JICA’s Cooperation in Climate Change Adaptation

Toward Sustainable and Resilient Development

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JICA’s Role and Approach in Respond to Climate change
JICA extends Japanese ODA (Official Development Assistance) through integrated implementation of grant aid, technical cooperation and concessional loan.
Direction of Low Carbon and Resilient Development Cooperation by JICA
(Published in June 2012)

Guiding Principles
1. Climate Compatible Sustainable Development
2. Comprehensive Assistance utilizing an Array of Schemes
3. Collaboration with Development and Climate Partners

Concrete Responses and Direction
1. Mitigation: Towards a Low Carbon Society
2. Adaptation: Towards a Resilient Society
   (1) Formulating National Plans and Sector Strategies
   (2) Enhancing Adaptive Capacity for Climate Related Disasters
   (3) Developing Resilient Infrastructure
3. Mechanisms to Accelerate Mitigation and Adaptation
JICA’s Approach: Low-Carbon and Climate Resilient Development Cooperation

**Comprehensive Assistance**

- **Technical Cooperation**
  - Policy Dialogue
  - Public-Private Partnership
  - Research / Studies

- **Financial Assistance**
  - Policy & Institutional Reform, Finance Mechanism, Human Resource Development
    - Modeling / Vulnerability Assessment (Climate Prediction, GIS**, etc.)
    - Adaptation Planning (NAP, etc)
    - Enhancing Adaptive Capacity (Awareness, Early Warning System, etc.)
    - Resilient Infrastructure (Irrigation, Flood Control, etc.)

- **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.)

- **Adaptation: Climate Resilient Society**
  - Modeling / Vulnerability Assessment (Climate Prediction, GIS**, etc.)
  - Adaptation Planning (NAP, etc)
  - Enhancing Adaptive Capacity (Awareness, Early Warning System, etc.)
  - Resilient Infrastructure (Irrigation, Flood Control, etc.)

**Climate Change, A Global Agenda**

**Climate Compatible Sustainable Development**

**Energy, Transport, Forestry, Waste Management, etc.**

**Disaster Risk Management, Water, Agriculture, Sanitation, etc.**
[#2]

Case Studies
JICA’s support for Climate Change adaptation in Indonesia

A case of "Project of Capacity Development for Climate Change Strategies in Indonesia"
Outline

I. Overview of the “Project of Capacity Development for Climate Change Strategies in Indonesia”
II. Support to mainstreaming adaptation in development planning
III. Support to pilot activities for adaptation
IV. Lessons learned
I. Overview of the “Project of Capacity Development for Climate Change Strategies in Indonesia”
The Project of Capacity Development for Climate Change Strategies (Indonesia)

< Project Purpose >
Capacity of the key ministries and local governments concerned of the Government of Indonesia to formulate climate change policies based on the sound information and approaches is developed

< Target Group >
National Development Planning Agency (BAPPENAS), Meteorological, Climatological and Geophysical Agency (BMKG), Ministry of Agriculture (MOA), Ministry of Environment and Forestry (KLHK), and concerned local governments, Ministry of Agrarian and Spatial Planning (MASP)

< Project Period >
October 2010 – October 2015 (Five Years)

Sub Project 1 (SP1)
Integration of Climate Change Mitigation and Adaptation into National Development Planning
■ CP: BAPPENAS, MASP, BMKG
■ SP Purpose:
  The capacity of the key ministries and local governments to formulate mitigation actions in a monitored, evaluated and reported manner and integrate adaptation into development planning is improved.

  • Assistance on National Action Plan for GHG Emissions Reduction (RAN-GRK)
  • Assistance on National Action Plan on Climate Change Adaptation (RAN-API)
  • Mainstreaming on National Medium Term Development Plan (RPJMN2015-2019)
  • Assistance on mainstreaming on land use plan

Sub Project 2 (SP2)
Capacity Development for Climate Change Adaptation Actions in Agriculture and Other Relevant Sectors
■ CP: BMKG, MOA, BAPPENAS,
■ SP Purpose:
  Capacity to promote climate change adaptation actions in agriculture and other relevant sectors is improved.

  • Vulnerability Assessment
  • Seasonal weather forecasting
  • Adaptation activities on farmers level
  • Agricultural Insurance

Sub Project 3 (SP3)
Capacity Development for Developing National GHG Inventories
■ CP: KLHK
■ SP Purpose:
  National greenhouse gas inventories are compiled by KLH on a regular basis in cooperation with key ministries and local governments concerned of the Indonesian government.

  • Capacity development of Centre for National Greenhouse Gas Inventory System (SIGN Center)
  • Establishment of GHG inventory formulation system

Mitigation
Adaptation
Mitigation
II. Support to mainstreaming adaptation in development planning
II. Support to mainstreaming adaptation in development planning

JICA supported:

- Establishment and operation of the Advisory Committee on Adaptation

- Development of the Strategy for Mainstreaming Adaptation into National Development Planning
II. Support to mainstreaming adaptation in development planning

National Action Plan for Climate Change Adaptation (RAN-API)

JICA supported the development of RAN-API in collaboration with GIZ and ADB.

JICA is supporting the operation of RAN-API secretariat office in collaboration with GIZ and Mercy Corps.
II. Support to mainstreaming adaptation in development planning

National Action Plan for Climate Change Adaptation (RAN-API) Contents

Chapter 1 Preliminary
Chapter 2 Climate Change and It's Impact in Indonesia
Chapter 3 Policies and Objectives of The National Action Plan on Climate Change Adaptation
Chapter 4 Adaptation Strategy and Action Plan by Sector
Chapter 5 Implementation Mechanism
Chapter 6 RAN-API Pilot Site Selection

Appendix 1: National Action Plan on Climate Change Adaptation (RAN-API) Matrix
Appendix 2: Summary of Impacts of Climate Change
Appendix 3: Priority areas and aspects Integrating Gender Considerations in Climate Change Adaptation Program of Action
### II. Support to mainstreaming adaptation in development planning

#### National Action Plan for Climate Change Adaptation (RAN-API)

#### Development Process

<table>
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<tr>
<th>Phase</th>
<th>Stage</th>
<th>Description</th>
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<tr>
<td>1. Preparation</td>
<td>1-1</td>
<td>Meetings and discussions for mainstreaming adaptation into national development plan and development of RAN-API</td>
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<td></td>
<td>1-2</td>
<td>Developing RAN-API outline</td>
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<td>1-3</td>
<td>Defining TOR and establishing RAN-API drafting team</td>
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<td>2. Drafting concept note of RAN-API</td>
<td>2-1</td>
<td>Establishing work plan and methodology</td>
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<td></td>
<td>2-2</td>
<td>Drafting the concept note</td>
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<tr>
<td></td>
<td>2-3</td>
<td>Stakeholder consultation meetings on the concept note</td>
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<td>3. Initial draft of RAN-API</td>
<td>3-1</td>
<td>Workshop on method and process of RAN-API</td>
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<td></td>
<td>3-2</td>
<td>Data collection</td>
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<tr>
<td></td>
<td>3-3</td>
<td>Interviews and consultation with line ministries/agencies</td>
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<td></td>
<td>3-4</td>
<td>Preparation of the initial draft of RAN-API</td>
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<td></td>
<td>3-5</td>
<td>Stakeholder consultation meetings on the initial draft</td>
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<tr>
<td>4. Finalizing RAN-API</td>
<td>4-1</td>
<td>Compilation and review of the results of the consultation meetings</td>
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<tr>
<td></td>
<td>4-2</td>
<td>Preparation of the final draft of RAN-API</td>
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<tr>
<td></td>
<td>4-3</td>
<td>Stakeholder consultation meetings on the final draft</td>
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<tr>
<td></td>
<td>4-4</td>
<td>Public consultation on the final draft</td>
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<tr>
<td></td>
<td>4-5</td>
<td>Finalizing the draft and going through the approval procedure of RAN-API</td>
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Original plan was 1 year to complete the process but it took about 2 years because of more time spent on stakeholder consultation.
II. Support to mainstreaming adaptation in development planning

National Action Plan for Climate Change Adaptation (RAN-API) Arrangement for the drafting process

Core Group
BAPPENAS (Overall Coordination), KLH, DNPI, BMKG

Support
RAN-API Secretariat
Drafting team
Stock taking team (data collection)
Admin. and logistic support section

Consultation

Support
JICA, GIZ, ADB

Other ministries
Local governments
Universities
NGOs, CSOs, and wider stakeholders

Note:
BAPPENAS: National Development Planning Agency
DNPI: National Council on Climate Change
BMKG: Meteorological, Climatological and Geophysical Agency
KLH: Ministry of Environment
II. Support to mainstreaming adaptation in development planning

Support to capacity development

JICA is supporting:

- Training in Japan for Meteorological, Climatological and Geophysical Agency (BMKG) staff on seasonal climate forecasting and climate change projection (University of Tsukuba, Japan)
- Training in Japan on climate change, including adaptation
  - Several staff from Government of Indonesia has been invited: National Development Planning Agency (Bappenas), BMKG, Ministry of Environment (KLH), Regional Development Planning Agency (Bappeda) of North and South Sumatra, Ministry of Public Works (PU), etc.
III. Support to pilot activities for adaptation
III. Support to pilot activities for adaptation

(1) Mainstreaming climate change adaptation at regional level

JICA has supported:

• Drafting the document for mainstreaming climate change, both for mitigation from RAD GRK and adaptation from KRAPI – Assessment on climate change risk and adaptation (project by GIZ) – into regional development planning (RPJMD) in South Sumatra
III. Support to pilot activities for adaptation

(2) Integrating Climate Change Adaptation into Spatial Planning Policies

JICA has supported:
• Assessment of climate change impacts and vulnerability in pilot sites
  1) Java Island (North coast, River basin)
  2) South Sulawesi (West & south coastal area, Selayar)
• Policy recommendations for integration of adaptation into spatial planning
• Guideline for local government to integrate climate change adaptation into spatial planning
III. Support to pilot activities for adaptation

(2) Integrating Climate Change Adaptation into Spatial Planning Policies

Pilot sites for Assessment of climate change impacts and vulnerability

- Northern Coastal Areas of Java Island
- Western and Southern Coastal Areas of South Sulawesi Province
- Selayar Archipelago

River basin
III. Support to pilot activities for adaptation

(3) Agricultural Insurance

JICA has supported:

- Pilot activities in Kabupaten Nganjuk and Jombang/Lumajang
- Designing agricultural insurance in Indonesia
- Facilitating for nationwide implementation in 2015/2016
III. Support to pilot activities for adaptation
(4) Adaptation by farmers communities (including irrigation)

JICA has supported:

• Pilot activities in Kabupaten Pasuruan (East Java), Demak (Central Java), Cirebon (West Java), and Jeneponto (South Sulawesi)
• Capacity building for farmers on use of climate information and adaptation practices including irrigation water management
• Development of strategy for adaptation practices at farmers level in agriculture sector
III. Support to pilot activities for adaptation

(5) Vulnerability assessment and map of agriculture sector in Bali

JICA has supported:

• Capacity building for BMKG (Meteorological, Climatological and Geophysical Agency) to conduct vulnerability assessments and make a vulnerability map for agriculture sector in Bali
III. Support to pilot activities for adaptation

Adaptation related JICA Pilot Activities

- North Sumatra = Rice Production =
- North Coast of Java Island & Rive Basin (West, Central, East Java Province) = Spatial Planning =
- South Sulawesi = Spatial Planning & irrigation =
- South Sumatra = Mainstreaming Adaptation =
- West Java, Central Java, East Java = irrigation =
- Wakatobi = community-based adaptation =
- Bali = Vulnerability Assessment =
- East Java = Agricultural Insurance =
IV. Lessons learned
IV. Lessons learned

• It is most effective and practical to undertake planning, implementation and evaluation of adaptation activities using (or at least in harmony with) existent government structure and procedures for development activities.

• Adaptation activities involve many stakeholders at the central and local levels. It is effective to show them the overall picture of the adaptation strategy, and frame their own roles within it.

• Given the uncertainty of the climate change effects, stakeholder consultation and consensus at the planning stage as well as the flexibility to adjust the plan will enhance the feasibility and effectiveness of adaptation activities.

• In planning and mainstreaming adaptation, it is important to analyze socio-economic factors (such as population growth and urbanization) along with climate change factors, and relationship among them.
JICA’s support for Climate Change adaptation in Thailand
Bangkok Master Plan on Climate Change 2013 – 2023
(Project Period: 2013-2015)

Steering Committee chaired by Governor of BMA
Representatives from Planning, Energy, Transport, Environment departments, etc..

Secretariat
Department of Environment

Working Groups
◆ Environmentally Sustainable Transport
◆ Renewable and Energy Efficiency
◆ Efficient Solid Waste Management and Wastewater Treatment
◆ Green Urban Planning
◆ Climate Adaptation

Project Purpose: 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
• GHG Emission Inventory and setting the reduction target
• Development of 5 Sector Strategies including Adaptation.
• Public consultation and workshops
• Dissemination of the new Master Plan

Output 2: Strengthened Capacity of BMA officials
• Training Programs for BMA officials
• Workshops for Related Stakeholders
• Development of Educational Materials

Japanese Expert Team
Local Consultants
Yokohama-City
Project for Capacity Development on Climate Change Mitigation/Adaptation in the Southeast Asia Region (2013-2016)

Training for Various Stakeholders

Climate Change International Training Center (CITC)
Technical Cooperation Project with Thailand Greenhouse Gas Management Organization (TGO)

Output 1
Preparation / Setting up of CITC
- Training Needs Assessment
- Development of Training Materials and Curriculums

Output 2
Training Course Implementation
- Capacity development of
  - TGO staff
  - Thailand participants
  - ASEAN participants

Output 3
Exchange with ASEAN Countries
- Sharing knowledge and experiences with ASEAN countries (Workshops, etc.)

Low-Carbon Society & Mitigation Mechanism Courses
GHG Inventory Courses
Climate Change Finance Course
Adaptation related courses

Collaboration with various organizations for development/implementation of training


East Asia Knowledge Platform for Low Carbon Growth
- Experiences and knowledge on low-carbon policy and technologies (National/local government, private sector, civil society, etc.)
- Low Carbon Asia Research Network (LoCARNet)
Thank you for your attention!

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