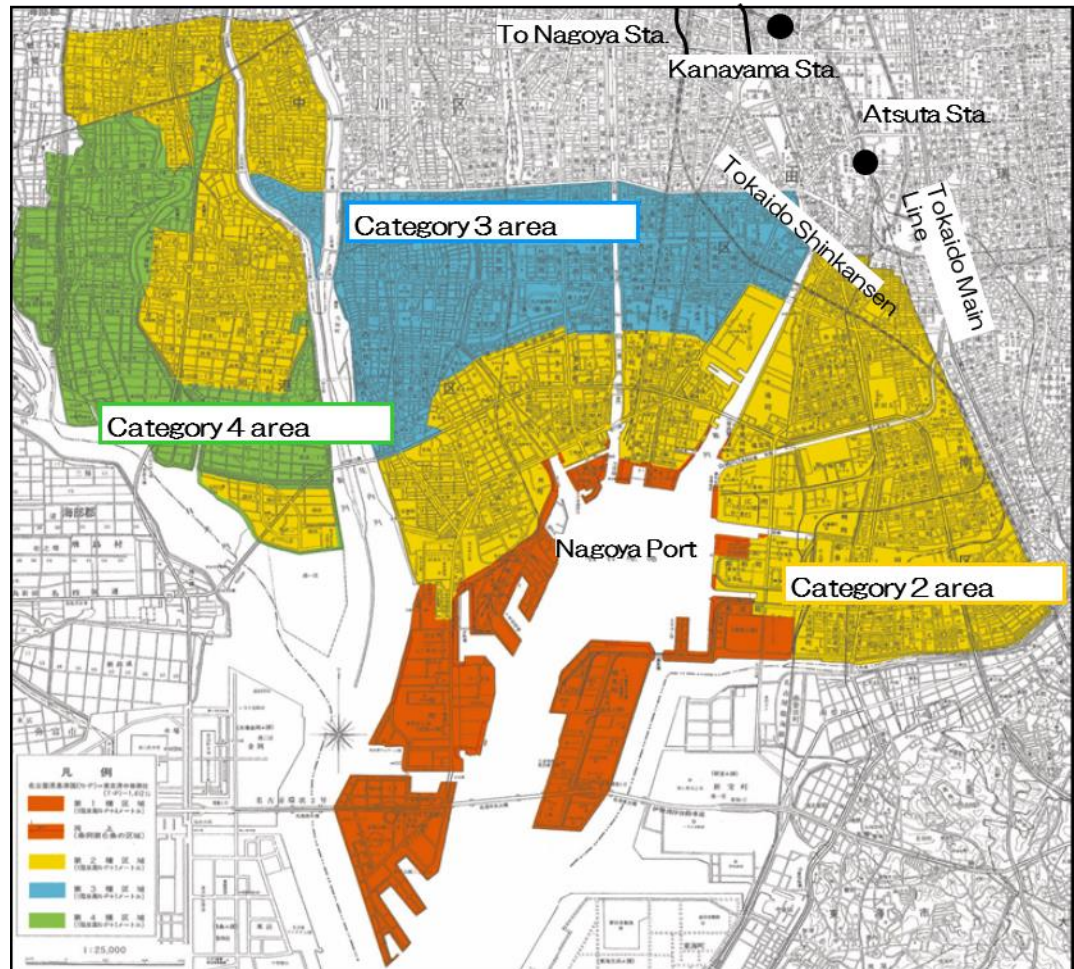
Casualties	5,238
Damaged House	311,749 houses
Inundated Area	310km

Nagoya Area, after Ise Gulf Typhoon 1959, New Land use Regulations

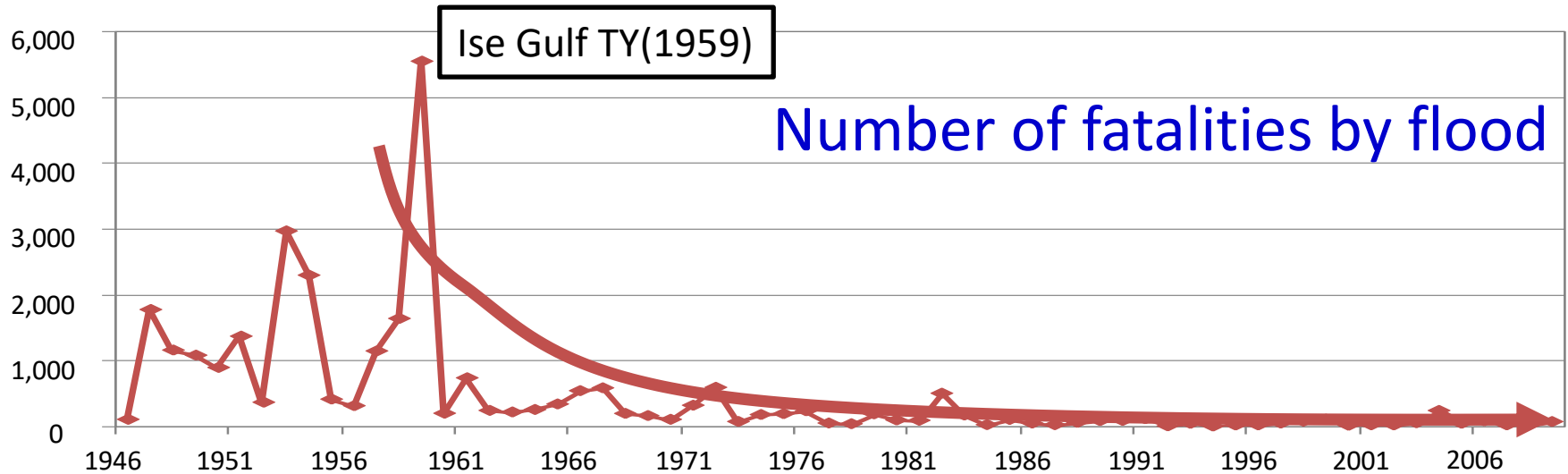
Article 39 of the Building Standards Act, “Disaster Hazard Areas”

Costal disaster-prevention areas in Nagoya

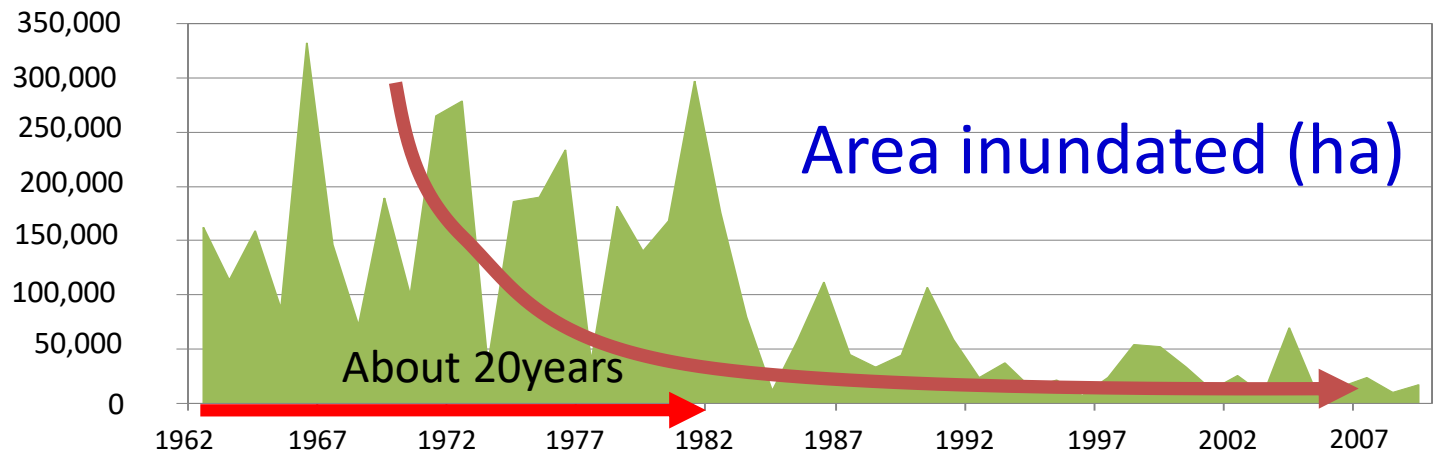
- Where schools, hospitals, meeting grounds, public offices, welfare facilities for children, and other public architectures located in areas of Categories 2 - 4 are concerned, one or more residential spaces will be placed on the architecture with the floor height of the first floor of $N \cdot P(+)$ 2 m or higher, and with the height of $N \cdot P (+)$ 3.5 m or higher.



Reduction of **flood damages** in Japan by continuous investment



Special purpose budget for Flood Control (1960)



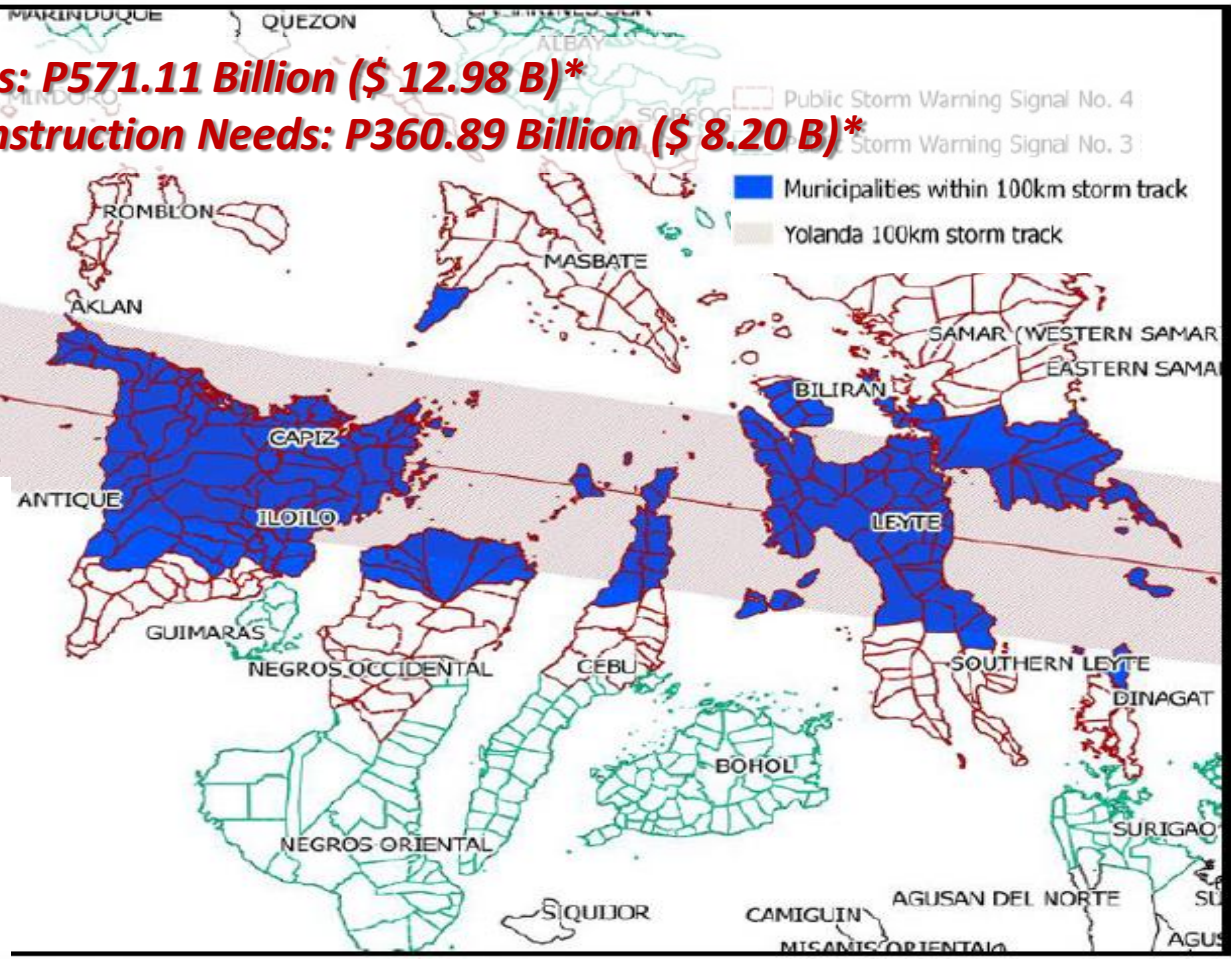
Source: Water Disaster Statistics, Ministry of Land, Infrastructure Transport and Tourism

Super Typhoon Haiyan (Yolanda) – November 2013

Total Cost of Damages & Losses: P571.11 Billion (\$ 12.98 B)*

Estimated Recovery and Reconstruction Needs: P360.89 Billion (\$ 8.20 B)*

Affected Families	1,472,251
Displaced Families	918,261
Damaged Houses	1,171,469
Fatalities	6,300



* Based on Reconstruction Assistance on Yolanda (RAY), Report as of December 16, 2013

No Build Zone



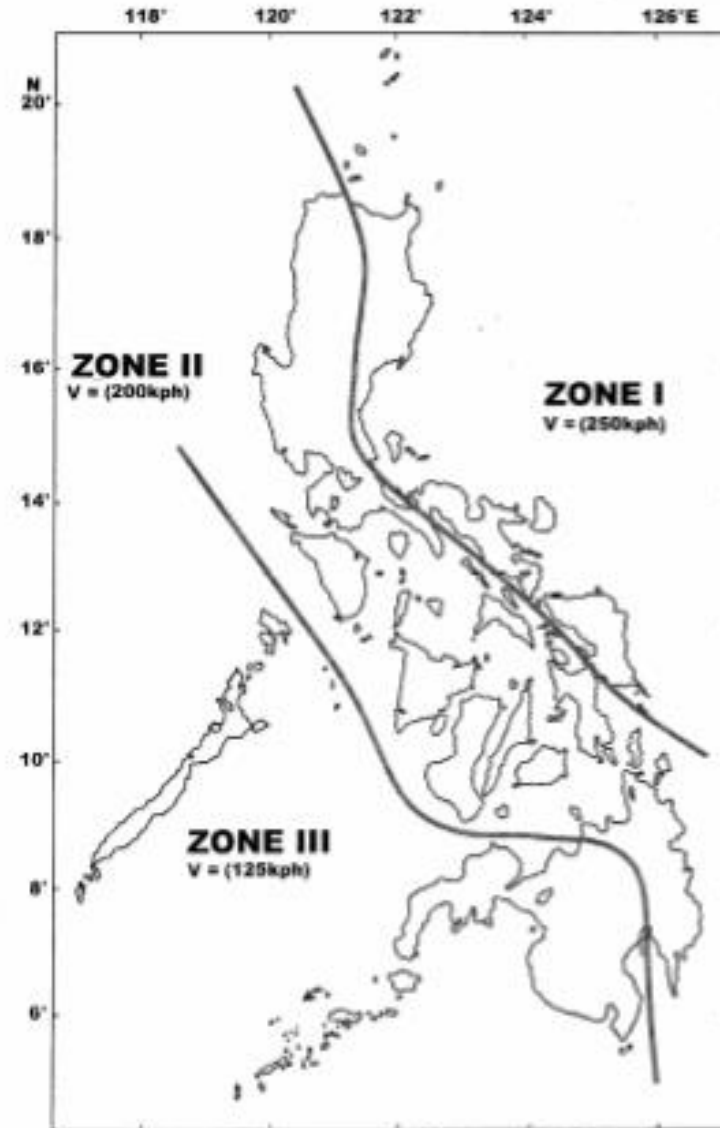
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**JOINT DENR-DILG-DND-DPWH-DOST
MEMORANDUM CIRCULAR**
No. 2014-01

**SUBJECT : ADOPTION OF HAZARD ZONE CLASSIFICATION IN
AREAS AFFECTED BY TYPHOON YOLANDA
(HAIYAN) AND PROVIDING GUIDELINES FOR
ACTIVITIES THEREIN**

No build Zone is adopted through reconstruction plan for affected area of TY Yolanda

Revision of Wind Load Provisions in Structural Code



Message

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Water Challenges in Asian Region

Too **little water**, Too **much water**, Too dirty water

- “Integrated Water Resource Management” sometimes tend to focus on water usage sector such as irrigation, water supply, industrial water and hydropower etc.
- But DRR such as flood control should be also considered as one of main objective of IWRM especially in terms of economic development.