# 50th Anniversary of Japan-ASEAN Friendship and Cooperation Further Cooperation for Smart Cities - DX for Resilience -

Special Advisor to the Prime Minister

Dr. MORI Masafumi

26 October, 2023

#### 1-1: Importance of Resilience in Japan and ASEAN

Japan and ASEAN nations have been working together on various initiatives for resilience.



Pasig-Marikina river channel improvement project, the Philippines

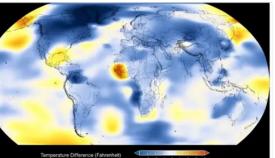


Erosion control dam in Mount Merapi, Indonesia

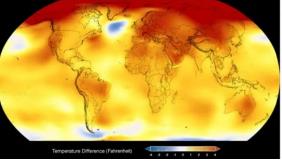
#### 1-2: Importance of Resilience in Japan and ASEAN

- Climate change is causing more and more severe disasters.
  - Improving resilience is an increasingly important global issue.

1884



2018



2013 Typhoon Haiyan (Yolanda)



**Global Surface Temperature Change** 

(Source: NASA Scientific Visualization Studio)
Global average temperature increased by 0.85° C from the 1880s to the 2010s

https://www.jwa.or.jp/news/2019/10/8374

https://www.mlit.go.jp/river/shinngikai\_blog/shaseishin/kasenbunkakai/shouiinkai/r-jigyouhyouka/dai04kai/siryou6.pdf

2021 Typhoon Rai (Odette)

#### 2-1: Examples of Resilience Initiatives in Japan

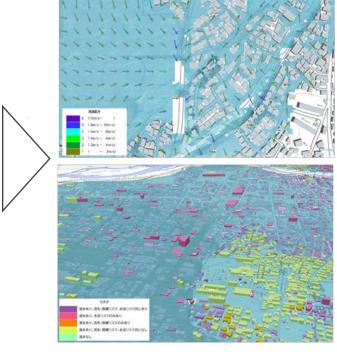
DX can solve problems in all phases: normal times, pre-disaster, and post-disaster.

# Normal times

# [Sophistication of evacuation planning by visualizing disaster risks]



3D model of the area around the Yahagi River (PLATEAU)



3D models allow simulation of water flow around buildings and the flooding/collapsing risk of each building.



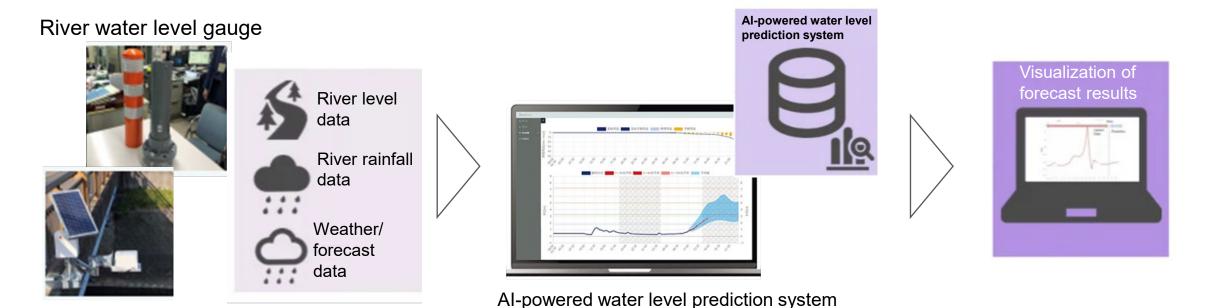
Used in disaster preparedness discussions to examine advanced measures

#### 2-2: Examples of Resilience Initiatives in Japan

DX can solve problems in all phases: normal times, pre-disaster, and post-disaster.

## **Pre-disaster**

# [Speeding up flood response and evacuation with AI]



Water level gauges, rain gauges, and inundation sensors are installed in rivers to acquire real-time data Al water level prediction at each measuring point based on the acquired data and forecast rainfall

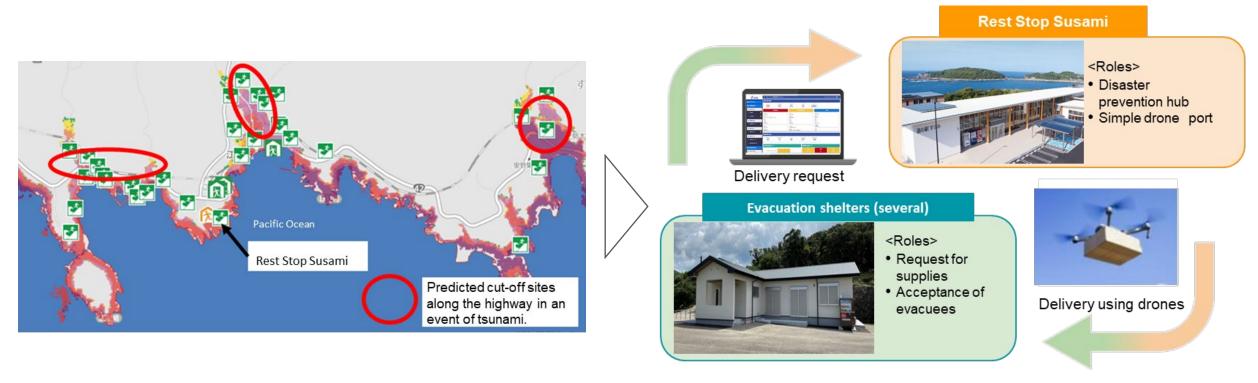
Early grasp of the situation Evacuation preparations

#### 2-3: Examples of Resilience Initiatives in Japan

• DX can solve problems in all phases: normal times, pre-disaster, and post-disaster.

#### Post-disaster

## [Delivery of relief supplies using automated drones]

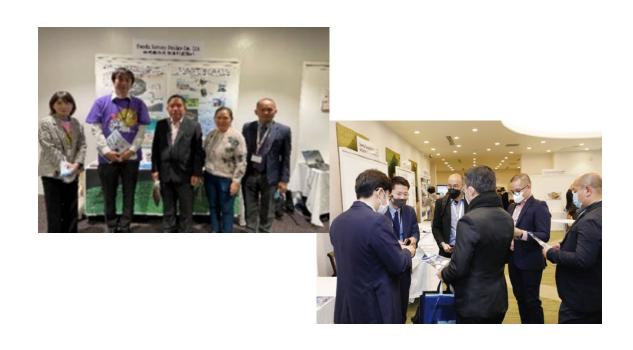


#### 3-1: Toward Social Implementation of Smart Cities

Matching opportunities with service provider companies and capacity-building efforts are important.

# **Business matching**

# **Capacity building**



At the 4th Japan-ASCN High Level Meeting



UNCRD Training

#### 4: Conclusions - Japan-ASEAN Cooperation in the Future

> The key is sharing experiences, strategies and best practices to jointly develop innovative solutions to each challenge.

➤ With Japan's knowledge and expertise, we would like to contribute to realizing smart cities in ASEAN nations and promote specific projects for "implementation."

> We will welcome proposals from ASEAN nations.

# Thank you