

# JICA Climate Change Cooperation Strategy and Support to Climate Change Adaptation

November 15th, 2016

Japan International Cooperation Agency (JICA)



# JICA Climate Change Cooperation Strategy

was adopted in September 2016;

text available at:

https://www.jica.go.jp/english/our\_work/climate\_change/overview.html

- commits to scaling up support to climate actions in developing countries;
- commits to promoting the transformation to low-carbon and climate-resilient economy in developing countries with Japan's advanced innovative technologies.



# JICA Climate Change Cooperation Strategy - Structure -

## **Priority Issues**

- 1. Promoting low-carbon and climate-resilient urban development and infrastructure investments
- 2. Enhancing comprehensive climate risk management
- Support to climate policy and institutional development
- 4. Enhanced conservation and management of forests and other ecosystems

## Cooperation Approach

- 1. Integrating climate actions and development
- 2. Building global partnership with diverse stakeholders
- 3. Taking the best of Japan



Priority issue 1: Promote investments in low-carbon and climate-resilient urban development and infrastructure

Making cities and infrastructure more low-carbon and climate-resilient is critically important for both climate change mitigation & adaptation.

- 1 More efficient use of energy (e.g. high-efficiency thermal power, reduction of electricity loss, energy saving), and adequate development and use of renewable energy
- 2 Development of public transport systems
- 3 Climate risk assessment in the planning stage of urban development and construction of infrastructure and subsequent incorporation of risk avoidance, prevention and reduction measures



#### Resilient Infrastructure

- JICA provides financial support (loan, grant, equity) to develop infrastructure.
- Measures to reduce climate risks are built into the design of infrastructure.



Thailand: Outer Bangkok Ring Road Rehabilitation Elevated to reduce flood risks



Thailand: Bangkok Metro Blue-line



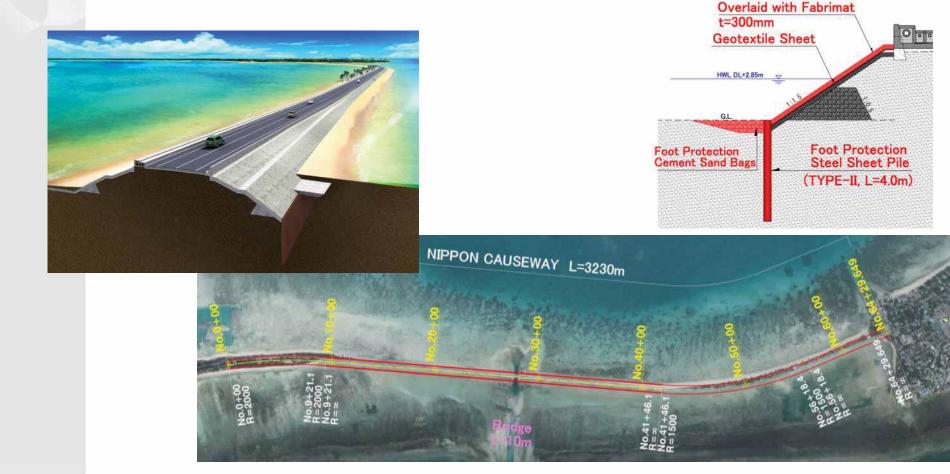
Philippines: Typhoon-resilient Aurora Memorial Hospital



#### Resilient Infrastructure

Project for reconstruction of Nippon Causeway on Tarawa to Adapt to Climate Change (Kiribati)

- The road was designed taking account of sea level rise by climate change





# Priority issue 2: Enhancing comprehensive climate risk management

With growing impacts of climate variability and change, comprehensive climate risk management is required for all development work. Special considerations for particularly vulnerable countries and people are taken into account.

- 1 Climate risk assessment/prediction, early warning, development of coping capacity and facility in preparation for prompt actions in the events of emergency
- 2 Pre-investments in climate risk prevention and reduction as well as enhanced resilience of facilities/infrastructure in reconstruction (build back better)
- 3 Risk finance in preparation for materializing climate risks

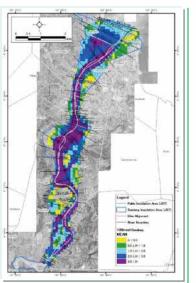


# Support to climate risk assessment, early warning, and preparedness

#### **Risk assessment**



Flood risk assessment in Philippines





#### **Early warning**

Enhancing weather observation, forecast and early warning in Philippines

- Grant aid provided to strengthen weather observation facilities
- Capacity development support provided for forecast and early warning





Awareness raising and capacity development support for local communities in Thailand





- Cyclone shelters are key facilities to protect human lives
- They are used as school in normal time

Construction of Cyclone Shelter in the Area Affected by Cyclone "Nargis" in Myanmar

**Preparedness** 

**Awareness raising** 



#### Investment in climate risk reduction

#### Irrigation



Irrigation canal (East Tmor)

Irrigation pump (Tunisia)



#### Flood risk management



Floodway (Philippines)



Floodgate (Indonesia)



Slit dam for debris flow (Philippines)



Drainage well for landslides (Honduras)

Sediment disaster risk management



Desalinization plant (Tunisia)

Water supply facility (Pakistan)



Reliable water supply

# JICA

#### Risk finance

# Stand-by Emergency Credit for Urgent Recovery (SECURE)

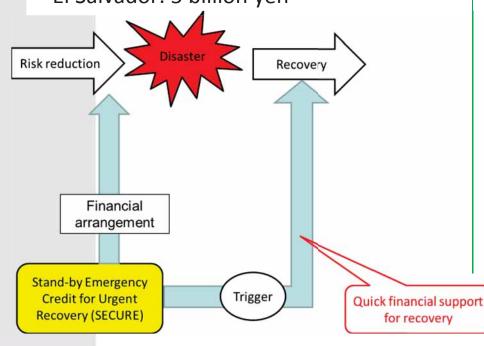
Contingent credit line for recovery after catastrophe

- Interest rate: 0.01%

Maturity: 40 years (10-year grace period)

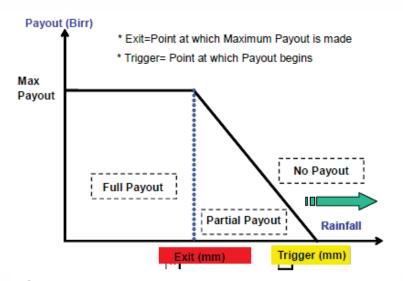
- Committed to date

Philippines: 50 billion yen
Peru: 10 billion yen
El Salvador: 5 billion yen



Weather index-based crop insurance pilot in Ethiopia

- Low-cost crop insurance for small-hold farmers
- Provided in cooperation with local insurance company
- Insurance premium approx. US\$ 5/unit with maximum payout of approx. US\$ 25
- Number of farmers who bought insurance 1,286 (2013) and 5,623 (2014)



Conceptual diagram of weather-index insurance scheme



# Priority issue 3: Support to climate policy and institutional development

Developing countries need assistance to implement the Paris Agreement and their Nationally Determined Contributions. Climate change has to be mainstreamed in the development agenda in the countries.

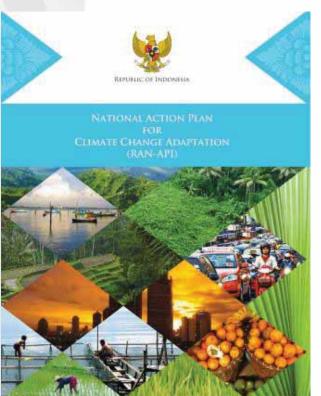
- 1 Formulation of climate action plans at national- and locallevels, and integration of climate change mitigation and adaptation into development policies/plans
- ② Capacity development to undertake the process of NDC preparation, monitoring, reporting and review as provided in the Paris Agreement
- 3 Improvement of policies and institutions to encourage private sector activities and investments in climate change
- 4 Improved access to climate finance for countries and cities



# Support to national/local adaptation planning and capacity development in Indonesia

"Project of Capacity Development for Climate Change Strategies in Indonesia" (2010-2015)

For adaptation, JICA supported;



- formulation and implementation of the National Adaptation Action Plan (RAN-API) in collaboration with GIZ and ADB,
- formulation and implementation of local adaptation policies/plans,
- implementation of adaptation pilot projects and capacity development

MINISTRY OF NATIONAL DEVELOPMENT PLANNING/ NATIONAL DEVELOPMENT PLANNING AGENCY (BAPPENAS) 2014



"Project of Capacity Development for Climate Change Strategies in Indonesia" (2010-2015)

North Sumatra
= Governor's instruction
on adaptation to secure
rice production =

## Map of local-level supports



West Java, Central Java,
East Java
= adaptation practices by

farmers communities =

South Sulawesi
= Spatial Planning
& irrigation =

Wakatobi
= community-based
adaptation =

( Show

South Sumatra = Mainstreaming Adaptation =

Bali = Vulnerability Assessment=

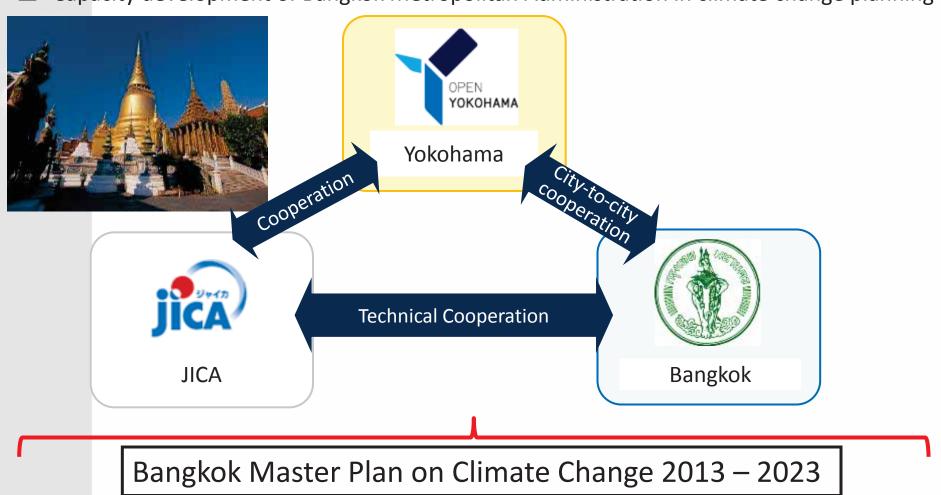
North Coast of Java Island &
Rive Basin (West, Central, East Java
Province)
= Spatial Planning =

East Java = Agricultural insurance =



#### Project for Bangkok Master Plan on Climate Change 2013-2023

- Support preparation of "Bangkok Master Plan on Climate Change 2013 2023"
- ☐ Capacity development of Bangkok Metropolitan Administration in climate change planning



Transport

Energy

Waste/Waste Water

Urban Greening

Adaptation



Priority issue 4: Enhanced conservation and management of forests and other ecosystems

Sustainable management of forests and other ecosystems contributes to both climate change mitigation and adaptation.

- 1 Enhancing mitigation measures through sustainable forest management with, among others, REDD+ and sustainable natural resources management by communities
- 2 Enhancing adaptation measures through, among others, the promotion of disaster risk reduction by enhanced ecosystem services, and enhancement of resilience to droughts (and desertification) in Sub-Saharan Africa
- ③ Promotion of public-private partnership centered with "Japan Public-Private Platform for REDD+"
- 4 Development of innovative technologies such as forest monitoring using advanced satellite technology with JICA-JAXA (Japan Aerospace Exploration Agency) partnersh



# Enhancing ecosystems and ecosystem services to reduce disaster risks

Mangrove Rehabilitation in Myanmar

Restoration of slope vegetation in China









## Conclusions

- Abundant experience in support to various aspects of adaptation actions integrated into sustainable development
- Ready to provide support to NAPs process upon request with high priority from developing countries
- Focus should be given to achieving more climateresilient development rather than isolating C.C. adaptation from development
- In this regard, mainstreaming adaptation in development planning at different levels (e.g. national/local-level, sector-wide, project level etc.) is the key