

COP20 Side Event on Urban, Climate change and Finance

# Urban, Climate change and Finance - JICA's Approach-

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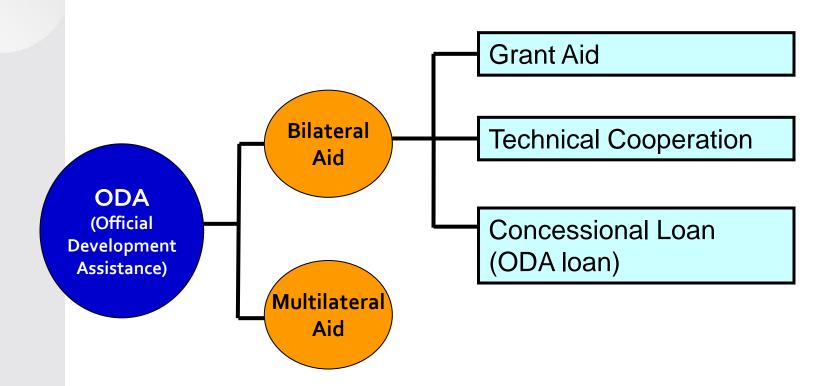
5<sup>th</sup> December, 2014, Japan Pavilion



### **About JICA**

JICA extends Japanese ODA (Official Development Assistance) through integrated implementation of grant aid, technical cooperation and concessional loan.

Annual commitment was over US\$15 billion in 2013.



# JICA's Approach: Low-Carbon and Climate Resilient Development Cooperation

Comprehensive Assistance



Climate Change, A Global Agenda



Climate Compatible
Sustainable Development



Financial Assistance

Policy Dialogue
Public-Private
Partnership

Cooperation

**Technica** 

Research / Studies

<Mitigation: Low-carbon Society>

- Strategic Mitigation Actions (NAMA、MRV、REDD+, etc.)\*
- Low-carbon Technologies (Renewables, Energy Efficiency, etc.)
- Efficient Use of Resources, etc. (Mass Transit, Smart-grid, etc.)

Policy & Institutional Reform, Finance Mechanism, Human Resource Development

- ➤ Modeling / Vulnerability Assessment (Climate Prediction, GIS\*\*, etc.)
- ➤ Enhancing Adaptive Capacity
  (Awareness, Early Warning System, etc.)
- Resilient Infrastructure (Irrigation, Flood Control, etc.)

< Adaptation: Climate Resilient Society >

Energy, Transport, Forestry, Waste Management, etc.

Reduction of GHG Emission

Responding to Climate Change

Enhancing Adaptive Capacity

**Equitable Growth** 

Sustainable Development

> Human Security

Disaster Risk Management, Water, Agriculture. Sanitation, etc.

NAMA (Nationally Appropriate Mitigation Actions)
 MRV (measurable, reportable, verifiable)
 REDD+ (Reduction of Emission from Deforestation and Degradation)

<sup>\*\*</sup>GIS (Geographic Information System)

### **Strategic Cooperation by JICA**

Bangkok Master Plan on Climate Change 2013 – 2023 (Project Period: 2013-2015)

#### **Bangkok Metropolitan Administration (BMA)**

### Steering Committee chaired by Deputy-Governor of BMA

Participants: Representatives from the participating departments of BMA, TGO, OTP, PCD, NESDB, ONEP, DEDE, etc.

Inter-Organizational Coordination

Yokohama-City ('Future City Initiative')

Japanese Expert Team

Experiences of Low-Carbon Policy-Planning and Implementation in JAPAN

Local Consultants





#### **Objective of the program**:

The Bangkok Master Plan on Climate Change 2013-2023 is prepared with strengthened capacity for implementation.

#### Output 1: Preparation of Bangkok Master Plan on Climate Change

- •Assessment of the Bangkok Action Plan on Global Warming Mitigation 2007 – 2012
- •Improvement of Data Collection, Methodologies for Estimation and Monitoring of GHG Emission
- Development of Sectoral Strategies
- •Public consultation, Workshops and Seminars
- •Dissemination of the Master Plan

# Output 2: Strengthened Capacity of BMA officials

- Training Programs for BMA officials
- Seminars/Workshops for Related Stakeholders
- Development of Educational Materials

# **Strategic Cooperation by JICA**

(broad lineup of JICA low carbon infrastructure investment in India)

### **Urban Transport**

Prime Minister
Dr. Manmohan Singh:
"Delhi Metro is a shining
example of Japan-India
partnership"





### **Energy Efficiency**

Increasing energy access and efficiency by helping India construct a pro-poor power network

- ✓ JICA metro projects already in 4 cities (Delhi, Bangalore, Kolkatta, Chennai)
- ✓ Knowledge sharing by Tokyo Metro on operational safety
- ✓ Wide range of renewable technology eligible for financing thru IREDA
- ✓ Technical cooperation to <u>transfer</u> <u>solar power technology</u> to IREDA

Medium to long term finance provided through IREDA (Indian Renewable Energy Development Agency Limited.)





Recent ODA loan projects include:

- ✓ <u>Rural electrification</u> in southern and western India (accessing 3 million)
- ✓ <u>Upgrading transmission and distribution</u> <u>system (urban and rural)</u>
- "Energy Saving Equipment List"
   Locally available energy saving equipment
- <u>Enhancing capacity</u> of intermediary bank and <u>raising awareness</u> of SMEs



Supporting SMEs using
Sustainable Finance thru
SIDBI (Small Industries
Development Bank of India)

**Sustainable Finance** 



# Increased vulnerability to Flood Risks in Urban Areas - Major Adaptation Challenge for Asian cities

### <u>Increased vulnerability to Flood</u> Risks in Urban Areas

- ◆Heavy Rainfall Events
- ◆Rise in Groundwater Level
- ◆ Multiple factors Related to Rapid Urbanization
- -Decreased Permeability of the Ground
- -Habitation in Depressed zones
- -Lack in Rainfall Drainage and Sanitary Management ,etc.



### Adaptation measures

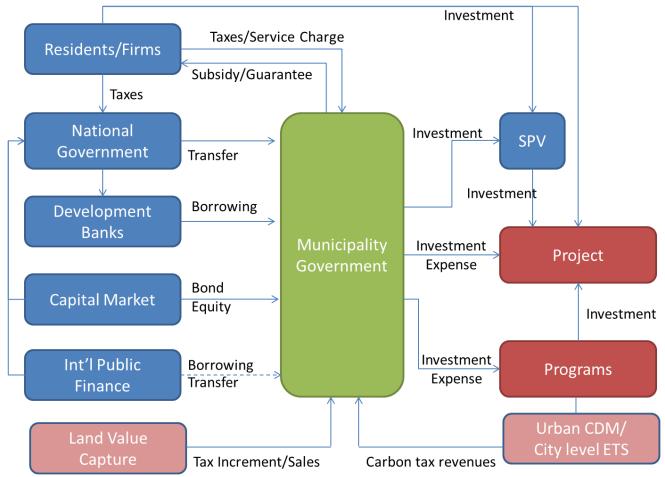
- ➤ Structural Measures Construction of Dikes, Improvement of Rainwater Drainage, etc.
- Non-Structural Measures
- -Risk Mitigation Measures at Household/Community Levels
- -Early Warning and Evacuation System
- Appropriate City Planning
- Environmental Management
- -Sewage System
- -Waste and Sanitary Management

Necessity of a 'Long-term Resilient City Development Plan'



### Need for a diversity of finance sources

- The limits of international public funding imply that most of the funding of CC action will have to be mobilized by local governments themselves with support from their national government.
- Public funding are most effective if they help overcome key problems of access to finance (e.g. creditworthiness) and support the development of capacities at the city level to improve access to diverse sources of funding. Innovative sources (e.g. City ETS) important.





### Conclusion

- What are the key lessons learned for planning and development towards Low-carbon and climate resilient city?
  - Well designed Master Plan + Timely Project implementation + O&M capacity to provide better service
  - Good coordination among stakeholders
- What elements are the most critical for effective policy planning and implementation for Low-carbon and climate resilient city?
  - Good coordination between National Government and Municipality (in terms of Development planning, Finance)
- What are the challenges and opportunities for municipalities and development financial institutions to apply their experiences to climate finance?
  - Improvement of municipality's Credit worthiness Fiscal management capacity
- What issues are to be studied further by development finance institutions and research institutions for better use of climate finance in climate compatible urban development?
  - > Enabling environment for generating 'co-benefit'



## Thank you very much for your attention!

For questions, please feel free to contact:

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