

Japanese Technology ~Tackle to overcome the development challenge in the world~

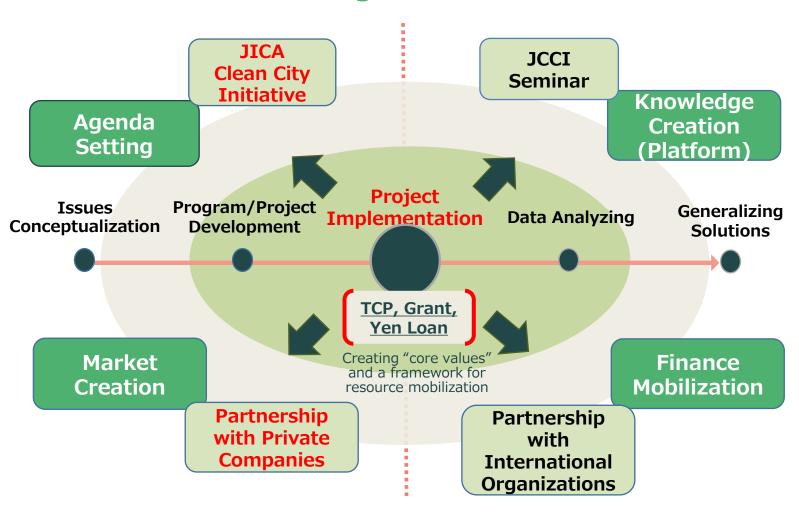
February 7th, 2024 Environmental Management Group, Global Environment Department, JICA



JICA Clean City Initiative

~Four Segments to achieve the Global Target~

Non-finance/Intangible Resource Mobilization



Finance/Tangible Resource Mobilization



Overview of Operations

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

Technical Cooperation

Finance and Investment Cooperation(ODA Loans)

Grants

- ◆ JICA's volunteer programs
- Citizen Participation
- Partnership with Nikkei

Communities in Latin America and the Caribbean Emergency

- Disaster Relief
- Studies and Research
- Public-Private Partnerships



Technical Cooperation Project

Accepting trainees



Dispatching experts



Providing equipment

Competent personnel in developing countries participate in training programs in Japan or third country to acquire the knowledge and skills necessary for their country's development

Experts are dispatched to developing countries to provide necessary knowledge and skills to counterpart officials in developing countries

Equipment and materials are provided to developing countries when they are necessary for addressing development challenges

Technical Cooperation Project

Combining various operational menu to resolve development challenges

Technical Cooperation for **Development Planning**

Conducting studies to develop **policies and** master plans of developing countries



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Technical Cooperation

Development Planning (Ex. M/P)

Pilot Project in Technical Cooperation Project





Comprehensive Support: Zero-Emission and Build Climate-Resilient City

Policy framework



Bangkok Master Plan on Climate Change 2013-2023

Bangkok Master Plan on Climate Change (2015)

- The MP aims to reduce the amount of GHG emissions by 13.57% by 2020, compared to the BAU scenario in the 4 sectors (Transportation, Energy, Waste and Wastewater, and Green Urban Planning).
- Established the strategy office for climate change.

Strengthening the organization to implement the MP

Supporting to monitor and evaluate the progress of the MP

Promoting to implement the mitigation plan defined in the MP

Supporting to formulate the new MP of BMA

Scientific Data



ADAP-T: Collaborative research to identify appropriate technologies and measures for adaptation strategies, contributing to the National Adaptation Plan (NAP) process.

Infrastructure



Urban railways & Smart Transport Technology (next slide)

Capacity building



Establishment of Climate Change International Technical and Training Center (CITC)

A one-stop technical training center and network hub, offering a variety of training courses on climate change



Southeast Asian countries

&

Thailand

Zero-Emission and Climate-Resilient City



Transition Towards Zero-Emission City

Urban railways

Blue Line

- Opened in 2004
- Total Project Cost: 358 Billion JPY
- ODA Loan Amount: 222 Billion JPY
- Civil Work, Depot, Track by ODA Loan
- E&M, O&M by Private Investment

Purple Line

- Opened in Aug 2016
- Total Project Cost: 210 Billion JPY
- ODA Loan Amount: 79 Billion JPY
- · Civil Work, Depot, Track by ODA Loan
- E&M, O&M by Private Investment

Red Line

- Under construction (to be opened in Nov 2021)
- Total Project Cost: 332 Billion JPY
- ODA Loan Amount: 268 Billion JPY
- Civil Work, Depot, Track, E&M by ODA Loan

Smart Transport Technology



Background

- Traffic congestion, air pollution and GHG emission in Bangkok
- Announcement of Thailand 4.0

Technologies

- Proposal of Smart mobility strategic integration method
- Implementation of Smart Transport System (Sukhumvit Model)

Expected outcome

By implementing the Smart mobility strategic integration method,

- traffic congestion will be resolved
- Quality of Life will be enhanced (with new travel behaviors and life styles)

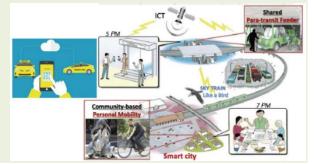
Smart City where QOL is enhanced





Traffic congestion in Bangkok







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Finance and Investment Cooperation (ODA Loans)

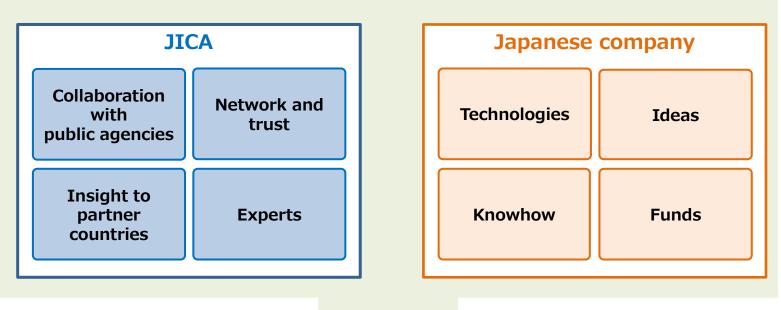
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Overview of JICA's Partnership with Private Sector

JICA has increased the efforts to enhance the partnership with private companies with co-creation, rather than simply ordering the business that align with JICA's priorities and designs as conventional ODA.



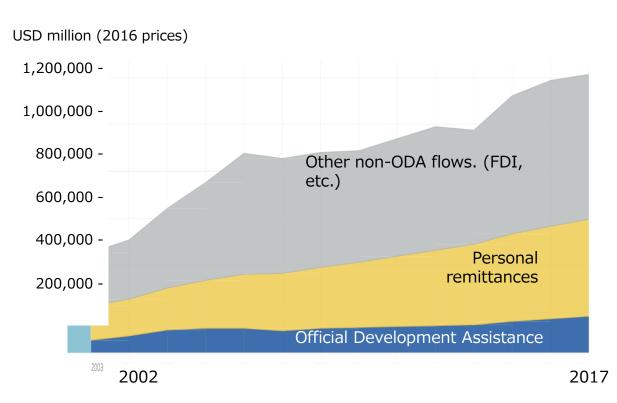
Partnership

Expansion of Social Impact through Co-Creation with Companies



Background | Expanding the Role of Business in Development Cooperation

Changes in the Breakdown of Funds Inflows into Developing Countries



Future Collaboration in Development and Business

- Equal Partnership
- Long-term and organizational relationships
- Flexible market-based development based on strategic analysis



Source: DCED "A summary of innovations and institutional change in donor agencies" (2018)

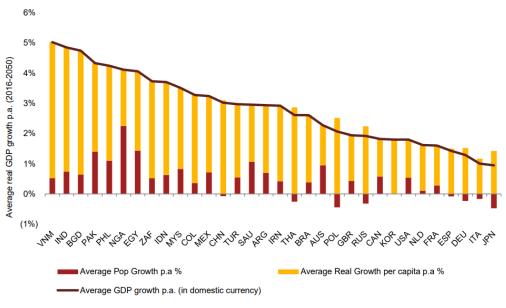
Source: OECD "Big picture of total resource receipts"



Market Expansion in Emerging and Developing Countries as an Innovation Hub

Developing countries, which drive global growth and have various challenges, are becoming increasingly important as hubs for markets, production, innovation, etc.

Forecast of Average Annual Real GDP Growth (2016-2050)



Examples of Innovation Born in Developing Countries



■ M-Pesa (Kenya):

Use your mobile device to send money or You can pay utility bills, tuition, etc. It quickly spread to the unbanked poor.

(Source: JETRO)



■ Zipline (Rwanda):

Rapid blood transport by drones has helped reduce infant deaths and malaria-induced anemia, which is common in children.

(Source: Drone News)

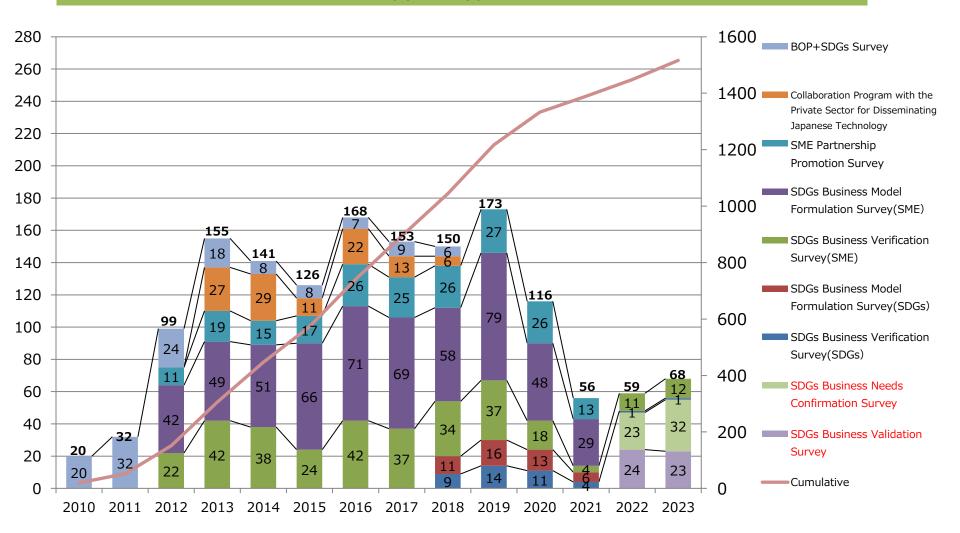
Source: PwC "The World in 2050: How will the global economic order change?" (2017)



JICA's Partnership with Private Sector

(Cumulative Numbers)

- •Total: 1,516 cases (cumulative number of entries since 2010)
- •Of these, 1,174 were SMEs support type





JICA's Partnership with Private Sector

(Target Area, Sectors)

Target area

