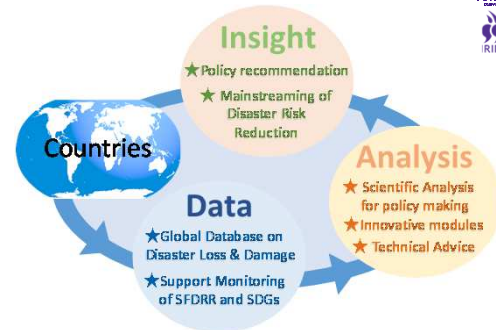4/24/2019

Slide 1

Global Centre for Disaster Statistics

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Slide 2

Global Centre for Disaster Statistics (GCDS)

FUJITSU · TOHOKU · UNDP Empowered lives. Resilient nations. · IRIDeS

Countries

Insight
★ Policy recommendation
★ Mainstreaming of Disaster Risk Reduction

Analysis
★ Scientific Analysis for policy making
★ Innovative modules
★ Technical Advice

Data
★ Global Database on Disaster Loss & Damage
★ Support Monitoring of SFDRR and SDGs

Slide 3

Introduction

United Nations Development Program (UNDP) and the International Research Institute of Disaster Science (IRIDeS) at Tohoku University jointly announced the establishment of the Global Centre for Disaster Statistics (GCDS) in March 2015 during the Third UN World Conference on Disaster Risk Reduction (WCDRR) in Sendai.

Voices of support and expectation to this initiative were received, including the UN Secretary-General Ban Ki-moon.

Establishment ceremony of GCDS at the WCDRR

UN Secretary-General Ban Ki-moon's speech at Tohoku University Symposium Forum held in the WCDRR
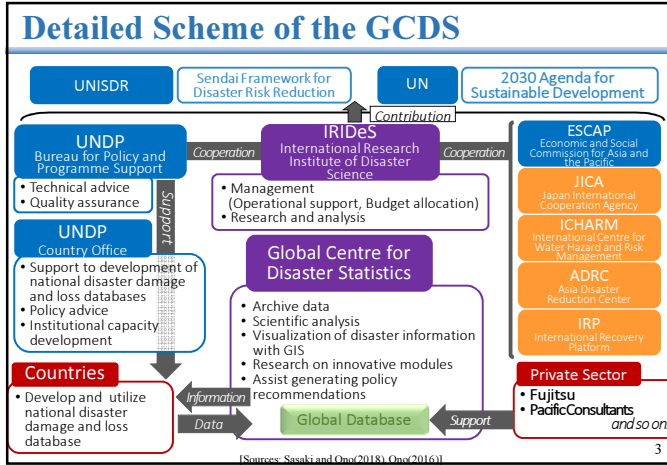
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Slide 4

Objectives of the GCDS

The GCDS contributes to sustainable development based on risk informed policy making.

- Support the United Nations International Strategy for Disaster Reduction (UNISDR) and countries for monitoring the progress of Sendai Framework for Disaster Risk Reduction and 2030 Agenda for Sustainable Development
- Provide scientific analysis and technical advice on their disaster loss and damage data
- Provide policy advice to build capacities of national/local governments based on their demands

Image of tools to visualize data
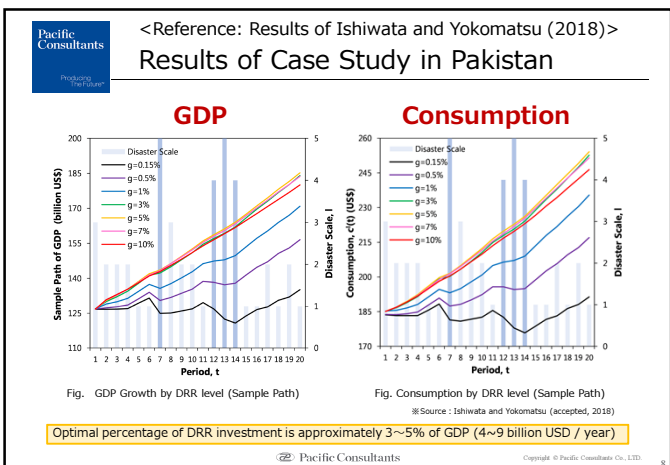Examples from the DesInventar system [right] and DIBI (Indonesian disaster data and information)[left]

2

1

Detailed Scheme of the GCDS

[Sources: Sasaki and Ono(2018), Ono(2016)]

3

Sendai Framework on Disaster Risk Reduction
  • Adopted 7 "Global targets"

(a) **Substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rate in the decade 2020–2030 compared to the period 2005– 2015;**

(b) Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 in the decade 2020–2030 compared to the period 2005–2015

(c) **Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030**

(d) Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030

(e) Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020;

(f) Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of the present Framework by 2030

(g) Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030

Analysis based on collected disaster loss data

■ Macro-economic analysis

* One example of the analysis to evaluate the effect of pre-disaster investment

■ Analysis based on disaggregated data

* Data disaggregated by social, demographic, and economic characteristics
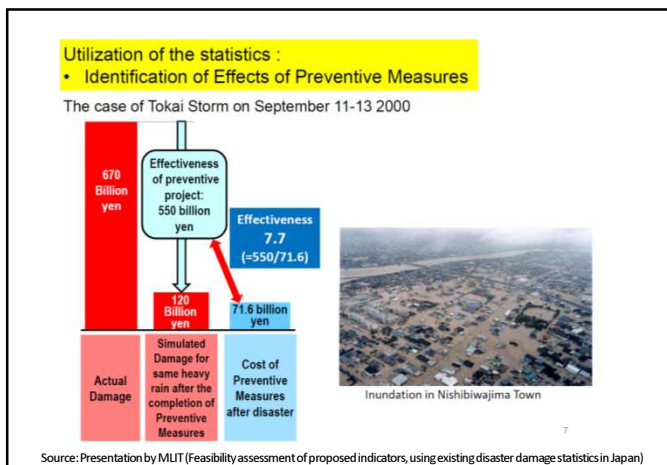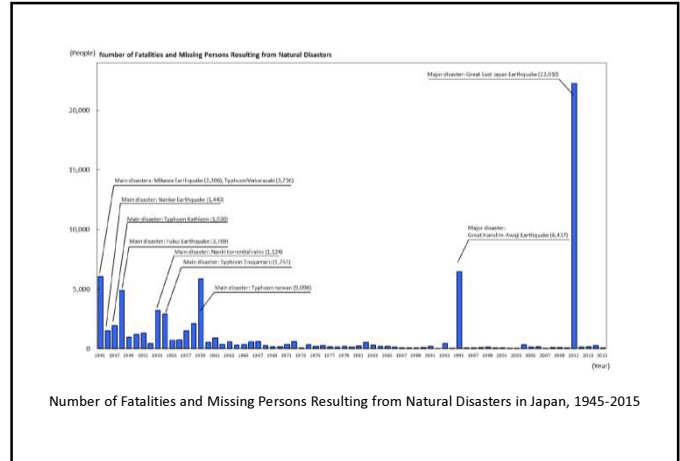

DR²AD model, developed by JICA, to quantitatively estimate the effect of pre-disaster investment to economic development

5

<Reference: Results of Ishiwata and Yokomatsu (2018)>
Results of Case Study in Pakistan

Fig. GDP Growth by DRR level (Sample Path)

Fig. Consumption by DRR level (Sample Path)

※Source : Ishiwata and Yokomatsu (accepted, 2018)

Optimal percentage of DRR investment is approximately 3～5% of GDP (4～9 billion USD / year)

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Annual Report (*White Paper* on DRR)

■ *White paper* on DRR has been issued by the Cabinet Office of Japan annually based on the Disaster Countermeasures Basic Law in 1961. This policy paper reviews national DRR policy taken in the previous year supported by evidence, including disaster damage and loss data supplied by various national agencies. It is circulated to all the parliamentarian members to generate improved policy (kaizen in DRR).

■ Learning from this good practice, GCDS would propose National Disaster Management Organizations (NDMOs) to generate a similar review report. GCDS intends to provide basic analysis for the report based on the national damage and loss data. GCDS welcomes joint work in this area with academia in each interested country as well.

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Number of Fatalities and Missing Persons Resulting from Natural Disasters in Japan, 1945-2015

Utilization of the statistics :
• Identification of Effects of Preventive Measures

The case of Tokai Storm on September 11-13 2000

Inundation in Nishibiwajima Town

7

Source: Presentation by MLIT (Feasibility assessment of proposed indicators, using existing disaster damage statistics in Japan)

7 pilot countries in Asia for consultation

Philippines, Indonesia, Cambodia, Myanmar, Sri Lanka, Maldives, and Nepal by March 2020

More countries from April 2020

Report will be completed by June 2019

The Global Database is under construction

The Global Database is to be launched
during the Second World Bosai Forum
in Sendai, Japan
9-12 November, 2019

www.worldbosaiforum.com/2019/english