Global Centre for Disaster Statistics (GCDS)

FUJITSU

TOHOKU UNIVERSITY

IRIDeS

UNDP

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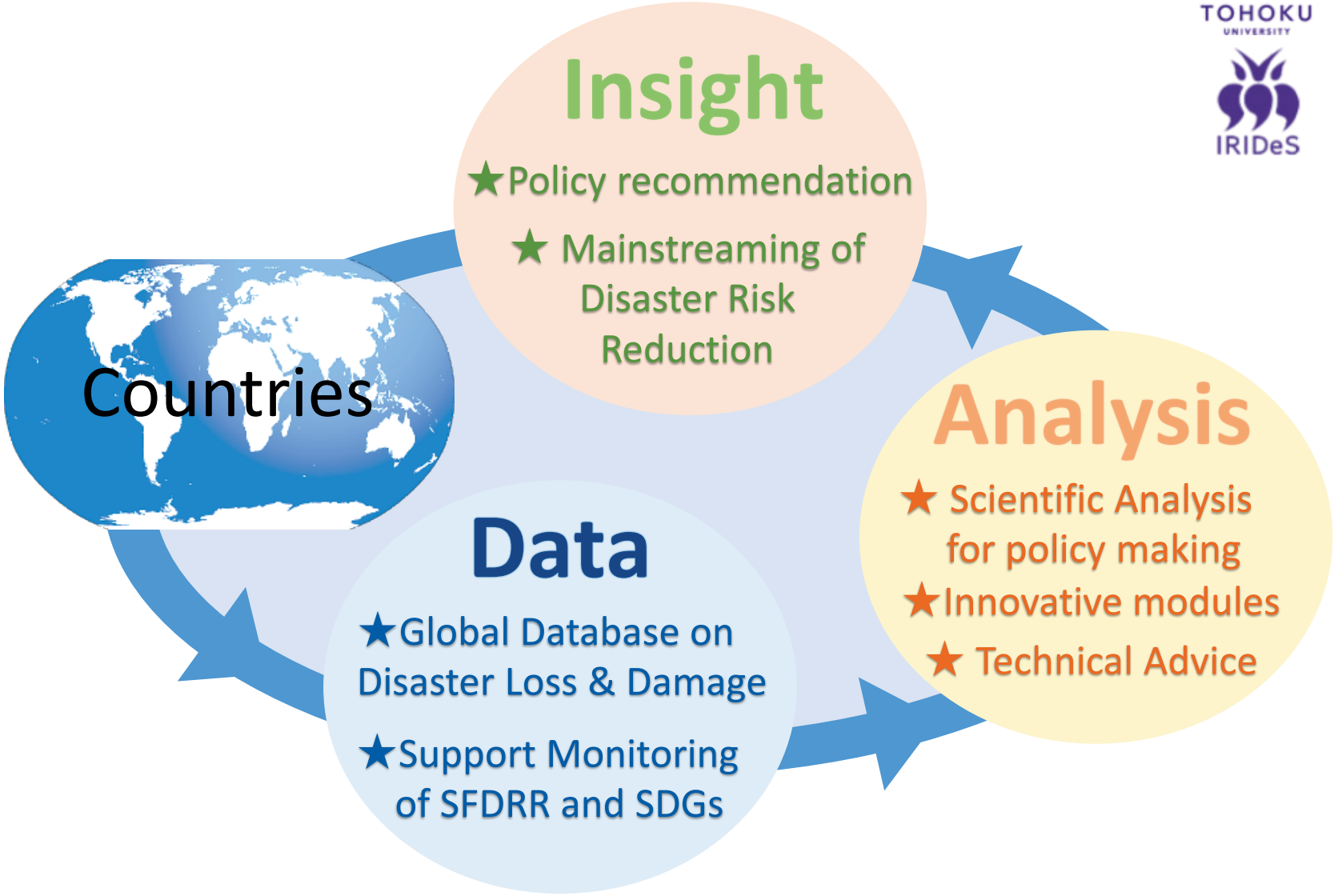


Introduction

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

Introduction

At the WCDRR a new framework Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR) was adopted by 187 countries including seven global targets.

In addition, Post-2015 Sustainable Development Goals (SDGs) were adopted in September 2015 with 17 global goals and 169 targets.

These targets include reducing the disaster mortality, number of affected people, and the direct economic losses.

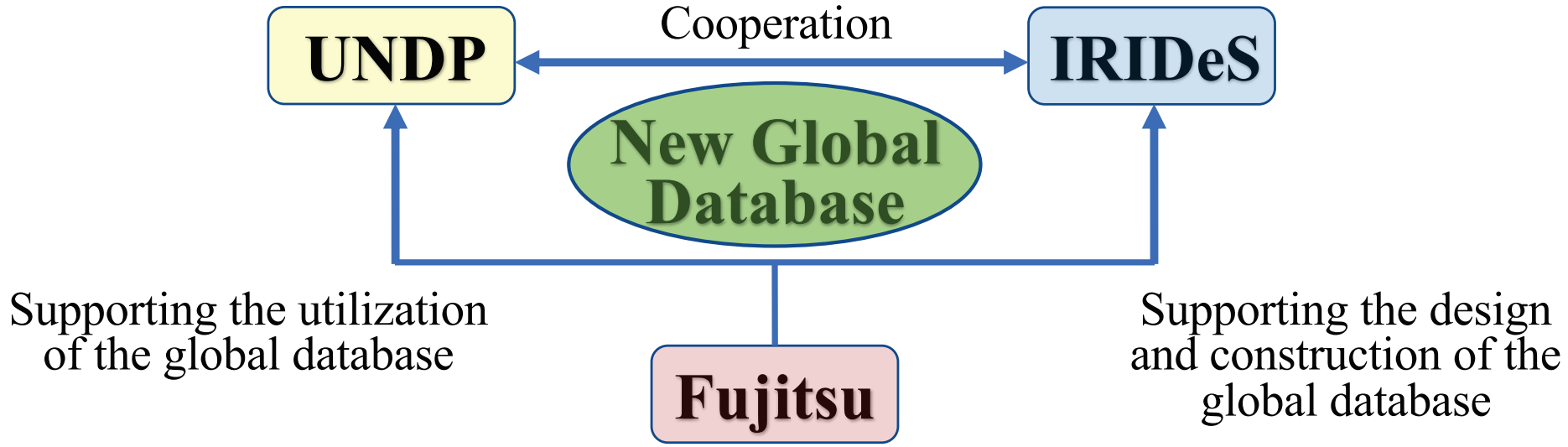
Therefore, development of sound disaster loss and damage system in no longer a choice but a *"Must thing"* for countries.

SFDRR Targets that can be monitored by the GCDS

Mortality	**Yes**
Number of affected people	**Yes**
Direct disaster economic loss	**Yes**
Damage to critical infrastructure	Yes/ No
# of countries with DRR strategies	No
International cooperation	No
Access to multi-hazard early warning system and disaster risk information and assessments	No

Introduction

Furthermore, UNDP, IRIDeS, and Fujitsu Limited announced in March 2017 that the three organizations have agreed to form a partnership to build and operate a new global database in the GCDS that will aim to reduce the damage caused by major disasters caused by natural hazards around the world.



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

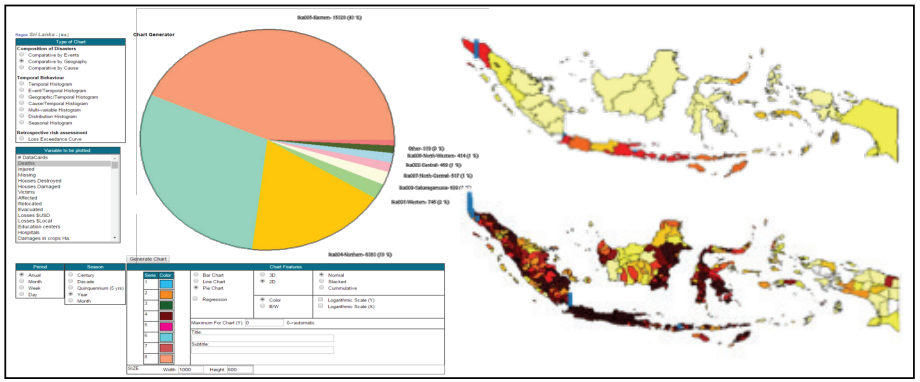


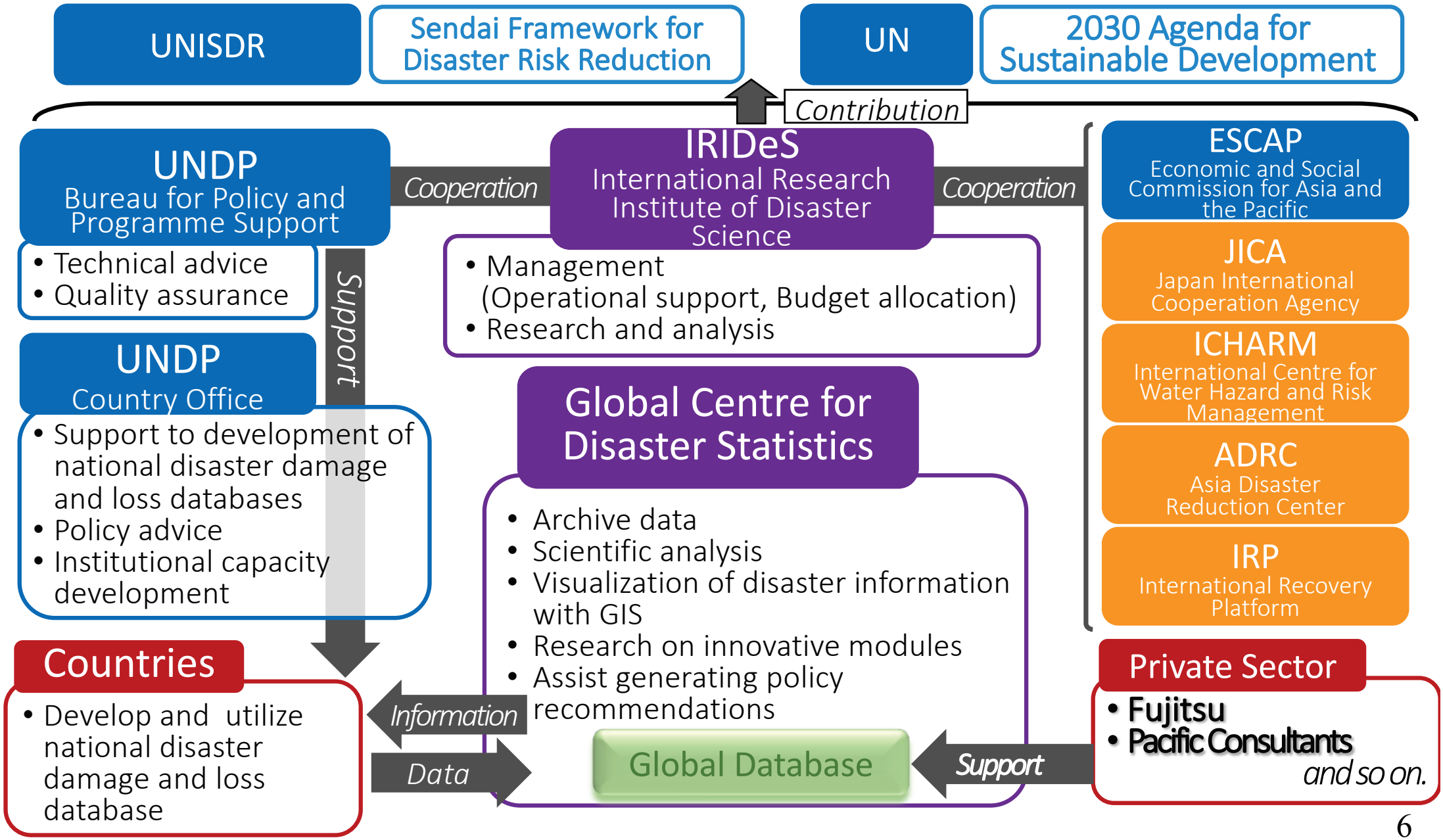
Image of tools to visualize data
Examples from the DesInventer system [right] and DIBI (Indonesian disaster data and information)[left]

Research Questions

From an academic viewpoint, the following *interdisciplinary* research questions can be posed.

- Does poor infrastructure in ordinary times cause more severe damage and loss when disasters occur?
- Is healthy community resilient to disaster?
- How can we visualize the regional peculiarity of disaster information?
- What is the result of regression analysis between tsunami height and fatality ratio?

Detailed Scheme of the GCDS



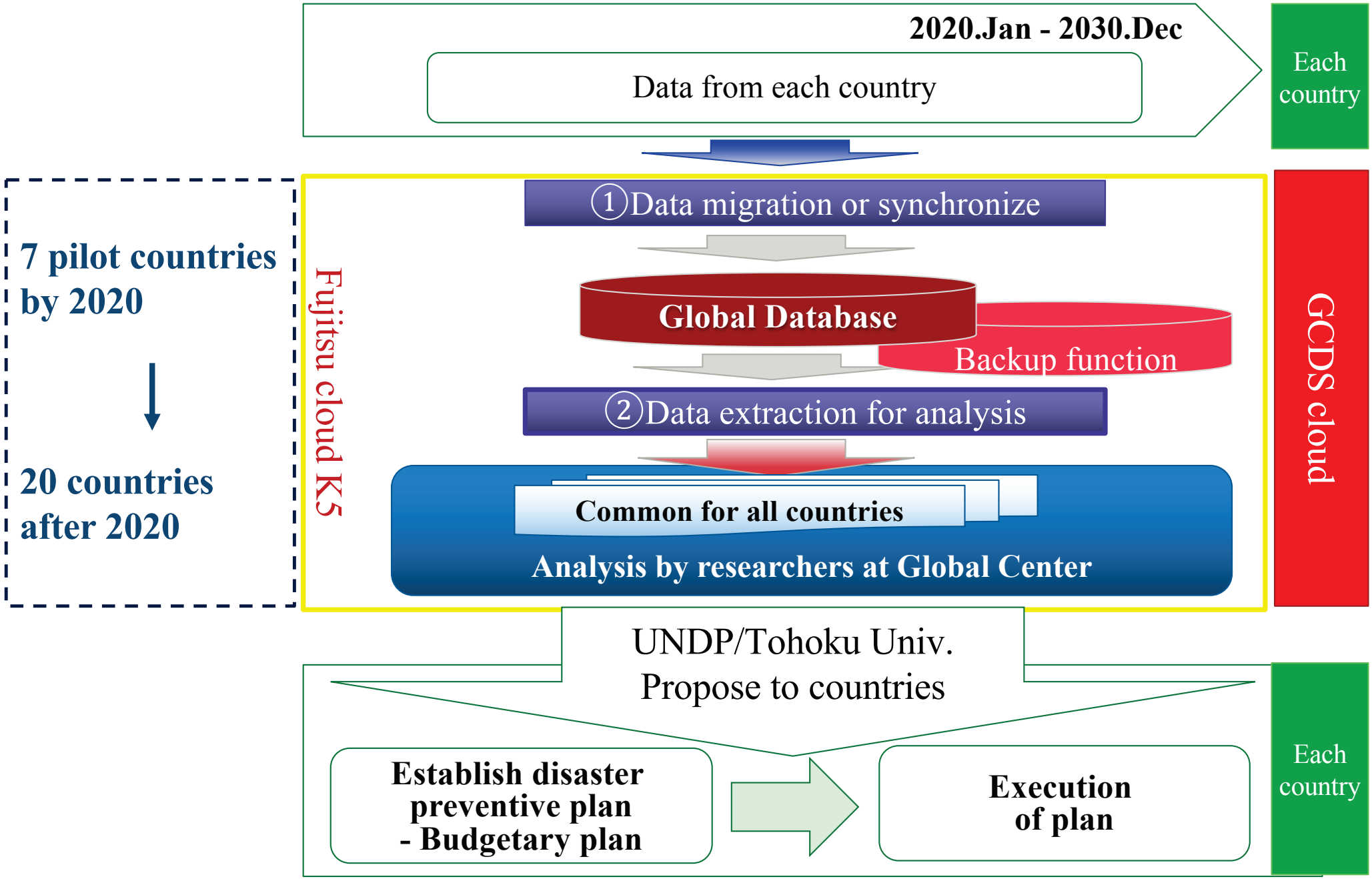
Pilot Countries

The GCDS is now conducting case studies in the following seven pilot countries. In addition, Japanese cases will also be examined soon.

Seven Pilot Countries

- **Indonesia**
- **Sri Lanka**
- **Myanmar**
- **Cambodia**
- **Maldives**
- **Nepal**
- **Philippines**

Towards Achievement of the Objectives



Academic Contributions of the GCDS

The GCDS is now preparing to publish several academic articles regarding disaster statistics within the next year.

The examples of research questions are as follows: (written again)

- Does poor infrastructure in ordinary times cause more severe damage and loss when disasters occur?
- Is healthy community resilient to disaster?
- How can we visualize the regional peculiarity of disaster information?
- What is the result of regression analysis between tsunami height and fatality ratio?

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Thank you!

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