



















\sim Focusing on Climate \sim





















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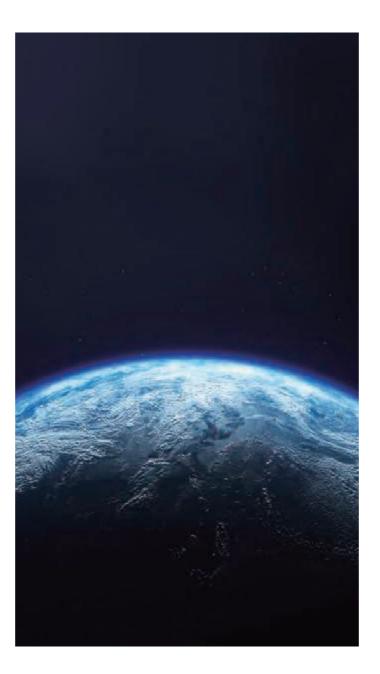


Message from the President

The Sustainable Development Goals (SDGs) and the Paris Agreement, which ambitiously aims to reduce greenhouse gas emissions, were both adopted in 2015. Since then, environmental, social, and economic sustainability have become closely intertwined challenges requiring international cooperation. With its mission to advance "human security" alongside "quality growth," and under the auspices of Japan's Development Cooperation Charter, JICA is steadfastly addressing a wide range of issues to achieve the SDGs in developing countries around the world.

Regarding climate change, the Paris Agreement sets out to limit global warming to well below 2 degrees Celsius-preferably to 1.5 degrees-compared to pre-industrial levels. To achieve this, many countries aim to level off, if not reduce, their greenhouse gas emissions as soon as possible. The Japanese government, for example, announced its "2050 Carbon Neutral Declaration" in October 2020. This declaration embraces the recommendations made by the "Advisory Panel on the Formulation of Long-Term Strategy as a Growth Strategy under the Paris Agreement," in April 2019, which I chaired under then-Prime Minister Abe's direction.

The effects of climate change are expected to include not only increased and more sever disasters, but also rising sea levels, the spread of tropical diseases, and widespread damage to water resources and food production. Clearly, climate change is one of the major challenges of our time, posing a substantial threat to human security and societies more broadly. Unfortunately, developing countries with weak socioeconomic foundations are expected to suffer most severely. As a developed country that historically emitted large amounts of greenhouse gases, Japan is in a position to lead on climate change countermeasure and build a global society which is not only resilient to climate change but that can also make the transition to decarbonization smoothly. On the other hand, since developing countries have the right to develop even under the threats of climate change and securing a stable power source is essential for socioeconomic development, it would be considerably difficult for them to stop coal-fired power generation entirely.



work closely with developing countries on their adoption. nance) issues.

Looking back at the history of our own country, the Japanese people have long had "mottainai" spirit by striving to be in harmony with nature even since ancient times, as demonstrated by the "recycling-oriented society" of the Edo period. Current trends, whereby the entire international community is striving for greater sustainability, echo this traditional ethos. Just as the people of Japan and other countries need to work together to fight against climate change, the global spread of COVID-19 underscores the fact that international cooperation is needed now more than ever to come to grips with the myriad challenges confronting developing countries. JICA recognizes we must play a larger role in building resilient societies by making the most of the trust we have fostered with our partner countries over many years. As the implementing agency of Japan's official development assistance, and in accordance with our vision of "Leading the world with trust." JICA will continue to strengthen meaningful collaboration toward these ends and make our strongest effort yet to advance the development of our partner countries in a way that appropriately balances the environment, economic prosperity, and social needs.

Therefore, JICA has positioned the strengthening of an array of efforts to combat climate change as a top management priority. JICA considers such climate change countermeasures to have enormous potential and intends to

The JICA Sustainability Report has been prepared to provide a better understanding of JICA's efforts to support sustainable socioeconomic development in developing countries, including measures to fight climate change. Specifically, this report discloses information on climate change countermeasures JICA has undertaken in line with recommendations made by the Task Force on Climate-Related Financial Disclosures (TCFD) of the Financial Stability Board (FSB) in 2017. In addition, this report highlights JICA's project-level achievements relating to climate change countermeasures and provides examples of its initiatives to solve ESG (Environmental, Social and Gover-

> **KITAOKA Shinichi** President, Japan International Cooperation Agency (JICA)



There are



96 overseas offices (as of July 1, 2020)



1,929 staff members (as of July 1, 2020)

Building people-to-people relationships are the foundation of trust

JICA dispatches experts and overseas volunteers to developing countries, and in return welcomes government officials and specialists as training participants and overseas students. People-to-people connections established through human resource development are the foundations of trust between developing countries and Japan.



Accepted

13,217 training participants and students from developing countries were accepted in fiscal year 2019

13,217_{people} 9,163_{people}

Leading the world with trust

JICA values the relationship of mutual trust with developing countries and is working with them to rise to the challenges.

About JICA

Human Security:

Aiming for a society where all people can protect themselves from various threats and live their daily lives in security and with dignity.

Quality Growth:

Promoting sustainable growth with less disparity and without harming the environment.



A society where all can live healthy, safe lives

People

● Education ● Health ● Social Security



Peace

A peaceful, just society without fear or violence

- State-Building to Prevent the Outbreak and Recurrence of Conflicts
- Governance Support
- Gender Equality and the Empowerment of Women and Girls



Prosperity

A prosperous, sustainable economy at harmony with nature and prepared for promoting social development

- Agricultural and Rural Development
- Private Sector Development
- Urban and Regional Development
- Ensure Access to Affordable and Clean Energy
- Development of Transport Infrastructure



Care for the Planet

- Environmental Conservation and Management
- Water Resources Management
- Disaster Risk Reduction
- Climate Change









Dispatched

9,163 Japanese experts and JICA volunteers were dispatched in fiscal year 2019



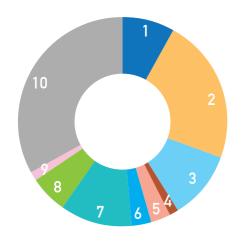
SUSTAINABILITY REPORT

Overview of Operations

JICA uses an array of development assistance schemes to meet the diverse needs of developing countries around the world.

Scale of Operations

¥175.1 billion



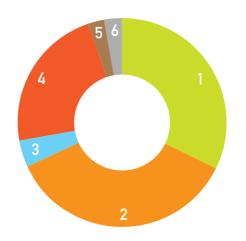
Technical Cooperation (*1)

Dispatch of Japanese experts to developing countries and acceptance of training participants and students to disseminate Japanese technologies and knowledge

- 1. Planning and administration 8.1%
- 2. Public works and utilities 22.6% (Transportation/Traffic/Social Infrastructure etc.)
- 10.6% • 3. Agriculture, forestry and fisheries
- 4. Mining and industry 1.4% 3.0%
- 5. Energy
- 6. Business and tourism 3.0% 11.2%
- 7. Human resources (Education/Vocational Training etc.)
- 8. Health and medical care 5.9%
- 9. Social welfare 1.3% ● 10. Others 32.9%

Scale of Operations



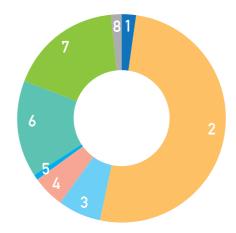


Finance and Investment Cooperation (ODA Loans) (*2)

Lending or investing of funds under concessional terms to developing countries for their development.

		Electric power and gas Transportation	32.3% 36.0%
	3.	Agriculture, forestry and fisheries	4.1%
	4.	Social services (Water Supply and Sanitation/Ed	22.5% ucation etc.)
	5.	Program loans	2.4%
6	6.	Others	2.7%





Grants (*3)

1. Planning and administration	2.4%
2. Public works and utilities	51.0%
 3. Agriculture, forestry and fisheries 	6.7%
🛑 4. Energy	5.1%
5. Business and tourism	0.8%
 6. Human resources (Education/Vocational Training etc.) 	14.9%
7. Health and medical care	17.5%
8. Others	1.5%
(In fiscal year 2019	9) (Unit:%)

■ JICA's volunteer programs ■ Citizen Participation

■ Partnership with Nikkei Communities in Latin America and the Caribbean

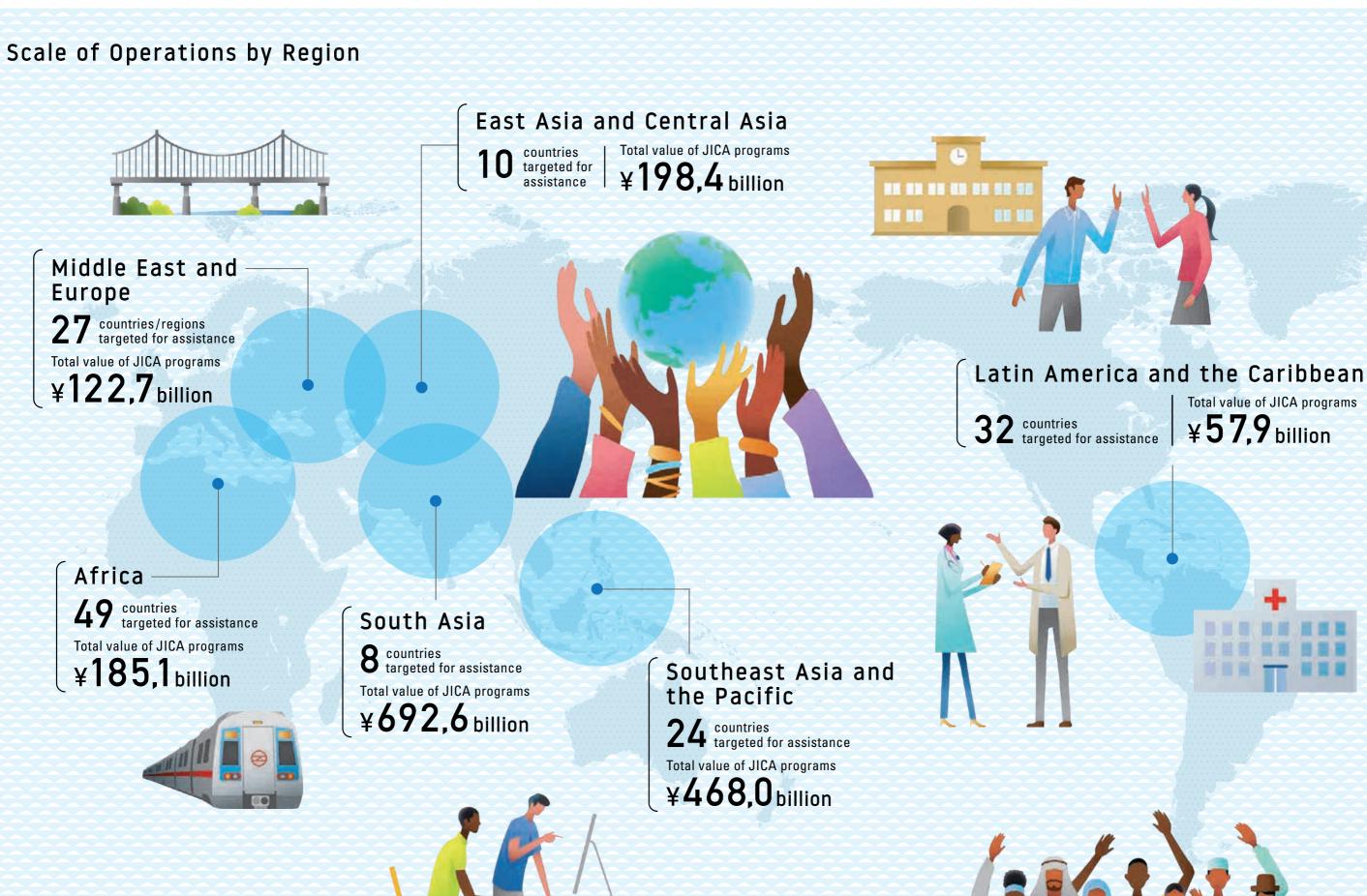
■ Emergency Disaster Relief ■ Studies and Research

(Note) In some cases, the numbers do not correspond to the figures reflected in the "Total" section because of rounding estimates. *1 Technical Cooperation expenses include Technical Assistance expenses managed under the Finance and Investment Account budget, but exclude administration costs. *2 Total commitment amounts of ODA Loans and Private-Sector Investment Finance. *3 The amount is calculated based on the fiscal 2019 budget, it does not correspond to the total amount of Grant Agreements (G/As) concluded in fiscal 2019. *Total value of JICA programs in the map do not include cooperation track records that cannot be categorized by region.

Scale of Operations 85.6 billion

Financial assistance with no repayment obligation; it mainly targets developing countries with low levels of income.

Public-Private Partnerships

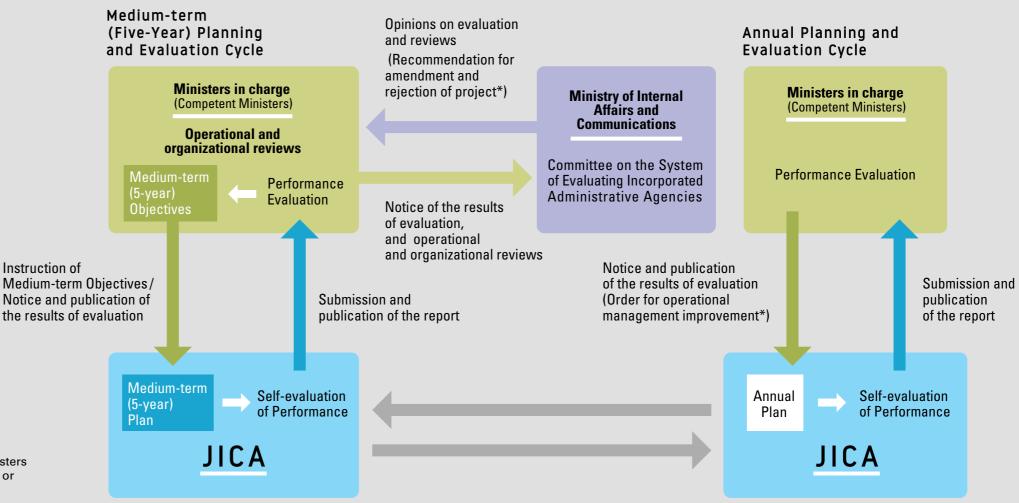


* Figures exclude JICA's cooperation for multiple countries and/or multiple regions and international organizations.

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Total value of JICA programs ¥ 57,9 billion

Framework for Performance Evaluation and Operational Management Review



* Based on the results of the ministers' evaluation, the ministers may recommend improvement or elimination of operations or order JICA to improve its operational management.

Governance

In accordance with the Act on General Rules for Incorporated Administrative Agencies, JICA prepares its five-year Medium-Term Plans and Annual Plans, JICA operates based on these Plans to pursue the Medium-Term Objectives set by relevant ministers (principally the Minister of Foreign Affairs along with other ministers who oversee JICA's activities). Moreover, JICA's Board of Directors deliberates and reports on important matters for the organization, as well as its business operations and internal controls, in accordance with the "Statement of Operational Procedures" approved by the pertinent government minister. At the end of each fiscal year (FY) and upon the conclusion of each Medium-Term Plan, JICA prepares self-evaluations of its annual operational performance and compiles these self-evaluations into a Performance Report. This Performance Report is then submitted to relevant ministers, following deliberation of it by the Board of Directors, and subsequently published. The ministers likewise review and publish the Performance Report as well as give feedback to JICA based on it. When necessary, they may order JICA to improve its operational management based on the results of their review.

For cooperation projects in partner developing countries, JICA utilizes a common framework for monitoring and evaluation encompassing the stages of ex-ante evaluation, monitoring, ex-post evaluation, and feedback.

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PDCA Cycle

Feedback

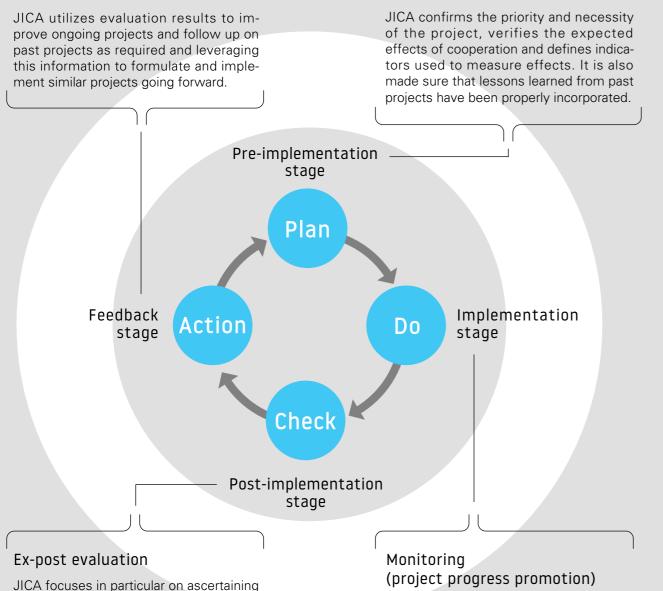
whether the project activity was appro-

priate for achieving the development

effects and which actual effects were

achieved by the project.

Ex-ante evaluation



JICA confirms whether the project activity is progressing as planned and whether outcomes have been properly achieved and adjusts trajectory as required. In October 2015, JICA's Environmental Policy was formulated as an organization-wide effort to embrace global environmental conservation, including climate change. In July 2021, JICA also formulated a strategy on climate change for projects in developing countries on which JICA cooperates. In addition, guided by JICA's "Statement of Operational Procedures", operational management follow JICA's Guidelines for Environmental and Social Considerations (hereafter "ESC Guidelines").JICA supports and confirms implementation of appropriate environmental and social considerations based on the ESC Guidelines.

As a part of this effort, JICA has established the Advisory Committee for ESC as an independent council that advises JICA on its examination and support of environment and social considerations. To maintain accountability and transparency, JICA actively discloses information related to the application of ESC Guidelines. In addition, JICA has established the Objection Procedure as a mechanism to ensure compliance with the ESC Guidelines. Since the current ESC Guidelines were established in 2010, JICA is currently in the process of their revision. This revision process will ensure transparency as well as accountability and take into account international trends. Specifically, for projects that are expected to generate more than a threshold amount of greenhouse gases, JICA is planning to disclose the total amount of greenhouse gas emissions.

In terms of organizational structure, the General Affairs Department is in charge of the JICA's overall environmental policy; the Office for Climate Change was established in 2010 to strengthen its climate change efforts. In addition, JICA has designated the Credit Risk Analysis and Environmental Review Department as the department in charge of the ESC Guidelines. As for objections, JICA has established the Objection Procedure based on the ESC Guidelines independent of JICA's operational departments. Contents of each objection are to be reviewed by the Examiners and report to the President directly. JICA will further strengthen its governance on climate change, including revising its environmental policies and systems.

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Strategy

Strengthening of efforts to combat climate change is among JICA's top management priorities. As a baseline, following the aforementioned "JICA Environmental Policy," JICA's basic policy on the environment is to "contribute to the conservation of the global environment while complying with environmental laws and regulations, and to continuously improve the environmental management system in order to prevent and reduce negative environmental impacts that result from JICA's activities." JICA will continue to support environmental measures through international cooperation, promote environmental awareness activities, undertake environmentally friendly activities in our offices and facilities, and comply with environmental laws and regulations.

Furthermore, as a key partner to developing countries, JICA aims to lead sustainable development by promoting climate cooperation in support of transitioning to a decarbonized and climate-resilient society. Through these efforts, JICA contributes to the achievement of the Paris Agreement, which is an international treaty for achieving the objectives of the United Nations Framework Convention on Climate Change (UNFCCC); other multilateral environmental/climate-related conventions (such as the Convention on Biological Diversity, the Convention on Desertification, and the Sendai Framework for Disaster Risk Reduction); associated SDGs; and other related visions/initiatives led by the Japanese government (notably, the Osaka Blue Ocean Vision). Specifically, the following actions have been set forth:



- access to climate finance*.
- management, and healthcare.

Combat climate change efforts, including co-benefit climate change strategies, are also articulatedin sector specific strategies such as energy and agriculture. Furthermore, emphasis during project implementation include: collaboration with various stakeholders; mobilization of additional finance (via collaboration with the private sector or other funding sources, such as the Green Climate Fund (GCF), etc.); utilization of knowledge and technology from Japan and other countries; strategic dissemination of information; inter-city and intra-regional collaboration/cooperation; and innovation, such as via digital transformation (DX).

* Climate finance broadly include countries' public funds, finance by international development finance institutions and MDBs, and the private sector to combat climate change. Climate change measures refer to efforts to reduce or increase the absorption of greenhouse gas emissions (mitigation measures), efforts to prevent or reduce damage in response to the effects of climate change (adaptation measures), and projects that contribute to both. (Based on the definition in the OECD DAC Rio Markers for Climate Handbook, OECD Development Assistance Committee.)

Promoting implementation of the Paris Agreement by supporting developing partner countries in the planning and implementation of climate change policies and measures, along with the development of greenhouse gas (GHG) inventories and transparency frameworks, as well as by facilitating

Advancing co-benefit climate change solutions that contribute to both addressing development challenges and combating climate change by promoting projects in the following sectors: energy, urban development, transportation, forest and other natural environment conservation, agriculture, environmental management, disaster prevention, water resource



The main opportunities for JICA in dealing with climate change include cooperation focused on mitigation measures, such as renewable energy, energy conservation, transportation and forest conservation; cooperation supporting adaptation measures, such as disaster risk reduction and water resources management; promotion of Green Climate Fund (GCF) projects; and strengthening of surveys and research contributing to the adoption of climate change countermeasures. On the other hand, the main risks to JICA's operations vis-à-vis climate change include the negative impact of increased and more severe natural disasters on JICA-supported projects in developing countries (physical risk); increased project-related costs stemming from the strengthening of laws and regulations dealing with climate change; and rapid technological progress (transition risk). JICA is currently conducting scenario analysis to understand the impact of climate change on its operations. JICA will also further develop strategies to support developing countries' transitions towards decarbonization.

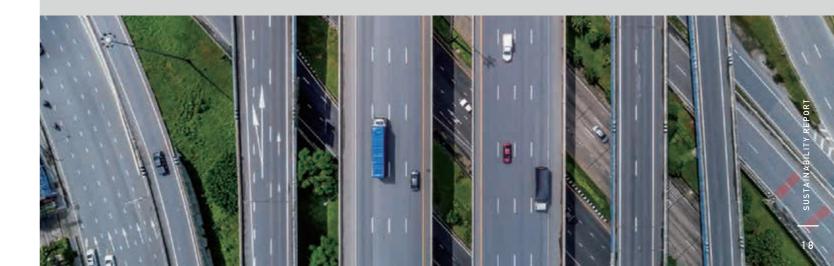
The main opportunities

- Renewable energy/Energy conservation
- Mitigation such as Transportation and forest conservation
- Adaptation such as Disaster risk reduction and water resources management
- Promoting Green Climate Fund (GCF) projects
- Survey and research contributing to the adoption of climate change countermeasures

The main risks

- The negative impact of increased and more severe natural disasters on JICA-supported projects in developing countries. (physicalrisk)
- Increasing project-related costs stemming from the strengthening of laws and regulations dealing with climate change; and rapid technological progress (transition risk)

The Japanese government's "Infrastructure System Overseas Promotion Strategy 2025" (Reiwa 3 June Revised Edition) of June 2021 states, "Japan will make inter-agency efforts towards responsibly leading global de-carbonization by strengthening its engagement with partner countries, in accordance with their stages of development. To lead global de-carbonization efforts, the government's basic policy is to support export of infrastructure that guides partner countries' energy transitions towards de-carbonization. Based on a deep understanding of the needs of partner countries, Japan will offer all available options for reducing their carbon dioxide (CO2) emissions, including through renewable energies (such as wind, solar, geothermal, and hydrogen), as well as energy management techniques and CCUS/carbon recycling. Japan will also support the development of policies and long-term strategies with a view to attaining de-carbonization in accordance with the Paris Agreement. Furthermore, as articulated in the G7 Cornwall Summit communique of June 2021, Japan commits to ending new direct government support-including through Official Development Assistance, export finance, investment, and support for financial and trade promotion-for unabated international thermal coal power generation by the end of 2021. "(Provisional translation) JICA operates in accordance with such Japanese government policies.





Risk Management

JICA defines risks as factors that can act as impediments to its operations. To achieve organizational objectives and realize plans, such as its Medium-Term Plans, in an effective and efficient manner, JICA employs risk management systems and performs risk identification and assessment. For example, all departments within JICA annually identify risks that are relevant to their operations. They likewise assess how these risks could affect their operations and review how they have addressed them. On that basis, JICA classifies all potential major risks for the entire organization. Of these risks, JICA's Board of Directors and Risk Management Committee, which meets regularly and is chaired by JICA's Senior Vice President in Charge of Internal Control, identify "material risks" as well as discuss and examine possible measures to be taken against each risk so as to strengthen responses to them. In addition, the Risk Management Committee for Finance and Investment Cooperations, which has been established separately for financial cooperation operations (primarily ODA loans and Private-Sector Investment Finance), discusses important matters related to integrated risk management.

JICA examines and confirms that project proponents, etc., put into practice the ESC Guidelines at various stages of the projects it supports. This consists of three processes. Screening, whereby projects are classified into four categories based on the magnitude of their potential impacts; Environmental Review, in which JICA applies the ESC Guidelines during the review of the project proposal; and Monitoring, in which JICA follows up on the ESC Guidelines-related activities of project proponents for a certain period of time, including the post-completion stage. For each process, JICA actively discloses information on environmental and social considerations with the cooperation of partner countries, etc., to ensure accountability and the participation of various stakeholders. During the environmental review for projects that may have a significant impact on the environment or society, JICA confirms potential negative impacts of the project based on documents submitted by the partner country, etc., relating to environmental and social considerations and evaluates necessary measures to avoid, minimize, and/or mitigate any such impacts. If significant impacts remain, JICA evaluates the necessary measures to compensate for them.

JICA identifies and assesses climate risks (hazards, exposures, and vulnerabilities) in its cooperation projects and considers necessary measures at the project formulation stage. Specifically, the JICA Climate-FIT tool*¹ is used to assess the climate risk of all projects and to examine the possibility of incorporating activities that further climate change countermeasures (i.e., mitigation and adaptation). In the project planning stage, JICA may provide assistance through its Preparatory Survey or Detail Design scheme for surveys and other procedures related to climate risk. JICA also enhances the climate-related capacity of project proponents, etc., through Knowledge Co-Creation Programs and Technical Cooperation Projects. Aiming to reinforce an effective support system for development cooperation, JICA provides similar capacity-building programs for consultants etc., collects information on climate in developing countries, and shares such information with other development partners.

Metrics and Targets

JICA will contribute to the realization of the Japanese government's commitment at the G7 Cornwall Summit to provide a total of 6.5 trillion yen in climate finance. This includes both public and private sector led support for climate change over the five-year period from 2021 to 2025, and support in the field of adaptation for countries vulnerable to the impacts of climate change. Specifically, JICA aims to annually contribute about 1 trillion yen*². In addition, with the recognition that climate change will increase the risk of undermining the development impact of JICA's cooperation projects and thus hampering the attainment of the SDGs, JICA will consider specific indicators and targets to assess and manage risks related to greenhouse gas emissions and climate based on the results of the aforementioned scenario analysis. Furthermore, JICA has set targets for energy consumption within its offices and facilities, and is working to reduce its own energy consumption accordingly.

*1 JICA Climate FIT: Mitigation (JICA HP), Adaptation (JICA HP) *2 Based on the current definition of climate change projects. This may change in the future depending on a review of the definition (for example, at OECD-Development Assistance Committee).

Overview of Operations Related to Climate Change

JICA supports partner developing countries in implementing climate change countermeasures so that they not only achieve their nationally determined contributions under the Paris Agreement and the SDGs but also realize the Sendai Framework for Disaster Reduction. While doing so, JICA also keeps abreast of changing international trends in these areas.

JICA's climate change countermeasures can be categorized into two types: mitigation measures that contribute to the reduction and absorption of greenhouse gas emissions, and adaptation measures that prepare developing countries for the negative impacts of climate change. JICA implements projects that contribute to mitigation and adaptation measures in developing countries through technical and financial cooperation.

> **JICA's Climate Finance** in FY2020* (Amount based)

> > **Total Amount**

930,745 million JPY

Proportion 100%



Adaptation

Proportion 41.9%

Cross-cutting

25,382 million JPY Proportion 2.7%

Total amount of Greenhouse Gas emission reductions in 2020 are estimated to be 16 million tons - CO2 /year (Note that emissions) reductions through the "Dedicated Freight Corridor Project" in India are estimated to be 14.6 million tons - CO2/year)

SUSTAINABILITY REPOR

*JICA's climate finance consists of Technical Cooperation, ODA Loans, and ODA Grants

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(Support for the establishment of a climate-resilient society)



(Support for both mitigation and adaptation)

Cases

The following are two representative examples of the JICA projects for climate change in 2020.

Arab Republic of Egypt P 25

The Project for Capacity Development on Energy Efficiency and Conservation

Indonesia

Disaster Resilience Enhancement And Management Program Loan

P 27





Arab Republic of Egypt



Arab Republic of Egypt

The Project for Capacity Development on **Energy Efficiency and Conservation**

□ Estimated Cost: 380 million yen \Box Project Period : January 2020 ~ February 2022

Egypt has been supplying electricity at a heavily subsidized price. However, due to economic stagnation and the country's worsening fiscal situation, electricity tariffs have increased in recent years, adversely affecting the become an urgent issue in Egypt.

■ JICA's cooperation will strengthen the Egyptian government's administrative capacity for energy conservation through policy proposals/reforms and related measures. This project will consequently promote energy conservation throughout Egypt and contribute to the reduction of greenhouse gas emissions in the region.







Project Meeting





Case 2: Adaptation

Indonesia

7-′

Cases

Disaster Resilience Enhancement And Management Program Loan

ODA Loan Amount: 31,800 million yen
 Loan Agreement Signed: February 2020



■ Based on its experience from past disasters, Indonesia has been strengthening its legal framework and organizational capacity to develop a comprehensive disaster risk reduction system that includes not only post-disaster response but also pre-disaster prevention. The country is also bolstering its efforts to identify and prepare for disaster risks by building an early warning system.

■ JICA is providing finance to support these policy improvements through Program Loans. These funds will be incorporated into the country's budget to sponsor programs that improve Indonesia's disaster risk reduction and management capacity, such as those leading to the development of a comprehensive disaster management system, and enhance the country's ability to cope with, in particular, flood risks due to climate change.



Signing of the Loan Agreement

SUSTAIN.

REPOR





Ex-post Evaluation of Climate Change Countermeasures

JICA conducts evaluations based on the six evaluation criteria set by the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD), which reflect the perspectives of international ODA evaluations. JICA also conducts

South Africa

Its Application in the Southern African Region

Vietnam

Support Program to Respond to Climate Changel \sim VII

Cambodia

Project for Construction and Rehabilitation of



P 35



Case 1: Adaptation

South Africa

Project for Prediction of Climate Variations and Its Application in the Southern African Region (Technical Cooperation/SATREPS)

 \sim Predicting abnormal weather mechanism and applying early warning system for agriculture and infectious diseases control \sim

□ Project Cost : 222 million yen □ Project Period : April 2010 to March 2013



One of the six automatic weather stations for seasonal change forecasting installed under this SATREPS project

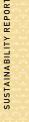


events.

Since the cause of extreme weather is the difference in sea surface temperature between two oceans, we used the High Resolution Coupled Atmosphere-Ocean Model (SINTEX-F), a supercomputer that reproduces how the atmosphere and oceans affect each other, to predict the extent of climate change over a wide area up to one year in advance. This has enabled the project stakeholders to reveal the mechanism of the subtropical dipole mode phenomenon in the South Indian Ocean and the South Atlantic Ocean, which causes abnormal weather in South Africa, and to successfully predict heavy rainfall events.

issues.





Ex-Post Evaluation Report: https://www2.jica.go.jp/en/evaluation/pdf/2019_0901000_4_f.pdf

South Africa

Project Homepage: https://www.jst.go.jp/global/english/kadai/h2103_southafrica.html

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This project was implemented as a science and technology cooperation program (SATREPS) for conducting joint research with universities and research institutions to

South Africa is very susceptible to extreme weather events, and we worked to improve climate change forecasting technology to help mitigate the impact of such

The results of the SINTEX-F climate forecasting are now being used by private sector to analyze environmental

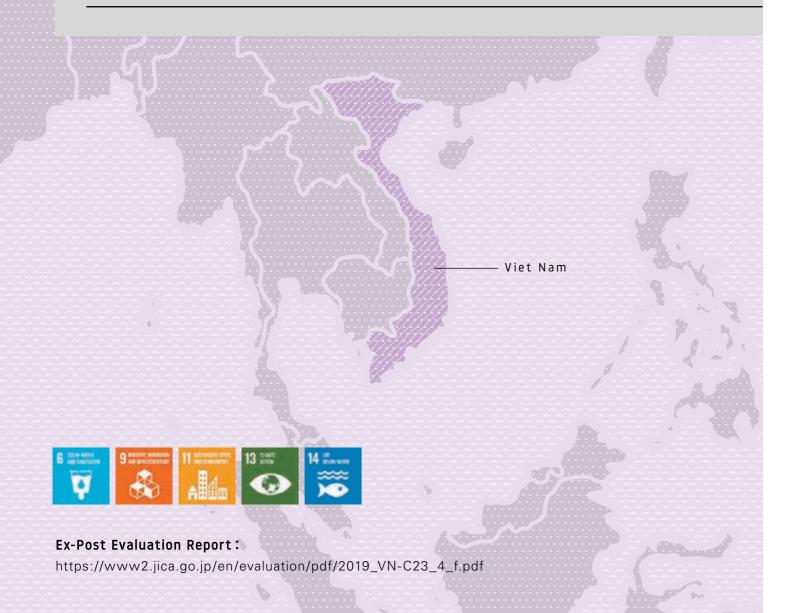
Limpopo Province, South Africa

Support Program to Respond to Climate Change $|\sim V||$ (Yen Loan)

Viet Nam

 \sim Support the Government of Viet Nam in establishing climate change policies \sim

 \Box Disbursed Amount : 80 billion yen (sum of phases I ~ VII) □ Loan Agreement Signed : 2010, 2011, 2013, 2014, 2015, 2016、2017, respectively





By supporting the Vietnamese government's climate change measures through policy dialogue and other means, the project aims to: (1) mitigate climate change by increasing greenhouse gas absorption and decreasing emissions; (2) strengthen the country's capacity to adapt to the adverse effects of climate change; and (3) address cross-sectoral issues related to climate change. This will support the sustainable economic development of the country by reducing the risk of climate change-related disasters, while at the same time contributing to climate change mitigation.

■ JICA played a leading role in not only funding but also supporting the establishment of the implementation system.

■ JICA provided yen loans and formed a platform for policy dialogue with relevant Vietnamese ministries and agencies including other development partners, such as the World Bank, and took a leading role in policy discussions and activities required to combat climate change.

To facilitate discussions among the various ministries and agencies involved in climate change issues, an expert was dispatched to Vietnam on a long-term basis to strengthen their capacity from multiple perspectives. In this manner, JICA utilized not only financial but also technical cooperation.

Wind power plant in Ninh Thuan Province (With this project, a policy to establish power purchase price was introduced to promote renewable energy projects)



Case 3: Mitigation



Project for Construction and Rehabilitation of Small Hydro Power Plants in Rattanakiri Province (Grant Aid)

Cambodia

 \sim Reduce greenhouse gas emissions and promote stable power supply in rural areas \sim

Cambodia

□ Grant Amount : 1.48 billion yen □ Grant Agreement Signed : 2013



Ex-Post Evaluation Report:

https://www2.jica.go.jp/en/evaluation/pdf/2018_1260800_4_f.pdf

■ The project enabled a stable supply of electricity in rural Cambodia by constructing and upgrading new small-scale hydroelectric power plants which can be developed even with relatively limited funding.

■ The project has brought benefits to local residents, who use the electricity produced by the new and rehabilitated hydroelectric power plants. In addition, by clearly measuring the reduction in greenhouse gas emissions, it was proven that the project contributed to climate change mitigation.

■ The electricity generated by this project substitutes for electricity imported from Vietnam. That is, if the project had not been implemented, Cambodia would have had to import more electricity that is derived from thermal energy sources. Therefore, this project has greatly contributed to the reduction of CO2 emissions by utilizing a clean energy resource.





t /year*²	Reduction of CO2 emissions*
Baseline	1,071.5
2015 (completion)	1000.00
2016 (1 year after)	852.23
2017 (2 year after)	1544.99
2018 (3 year after)	1485.61

*1 Volume of CO2 emission reduction : Actual output from O'Chum No.1 and No.2 power plants (increased volume) × emission coefficient of Vietnam (generating end) 409 kg CO2 / MWh *2 These amounts are the sum of O'Chum No.1 and No.2 power plants



Water Intake Tower of O'Chum No.1 Dam



Combating Climate Change through Infrastructure Development

India

Delhi Mass Rapid Transport System Project

The percentage of people in India who own cars is increasing together with economic growth, with the attendant effects of air pollution and traffic congestion becoming serious problems in urban areas throughout the country. In response, Japan has supported the expansion of mass transit infrastructure in the Indian capital region via the Delhi Metro Project. As a result of the construction of the Delhi Metro, the number of vehicles on Indian roadways had declined by approximately 700,000 per day as of 2018, corresponding to a reduction of 990,000 tons per year of CO2 emissions. Furthermore, the metro's train cars are equipped with braking systems that utilize Japanese energy-saving technologies, leading to a further reduction in CO2 emissions. In recognition of this project's environmental benefits, the United Nations certified it as the world's first CDM project* in the railroad sector.

problems caused by urbanization—foremost increased CO2 emissions and air pollution are not confined to Delhi alone. In fact, other metro railway projects currently being developed with JICA's cooperation in India, as well as in Bangladesh, are modeled after the Delhi Metro Project.

* A mechanism established under the Kyoto Protocol. The CDM allows emission-reduction projects in developing countries to earn certified emission reduction credits. The credits can be used by industrialized countries to meet a part of their emission reduction targets under the Kyoto Protocol.





Delhi



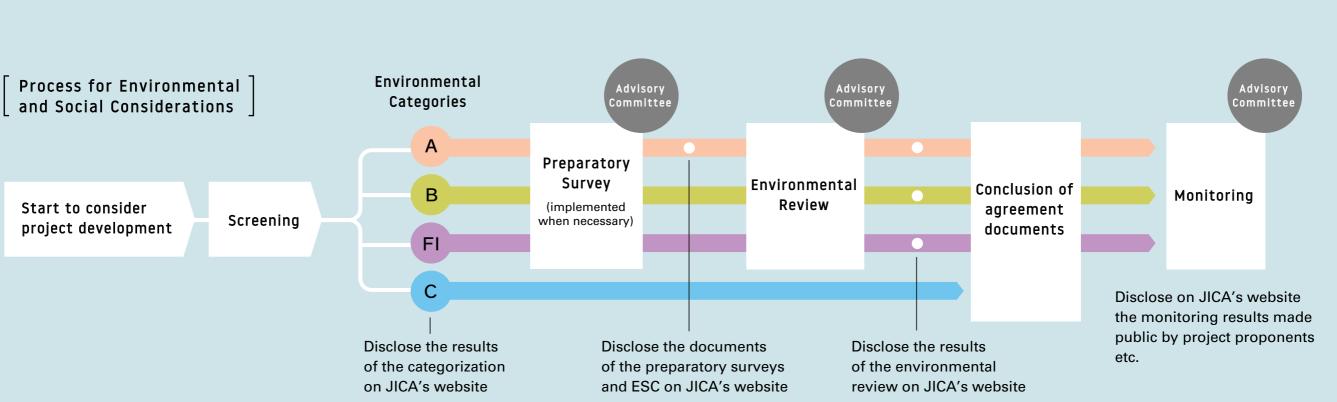
Regarding climate adaptation, two articles (Part 1 and Part 2) on JICA's website provide examples of how JICA has supported countermeasures in the water sector (against drought), where the impact of climate change is particularly pronounced. Various case studies of JICA's climate change countermeasures are also introduced in the October 2019 edition of JICA's PR magazine, with a special feature titled, "JICA's Climate Actions: For the Future of the Planet."

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JICA's Guidelines for Environmental and Social Considerations

As described in "5. Risk Management," JICA examines and confirms that Environmental and Social Considerations (ESC) are put into practice by the project proponents, etc., at various project stages-including formulation, review, implementation, and post-implementation --per "JICA Guidelines for Environmental and Social Considerations" (hereinafter referred to as ESC Guidelines). The details of the three processes—screening, environmental review, and monitoring involved are as follows.

Screening is a process in which JICA classifies the project into one of four environmental categories based on the magnitude of its impacts, as inferred from information provided by the project proponents, etc. These categories are: A (likely to have significant adverse impacts), B (potential impacts that are less adverse than A), C (minimal or little impact), and FI (whereby JICA provides funds to a financial intermediary and subprojects could not be identified prior to JICA's approval of the transaction). JICA then follows the ESC procedures set forth by the ESC Guidelines in accordance with the category to which the project is assigned.

During the Environmental Review, JICA confirms possible environmental and/or social impacts of a project together with the measures to be taken

by project proponents, etc., based on the documents they submit, including an environmental impact assessment (EIA) report and Environmental Checklist indicating the current state of ESC. For category A projects, JICA holds a discussion with the project proponents, etc., to confirm the positive and negative impacts of the project based on the EIA report along with other ESC-related documents. JICA then evaluates proposed measures for avoiding, minimizing, mitigating, and/or compensating for adverse impacts, as well as measures to enhance positive impacts on the environment and society.

JICA ensures transparency of the Environmental Review by disclosing ESC-related documents prior to this process.

ESC monitoring is carried out by the project proponents, etc. For projects categorized as A, B, or FI, JICA confirms the monitoring results for significant social and/or environmental impact items. If during the monitoring period any necessity to improve such impacts is identified, JICA urges the project proponents, etc., to devise appropriate countermeasures and provides necessary support to this end.

Advisory Committee for Environmental and Social Considerations

JICA established the Advisory Committee for Environmental and Social Considerations as an independent council that advises JICA on its examination and support of ESC. This committee consists of external experts in relevant fields who were carefully selected from among the public. During FY2020, the committee held 11 plenary meetings and 14 working group meetings. Working groups—made up of committee members assigned to them during a plenary meeting and tasked with investigating individual projects that are subject to the Advisory Committee's scrutiny—provided advice for 14 projects during the year. The Working Group for Comprehensive Review of the Guidelines convened twice during FY2020 (and eight times total after FY2019).

• Ensuring Appropriate Implementation of and Compliance with the ESC Guidelines

In addition to the measures outlined above, JICA has established the Objection Procedure to ensure its compliance with the ESC Guidelines. By following this procedure, either residents of a partner country who are affected, or likely to be affected, by a project due to non-compliance with JICA's ESC Guidelines or their agents can file an objection with JICA.

The contents of these objections are reviewed by a group of Examiners who are independent of JICA's operational departments. These Examiners inspect the facts relating to whether or not the ESC Guidelines were complied with and report their findings to JICA's president. If they identify non-compliance with JICA's ESC Guidelines, the Examiners will encourage the Requester (the person who raised the objection) and the project proponents, etc., to engage in dialogue to resolve any problem or dispute caused by said non-compliance.

Documents outlining the Objection Procedure and annual reports of the Examiners are available on the Climate Change/Environmental and Social Considerations page of JICA's website. No objections were received during FY2020.

• Information Disclosure and Consultation with Stakeholders

To maintain accountability and transparency, JICA actively discloses ESC-related information. Project proponents, etc., are primarily responsible for the disclosure of information regarding a project's ESC, but JICA itself also discloses key information about a project's ESC per the ESC Guidelines. Details and information to this effect are available on the Climate Change/Environmental and Social Considerations page of JICA's website.

• Harmonization with the Systems of Other Aid Agencies

The ESC Guidelines state that JICA's projects must not deviate significantly from the World Bank's Safeguard Policies and that JICA should refer to internationally recognized standards and good practices—including those of the international financial institutions as appropriate.

To this end, JICA closely coordinates with development partners, including the World Bank and Asian Development Bank, to keep up-to-date with global trends in safeguards policy and to share relevant experiences. The alignment efforts are strengthened, for example, through co-financing by engaging in joint missions with such partners.

Review of the Guidelines

JICA's current ESC Guidelines stipulate that "JICA will create a comprehensive review of the guidelines within ten years of their enforcement on the basis of its findings. Revisions are made as needed, based upon the results mentioned above." Given this stipulation, JICA has recently reviewed comprehensively the operational status of its current ESC Guidelines through a process that entailed a reexamination of project surveys. It was followed by the establishment of the Advisory Council for the Revision of the Guidelines in August 2020, and discussions within its purview are underway.

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ESG efforts

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- 9-2. Building relationsh with diverse stake
- **9-3.** JICA's Social Bonds GCF Project
- **9-4.** Knowledge Management

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SUSTAINABILITY REPORT

Toward Achieving the SDGs with Japan's Experience

Expanded Food Production

An 80% increase

The rate of increase in rice production in Sub-Saharan Africa. [From 14 million tons in the baseline year to 25.16 million tons in 2014]

Clean Energy

1.230 MW

Total installed capacity of operational geothermal power-generation facilities that have been built with Japanese ODA Loans. (since fiscal 1978)



Development of Industrial Human Resources

821 students

Initiative participants. (fiscal 2014-2016)

The number of ABE



Maternal and Child Health Handbook

25 countries **8** million copies

The total estimated number of copies of the Maternal and Child Health (MCH) Handbook distributed in Japan and 25 countries in one year. (2016)

BOSAI: Disaster **Risk Reduction**

1/70_{th}

The reduction in fatalities due to cyclones in Bangladesh.

[A comparison in death tolls caused by cyclones of similar scale between the 1970s and 2007]

Mathematics and Science Education



The total number of teachers who received JICA's training in mathematics and science education. (1994 - 2015)



Advanced Technology for Environmental Conservation

7,600 cases

The annual number of cases where forest change was detected in 77 countries. (From March 2016 to February 2017)

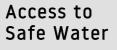


JICA's basic approach toward SDGs

JICA has released a position paper detailing its basic strategy for accelerating achievement of the SDGs, under the twin missions of human security and quality growth. The paper underscores that various partnerships, including those that mobilize funds from the private sector, are essential in achieving the SDGs since public funding alone is insufficient in terms of scale. By communicating its approach and the relevance of its projects to a broad range of potential partners, JICA aims to increase its impact vis-a-vis the SDGs through greater collaboration and mobilization. Please refer to JICA's website for more information about our efforts regarding each of the 17 SDGs.

Enhance cooperation with partners both within and outside Japan to promote the SDGs

JICA is the only government-affiliated organization besides ministries and agencies to participate in the roundtable and secretariat meetings of the Japanese Government's SDGs Promotion Headquarters. JICA has significantly contributed to the formulation of Japan's "Revised SDGs Implementation Guiding Principles" and "SDGs Action Plan 2021." The former references JICA's contributions to the SDGs in Japan and abroad, primarily in developing countries; for the latter, it includes 27 examples of a wide range of JICA-led initiatives (e.g., International Science and Technology Research Partnership for Sustainable Development (SATREPS),





The total number of people who gained access to water with JICA's aid for water supply facilities. (2002 - 2016)



Japan Overseas **Cooperation Volunteers**



The cumulative total number of JOCVs dispatched. (fiscal 1965-2016)





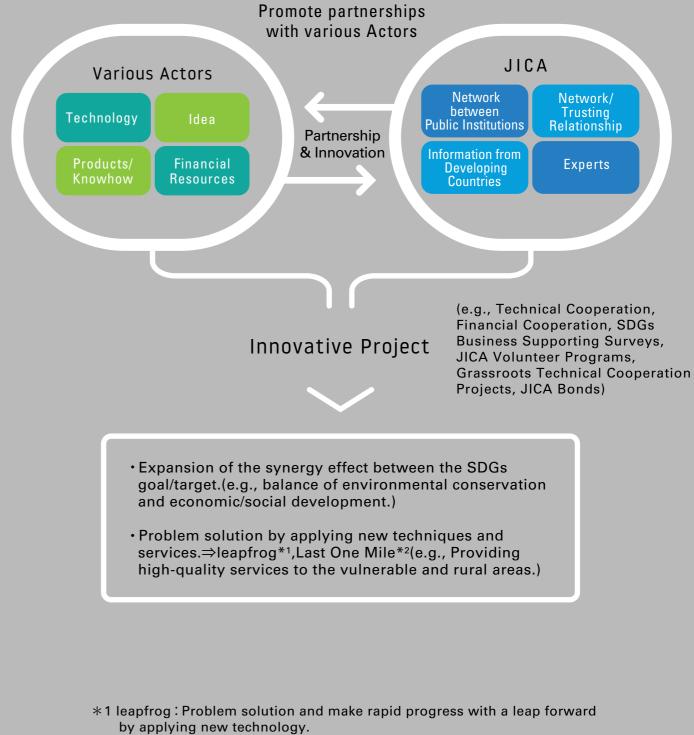
Low Carbon Energy Initiative, and the issuance of JICA Social Bonds). In addition, to further advance the SDGs Implementation Guiding Principles and the SDGs Action Plan, JICA established the "JICA-SDGs Partner" framework in July 2020 to certify organizations that partner with JICA to achieve the SDGs (approximately 60 organizations were certified as of May 2021) and to help disseminate information about how companies and organizations are promoting the SDGs. In addition, JICA is part of the "Kansai SDGs Platform," which with more than 1,000 member organizations (as of May 2021) has become a hub for promoting the SDGs in Kansai since its founding in July 2020.

JICA makes use of its extensive network of counterparts in developing countries (government officials, corporate executives, etc.) and the timely information provided by JICA network (staff, experts, overseas volunteers, etc.). Moreover, JICA has been providing technical cooperation to formulate metadata for Indonesia's national SDGs indicators. In three African countries (Ghana, Malawi, and South Africa), JICA, together with the University of Tokyo and other organizations, has engaged in in a policy oriented research on the interconnectedness among different SDGs focusing especially on SDG 9 (infrastructure and technological innovation) and SDG 11 (cities).

Enhance the evaluation framework of projects articulating the SDGs

Almost all JICA projects contribute to the SDGs, and JICA is making efforts to communicate their specific impacts in an easy-to-understand manner. Specifically, JICA is conducting in -depth analysis to verify and articulate the impact of projects contributing to the SDGs. In addition, JICA is revising its project evaluation criteria to more adequately reflect the targets underlying the SDGs. This includes adding new evaluation criteria and incorporating the perspectives of equity, human rights, gender, etc., into each of its evaluation criteria. JICA recognizes that in strengthening the evaluation framework towards SDGs consistency at each stage ---from strategy and planning to project formulation, implementation, and ex-post evaluation—is central, and is continuing efforts to improve such consistency.

JICA's challenges and actions toward achieving the SDGs



^{*2} Last One Mile: To deliver services to people in rural areas where infrastructure and physical distribution are not easily accessible.

Building relationships with diverse stakeholders

Enhance collaboration with NGO/CSO*s and expand the range of new partners

JICA has established the NGO-JICA Council to discuss ways to strengthen cooperation with NGOs, as well as to promote detailed discussions with NGO coordinators who co-manage the Council. Likewise, in FY2020, the NGO-JICA study group was convened separately from the Council to share knowledge and expertise on themes including refugee support, support for foreign workers in Japan as well as multicultural conviviality, and digital transformation. Various additional efforts are being made to expand collaboration with NGOs, such as through NGO-hosted events and for other NGO activities, personnel exchanges (including by dispatching JICA staff to intern at NGOs), and promoting mutual cooperation and dialogue through opinion exchanges. With regard to local governments in Japan, we have concluded comprehensive cooperation agreements to support local governments' international cooperation projects and the development of their own human resources in the era of globalization. In recent years, JICA's know-how and networks have contributed to the welcoming of foreign workers in their respective regions, efforts for multicultural conviviality, promotion of SDGs, and efforts as host towns of the Tokyo Olympics and Paralympics.

*Civil Society Organization

Supporting NGOs/CSOs implement quality projects by enhancing their knowledge



This program aims to share with NGOs/CSOs with a wide range of relevant knowledge and information necessary to implement projects, and to strengthen their overall capacity in organizational management and project implementation. In addition, JICA provides training programs at domestic and international locations to increase the capacity of NGOs and other organizations to implement projects in developing countries (contents include project management, field survey practice, and monitoring and evaluation). In FY2020, JICA also established NGO Japan Desks in 23 partner countries to support the activities of Japanese NGOs. JICA also compiled a list of about 1,000 local organizations registered in India, published this list on its website, and prepared a booklet highlighting their activities for distribution to Japanese NGOs/CSOs and private companies seeking local partners in the country.

The "Japan Platform for Migrant Workers towards Responsible and Inclusive Society (JP-MIRAI)" (established in November 2020)

JICA and the Global Alliance for Sustainable Supply Chains (ASSC) established and jointly serve as the secretariat for the Japan Platform for Migrant Workers towards Responsible and Inclusive Society (JP-MIRAI), a non-statutory body that collaborates with private companies, industry associations, lawyers, academics, and civil society groups involved in welcoming foreign workers in Japan. With human rights and labor issues surrounding foreign workers gaining much-deserved attention both at home and abroad, JP-MIRAI aims to contribute to the appropriate reception of foreign workers to achieve "a Japan trusted and chosen by workers around the world," as well as to realize inclusive economic growth and a sustainable society. JP-MIRAI is a platform that works together with Japan's leading multinational corporations, industry associations uniting small and medium-sized enterprises, and many other stakeholders (it had 207 corporate and organizational members, along with 108 individual members, as of August 2021). Following its establishment, JP-MIRAI has held seminars on issues relevant to foreign workers for its members and promoted their implementation of its 'Code of Conduct.'







The "Platform for Sustainable Cocoa in Developing Countries" (launched in January 2020)

JICA assists developing countries in comprehensively responding to the challenges that their private sector face by mobilizing all available technological, professional, and financial resources. In Ghana, for example, the export of cocoa beans provides a valuable source of foreign currency yet the country's cocoa industry suffers from low productivity and faces the issue child labor. In February 2020, JICA commenced the Cocoa Value Chain Enhancement Project under its Private-Sector Investment Finance window. JICA's assistance through this project involves replanting cacao trees and improving logistics facilities. Consequently, in January 2020, JICA launched the Platform for Sustainable Cocoa in Developing Countries as a forum where many actors, including Japanese businesses and NGOs, work together to solve the issue of child labor and other issues to achieve a cocoa industry that is socially, economically, and environmentally sustainable.



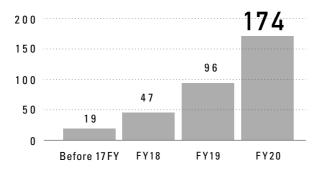
The total amount of JICA's Social Bonds (FY2016-2020)

2,800 million yen

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JICA's Social Bonds • GCF Project

Accumulated Number of Investment Announcements by Investors





JICA's Social Bonds

JICA made the debut issuance of Social Bond whose proceeds are exclusively applied to finance projects that address social issues—in the Japanese domestic capital market in 2016, with the aim of better communicating its mission and projects to the financial market stakeholders. Since then, JICA has successively issued Social Bonds in the Japanese market . Their total amount reached 280 billion yen as of FY2020 and 174 investors have made their investment announcements public by the end of the same year. Hence, JICA's Social Bonds continue to attract the attention of Japanese investors as instruments for ESG

*JICA's Social Bonds have obtained a second party opinion by an independent external reviewer that the bonds are aligned with the Social Bond Principles set by the International Capital Market Association (ICMA).



investment and a means to contribute to the SDGs. Indeed, they are explicitly referred to in the SDGs Implementation Guiding Principles set by the Japanese government as an instrument to mobilize private capital to achieve the SDGs.

Proceeds of JICA's Social Bonds are used for JICA's own finance and investment projects (ODA loans and Private-sector investment finance) to address social issues in developing countries through transport infrastructure (including roads and railroads), renewable energy clean water supply and sewage,

Accumulated Number of Investment Announcements by Investors

174 investors



Photo courtesy of Women's World Banking



equitable quality education for children, and the advancement of gender equality and women's empowerment.

In FY2020, JICA issued "JICA COVID-19 Response Social Bonds" as a part of its efforts to cope with the unprecedented COVID-19 crisis. Proceeds of these bonds are exclusively used for strengthening health systems and mitigating economic impacts of the COVID-19 crisis in developing countries. Many investors have supported this objective. Furthermore, JICA launched another type of thematic bonds in September 2021, namely, "Gender Bonds". The "Gender Bonds" are the first and unique products in the Japanese bond market. The bonds aim at strengthening JICA's efforts to achieve gender equality and empowerment of all women and girls amid the COVID-19 crisis and post COVID-19. The concept of the bonds have attracted a great number of investors, and demand for the bonds has reached much more than the issued amount.

JICA will continue to contribute to the sustainable development of developing countries and the world by contributing to the creation of results oriented finance market as well as mobilizing additional funds from a variety of financial resources through the issuance of JICA Bonds.

Investors Relations https://www.jica.go.jp/english/ir/index.html

GREEN CLIMATE FUND

Partnership with GCF



Participant of a seedling production training



Beach at Maamendhoo island

The Green Climate Fund (GCF) is a multilateral fund which supports developing countries in reducing their greenhouse gas emissions and enhancing their abilities to take measures to fight climate change. It was established at the 16th Conference of the Parties (COP16) to the United Nations Framework Convention on Climate Change (UNFCCC) in 2010, And JICA became one of the first GCF-accredited entities in Japan in July 2017.

JICA's first GCF-endorsed project—Community-based Landscape Management for Enhanced Climate Resilience and Reduction of Deforestation in critical Watersheds in Timor-Leste-was approved at the 28th GCF Board Meeting in March 2021.

In Timor-Leste, unsustainable natural resource and land management practices-such as shifting cultivation, farmland expansion, and overgrazing-have resulted in deforestation, forest degradation, and increased greenhouse gas emissions. In turn, intensified and more frequent droughts and floods due to climate change have reduced food production by traditional methods and accelerated the further expansion of farmlands for subsistence. Communities adjacent to forests are particularly vulnerable, as their livelihoods directly depend on natural resources.

This project aims to reduce forest degradation and deforestation by applying a forest management model developed with JICA's support in 74 vulnerable upland communities across four watersheds. The project also aims to improve the livelihoods of the target population (about 48,000 people) who depend on natural resources by proposing sustainable agriculture and agroforestry practices so that they can better cope with the negative impacts of climate change. The project is expected to reduce greenhouse gases by 4.4 million tons (CO2 equivalent) over 20 years and contribute to SDGs 13, 15, and 17.

More lately, the GCF also approved JICA's 'Building Climate Resilient and Safer Islands in the Maldives' at its 29th Board Meeting in July 2021.

JICA will continue to support developing countries' efforts to transition to a zero-carbon and climate-resilient society.

Knowledge Management Networks

Knowledge Management

JICA has established a system of Knowledge Management Networks (KMNs) to accumulate knowledge and know-how on development issues and project implementation, as well as to share and utilize such knowledge and know-how among project stakeholders across the organization. KMNs are mainly managed by JICA's sectoral departments, and 19 KMNs have been established covering all 17 SDGs. These include KMNs for Climate Change and Disaster Risk Reduction, both of which intend to collect and disseminate information on international trends; accumulate knowledge and know-how contributing to the formulation, implementation, and evaluation of climate change projects; develop human resources based on this knowledge; and build networks with external experts.









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