

JICA Climate Change Cooperation Strategy

Climate change poses a threat to human security, stability and prosperity in every country of the world. The international community adopted the Sustainable Development Goals (SDGs), which include the goal for climate actions, at the United Nations Sustainable Development Summit in September 2015. Furthermore, the Paris Agreement was adopted at the 21st session of the Conference of the Parties (COP21) of the United Nations Framework Convention on Climate Change (UNFCCC) in December 2015, which aims at holding the increase in the global average temperature to well below 2°C above pre-industrial levels and striving to limit the temperature increase to 1.5°C above pre-industrial levels. Moreover, the Agreement also established the global goal on adaptation to enhance adaptive capacity, strengthen resilience, and reduce vulnerability to climate change. To contribute to achieving the common goals of the international community, the Government of Japan announced the 'Actions for Cool Earth (ACE) 2.0', an initiative that is committed to increasing Japan's public and private climate finance to approximately ¥1.3 trillion in 2020, which is about 1.3 times more than the current level.

To date, JICA has been providing developing countries with assistance to address climate change as an integral part of its development projects, utilizing a range of modalities, and has achieved significant outcomes in many countries. However, considering the new international framework and global goals to address climate change as well as Japan's related initiatives and commitments, JICA will further expand and showcase its assistance to developing countries in climate actions in accordance with the Priority Issues and Cooperation Approach as described below to ensure human security and realize JICA's vision of "Inclusive and Dynamic Development". In particular, JICA will strongly support the transformation to a low-carbon and climate-resilient society and economy in developing countries with Japan's advanced innovative technologies, recognizing the fact that such transformation driven by technological innovation and diffusion is indispensable for attaining the objectives and goals of the Paris Agreement.

1. Priority Issues

(1) Promoting low-carbon, climate-resilient urban development and infrastructure investment

In order to achieve transformation to a low-carbon, climate-resilient society, infrastructure must become low-carbon and climate resilient. For global climate actions, it is critically important to ensure this in developing countries where economies are growing rapidly and the demand for infrastructure investment is enormous. With this recognition, JICA will strengthen its assistance for the following issues in conjunction with related Japanese

government initiatives, such as the “Partnership for Quality Infrastructure”, and in line with the concept of “quality growth” set forth in Japan’s “Development Cooperation Charter”:

- More efficient use of energy (e.g., high-efficiency thermal power, reduction of electricity loss, and energy saving), and adequate development and use of renewable energy
- Development of public transport systems
- Climate risk¹ assessment in the planning stage of urban development and construction of infrastructure, and subsequent incorporation of risk avoidance, prevention and reduction measures

(2) Enhancing comprehensive climate risk management

The effects of climate change have been materializing in every part of the world and thus, consideration of climate risks is essential for all future development projects. In the “Sendai Framework for Disaster Risk Reduction 2015-2030”, climate change is regarded as a significant factor that increases disaster risks. JICA will cooperate with developing countries to strengthen the comprehensive climate risk management with a special emphasis on risk prevention and reduction. To that end, JICA will address the following issues, taking into account the fact that climate risks may affect various aspects including natural disasters, agriculture, food security, water, and infectious diseases:

- Climate risk assessment/prediction, early warning, and development of coping capacity and physical facilities in preparation for prompt action in the event of emergency
- Pre-investment in climate risk prevention and reduction as well as enhanced resilience of facilities/infrastructure in reconstruction (“build back better”)
- Risk finance in preparation for climate risks materializing

In implementing the assistance, particular attention is paid to the fact that climate change effects have different impacts on the respective countries and people depending on their unique circumstances, including the level of control measures in place against the existing risks. With a view to ensuring human security, special consideration will be paid to countries particularly vulnerable to climate change, such as Small Island Developing States (SIDS) (e.g., the Pacific and Caribbean island countries) and least developed countries (LDCs), as well as to poor and socially vulnerable people and gender. JICA will also provide the necessary support to facilitate the participation of women in the actions supported by JICA.

¹ For the purpose of this document, “climate risk” is considered as a concept that represents the magnitude of threat determined by the combination of the probability and severity of impacts resulting from climate/weather phenomena (e.g., heat wave, heavy rain, drought, windstorm) and their secondary phenomena (e.g., flood, tidal surge, sea level rise). Climate risk includes both existing climate-related risks resulting from natural causes and additional risks resulting from the effects of anthropogenic climate change.

(3) Supporting climate policy and institutional development

Long-term commitment and efforts are required to address climate change, and developing countries need to develop their capacity to plan, implement, monitor and improve climate actions. In accordance with the Paris Agreement, developing countries are required to prepare, implement, monitor and report their Nationally Determined Contribution (NDC) in five-year cycles, and progressively raise the level of ambition. However, many countries, LDCs and SIDS in particular, have limited capacity to adequately undertake this process.

At the national level, an appropriate policy framework and implementation/monitoring capacity to undertake climate actions are required. At the city/regional level, urban planning towards a low-carbon and sound material-cycle society as well as enabling a regulatory framework and human resource development for implementation are required.

Hence, JICA will strengthen its support for capacity enhancement and human resource development in the following issues:

- Formulation and improvement of climate action plans² and institutional/capacity development for implementation as well as integration of climate change mitigation and adaptation into development policies/plans at national and local levels
- Capacity development for undertaking the process of NDC preparation, monitoring, reporting and review as provided in the Paris Agreement
- Improvement of policies and institutions to encourage private-sector activities and investments to address climate change
- Improved access to climate finance for national governments and cities

(4) Enhancing conservation and management of forests and other ecosystems

Land use, land use change and forestry (LULUCF), which is often accompanied by degradation and loss of forests and other ecosystems, accounts for about 30% of global cumulative anthropogenic greenhouse gas (GHG) emissions. Emission reduction in LULUCF is urgently required. The Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) indicates that the scenario most likely to be able to limit the temperature rise to below 2°C compared to the pre-industrial level will require the reduction of the net anthropogenic GHG emissions to zero or below by the end of this century. This confirms the importance of fostering forests and other ecosystems as sinks for GHG (CO₂). The Paris Agreement acknowledges the importance of this, and specifically refers to reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable forest management and enhancement of forest carbon stock in developing countries (REDD+). Fostering ecosystems is also considered effective for adaptation

² Such plans include those intended for sustainable social systems and low-carbon/green growth.

measures through enhanced ecosystem services to local communities. JICA has supported and will continue to provide assistance for capacity development and investment promotion in the following issues:

- Enhancing mitigation measures through sustainable forest management with, among others, REDD+ and sustainable natural resources management by communities
- Enhancing adaptation measures through, among others, the promotion of disaster risk reduction by enhanced ecosystem services (Eco-DRR), and enhancement of resilience (combat against desertification) in Sub-Saharan Africa
- Promotion of public-private partnership centered on the “Japan Public-Private Platform for REDD+”
- Development of innovative technologies such as forest monitoring using advanced satellite technology through a JICA-JAXA (Japan Aerospace Exploration Agency) partnership

2. Cooperation Approach

(1) Integrating climate actions and development

The fact that most SDGs are linked with climate change indicates that addressing climate change is an indispensable element of sustainable development. The assistance provided for climate actions in developing countries will be integrated with development cooperation and thus will contribute to the fulfilment of multiple SDGs and the achievement of “quality growth”. In accordance with the country-specific social and economic situations, the policy and technology environment as well as the targets, plans and support needs set forth in their NDCs, JICA will implement cooperation, addressing all important aspects including policies, technologies, organizations, human resources and finance. In addition to the country approach, the regional approach will also be strengthened to cooperate with countries facing common issues in the region.

(2) Building global partnership with diverse stakeholders

COP21 highlighted a wealth of cases of climate actions and initiatives by different non-party stakeholders that were undertaken outside the UNFCCC process, and the importance of such efforts was well acknowledged in the COP decision. Effective climate actions require the integral mobilization of technologies, expertise, experience and finance offered by diverse stakeholders. JICA will scale-up the outcome of its assistance to address climate change by building partnerships with diverse stakeholders including international organizations, national entities, NGOs, academia, local authorities, and the private sector.

(3) Taking the best of Japan

JICA, as a Japanese development assistance agency, will fully utilize the strengths of government entities, local authorities, private companies and universities in Japan, and deploy their advanced technologies and expertise in developing countries. It will also strive to create new intellectual and technological value that will contribute to addressing climate change. To that end, JICA will fully utilize the knowledge and experience in climate-related policies, institutions and the governance of Japanese government entities and local authorities, in providing assistance for the development of policies, institutional capacity building, and human resource development in developing countries. Through its private-sector partnership programs and technical cooperation, JICA will promote the application of advanced technologies of Japanese companies and research institutes, and climate investments by the Japanese private sector in developing countries. JICA will collaborate with Japanese universities and research institutes under the Science and Technology Research Partnership for Sustainable Development (SATREPS), and promote research and development that could lead to solutions to climate change.

Examples of JICA's climate change cooperation

1. Promoting low-carbon climate-resilient urban development and infrastructure investment

Country	Project Title	Modality	Remarks
More efficient use of energy, and adequate development and use of renewable energy			
Uzbekistan	Navoi Thermal Power Station Modernization Project	Loan	Construction of gas combined-cycle co-generation power plant
Uganda	The Project for Improvement of Queensway Substation	Grant aid	Rehabilitation of electrical substation
Vietnam	Master plan for energy conservation and effective use	Technical Cooperation	
India	Micro, Small and Medium Enterprises Energy Saving Project	Loan	Two-step loan for energy saving investments by local enterprises
Kenya	Olkaria I Unit 4 and 5 Geothermal Power Project	Loan	
Sri Lanka	Upper Kotmale Hydro Power Project (II)	Loan	
Seychelles	Project for Formulation of Master Plan for Development of Micro Grid in Remote Islands	Technical Cooperation	
Tonga	The Project for Introduction of a Micro-Grid System with Renewable Energy for the Tonga Energy Road Map	Grant aid	
Vietnam	Service for Development of Companies' Energy Saving Plan by Simplified Environment Measurement in Da Nang	Private sector partnership	
Development of public transport systems			
Indonesia	Construction of Jakarta Mass Rapid Transit Project	Loan	
India	Delhi Mass Rapid Transport System Project	Loan	
Thailand	Mass Transit System Project in Bangkok (Red Line)	Loan	
Brazil	Belem Metropolitan Trunk Bus System Project	Loan	
Climate risk assessment in the planning stage of urban development and construction of infrastructure, and subsequent incorporation of risk avoidance, prevention and reduction measures			
Senegal	Project for Updating Dakar Urbanization Master Plan by the Horizon 2025	Technical Cooperation	Disaster risk reduction was integrated into a set of development plans
Kiribati	Preparatory Survey on the Project for Reconstruction on Nippon Causeway on Tarawa to Adapt Climate Change	Survey for grant aid	Effects of sea level rise and tidal surge considered

2. Enhancing comprehensive climate risk management

Country	Project Title	Modality	Remarks
Climate risk assessment/prediction, early warning, development of coping capacity and physical facilities in preparation for prompt actions in the events of emergency			
Thailand	Advancing Co-Design of Integrated Strategies with Adaptation to Climate Change in Thailand (ADAP-T)	Science & Technology	
South Africa	Project for Establishment of an Early-warning	Science &	

	System for Infectious Diseases in Southern Africa Incorporating Climate Predictions	Technology	
Bhutan	Project for Capacity Development of GLOF and Rainstorm Flood Forecasting and Early Warning	Technical Cooperation	
El Salvador	Project for Capacity Development of the Department of Climate Change Adaptation and Strategic Risk Management for Strengthening of Public Infrastructure	Technical Cooperation	
Philippines	Verification survey with the private sector for disseminating Japanese technologies for integrated Geographic Information System (GIS) for improvement of Regional Disaster Risk Reduction and Management	Private sector partnership	
Fiji	Project for Reinforcing Meteorological Training Function of FMS	Technical Cooperation	
Myanmar	Project for Establishment of Disastrous Weather Monitoring System	Grant aid	Installation of meteorological radars and automatic weather observation systems
Laos	Project for Improvement of Equipment and Facilities on Meteorological and Hydrological Services	Grant aid	Installation of automatic hydro-meteorological observation systems and data management system
Bangladesh	Project for Construction of Multipurpose Cyclone Shelters	Grant aid	
Pre-investments in climate risk prevention and reduction as well as enhanced resilience of facilities/infrastructure in reconstruction (build back better)			
Cape Verde	Water Supply System Development Project in Santiago Island	Loan	Installation of a water desalination plant
Kenya	Mwea Irrigation Development Project	Loan	
Philippines	Flood Risk Management Project for Cagayan de Oro River	Loan	
Philippines	Post Typhoon Yolanda assistance in line with Build Back Better concept through "Project on Rehabilitation and Recovery from Typhoon Yolanda" and "Programme for Rehabilitation and Recovery from Typhoon Yolanda"	Technical Cooperation + Grant aid	
Risk finance in preparation for materializing climate risks			
Philippines, Peru, El Salvador	Stand-by Emergency Credit for Urgent Recovery	Loan	
Ethiopia	Rural Resilience Enhancement Project	Technical Cooperation	Include weather-index insurance pilot
Myanmar	Preparatory survey on BOP business on weather index insurance	Private sector partnership	
Indonesia	Preparatory survey in Indonesia for the introduction of the Weather Index Insurance for agricultural workers	Private sector partnership	

3. Supporting climate policy and institutional development

Country	Project Title	Modality	Remarks
Formulation and improvement of climate action plans and institutional/capacity development for			

implementation as well as integration of climate change mitigation and adaptation into development policies/plans at national and local-levels			
Indonesia	Project of Capacity Development for Climate Change Strategies	Technical Cooperation	
Vietnam	Support Program to Respond to Climate Change	Loan	
Thailand	Project for Bangkok Master Plan on Climate Change 2013 - 2023	Technical Cooperation	
Malaysia	Project for Development of Low Carbon Society Scenarios for Asian Regions	Science & Technology	
Vietnam	Project for Institutional Development for green growth implementation and Strengthening of environmental management system towards sustainable conservation for the Halong Bay	Technical Cooperation	
Capacity development to undertake the process of NDC preparation, monitoring, reporting and review as provided in the Paris Agreement			
Vietnam	Project for Capacity Building for National Greenhouse Gas Inventory	Technical Cooperation	
Vietnam	Project to Support the Planning and Implementation of NAMAs in a MRV manner	Technical Cooperation	
Improvement of policies and institutions to encourage private sector activities and investments to address climate change			
Indonesia	Climate Change Program Loan	Loan	With policy actions to encourage private investments
Vietnam	Support Program to Respond to Climate Change	Loan	With policy actions to encourage private investments
Bangladesh	Project for Development of Energy Conservation/Efficiency Master Plan	Technical Cooperation	
Improved access to climate finance for national governments and cities			
SIDS	Green Climate Fund Readiness Support Workshop for Small Island Developing States (SIDS) 2015		

4. Enhancing conservation and management of forests and other ecosystems

Country	Project Title	Modality	Remarks
Enhancing mitigation measures through sustainable forest management with, among others, REDD+ and sustainable natural resources management by communities			
Cambodia	Project for Facilitating the Implementation of REDD+ Strategy and Policy	Technical Cooperation	
Laos	Sustainable Forest Management and REDD+ Support Project	Technical Cooperation	
India	Uttarakhand Forest Resource Management Project	Loan	
Kenya	Capacity Development Project for Sustainable Forest Management in the Republic of Kenya	Technical Cooperation	
Democratic Republic of the Congo	Project for Strengthening National Forest Resources Monitoring System for Promoting Sustainable Forest Management and REDD+	Technical Cooperation	
Gabon	Project for enhancing national forest resources inventory system contributing to sustainable forest management	Technical Cooperation	
Cameroon	Project for Promotion of Conservation, Sustainable Use of Biodiversity and Climate Change Issues in COMIFAC Countries	Technical Cooperation	

Ethiopia	Certified Forest Coffee Production and Promotion Project	Technical Cooperation	
Enhancing adaptation measures through, among others, the promotion of disaster risk reduction by enhanced ecosystem services (Eco-DRR), and enhancement of resilience (combat against desertification) in Sub-Saharan Africa			
Myanmar	Project for Mangrove Rehabilitation Plan for Enhancement of Disaster Prevention in Ayeyawady Delta	Grant aid	
Senegal	Project of Capacity Building for the Restoration and the Promotion of Effective Use of Degraded Soil in the Areas of Soil Degradation	Technical Cooperation	
Kenya	Project for Enhancing Community Resilience against Drought in Northern Kenya	Technical Cooperation	
Promotion of public-private partnership centered with "Japan Public-Private Platform for REDD+"			
N.A.	"Japan Public-Private Platform for REDD+"		JICA provided secretariat service for the platform
Vietnam	Sustainable Natural Resource Management Project	Technical Cooperation	Partnered with private sector
Development of innovative technologies such as forest monitoring using advanced satellite technology with JICA-JAXA (Japan Aerospace Exploration Agency) partnership			
N.A.	JICA-JAXA partnership program for tropical forest monitoring with satellite technologies		
Peru	Project on Capacity Development for Forest Conservation and REDD+ Mechanisms	Technical Cooperation	Satellite monitoring used