# **Disaster Risk Reduction (DRR)**

# Risk Management Team Miho OHARA ICHARM



United Nations Educational, Scientific and Cultural Organization



International Centre for Water Hazard and Risk Management under the auspices of UNESCO

ユネスコ後援 水災害・リスクマネジメント国際センター

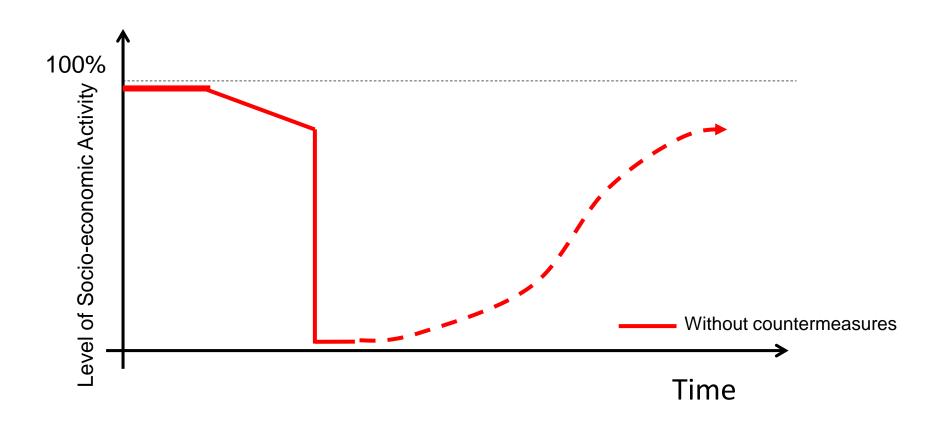


Public Works Research Institute, National Research and Development Agency, Japan

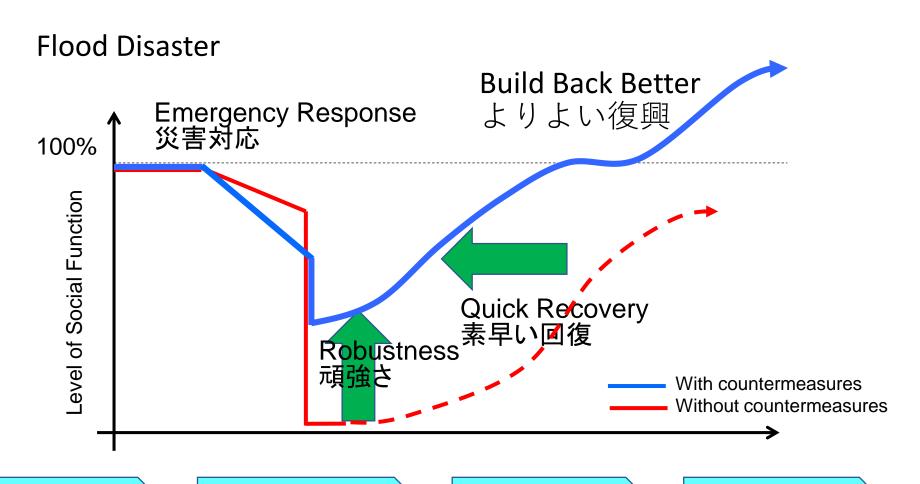
国立研究開発法人 土木研究所

## Disaster Resilience with/without countermeasures

#### Flood Disaster



#### Disaster Resilience with/without countermeasures



① Disaster Impact Analysis (災害影響分析)

② Disaster Risk Assessment (災害リスク評価)

③Contingency Planning (災害対応計画) 4 Risk Communication (リスクコミュニケーション)

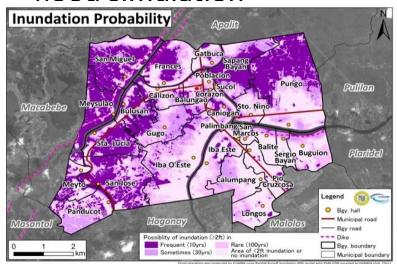
## Disaster Impact Analysis and Risk Assessment

Disaster Impact Analysis
 (災害影響分析)

-Interview/Questionnaire Survey to understand disaster impact <Percentage of livelihood restoration in some inundated municipality in Japan> <sup>(%)</sup>100 N = 1161Year 2Year

2.Disaster Risk Assessment (災害リスク評価)

-Risk Assessment based on flood simulation

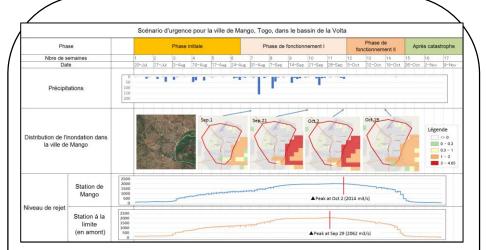


Sharing results with local municipality officers



#### Contribution to Disaster Risk Reduction (DRR)

#### 3.Contingency Planning (災害対応計画)



Development of emergency response timeline



Capacity development for related governmental officers

# **4. Risk Communication** (リスクコミュニケーション)

-Visualization of inundation



Visualization by Google Earth Street View



Visualization by Virtual Reality (VR)

#### International Research Project for Implementation of Technology

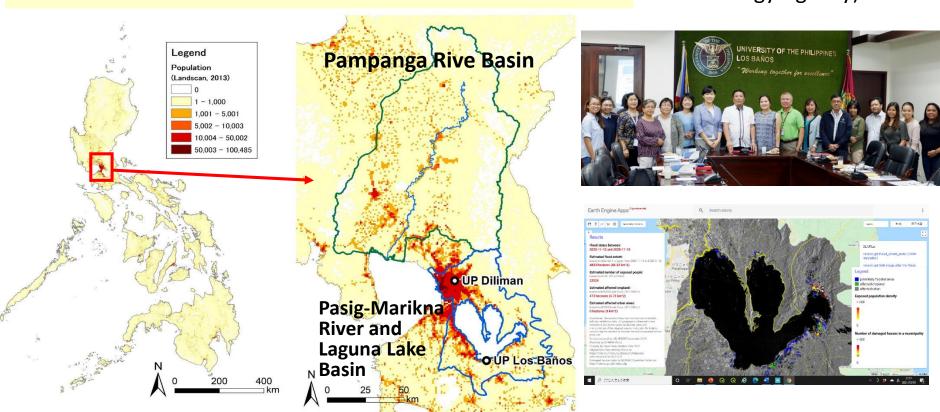
The Project for Development of Hybrid Water-Related
Disaster Risk Assessment Technology for
Sustainable Local Economic Development Policy
in the Philippines

フィリピン共和国における気候変動下での 持続的な地域経済発展への政策立案のための ハイブリッド型水災害リスク評価の活用

#### **SATREPS**

Science and Technology Research Partnership for Sustainable Development Program

5 year Project (2021-2026) funded by JICA and JST (Japan Science and Technology Agency)



https://www.pwri.go.jp/icharm/research/articles/project-HyDEPP-SATREPS.html