

# Part III

## Responses to Priority Challenges

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A Japanese technical expert providing guidance on ladder truck maintenance as part of the Grant Assistance for Grass-Roots Human Security Projects, "The Project for providing a Ladder Truck for Firefighters of Talagante" in Chile (Photo: The Society for Promotion of Japanese Diplomacy)



# “Quality Growth” in the New Era and Poverty Eradication through such Growth

## (1) Strengthening Socio-economic Autonomy and Resilience

Japan has long sought to eradicate poverty, the most fundamental development challenge, by achieving economic growth and ensuring that such growth is “quality growth.”<sup>1</sup> Essential to “quality growth” is improving the socio-economic infrastructure that underpins development. Moreover, it is crucial for the private sector to play a central role, vigorously promoting its activities in industrial development as well as in the expansion of trade and investment. However, national economies are recovering from the impacts of the COVID-19 pandemic at various paces. Concurrently, the global economy faces challenges, including surging energy and food prices and supply chain disruptions,<sup>1</sup> exacerbated by Russia’s aggression against Ukraine and instability in the Middle East. In particular, developing countries often face difficulties in building institutional capacity and an enabling environment needed to promote trade and attract private investment. To support developing countries in building socio-economic autonomy and resilience, engagement from the international community remains vital.

### Japan’s Efforts

#### ■ Enhancing Resilience and Diversifying Supply Chains as well as Promoting Economic Diversification

Japan supports the development of trade and investment environments, as well as the broader economic foundations of developing countries, through both structural (infrastructure) and non-structural (institutional and capacity building) assistance, with the aim of enhancing their export capabilities and competitiveness. Structural assistance includes the development of transportation networks—such as ports, roads, and bridges—that are essential for trade, along with industrial infrastructure like power plants and transmission grids. On the non-structural side, support is provided through technical cooperation in trade-related fields, such as capacity building for customs officials and experts in intellectual property rights, to facilitate trade management as well as import and export procedures.

Strengthening the economic resilience and economic security of developing countries through such cooperation is an urgent priority. Doing so helps ensure quality growth in developing countries while also contributing to a virtuous cycle of mutual growth that benefits the Japanese economy.

With this perspective in mind, at the Ministerial Council Meeting of the Organisation for Economic Co-operation and Development (OECD) held in May 2024, under the leadership of Japan as chair, the member countries expressed serious concerns over risks of excessive dependence on certain countries for supply of critical goods and attempts to weaponize economic dependencies, amid the recent pandemic and rising geopolitical tensions. In the Ministerial Council Statement, member countries affirmed their commitment to enhancing cooperation on economic resilience and economic security through inter alia reducing vulnerabilities and countering practices that undermine international rules and norms.

At the G7 Trade Ministers’ Meeting in July of the same year, Japan, in light of addressing economic coercion, stressed the importance of enhancing the G7 members’ own capacity to counter such coercion, including the strengthening of supply chain resilience for critical minerals, and the importance of collaboration beyond the G7. Japan further pointed out the importance of unity among like-minded countries, including the G7 members, in not allowing arbitrary export controls, and the importance of collaboration between the public and private sectors to mitigate the impact of such controls.

As an example of cooperation for infrastructure development aimed at strengthening supply chain resilience, Japan has provided a comprehensive cooperation package since 1999 to develop Cambodia’s sole deep-water port, Sihanoukville Port, located at the junction of the Pacific and Indian Oceans. Through cooperation projects utilizing yen loans, technical cooperation, and grants, Japan has provided a wide range of support—the development and expansion of container terminals, the establishment of a special economic zone adjacent to the port, the enhancement of the port authority’s management and operational capacity, and the digitalization of port procedures—all with the goal of positioning the port as a regional hub. In September 2024, an inauguration ceremony was held for the newly completed container terminal. Japanese companies have also begun operating in the

<sup>1</sup> This refers to the entire process, from procuring raw materials to production, processing, distribution, and sales to providing the product to consumers.





Sihanoukville Port in Cambodia, developed and expanded with support from Japan through yen loans and other assistance (Photo: JICA)

special economic zone, and public-private collaborations continue to advance in areas such as the enhancement of logistical functions.

Japan offers training programs worldwide on strengthening supply chain resilience, building sustainable and reliable logistics systems, and enhancing food value chains.<sup>2</sup> In FY2023, a total of 64 government officials and others participated in these programs. In Indonesia, since 2018, Japan has been providing technical cooperation on six remote islands near the national border. In addition to supporting the development of fisheries facilities, this cooperation has focused on revitalizing local economies through the promotion of high-value-added marine products and the establishment of distribution systems to markets outside the islands.

To promote trade with developing countries, Japan has introduced the Generalized System of Preferences (GSP), which applies lower tariff rates than those under the Most-Favored Nation regime to encourage imports from developing countries into the Japanese market. In particular, Japan offers a Special Preferential Tariff Scheme for Least Developed Countries (LDCs),\* providing duty-free, quota-free access\* for a wide range of products.

Japan actively promotes Economic Partnership Agreements (EPAs)\* and investment agreements with developing countries. These agreements are designed to liberalize trade and investment, such as through the reduction or elimination of tariffs and barriers to trade in services, as well as the simplification of customs procedures. They also aim to protect Japanese companies investing abroad and their assets, thereby improving the overall business environment. Such efforts are expected to support Japanese companies in expanding their activities in developing country markets, ultimately contributing to the economic growth of those countries. For example, in 2024, Japan launched EPA negotiations with Bangladesh and the United Arab

Emirates. To ensure the smooth implementation of EPAs, Japan also provides technical assistance to customs authorities in developing countries to support the proper application of customs procedures.

Discussions regarding “Aid for Trade (Aft)”\* have intensified in various international fora such as the World Trade Organization (WTO) and the OECD, as a means of further promoting support from developed countries, including Japan. Japan has contributed to organizations such as the International Trade Centre (ITC), which implements Aft, with the aim of strengthening the capacity of developing countries to engage in trade negotiations and participate in the global market, and raising their ability to implement the WTO agreements. In 2024, support was extended through the ITC for a range of initiatives: promoting the use of e-commerce among women entrepreneurs in Africa; providing technical assistance to expand vaccine production and distribution in Nigeria; enhancing the capacity of governments, business support organizations (such as trade promotion agencies and chambers of commerce), and micro-, small, and medium-sized enterprises (MSMEs) in Nigeria and other West African countries; and facilitating employment and entrepreneurship for displaced persons in Ukraine.

With regard to customs-related cooperation, Japan actively supports developing countries, particularly among ASEAN member states, through organizing training programs for customs officials and dispatching Japanese customs personnel as experts, in order to share technical expertise and experience. These efforts are aimed at strengthening the institutional capacity of customs authorities in developing countries. In particular, Japan has dispatched its customs officials as long-term JICA experts to six ASEAN member states,<sup>3</sup> where they provide on-site support tailored to the specific needs of each country. Since July 2024, a regional initiative involving Cambodia, Thailand, and Laos has also been launched to enhance connectivity in the Mekong region. At the multilateral level, Japan contributes to the World Customs Organization (WCO), helping to promote the adoption of international standards and to share best practices, thereby facilitating global trade while ensuring border security. In addition, the Master Trainer Programme—launched in 2016 as a joint initiative by JICA and the WCO—was initially developed for Africa and has since expanded to Pacific Island countries as well as Central Asia and the Caucasus region. As of 2024, the program supports the training of instructors and development of training materials in 37 countries, contributing to the enhancement of sustainable customs training capabilities.

<sup>2</sup> Systems that link added value across all stages of the food production process—from farming to processing, distribution, and consumption—through the coordinated involvement of multiple stakeholders, including farmers; suppliers of inputs such as seeds, fertilizers, and machinery; agri-food processors; transport and logistics providers; and retailers.

<sup>3</sup> The six countries are: Cambodia, Laos, Malaysia, Myanmar, the Philippines, and Thailand.

## ■ Providing Technical Assistance for the Development of Financial and Capital Market Systems and Related Areas

A sound and stable financial system, along with a well-functioning financial and capital market, is essential to the sustainable economic development of developing countries. As financial globalization progresses, it is increasingly important to support the development of robust financial markets by fostering financial systems in emerging markets in an appropriate manner. With this in mind, Japan has provided training through the JICA Knowledge Co-Creation Program, covering topics such as financial regulations and supervision, as well as the development of the stock market. Additionally, the Financial Services Agency of Japan hosted the Asia High-Level Financial Regulator's Forum, bringing together financial regulatory authorities from across the region to exchange views and strengthen cooperation on shared financial challenges in Asia. The first meeting, held in March 2024, focused on natural disaster protection gaps and transition finance in Asia, with 37 participants from six countries. The second meeting, held in October 2024, explored the role of regulatory authorities in enhancing the sustainability and resilience of the financial sector and continued discussions on transition finance, with participation of 51 representatives across nine countries.



A JOCV in Zambia conducting an accounting workshop for members of regional chambers of commerce and businesspersons of small and medium enterprises on proper financial record-keeping for securing bank loans (Photo: JICA)

## ■ Supporting Domestic Resource Mobilization

In order for developing countries to achieve quality growth by addressing various development challenges under their own ownership, it is important that they secure necessary development funds through their own efforts, such as from tax revenue. This approach is known as “domestic resource mobilization,” and its importance has been increasingly emphasized in light of the shortfall in development financing required to achieve the Sustainable Development Goals (SDGs).\* Japan, in collaboration with international organizations and other partners, contributes to discussions on domestic

resource mobilization and provides related support to developing countries. For example, Japan actively engages in technical cooperation aiming at improving tax administration of developing countries. In 2024, officials from the National Tax Agency (NTA) served as JICA's long-term experts in Laos, the Philippines, and Viet Nam, providing expertise in areas such as taxpayer management, international taxation, and tax collection. Additionally, the NTA organizes the International Seminar on Taxation (ISTAX) and training on international taxation for tax officials from developing countries. Moreover, the “Project for Enhancement of Property Valuation Capacity” has been underway in Thailand since November 2022. Japan also supports the technical assistance programs of the International Monetary Fund (IMF) and the Asian Development Bank (ADB) related to taxation, including domestic resource mobilization, by providing human resources, expertise, and financial assistance.

To support the sustainable development of developing countries, the implementation of the OECD/G20 BEPS Project,\* which aims to prevent tax avoidance by multinational enterprises, is also important. Coordinated implementation of this project by participating countries enables developing countries to effectively tackle tax avoidance and to impose and collect taxes appropriately within their jurisdictions. It also helps align their tax systems and administration with international standards, contributing to the establishment of a stable, predictable, and attractive investment environment for companies and investors. Currently, approximately 145 jurisdictions, including many developing countries, participate in the OECD/G20 Inclusive Framework on BEPS—a framework established to implement the measures agreed under the BEPS Project. To address the tax challenges arising from globalization and digitalization of the economy, work is underway on implementing the Two-Pillar Solution,\* agreed upon in 2021. This includes negotiations on a multilateral convention for Pillar One and advancing legislative reforms in individual jurisdictions for Pillar Two. Japan supports developing countries in implementing the Two-Pillar Solution through contributions to relevant international organizations.

## ■ Supporting the Labor Sector, including through Industrial Human Resources Development and Job Creation

Developing a skilled industrial workforce is crucial for achieving quality growth. In developing countries, where opportunities for education and training are often limited, Japan supports core institutions such as technical colleges and vocational training centers in cultivating personnel with a wide range of technical skills and expertise. In doing so, Japan works in partnership with the private sector, leveraging its knowledge and experience to strengthen the capacity of teachers and instructors, improve the organizational management



Then Parliamentary Vice-Minister for Foreign Affairs Fukazawa visiting the TICAD Human Resource Development Center for Business and Industry in Ethiopia, a core institution for developing human resources through Kaizen, built with Japan's grant, in February 2024

of training facilities, and assist in the development and revision of curricula and teaching materials, all of which are efforts that aim to better link education with employment.

From 2016 to 2024, Japan provided multifaceted support, including the development of facilities and provision of equipment, to 19 Technical and Vocational Education and Training (TVET) institutions and others through 21 projects in 15 countries, in collaboration with the industrial sector and other partners. In 2024, Japan also supported skills development aimed at improving women's livelihoods through 13 projects across 20 countries and regions.

For Asia, the Japan-ASEAN Comprehensive Connectivity Initiative, announced in September 2023, set out Japan's plan to provide training opportunities for 5,000 individuals in the following three years. Through various programs—such as training courses of JICA Knowledge Co-Creation Program (Group & Region Focus) and the Project for Human Resource Development Scholarship (JDS)—Japan supports the development of human resources, which is key to nation-building of ASEAN member states.

The “Innovative Asia” initiative, launched in FY2017, offers opportunities for outstanding science and engineering students from developing countries in Asia to study and participate in internships in Japan, including at companies, with the view to promoting circulation of highly-skilled professionals between Japan and other Asian countries.

The Ministry of Health, Labour and Welfare (MHLW) has been conducting training programs both in Japan and in four targeted countries—Cambodia, Indonesia, Laos, and Viet Nam—to help develop and secure a skilled workforce. These programs <sup>4</sup> aim to transfer the know-how of Japan's Skills Evaluation System, which has been

developed over time in both the public and the private sectors, including the National Skill Test System and Skills Competitions. In FY2023, a total of 100 individuals from four countries participated in the training. These efforts are expected to support the development and improvement of local skills evaluation systems, foster the growth of skilled workers, expand employment opportunities, and elevate the social standing of skilled labor in the target countries.

For Africa, Japan supports workforce development in the industrial sector to promote sustainable growth at the individual level. Key initiatives include the ABE Initiative (African Business Education Initiative for Youth) <sup>5</sup> and the Africa Kaizen <sup>6</sup> Initiative, both of which foster collaboration among industry, academia, and government. Japan also provides technical assistance in partnership with international organizations (For details on the ABE Initiative, see Part IV, Section 8 on page 118 and Part V, Section 1 (6) on page 140).

Japan is also active in supporting labor-related initiatives. Socio-economic downturns tend to disproportionately affect socially vulnerable people, including youth and women. In order to foster stable employment, it is essential for countries to build social safety nets that can mitigate such risks. At the same time, there is a strong international call for efforts to promote decent work for all, as set out in Goal 8 of the Sustainable Development Goals (SDGs). Japan contributes to the realization of decent work in various regions around the world such as Africa, the Middle East, and Asia through cooperation that includes job creation for youth and women, improvement of



Ethiopian researchers and JICA experts conducting a rice root distribution survey in a trial plot as part of technical cooperation, “Project for Capacity Development to Transfer the Technology for Increasing Rice Production” in Ethiopia (Photo: JICA)

<sup>4</sup> Training programs include “Training for personnel responsible for developing test standards and questions,” and “Training for personnel involved in administering and grading tests.” The number of participants mentioned above reflects the total across all such training programs.

<sup>5</sup> See the glossary on page 121.

<sup>6</sup> An approach that encourages each worker on the production floor to take initiative in identifying and implementing ways to reduce inefficiency and improve quality and productivity. This method was developed in Japan's manufacturing sector during the post-World War II period of rapid economic growth in order to improve the quality and productivity of manufacturing, rooted in the principles of 5S: Sort, Set, Shine, Standardize, and Sustain.



## Supporting the Livelihood Recovery of Female Returnees in Partnership with Local Businesses

In 2014, the invasion by the Islamic extremist group “Islamic State of Iraq and the Levant (ISIL)” forced more than six million people—15% of Iraq’s population—to flee their homes, leaving them homeless and displaced, and their local communities devastated. Even today, nearly one million people continue to live as internally displaced persons (IDPs), and they face many challenges in returning to their home communities. The challenges include securing housing, restoring infrastructure, access to education and vocational training, as well as psychological support for trauma caused by ISIL’s brutal acts.

Japan has been actively providing humanitarian assistance through the United Nations Development Programme (UNDP) in northwestern Iraq, which was affected by the ISIL invasion, with a focus on Cash-for-Work\*1 programs, vocational training, support for entrepreneurship, and housing rehabilitation.

As one form of support, Technostar Ltd., a local company representing Japan’s Brother Int. Ltd, offered to donate 100 Brother-brand sewing machines. Facilitated by the Embassy of



A woman and children receiving a Japanese brand Brother sewing machine (Photo: UNDP Iraq Office)

Japan and UNDP, the company donated these sewing machines to women who participated in vocational training in Anbar Province, an area that Japan supports through UNDP.

One woman who received a sewing machine shared her thoughts, “When I returned to my home, there was nothing left. It is extremely difficult to make a living, especially for families who lost the head of their household and for women. I am also a woman who lost her husband and has no job, but with the sewing skills I have acquired and the sewing machine I was given, I want to start my own small business.”

Through the combined efforts of Japan’s humanitarian assistance and a local Iraqi company, vulnerable women in Iraq are receiving protection and livelihood support. Japan remains committed to supporting the protection of IDPs and helping returnees rebuild their lives through various ways.



A woman, who was once internally displaced, returning to Anbar Province and receiving sewing training (Photo: UNDP Iraq Office)

\*1 A method of supporting self-reliance by temporarily employing disaster victims or refugees and paying them for their labor in the event of natural disasters or humanitarian crises.

occupational safety and health standards, and support for the development of social insurance systems, by funding the projects of the International Labour Organization (ILO) and other organizations.

### ■ Securing Access to Resources and Energy

As of 2022, 685 million people worldwide are estimated to lack access to electricity.<sup>7</sup> The absence of reliable energy sources, such as electricity and gas, hampers industrial development, reduces employment opportunities, and exacerbates poverty. Global energy demand is expected to grow further, particularly in emerging and developing countries, including those in Asia. At the same time, addressing climate change is an urgent challenge. In this context, it is essential to ensure energy security, while advancing decarbonization efforts to achieve net zero emissions by 2050. This requires diversifying both energy sources and suppliers. Japan remains committed to supporting energy transitions in ways that are tailored to the specific conditions and

development needs of each region. In October 2024, during the Japan-Laos Summit Meeting held alongside the ASEAN-related Summit Meetings, Japan expressed its intention to cooperate with Laos to promote assistance for strengthening electricity connectivity with



A headrace tunnel constructed through loan aid “Asahan No. 3 Hydroelectric Power Plant Construction Project” for Indonesia (Photo: Otto Ferdinand)

<sup>7</sup> International Energy Agency (IEA) Tracking SDG7: The Energy Progress Report, 2024 <https://www.iea.org/reports/tracking-sdg7-the-energy-progress-report-2024>

neighboring countries and promoting decarbonization through clean energy in Laos, including consideration for the Co-creation for common agenda initiative. On the same day, at the 2nd Asia Zero-Emission Community (AZEC) Leaders Meeting, then Prime Minister Ishiba also stated Japan’s interest in proactively developing projects under the Co-creation for common agenda initiative, to support Lao PDR’s bid to become a regional clean energy hub in the future, with a view to contributing to the decarbonization in the region.

To promote sustainable development in developing countries, Japan offers support to enable the provision of modern energy and works to ensure a stable electricity supply for industrial growth. This includes assistance for the development of environmentally friendly infrastructure, such as energy-efficient equipment and power generation facilities that utilize renewable energy sources, including hydropower, solar photovoltaics, solar thermal, wind, and geothermal energy (For more on Japan’s climate change efforts, see Part III, Section 3 (1), on page 63).

In the Pacific Islands region, characterized by its extensive maritime territories and high vulnerability to the impacts of climate change, Japan supports the mainstreaming of grid-connected renewable energy, with a focus on energy security and the transition to a low- and zero-carbon society. In the Dominican Republic, where electricity supply depends heavily on imported fossil fuels, Japan is helping to improve energy efficiency through a yen loan project that supports the nationwide conversion of street lighting on public roads to LED. These efforts are expected to contribute to promoting energy conservation in the country’s public sector and reducing greenhouse gas emissions in the country’s public sector.



Prime Minister Marrero of Cuba and Mr. Hirata, then Ambassador of Japan to Cuba, shaking hands in front of the commemorative plaque installed at the power plant during the completion ceremony for the grant-financed “Project for the Improvement of Power Supply in the Isle of Youth” for Cuba

At the Eighth Tokyo International Conference on African Development (TICAD 8), <sup>8</sup> held in August 2022, Japan launched the “Green Growth Initiative with Africa (GGA)” to maximize its contributions through three approaches, namely ownership and co-creation, flexible mobilization of finance, and collaboration with diverse partners. Under this initiative, Japan announced support for private investment in renewable energy projects, the expansion of geothermal power generation, and cooperation in the mineral resources sector, particularly in copper and rare metals that are essential for advancing a decarbonized society. To help African countries sustainably manage and utilize their natural resources and ecosystems while pursuing sustainable growth (green growth), Japan also supports the development of regional power infrastructure, such as the Africa Power Pool (a cross-border power transmission network), distribution systems, and grid stabilization measures.

### ■ Promoting Initiatives to Enhance Food Security and Nutrition

According to the report, “the State of Food Security and Nutrition in the World 2024,” <sup>9</sup> an estimated 713 to 753 million people were facing hunger in 2023. The report also projects that approximately 600 million people will still be affected by hunger in 2030. In addition, the prolongation of Russia’s aggression against Ukraine has left an estimated 5 million people—about 15% of the population—in need of food assistance. <sup>10</sup> Following the terrorist attacks by Hamas and others in October 2023, the number of people suffering from acute food insecurity in the Gaza Strip has risen to 2.2 million. <sup>11</sup>

Amid the urgent need to accelerate international efforts to combat hunger and poverty, Japan has been actively demonstrating its commitment to addressing these challenges in coordination with the international community through various bilateral meetings and multilateral conferences. In July 2024, at the “Ministerial Meeting of the G20 Task Force to Establish a Global Alliance against Hunger and Poverty” held in Brazil, Japan expressed its support for the creation of the Alliance, as an initiative in line with Japan’s development cooperation philosophy of supporting developing countries’ self-help efforts, while “co-creating” solutions to social issues in collaboration with diverse stakeholders. At Session 1 of the G20 Rio de Janeiro Summit in November, “Fight against Hunger and Poverty,” Japan formally announced its participation in the Alliance. Then Prime Minister Ishiba shared Japan’s experience of transforming a barren

<sup>8</sup> See the glossary “Tokyo International Conference on African Development (TICAD)” on page 121.

<sup>9</sup> A report jointly prepared and published by FAO, IFAD, UNICEF, WFP, and WHO. <https://www.who.int/publications/m/item/the-state-of-food-security-and-nutrition-in-the-world-2024>

<sup>10</sup> WFP website: <https://www.wfp.org/emergencies/ukraine-emergency#:~:text=A%20total%20of%205%20million%20people%20%2815%20percent,of%20the%20population%29%20need%20food%20and%20livelihood%20assistance>

<sup>11</sup> FAO website: <https://www.fao.org/newsroom/detail/Fao-hunger-gaza/en#:~:text=Rome%20-%20The%20Food%20and%20Agriculture%20Organization%20of,Integrated%20Food%20Security%20Phase%20Classification%20%28IPC%29%29%20global%20initiative>



land into the world's largest soybean-producing region through long-standing support for the development of the Cerrado region in Brazil.<sup>12</sup> He emphasized that Japan would further cooperate in the realization of sustainable agriculture, which converts degraded pastures into farmland without deforestation. He also stated that Japan also focuses on building the capacity of small-scale farmers, and expands the same support to 69 countries around the world, mainly in Africa and Central and South America, with the aim of improving farming and cultivation skills focused on increasing sales. Furthermore, then Prime Minister Ishiba affirmed Japan's support to expand sustainable and highly productive agriculture, forestry and fisheries, including the reduction of greenhouse gas emissions, to new partners, making use of Japan's advanced technologies.

Japan provides food aid<sup>13</sup> in response to requests from developing countries facing food shortages. In FY2024, grants totaling ¥6.15 billion were extended to 21 countries and regions, mainly through the provision of Japan's Government-owned Rice.



JICA experts, JOCVs, and local farmers working together in the Dominican Republic under the JICA Partnership Program. Various specialists, such as breeding researchers, university professors, and orchard owners, from Matsudo City in Chiba Prefecture—a major pear-producing region—are collaborating to promote Japanese pears as a regional specialty product in the La Culata district. (Photo: JICA)

In addition to its bilateral cooperation through JICA, Japan works with international organizations to provide food assistance to developing countries. Through the World Food Programme (WFP), for instance, Japan supports school meal programs that promote access to education, as well as initiatives that encourage participation in agricultural and social infrastructure development through food distribution. In August 2024, Japan decided to provide ¥500 million in grants for South Sudan through WFP, where the food crisis had worsened due to flooding and other challenges. In 2023, WFP reached around 152 million people in over 120 countries and regions, providing food assistance

including through the distribution of approximately 3.7 million tons of food and cash-based interventions. Japan's total disbursement to WFP in 2023 amounted to approximately \$208.97 million.

Japan supports nutrition improvement in developing countries through contributions to multilateral development banks (MDBs)\* and other mechanisms. For example, it helps effective finance mobilization for maternal and child health as well as the nutrition sector, the World Bank's Global Financing Facility (GFF),\* and supports policy development to improve nutrition through the Trust Fund for Scaling Up Nutrition.\* In order to mainstream nutrition in development policy, Japan hosted the final meeting of the 20th replenishment of the International Development Association (IDA) of the World Bank Group in December 2021, where it identified human capital development—including nutrition—as a key priority. That same month, Japan hosted the "Tokyo Nutrition for Growth Summit 2021," where then Prime Minister Kishida announced over ¥300 billion in nutrition-related assistance over three years. In 2023, it committed approximately ¥156.2 billion in nutrition assistance.

Furthermore, Japan places strong emphasis on agriculture, which plays a key role in Africa's economic growth, and actively contributes to its development. Under Phase 2 of the Coalition for African Rice Development (CARD)\* and through the RICE approach,\* Japan supports a range of efforts to improve both the quantity and quality of rice production. These efforts include developing irrigation facilities, breeding and disseminating high-yield rice varieties such as the New Rice for Africa (NERICA),\* a hybrid of Asian and African rice, and promoting improved cultivation techniques. The number of countries covered by CARD has so far expanded to 32. At TICAD 8 held in August 2022, Japan announced its commitment to training 150,000 people through CARD and set a goal to double rice production across the continent to 56 million tons by 2030, an effort



A JICA expert providing research guidance at Jomo Kenyatta University of Agriculture and Technology in Kenya, where Japan has been providing continuous support for over 40 years since the university's establishment (Photo: JICA)

<sup>12</sup> A region spanning approximately 204 million hectares in central-western Brazil. The name means "closed" in Portuguese, and the area was originally regarded as unsuitable for agriculture due to its highly acidic soil.

<sup>13</sup> Grants that provide funding for the procurement of necessary goods and services to implement food aid in accordance with the Food Assistance Convention, targeting developing countries undertaking socio-economic development efforts, including poverty reduction.



already underway in countries including Uganda.

To support the transition from subsistence farming to agriculture as a source of income, Japan has been promoting the Smallholder Horticulture Empowerment & Promotion (SHEP) approach.\* SHEP encourages smallholder farmers engaged in the production of fruits and vegetables to adopt a market-oriented mindset—“grow to sell”—and seeks to improve their farm management and cultivation techniques in order to increase their income. Originating from technical cooperation with Kenya, the SHEP approach has spread to around 60 countries worldwide, supporting this transformation through training programs and the dispatch of experts. At TICAD 8, Japan made the commitment to support 66,000 farmers in making the transition to income-generating agriculture through SHEP. It also pledged to strengthen food production by co-financing the African Emergency Food Production Facility of the African Development Bank. In 2024, Japan provided a total of USD 320 million in assistance to Côte d'Ivoire, Tanzania, and Nigeria.

To contribute to improving food security by enhancing transparency in international agricultural markets, Japan has supported the “Agricultural Market Information System (AMIS)”<sup>14</sup> through data provision and financial contributions. At the G7 Hiroshima Summit in May 2023, leaders reaffirmed their commitment to strengthening support for AMIS.

Japan contributes to strengthening food production systems in developing countries through agricultural support in collaboration with international organizations such as the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD), the Consultative Group on International Agricultural Research (CGIAR), and the World Food Programme (WFP). For example, through its partnership with FAO, Japan engages in technical

cooperation for agricultural and rural development, helps establish international standards and norms in the food and agriculture sectors, and assists in developing statistical systems. Japan supports research and development aimed at achieving both productivity potential and sustainability, including the development of improved crop varieties and the introduction of digital agricultural technologies, in collaboration with CGIAR, which consists of 15 international agricultural research institutions. At the G7 Agriculture Ministers' Meeting in Miyazaki in April 2023, Japan launched the “Enhanced Linkages between Private sector and Small-scale Producers (ELPS)” initiative. This initiative connects Japanese companies with smallholder farmers and other stakeholders in developing countries to help build and strengthen stable and sustainable supply chains for imported agricultural products. Under this framework, the first ELPS project—the “Sustainable Coffee Production Project” in Tanzania—was launched in September 2024. By providing support to raise awareness on environmental sustainability and to enhance both productivity and quality of produce, the project aims to improve the livelihoods of small-scale coffee farmers, while also ensuring a reliable supply of coffee beans for private companies sourcing from Tanzania.

In addition to such agricultural assistance, Japan also contributes to improving animal health through collaboration with the World Organisation for Animal Health (WOAH) and FAO. For instance, under the “Global Framework for the Progressive Control of Transboundary Animal Diseases (GF-TADs),” —a joint initiative by WOAH and FAO to address transboundary animal diseases such as Avian Influenza, Foot-and-Mouth Disease (FMD), and African Swine Fever (ASF)—Japan supports efforts by international organizations in the field of animal health, with a particular focus on the Asia-Pacific region.



## Glossary

### Quality growth

Growth that is “inclusive” in that the fruits of growth are shared within society as a whole, leaving no one behind, “sustainable” in that the economy, society, and environment are in harmony across generations, and “resilient” in that it can withstand and recover from various shocks, including natural disasters and economic crises (Development Cooperation Charter).

### Least Developed Countries (LDCs)

According to the United Nations classification based on income levels, LDCs are those that are significantly behind other developing countries in terms of development. To be classified as an LDC, a country has to meet specific criteria, including having a gross national income (GNI) per capita of \$1,088 or less on average over three years. As of 2024, 44 countries meet these criteria: 7 in Asia, 3 in Oceania, 1 in Latin America and the Caribbean, 1 in the Middle East, and 32 in Africa.

### Duty-free, quota-free access

A measure that allows products imported from LDCs to be brought into Japan duty-free and without quantitative restrictions. Japan has expanded the scope of this measure, and currently allows approximately 98% of all tariff lines to be imported under duty-free, quota-free conditions.

### Economic Partnership Agreement (EPA)

Agreements between specific countries or regions with the objective of strengthening broad economic relations, which incorporates elements of Free Trade Agreements (FTAs), aiming to reduce or eliminate tariffs on goods, barriers to trade in services, etc., as well as rule-making in fields of investment, movement of natural persons, intellectual property protection and competition policy, and elements of cooperation in various fields. These agreements are expected to stimulate trade and investment, contributing to further economic growth.

<sup>14</sup> A system launched by the G20 in 2011 as a response to volatile food prices. AMIS facilitates the timely, accurate, and transparent sharing of agricultural and food market information, such as production volumes and prices, among countries, companies, and international organizations.

### **Aid for Trade (Aft)**

Assistance provided to developing countries in order to enhance their trade-related capabilities and develop infrastructure, with the aim of achieving economic growth and poverty reduction through trade under the multilateral trading system of the World Trade Organization (WTO). The WTO places particular emphasis on promoting development in developing countries by facilitating their integration into the multilateral free trading system.

### **2030 Agenda for Sustainable Development (2030 Agenda)/Sustainable Development Goals (SDGs)**

International goals aimed at realizing a sustainable and better world by 2030, as outlined in “the 2030 Agenda for Sustainable Development,” adopted unanimously by UN member states at the UN Summit in September 2015, as the successor to the Millennium Development Goals (MDGs, 2001). The SDGs consist of 17 goals and 169 targets.

### **OECD/G20 BEPS Project**

Launched in June 2012 by the OECD Committee on Fiscal Affairs, the OECD/G20 Base Erosion and Profit Shifting (BEPS) Project aims to revise the entire framework of international taxation rules to better reflect the realities of the global economy and corporate behavior, so as to prevent multinational enterprises from artificially shifting profits and eroding tax bases to avoid taxation, based on the notion of ensuring a level playing field. It also aims to enhance the transparency of both governments and multinational enterprises.

### **Two-Pillar Solution**

Under the conventional international tax system, a country may not impose taxes on services provided across borders, unless the service provider is physically present within its territory, such as possessing a local office or server in the country. However, as the economy becomes increasingly digitalized, a challenge has emerged: market countries are unable to impose tax on profits derived from services delivered online to their consumers, when the service provider has no physical presence in their jurisdiction. To address this gap, some market countries have unilaterally introduced Digital Services Taxes (DSTs), targeting companies engaged in specific digital activities such as online advertising to prevent tax avoidance. However, since these measures are taken at the discretion of each country, they risk undermining the stability of the international tax system. The Two-Pillar Solution is an international reform effort designed to respond to these challenges. Pillar One aims to eliminate unilateral measures such as DSTs and allow market countries to tax a portion of the profits of large, highly profitable multinational enterprises, regardless of whether they have physical presence in their jurisdiction, including through the revision of international tax rules. Pillar Two seeks to curb harmful tax competition, which consists of excessively lowering corporate tax rates to attract foreign investment, including through the introduction of a global minimum tax.

### **Multilateral Development Banks (MDBs)**

A general term for international institutions that provide comprehensive support for poverty reduction and sustainable economic and social development in developing countries through financial assistance, technical assistance, and knowledge sharing. The term “MDBs” typically refers to the World Bank Group, which operates globally, and four regional development finance institutions that focus on specific regions: the Asian Development Bank (ADB), the Inter-American Development Bank (IDB), the African Development Bank (AfDB), and the European Bank for Reconstruction and Development (EBRD).

### **Global Financing Facility (GFF)**

An initiative launched in 2015 by the World Bank, the UN, and others, seeking to expand financial resources for maternal and child health. It provides technical assistance for formulating relevant policies, including those aimed at improving the nutritional status of women and children, as well as for strengthening implementation capacity. To mobilize additional funding, GFF support is conditioned on the use of concessional financing, such as low-interest loans from the World Bank, for implementing the formulated plans.

### **Trust Fund for Scaling Up Nutrition**

Established in 2009, this trust fund aims to expand investments in nutrition measures in countries facing a high burden of undernutrition and to strengthen local capacities for implementing effective nutrition programs. It provides technical assistance for the development of nutrition-related policies and enhancement of implementation capabilities, thereby encouraging increased investment in nutrition by both the government and institutions such as the World Bank.

### **Coalition for African Rice Development (CARD)**

An initiative to support self-help efforts to boost rice production in Africa, simultaneously functioning as a donor consultation group that works in partnership with interested rice-producing countries. Japan, in partnership with the international NGO Alliance for a Green Revolution in Africa (AGRA), launched CARD at TICAD IV in 2008. The second phase of CARD was initiated at TICAD 7 in 2019.

### **Resilience, Industrialization, Competitiveness, Empowerment (RICE) Approach**

An approach adopted under CARD Phase 2 to help achieve the goal of doubling rice production in Sub-Saharan Africa. It focuses on stabilizing production in response to climate change and population growth, fostering local industries in collaboration with the private sector, improving the quality of domestically produced rice to enhance competitiveness with imports, and strengthening agricultural management systems to enhance farmers' incomes and livelihoods.

### **New Rice for Africa (NERICA)**

A collective term for rice varieties developed by the Africa Rice Center, part of the Consultative Group on International Agricultural Research (CGIAR), through crossbreeding high-yield Asian rice with African rice varieties, known for their resistance to weeds, diseases, and pests. Compared to conventional rice, NERICA varieties offer (1) higher yields, (2) shorter growing period, allowing cultivation during short rainy seasons and reducing risk of drought, and (3) greater resilience against drought and disease, making them well-suited to Africa's hot, dry climate. Since 1996, Japan has supported the development and dissemination of NERICA by dispatching researchers and experts from the Japan International Research Center for Agricultural Sciences (JIRCAS) and JICA.

### **Smallholder Horticulture Empowerment & Promotion (SHEP) approach**

Launched by Japan in Kenya in 2006, the SHEP approach supports smallholder farmers who produce vegetables, fruits, and other horticultural crops. It aims to boost farmers' incomes by encouraging a shift in mindset from “grow and sell” to “grow to sell,” while enhancing their farm management and cultivation skills. The SHEP approach has since been adopted in countries around the world, particularly across Africa.



## Stories from the Field 1

## Supporting the Prosperous Living in Rural Laos through Coffee Cultivation Technology and Nutrition Guidance

– Initiative through Collaboration among the Government of Japan, International Organizations, and the Private Sector –



Public nomination

Laos has achieved steady economic development in recent years, but income levels remain low. Particularly in rural areas, there are villages where the cash economy is not fully penetrated, making low income a challenge. Against this backdrop of low income and delayed development, infants, their mothers, and pregnant women suffer from malnutrition.

To improve this situation, the World Food Programme (WFP), with support from the Government of Japan, launched the “Coffee Japan Project,” targeting approximately 300 households in eight rural villages in northern Laos. This project is implemented in collaboration with Saka no Tochu Co., Ltd., a Japanese company that has been engaged in forest conservation and the improvement of farmers’ incomes in coffee-producing regions in Laos since 2016.

WFP primarily focuses on nutrition improvement initiatives, while coordinating with governmental bodies and overseeing the overall project. Through lectures on balanced diets and cooking classes for local women, WFP contributes to deepening their understanding of nutrition. Additionally, since many residents cannot consume meat regularly and particularly lack protein, WFP provides cash for them to purchase livestock, which they can raise for food. Drawing from his previous experiences as a Japan Overseas Cooperation Volunteer in Africa, Mr. TASAI Ryoya of the WFP Laos Country Office, who is in charge of this project, explains about the trial-and-error process, which places emphasis on voices from the field and the actual situation. “In the target areas, there are traditional customs among ethnic minorities, such as prohibiting pregnant women from eating meat. We are making efforts to communicate the importance of nutrition while respecting their values. For example, we want to create a situation where ‘model households’ emerge as successful examples, motivating other residents to voluntarily improve their nutrition.” Results are beginning to show. “Many farmers have started raising chickens and fish. When we see eggs and other foods appearing on their dining tables, we can really feel the change,” he says, expressing his sense of achievement.

Coffee cultivation support is provided by Saka no Tochu



Ms. Miyazaki (third from left in the back row) with villagers from the target area planting coffee seedlings (Photo: Saka no Tochu Co., Ltd.)

Co., Ltd. and their local partner, Saffron Coffee. Their efforts include developing seedlings suited to the local land and providing training and technical guidance on cultivation and production. Ms. MIYAZAKI Saya, who is in charge of this project, says, “Many farmers are enthusiastic, so I have high expectations for the future. I’ve heard that some farmers previously received coffee trees from other donors but have given up before the harvest. It’s important to maintain their motivation until they can monetize their harvest, which may take a few years.” Ms. Miyazaki also has experience as a Japan Overseas Cooperation Volunteer, working with coffee farmers in Rwanda to improve quality. Reflecting on this experience, she says, “Not only the technology and knowledge of coffee cultivation but also how to communicate with local people—all of those activities from that time are still relevant today.”

Saka no Tochu Co., Ltd. places importance on environmentally sustainable coffee cultivation. In the project’s target area, where deforestation is serious even within Laos, they are working with Saffron Coffee to grow coffee using agroforestry,<sup>\*1</sup> an agricultural method that protects forests while growing crops. By allowing coffee to slowly ripen under moderate shade in the forest, they aim to produce high-quality coffee while protecting the forest and stabilizing farmers’ incomes. During the project period, a coffee processing facility is planned to be built in the village, and they expect to continue their relationship with the local community even after the project ends. Mr. Tasai says, “One benefit of cooperating with the private sector is that activities can continue beyond the project term. We are committed to further advancing the initiative.”

As coffee cultivation gains momentum and livelihoods improve, it is expected that the nutritional habits that have been enhanced through the WFP program will become further established, leading to a more prosperous life for all villagers, including infants and pregnant women who are suffering from malnutrition.



Mr. Tasai (second from left in the front row) with women from the target areas of the nutrition improvement project (Photo: WFP Lao PDR)

<sup>\*1</sup> See 19 on page 102.

## (2) Digital, Information and Communications Technology, and Science and Technology

The growth of developing countries and the development of the international community cannot proceed properly without responding to the digitalization of economic and social activities. Digital technology has become well integrated in people's lives and industrial activities, and the benefits of cyberspace, which is an important foundation for daily lives and socio-economic activities, are expanding. On the other hand, the threat of cyber-attacks is becoming more serious, including damage caused by leaks of personal and corporate information and risks to national security from attacks on critical infrastructure. Therefore, it is becoming increasingly important to help developing countries reap the benefits of digitalization while mitigating its risks. Furthermore, since the impact of events in cyberspace can easily cross borders and cyber incidents occurring in other countries can also affect Japan, it is important to implement multi-layered cooperation and collaboration at various levels, including among governments and the private sector.

### Japan's Efforts

#### ■ Promotion of Digital Transformation (DX)

The spread of COVID-19 has led to a period of disruption in the movement of people and goods, resulting in further promotion of the digitalization of socio-economic activities. Digital transformation (DX)<sup>15</sup> is directly linked to all development challenges and is the key to achieving “quality growth.”

In order to realize an inclusive and prosperous society in which developing countries and their people can benefit from digitalization in a safe, equitable, and stable manner, Japan has identified the promotion of digitalization and DX as one of the areas in which Japan will strategically implement ODA through the “Co-creation for common agenda initiative” (see Part I, Section 2 (2) on page 12 and Part V, Section 2 (2) on page 145 for details on the “Co-creation for common agenda initiative”). Through collaboration with various entities including international organizations and private companies, Japan supports the development of legal systems, human resources, and information and communication environments, as part of establishing foundations for promoting digitalization

based on the concept of “Data Free Flow with Trust (DFFT),”<sup>16</sup> which Japan advocates. By doing so, Japan is promoting cooperation aimed at solving issues and enhancing development outcomes through the promotion of digitalization.



A doctor explaining the benefits of digitalizing medical imaging as part of the technical cooperation in Cuba, “Project to Promote Hospital Digitalization in Image Diagnosis” (Photo: JICA)

Areas where development benefits are expected to increase through DX include smart agriculture, remote medical care, smart cities, mobile banking, and the digitalization of government administration. As an example of Japan's new cooperation initiative, Japan has been working with the Ministry of Industry, Commerce and Employment and the Ministry of Health of Bhutan since 2023 to expand and improve the quality of healthcare services in the country, by formulating strategies and plans for utilizing the health and medical data of Bhutanese citizens, developing data linkage infrastructure, and promoting data utilization. Additionally, under a yen loan project implemented by the Forest Department of West Bengal in India, efforts were made to utilize digital technologies such as artificial intelligence (AI) to address the pressing issue of avoiding collisions between elephants and humans.

In order to advance DX in ODA projects in more concrete terms, the JICA DXLab was launched in 2022 as an initiative to enable rapid and timely demonstration experiments with digital partners possessing excellent technology. JICA opens up its assets, such as the sites of its ODA projects in 150 countries and the networks it has cultivated, as a place for co-creation to support the resolution of challenges in developing countries through digital technology and data utilization together with its digital partners. By November 2024, a total of 15 projects had been implemented in Bangladesh, Ethiopia, India, and Indonesia (see “Stories from the Field” on page 40 for a case in Mongolia on building a drone-based blood

<sup>15</sup> Making people's lives more convenient and enriching them through the introduction of new information technologies, and generating new value by recreating existing business structures with the introduction of new digital technologies, etc.

<sup>16</sup> DFFT is an abbreviation of Data Free Flow with Trust. The concept of DFFT aims to promote the free international flow of data, where data that is useful for business and solving social issues can flow freely without regard for borders, while ensuring trust in terms of privacy, security, and intellectual property rights. DFFT was proposed by then Prime Minister Abe at the World Economic Forum Annual Meeting (Davos Conference) held in Geneva, Switzerland, in January 2019 and was included in the Leaders' Declaration at the G20 Osaka Summit in June 2019 with the support of the leaders of participating countries.



delivery network, and “Master Techniques from Japan to the World” on pages 58 and 139 for cases on crime prediction and prevention using AI technology in Brazil as well as weather forecasting and disaster risk reduction using the power of science in Argentina).



A JICA expert discussing with counterparts during the “Project for Management of Space Programs applied to the Socioeconomic Development,” a technical cooperation project in Paraguay (Photo: JICA)

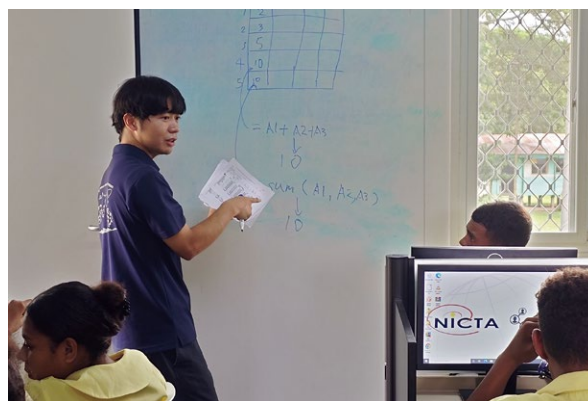
## ■ Information and Communications Technology (ICT)

The dissemination of Information and Communications Technology (ICT) <sup>17</sup> contributes to the upgrading of industry and improvement of productivity as the establishment of a foundation for DX. It also contributes to solving social issues of medical care, education, energy, environment, disaster risk reduction and other areas, and helps promote democratization by encouraging information disclosure and establishing broadcasting media.

Japan promotes “quality infrastructure investment” in the ICT sector in developing countries. <sup>18</sup> It actively supports the establishment of telecommunications and broadcasting equipment and facilities, the introduction of the technology and systems they require, and relevant human resources development. Specifically, Japan actively works to support the overseas promotion and the introduction of the Integrated Services Digital Broadcasting-Terrestrial (ISDB-T), <sup>19</sup> which has been adopted in a total of 20 countries <sup>20</sup> in Latin America and the Caribbean, Asia, Africa, and other regions as of April 2024. Japan also conducts training programs through JICA every year for countries adopting or considering ISDB-T. The Ministry of Internal Affairs and Communications (MIC) also promotes assistance that

offers ICT solutions to resolve social issues through dialogues and joint projects with partner governments.

Japan works with the International Telecommunication Union (ITU) <sup>21</sup> to provide a variety of development assistance in the fields of telecommunications and ICT for developing countries. The internet usage rate in Least Developed Countries (LDCs) <sup>22</sup> is estimated to be at 36%. Since October 2020, Japan has cooperated with the ITU to launch the Connect2Recover (C2R) Initiative, which supports developing countries, mainly in Africa, to draft national strategies for strengthening digital infrastructure and improving their usage environments. Among the pilot projects in the “Giga” initiative <sup>23</sup> jointly implemented by ITU and the United Nations Children’s Fund (UNICEF), Japan has provided support for introducing internet connectivity to schools in Rwanda. Starting in 2022, Japan has supported Zimbabwe and Mauritania in evaluating the resilience of their network infrastructure, developing maps that show the connection status of telecommunications networks before and after natural disasters, and formulating national strategies for the dissemination of ICT. Additionally, as a result of reaching out to various countries to expand the C2R projects, the Governments of Australia, the Czech Republic, and Lithuania have decided to provide funding, and the area of activities expanded to countries in Asia, the Caribbean, and the Commonwealth of Independent States (CIS). Since 2023, Japan has also extended its support to a total of 11 countries in Africa, with a focus on initiatives related to early warning systems.



A Japan Overseas Cooperation Volunteer (JOCV) in Papua New Guinea giving a lecture on basic computer software usage and practical spreadsheet functions (Photo: JICA)

<sup>17</sup> ICT is a technology that integrates computers and other information technology with digital communication technology, as represented by the Internet and mobile phones.

<sup>18</sup> In 2017, Japan formulated the Playbook for Investment in “Quality ICT Infrastructure” for ICT policymakers and procurement managers of the respective countries and regions.

<sup>19</sup> A terrestrial digital broadcasting system that was developed in Japan. Its functions, such as an emergency alert broadcast system, TV broadcasting reception on mobile terminals, and data broadcasting, etc., give the system advantages in disaster response and the provision of diverse services.

<sup>20</sup> The 20 countries are Japan, Angola, Argentina, Bolivia, Botswana, Brazil, Chile, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Maldives, Nicaragua, Paraguay, Peru, the Philippines, Sri Lanka, Uruguay, and Venezuela.

<sup>21</sup> A UN specialized agency that covers the fields of telecommunications and broadcasting. To ensure that people around the world are able to make use of telecommunications technologies, ITU organizes the following: (i) international allocation of radio frequencies used in mobile phones, satellite broadcasting, and other technologies, (ii) international standardization of telecommunications technologies, and (iii) support for development in the field of telecommunications in developing countries.

<sup>22</sup> See the glossary on page 35.

<sup>23</sup> An initiative launched by UNICEF and ITU in 2019 with the aim of enabling internet access in schools around the world, focusing on developing countries.

## Saving Lives in Mongolia with Drone Technology

### – Building a Drone-Based Blood Delivery Network through Japan-Mongolia Cooperation –

In Ulaanbaatar, Mongolia's capital and home to nearly half of the country's total population, social infrastructure has not kept pace with its rapid population expansion and the number of vehicles has also increased dramatically with economic growth. The chronic traffic congestion has seriously disrupted healthcare services, with emergency vehicles and blood deliveries frequently getting stuck in traffic jams. Additionally, in Mongolia, nurses are required to accompany blood deliveries in ambulances, which further limits the time they can dedicate to essential medical services.

Aeronext Inc., a Japanese company developing drone-based logistics services, is working to address these challenges. Focusing on aerial routes as a new form of logistics infrastructure network, the company provides drone delivery services in Japan's remote mountainous areas and during emergencies such as natural disasters. Since its founding, international expansion is one of their key strategies. As they explored global business opportunities, Aeronext identified Mongolia as a promising market. The company is now utilizing JICA's SDGs Business Supporting Surveys<sup>\*1</sup> to help build logistics infrastructure for the drone-based delivery of blood for transfusions, a service that demands both speed and quality.

Mr. KAWANOUE Kazufumi, General Manager in charge of overseas business development at Aeronext, explains, "One of the reasons we focused on Mongolia is that it's a country that is friendly to Japan. For many years, Japan supports Mongolia's infrastructure development through ODA, helping build hospitals, schools, and airports. Japan also collaborates in sectors such as agriculture and livestock farming, and environmental management, which has contributed to the strong sense of trust of Mongolia toward Japan."

In June 2023, the company launched a needs assessment survey and began iterative testing of drone operations and cold-weather adaptations, taking into account Mongolia's harsh winters and strong winds. In November, a successful demonstration flight was conducted, transporting blood over a 9.5 km round-trip between the National Center for Transfusion Medicine (hereinafter referred to as the "Transfusion Center") and the Mongolia-Japan Hospital, affiliated with the Mongolian National University of Medical Sciences and built with Japanese support (hereinafter referred to as the "Mongolia-Japan Hospital"). Unlike the company's previous experience in Japan, where drones were primarily deployed in remote areas with limited ground access, this achievement in a densely populated urban setting—where stringent safety standards are required—marked a significant breakthrough.

Mr. Kawanoue highlights the benefits of leveraging



A drone flying over traffic-congested Ulaanbaatar (Photo: Aeronext Inc.)

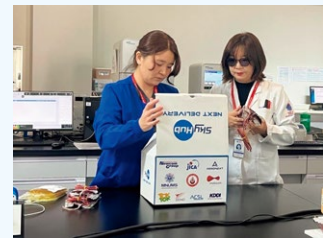
JICA's support, stating, "The demonstration project required the understanding and cooperation of various government agencies, including the Civil Aviation Authority of Mongolia, the National Agency for Meteorology and Environmental Monitoring, and the Administration of Land Affairs, Geodesy

and Cartography. As our company had no prior experience in Mongolia, JICA's introductions were instrumental in helping us establish connections with relevant local authorities, which greatly contributed to the smooth progress of the project."

In May 2024, Aeronext initiated a pilot project to validate its business model, in partnership with Mongolian companies including NEWCOM Group and MSDD. Together, they worked on developing a business model and establishing a drone operation system, and in June, the company secured Mongolia's first commercial drone flight license. By August, operations were underway, with regular blood deliveries from the Transfusion Center to three hospitals across the city. The service also supports emergency situations: in September, following an urgent request, blood was delivered in approximately 13 minutes over a 4.75 km route to the Mongolia-Japan Hospital, where a patient with a rare blood type was admitted.

Dr. Adilsaikhan, Director of the Mongolia-Japan Hospital, remarked, "Japanese technology saved the lives of two patients who might not have survived due to traffic congestion. I am fully committed to continue supporting the development and expansion of this drone-based logistics system." Dr. Erdenebayar, Director of the Transfusion Center, expressed his deep appreciation for the project: "During the COVID-19 pandemic, I attempted to build a drone myself in the hope of realizing aerial transport, but I eventually had to abandon the effort. I am grateful for my encounter with Mr. Kawanoue and for the fact that this project has already helped to save lives."

Mr. Kawanoue outlined his vision: "Medical professionals' recognition of the need for drones and their efforts to actively communicate their effectiveness have been a major driving force behind the project's progress. Looking ahead, we plan to work with the Mongolian University of Science and Technology on joint research to develop next-generation drones tailored to Mongolia's extreme natural conditions, while also investing in local human resource development. Our goal is to establish a system that can be operated independently by local communities." As social infrastructure continues to develop in response to local needs, the project is expected to help address issues – not only in Mongolia but also in neighboring countries also struggling with traffic congestion.



Nurses at the Mongolia-Japan Hospital inspecting blood packages for transfusion delivered by drone (Photo: Aeronext Inc.)

<sup>\*1</sup> See the glossary on page 130.



In the Asia-Pacific region, the Asia-Pacific Telecommunity (APT)<sup>24</sup> contributes to the balanced development of the telecommunication services and information infrastructure in the region. In order to promote human resources development related to telecommunications, Japan finances a number of training programs conducted by the APT every year. In FY2023, 10 training programs including on broadband networks and cybersecurity were implemented and attended by approximately 125 people from the APT member states. The trainees utilize Japanese technology for the development of their own countries’ ICT, and Japanese companies’ expansion into the Asia-Pacific region is also expected through introducing Japanese technology systems.

In the Asia-Pacific region, over two billion people do not have internet access due to factors including fragile infrastructure and the unaffordable usage costs. In the Southeast Asian region and Pacific Island countries, Japan is developing an environment to make low-cost, high-speed internet available even in remote islands and areas.



Displaced Ukrainian children gathered at an educational facility in Moldova. A Japanese NGO set up learning spaces allowing them to take online classes conducted from Ukraine. (Photo: Peace Winds Japan)

## ■ Cybersecurity

In recent years, it has become a pressing task to take measures against threats to a free, fair, and secure cyberspace. It is thus necessary for diverse entities in each country to work together in order to respond to this issue. The lack of security-related awareness and response capacity in some countries, including developing countries, poses a significant risk to the entire world, including Japan. Therefore, strengthening cooperation for ensuring the security in cyberspace of countries around the world and providing capacity building support to developing countries not only contributes to the recipient countries, but also benefits

the entire world including Japan.

Japan has strengthened cooperation with ASEAN on cyber security through the ASEAN-Japan Cybercrime Dialogue and the Japan-ASEAN Information Security Policy Meeting. At the Japan-ASEAN Information Security Policy Meeting in 2024, Japan and ASEAN member states advanced initiatives on public-private partnerships, capacity building, awareness raising, and the protection of critical infrastructure, with the purpose of enhancing collaboration on cybersecurity. In addition, through the International Criminal Police Organization (INTERPOL), Japan supported the strengthening of the investigative capacity of officials at law enforcement related agencies to deal with crimes committed in cyberspace, which increased under the COVID-19 pandemic.

Japan and ASEAN have concurred to further strengthen their cooperation on the issues related to cyber-attacks. As a specific initiative, since 2017, Japan has been conducting training for staff engaged in combatting cybercrimes at the Ministry of Public Security of Viet Nam, with the aim of helping them acquire the knowledge and skills for dealing with cybercrimes, as well as strengthening cooperative relations between the security agencies of Japan and Viet Nam. Japan also conducts cybersecurity exercises and other programs at the “ASEAN-Japan Cybersecurity Capacity Building Centre (AJCCBC),” which was established in Bangkok, Thailand, through the Japan-ASEAN Integration Fund (JAIF).<sup>25</sup> In March 2023, support for the operation of the AJCCBC began as technical cooperation through JICA under the “Project for Enhancing ASEAN-Japan Capacity Building Program for Cybersecurity and Trusted Digital Services.” As of November 2024, a total of 2,395 people had taken part in training and other programs.

At the AJCCBC, Japan provides the Cyber Defense Exercise with Recurrence (CYDER), a practical exercise targeting cybersecurity personnel of government agencies and critical infrastructure operators in ASEAN countries, and promotes cooperation in capacity building in the area of cybersecurity in ASEAN. Since March 2023, Japan has been working to further enhance the content by adding new training for exercise trainers and exercises based on needs surveys in ASEAN countries. In October 2024, the Cyber SEA Game 2024 was held and young engineers and students selected from ASEAN countries competed using their cybersecurity skills.

Japan also contributed to the World Bank’s Cybersecurity Multi-Donor Trust Fund and works on capacity building assistance in the field of cybersecurity for low and middle-income countries.

<sup>24</sup> An international telecommunication organization established in the Asia-Pacific region. Aiming for a balanced development of telecommunication services and information infrastructure in the Asia-Pacific region, it implements human resources development through training courses and seminars, and coordinates regional policies on standardization, radio communications, and other telecommunication issues.

<sup>25</sup> See 5 on page 91.

## ■ Promoting Science, Technology and Innovation, and Research and Development

In the world today, social changes are occurring, with information and communication technology (ICT), artificial intelligence (AI), and robotics being utilized in diverse industries, including not only the manufacturing industry and the service industry but also in agriculture and construction.

Based on “the 2030 Agenda for Sustainable Development (2030 Agenda <sup>26</sup>)” (Paragraph 70), the UN has established the UN Inter-agency Task Team on STI for the SDGs (UN-IATT) and promotes Science, Technology, and Innovation for SDGs (STI for SDGs) on a global scale, in cooperation with other countries. The UN Multi-Stakeholder Forum on Science, Technology, and Innovation for the Sustainable Development Goals (STI Forum) was held again in 2024. Expectations for STI are internationally increasing as a key to achieve the SDGs while optimizing limited resources.

In the process of Japan’s economic development, Japan has overcome its own challenges in fields such as health and medical care, environment, and disaster risk reduction, fully utilizing STI. Based on these experiences, Japan is engaged in science and technology cooperation through the “Science and Technology Research Partnership for Sustainable Development (SATREPS) program”<sup>\*</sup> and others in order to resolve challenges faced by developing countries. SATREPS, which links Japan’s science and technology with ODA, was launched in 2008 to support joint research between research institutions and researchers in science and technology fields in Japan and in developing countries. A total of 202 research projects in 58 countries around the world have been adopted as of FY2024. In 2024, 12 new projects were selected in fields such as environment and energy, bioresources, disaster prevention and mitigation, and infectious diseases control (see also “Master Techniques from Japan to the World” on page 139 for a SATREPS project in Argentina).

The UN-IATT conducts the “Global Pilot Programme” to promote the development of an STI roadmap for SDGs in countries worldwide, including six pilot countries: Ethiopia, Ghana, India, Kenya, Serbia, and Ukraine.<sup>27</sup> Under this Programme, Japan has supported Kenya in the agricultural sector from FY2020 to FY2024 through contributions to the World Bank. In addition, since FY2020, Japan has supported Japanese companies that are considering launching projects to resolve social challenges in developing countries through STI, through contributions to the United Nations Development Programme (UNDP), and made efforts to share expertise gained through this support among developing countries.



A Japanese researcher instructing local livestock farmers in Colombia on confirming calf (beef cattle) development using a digital platform as part of SATREPS (Photo: JICA)

In terms of support for research and development, Japan is building a next-generation network based on cooperation in human resources development, by strengthening assistance for overseas engineering universities.

In Asia, Japan supports the Malaysia-Japan International Institute of Technology (MJIIT), which was founded with the aim of establishing Japanese-style engineering education. The support includes procuring educational and research equipment and supplies, and developing curriculum designs. In partnership with Japanese universities, Japan also helps MJIIT embed the characteristics of Japanese-style engineering education in its teaching and research activities. In 2023, Japan launched cooperation to establish and expand the Malaysia-Japan Linkage Office within MJIIT as a liaison office to further strengthen collaboration between MJIIT and Japanese universities and industries. As of 2024, a consortium of 29 universities and 2 research institutes, among others, has been organized to promote people-to-people exchanges between Japan and Malaysia through joint research, joint degrees, and student exchanges.

Since 2012, Japan has provided scholarships to students studying remote sensing (satellite image analysis) in courses taught by Japanese instructors at the Asian Institute of Technology (AIT) located in Thailand, contributing to the development of the human resources constituting the crux of the space industry development in the Asian region.

In Africa, Japan has been cooperating under the Egypt-Japan University of Science and Technology (E-JUST) project since 2008. Established based on the principles of Japanese-style engineering education, E-JUST has received support from Japanese universities through curriculum development and the dispatch of faculty. E-JUST has been highly praised for its achievements,

<sup>26</sup> See the glossary on page 36.

<sup>27</sup> India, Ethiopia, Ghana, Kenya, and Serbia since 2020; Ukraine since 2021.

including joint research and joint supervision with Japanese researchers, exchange student programs and internationalization undertaken by both Japanese and Egyptian governments, and collaboration with Japanese companies. E-JUST was ranked as the top university in Egypt and sixth on the African continent in the World University Rankings published by the UK’s Times Higher Education (THE) in 2024. In September 2024, JICA

and the Government of Egypt signed an agreement to strengthen the academic network between Japanese and African universities in the field of science, technology, and innovation, with E-JUST serving as one of the hubs on the African continent. E-JUST is expected to play a key role in promoting international joint research and education by university researchers from Japan and within Africa.



## Glossary

### Science and Technology Research Partnership for Sustainable Development (SATREPS) program

Through the collaboration of Japan’s advanced science and technology with ODA, SATREPS aims to resolve global issues in the fields of environment and energy, bioresources, disaster prevention and mitigation, and infectious disease control. Under this program, research institutes both in developing countries and Japan work together to conduct international joint research with the following objectives: (1) enhancing international cooperation in science and technology, (2) acquiring new knowledge and technologies that lead to the resolution of global issues, and through this process, creating innovations, (3) promoting capacity development. The Ministry of Foreign Affairs (MOFA) and JICA, in collaboration with the Ministry of Education, Culture, Sports, Science and Technology (MEXT), the Japan Science and Technology Agency (JST), and the Japan Agency for Medical Research and Development (AMED), provide support to research institutes and researchers in Japan and the developing countries.

## (3) Quality Infrastructure

For the autonomous development of developing countries, infrastructure that supports people’s lives and economic activities serving as the foundation for their national development is essential. However, developing countries still have enormous demand for infrastructure and the investment gap between infrastructure demand and supply is estimated to be approximately \$15 trillion by 2040.<sup>28</sup> In order to achieve “quality growth”<sup>29</sup> in developing countries, it is necessary to meet this enormous demand for infrastructure. It is very important not only to develop a large amount of infrastructure but also to consider openness, transparency, economic efficiency in view of life-cycle costs, and debt sustainability, etc.

Japan has strengths related to maritime and aviation safety management, disaster risk reduction and resilience technologies, urban development that contributes to addressing climate change and environmental issues, safe transportation systems, electricity and energy infrastructure, and water supply. In order to leverage these strengths to solve social issues in partner countries, Japan promotes the development of “Quality Infrastructure”<sup>\*</sup> by combining structural and non-structural support. For structural support, it provides infrastructure development in line with the economic and development strategies of each developing country,

while for non-structural support, it provides cooperation for institutional development, management and maintenance, and human resources development.



The “Jamuna Railway Bridge Construction Project” in Bangladesh, supported by Japan’s loan aid, expected to enhance transportation networks within the country and with neighboring countries.  
(Photo: Obayashi-Toa-JFE (OTJ) Joint Venture)

## Japan’s Efforts

Japan has been working with the international community to disseminate the notion of “Quality Infrastructure,” and to standardize it internationally, aiming to ensure broader access for people around the world. The “G7 Ise-Shima Principles for Promoting Quality Infrastructure Investment,” endorsed at the G7 Ise-Shima Summit under the Japanese Presidency in May 2016, was the initial step for sharing the fundamental elements of “Quality Infrastructure Investment.” In addition, at the G20 Osaka Summit under the Japanese Presidency in June 2019, the “G20 Principles for Quality Infrastructure Investment,”<sup>30</sup> which indicate a strategic direction for

<sup>28</sup> Forecasts by the G20 Global Infrastructure Hub (GIH).

<sup>29</sup> See the glossary on page 35.

<sup>30</sup> See the glossary “Quality Infrastructure” on page 45.



promoting Quality Infrastructure Investment, were endorsed. Japan cooperates with various countries and international organizations to promote and implement these Principles, and the importance of “Quality Infrastructure Investment” has been confirmed at various bilateral and multilateral meetings.

At the G7 Elmau Summit in June 2022, the Partnership for Global Infrastructure and Investment (PGII), <sup>31</sup> an initiative for the G7 to work together to promote Quality Infrastructure Investment to narrow the global investment gap, was launched. Under the PGII, the G7 leaders announced their aim to collectively mobilize up to \$600 billion in public and private investment over five years, with a particular focus on Quality Infrastructure. At a side event on PGII held during the G7 Apulia Summit in June 2024, each country introduced their respective initiatives to strengthen connectivity in Africa and expressed their expectations for the promotion of infrastructure investment, including private capital, under the PGII. Then Prime Minister Kishida introduced Japan’s initiatives for strengthening connectivity in Africa and Asia, and announced that Japan would continue to support Africa’s growth through Quality Infrastructure so as to be able to link the outcomes of the PGII to the Ninth Tokyo International Conference on African Development (TICAD 9), which is scheduled to be held in 2025.

The Blue Dot Network (BDN), <sup>32</sup> a framework for internationally certifying Quality Infrastructure projects, is also an important initiative in promoting “Quality Infrastructure Investment.” In April 2024, the BDN Secretariat was established in the Organisation for Economic Co-operation and Development (OECD). The Ministerial Council Statement adopted at the OECD Ministerial Council Meeting chaired by Japan in May of the same year, committed to promoting Quality Infrastructure Investment in line with the “G20 Principles for Quality Infrastructure Investment” and through



Opening ceremony of a refrigerated rail freight service in India using refrigerated containers developed by a Japanese company under a public-private partnership project aimed at building a cold chain (Photo: JICA)

initiatives such as the PGII, and welcomed efforts to operationalize the BDN and the establishment of its secretariat.

In ASEAN, Japan has promoted many projects to develop transport infrastructure such as the Sihanoukville Port in Cambodia, the Patimban Port and Jakarta Mass Rapid Transit in Indonesia, and the Metro Manila Subway in the Philippines. At the ASEAN-Japan Summit held in October 2024, then Prime Minister Ishiba stated that under the “Japan-ASEAN Comprehensive Connectivity Initiative” announced in 2023, various projects are underway in a wide range of areas including both structural and non-structural aspects, such as digital technology, transport infrastructure development, and electricity connectivity, as well as in promoting regional financial cooperation. He also expressed Japan’s willingness to promote cooperation to address emerging issues such as Green Transformation (GX) and Digital Transformation (DX) <sup>33</sup> in order to jointly shape a vibrant future of the region.

As for efforts in Pacific Island countries, Japan, the United States, Australia, Kiribati, Nauru, and the Federated States of Micronesia jointly announced Japan-U.S.-Australia joint support for the East Micronesia Cable (EMC) in December 2021, and an undersea cable contract was signed in June 2023. In May 2024, the fourth meeting of the six-country Project Executive Board was held to confirm the progress of the project. At the 10th Pacific Islands Leaders Meeting (PALM10) held in July 2024, then Prime Minister Kishida stated that Japan would contribute to the enhancement of connectivity on land, sea, air, and in the digital space through the development of “Quality Infrastructure” including undersea cables. Japan will continue to cooperate in developing Quality Infrastructure to strengthen connectivity in the Indo-Pacific region, including in the Information and Communications Technology (ICT) field, in cooperation with the United States, Australia, and other like-minded countries.

As for the African region, at the Eighth Tokyo International Conference on African Development (TICAD 8) held in Tunisia in August 2022, Japan announced initiatives that would promote enhancement in regional connectivity, in addition to improving social infrastructure development in Africa through the development of Quality Infrastructure and one-stop border posts at national borders. As a concrete example of cooperation to promote “connectivity and Quality Infrastructure Investment” in Africa, Japan signed and exchanged notes with Tanzania in October 2024 concerning a grant project for the construction and expansion of the inner ring road in Dodoma, the capital of Tanzania. This project is expected to contribute to infrastructure development supporting smoother logistics as well as economic and

<sup>31</sup> PGII is the G7’s commitment to promoting public and private investment in sustainable, inclusive, resilient and quality infrastructure.

<sup>32</sup> Proposed by Japan, the United States, and Australia in November 2019. Since 2023, the United Kingdom, Spain, and Switzerland have joined and are discussing the specific institutional design.

<sup>33</sup> See 15 on page 38.

social development in Tanzania. In addition, it is also expected to facilitate logistics along the Central Corridor, as Dodoma is located on this corridor connecting Tanzania to Uganda, an inland country, and the Democratic Republic of the Congo.

The Government of Japan will continue to disseminate the “G20 Principles for Quality Infrastructure Investment” throughout the international community for quality growth around the world, and will further promote efforts to implement “Quality Infrastructure Investment” together with countries around the world including Asian countries as well as international organizations such as the World Bank, the Asian Development Bank (ADB), and the OECD.



Human resources development support for bridge inspection, diagnosis, repair, and maintenance in Tajikistan (Photo: JICA)



## Glossary

### Quality Infrastructure

Infrastructure that genuinely contributes to “quality growth” that is “resilient” against natural disasters and other risks, “inclusive” so that no one is left behind, and “sustainable” taking into account its impact on society and the environment. The “G20 Principles for Quality Infrastructure Investment,” which incorporate key elements for investing in “Quality Infrastructure” such as (i) openness, (ii) transparency, (iii) economic efficiency in view of life-cycle costs, and (iv) debt sustainability, were endorsed at the G20 Osaka Summit in June 2019.

## (4) Efforts on Debt Issues

Official loan assistance is intended to be utilized to promote economic growth in developing countries. However, when developing countries face difficulties in repaying their debts due to failures in economic and fiscal policies, changes in the international economic environment, or other reasons, their debts may put a strain on essential fiscal spending in areas such as health, education, and the environment, thus hindering sustainable growth. While debtor countries must resolve this issue themselves through various efforts, including economic and fiscal reforms, the international community needs to respond when excessive debt stands in the way of the debtor countries’ sustainability and development.

In regard to international efforts to address debt issues, debt relief measures have been implemented including through the Enhanced HIPC Initiative<sup>34</sup> for Heavily Indebted Poor Countries (HIPC)\* and the Paris Club’s<sup>35</sup> Evian Approach.<sup>36</sup> However, in recent years, despite receiving such debt relief, some low-income countries have accumulated private debt in addition to public debt, thus raising renewed concerns about their

worsening debt sustainability. This situation can be attributed, on the debtors’ side, to a lack of capacity to collect and disclose their own debt data and to manage debt appropriately. On the creditors’ side, it has been pointed out that the funding providers have diversified the proportion of loans increasingly coming from emerging donor countries and private creditors, including the provision of unconventional and non-concessional loans such as collateralized loans, while the proportion of loans by Paris Club creditors has been decreasing. Furthermore, in the last few years, policy rate hikes in Western countries have led to higher financing costs for developing countries, raising concerns about liquidity constraints in these economies. The international community needs to work together to address the debt problems of developing countries, which could also affect the economies of lenders.

The COVID-19 pandemic has had a serious impact on the debt issues of low-income countries. In response, the G20 and the Paris Club launched the “Debt Service Suspension Initiative (DSSI)”\* in April 2020 and implemented measures to temporarily suspend repayment of public debt for low-income countries. After the expiration of the DSSI at the end of December 2021, G20 and Paris Club creditor countries work together to provide debt treatments under the

<sup>34</sup> An initiative agreed at the Cologne Summit (Germany) in 1999.

<sup>35</sup> An informal group of creditor countries that convenes to discuss the treatment of public debts. The name of the Paris Club derives from the fact that France has chaired meetings and invited creditor countries to Paris upon requests from debtor countries.

<sup>36</sup> A new Paris Club approach to debt restructuring (the Evian Approach). Debt relief measures focus more on the debt sustainability of recipient countries, especially low-income and middle-income debtor countries other than HIPC, and take case-by-case measures corresponding with the circumstances of each debtor country.

## Expanding Transportation Infrastructure by Supporting the Construction of the Cairo Metro

– Building a Transportation Network Leveraging Japan’s Advanced Technology –

The Government of Egypt has been working to expand transportation means to alleviate traffic congestion that has resulted from population growth. In 1987, it opened the first subway on the African continent. However, despite the completion of three metro lines to date, the population has continued to grow rapidly, increasing by 20 million in just a decade since 2010. Approximately 20% of the total population is concentrated in the Greater Cairo Region, exacerbating traffic congestion. Within this context, the Cairo Metro Line No.4 is positioned as a particularly urgent project for expanding transportation options in the Greater Cairo Region under the national plan for transportation and urban development formulated by the Government of Egypt. Since 2012, Japan has been supporting the development of the approximately 19 km section of Line No.4 connecting central Cairo with the Giza Pyramid area through its financial assistance.

This project is the first yen loan project for Egypt to which Special Terms for Economic Partnership (STEP)\*<sup>1</sup> has been applied, and Japanese advanced railway products and technologies are planned to be utilized for the railroad vehicles and signaling systems. Once this line opens, travelers will be able to reach major tourist destinations such as the Pyramids in Giza and the Grand Egyptian Museum (GEM), which Japan supported through construction, cultural property restoration, and operational assistance, and which began its trial opening in October 2024, from central Cairo in just about 20 minutes. This is expected to contribute significantly to the development of Egypt’s tourism industry.

Mr. NISHIKORI Atsushi, Deputy Director of the Railway Division at Oriental Consultants Global Co., Ltd., which is involved in the construction supervision of this project, highlights technology transfer as one of the strengths of Japanese infrastructure development. “For Line No.4 construction, we need to build a tunnel under the Nile River and construct multiple tunnels not horizontally but with vertical alignment, which is technically challenging. While this construction method is new for Egyptian engineers, many experienced experts in railway projects from Japan, Europe, and other regions are participating in this project. We believe



Japanese company representatives discussing with NAT (Photo: Oriental Consultants Global Co., Ltd.)

it would be a good opportunity for them to acquire new technologies through collaboration.”

At the same time, Mr. Nishikori faced difficulties in securing local talent due to the strict qualification requirements set by the National Authority for Tunnels (NAT), the implementing agency under Egypt’s Ministry of Transport. He notes that they are overcoming problems by building a relationship of trust with NAT. “Given that experienced Egyptian engineers tend to move to neighboring countries for higher salaries, we explained to NAT that easing qualification requirements would help the development of domestic human resources. Through close communication and persistent negotiation with NAT, we are gradually gaining a certain level of their understanding,” he states.

Mr. Nishikori also mentions, “I am staying at an accommodation near tourist sites, and nearby hotels are thriving, partly due to the trial opening of the GEM. If the launch of the Line No.4 alleviates traffic congestion and improves access, Egypt’s tourism industry is likely to become even more vibrant.” He also explains the economic effects that will be brought about by the opening of Line 4. “Foreign companies are increasingly entering the Egyptian market. Recently, the manufacturing and sales of Oronamin C Drink, a vitamin drink made in Japan, has begun in Egypt. I hope that the development of the transportation network will attract investments from Japan, ultimately contributing to job creation for Egyptians.”

In addition to the construction of Line No.4, the Government of Egypt is proceeding with the development of the New Administrative Capital, located approximately 45 km east of Cairo. In 2022, some government officials started operations in the New Administrative Capital, advancing large-scale urban development. Japan will continue to respond to the Government of Egypt’s expectations for its excellent technology and expertise, contributing to Egypt’s economic development by expanding transportation infrastructure and other means.



Japanese company representatives and local engineers discussing at the construction site (Photo: Mitsubishi Corporation)

\*1 See Part V, 2(2) on page 146.



“Common Framework for Debt Treatments beyond the DSSI,”\* which was agreed on in November 2020. Having requested the application of the Common Framework, Zambia reached a debt restructuring agreement with all creditor countries in April 2024.

One of the factors that can significantly affect debt sustainability of borrowing countries, including low-income countries, is infrastructure investment. Infrastructure projects such as ports and railroads require large investments, and debt repayments can become a significant burden for the borrowing countries. When financing infrastructure projects, it is necessary for both the debtors and creditors to fully take into account debt sustainability. Loans without consideration of debt sustainability are criticized by the international community as a “debt trap.”

The “G20 Principles for Quality Infrastructure Investment”<sup>37</sup> incorporated the importance of considering country level debt sustainability as well as project-level financial sustainability. They also include the principles of openness, transparency, and economic efficiency in view of life-cycle cost. Each G20 country is required to implement these principles as an international standard in their infrastructure investments and to work to ensure that these principles are implemented in the countries receiving loans. At the G20 Development Ministerial Meeting in July 2024, ministers agreed that the “G20 Principles for Quality Infrastructure Investment” should be taken into account, particularly in the areas of drinking-water and sanitation services for households, workplaces, schools, and healthcare facilities to those in vulnerable situations, especially in rural and/or peri-urban areas.

## Japan's Efforts

In providing ODA loans, Japan makes its decisions based on the careful consideration of the cooperation structure, debt service repayment ability, operational capacity, credit protection measures, etc. of the recipient countries. Most of the recipient countries make repayments as scheduled. However, there are exceptional cases in which they face serious difficulties in their repayment due to events that could not be foreseen when Japan provided ODA loans. In such cases, based on international agreements such as the aforementioned Enhanced HIPC Initiative

and the Paris Club's agreements with debtor countries, Japan provides debt relief in a limited form through debt rescheduling,<sup>38</sup> cancellation, and reduction. As an example of debt relief efforts in 2024, in November, Japan concluded a bilateral agreement with Somalia concerning a debt relief measure (debt cancellation). As of the end of 2024, Japan has cancelled ODA debts worth a total of approximately 1.1437 trillion yen for 34 countries since FY2003. In addition, Japan, as a co-chair of the Official Creditor Committee (OCC) for Sri Lanka's debt restructuring, led the negotiation on debt restructuring, and in July, the signing of the Memorandum of Understanding on debt restructuring between the members of the OCC and Sri Lanka was completed. Following the confirmation of the Sri Lankan government's intention to swiftly conclude a bilateral agreement with Japan, the Government of Japan decided to resume the disbursement of yen loans and other operations related to the ongoing projects in Sri Lanka.

At TICAD 8 held in August 2022, Japan announced and is currently working on financial cooperation of up to \$5 billion under the fifth phase of the “Enhanced Private Sector Assistance for Africa”\* (EPSA5) covering the period from 2023 to 2025. This includes a new special window of up to \$1 billion to support countries that are engaging in reforms for enhancing debt transparency and sustainability and thereby making steady and significant progress in their debt situations.

From the perspective of ensuring debt sustainability, an important element of the “G20 Principles for Quality Infrastructure Investment,” Japan is working on the improvement of the capabilities related to public debt and risk management among management personnel at the finance ministries of developing countries through contributions to international organizations, as well as through training and the dispatch of experts by JICA. For example, in FY2023, Japan provided support for capacity building in debtor countries, including through training in collaboration with the World Bank for 30 administrative officers from 26 countries, including Kenya and Ethiopia, on contingent liabilities risk management, as well as through new financial contributions to the respective trust funds of the International Monetary Fund (IMF) and the World Bank.

<sup>37</sup> See the glossary “Quality Infrastructure” on page 45.

<sup>38</sup> Debt rescheduling is one form of debt relief, wherein payment is postponed for a certain period of time in order to reduce the burden of debt payment on the debtor country.



## Glossary

### **Heavily Indebted Poor Countries (HIPC)**

39 developing countries, mainly from Africa, that are poor and have heavy debt burdens, and that are applicable for the “Enhanced HIPC Initiative,” a framework to provide comprehensive debt relief.

### **Debt Service Suspension Initiative (DSSI)**

A framework for temporarily suspending debt repayments for low-income countries facing a liquidity crisis due to COVID-19's impact. The G20 and the Paris Club, a group of major traditional creditor countries, agreed in April 2020 to temporarily suspend debt repayments that would be due in the period from May 2020 to the end of December 2020, and subsequently extended the suspension period twice (agreed in October 2020 on an extension to June 2021, and in April 2021 on an extension to the end of December 2021).

### **Common Framework for Debt Treatments beyond the DSSI**

A framework agreed upon by the G20 and the Paris Club in November 2020 to provide debt relief to low-income countries on a case-by-case basis. This is the first agreement to jointly determine the terms of debt treatments in a manner that involves non-Paris Club countries such as China.

### **Enhanced Private Sector Assistance for Africa (EPSA) Initiative**

A cooperative framework established by Japan in 2005 together with the African Development Bank (AfDB) to promote private sector-led economic growth. At TICAD 8 held in August 2022, Japan and AfDB announced financial cooperation of up to \$5 billion under the fifth phase of Enhanced Private Sector Assistance for Africa (EPSA5) covering the period from 2023 to 2025. This consists of \$4 billion under existing windows, and up to an additional \$1 billion under a new special window to support countries that are engaging in reforms for enhancing debt transparency and sustainability and thereby making steady and significant progress in their debt situations.