



MOEJ's Loss & Damage Assistance Activities

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Initiative to Promote the Development of Early Warning Systems through PPP



Background

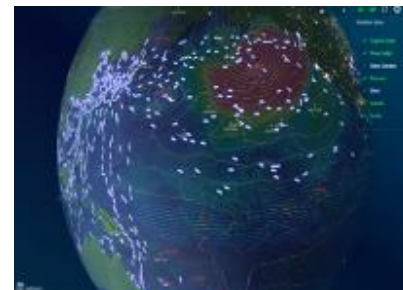
- The UN announced, "Within the next five years, everyone on Earth should be protected by Early Warning Systems (EWSs)".
- **Japan announces the package at COP27** and will provide comprehensive assistance for losses and damages.
- The **private sector** has been active in providing solutions.

EWS development by private sector

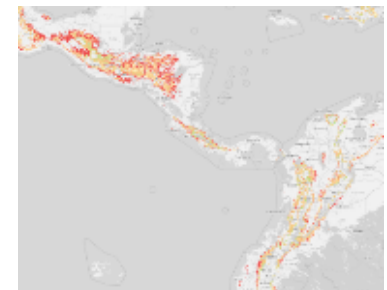


Plans to install small radars in Vietnam.
Targets 50 locations by 2024 in Indonesia,
Japan, and other Asian countries.

Climate Information Solutions



Recommendation of the
best route for vessels



Support for procurement
through yield risk
assessment

The Consultation Meeting of the Public Private Partnership for the Development of Early Warning Systems in the Asia Pacific Region



Objectives

- Promotes the introduction of early warning systems, such as the development of observation equipment, analysis and prediction of observation data, provision of climate information services, for the business sector by the Japanese private sector in the Asia-Pacific region, including the ASEAN region.
- Formulate public-private partnership to develop case studies of early warning system for the business sector that will pave the way for its implementation ahead of its Asian counterparts.

the Consultation Meeting

■ Participants:

Organizer	Minister of the Environment, Japan
Relevant Ministries and Organizations	JMA, Cabinet Office, MoFA, METI, JICA, JAXA, UNDRR Office in Japan, ASEAN-Japan Centre etc.
Private sector	Approx. 50 companies, including climate information service providers, manufacturers of weather observation equipment, weather forecast system developers, communication services providers, remote sensing technology provider, general insurance company, and development consultants

■ Details of the Consultation Meeting:

the 1st Consultation Meeting (June 27, 2023)

Agenda: “Initiative to Promote the Introduction of Early Warning Systems in the Asia-Pacific Region through Public-Private Partnerships” and the Public-Private Partnership Consultation

the 2nd Consultation Meeting (Oct. 31, 2023)

Agenda:

- Introduction of the results of the field survey for the promotion of EWS introduction in ASEAN countries
- Explanation of business model proposal strategy



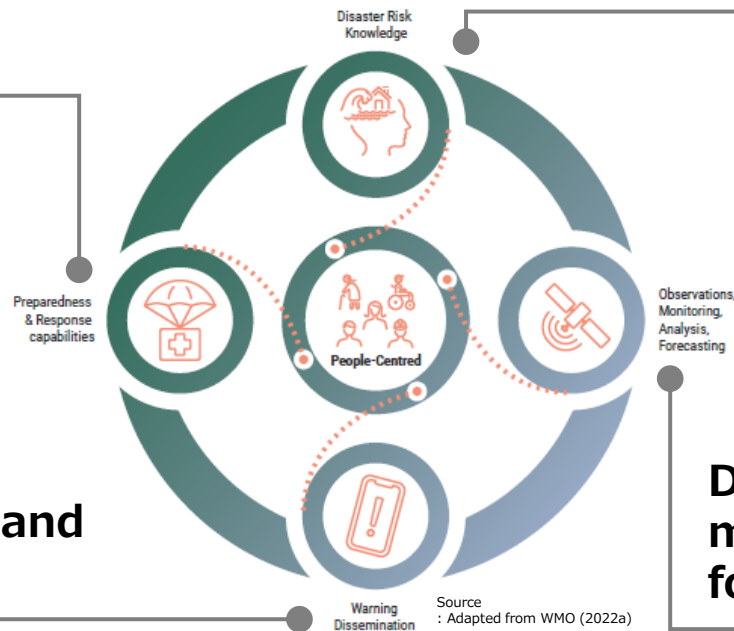
Initiative to Promote the Development of Early Warning Systems through PPP

What is EWSs for extreme weather event ?

Preparedness and response capabilities



Warning dissemination and communication



Disaster risk knowledge



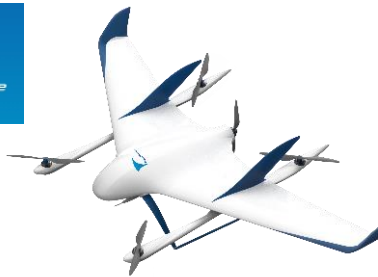
Detection, observation, monitoring, analysis and forecasting of hazards



Four pilers for Early Warning System

Preparedness and response capabilities

- ▶ Measuring and transporting supplies using drones

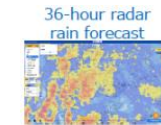


Preparedness & Response capabilities

Disaster risk knowledge

- ▶ Real time water disaster information

CTI 株式会社 建設技術研究所



36-hour radar rain forecast



River flood forecast

River water level & dam information



Information from JWA



Weather warnings/advisories



Stormwater flood hazard map

RiskMa
水災リスクマッピングシステム

Observations, Monitoring, Analysis, Forecasting



Warning Dissemination
Source : Adapted from WMO (2022a)

Warning dissemination and communication

- ▶ Early warning with ICT solution



- ▶ Landslide remote monitoring system

OSASI
OSASI TECHNICS INC.

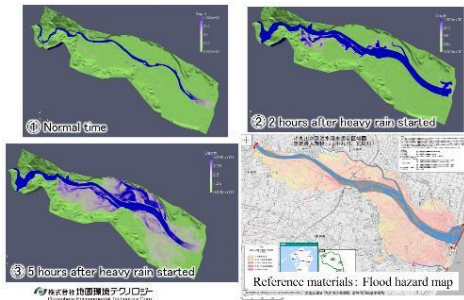


Four pilers for Early Warning System

Detection, observation, monitoring, analysis and forecasting of hazards

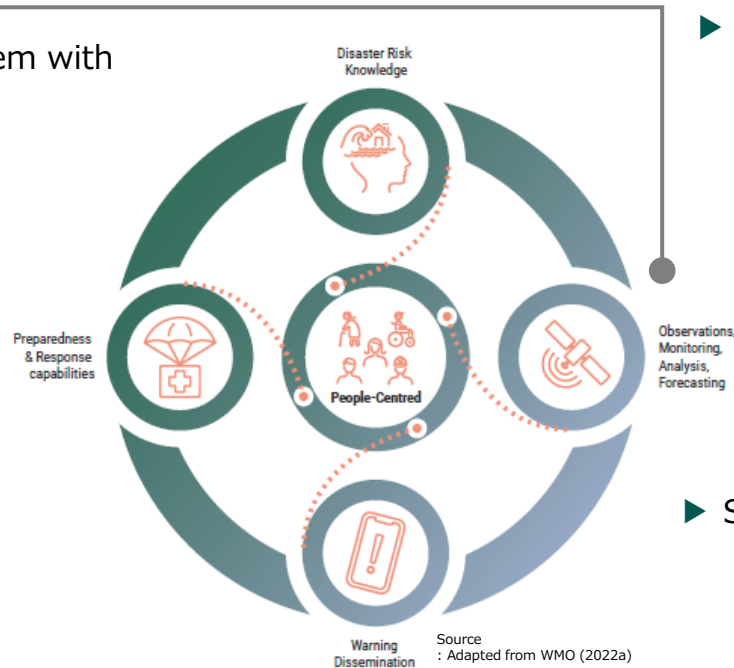
- ▶ Real-time flood prediction system with GETFLOWS

株式会社地圏環境テクノロジー
Geosphere Environmental Technology Corp.



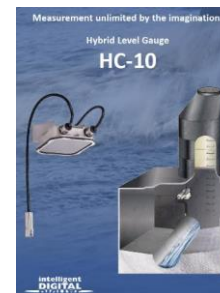
- ▶ Flow measurement using video image

HYDRO Hydro Technology Institute



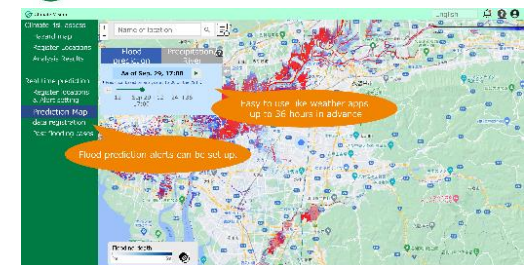
- ▶ Water level monitoring with radar and water pressure

TOKYO
KEIKI
TOKYO KEIKI INC.



- ▶ Real-time flood prediction solutions

Gaia Vision



- ▶ Sensory Data Transmission Service

株式会社みどり工学研究所
MIDORI ENGINEERING LABORATORY



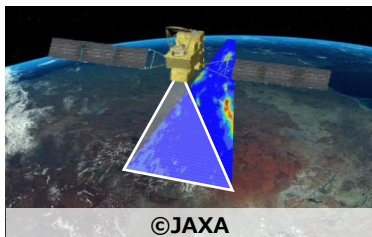
Japan's Assistance Package to Promote Investments for Global Actions Toward the Achievement of the Paris Agreement Goals

① Ambition gap

Added emissions reduction targets don't reach 1.5°C

Support for raising countries' ambitions and to identify pathways toward net zero

Increase the predictability of decarbonization for business



② Adaptation gap

Adaptation measures are not keeping pace with increasing climate risks

Accelerating sustainable adaptation through public-private partnerships



Mitigating economic damage caused by climate change



③ Implementation gap

Not enough investments for implementation

Explore new areas and promote the use of private capital, aligning all financial flows with the Paris Agreement goals



G7 Inventory on Climate Disaster Risk Reduction, Response and Recovery



Background

- The COP27 decisions on establishing new fund and funding arrangements for responding to loss and damage as well as on the institutional arrangements for the full operationalization of the Santiago network (SN)
- Nonetheless, in order to further support vulnerable developing countries, it is important to enhance visibility of and access to available technical and financial solutions and support for climate disasters.
- For this purpose, **G7 Climate, Energy and Environment Ministers** released “**G7 Inventory on Climate Disaster Risk Reduction, Response and Recovery**” in Sapporo on 16th April 2023.



Contents

- By mapping the support provided by G7 members, the Inventory describes the **overall picture** of existing committed G7 support.
- The Inventory serves as useful reference material to look for **support options already in operation**, for the countries that are considering applying for support.
- Specifically, each **Country Sheet** provided by G7 members explains various support activities.

Including...

120 Capacity Building Support,
13 Insurance-based Mechanisms,
27 Post-Disaster Financial Schemes, and
40 Activities on Early Warning System



Thank you!

References

Structure



Assistance Package by the Government of Japan for Averting, Minimizing and Addressing Loss and Damage” (APLD)



MOEJ's Initiative to Promote the Development of Early Warning Systems through Public-Private Partnerships in the Asia-Pacific Region



The Consultation Meeting of the Public Private Partnership for the Development of Early Warning Systems in the Asia Pacific Region

Purpose

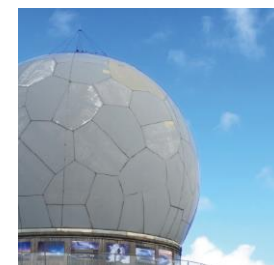
Work with the international community to provide comprehensive support such as human resource development, early warning system development against loss & damage

Promote business development related to early warning systems by the Japanese private sector in the Asia-Pacific region

Develop EWS prototypes by private sector

Discussion in the International Community

- “Loss and Damage” COP2
- Importance of the International community to work together to avert Loss and Damage
- Requirement of efforts to achieve Paris Agreement, Sendai Framework for Disaster Reduction, and SDGs





Issue

**Increase of
mortality and
economic loss**

Goal

**Develop an EWS
Prototype**

Mission

**Avert Loss and Damage in
Developing Countries**

Vision

**Develop EWS
throughout the Asia-Pacific**

Value

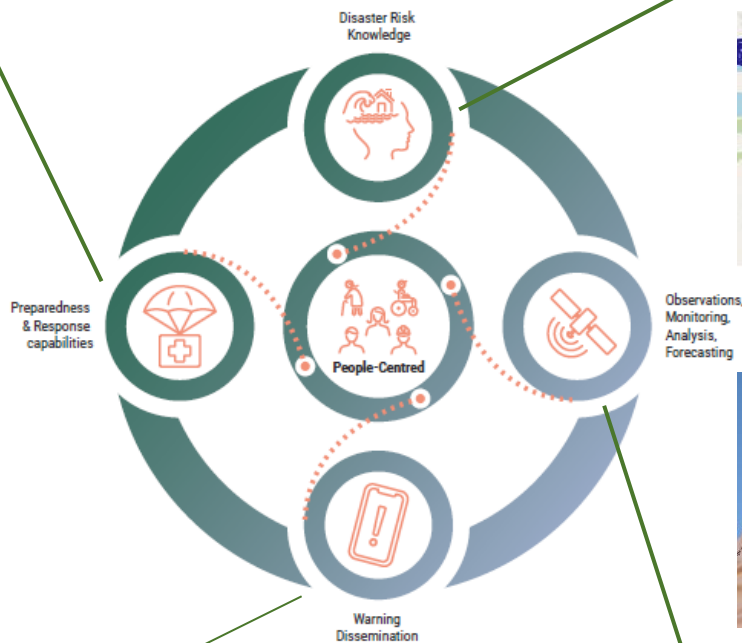
**Arrange public financing and policies
to promote development of EWS
through private sector initiatives**

Four pilers for Early Warning System

Preparedness and response capabilities

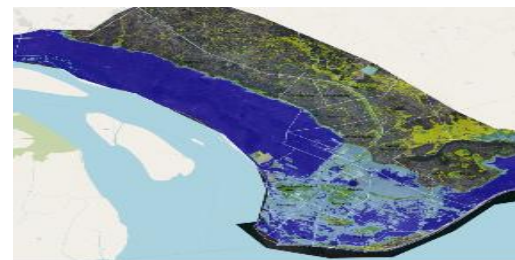


Warning dissemination and communication



Source: Adapted from WMO (2022a)

Disaster risk knowledge



Detection, observation, monitoring, analysis and forecasting of hazards

Road map

