Scoping Workshop on Science and Technology for Disaster Resilience 2017

## Priority 3: Investing in DRR for Resilience

#### Akiyuki KAWASAKI

Department of Civil Engineering, The University of Tokyo

e: kawasaki@hydra.t.u-tokyo.ac.jp w: http://wci.t.u-tokyo.ac.jp





## Agenda

- 1. Present status
- 2. Sharing practices
- 3. Discussion framework
- 4. Expected inputs to National Platform Guideline and Synthesis Report





## 1. Present status

#### SFDRR highlights public and private investment

*Investment* is used : 3, 6, 9, 19j, 19k, 28c, 29, 30b, 30c, 34c, 36c,

- > 29-31. Priority 3: Investing in DRR for resilience
- 3. Reducing disaster risk is a cost-effective investment in preventing future losses.
- 19 (j). Addressing underlying disaster risk factors through disaster risk-informed public and private investments is more cost-effective than primary reliance on post-disaster response and recovery, and contributes to sustainable development



In reality, gaps and barriers for implementation → Limited budget, low priority, low understanding,,,,

Can **S&T** play a fundamental role for breaking a barrier for DRR investment?

## 2. Sharing Practices

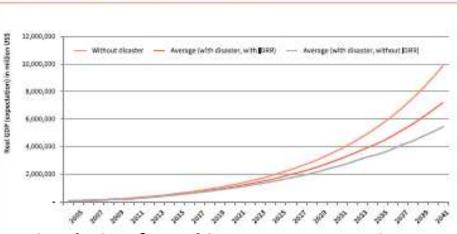
# GVR

#### **Global Assessment Report** on Disaster Risk Reduction

## 2013

From Shared Risk to Shared Value: The Business Case for Disaster Risk Reduction





#### Simulation for Pakistan Investment in DRR

#### Wider importance of pre-disaster investment was demonstrated through and experimental simulation of long-term macroeconomic impact

Although further research is required to reconcile the results from different economic models, recent studies show that in the medium (Hochrainer, 2009) or long term (Hsiang and Jina, 2012), countries that have experienced intensive disasters may never re-

Figure 5.33 Simulation for Pakistan (IDRR - Investment in disaster risk reduction)

The impacts of disasters on econor time can be understood when assi d- to long-term macroeconor oduras, a one-in 100 year event bet losses amounting to 33 perce

#### Helped to demonstrate the link between DRR and development issues, such as the

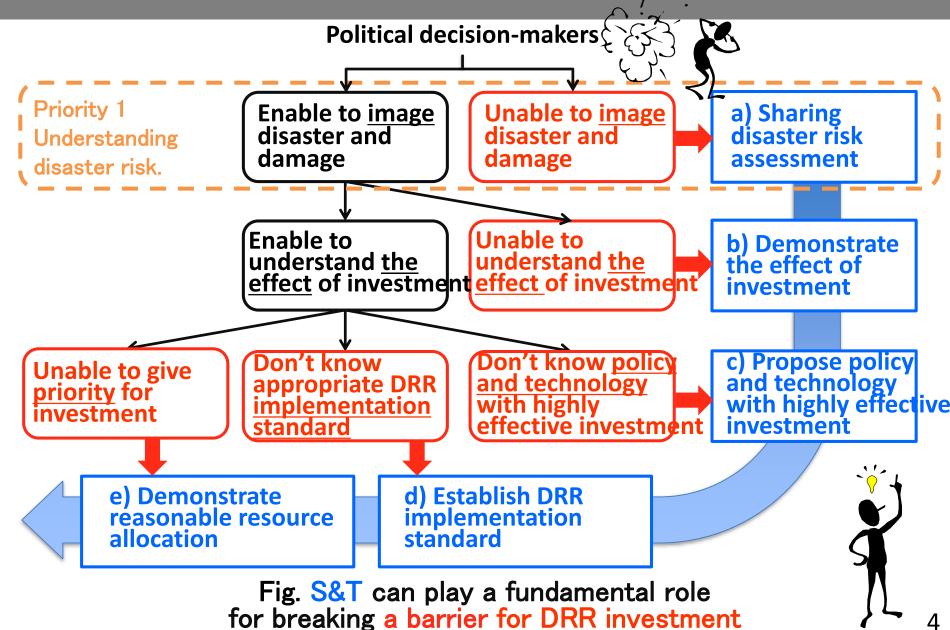
SDGS e impacts. In countries with frequent

ippines—and large fiscal gaps, growth will be lower

years (Figure 5.12).

Currently, national accounting does not adequate

## 3. Discussion Framework



## 4. Expected Inputs to National Platform Guideline and Synthesis Report

- Collect and share best practices demonstrating costeffectiveness in DRR investment.
- b), c) Develop a method for demonstrating the effect of investment in both structural and non-structural measures as economic value. This contribute to selecting the most effective policy and countermeasure through comparison.
- d) Establish a standard/criteria for implementing DRR policy and technology considering cost-effectiveness, and make a guideline.
- e) Give priority for smart investment from limited budget from a standpoint of S&T