

Measures for Each Priority Issue



A JICA expert checking the growing conditions of crops with her counterparts as part of the "Project for Market-Oriented Smallholder Horticulture Empowerment and Promotion" in Malawi (Photo: JICA)

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Part II Measures for Each Priority Issue

Hereafter, in relation to Japan's development cooperation¹ around the world, Japan's recent efforts regarding three key issues will be introduced. These three issues are "1. Cooperation aimed at achieving 'quality growth,'" "2. Sharing universal values and realizing a peaceful and secure society" and "3. Promoting efforts to address global issues and human security."

1 Cooperation Aimed at Achieving "Quality Growth"

In order to enable developing countries to achieve economic growth aimed at self-reliant development, it is essential to aim for not only quantitative economic growth but also "quality growth." "Quality growth" is growth that is "inclusive," wherein the fruits of growth are shared with the society as a whole, leaving no one behind. It must also be "sustainable" in that growth can be sustained in harmony with society and the environment, and "resilient" against economic crises, natural disasters, and other shocks. These are some of the challenges that Japan has tackled in its postwar history. Japan is providing support to enable developing countries to achieve "quality growth" by utilizing its experience, expertise, lessons learned, and technology.

(1) Development of Industrial Infrastructure and Industries and Economic Policy

In order to achieve "quality growth," it is important to improve the socio-economic infrastructure that serves as the foundation for the development of developing countries. Moreover, it is crucial that the private sector plays a central role, and important to boost private sector activities, such as the development of industries and the expansion of trade and investment. In developing countries beset by numerous challenges, it can sometimes be difficult to develop capacities or set in place an environment for promoting trade and attracting private investment. Thus, support from the international community is required.



Japan's Efforts

... Quality Infrastructure

When investing in infrastructure, it is crucial for the infrastructure planning to be based on the needs of the country concerned, in addition to the quality of the infrastructure itself being user-friendly, safe, and disaster resistant. Japan develops quality infrastructure in developing countries and regions in line with their economic and development strategies, and trains human

resources to maintain and operate this infrastructure. Japan's strength lies in developing infrastructure that is truly contributory to "quality growth" in developing countries, which includes technology transfer and job creation.



Foreign Minister Motegi visiting Colombo Port in Sri Lanka, which is being developed with support from Japan (December 2019)

The "G7 Ise-Shima Principles for Promoting Quality Infrastructure Investment," which was agreed at the G7 Ise-Shima Summit in 2016, is positioned as the first step towards sharing the recognition on the basic elements of "quality infrastructure investment," or investment for the development of infrastructure that contributes to "quality growth." Furthermore, the importance and various elements of quality infrastructure investment were also agreed upon at the G20 Hangzhou Summit held under China's Presidency. Based on the agreements by the G7 and the G20 thus far, discussions were carried out at G20 meetings under Japan's Presidency toward formulating principles to maximize the positive impacts brought about by infrastructure investment on the economy, environment, and society while newly incorporating components such as strengthening infrastructure governance, including debt sustainability at the country level. As a result, at the G20 Osaka Summit held in June 2019, the "G20 Principles for

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Here, the term "development cooperation" refers to "international cooperation activities conducted by the Government and related organizations for the main purpose of development in developing regions," including ODA and other cooperation conducted in collaboration with public-private financing and activities.

Quality Infrastructure Investment” were endorsed by the G20 leaders, including emerging donors, as principles that show the common strategic direction and vision concerning future quality infrastructure investment (see page 2 “Connecting the World in 2019” for details).

In order to resolve development challenges such as global growth, poverty, and disparities, the Government of Japan will continue to spread the “G20 Principles for Quality Infrastructure Investment” to the entire international community. Moreover, Japan will cooperate



Foreign Minister Motegi attending the 14th Asia-Europe Meeting (ASEM) Foreign Ministers' Meeting (December 2019)

with countries around the world including in Asia as well as international organizations such as the OECD to promote the international standardization of “quality infrastructure investment,” and work to reflect and implement quality infrastructure investment in individual projects.

... Improving the Trade and Investment Environment

Japan utilizes ODA and Other Official Flows (OOF)* to support the development of small and medium-sized enterprises (SMEs), transfer of Japan's industrial technology, and formulation of economic policies in developing countries. In addition, Japan supports the development of the trade and investment environment and economic infrastructures in order to enhance the export capabilities and competitiveness of developing countries.

At the Seventh Tokyo International Conference on African Development (TICAD7) held in Yokohama in August 2019, the representatives discussed assistance to develop the African private sector and the expansion of trade and investment between Japan and Africa. Prime Minister Abe stated that the Government of Japan would exert every effort to further increase private investment in Africa, which was at a level of \$20 billion over the past three years. To crystalize such a goal, Japan will provide support for the promotion of industrial human resources

Kiribati

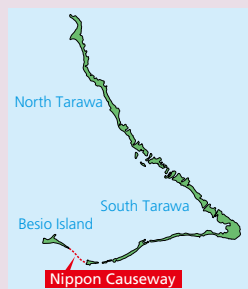
Project for Reconstruction of the Nippon Causeway Grant Aid (January 2017 - April 2019)

The “Nippon Causeway,” which was so named to express the gratitude of the people of Kiribati to Japan, is a 3.4-kilometer highway constructed by Dai Nippon Construction through a grant aid project for the Construction of the Batio-Bairiki Causeway and Fisheries Channel in 1985.

This causeway is the only land route on the Tarawa atoll, the capital of Kiribati. The route connects Besio Island in the southwestern end, which has an international port, to the slender region of small islands that stretches to North Tarawa, and has played an important role as a lifeline for the people. However, problems such as partial road damage became more serious due to aging and waves at high tide over many years. Therefore, this two-and-a-half-year reconstruction project was started in January 2017 to rebuild the road with the help of Dai Nippon Construction.

The road surface became higher after the reconstruction, and a wall of sufficient height was installed on the side facing the open sea with tossing waves. This resulted in lowering the risk of traffic cut-off due to large waves. The project also improved road safety by widening the road and installing streetlights and signs in consideration of pedestrian safety. Furthermore, electric wires, water pipes, and telephone lines that were previously buried in the ground were put in concrete boxes that run along the road. This improved the sustainability and durability of these infrastructures and also reduced the risks posed to the structure of the road by maintenance work.

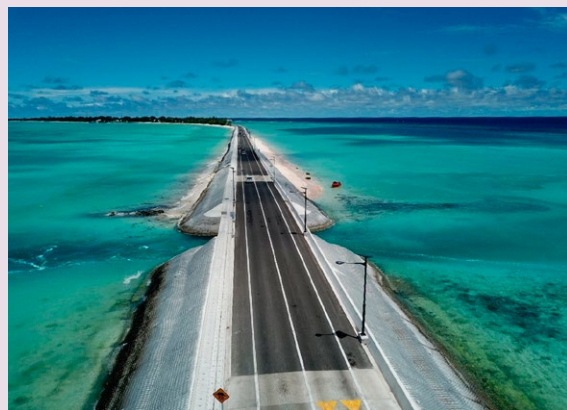
In these ways, the Nippon Causeway that was rebuilt through the reconstruction project represents “building resilience against



The causeway before reconstruction, affected by waves at high tide (Photo: JICA)

natural disasters,” as set forth in the “G20 Principles for Quality Infrastructure Investment” adopted in 2019. In addition, as an economic and social infrastructure that embodies adaptation to climate change and the “Build Back Better” philosophy

advocated in disaster risk reduction frameworks, it is expected to contribute to the social and economic development of Kiribati for many years.



The causeway after reconstruction (Photo: Dai Nippon Construction)

development as well as innovation and investment.

In addition, the World Trade Organization (WTO) emphasizes the significance of promoting the development of developing countries through their participation in the multilateral free trading system. Japan has contributed to the trust fund set up within the WTO with an aim to strengthen the capacity of developing countries to engage in trade negotiations and participate in the global market, and to raise their ability to implement the WTO agreements.

With regard to access to the Japanese market, Japan has implemented the Generalized System of Preferences (GSP), which applies tariff rates that are lower than the general tariff to products originating from developing countries. Furthermore, for the Least Developed Countries (LDCs),* Japan applies duty-free quota-free access* by introducing a special preferential treatment. Through these schemes, Japan intends to encourage the import of products from developing countries. Moreover, Japan is actively promoting Economic Partnership Agreements (EPAs),* and it is expected that the liberalization of trade and investment will also contribute to economic growth in developing countries.

Discussions regarding “Aid for Trade (AfT)”* have intensified in various international organizations, including the WTO and the OECD, as a means of further promoting support from developed countries, such as that of Japan. Japan is providing funds for the development of transportation networks, including ports, roads, and bridges, as well as for projects to construct facilities such as power plants and power grids, all of which are vital for developing countries to engage in trade. Japan is also implementing technical cooperation in trade-related areas, including the training of customs’ officials and intellectual property rights experts.

Furthermore, Japan provides assistance to small-scale production groups and small companies in developing countries over the “One Village, One Product Campaign.”* In addition, to attract private sector investment in developing countries, Japan advances such supports by identifying unique challenges in those countries, and by offering recommendations or advice to this extent.

Moreover, the implementation of the “Trade Facilitation Agreement (TFA),”* which entered into force in February 2017, is expected to improve the challenging situations Japanese companies frequently face at export destinations, such as lack of transparency and arbitrary application of trade procedures, and to boost trade and other economic activities by Japanese companies, which not only export

finished goods, but also develop supply chains on a global scale. In addition, its implementation is also expected to help developing countries to expand trade and investment by reducing the trade transaction costs, prevent illegal exports, and improve the collection of customs duties.



Products made under the One Village One Product campaign in Malawi being exhibited and sold at an international trade fair (Photo: JICA)

... Support for Mobilization of Domestic Private-Sector Resources

In order to enable developing countries to achieve quality growth by resolving various development issues under their ownership, it is critical that developing countries ensure the necessary development funds in the form of tax revenue collection or others with their own capacities. This is known as “domestic resource mobilization.” Its importance has been noted at the discussion fora of the UN, OECD, G7, G20, International Monetary Fund (IMF), and Multilateral Development Banks (MDBs). This issue is also brought up in the “2030 Agenda for Sustainable Development (2030 Agenda).”

Japan, together with the international organizations and other entities concerned, is contributing to discussions regarding domestic resource mobilization, and providing relevant support to developing countries. For example, Japan proactively provides technical cooperation to developing countries for improving their tax administration. In 2019, Japan dispatched National Tax Agency personnel as lecturers on topics including appellate systems², trial work³ and tax education⁴ to Indonesia, Viet Nam, and Laos.

In addition to these programs implemented with international organizations, Japan has assisted the development of the “OECD Global Relations Programme” for more than 20 years. This Programme dispatches

² Systems for taxpayers to protest against actions taken by tax authorities such as heads of tax offices and others, requesting annulment or correction of the action concerned including taxation and coercive collection.

³ Work to evaluate the propriety of fact-finding in the taxation concerned and to examine whether laws, regulations and notifications are properly applied to the action.

⁴ A system that provides support such as tax classrooms with the goal of helping children and students, who will shape the next generation, properly understand the meaning and role of taxes, and, as members of society, pay taxes and take interest in their use, which constitutes a foundation of democracy, as well as fostering a mindset, as taxpayers, of actively considering their society and country.

experts to developing countries in the relevant fields of tax treaties⁵ and investigation of the taxes of multinational enterprises to conduct seminars and lectures to deepen the countries' understanding of taxation systems and tax enforcement. Japan also provides cooperation on the human resources, expertise, and financing for technical assistance provided by the IMF and Asian Development Bank (ADB) in the field of taxation, including domestic resource mobilization, thereby contributing to strengthening capabilities in the field of taxation in developing countries including Asia.



Tax personnel and others from developing countries who participated in the practical training implemented by the National Tax Agency attending an intensive course on tax treaties (Photo: National Tax Agency)

In recent years, public opinion has taken an increasingly critical view towards the involvement of the wealthy class and multinational enterprises in international tax avoidance. In this regard, the World Bank and ADB, for example, have introduced a system for examining projects that use regions recognized as lacking in tax transparency, with issues such as insufficient effective tax information exchange, as intermediate investment regions when formulating private sector investment projects, including the cancellation of the formation of such projects. Investment through MDBs is one of the important

tools for the growth of developing countries. Hence the importance of support to enhance the transparency of taxes in developing countries is increasing, from the perspective of the provision of development funds as well.

Furthermore, the outcomes of the OECD/G20 BEPS Project* are also important for the sustainable development of developing countries. Cooperation among countries to implement the outcomes of this project will improve the transparency of companies and governments, and appropriate taxation will become possible in places where economic activities take place. Developing countries will be able to respond to the tax avoidance of multinational enterprises appropriately, and impose and collect tax properly in their own countries, and at the same time, their tax systems and tax administration will be in line with international standards, and a stable, highly predictable, and attractive investment environment will be created for companies and investors. At present, more than 130 countries and regions, including developing countries, are participating in the framework that implements measures recommended under the BEPS project.

... Finance

A sound and stable financial system, coupled with smooth financial and capital markets, forms an essential foundation for the sustainable economic development of developing countries. As financial globalization advances, it is pivotal that financial systems in emerging countries are properly established and that assistance is provided for the development of sound financial markets.

Based on this concept, in October 2019, the Financial Services Agency (FSA) invited officials in insurance regulatory authorities from developing countries in Asia and others, to attend a training program conducted by FSA officials and others. This training program covered areas such as the initiatives, as well as regulatory and supervision systems in Japan's insurance sector.

⁵ Bilateral treaties for avoiding the double taxation on income, as well as preventing the avoidance or evasion of taxes on income.



Glossary

***Other Official Flows (OOF)**

OOF refers to flows of funds to developing countries from governments, which are not considered as ODA because their main purpose is not development, the leniency of their conditions does not reach the standards, and/or other reasons. Examples include export credit, direct investment by governmental financial institutions, and financing to international organizations.

***Least Developed Countries (LDCs)**

According to the classification by the United Nations, LDCs are countries particularly behind in development compared to other developing countries, based on their income levels. LDCs meet certain criteria, including gross national income (GNI) per capita of \$1,025 or less between 2014 and 2016. As of 2018, there are 47 eligible countries: 7 in Asia, 2 in the Middle East and North Africa, 33 in Sub-Saharan Africa, 1 in Latin America, and 4 in Oceania.

***Duty-free quota-free access**

A measure to make products imported from LDCs tariff free and without any import quotas. Japan has been expanding the number of applicable products under this measure, and approximately 98% of all products can be imported under such conditions.

***Economic Partnership Agreement (EPA)**

Compared with Free Trade Agreements (FTAs) that stipulate the elimination of tariffs for specific countries or economies, and other issues, EPAs are agreements that set out rules in a wide range of areas such as the movement of persons, investment, government procurement, and bilateral cooperation. These agreements are expected to further vitalize trade and investment between countries and accelerate economic growth.

***Aid for Trade (Aft)**

AfT is assistance provided to developing countries to improve trade-related capabilities and to develop infrastructure for the purpose of achieving economic growth and poverty reduction through trade in developing countries, under the WTO's multilateral trading system.

***One Village, One Product Campaign**

The One Village, One Product Campaign is an initiative, which was launched in Oita Prefecture, Japan in 1979 and prevails globally, that aims to create jobs and to revitalize local communities through promoting unique products that take advantage of local resources and traditional techniques. This Campaign facilitates expanding exports of developing countries' products by discovering attractive goods, such as handicrafts, textiles, and toys that represent the unique ethnic characteristics of those countries in Asia and Africa, and by reaching out to a wider range of people.

***Trade Facilitation Agreement (TFA)**

The Trade Facilitation Agreement (TFA) is an agreement that stipulates the simplification and enhanced transparency of customs procedures aimed at trade promotion, and entered into force in February 2017. The TFA is the first newly-created multilateral agreement that has gained the participation of all WTO member states, since its founding in 1995. According to the WTO, full implementation of the TFA could reduce the trade costs of member states by an average of 14.3%, and increase global export of goods by over \$1 trillion.

***OECD/G20 BEPS Project**

Base Erosion and Profit Shifting (BEPS) refers to the issue of multinational enterprises' aggressive tax planning measures that exploit gaps and loopholes in international tax systems, including tax treaties, in order to intentionally reduce the tax burden for economic activities that should have been taxed. In order to address this issue, the BEPS Project was launched in June 2012, by the OECD's Committee on Fiscal Affairs (led by a Japanese Chair until the end of 2016), with the aim of ensuring fair competition and making international taxation rules conform with the situation of the global economy and company trends, as well as reviewing international taxation rules across the board in order to raise transparency among all governments and global companies. As of November 2019, more than 130 countries and regions are participating in the Inclusive Framework on BEPS. As of December 31, 2019, 91 countries and regions have signed the "Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Sharing" (BEPS MLI), and 37 countries and regions including Japan have concluded the Convention.

(2) Efforts on Debt Issues

Debt can be useful in achieving economic growth as long as developing countries can effectively use the funds they receive through loans. However, if a country has limited repayment capacity and becomes overburdened with excessive debt, it could inhibit sustainable growth, and thus pose a significant challenge to developing countries. Such issues must essentially be resolved by the indebted countries themselves by putting forward reforms and other efforts. However, their excessive debt must not stand in the way of their development path.

At the G8 Gleneagles Summit (the United Kingdom) held in 2005, the G8 countries agreed on a proposal called the Multilateral Debt Relief Initiative (MDRI) to reduce 100% of the debts that the Heavily Indebted Poor Countries (HIPC)* owe to the IMF, the International Development Association (IDA), and the African Development Fund (AfDF). As for the debt issue faced by the poorest countries, 39 countries have become eligible for the Enhanced HIPC Initiative,⁶ which further expands existing international debt relief initiatives for HIPCs, and enables complete debt reduction among others. 36 of these countries have received comprehensive debt reduction as a result of having attained a certain level of economic and social reforms as of the end of FY2019.

Furthermore, some low-income and middle-income countries, other than HIPCs, may owe heavy debts, and appropriate measures must be taken to make sure such debts do not prevent their stable medium to long-term development. In 2003, the Paris Club⁷ adopted a new Paris Club approach to debt restructuring (the Evian Approach), which examines measures that correspond to the respective situations of low-income and middle-income indebted countries other than HIPCs, while focusing more on debt sustainability of the recipient countries. The approach takes comprehensive debt relief measures for a country that faces difficulty concerning their repayment capacity due to their large debt volume, from the perspective of debt sustainability, as long as the country meets certain criteria.

However, in recent years, there are some cases among low income countries in which they accumulate official debt again, despite having received debt relief through the Enhanced HIPC Initiative and MDRI. Thus, there are concerns in regards to their debt sustainability. The reasons behind this situation are pointed out to be the increase in loans from emerging donor countries and private creditors, including the provision of untraditional and non-concessional loans such as secured loans, as well

as the fact that indebted countries lack the capabilities to gather and disclose their own debt data and appropriately manage their debt. Given this situation, discussions are being conducted in the G20 toward ensuring enhanced debt transparency and debt sustainability in low income countries. At the G20 under Japan's Presidency, cooperation from both indebted countries and government and private creditors were called upon, and progress in specific initiatives was confirmed at the Finance Ministers and Central Bank Governors' Meeting held in Fukuoka and the G20 Osaka Summit.

One of the factors that can significantly affect debt sustainability of countries, including low-income countries, is infrastructure investment. With regard to infrastructure investment and debt sustainability, the "G20 Principles for Quality Infrastructure Investment," which was endorsed at the G20 Summit, incorporate the importance of considering project-level financial sustainability as well as macro-level debt sustainability. From now on, it is important for the G20 countries that endorsed the G20 Principles to implement them, and to provide capacity-building support through technical cooperation toward further implementation of the G20 Principles so that developing countries and others do not incur excessive debt. Under this recognition, JICA strives to enhance the capacity of public debt management among management personnel at the finance ministries of developing countries through providing the JICA Knowledge Co-Creation Programs and dispatching experts.

Japan's Efforts

In providing ODA loans, Japan makes its decisions based on the careful consideration of the cooperation structure, debt repayment ability, operational capacity, and credit protection measures, etc. of the recipient countries. In most cases, the recipient countries do repay their loans, but there are also exceptional cases in which they face serious difficulties in their repayment due to events that could not be foreseen when they received ODA loans. In such cases, based on international agreements such as the aforementioned Enhanced HIPC Initiative and Paris Club agreements, Japan takes debt relief measures such as debt rescheduling,⁸ cancellation, and reduction only when they are absolutely necessary. As of the end of 2019, Japan has cancelled ODA debts worth a total of approximately ¥1.129 trillion towards 33 countries since FY2003. However, in 2019, as well as in 2018, no debt relief measures have been taken.

⁶ An initiative agreed at the Cologne Summit (Germany) in 1999.

⁷ The Paris Club is an informal group of creditor countries to discuss the rescheduling 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 indebted countries.

⁸ 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 indebted country.

(3) Promotion of Information and Communications Technology (ICT), Science, Technology, and Innovation, and Research and Development

The dissemination of Information and Communications Technology (ICT)⁹ contributes to the upgrading of industry, improvement of productivity, achievement of sustainable economic growth, as well as addressing issues related to medical care, education, energy, environment, disaster risk reduction and other social issues in developing countries. Furthermore, the utilization of ICT improves their democratic foundation by encouraging information disclosure by governments and establishing broadcasting media. In this way, ICT is extremely important for strengthening civil society through enhanced convenience and improved services as well as for quality growth.

Japan's Efforts

... Information and Communications Technology (ICT)

In 2017, Japan formulated the Playbook for Investment in “Quality ICT Infrastructure” for ICT policymakers and procurement managers of the respective countries and regions in order to promote quality infrastructure investment in the field of ICT, with the aim of eliminating the ICT disparities that exist between countries and regions, and to help improve the quality of life of all people.

Moreover, Japan actively offers assistance centered on the establishment of communications and broadcasting equipment and facilities in developing countries, and the introduction of the technology and systems they require, and relevant human resources development. Specifically, Japan makes proactive efforts to provide comprehensive support for the overseas promotion of Integrated Services Digital Broadcasting-Terrestrial (ISDB-T),* which is also an effective means for boosting Japan's economic growth, in the areas of maintenance, personnel and systems. ISDB-T is being spread in Latin America and the Caribbean, Asia, and Africa, and Angola also decided to adopt it in March 2019. As of December 2019, it has been adopted in a total of 20 countries.¹⁰ A JICA training program is conducted every year for countries adopting or considering ISDB-T to promote the spread and introduction of ISDB-T overseas. In order to increase the adoption of ISDB-T in other countries, the Ministry of Internal Affairs and Communications (MIC) is also promoting assistance that offers ICT solutions to resolve social issues by way of dialogues and joint projects with partner governments.

MIC also contributes in the field of overseas deployment of ICT for disaster risk reduction. Japan's ICT for disaster risk reduction makes it possible to collect, analyze, and distribute disaster information in an integrated manner,



A local technical staff receiving instruction regarding machinery for training on digital terrestrial television broadcasting provided through general cultural grant assistance at the Latin American International Center for Superior Communication Studies in Ecuador (Photo: JICA)

allowing detailed information to be communicated swiftly and infallibly at the community level, including to residents. Japan will continue to cooperate in the field of overseas deployment of ICT for disaster risk reduction and thereby aim to contribute to increasing the disaster reduction capabilities of developing countries (see page 77 for more information on disaster risk reduction).

In addition, Japan actively carries out projects in collaboration with international organizations. Japan works with the International Telecommunication Union (ITU),* a specialized UN agency that is responsible for telecommunications and ICT, to provide a variety of development assistance in the fields of telecommunications and ICT to developing countries.

At the Study Group meeting of the ITU Telecommunication Development Sector (ITU-D), which was held in October 2019 in Switzerland, Japan led the holding of workshops on new communications technologies for medical ICT. Japan provided introductions on the outcomes of the remote healthcare applications demonstration test utilizing 5th generation mobile telecommunications networks (5G), a fee-setting mechanism based on the users' intent to pay for remote medication, and pathology diagnoses and healthcare systems utilizing artificial intelligence (AI), which were highly praised. Japan also introduced its own good practices in areas such as smart society, disaster mitigation ICT, environmental ICT, digital broadcasting, and accessibility at the ITU-D Study Group meetings in March and October 2019, and is proactively contributing to the information sharing between countries, including developing countries.

In the Asia-Pacific region, the Asia-Pacific Telecommunity (APT),* an international organization

⁹ ICT is an Abbreviation for Information and Communications Technology. It is a technology that integrates computers and other information technology with digital communication technology, as represented by the Internet and mobile phones.

¹⁰ The 20 countries are Japan, Brazil, Peru, Argentina, Chile, Venezuela, Ecuador, Costa Rica, Paraguay, the Philippines, Bolivia, Uruguay, Botswana, Guatemala, Honduras, Maldives, Sri Lanka, Nicaragua, El Salvador, and Angola (as of December 2019).

specialized in the field of ICT, contributes to the balanced development of the telecommunication services and information infrastructure in the region. The APT hosts a ministerial meeting once every five years to further strengthen regional cooperation to support the advancement of ICT in the Asia-Pacific region, and issues a joint statement setting the medium-term direction of ICT initiatives. 2019 was the 40th anniversary of the APT, and the APT Ministerial Meeting was held in Singapore as a commemorative event. During the meeting, the shared vision to promote digital transformation in the region was unanimously adopted.

In order to promote capacity building (human resource development), which is one of the priority areas under this shared vision, Japan finances a number of training programs conducted by APT every year. In 2018, eight training programs regarding issues such as broadband networks and cybersecurity were implemented, and were attended by around 100 people from the member states. During the programs, the trainees studied Japanese technology through classroom learning and facility visits, and are now utilizing this experience for the development of their own countries' ICT. In addition, Japanese companies' expansion into the region is also expected through introducing Japanese technology systems in the Asia-Pacific region.

Furthermore, in the Association of Southeast Asian Nations (ASEAN), ICT was identified as a key driver in ASEAN's economic and social transformation under the blueprints adopted at the ASEAN Summit in November 2015 that provide new indicators leading up to 2025. Also, at the ASEAN Telecommunications and Information Technology Ministers (TELMIN) Meeting held in the same month, "The ASEAN ICT Masterplan 2020 (AIM2020)" that serves as ASEAN's ICT strategy towards 2020 was formulated. Moreover, with regard to the issues of cyber-attacks that have become key concerns of countries in recent years, Japan and ASEAN have agreed to further strengthen their cooperation in the information security field.

Given this context, the basic assistance policies made by the relevant ministries and agencies to strategically and

efficiently provide all-Japan support for capacity building in the cyber security field in developing countries were reported to the Cybersecurity Strategic Headquarters in 2016. Specific initiatives include the establishment of the "ASEAN-Japan Cybersecurity Capacity Building Centre (AJCCBC)" through the Japan-ASEAN Integration Fund (JAIF), and the cybersecurity training based on the Japan-ASEAN Technical Cooperation Agreement (see "Cyberspace" on page 42 for details).

... Promoting Science, Technology and Innovation, and Research and Development

As a major program for Japan's science and technology-related assistance, the Science and Technology Research Partnership for Sustainable Development (SATREPS) program,* which links ODA and the science and technology budget, was launched in 2008, and by FY2019, 145 joint research projects in 51 countries around the world have been adopted (see also page 100 "Master Techniques from Japan to the World").

Furthermore, based on cooperation for human resources, Japan is developing networks among the next-generation by strengthening assistance for overseas engineering universities.

In Asia, Japan provides support to the Malaysia-Japan International Institute of Technology (MJIT) by purchasing equipment and supplies for education and research as well as developing curriculums. Japan also collaborates with 27 universities and two research organizations in Japan to extend cooperation for establishing curriculums, dispatching Japanese faculty, and other objectives. In addition, Japan provides contributions to the Asian Institute of Technology (AIT) located in Thailand, one of Asia's leading graduate schools offering Master's and Ph.D. programs at the School of Engineering and Technology, the School of Environment, Resources and Development, and other faculties. In particular, Japan is providing scholarships to students studying remote sensing (satellite image analysis) in courses taught by Japanese instructors, and contributes to human resources development in this field, which constitutes the crux of the space industry development in the Asian region.



A Japanese teacher giving instructions at the Malaysia-Japan International Institute of Technology (Photo: JICA)



Conducting an experiment using research equipment provided by the Government of Japan at E-JUST

In Egypt, Japan supports the Egypt-Japan University of Science and Technology (E-JUST), a public university based on the concept of "graduate school, research-centered, pragmatic, and international-standard education for a small number of students," drawing on the features of Japanese-style engineering graduate school education. With the cooperation from universities in Japan, in addition to providing support for the operation of graduate schools and departments, such as the introduction of practical engineering education and Japanese-style laboratory

education, Japan also supports the acceptance of exchange students from African countries, and contributes to industrial and science and technology human resources development in Africa and the Middle East.

Furthermore, Japan conducts a program to spread Japanese companies' technologies that are useful for the socio-economic development of developing countries. This program is expected to lead to the spread of Japanese private companies' advanced technological capabilities and diverse expertise in partner countries.



Glossary

*Heavily Indebted Poor Countries (HIPC)

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

*Integrated Services Digital Broadcasting – Terrestrial (ISDB-T)

ISDB-T is a terrestrial digital broadcasting system that was developed in Japan. Its functions, such as emergency alert broadcast, TV reception on mobile terminals, and data broadcasting, give the system advantages in disaster response and the provision of diverse services.

*International Telecommunication Union (ITU)

ITU is a UN specialized agency, which covers the fields of telecommunications and broadcasting (HQ: Geneva, Switzerland; 193 member states). 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.

*Asia-Pacific Telecommunity (APT)

APT is an international telecommunication organization established in the Asia-Pacific region in 1979, made up of 38 member states in the 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, wireless communications, and other telecommunication issues.

*Science and Technology Research Partnership for Sustainable Development (SATREPS)

→ See also "Master Techniques from Japan to the World" on page 100

Through the collaboration of Japan's advanced science and technology and ODA, SATREPS is an initiative to conduct research to solve global issues relating to the environment and energy, bio-resources, disaster prevention and mitigation, and infectious diseases. Under this program, research institutes both in developing countries and Japan work together to conduct international joint research with the following objectives: 1. Strengthening international science and technology cooperation, 2. Acquiring new expertise and technologies that will lead to resolving global issues, and using these to create innovation, and 3. Capacity development.¹¹ 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 partner countries.

¹¹ Enhancing the independent research and development capacity, building sustainable activity systems which contribute to resolving challenges of developing countries, as well as conducting human resources development and establishing networks between Japan and developing countries for the future through international joint research.

(4) Vocational Training, Industrial Human Resources Development, and Employment Creation

To support quality growth in countries, it is essential for their people to acquire the necessary vocational skills. In developing countries, however, opportunities to receive quality education and training are limited. Moreover, the ineffective use of human resources tends to stifle opportunities for earning sufficient income. A shortage of appropriate human resources thus poses a major obstacle to industrial development in those countries.

“Work” constitutes a fundamental activity of mankind that shapes society. Increasing income by getting a job (employment) is an important means for improving the living standards of people. Nevertheless, the global employment situation is uncertain, and the number of unemployed people in 2018 was 172 million. Moreover, it is predicted that the unemployment rate will be roughly on the same level during 2019-2020. In order to create stable employment under these circumstances, each country must urgently prepare for risks by building social safety nets, as well as engage in an international effort to realize “decent work,” established as Goal 8 of the SDGs.

Japan's Efforts

... Vocational Training and Industrial Human Resources Development

Based on requests from developing countries to develop human resources who can respond to diverse needs in technology and technical skills, Japan provides support to leading polytechnic and vocational training schools, which will serve as core centers in each country. In implementing this assistance, Japan, in cooperation with the private sector, supports the capacity building of teachers and trainers, the reinforcement of the operational capacity of training schools, and curriculum improvement, in order to further strengthen the linkages between education and employment.

In the field of industrial human resources development, Japan implemented 64 comprehensive cooperation projects in 31 countries between 2000 and 2019. The projects drew on Japan's insight and know-how for the development and revision of curriculums and teaching materials, capacity enhancement of trainers, and collaboration with the industry sector. As a result, Japan provided support for improving facilities and equipment at 12 schools in six countries, as well as Technical and Vocational Education and Training (TVET) institutions. Japan also contributed to skill development through 14 projects in eight countries, with the aim of improving the livelihoods of women, the disabled, demobilized soldiers, as well as refugees and others whose lives have been impacted by conflict.

In addition, in relation to Africa, Japan positioned developing industrial human resources as part of Japan's

contributions for Africa announced at TICAD7 held in August 2019 in Yokohama. Japan expressed its intention to train 140,000 people in order to diversify industries and create jobs in areas such as innovation, agriculture, blue economy,¹² and others, through the Kaizen Initiative, vocational training centers, and technical assistance financed by the AfDB's trust fund. Japan also announced that human resources development for business and industry would be conducted for 3,000 people to promote business between Japan and Africa in six years under the African Business Education Initiative for Youth (ABE Initiative)* 3.0. The ABE Initiative, driven by industry-academia-government cooperation, enables trainees to study at 76 universities (156 graduate courses offered) throughout Japan as of the end of 2019 (see also “Stories from the Field” on page 28).



Tanzanian staff receiving a briefing from a JICA expert dispatched for Phase 2 of the Project on Strengthening Manufacturing Enterprises through Quality and Productivity (Photo: JICA)

The “Industrial Human Resource Development Cooperation Initiative” was announced at the Japan-ASEAN Summit Meeting in 2015 with the goal of assisting industrial human resource development of 40,000 people over the next three years in Asia. At the Japan-ASEAN Summit Meeting in November 2018, following the achievement of the initiative for exceeding the original goal, Japan announced the “Industrial Human Resource Development Cooperation Initiative 2.0,” which aims to support industrial human resource development of approximately 80,000 people in Asia over the next five years, with a view toward the 50th anniversary of Japan-ASEAN Friendship and Cooperation in 2023. In this initiative, cooperation for industrial advancement capabilities, including in AI and other digital fields, has been newly listed, in addition to cooperation in practical technology, design and development capabilities, innovation, business administration, planning, and management capabilities, which have been emphasized thus far.

¹² The blue economy aims to balance the conservation of ocean resources and economic development through the sustainable use of resources from the oceans, rivers, lakes, and more.

Furthermore, under the “Japan Revitalization Strategy 2016” decided by the Cabinet in 2016, with the aim of contributing to fostering innovation in both Japan and developing countries in Asia, Japan decided to launch a new initiative known as the “Innovative Asia,” Initiative for circulation of competent human resources between Japan and Asian countries, aiming to offer study opportunities and internships in Japan for approximately 1,000 talented students from Asia over five years from FY2017. This new initiative was highly welcomed by partner countries on occasions such as summit meetings, and aims to lead to the strengthening of diplomatic relations between Japan and Asian countries in the mid- to long-term.

In addition, the Ministry of Health, Labour and Welfare (MHLW) conducts trainings in Japan primarily for Southeast Asian countries,¹³ with which Japan has been expanding and deepening economically interdependent relationships. The trainings¹⁴ are designed to transfer the Government and private sector’s accumulated know-how on Japan’s skills evaluation system (Japan’s National Trade Skill Test and Certification), with a view to developing and securing a quality workforce. In FY2018, a total of 152 people from three countries participated in these training programs. The training is expected to develop and improve skills evaluation systems in these

countries, which in turn will promote the development of their skilled workers and elevate their social standing through increased employment opportunities.

... Employment, Including Job Creation

Japan also provides support in the area of employment. The question of how to address issues such as response to serious industrial accidents that occur frequently, and protecting the rights of workers and stabilizing employment amidst the expansion of the global supply chain, is a common issue for each country. In light of this, the improvement of the working environment from a global perspective is becoming an increasingly important issue. To cope with these problems, Japan provides technical cooperation that supports developing countries primarily in Asia, focusing on the enhancement of security and hygienic standards of work, as well as improvement of employment legislations and its implementing systems for the improvement of working environments, through means such as voluntary contributions to the International Labour Organization (ILO). In addition, Japan is also engaged in realizing decent work, such as providing support in Africa, including support for youth employment in The Gambia (see also page 122 “Stories from the Field”).

Glossary

*African Business Education Initiative for Youth (ABE Initiative)

→See also “Stories from the Field” on page 28

A program that invites youth in Africa to Japan and provides them with opportunities to gain master’s degrees at Japanese universities and obtain internship opportunities at Japanese enterprises, with the aim of promoting human resources development for business and industry in Africa and fostering “navigators” who will support the business activities of Japanese companies in Africa. At TICADV held in 2013, it was announced that Japan will receive 1,000 trainees over five years through the ABE Initiative. At TICADVI in 2016, it was further announced that the Initiative would train 1,500 people including through onsite human resources development over three years. At TICAD7 in 2019, it was announced that these efforts would be continued.

¹³ The target countries are Indonesia, Thailand, Viet Nam, Myanmar, Cambodia, and Laos.

¹⁴ There are two types of training in this project: “training for people in charge of the creation of test standards and test problems” and “training for people in charge of tests and marking.” The number of participants above is the total value for both of these types of training.