

3. Promoting Efforts to Address Global Issues and Human Security

As globalization advances, the international community has been confronted with various challenges that cross national borders such as disparity and poverty, terrorism, refugees and displaced persons, infectious diseases, disaster risk reduction, climate change, and marine plastic litter. In 2020, the spread of COVID-19 has threatened the lives, livelihoods, and dignity of all people around the world, causing a crisis for human security. In order to resolve such transboundary global issues, it is necessary for the international community to move beyond the conventional concept of developed and developing countries and work together to address the issues (see Part I regarding Japan's efforts against COVID-19 in 2020).

The SDGs, which are important in advancing such efforts, are 17 global goals to be achieved by 2030, agreed upon by all UN Member States at the UN Summit

held in September 2015 as a successor of the Millennium Development Goals (MDGs). The SDGs represent a commitment by the entire international community including developed countries, and therefore could be described as a "compass" providing the direction toward the fundamental resolution of global issues that must be tackled by both developing and developed countries.

The Government of Japan established the SDGs Promotion Headquarters, with the Prime Minister as its head and all the Cabinet Ministers as its members, and has actively worked on achieving the SDGs both in Japan and abroad through the formulation of the SDGs Implementation Guiding Principles, which sets the direction for the promotion of the SDGs, and the SDGs Action Plan, which compiles specific policies. This section features Japan's initiatives aimed at achieving the SDGs from the perspective of various fields including health, water and sanitation, education, gender, environment, and climate change (see also "ODA Topics" on pages 106 and 154 for details).

Human Security

The SDGs present a vision of a prosperous and vibrant society where "no one is left behind." This is in concurrence with the concept of "human security" that Japan has been promoting for many years, which seeks to build states and communities by protecting and empowering individuals so that they can live in dignity, free from fear and want. In the Development Cooperation Charter, human security is also positioned as the guiding principle that lies at the foundation of Japan's development cooperation, and in order to promote human security, the Government of Japan undertakes various efforts both to (i) spread the concept and to (ii) put it into practice on the ground.

(i) Spreading the concept

After the unanimous adoption by the UN General Assembly of the resolution concerning common understanding of human security led by Japan in 2012, Japan has been continuing to spread the concept centered on the United Nations Human Security Unit. In February 2019, Japan took the opportunity of the 25th anniversary of the introduction of the concept of human security and held the High-level Event "Human Security at 25" with the UNDP, the United Nations Human Security Unit, and related countries at the UN Headquarters in New York.

(ii) Putting the concept into practice on the ground

Japan spearheaded the launch of the "UN Trust Fund for Human Security" in 1999 and has contributed approximately ¥47.8 billion in total by the end of FY2019. The trust fund has supported 257 UN projects to ensure human security in 99 countries and regions by the end of 2019.

OGATA Sadako Memorial Symposium

A memorial symposium commemorating Dr. OGATA Sadako, who spearheaded the refinement and practical implementation of the concept of human security at the front lines, was held by the JICA Ogata Sadako Research Institute for Peace and Development on November 2, 2020. The symposium looked back on Dr. Ogata's achievements in the field of human security, with video messages sent in by UN Secretary-General Guterres and United Nations High Commissioner for Refugees (UNHCR) Grandi. A panel discussion was also held on how the international community should overcome the challenges faced in the COVID-19 and post-COVID-19 era under the concept of human security.



Panelists from both Japan and abroad discussing human security at the OGATA Sadako Memorial Symposium (Photo: JICA)

(1) Health and Medical Care

It is said that roughly at least half of the world's population has no access to basic medical care ²⁴. According to UNICEF, the World Health Organization (WHO), and others, more than 5.3 million children ²⁵ under the age of five die annually due to infectious diseases, malnutrition, diarrhea, and other preventable causes, even today. Over 295,000 women ²⁶ die during and following pregnancy and childbirth per year, primarily due to the lack of emergency obstetric care provided by skilled health professionals such as obstetricians, gynecologists, and/or midwives. Furthermore, in 2020, the spread of COVID-19 brought grave disruption to the lives and livelihoods of all people on the planet.

SDGs Goal 3 aims to “Ensure healthy lives and promote well-being for all at all ages.” In addition, in order to respond to various health issues, which differ across countries and regions, achieving “Universal Health Coverage (UHC)” is positioned as an important international goal to ensure that all people have access to basic health services at an affordable cost when needed.

Japan's Efforts

*** Promotion of UHC

(Japan's Initiatives at International Conferences)

Japan has placed importance on initiatives to improve healthcare that is directly linked to human security for a long time. Japan has been actively leading the promotion of UHC and the provision of basic health services under the “Japan brand” at international meetings including the G7, G20, TICAD, the UN General Assembly, and more.

Facing the global pandemic of COVID-19 in 2020, it was reconfirmed that improving preparedness and response against infectious diseases through efforts for achieving UHC is indispensable for sustainable economic growth and it is important to invest into UHC as part of a growth strategy.

At the G20 Osaka Summit in June 2019, under its Presidency, Japan discussed specific policies toward resolving issues such as achieving UHC, realizing a healthy and active ageing society, and health emergencies including antimicrobial resistance (AMR). In regard to the promotion of UHC, it was agreed in the Leaders' Declaration to enhance human resources for health policy while working on it based on the contexts and priorities of each country. Furthermore, with regard to health financing, the leaders called for greater collaboration between health and finance authorities in accordance with the “G20 Shared Understanding on the Importance of UHC Financing in Developing Countries” confirmed



Former JICA training participants conducting maintenance on medical equipment in Angola (Photo: JICA)

at the first-ever G20 Joint Session of Finance and Health Ministers. In September 2020, under Saudi Arabia's Presidency, the G20 Joint Finance and Health Ministers Meeting was held again following the 2019 session, and the joint statement reconfirmed the commitment to the “Shared Understanding” from the standpoint of preparedness and response against pandemics. At the G20 Riyadh Summit held in November 2020, Prime Minister Suga remarked that efforts toward UHC based on the principle of human security, including securing sustainable health financing, are indispensable. The G20 Riyadh Leaders' Declaration confirmed the critical importance of well-functioning, value-based, inclusive, and resilient health systems toward achieving UHC, as well as the importance of sustainable health financing in developing countries.

At TICAD7 in August 2019, the Yokohama Declaration 2019 reaffirmed the commitment to further promotion of UHC in Africa based on the gains of TICAD VI and the G20 Osaka Summit. In addition, the Yokohama Plan of Actions 2019 specified the further promotion of UHC in Africa through effective policies, including strengthening health systems such as sustainable health financing through bolstering cooperation among health and finance authorities, strengthening capacity development, control of communicable and non-communicable diseases, maternal and child health, nutrition improvement, water and sanitation, and promoting cooperation with the private sector. Furthermore, Japan announced in “TICAD7: Japan's contributions for Africa” that it would expand UHC, launch the Africa Health and Wellbeing Initiative, and host the Tokyo Nutrition for Growth Summit (see page 90 for details regarding the Tokyo Nutrition for Growth Summit).

At the UN, the first United Nations General Assembly High-Level Meeting on UHC was held in September

²⁴ WHO Fact Sheets 2019

²⁵ As of 2018. The previous total was over 5.4 million children.

²⁶ As of 2017. The previous total was over 303,000 women.

2019. During the meeting, then Prime Minister Abe took the stage at the closing ceremony as the only leader of a member state, introduced Japan's contributions to promote other countries' efforts toward achieving UHC at the G20 Osaka Summit and TICAD7 in 2019, and emphasized the importance of promoting a cross-sectoral approach, combining health development with nutrition, water, and sanitation, and strengthening health financing. At the meeting, UHC Political Declaration was endorsed, which affirmed goals, such as providing basic health services to all people and eliminating impoverishment due to health-related expenses by 2030.

On September 26, 2020, Prime Minister Suga gave his first address at the General Debate of the UN General Assembly since taking office, where he touched upon Japan's international health policy including measures against COVID-19 at the beginning. In his address, he pointed out that the spread of the disease is a crisis for human security and, in advancing countermeasures, it is essential to set the goal of "leaving no one's health behind" and to achieve UHC.

In addition, he announced that Japan would proactively lead international efforts with a focus on the areas of (i) fully supporting the development of therapeutics, vaccines, and diagnostics and ensuring fair and equitable access for all including those in developing countries, (ii) supporting the strengthening of each country's health and medical systems including through building hospitals, providing equipment, and supporting human resources development, and (iii) taking measures to ensure health security including improvement in conditions for water, sanitation and hygiene, nutrition, and other environmental factors.

Among these areas, vaccinations are one of the most cost-effective investments, estimated to save the lives of approximately two to three million people each year. To promote these efforts, at Gavi, the Vaccine Alliance's* third donor pledging conference (the "Global Vaccine Summit") on June 4, 2020, Japan announced that it would provide contributions of \$300 million for the time being (see the Part I on page 12 regarding the Japanese staff working at Gavi). Moreover, through bilateral assistance, Japan contributes to increased vaccination rates by providing support including vaccine production and management as well as operations and maintenance for cold chains ²⁷.

Furthermore, on October 8, 2020, Foreign Minister Motegi co-hosted the Ministerial Meeting of Group of Friends of UHC with the foreign ministers of Thailand and Georgia who co-chair the group, which aims to further promote awareness of UHC in the international community. The meeting was attended by UN Secretary-

General Guterres, the foreign ministers of Thailand, Georgia, Kenya, and Senegal, the health ministers of Ghana, Uruguay, and India, WHO Director-General Tedros, UNICEF Executive Director Fore, Gavi, the Vaccine Alliance CEO Berkley, and Coalition for Epidemic Preparedness Innovations (CEPI) CEO Hatchett.

Foreign Minister Motegi gave a speech at the beginning in which he explained the specific efforts Japan was spearheading and stated that Japan remains committed to realizing UHC together with the international community, in line with Prime Minister Suga's address at the General Debate of the UN General Assembly. Specifically, he announced that out of the \$300 million of assistance pledged at the Global Vaccine Summit, Japan would contribute over \$130 million to the Advance Market Commitment (AMC)* of the COVID-19 Vaccine Global Access Facility (COVAX Facility) in order to enable lower income countries to reinforce equitable access to vaccines. Related countries and organizations extended their appreciation to Japan's leading role and initiatives toward achieving UHC including this contribution (see Part 1 on page 6 regarding global efforts for vaccine development and distribution).

Additionally, on December 4, 2020, the Special Session of the UN General Assembly in response to the COVID-19 Pandemic was held with the aim to evaluate the international community's response to COVID-19 and its impact on social and economic activity and to further strengthen global cooperation for the future response. In a video message, Prime Minister Suga stated the importance of aiming at "leaving no one's health behind" in achieving UHC, guided by the principle of human security, and that Japan would promote efforts to overcome the crisis of the pandemic, strengthen health and medical systems, and generate an environment that is resilient to infectious diseases.

*** Promotion of UHC (Japan's Specific Contributions)

Under the "Basic Design for Peace and Health" enacted in 2015, the Government of Japan provides assistance to achieve UHC that aims to "leave no one behind," utilizing its experience, technology, and expertise.

Primary healthcare* services under UHC comprise all services ranging from nutritional improvement (see "(8) Food Security and Nutrition" on page 87), vaccination, maternal and child health, sexual and reproductive health, infectious disease control, non-communicable disease (NCD) control, and comprehensive community care and long-term care for the elderly.

²⁷ A mechanism to deliver products to their destination while maintaining low temperatures. This allows the quality of medical goods such as vaccines to be preserved.



A Japan Overseas Cooperation Volunteer (JOCV) explaining hospital infection prevention at a national hospital in Timor-Leste (Photo: JICA)

With regard to maternal and child health in developing countries, there are still significant challenges, despite improvements such as a reduction in the under-five mortality rate and maternal mortality rate, as well as an increase in births attended by skilled health professionals. Japan aims to strengthen sustainable health systems by providing comprehensive, continuous maternal and child care and strengthening the ownership and capabilities of developing countries. In pursuit of these aims, Japan has been supporting many countries including Ghana, Senegal, Bangladesh, Cambodia, and Laos. Through this assistance, Japan contributes to making necessary services accessible to all women at every stage of pregnancy (including that of adolescence and family planning), as well as for newborns and infants.

Furthermore, Japan is implementing activities utilizing the Maternal and Child Health (MCH) Handbook as a means of improving maternal and child health, based on its experience and expertise. The MCH Handbook can contribute to the Continuum of Care (CoC) from pregnancy, childbirth, the post-partum period ²⁸, the neonatal period, infancy, and to early childhood. It also enables mothers to acquire knowledge about health, which in turn raises awareness and encourages behavior modification. To give an example of the concrete assistance, the MCH Handbook is being widely used throughout the country in Indonesia as a result of Japan's cooperation. Moreover, among the countries promoting the use of the MCH Handbook, including Indonesia, Thailand, the Philippines, Laos, Cambodia, and Kenya, there have been sessions to share their experiences and learn from each other. Furthermore, these countries hold exchanges of opinions with Afghanistan and Tajikistan, which are implementing trial use of the MCH Handbook. In addition, efforts are also being conducted for the utilization of the MCH Handbook in other countries in Africa, including Ghana.

Japanese NGOs have been working in health and medical care using the Grant Assistance for Japanese NGO Projects scheme. For example, in Banke District, Nepal, where there is a great need to improve the healthcare environment for newborns and infants, ADRA Japan, a non-profit organization, has been implementing a project to rehabilitate healthcare facilities and provide medical equipment and supplies, while providing training aimed at raising awareness of health-related knowledge among the local residents, district officials, and medical personnel (see also "Project Introduction Column" on page 64).

In addition, Japan works with other development partners, such as the United Nations Population Fund (UNFPA), the International Planned Parenthood Federation (IPPF), and the World Bank, to promote maternal and child health that includes sexual and reproductive health services, and thereby improving the health of a greater number of women and children in aid recipient countries (see also "Project Introduction Column" on page 67).

Furthermore, Japan supports policy reforms toward achieving UHC and is also engaged in its promotion from a comprehensive, medium to long-term standpoint, such as by providing health sector policy loans for the achievement of UHC in Senegal and Kenya.

Strengthening Response Capacity, Prevention Measures, and Preparation for Public Health Emergencies

In a globalized world, as infectious diseases easily spread beyond national borders and have a serious impact on the entire international community, it is important to put in place countermeasures for emerging and re-emerging infectious diseases ²⁹. The Ebola outbreak in the countries of West Africa from 2014 to 2015 took many lives and resulted in the spread of infection to neighboring countries and the secondary infection of medical personnel, and thus became a major humanitarian, economic, and political challenge for the international community. Moreover, Ebola has been spreading once again in the Democratic Republic of the Congo since August 2018. In addition to financial assistance, Japan has seamlessly provided a variety of assistance to such affected countries and international organizations, including the dispatch of experts and provision of emergency relief goods. Furthermore, Japan is supporting the efforts to overcome the Ebola crisis through public-private cooperation, such as providing medicine and rapid test kits utilizing the technology of Japanese private companies (see "Master Techniques from Japan to the World" on page 149 regarding

²⁸ The period after childbirth in which the woman recovers to a similar condition before pregnancy, usually around one to two months after birth.

²⁹ Emerging diseases are infectious diseases that were not previously known and have been newly recognized in recent years, such as severe acute respiratory syndrome (SARS), avian influenza, and the Ebola virus disease. Re-emerging diseases are infectious diseases that had spread throughout the world in the past and subsequently saw a decrease in the number of cases, but have been on an increasing trend again in recent years, such as cholera and tuberculosis.

Timor-Leste

Project for Strengthening Primary Health Care Service Delivery through Community Participation (Phase 1 and 2) Grant Assistance for Japanese NGO Projects (February 2019 – (ongoing))

"I lost my first child a week after the birth and had a miscarriage with my second baby. It takes me over one hour to walk to the nearest medical facility, and I received prenatal care only once or twice." This is the reality faced by most mothers and their children living in remote areas of Dili, the capital of Timor-Leste. In Dili, there are areas where access to roads, electricity, and primary healthcare services is still limited, putting both the vaccination rate and prenatal care rate at 50% or below, lower than the country's average.

In order to improve this situation, Services for the Health in Asian and African Regions (SHARE), a Japanese NGO involved in international cooperation, constructed a public health clinic (health post)* and provided a small boat to deliver health and medical services to the people living in Metinaro administrative post, Dili, as well as Atauro Island, a remote island off the coast of the capital. Moreover, SHARE has been working to improve the capacity of local medical personnel and provide health education to local residents.



Mothers and children waiting to be seen at a health post on a remote island, one of the target communities of the project (Photo: SHARE)

Thanks to this project, a total of approximately 1,200 people were able to receive healthcare between November 2019 and October 2020 in Manleuana village, Metinaro administrative post, where there is a population of 2,000

people and no doctor. In addition, on Atauro Island, health center personnel and local residents have been working to conduct mobile health checkups using the small boat provided by this project.



Transporting medicines and vaccines to coastal villages using the small boat provided by the project (Photo: SHARE)

As a result, the overall vaccination rate in Dili improved by nearly 20%. Even in 2020, when the domestic consultation rate declined due to the COVID-19 pandemic, the health center continued to provide healthcare services through a trial-and-error process. Consequently, 2,324 people in the targeted communities have been vaccinated by August, which is 380 more people than the same period in the previous year.

Furthermore, through this project, a total of 97 people, including doctors, midwives, and healthcare volunteers, have received training aimed at improving their healthcare skills and knowledge. They will continue to apply the skills and knowledge that they have acquired in providing healthcare services and health education for local residents.

*In Timor-Leste, there is one health bureau for each of the 13 municipalities to oversee municipality healthcare under the Ministry of Health, and health centers and public health clinics (health posts) have been established in the districts.

SATREP's support in the field of infectious disease in Africa).



Community health volunteers learning about handwashing methods at a health post in Banke District, Nepal (Photo: ADRA Japan)

From the point of view that building a sustainable and resilient health system is crucial to controlling infectious diseases, Japan has been strengthening the capacity of prevention, preparedness, and response to public health crises, particularly in African countries, and aims to realize an Africa in which all people have access to health services. To that end, Japan is swiftly implementing

assistance that contributes to their social and economic recovery, including assistance for the health sector such as capacity building of medical staff and improvement of medical facilities, infrastructure development, and food security enhancement.

Moreover, Japan leads discussions in international fora such as the G7 and TICAD on the establishment of the Global Health Architecture, a framework of the international community for responding to these health crises. On the occasion of the G7 Ise-Shima Summit in 2016, discussing the WHO's responses to public health emergencies, then Prime Minister Abe announced contributions of \$50 million to the WHO Health Emergencies Programme*, the Contingency Fund for Emergencies (CFE)*, and others. These contributions are being used to respond to the outbreak of the Ebola virus disease that has continued in the Democratic Republic of the Congo since 2018 as well as the COVID-19 pandemic in 2020, contributing to the response against health emergencies. Furthermore, utilizing funds such as the Health Emergency Preparedness and Response Multi-Donor Trust Fund (HEPRTF) launched in cooperation between Japan and the World Bank Group in June 2020, Japan is providing assistance for strengthening capacities in preparedness and responses against infectious diseases in developing countries.

***** Responding to Antimicrobial Resistance (AMR)**

Antimicrobial resistance (AMR) ³⁰ is a serious threat to public health, and in recent years, more and more countermeasures against AMR have been taken. In order to advance measures against AMR, Japan is promoting the “One Health Approach” for those who are engaged in the field of sanitation concerning people, animals, and the environment to work together on efforts. In the G20 Osaka Leaders’ Declaration in 2019 as well, it was agreed to accelerate efforts based on the “One Health Approach.” At the G20 Health Ministers’ Meeting held in Okayama in October 2019, the Ministers adopted the Okayama Declaration of the G20 Health Ministers, which mentioned the importance of continuing AMR measures based on the same approach. In addition, in the same month, Japan announced that it would contribute approximately ¥1 billion to the Global Antibiotic Research & Development Partnership (GARDP), which promotes research and development for new antibiotics and diagnosis development, and is exerting leadership for AMR measures including through participation in

the AMR leadership group. In 2020, Japan contributed approximately ¥200 million to GARDP.

***** The Three Major Infectious Diseases (HIV/AIDS, Tuberculosis, and Malaria)**

SDGs target 3.3 sets out to end epidemics of the three major infectious diseases by 2030. Japan has been providing support for measures against the three major infectious diseases and strengthening health systems through the “Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund),” an organization whose establishment was agreed upon at the G8 Kyushu-Okinawa Summit held in 2000. Since its establishment in 2002 to the end of December 2019, Japan has contributed approximately \$3.46 billion to the Global Fund. Furthermore, Japan provides supplemental bilateral aid to the developing countries receiving support from the Global Fund in order to ensure that measures against these three major infectious diseases are implemented effectively in those countries. Japan also strives to strengthen mutual cooperation on enhancing health

Nigeria
(1) Polio Eradication Project, (2) Project for Eradication of Poliomyelitis/Project for Infectious Diseases Prevention for Children
 (1) ODA Loan, (2) Grant Aid ((1) May 2014 – (ongoing), (2) 2000 - 2013^{*1})

Nigeria used to be the last wild poliovirus endemic country in Africa and one of the three countries^{*2} in the world where the cases of wild polio were still being identified. As of 2012, Nigeria accounted for approximately half of the world’s polio cases.

In response to this situation, Japan has provided Nigeria with a wide range of support, from procurement of vaccines to development of human resources, in order to strengthen measures for polio eradication.

For example, through the grant aid “Project for Eradication of Poliomyelitis” and the “Project for Infectious Diseases Prevention for Children” through UNICEF, in addition to procurement of vaccines, Japan worked on the development of cold chains^{*3}, including solar-powered refrigerators that enable the transportation and storage of vaccines to remote areas. Japan also provided assistance to improve the testing technology and related equipment of national polio laboratories in Nigeria and support for human resources development for researchers of polio through JICA training.



Administering an oral polio vaccine to a child
(Photo: JICA)

Furthermore, in 2014, Japan implemented an ODA loan project to

procure polio vaccines. In Nigeria, the vaccines procured through the ODA loan were used to conduct a thorough immunization campaign to eradicate polio. This ODA loan adopted an innovative financing approach (loan conversion mechanism)^{*4}, under which the Bill & Melinda Gates Foundation agreed to repay the loan debt in place of the Nigerian government on the condition that the predetermined goals were successfully achieved.

Thanks to the contributions by Japan and the international community, Africa was declared polio-free on August 25, 2020^{*5}. Mr. ISONO Mitsuo, a JICA senior advisor who has been engaged in the fight against infectious diseases in Nigeria for many years, shared the following thoughts on the polio-free declaration.

“Nigeria is a vast country with many hard-to-reach areas and complex security challenges. I believe that the government’s leadership, as well as the efforts of many staff who have been engaged in the most difficult countermeasures against polio on the front lines, contributed to the eradication of polio.”

Japan will continue to contribute to the prevention and control of the spread of infectious diseases in Africa together with the international community.

^{*1} Grant aid was provided every year from 2000 to 2013.

^{*2} The three countries are Nigeria, Afghanistan, and Pakistan.

^{*3} See 27 on page 62.

^{*4} In December 2017, the Bill & Melinda Gates Foundation took over the ODA loan obligations after it was recognized that the vaccination rate and other project targets that had been set in advance were achieved.

^{*5} WHO has certified that Nigeria has zero cases of the wild polio (polio-free) for the past three years.

³⁰ Pathogenic microorganisms, including bacteria and viruses, gaining resistance to antimicrobials such as antibiotics and antiviral drugs, which causes the drugs to lose sufficient efficacy.

systems, community empowerment, and policies for maternal and child health in those countries.



Mothers receiving an explanation on newly created MCH Handbooks under the technical cooperation “Project for Improving Continuum of Care for Mothers and Children through the Introduction of Combined MCH Record Book” in Ghana (Photo: JICA)

Japan is providing assistance such as spreading knowledge to prevent new infections and promoting awareness raising, testing, and counseling as bilateral assistance for HIV/AIDS countermeasures. JOCVs for Infectious Disease and HIV/AIDS Control are vigorously engaging in activities especially in Africa. These activities include spreading knowledge on prevention and promoting understanding of it among as many people as possible and providing care and support for people infected by HIV/AIDS.

With regard to tuberculosis, based on the “Stop TB Japan Action Plan”¹⁰ announced in 2008, Japan is engaged in reducing the annual number of deaths from tuberculosis in developing countries, particularly in Asia and Africa. These efforts aim to achieve a 10% reduction of the number of deaths from tuberculosis worldwide (160,000 people, based on 2006 figures) by making use of Japan’s own experience and technology to take measures against tuberculosis through a public-private partnership.

In addition to these efforts, with regard to malaria, one of the major causes of infant mortality, Japan provides assistance for anti-malaria countermeasures such as initiatives through the strengthening of local communities in Myanmar and Solomon. Moreover, Japan also provides assistance in cooperation with the WHO.

●●● Polio

Although polio is on the brink of being eradicated, Japan has been working mainly in cooperation with UNICEF to provide support for its complete eradication with a focus on countries where cases of infection are still being identified (countries where wild strains of polio are constantly present). In August 2020, Nigeria, the last country with a constant wild polio presence in Africa, was recognized to have had no cases of wild strains of polio for the past three years, and Africa was declared to be polio-free. Japan has continuously supported a wide

range of polio countermeasures for Nigeria from vaccine procurement to human resources development (see also Project Introduction Column on page 65 regarding efforts toward the eradication of polio in Nigeria).

Furthermore, in Pakistan, Japan has provided grant aid amounting to more than ¥11 billion in coordination with UNICEF since 1996 and provided an ODA loan of approximately ¥6.3 billion in 2016. Under the polio-related ODA loan, a new approach (loan conversion) was adopted where the private sector Bill & Melinda Gates Foundation will pay the debt owed by the Government of Pakistan when certain targets are achieved.

●●● Neglected Tropical Diseases (NTDs)

Parasitic and bacterial infections, such as Chagas disease, Filariasis, and Schistosomiasis, are known as “neglected tropical diseases (NTDs),” and have infected more than 1 billion people worldwide, causing major socio-economic losses to developing countries. Since infectious diseases can have an impact beyond national borders, the international community must work as one to combat them. Thus, Japan also cooperates closely with all the relevant countries and international organizations on countermeasures against NTDs.

Since 2000, Japan has provided support against Filariasis for Pacific island countries through technical cooperation. This long-term support has proved successful, with eight of 14 Oceanian countries (Cook, Marshall, Nauru, Niue, Palau, Solomon, Tonga, and Vanuatu) having eliminated Filariasis. Continuing from this, in October 2019, the WHO declared Kiribati to have eliminated lymphatic Filariasis. Through the dispatch of experts and other means, Japan will continue to support plans for the elimination of Filariasis in Pacific island countries.



A survey of the current situation underway in the “Project for Reinforcement of Infectious Diseases Epidemiological Surveillance System” in the Democratic Republic of the Congo (Photo: JICA)

= Glossary

***Gavi, the Vaccine Alliance**

Gavi, the Vaccine Alliance is a public-private partnership which was established in 2000 with the aim of saving children's lives and protecting people's health by improving immunization rates in developing countries. Governments of donor countries and developing countries, relevant international organizations, the pharmaceutical industry, private foundations, and civil society participate in this partnership. Since its establishment, it is said to have vaccinated 822 million children and saved over 14 million lives. Japan has provided a cumulative total of approximately \$250 million in aid since the initial contribution in 2011 through the first Supplementary Budget for FY2020.

***Advance Market Commitment (AMC) of the COVID-19 Vaccine Global Access Facility (COVAX Facility)**

COVAX is a comprehensive financing and supply coordination mechanism launched for a limited period of time under Gavi's lead, aimed at promoting the production and supply of COVID-19 vaccines. It is an arrangement to supply vaccines rapidly and at a reasonable price, negotiated by taking advantage of economies of scale by guaranteeing vaccine purchase volumes and market demand. AMC is a mechanism to encourage the development, production, and supply of vaccines for developing countries, through which Gavi guarantees the purchase of a certain amount of vaccine after it is developed and manufactured and ensures a post-development market, as well as encourages the developer companies to expand their production capacities in order to put in place a vaccine production system at scale that meets the demand. AMC supports the spread of vaccines by having donors pledge funding and bear part of the purchase cost for developing countries following the commercialization of the vaccines, which enables developers to have an outlook for recouping their development and production costs and lowers the cost burden for developing countries.

***Primary Health Care (PHC)**

An approach to comprehensively and equally resolve issues by residents of a local community on their own through their proactive participation in order to respond to the most vital needs of people and achieve health for all people by recognizing health as a basic human right. It is composed of three components: (i) comprehensive and equal health and medical services that meet the requirements of people regarding health, (ii) systematic approaches to decisive factors of health, and (iii) giving individuals, families, and communities the right to make their own decisions about their health.

***WHO Health Emergency Programme**

The WHO Health Emergency Programme is a part of the WHO that responds to health emergencies. It evaluates the health emergency response capacity of countries, supports drafting of plans, and monitors new and ongoing health emergency situations. It also provides health services to save lives in countries where health emergencies are occurring.

***Contingency Fund for Emergencies (CFE)**

An emergency fund for responding to outbreaks and states of emergency established by the WHO in 2015 based on its reflection concerning the Ebola virus outbreak in West Africa in 2014. Decision-making regarding contributions is entrusted to the WHO Director-General, and it is possible to provide funding within 24 hours of the decision being made.

Bolivia

Mother and Child Health Network Improvement Project in Oruro Technical Cooperation Project (February 2016 – February 2020)

The department of Oruro is located in the highlands of the western part of Bolivia at an altitude of approximately 3,700 meters above sea level, and it is home to many indigenous people. Bolivia has the second highest maternal mortality rate*¹ and under-five mortality rate*² in Latin America and the Caribbean after Haiti, which shows the poor condition of maternal and child health.

This project was conducted to improve maternal and child health services as well as the health of pregnant women and children under five years old in Oruro department. In this project, a total of 21 experts from Japan were dispatched to three health districts in Oruro department, encompassing a total of 16 cities, to provide training and other support to healthcare workers, health administration staff, and expectant and nursing mothers. Educational activities were also conducted to raise awareness of the importance of improving lifestyle

habits and other aspects related to maternal and child health.

These efforts have resulted in the improvement of maternal and child health services through community participation. For example, the project increased the percentage of prenatal care in target communities to nearly 70% and doubled the number of educational teams for healthy life that comprise local healthcare workers. In addition, the Guide for Information Analysis on Child Development was developed in the project and approved by the Ministry of Health. The Guide is utilized not only in Oruro department but also throughout Bolivia.

Japan has been cooperating with Bolivia in the field of maternal and child health for approximately 20 years and has always placed importance on providing assistance that gives careful consideration to the situation of the Government of Bolivia. Likewise, this project was carried out while placing emphasis on the concept of the multicultural healthcare system*³ that is promoted by the Government of Bolivia, in which families and communities consider their own health risks and take necessary preventive measures themselves. As a result, maternal and child health in Bolivia has been improved in a way that is in line with the culture and thought of the people in the country.



"Educational team for healthy life," established as part of the project, providing guidance on nutrition improvement to pregnant women in target communities (Photo: JICA)

*¹ 206 maternal deaths according to the WHO estimate in 2015 (death rate per 100,000 births).

*² 38 under-five deaths according to the WHO estimate in 2015 (number of deaths per 1,000 births).

*³ Different cultures have different ideas about health, and living a healthy life should be emphasized over dealing with illnesses" (see also: <https://www.jica.go.jp/project/bolivia/008/outline/index.html> <https://www.jica.go.jp/project/bolivia/008/outline/index.html> (in Japanese only)).

(2) Water and Sanitation

Water and sanitation are vital issues linked to human life. Throughout the world, approximately 2.2 billion people are not provided with safely-managed drinking water, 4.2 billion people cannot use safely-managed sanitary facilities such as toilets, and three billion people live without access to basic hand-washing facilities. Moreover, in developing countries where piped water is not widely available, women and children often bear the role of fetching water and sometimes spend many hours on this work, which deprives children of opportunities for education and women of engaging in society. Furthermore, an unstable supply of water has a negative impact on healthcare and agriculture. From this viewpoint, Goal 6 of the SDGs sets forth the target “Ensure availability and sustainable management of water and sanitation for all.”



A handwashing campaign at the Kule refugee camp in the Gambella region, Ethiopia (Photo: Peace Winds Japan)

Japan's Efforts

Japan has the top cumulative track record in the world in the fields of water and sanitation support since the 1990s. Japan draws on its extensive experience, knowledge, and technology in these fields to provide continuous support for promoting the provision of safe water in developing countries through the means of ODA loan and grant aid, as well as technical cooperation, including the dispatch of experts and accepting trainees from developing countries. Japan also provides support through international organizations such as UNICEF.

In the Asia and Oceania regions, Japan implemented projects for the development and expansion of piped water in Indonesia, Cambodia, Viet Nam, and Laos. For example, in October 2019, Japan and Laos signed the Exchange of Notes for a grant aid to improve water supply services, including the construction of new water pipes in Luang Prabang City, which has a World Heritage Site. It is expected that this cooperation will contribute

to the development of a sustainable urban environment by increasing the population covered by the city's water supply from approximately 58,800 people in 2017 to approximately 70,000 people in 2025, three years after the completion of the project. In addition, in March 2020, Japan and Cambodia signed an Exchange of Notes for a grant aid to construct new water supply facilities in Ta Khmau City, where improvements to water supply capacity have become urgent following rapid population growth. This cooperation is expected to contribute to improving the quality of life in Cambodia through enabling access to safe water for approximately 120,000 residents in the region by 2030.

In addition, Japanese NGOs have been implementing water supply sanitation and hygiene improvement projects through the Grant Assistance for Japanese NGO Projects scheme. For example, World Vision Japan, a non-profit organization, is constructing sanitary facilities and conducting comprehensive, community-led sanitary improvement activities in Preah Vihear Province, Cambodia, where sanitary infrastructure is not well developed. In the first year of the project, three water storage tanks were constructed in three districts in Cambodia.

In parallel with these efforts, Japan is also providing large amounts of assistance in the field of water and sanitation that directly benefit local residents, such as the improvement of wells, water supply, and irrigation facilities, as well as disaster prevention measures through the Grant Assistance for Grass-Roots Human Security Projects. For example, Japan provided four wells in Côte d'Ivoire through the Project for the Construction of Wells in Grobiassoumé. Through this project, local residents are able to access safe water, reducing not only waterborne illness but also the manual labor of fetching water for women and children, which contributes to improvements in women's social advancement and children's enrollment rates.

Efforts for the improvement of the water environments in developing countries in cooperation with Japanese and local private companies and organizations are also being carried out around the world. For example, in Southwest Asia, using JICA's SDGs Business Supporting Surveys, a verification survey with the private sector for disseminating Japanese technologies for pre-stressed concrete tanks for water supply and sewage treatment system was conducted in Sri Lanka. This project made it possible to supply 14,650 households with water, and there has been progress such as the establishment of a local field office of the Japanese company involved, which is advancing plans for the construction of new tanks.

In addition, in order to eliminate the lack of local information and knowledge with regard to the problem of serious water contamination in many Asian countries, the Ministry of the Environment (MOE) is implementing

the Water Environment Partnership in Asia (WEPA). With the cooperation of the 13 participating countries ³¹ from Asia, WEPA aims to enhance water environment governance in Asia through building human networks, gathering and sharing information, and capacity building. Moreover, to contribute to achieving “halving the proportion of untreated wastewater” that is raised in Target 6.3 of the SDGs, Japan is also encouraging the spread of septic tanks in developing countries through initiatives that introduce the technology of septic tanks, legislative systems, etc. by holding workshops and seminars concerning Japan’s advanced septic tank technology, mainly for Asian regions.



A water treatment facility in Cambodia constructed through grant aid from Japan (Photo: JICA)

(3) Quality Education for All

There are as many as approximately 59 million children who cannot go to elementary school worldwide. When including secondary school, it is estimated that there are approximately 258 million out-of-school children (17% of the total) ³². In particular, the percentage of children who cannot go to school has been increasing since 2000 in Sub-Saharan Africa. Furthermore, as the World Bank points out in the World Development Report (2018), the learning crisis has also become a major problem, in which even the children who go to school cannot perform basic reading, writing, and arithmetic skills. Moreover, many children have been impacted by school closures due to the spread of COVID-19. Above all, children with disabilities, children of minority ethnic groups or those in disadvantaged communities, refugee and displaced children, and those living in remote areas are at the greatest risk of being left behind, and there are further concerns surrounding the impact of school closures on malnutrition, early marriage, and gender inequality.

To address this situation, new methods of learning, including remote learning, are being explored around the world, and Japan is also providing support using its own expertise and technology for online learning (see “Master Techniques from Japan to the World” on page 73). It is necessary to provide opportunities for education and vocational training to young people that respond to social changes and technological innovation, and foster human resources who can create innovation toward resolving global issues.

Goal 4 of the SDGs has been set up to “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.” The international community formulated the “Education 2030 Framework for Action”^{*} in 2015, with the aim of achieving this goal.

In 2019, Japan compiled the G20 Initiative on Human Capital Investment for Sustainable Development: Quality Education to Create an Inclusive, Resilient, and Innovative Society, as the G20 Presidency. The G20 Osaka Leaders’ Declaration reaffirms the commitment to promote quality education that is inclusive and fair for all people through human capital investment. In addition, in his speech to the General Debate of the 74th session of the UN General Assembly in September 2019, then Prime Minister Abe mentioned the promotion of inclusive, quality education for all girls and women and emphasized that “the essence of Japan’s international engagement can be found in the fact that we earnestly value education.”

Japan’s Efforts

Japan has traditionally placed importance on assistance in the field of education as an essential area for promoting human security and has been providing developing countries with a broad range of support, including the enhancement of basic education^{*}, higher education, and vocational training.

As one of the G20 Presidency’s initiatives, Japan announced its “Education x Innovation” initiative to support at least approximately nine million children and young people during the three-year period between 2019 and 2021. In order to allow all children to complete quality elementary and secondary education by 2030, it is essential to encourage innovation to accelerate assistance.

³¹ The 13 countries are Cambodia, China, Indonesia, Republic of Korea, Laos, Malaysia, Myanmar, Nepal, the Philippines, Sri Lanka, Thailand, Viet Nam, and Japan.

³² From pages 6 and 354 of the “Global Education Monitoring Report 2020.” <https://unesdoc.unesco.org/ark:/48223/pf0000373718>

Through this initiative, Japan will further strengthen support for education that fosters basic knowledge, STEM education ³³, development of e-learning, and more.

At TICAD7 in August 2019, as initiatives for education and human resources development in Africa, Japan announced its intention to provide quality education to three million children through measures such as science and mathematics education and improvement of the learning environment, as well as develop 5,000 highly-skilled people for STI through assistance for the Egypt-Japan University of Science and Technology (E-JUST)* and Jomo Kenyatta University of Agriculture and Technology in Kenya. It was also announced that E-JUST would receive 150 African students, and 28 African students were newly admitted in 2020.



Children learning at a kindergarten in Kampot Province, Cambodia, built through Grant Assistance for Grass-Roots Human Security Projects (Photo: Planète Enfants & Développement)

Also, Japan contributed a total of approximately \$30.58 million from 2008 to 2020 to the Global Partnership for Education (GPE)*, an international fund specialized in education. In partner countries that received support through GPE, the number of children supported by the fund between 2015 and 2018 was approximately 25 million, and three out of four have finished elementary education.

Moreover, with a focus on Niger and other West African countries, Japan has been implementing the “School for All” project since 2004, which aims to build relationships of trust between schools, parents and guardians, and local residents, as well as improve the education environment for children. In cooperation with the World Bank, the GPE, and others, Japan is spreading the project throughout the targeted African countries.

In addition, in Egypt, the introduction of Japanese-style education at local schools has been promoted

since February 2017 under the Egypt-Japan Education Partnership (EJEP) announced in 2016. 41 “Egypt-Japan Schools” that introduced this Japanese-style education were opened by October 2020. In Egypt, the “Tokkatsu-plus” model for Japanese-style education has been introduced, and primary and junior high students at above-mentioned schools are engaged in special activities, such as cleaning, chore duties, and class meetings, as the core for holistic education that aims to build harmonious character, including sensitivity and morality. Japan also cooperates in human resources development in Egypt, providing support related to learning through playing at kindergartens for pre-school children and management needed to conduct special activities for school administrators.

Furthermore, in order to encourage the development of education and improvement of its quality in the Asia-Pacific region, by contributing to a funds-in-trust within the United Nations Educational, Scientific and Cultural Organization (UNESCO), Japan is providing support for organizing the Asia-Pacific Meeting on Education 2030 (APMED2030) annually, a forum for discussing progress in the achievement of Goal 4 (Education) of the SDGs. Japan also supports initiatives toward the achievement of Goal 4 in the Asia-Pacific region including through the quality improvement of elementary, secondary, and higher education, enrichment of early childhood education, spread of non-formal education, and increasing the teaching capacity of teachers. Moreover, Japan supports human resources development in developing countries by engaging in efforts to strengthen networking among higher education institutions between Japan and ASEAN, collaborating with the industrial sector, participating in joint research projects with neighboring countries, accepting international students to Japanese institutions of higher education and other institutions in accordance with the “300,000 International Students Plan,” and a wide range of other measures.

*** Promoting Education for Sustainable Development (ESD)

“Education for Sustainable Development*”: Towards achieving the SDGs (ESD for 2030)” is a new international implementation framework from 2020 to 2030 that began on January 1, 2020 with UNESCO as the leading organization. It was adopted at the 40th Session of the General Conference of UNESCO in November 2019 and the 74th Session of the UN General Assembly in December of the same year as the successor program to the “UN Decade of ESD (UNDESD)” program (2005 to 2014) and the “Global Action Programme (GAP) on ESD” (2015 to 2019). ESD is education to contribute to the realization of all SDGs by fostering the leadership

³³ STEM is an acronym for science, technology, engineering, and mathematics, and refers to these four educational fields.

needed to build a sustainable society, and as an advocate of ESD, Japan continues to engage in the promotion of ESD as well as play a significant role in its global spread and deepening through contributions to the funds-in-trust in UNESCO. In addition, through the funds-in-trust, Japan is actively promoting ESD by implementing the “UNESCO-Japan Prize on ESD” together with UNESCO, which awards individuals and organizations that conduct excellent initiatives toward putting ESD into practice, and has been presented to 15 organizations to date (see page 157 for the voices of Japanese personnel working in UNESCO).



A JOCV for Nikkei Communities conducting an activity at the San Juan School (a Nikkei school) in the San Juan settlement, Bolivia (Photo: JICA)

Kyrgyz Republic

Project for Supporting Safe School Programme
Grant Aid (Partnership with UNICEF) (March 2017 – March 2020)

Public
nomination

The Kyrgyz Republic, a mountainous landlocked country located in the northeastern part of Central Asia, is prone to various natural disasters such as earthquakes, floods, and landslides, and the situation has worsened due to climate change in recent years. According to a survey conducted in 2014, approximately 85% of educational facilities were considered to be unsafe and could be affected by natural disasters. Thus, the safety of schools, which is directly linked to safety of children, has been a major issue for people in the Kyrgyz Republic.

In partnership with UNICEF, Japan supported a project to ensure school safety and strengthen disaster risk reduction systems, which would raise awareness of disaster risk reduction among teachers and children. Specifically, a survey was conducted regarding the safety of ten model schools for disaster risk reduction, and alarm systems, emergency exit signs, and anti-fire metal fire doors were installed in schools that had previously been ill-equipped with disaster risk reduction equipment. In addition, evacuation drills and disaster risk reduction education were conducted for 65,000 students



Children in the Kyrgyz Republic presenting drawings on the theme of disaster risk reduction (Photo: UNICEF Kyrgyzstan office)

and 3,000 teachers in 121 schools, as well as for local government officials, to enable them to take actions to save their lives in the event of disasters.

The principal of one of the model

schools said, “We utilize what we have learned to conduct evacuation drills twice a year. Thanks to the support, the children’s awareness of disaster risk reduction has increased.” Moreover, the project has contributed significantly to raising awareness of disaster risk reduction nationwide by creating a training video for teachers on disaster risk reduction in schools, as well as five educational animations on climate change and disaster risk reduction using popular Kyrgyz characters which are widely broadcast on national television.



Children at a model school participating in an evacuation drill assuming an earthquake (Photo: UNICEF Kyrgyzstan office)

In implementing the project, the UNICEF Kyrgyzstan office emphasized the importance of utilizing Japan’s knowledge and experience on disaster risk reduction. In addition, through cooperation and collaboration with the Government of the Kyrgyz Republic, it promoted the use of disaster risk analysis at the local government level and institutionalization of child-sensitive disaster risk reduction initiatives to enhance disaster risk reduction systems in schools. Furthermore, a study tour was conducted in Japan to learn about disaster risk reduction education policies and initiatives for government officials in charge of disaster risk reduction, which contributed to the capacity development of these officials.

= Glossary



***Education 2030 Framework for Action**

The Education 2030 Framework for Action succeeds the EFA Dakar Framework for Action aimed at achieving education for all, adopted at the World Education Forum in Dakar, Senegal in 2000. It was adopted at the Education 2030 High-Level Meeting, which was held to coincide with the UNESCO General Conference in 2015.

***Basic education**

The educational activities designed to enable individuals to acquire the knowledge, values, and skills necessary to live. It mainly refers to elementary education, lower secondary education (equivalent to Japanese junior high schools), pre-school education, and adult literacy education.

***Egypt-Japan University of Science and Technology (E-JUST)**

A university that was established based on an agreement (bilateral agreement) between the Government of Japan and the Government of the Arab Republic of Egypt to establish the Egypt-Japan University of Science and Technology, concluded in 2009. Based on the agreement, Japan provides technical support, including for improving education and research materials, while cooperating with universities in Japan, in order to enable E-JUST to operate as a university based on the concept of providing graduate school, research-centered, pragmatic, and international-standard education for a small number of students, which is characteristic of Japanese-style engineering education. Japan is currently implementing technical support aimed at establishing E-JUST's foundation as a top-level research university in Egypt in order for E-JUST to produce human resources in the field of industry and science and technology who will contribute to the development of the higher education sector and industries in the Middle East and Africa.

***Global Partnership for Education (GPE)**

GPE refers to an international partnership established under the leadership of the World Bank in 2002, which supports the education sector in developing countries. Its members include developing countries, donor countries and organizations, civil society, and private-sector corporations and foundations. It was renamed as GPE from Fast Track Initiative (FTI) in 2011.

***Education for Sustainable Development (ESD)**

ESD refers to education that fosters builders of sustainable societies. "Sustainable development" means development that "meets the needs of the future generations while also meeting the needs of the present generation." In order to build such a society, it is necessary to perceive a variety of challenges in contemporary society, such as the environment, poverty, human rights, peace, and development, as one's own problems and then to work to find solutions for them. For that purpose, ESD puts importance on creating new values and actions. ESD was affirmed as being the key for achieving all the SDGs in the resolutions of the 72nd Session of the UN General Assembly in 2017. This was also reaffirmed in the "ESD for 2030" from 2020, which was adopted by a resolution of the 74th Session of the UN General Assembly in 2019.

MASTER
TECHNIQUES

1

from Japan to the World

Spreading Japanese-style Quality Education by Utilizing an E-learning System**—A user-friendly system for public and private education in Uzbekistan—**

Uzbekistan, a landlocked country in Central Asia, has been promoting education, human resources development, and ICT for fostering industrial development, as the enthusiasm among its people for education grows. However, there have been major setbacks due to a shortage of teachers in public schools, challenges associated with teachers' competency, and lack of teaching materials and private educational services.

Under these circumstances, Digital Knowledge Co., Ltd., an e-learning systems developer and operator in Tokyo, implemented "Uzbekistan: SDGs Business Verification Survey with the Private Sector for Learning Management System (LMS) Application to Improve Regional School Teachers' Qualification and Eliminate Educational Disparity" through JICA's SDGs Business Supporting Surveys scheme in order to offer and promote the use of Japan's quality educational contents across Uzbekistan.

This project has introduced the e-learning education system of Digital Knowledge Co., Ltd. to the ICT center, Ministry of Public Education, for enhancement of both public and private education. Specifically, in the public education sector, the company provided online educational programs of leading Japanese educational companies customized for Uzbekistan, such as teaching method programs for school teachers and math materials for elementary and junior high school students. As for private education, it opened after-school classes for elementary and junior high school students, which incorporate the company's educational system, at public school buildings. The programs for teachers in particular have impressed Uzbek teachers who had never participated in any specific training on improving students' understanding and academic performance. Comments were heard like, "I didn't know there is such a way of teaching."

Mr. SAITO Yosuke of Digital Knowledge Co., Ltd. explained as follows: "The after-school classes that we started provide Japanese-style one-on-one tutoring, electronic abacus lessons, and other services. We initially planned to offer about two classes, but we ended up adding more classes in a hurry as word of mouth got



Students in Uzbekistan using the e-learning system (Photo: Digital Knowledge)



Teachers in Uzbekistan intently receiving teaching method training (Photo: Digital Knowledge)

around and applications flooded in. Although our original intention in applying for the scheme was to see if Japanese-style education business would be feasible overseas, we rediscovered the potential of Uzbekistan as a country with great possibilities where people are so enthusiastic about education and the necessary infrastructure is being developed."

"I can feel the great love that the people at Digital Knowledge have for Uzbekistan," said Mr. Kubota, a project formulation advisor in charge of this project at the JICA Uzbekistan Office. He continued as follows: "Normally, it is very difficult for a private company to persuade the Government of Uzbekistan and move a project forward. But Digital Knowledge is speedily advancing this project, based on the firm trust with the Ministry of Public Education. This owes to not only Uzbekistan's high expectations for the services of the company but also the fact that its enthusiasm has been relayed to the Government. It has also helped that the Deputy Minister of the Ministry of Public Education (at the time) has studied at a Japanese graduate school under JICA's Project for Human Resource Development Scholarship (JDS)* and has tremendous confidence in Japanese education."

When schools across the country closed in response to COVID-19 in March 2020, the Ministry of Public Education requested the cooperation of the company directly. "The company expanded its original plan to provide free online learning programs, and this was highly appreciated by the Government of Uzbekistan," recalled Ms. Ozawa, who was in charge of this project at the Private Sector Partnership and Finance Department of JICA's headquarters.

Built on the trust between a Japanese company and the Government of Uzbekistan, Japan's quality education and ICT are contributing to the development of Uzbekistan, while responding to the desire of its children to learn.

*See page 147 for more information on JDS.

(4) Gender and Inclusive Growth

A. Promotion of Women's Empowerment and Participation

The social norms and systems in developing countries are generally shaped by men's perspectives, which renders women to be put in vulnerable positions in many aspects. Although certain progress has been seen in women's participation in fields such as education, politics, and economy compared to the early 2000s, when the Millennium Development Goals (MDGs) were established, there are still many countries where it cannot be said that women have the same opportunities as men to participate in decision-making processes, which is not restricted to the public sphere such as high-level government decision-making, but also includes family and other private decision-making.

On the other hand, women are critical actors of development, and their participation will lead not only to the improvement of their own lives but also to more effective development. For example, improving the literacy of women who have had little or no educational opportunities so far, increases their access to correct information on public health and prevention of infectious diseases such as HIV/AIDS. This leads to appropriate family planning and promotes women's social advancement and economic empowerment. Moreover, it contributes to the inclusive economic growth of developing countries.

The 2030 Agenda for Sustainable Development (2030 Agenda) adopted at the United Nations Summit in 2015 strongly and clearly expressed that "Realizing gender equality and the empowerment of women and girls will make a crucial contribution to progress across all the Goals and targets." Moreover, Goal 5 of the SDGs seeks to "Achieve gender equality and empower all women and girls." Gender equality and promoting women's empowerment are essential for realizing "quality growth." For this purpose, it is important for men and women to participate equally in all phases of development cooperation and to reap the benefits equally.

Japan's Efforts

In order to make the 21st century a world with no human rights violations against women, Japan has been advancing its efforts in the international community to promote gender mainstreaming³⁴ and women's empowerment by setting the following three priority fields: (i) promoting women and girls' rights, (ii) improving an enabling environment for women and girls to reach their full potentials, and (iii) advancing women's leadership in political, economic, and other public fields.



A Japan Overseas Cooperation Volunteer introducing how to make cocoon crafts to members of a women's self-help group for silk farmers in India (Photo: JICA)

In March 2018, Japan contributed \$50 million to the Women Entrepreneurs Finance Initiative (We-Fi)*, whose launch was announced at the G20 Hamburg Summit. By assisting women entrepreneurs and women-owned and led small and medium-sized enterprises (WSMEs) in developing countries to overcome various obstacles they face (such as access to finance and legal systems and regulations that are disadvantageous to women), this initiative aims to promote the prompt economic independence of women in developing countries and their social and economic participation, and to realize regional stability, reconstruction, and peacebuilding. At present, We-Fi has implemented projects across 39 countries. Moreover, in March 2019, Japan held the Fifth World Assembly for Women (WAW!) at the same time as the meeting of Women 20 (W20), a group led by the private sector that makes proposals to the G20 for enhancing the economic activities of women. During the meeting, then Prime Minister Abe stated that Japan would provide opportunities for quality education and human resources development to at least four million girls and women in three years until 2020 in order to expand opportunities for education among women in developing countries. Furthermore, at the G20 Riyadh Summit in November 2020, Prime Minister Suga welcomed the commencement of activities of "EMPOWER," an initiative of the private sector for the advancement of women in leadership positions, whose launch was agreed at the G20 Osaka Summit in June 2019.

Japan also provides assistance through UN Women. Japan provided approximately \$18 million in 2019 and approximately \$22 million in 2020 to contribute to initiatives for the political participation and economic empowerment of women, the elimination of sexual and gender-based violence against women and girls, a stronger role for women in the peace and security fields, and the strengthening of gender responsive

³⁴ Integrating gender perspective into all policies, measures, and projects in order to achieve gender equality in all fields. In the field of development, it refers to the process to clarify development challenges, needs, and impacts on both men and women, at all stages of planning, implementation, monitoring and evaluation, of all policies, measures, and project, based on the premise that they have different impacts on men and women.

Zimbabwe

Emergency Grant Aid for Three Countries in Southern Africa Affected by Cyclone Idai (Capacity Building on Prevention of Sexual Abuse and Exploitation and Menstrual Hygiene Management in Cyclone Idai Affected Districts in Zimbabwe) Emergency Grant Aid (April – October 2019)

In Manicaland Province in the eastern part of Zimbabwe, a cyclone that hit the area in March 2019 caused landslides and flooding, affecting approximately 270,000 people. While emergency disaster response measures were taken in the region, including the establishment of campsites as temporary shelters, there were concerns over an increased risk of abuse and violence against women and children and the deterioration of the hygienic environment.

In light of these concerns, Japan provided \$600,000 in emergency grant aid to Zimbabwe, of which \$150,000 was allocated to a UNICEF project to prevent sexual abuse and exploitation and improve menstrual hygiene management in cyclone-affected districts.

As part of this project, UNICEF Zimbabwe focused on women's menstrual hygiene management which was often overlooked in past emergency disaster relief efforts, conducted activities for local residents to acquire knowledge and deepen understanding of hygiene management, and distributed 4,000



Students receiving menstrual hygiene management kits distributed in cyclone-affected districts of Manicaland Province (Photo: UNICEF)

menstrual hygiene management kits. Each kit contained three pieces of underwear, one comb, one toothbrush, one tube of toothpaste, one kilogram of soap, 30 disposable sanitary napkins, and five reusable sanitary napkins. Educational activities were also conducted to prevent abuse and violence and protect children from these risks.

As 2019 was also the year when the Government of Zimbabwe conducted a nationwide survey on menstrual hygiene management, Japan's contribution came to be widely known to the Government of Zimbabwe, NGOs, and international organizations. In addition, based on the experience of the project, UNICEF Zimbabwe is considering incorporating support for improved women's hygiene management in future emergency assistance projects through distribution of menstrual hygiene management kits and is working with relevant local organizations to enable domestic procurement of the contents of the kits within Zimbabwe.



Students attending a class on menstrual hygiene management (Photo: UNICEF)



Women receiving vocational training through Cash for Work assistance at the Kirkuk refugee camp in Iraq (Photo: UN Women)

policies and budgets, among others. For example, in Iraq, for the empowerment of women at the Kirkuk refugee camp, comprehensive and high-quality health

management and livelihood support were provided for 2,382 women who were victims of ISIL, and through Cash for Work ³⁵ assistance, 80 women were paid wages in exchange for engaging in sewing, food processing, and other labor. Additionally, in 2020, 11,600 masks were made by hand and sold by women in the refugee camp in order to prevent COVID-19 infections. Furthermore, 50 women were trained in necessary skills for leadership and 40 were provided with sewing machines. Moreover, psychosocial support such as counseling and awareness activities regarding legal rights were conducted for 2,302 women and girls, and among them, improvements were seen in awareness of and access to services, as well as recovery from stress of psychological trauma caused by conflict and the COVID-19 pandemic.

Japan considers that sexual violence in conflict cannot be tolerated. Therefore, Japan places importance on collaboration with the Office of the Special Representative of the Secretary-General on Sexual Violence in Conflict

³⁵ A method for supporting the independence of victims or displaced people during times of natural disasters and humanitarian crises by temporarily employing them and paying wages for their labor.

of the UN (OSRSG-SVC) ³⁶. In 2020, Japan provided over \$1 million in assistance to the OSRSG-SVC for projects in Central Africa, the Democratic Republic of the Congo, Mali, Nigeria, Somalia, and South Sudan, and has been contributing to preventing sexual violence and strengthening response capacity through comprehensive support including improving the judicial system to punish perpetrators and support systems for victims of sexual violence related to conflict.

Furthermore, based on the view that in order to realize a peaceful society more effectively, it is vital to integrate a gender perspective and to secure women's participation in all stages of conflict prevention, conflict resolution, and peacebuilding, Japan established its National Action Plan for the implementation of United Nations Security Council resolution 1325 on Women, Peace and Security (WPS) and other relevant resolutions in 2015, and has been implementing the Plan. In March 2019, the revised version was formulated. Moreover, under the G7 WPS Partnership Initiative agreed upon at the G7 Foreign Ministers' Meeting in 2018, Japan chose Sri Lanka as its partner country, and from FY2019, Japan, in cooperation with the embassies of each G7 country in Sri Lanka, has been assisting the country with the formulation of its WPS Action Plan and also providing assistance in the field

of health centered on reproductive health and for the financial empowerment of Sri Lankan women, including women who became widows due to the internal conflict over the past 26 years.



A video message by State Minister for Foreign Affairs Uto being played at the International Conference on Women, Peace and Security (WPS) held by the Government of Viet Nam and the UN (December 2020)

Through these efforts, Japan will continue to cooperate with other countries for achieving the empowerment of all women and girls, gender equality, and a society and system in which men and women support each other.

Glossary



***Women Entrepreneurs Finance Initiative (We-Fi)**

An initiative launched by the World Bank with 14 participating countries, aiming to support the economic independence of women in developing countries and to promote their social and economic participation by implementing support to overcome the challenges which women entrepreneurs and women-led SMEs in such countries face including access to finance, legal systems, and others. The types of assistance We-Fi provides include financial access assistance for women entrepreneurs, advisory service for financial institutions to facilitate greater business with women entrepreneurs, and technical assistance to improve the legal and regulatory systems of developing countries. The initiative is aiming to make more than \$1 billion in funds available, with approximately \$350 million from donor countries and additional resources from the private sector and international financial institutions.

B. Reducing Disparities (Assistance for People Who Tend to be in Vulnerable Situations)

Ongoing efforts are being made to implement initiatives toward the achievement of the SDGs. Meanwhile, a number of issues such as the difficulty in identifying where problems lie and addressing them properly from the broader national level are gradually being brought to light. Even when responding to the “increase of disparities,” similar problems exist. Challenges such as poverty, conflicts, infectious diseases, terrorism, and natural disasters have varying impact depending on the situations that individuals are in, including their country and region, or whether they are women and/or children.

The spread of COVID-19 has had a major impact particularly on the survival and livelihoods of all people placed in socially vulnerable positions. Moreover, it has been pointed out that schooling opportunities among the most vulnerable people will be restricted and women will have negative social and economic impacts, and this will lead to further growing disparity and abuse. In order to deal with this situation, it is effective to adopt an approach that takes the standpoint of individual people, which is also indispensable for the realization of a society that fulfills the principle of the SDGs, “no one will be left behind.”

³⁶ Japan's efforts regarding the prevention of sexual violence in conflict can also be found on MOFA's website (https://www.mofa.go.jp/fp/hr_ha/page23e_000466.html).

For example, as part of its cooperation on measures against COVID-19 in the ASEAN region, Japan signed an investment agreement to provide funds to microfinance institutions (MFIs) through the COVID-19 Emerging & Frontier Markets MSME Support Fund operated by Blue Orchard Finance Ltd. The cooperation aims to improve financial access and maintain employment for micro, small, and medium-sized enterprises (MSMEs), mainly women-owned businesses affected by COVID-19, and contributes to the empowerment of women, low-income people, and MSMEs (see “Project Introduction Column” on page 99 for details).

Japan's Efforts

*** Assistance for Persons with Disabilities

In order to ensure the social participation and inclusion of people in vulnerable situations in society, especially persons with disabilities, Japan pays due attention to the socially vulnerable, including persons with disabilities, when planning and implementing ODA policies. Policies for persons with disabilities cover a number of different fields, including welfare, health and medical care, education, and employment. Japan has applied the techniques and experiences it has accumulated in

these fields for measures and policies for persons with disabilities in developing countries through ODA and NGO activities.

For example, Japan carefully carries out its assistance to suit various local needs through incorporating barrier-free design in the planning of railroad and airport construction, developing vocational training centers and rehabilitation facilities, providing minibuses for their transportation, and other measures. Additionally, Japan provides a wide range of technical cooperation through JICA to enhance the capacity of organizations and personnel providing assistance to persons with disabilities. These efforts include the acceptance of trainees from developing countries and dispatch of JOCVs and experts such as physical and occupational therapists and social workers (see below Project Introduction Column regarding JOCVs' activities).

The Convention on the Rights of Persons with Disabilities ratified by Japan in 2014 has a discrete clause which stipulates that state parties would undertake measures for international cooperation and its promotion (Article 32). Japan continues to contribute to improving the rights of persons with disabilities in developing countries through ODA and other means.

Nicaragua, Saint Lucia

Self-reliance Support for Visually Impaired Persons by Other Visually Impaired Persons, Japan Overseas Cooperation Volunteer Passing on Correct Oriental Medicine Techniques from Hand to Hand

(1)(2) Senior Volunteers (Nicaragua), (3) Japan Overseas Cooperation Volunteers (Saint Lucia)
(1) 2010 – 2012, (2) 2013 – 2015, (3) On standby in Japan (3rd batch in 2019)

Mr. TSUNAKAWA Akira, an acupuncture and moxibustion massage practitioner, is a visually impaired person who has taught at a school for visually impaired persons in Japan. Mr. Tsunakawa has been dispatched twice to Managua, the capital of Nicaragua in Central America, as a Senior Volunteer.

Oriental medicine, which does not rely on drugs to treat conditions such as back pain and stiff shoulders, was attracting attention in Nicaragua. However, there was a lack of human resources who could teach correct treatment methods of the medicine. To address this gap, Mr. Tsunakawa has produced 20 Shiatsu (Japanese acupressure therapy) and Anma (Japanese massage therapy) practitioners by giving them a total of approximately 500 hours of lectures of basic medicine, Shiatsu and Anma techniques, as well as clinical practice at the University of Oriental Medicine Japan-Nicaragua in Managua, Nicaragua.



Mr. Tsunakawa passing on Shiatsu techniques to his visually impaired students from hand to hand at the University of Oriental Medicine Japan-Nicaragua in Managua, Nicaragua

In particular, he taught practical skills to students so that each of them could obtain a job and become self-reliant, while considering factors such as the degree of each student's disability. In addition, he has produced two instructors with

total blindness, acknowledging the importance of Nicaraguan instructors.

“At times, it made me feel sad to know that there were disabled people begging on the streets in between traffic.

However, I was so impressed to see that my students, who had cheerfully walked to the lectures with white canes on roads without manhole covers, eventually became Shiatsu practitioners and were supporting their families and households,” Mr. Tsunakawa said about his activities in Nicaragua.

From his experience in Nicaragua, Mr. Tsunakawa realized that support for visually impaired persons not only gives them hope for the future by demonstrating the goal of self-reliance directly and concretely, but also has a significant impact on raising awareness of people toward issues regarding disabilities. Hoping to utilize his experience and skills again in a new location, he applied for post for a JOCV in Saint Lucia, an island in the Caribbean, and secured it. He is currently preparing for dispatch to the country in Japan.



At a lecture on Anma attended by students who completed the Shiatsu course at the University of Oriental Medicine Japan-Nicaragua



Transporting a person with a physical disability to a rehabilitation center in a car donated by Japan in Ecuador

*** Assistance for Children

Generally, children tend to be in vulnerable situations, and today, there are many children around the world that have been placed in harsh environments due to the impact of COVID-19 in addition to conflicts, natural disasters, etc. Also, the number of refugee and internally displaced children is rapidly increasing, and Japan is providing a variety of humanitarian and development assistance bilaterally and through international organizations. In 2020, through the United Nations Children's Fund (UNICEF), Japan assisted by providing supplies to prevent COVID-19 infections and technical cooperation for health workers, implementing awareness activities on infection risks, and through other support for 66 countries in the Asia, Middle East, and Africa regions.

Additionally, through the Grant Assistance for Grass-Roots Human Security Projects ³⁷, Japan provides cooperation that directly benefits residents at the grassroots level. Under this scheme, Japan is implementing projects which contribute to improving the living conditions of children, such as the construction and refurbishment of elementary and junior high schools, provision of medical equipment to hospitals, and development of wells and water supply facilities.

For example, in Thoung Ninh Commune, Thanh Hoa Province, Viet Nam, Japan is cooperating in the construction of a new school building that is resilient to natural disasters at Thuong Ninh Elementary School, which has many ethnic minority children. It is expected that this assistance will improve the learning environment for 443 children who could not take sufficient classes due to classroom shortages and will also contribute to creating an educational environment resilient to natural disasters. In addition, in Colombia, Japan provided assistance to the municipality of Toluviejo in Sucre Department for the construction of a new municipality-run children's library building. This is expected to improve the reading and literacy education environment for the approximately 22,000 people, including approximately

5,000 children, in the municipality.

In Malawi, although the number of school children rapidly increased after the government made primary education free in 1994, the construction of school facilities to meet the sudden rise in school children all over the country has been significantly delayed. Under such circumstances, Japan has supported the Kapalamula Primary School in Dedza District in constructing three buildings with six classrooms, refurbishing the floors of four existing classrooms, and installing 300 two-person desks, which is expected to improve the learning environment for 2,096 children and the classroom management environment for 40 teachers.

Japan also signed an Exchange of Notes with Cambodia concerning the grant aid "Project for the Prevention of and Response to Violence against Children in Cambodia (through UNICEF)" in January 2019. Under this project, Japan is strengthening the communication skills of social workers and medical professionals, who actually come face-to-face with the children, as well as conducting training that is recognized worldwide for the eradication of violence for the government officials of Cambodia. As of 2020, approximately 1,200 government officials, social workers, and medical professionals have undertaken the training, which is expected to lead to a reduction in physical violence in educational settings, etc. and to improvement of the environment in which children who have suffered physical violence can easily consult with counselors.

Additionally, with regard to the Kyrgyz Republic, Japan signed an Exchange of Notes concerning the grant aid "Project for Enhancing the Resilience of Children to Climate and Disaster Risks (through UNICEF)" in March 2020. Through this project, Japan is installing equipment for disaster risk reduction at approximately 600 schools in the country, as well as creating and distributing disaster risk reduction manuals and conducting evacuation drills for approximately 1,800 schools. As a result, it is expected



Children in class at an early childhood education facility in El Pozo, the Dominican Republic, which was built through Grant Assistance for Grass-Roots Human Security Projects

³⁷ Details of the program and past achievements can be found on MOFA's website (<https://www.mofa.go.jp/mofaj/gaiko/oda/files/000071826.pdf>).

to mitigate natural disaster risks for approximately 900,000 children and improve disaster risk reduction capacities with schools serving as base.

Furthermore, in Afghanistan, Japan signed an Exchange of Notes regarding the grant aid “Project for Infectious Diseases Prevention for Children” in November 2020. This cooperation enables vaccinations for approximately 1.43 million babies under the age of one, approximately 3.19 million women in the reproductive age group, and approximately 10 million children under the age of five through support for the provision of vaccines for routine immunizations scheduled in 2021 as well as a polio vaccination campaign aimed at infants. Furthermore, it is also expected that the steady implementation of these campaigns for routine immunizations and the polio vaccine will contribute to preventing infections and deaths from preventable diseases and improve the health of children and women in the reproductive age group across all of Afghanistan (see also “Polio” on page 66 and “Project Introduction Column” on page 65 for details on support for polio prevention and eradication).

(5) Culture and Sports

Cultural heritage that symbolizes a country is a source of pride for people, and, as tourism resources, can be effectively utilized to improve the livelihoods of the residents in the surrounding areas. On the other hand, a number of cultural heritage sites are in danger due to the lack of funds, equipment, and technology among others, and assistance to protect such cultural heritages is required. In addition, the preservation and promotion of culture, such as invaluable cultural heritages that are shared by all humankind, are an issue that should be addressed not only by the countries with cultural heritage in danger, but also by the entire international community.

Moreover, sports can not only enhance the quality of people’s lives, as they cultivate a sense of respect for others, a spirit of mutual understanding, and awareness of norms, but also help maintain and improve health. The influence and positive power of sports play the role of “catalyzer” for the development and growth of developing countries.

Japan's Efforts

Japan has provided assistance for the promotion of culture and higher education as well as the preservation of cultural heritage and promotion of sports in developing countries through the Cultural Grant Assistance* since 1975. Specifically, Japan has constructed or rehabilitated facilities for sports and culture or higher education and research institutions and provided equipment for those facilities in developing countries. Japan has also

constructed facilities and provided equipment for the restoration, preservation, and utilization of cultural heritage and property. Such facilities built in developing countries also serve as hubs for spreading information about Japan and holding cultural exchanges with Japan, as well as deepening understanding of Japan and fostering a sense of affinity toward Japan.

In 2020, Japan approved 19 projects to provide support in the fields of education, including Japanese language education, preservation of cultural heritage, and sports under the Cultural Grant Assistance. Furthermore, Japan provided sports assistance using ODA and “Projects for Sports Diplomacy Enhancement” to advance “Sport for Tomorrow,”³⁸ a program launched for the purpose of international contribution through sports. Under the program, Japan aimed to spread the value of sports and the Olympic and Paralympic movement as the host country of the Olympic and Paralympic Games Tokyo 2020, which had been postponed until 2021³⁹. In addition, Japan has dispatched 142 JOCVs in the field of sports.



A scene from the international friendly practice match between youth rugby teams from India and Sri Lanka, and JOCVs dispatched to each country's rugby association instructing each team. The match was held to promote friendship and goodwill among players of both countries, improve their skill of rugby, popularize it in these countries, and realize the healthy development of youth through international cooperation. (Photo: JICA)

Moreover, Japan provides support for the restoration and preservation of cultural heritage, including equipment provision and preliminary studies and surveys, through the “Japanese Funds-in-Trust” established in the United Nations Educational, Scientific and Cultural Organization (UNESCO). Japan contributed approximately ¥1 billion in FY2020 and has implemented multiple projects in the field of cultural heritage through the fund. Placing a particular emphasis on human resources development in developing countries, so as to enable people to protect the cultural heritage of their own country by themselves in the future, Japan also endeavors to dispatch international experts, mainly Japanese experts, as well as hold workshops in order to transfer the techniques and

³⁸ Sport for Tomorrow Consortium (<https://www.sport4tomorrow.jpnsport.go.jp/>)

³⁹ MOFA's efforts regarding the Tokyo 2020 Olympic and Paralympic Games (https://www.mofa.go.jp/p_pd/ep/page23e_000467.html)

expertise to developing countries. In addition to tangible cultural heritage, Japan also supports the safeguarding of intangible cultural heritage such as traditional dances, music, handcraft techniques, and oral lore (oral traditions) by implementing successor training, records conservation, the creation of safeguard mechanisms, and other activities through the Japanese Funds-in-Trust.

Furthermore, Japan is also conducting training programs with the aim of improving capabilities for the protection of cultural heritage by inviting young experts

involved in cultural heritage protection from the Asia-Pacific region to Japan as part of the “Project for the Promotion of Cooperation for the Protection of World Heritage and Other Cultural Properties in the Asia-Pacific Region.” In addition to conducting biennial training on maintenance and repair methods for wooden buildings and survey records of archeological remains, training on the effective utilization and management of cultural heritage for experts in Bhutan and other activities were conducted virtually in 2020.

Glossary



***Cultural Grant Assistance**

Cultural Grant Assistance is a grant aid to procure equipment and supplies and to construct and rehabilitate facilities for the promotion of culture and higher education in developing countries. It is intended to encourage cultural and educational advancements in developing countries as well as cultural exchanges between Japan and these countries with an aim of promoting friendly relationships and mutual understanding. It includes Cultural Grant Assistance, which provides assistance to governmental organizations of developing countries, and Grant Assistance for Cultural Grassroots Projects, which provides assistance to NGOs and local public entities for small-scale projects.

(6) Environment and Climate Change Actions

The importance of initiatives to address environmental and climate change issues is recognized globally, as such issues have been repeatedly taken up as one of the main topics at the G7 and G20 Summits and are also mentioned in the SDGs adopted at the UN Summit in 2015. Japan has been vigorously working on addressing these issues and has also been providing assistance to developing countries through the Global Environment Facility (GEF)*, a financing mechanism for major international environmental treaties such as the Convention on Biological Diversity and United Nations Framework Convention on Climate Change, as the world's top donor. Japan will continue to actively participate in discussions in the international community.

Japan's Efforts

***** Conservation of the Marine Environment**

Marine plastic litter is a pressing issue that can have an adverse impact on the marine ecosystem, tourism, fisheries, and human health. In recent years, measures to address this issue have become increasingly important. At the G20 Osaka Summit in June 2019, under Japan's leadership as the G20 Presidency, the member countries shared the Osaka Blue Ocean Vision, which aims to reduce additional pollution by marine plastic litter to zero by 2050 and has now been shared by 86 countries and regions as of December 2020. In order to achieve the Vision, Japan announced that it would support capacity building, infrastructure development for waste management in developing countries, and launched the MARINE Initiative that focuses on (i) MANagement of wastes, (ii) Recovery of marine litter, (iii) INnovation, and (iv) Empowerment, to encourage effective marine plastic litter measures worldwide. Under the Initiative, Japan continues to support capacity building in developing

countries to promote waste management, collection of marine waste, and innovation through specific measures.

In 2018 and 2019, Japan contributed approximately ¥2.84 billion in support through international organizations including the United Nations Environment Programme (UNEP) in order to build scientific knowledge and develop capacities for measures against marine plastic litter in the Asia region. The CounterMEASURE I and II projects by UNEP's Regional Office for Asia and the Pacific have conducted awareness activities for local people and developed a method for monitoring the flow of plastic into the ocean in the lower Mekong River basin on the Indochinese Peninsula as well as the Southwest Asia region. In developing the method, the technology of Japanese companies that detects areas of plastic pollution was used to identify 886 “hotspots” with high risks for plastic leakage. Through the project, approximately 1,692 kg of plastic have been collected, approximately 823 kg of plastic have been analyzed for research, and the number of participants in awareness and cleanup activities has climbed to approximately 4,690 up until now.

Furthermore, based on the G20 Implementation Framework for Actions on Marine Plastic Litter adopted at the G20 Ministerial Meeting on Energy Transitions and Global Environment for Sustainable Growth in 2019, Japan has assisted in compiling the “G20 Report on Actions against Marine Plastic Litter: Second Information Sharing based on the G20 Implementation Framework” at the 2020 G20 Environment Ministers' Meeting and under Saudi Arabia's initiative.

Moreover, as part of expanding assistance for ASEAN concerning marine plastic litter that was announced at the Japan-ASEAN Summit Meeting in November 2018, Japan is providing trainings in Japan on survey and analysis methods on marine plastic litter, including

microplastics. The training was conducted virtually in January 2021 with a total of 17 attendees, including five from Indonesia and four each from Myanmar, Thailand, and Viet Nam.

In addition, Japan is conducting human resources development as well as awareness and public relation activities for environmental conservation centered on reducing marine plastic litter in ASEAN countries. For example, with contributions to the Japan-ASEAN Integration Fund (JAIF) and through various organizations such as the Ministry of Natural Resources and Environment of Viet Nam, NHK International, Inc., and the Institute for Global Environmental Strategies (IGES), Japan is providing assistance for the formulation of national action plans for ASEAN member states, regional collaborative research and capacity building for the monitoring and reduction of marine debris from fisheries in Southeast Asia, documentary video production on marine plastic waste, and the implementation of the 2019 Bangkok Declaration on Combating Marine Debris. Furthermore, at the Eighth Japan-China-ROK Trilateral Summit held in December 2019, Japan, China, and the Republic of Korea affirmed that they would support and promote joint efforts to handle issues of common interest including marine plastic litter.



An online training to learn research and analytical methods on marine plastic litter, including microplastics

*** Conservation of Ocean Resources

Japan backs sustainable fishing and the sustainable development of fishing communities within the ASEAN region, and hence is conducting trainings and workshops on countermeasures against illegal, unreported, and unregulated (IUU) fishing through JICA and with the cooperation of the Southeast Asian Fisheries Development Center (SEAFDEC). Curbing the impact on fish ecosystems by IUU fishing that exceeds regulatory thresholds will lead to enhanced sustainability of the fishing industry, one of the core industries for ASEAN countries.

*** Climate Change

Climate change is a global issue that requires a cross-border approach, and strengthening concerted efforts by the international community including both developed and developing countries is needed. Given the fact that the Kyoto Protocol adopted in 1997 imposed the obligations of reducing greenhouse gas (GHG) emissions only on developed countries, the Paris Agreement was adopted at the 21st Session of the Conference of the Parties to the UN Framework Convention on Climate Change (COP21), held in Paris in 2015, as a new framework under which all countries would work toward GHG emission reductions. The Paris Agreement entered into force in 2016. Although COP26, which had been scheduled to be held in Glasgow, the UK in November 2020, was postponed to November 2021 due to the impact of COVID-19, discussions have continued on topics such as the adoption of implementation guidelines for market mechanisms.

In March 2020, Japan submitted its Nationally Determined Contribution (NDC) ⁴⁰ to the UN and announced that reviews of the reduction targets in the NDC would be carried out consistently with revisions of the energy mix, aiming at aspiring figures to reflect further ambitious efforts.

Additionally, in his policy speech to the Diet in October 2020, Prime Minister Suga declared that by 2050, Japan will aim to reduce greenhouse emissions to net-zero, that is, to realize a carbon-neutral, decarbonized society to devote itself to the greatest possible extent to bring about a green society, while focusing on a virtuous cycle of the economy and the environment as a pillar of Japan's growth strategy. He also noted that addressing climate change is no longer a constraint on economic growth and paradigm shift is needed to a mindset that proactive climate change measures bring transformation of industrial structures as well as the economy and society, leading to dynamic economic growth. In addition to a sincere welcome and appreciation for this courageous decision expressed by UN Secretary-General Guterres, the policy was met with high acclaim by the international community, including Chile, COP25 President, and the UK, COP26 President.

On December 12, 2020, the Climate Ambition Summit 2020 was co-hosted by the UK, France, and the UN in partnership with Chile and Italy as a summit-level event. This summit aimed to commemorate the fifth anniversary of the adoption of the Paris Agreement and to call for the international community's further efforts against climate change. Leaders from 75 countries and regions, international organizations, global companies, NGOs,

⁴⁰ Parties set their greenhouse gas emission reduction targets and formulate measures to achieve them, which are submitted as their Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC) secretariat.



A video message by Prime Minister Suga played at the Climate Ambition Summit 2020 (December 2020)

and youth groups participated, with Prime Minister Suga attending from Japan. In his video message, Prime Minister Suga spoke of Japan's efforts in aiming to achieve a carbon-neutral society by 2050.

Moreover, Japan is actively supporting climate change actions in developing countries. In 2015, Japan announced the provision of approximately ¥1.3 trillion in 2020 in aid from public and private funds in order to support developing countries in addressing climate change, and is steadily working toward reaching that goal.

As a specific example of bilateral aid, Japan supported the establishment of the Pacific Climate Change Centre in Samoa to which Japan is dispatching experts on climate change countermeasures. Through the Centre, Japan is striving to develop human resources in the

Pacific island countries vulnerable to climate change. Additionally, in Tonga, Japan assisted in installing a wind power generation system with tiltable wind turbines and other machinery to support electricity supply that is resilient to natural disaster, promoting the introduction of renewable energy and contributing to its stable energy supply in the country.

As part of its assistance for measures against climate change in developing countries, Japan is promoting the "Joint Crediting Mechanism (JCM),"* which facilitates the global application of advanced low-carbon and decarbonized technologies to the world including to developing countries. This will contribute to GHG emission reductions in developing countries and enable the bilateral sharing of the results. In 2013, Japan signed the first bilateral document pertaining to the JCM implementation with Mongolia, and to date, it has established the JCM with 17 countries. As of the end of 2020, the JCM credits have been issued from 37 energy-saving and renewable energy projects in Cambodia, Indonesia, Laos, the Maldives, Mongolia, Palau, Saudi Arabia, Thailand, and Viet Nam. These JCM projects are contributing to GHG emission reductions worldwide.

With regard to export support for coal-fired power generation projects, in 2020, Japan tightened its export policy for assistance for newly planned projects from the perspective of engaging responsibly in the world's effective decarbonization. Japan will deepen its involvement in

Solomon

Project for Capacity Development for Sustainable Forest Resource Management in Solomon Islands

Technical Cooperation Project (September 2017 – August 2022)

Approximately 90% of the national land of Solomon is covered by forest (as of 2020). The forestry industry is one of the major industries, and revenues from the export of timber (mainly logs) account for approximately 65% of foreign currency earnings. In recent years, export volume has also been increasing in response to growing demand for timber in the Asian region.

This has raised concerns about the depletion of forest resources and forest degradation caused by large-scale commercial logging. For example, in the 10 years from 2000 to 2010, it is said that the canopy cover, which is the area of branches and leaves of the upper parts of trees, decreased by more than 20% on approximately 160,000 hectares of forests. In addition, since the majority of the forests are privately owned, it is important to promote the sustainable use of forest resources and raise the awareness of local residents about the danger of forest degradation.



A project meeting led by officials of the Ministry of Forestry and Research (Photo: JICA)

Under these circumstances, this project is supporting the strengthening of the capacity of the Ministry of Forestry and Research for sustainable forestry.

Project experts are working closely with the Ministry of Forestry and

Research to provide technical support for forest policy and forestry information management promoted by the ministry, as well as support to improve the coordination and leadership capabilities of the ministry's officials. In addition, through pilot activities with the participation of local residents, their awareness and ownership regarding the sustainable use of forests and forest lands have improved, and as a result, a way of life that is not too dependent on forest resources is gradually being realized.

Furthermore, in cooperation with the Ministry of Forestry and Research, the project is playing a central role in coordinating with supporting organizations working in the forest sector by operating the Secretariat of the Forest Sector Technical Working Group. In this way, Japan's cooperation is contributing to the forestry policy in Solomon and is having significant inputs on the sustainable use of forest resources.



As a part of the pilot activities, a JICA expert instructing a local resident on community boundary demarcation (Photo: JICA)



The Pacific Climate Change Centre in Samoa, which serves as base for the work of Pacific island countries against climate change (Photo: JICA)

the partner country's energy and climate change policy, leading the realization of a decarbonized society.

Furthermore, Japan supports developing countries through its contribution to the Green Climate Fund (GCF)*, the world's largest multilateral climate fund. Japan has pledged up to \$3 billion to the fund, putting effort into its support for countries vulnerable to the impacts of climate change as the fund's second largest donor country. In the GCF, a total of 159 projects have been approved by December 2020, with a large number of them entering the implementation phase, which in total are expected to reduce GHG emissions by 1.2 billion tons and benefit 410 million people through support for adaptation measures. Additionally, from Japan, JICA and MUFG Bank have been approved as "Accredited Entities" that are entitled to develop GCF projects, and to date, two projects by MUFG Bank have been adopted (construction of solar power and pumped-storage hydroelectricity facilities in Chile (July 2019) and support for sustainable private forestry projects in seven countries in Sub-Saharan and South American region (March 2020)).

*** Biodiversity

Expansion in the types, scope, and scale of human activities has given rise to serious concerns about further degradation of habitats and the destruction of the ecosystem in recent years. Japan places importance on biodiversity initiatives, such as hosting the 10th Meeting of the Conference of the Parties to the Convention on Biological Diversity* (COP10) in Nagoya City, Aichi Prefecture in October 2010. With the aim of providing support for measures such as the capacity development of developing countries toward the achievement of the Aichi Biodiversity Targets*, Japan contributes to the "Japan Biodiversity Fund,"* through which the Secretariat of the Convention organizes workshops to support the implementation of the National Biodiversity

Strategies and Action Plans. In addition, as part of the process of formulating the Post-2020 Global Biodiversity Framework, including the next global goals that will replace the Aichi Biodiversity Targets, the Open-ended Working Group and other meetings have been held, during which Japan also participated in and contributed to the discussions.

In recent years, illegal trade in wildlife has become an increasingly serious issue. It is also drawing the attention of the international community as one of the sources of funding for international terrorist organizations. Along with actively participating in the discussions at the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Japan works on resolving these issues in cooperation with the international community through contributing to projects implemented by the CITES Secretariat. Specifically, Japan has supported the construction of facilities for implementing elephant poaching countermeasures among other initiatives.

*** Environmental Pollution Control Measures

In developing countries, regulatory controls on hazardous chemical materials are often not in place, and sometimes lead to environmental pollution and damage to health. Japan has accumulated abundant knowledge, experience, and technology related to environmental pollution control measures and has been utilizing them to solve environmental pollution problems in developing countries. Japan has also been conducting technical cooperation in the chemical industry, such as dispatching experts to developing countries and accepting trainees from them, including in the areas of environmental management techniques, analysis techniques and risk evaluation for environmentally hazardous substances, and trace chemical analysis techniques.

At the Conference of Plenipotentiaries on the Minamata Convention on Mercury held in Japan in 2013, Japan took the lead in the adoption of the "Minamata Convention on Mercury" as the President, and this Convention entered into force in August 2017. Japan is exercising continuous leadership in promoting the management of global mercury pollution by proactively transferring to the world its technology and know-how on preventing adverse effects caused by mercury, accumulated through its experience with the Minamata disease ⁴¹. In December 2020, Japan, among other things, held an online training regarding the management of mercury for ten countries with UNEP-ROAP as the implementing institution in order to provide support for developing countries.

Moreover, in the field of waste management, based

⁴¹ Minamata disease is a toxic nervous disorder caused by ingesting fish and shellfish contaminated with methylmercury compounds discharged from chemical plants. The disease was officially acknowledged in May 1956 in and around Minamata Bay area in Kumamoto Prefecture, and in May 1965 in the Agano River basin of Niigata Prefecture.

on the “MARINE Initiative,” in addition to providing training for 10,000 officials engaging in waste management around the world by 2025 Japan held the 10th Regional 3R and Circular Economy Forum in Asia and the Pacific jointly with the United Nations Centre for Regional Development (UNCRD) as a webinar series over six sessions from November to December 2020. During the Forum, various countries shared information on systematic and technological aspects useful for the promotion of 3R ⁴² and the circular economy in the Asia-Pacific region, and as the outcome document, the “State of Plastics Waste in Asia and the -Pacific- Issues, Challenges and Circular Economic Opportunities” report summarizing the overview of waste issues in the Asia-Pacific region was adopted.

In November 2020, Japan also signed an Exchange of Notes with Cambodia on the “Project for Combating Marine Plastic Litter.” In cooperation with the United Nations Development Programme (UNDP), the project will promote 4R (Refuse, Reduce, Reuse, Recycle) and carry out operations to raise awareness of waste

disposal among residents and corporations. By aiming to improve the environments of urban areas and to reduce the amount of plastic waste discharged into the ocean through the Mekong River, the project is expected to improve the urban living environments for Cambodia’s citizens and contribute to Goal 14 of the SDGs, “Life Below Water.”

Moreover, as a model project for waste management support in Africa under the African Clean Cities Platform (ACCP)*, Japan has provided support for the Hulene final waste dumping site in Mozambique. Following an accident in which a waste pile collapsed due to heavy rains, Japan has supported the prevention of further collapse and future safety measures by applying the “Fukuoka method” at the dumping site through pilot construction utilizing counterpart funds and on-site guidance by experts. This “Fukuoka” method was developed by Japan and is being introduced in waste dumping sites around the world, such as Asia and Africa. The first construction for safety measures, which began in 2019, was completed in October 2020.

= Glossary



*Global Environment Facility (GEF)

A multilateral funding mechanism providing primarily grant-based financing for projects that contribute to global environmental conservation in developing countries. Established in 1991, 183 countries including Japan participate (as of June 2020). The World Bank acts as trustee. Through 18 implementing organizations including MDBs (World Bank, ADB, etc.) and UN organizations (UNDP, UNEP, etc.), it assists in the five areas of biodiversity conservation, measures against climate change, pollution prevention in international waters, measures against land degradation, and measures against chemicals and waste.

It is designated as the financing mechanism to five international conventions: United Nations Framework Convention on Climate Change, Convention on Biological Diversity, UN Convention to Combat Desertification, Stockholm Convention on Persistent Organic Pollutants, and Minamata Convention on Mercury.

*Joint Crediting Mechanism (JCM)

A mechanism to evaluate contributions by Japan for GHG emission reductions or removals in a quantitative manner through the provision of advanced decarbonized technologies, products, systems, services, and infrastructure to developing countries and through the implementation of greenhouse gas reduction projects, and to utilize the achieved reductions as “credit” to achieve Japan’s emission reduction target.

*Green Climate Fund (GCF)

A multilateral climate fund established by the decision of the Cancun Agreements adopted at COP16 in 2010, in order to support developing countries in reducing/sequestering their greenhouse gases (mitigation) and enhancing their ability to respond to climate change (adaptation).

*Convention on Biological Diversity (CBD)

A convention adopted in 1992 to advance efforts to address biodiversity issues on a global scale. The objectives of the CBD are the following: (i) conservation of biological diversity, (ii) sustainable use of the components of biological diversity (utilizing living things, etc. for resources into the future while maintaining diversity at the levels of ecosystems, species, and genes), and (iii) fair and equitable sharing of the benefits arising from the utilization of genetic resources. Through the provision of economic and technical assistance to developing countries from developed countries, the international community as a whole facilitates the conservation and sustainable use of biological diversity worldwide.

*Aichi Biodiversity Targets (The Strategic Plan for Biodiversity 2011 - 2020)

Aichi Biodiversity Targets were set out in the Strategic Plan for Biodiversity 2011 - 2020 of the CBD adopted at COP10 in 2010. It sets a goal to realize “Living in Harmony with Nature” by 2050 and established 20 individual short-term targets called the “Aichi Biodiversity Targets” in order to implement actions to halt the loss of biodiversity by 2020.

*Japan Biodiversity Fund

A fund established in the Secretariat of the CBD by Japan during its COP10 Presidency with the aim of cultivating capacities in developing countries for the achievement of the Aichi Biodiversity Targets. Japan contributed a total of ¥5 billion in FY2010 and FY2011.

*African Clean Cities Platform (ACCP)

Established in April 2017 by the Ministry of the Environment together with JICA, the City of Yokohama, UNEP, and the UN Human Settlement Programme (UN-Habitat) aiming to share knowledge on waste management and promote the achievement of the SDGs in Africa. 65 cities in 37 countries in Africa have joined, holding plenary sessions, creating various guidelines and educational materials, planning study tours, and more.

⁴² A term referring to the first letter of Reduce (reduce waste), Reuse, and Recycle.



Dr. MATSUFUJI Yasushi, Professor Emeritus at Fukuoka University and developer of the “Fukuoka method,” providing on-site guidance in a project supporting urban waste management (through UN-HABITAT) in Ethiopia, one of the ACCP’s initiatives

(7) Mainstreaming of Disaster Risk Reduction, Measures of Disaster Risk Reduction, and Post-Disaster Recovery and Creating Sustainable Cities

In developing countries that are vulnerable to disasters, the poor are more likely to be affected significantly and displaced by disasters. In addition, protracted secondary damage, such as the deterioration of sanitary conditions and food shortages, can increase the severity of the issue and have a significant impact on the entire society and economy in developing countries. Therefore, it is necessary to build a disaster-resilient and flexible society to protect human lives from disasters. At the

same time, efforts aimed at sustainable development are needed. Among them, it is important to promote the “mainstreaming of disaster risk reduction” that introduces the perspective of disaster risk reduction in all the development policies and plans.

Moreover, in recent years, attention has been focused on the various issues relating to the management of cities, which serve as primary settlement areas of humans and are the focal points of economic, social, and political activities. For example, such issues include measures to handle the disposal of the substantial amount of waste emitted in urban areas and suburbs, prevention of air, water, and other pollution, development of infrastructure facilities including sewage and waste treatment systems, and responses to rapid population increases and the consequent rapid pace of urbanization. Addressing these issues and engaging in efforts to realize sustainable cities have become priorities for development cooperation.

Thus, among the SDGs, Goal 11 sets forth the following task: “Make cities and human settlements inclusive, safe, resilient and sustainable.” Likewise, there is growing international interest in resolving the issues of human settlements, including realizing sustainable cities.

Nepal

Disaster Risk Reduction (DRR) Strengthening Project in Chitwan District (Phase 1 and 2)

Grant Assistance for Japanese NGO Projects (November 2017 – November 2019)

Public nomination

In Madi, Chitwan District, located on the plains of southern Nepal, there are several large and small rivers flowing from south to north that would frequently overflow every year during the rainy season, causing flood damage to fields and houses. In response, SHAPLA NEER = Citizens’ Committee in Japan for Overseas Support, a Japanese non-profit organization, implemented a project to reduce the disaster risk of entire rivers based on the concept of “One River One Community,” broad-area watershed management that works on flood countermeasures spanning from upstream to downstream. Started as a self-funded project in 2016 covering eight villages near the Bandarmudhe River in Madi, SHAPLA NEER has been implementing the disaster risk reduction project for three years from 2017 through the Grant Assistance for Japanese NGO Projects.

As a direct measure to reduce flood risk, infrastructure construction works were carried out based on surveys and technical guidance by Japanese experts in landslide and flood prevention techniques, such as widening the river to build earthen embankments and constructing revetments with gabions, boxes, or cages filled with rocks, in dangerous areas with flood risk. In addition, in the Bandarmudhe River Basin, the project encouraged local people to form community disaster risk reduction committees, and through regular meetings of these committees, developed disaster risk reduction maps (hazard maps) for each village. Moreover, the project worked to raise awareness of disaster risk reduction among local residents by providing them with hand crank sirens to warn their communities in case of heavy rain.

As a result, no floods have been reported in the target area even after three rainy seasons since the project started. In addition, local residents are now able to act in advance to prevent disasters, for instance by using sirens to warn downstream communities of danger from upstream communities. Prior to this, they used to evacuate just before or even after the river had overflowed. Furthermore, Madi City Council highly praised these initiatives and allocated a budget for flood prevention measures. This shows that the SHAPLA NEER initiative has become sustainable, promoting self-reliant growth in line with the basic principle of Japan’s ODA.



Local residents drawing a map on the ground to identify flood-prone areas and safe areas in the community in order to make a hazard map (Photo: SHAPLA NEER = Citizens’ Committee in Japan for Overseas Support)

*** Cooperation in Disaster Risk Reduction

Japan utilizes its enriched knowledge and technology acquired through its past experiences with natural disasters, such as earthquakes and typhoons, to provide proactive support for disaster risk reduction and post-disaster recovery measures, alongside emergency assistance. In 2015, as a result of the Third UN World Conference on Disaster Risk Reduction held in Sendai City, the Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework) was adopted. The Sendai Framework incorporated ideas proposed by Japan, such as the “mainstreaming of disaster risk reduction,” the importance of investment in disaster risk reduction, the commitments of diverse stakeholders, the concept of “Build Back Better,” and the importance of women’s leadership.

Furthermore, then Prime Minister Abe announced the Sendai Cooperation Initiative for Disaster Risk Reduction Phase 2 in 2019 as a new support initiative that would become Japan’s future basic policy for cooperation in the field of disaster risk reduction. Japan demonstrated its attitude to further contribute to the international community by utilizing its advanced expertise and technology in the field of disaster risk reduction. Specifically, in addition to providing support for at least five million people over the four-year period from 2019 to 2022 for flood countermeasures and other measures, Japan also announced human resources development for a total of 48,000 officials and local leaders and disaster risk reduction education for a total of 37,000 children who will create the next generation. Such efforts by Japan enhanced not only the quality of building structures and improvement of disaster monitoring facilities in each country, but also the development of human resources in fields such as laws and plans enactment related to disaster risk reduction, formulation of disaster risk reduction policies, and disaster monitoring. Consequently, the mainstreaming of disaster risk reduction is progressing in each country.



A disaster risk reduction training by a JICA expert in Honduras (Photo: JICA)

In addition, at then Prime Minister Abe’s encouragement at the UN General Assembly in December 2015, a resolution was adopted to establish November 5 as World Tsunami Awareness Day in order to raise

awareness of tsunamis. Accordingly, the “High School Students Summit on World Tsunami Awareness Day 2019 in Hokkaido” was held in Sapporo in September 2019 and the “Third World Tsunami Museum Conference” was held online in November 2020.

Moreover, Japan is providing disaster risk reduction cooperation through international organizations. For example, in close cooperation with UNDP, Japan is implementing projects including the formulation of tsunami evacuation plans and tsunami evacuation drills for countries at high tsunami risk in the Asia-Pacific region. Based on World Tsunami Awareness Day, phase I of the project provided support from a practical local perspective for raising awareness on tsunami disaster risk reduction and strengthening disaster risk reduction capabilities and systems in each country. The project was implemented from June 2017 to November 2018 aimed at helping community residents including children in areas vulnerable to tsunamis to learn how to prepare for tsunamis and how to act when a natural disaster occurs. Under the project, tsunami disaster management plans were formulated and updated, and programs for tsunami education were implemented at a total of 115 schools across 18 target countries with 61,175 people participating in evacuation drills. The Regional Guide for Schools to Prepare for Tsunamis was also developed and used. Under phase II ⁴³ of the project, which began in December 2018 based on this experience and with a target period through July 2020, the institutionalization of disaster risk reduction has been promoted in Palau, with a Presidential Proclamation declaring September as National Preparedness Month. Also, teacher and other staff trainings were conducted at 136 schools, and the formulation and revision of tsunami disaster management plans as well as programs for tsunami education were implemented at 202 schools across 11 countries, with 88,841 students, teachers, and other school personnel participating in tsunami evacuation drills.

Additionally, Japan also cooperates with the United Nations Institute for Training and Research (UNITAR). Every year since 2016, the UNITAR Hiroshima Office has implemented a human resources development project (lectures, study tours to domestic disaster-affected areas, etc.) related to women’s roles and leadership during times of natural disasters, particularly in the event of tsunamis, targeting female government officials and others in developing countries vulnerable to natural disasters, with the aim to spread and raise awareness of World Tsunami Awareness Day. Through this project, 123 people have participated from 18 Pacific and Indian Ocean island countries by the end of 2019.

*** Realizing Sustainable Cities

Based on the Development Cooperation Charter,

⁴³ Targeting 18 countries in the Asia-Pacific region (5 of which are newly added).

Japan implements initiatives to resolve global issues directly related to human settlements, including efforts for promoting disaster risk reduction, recovery from natural disasters, and a sound water cycle. In particular, drawing on its know-how and experience, Japan develops infrastructure, including water and sewage, waste, and energy facilities. In addition, Japan carries out disaster risk reduction programs, human resources development, etc. based on the concept of “Build Back Better,” striving to build cities that are more resilient to natural disasters after rebuilding. Furthermore, Japan implements initiatives through providing assistance to the United Nations Human Settlements Programme (UN-Habitat), which promotes sustainable urban development. One example can be seen in Japan’s collaboration with the UN-Habitat Regional Office for Asia and the Pacific (ROAP), based in Fukuoka, to introduce the environmental technology of private-sector companies and local governments in Japan to their overseas counterparts.

(8) Food Security ⁴⁴ and Nutrition

The number of chronically undernourished people in the world is estimated at 687.8 million (approximately one in 11 people in the world) in 2019, according to the “State of Food Security and Nutrition in the World report 2020” jointly prepared and published by the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD), the World Food Programme (WFP), the United Nations Children’s Fund (UNICEF), and the World Health Organization (WHO). Although the number of chronically undernourished people had been on a declining trend for more than 10 years until 2014, it has risen by over 60 million people since the trend was reversed in 2015. In order to achieve Goal 2 of the SDGs, “End hunger, achieve food security and nutrition improvement, and promote sustainable agriculture,” it is vital to put in greater effort. Furthermore, although a provisional estimate, the possibility of a further 80 million to 130 million people falling into malnutrition has been pointed out as a result of the economic decline caused by the spread of COVID-19. Hence, there are calls around the world to accelerate and expand action toward strengthening resilience and adaptability against this grave food crisis.

In order to ensure food security, there is a need for multifaceted measures based on international coordination. These measures include not only a sustainable increase in the production of food, but also improvement of nutrition, establishment of a social safety net, provision of necessary food assistance, and implementation of countermeasures against pests and infectious diseases among livestock. Improving the nutritional status during the first 1,000 days from pregnancy to the child’s second birthday is said to be particularly important as it has a significant impact on the

child’s long-term growth thereafter.

Moreover, since many of the poor in developing countries live in the rural area and the majority depend on agriculture for their livelihoods, it is also important to tackle the development of agriculture and farming communities. Furthermore, many farmers in developing countries are unable to sell their agricultural products at a high price, and this, among other factors, makes it difficult for them to get out of poverty. Thus, one of the proposed solutions for this is to build a food value chain. This is an initiative in which many stakeholders, including the farmers, suppliers of the necessary farming implements such as seeds, fertilizers, and farming machinery, processing companies of agricultural produce, transportation and distribution companies, and retailers, cooperate to create a chain that can enhance the added value of agricultural produce from the stages of production, to manufacturing and processing, distribution, and consumption. Specifically, the added value of agricultural produce includes improving the quality of products, developing attractive new products, reducing transportation costs, increasing sales opportunities by expanding the sales network, and other activities.

Japan’s Efforts

Japan proactively addresses food-related problems as a global issue, giving priority to cooperation for the promotion of agriculture, forestry, and fisheries, including the development of food value chains. In the short term, Japan provides food assistance to developing countries to avert food shortages, and in the medium to long-term, it aims to help increase and improve agricultural production and productivity in developing countries in order to prevent and eliminate the causes of food-related problems including hunger. As its medium to long-term support, specifically, Japan uses its knowledge and experience to strengthen research and technology development along with capacity building in disseminating this technology in a way that is suited to the cultivation environment, promote the sustainable use of fishery resources, strengthen organizations of farmers, and assist in policymaking, as well as to improve infrastructure such as irrigation facilities, farm roads, and fishing ports.



Local extension workers for vegetable farming and processing giving technical instruction to farmers in Mandi District, Himachal Pradesh, India (Photo: JICA)

⁴⁴ A state where all people, at all times, can access sufficient, safe, and nutritious food.

Promoting Acceptance of Foreign Human Resources Gives Boost to Farmers in Laos and Japan!

—Agricultural promotion through cooperation with Lao Government, Farmers Cooperative Association in Kagawa Prefecture, and JICA—

The province of Xieng Khouang in northern Laos is located in a mountainous area which is lagging behind in agricultural and infrastructure development. It is a poverty area where hill tribes, such as the Hmong, make their living mainly through slash-and-burn agriculture and collecting natural fruits. Although the Government of Laos is taking measures to encourage hill tribes to switch to settled agriculture, this has not yet led to solving the poverty issue.

The Farmers Cooperative Association in Kagawa Prefecture (the Farmers' Co-op) has been accepting technical intern trainees from Asia since 2008 and learned about the situation of Xieng Khouang, the province from which their Lao trainees had come. In 2017, the Farmers' Co-op began a project for developing agricultural production areas in Xieng Khouang to enable vulnerable farmers in the province to settle there, grow and harvest crops, and earn a stable income.

Mr. KONDO Takashi, Representative Director of the Farmers' Co-op, explains as follows: "We started experimenting with garlic seeds cultivated in Kagawa Prefecture because the climate in the cool highland province of Xieng Khouang is suitable for the cultivation of temperate vegetables and fruit trees. We established an agricultural production corporation in Laos and started growing seedlings. One of our goals for the future is to grow kiwifruit pollen for pollination. We are working with local staff to provide technical guidance and supplies to farmers that are appropriate for the local climate and conditions." Mr. MORIKAWA Takeshi of INFINI Co., Ltd., one of the Farmers' Co-op members participating in the project, shares his ambitions. "We selected fruit tree seedlings that may be suitable for local conditions and exported them from Japan to Laos. In the future, we hope to process and commercialize the crops, promote sales of superior varieties as products of Laos, and export them to neighboring countries."

The Farmers' Co-op has been making use of the Technical Intern Training Program to generate benefits for both farming communities in developing countries sending technical intern trainees to Japan, and communities in Japan receiving them. The Farmers' Co-

op currently hosts approximately 200 trainees from four countries, including Laos. The trainees learn agricultural methods while working at the member farms of the Farmers' Co-op for six years at most as of December 2020. With regard to Laos, there is a growing trend in which the agricultural production corporation is offering work to trainees after they return home, and some of them who studied in Kagawa Prefecture are playing

an active role in providing agricultural supports in the areas where hill tribes live. This program helps Lao farmers by increasing their incomes and creating opportunities for farming and employment.

At the same time, for the farmers in Kagawa Prefecture it secures a stable workforce and, in the future, enables them to obtain high-quality seeds and pollen from Laos, thus leading to a win-win relationship for both sides.

In order to further expand these activities of the Farmers' Co-op, the "Xieng Khouang-Kagawa-JICA Cooperation Program for Sustainable Agricultural Development" was launched in October 2019. This program aims to improve the livelihood of vulnerable farmers in Xieng Khouang province by supporting production and sale of vegetables and fruit trees through the collaboration of the Ministry of Agriculture and Forestry of Laos, the Farmers' Co-op, and JICA. JICA coordinates with the Government of Laos, facilitates administrative procedures, provides guidance to agricultural extension workers, and conducts market research related to the distribution of agricultural products. JICA Volunteers and experts also will be dispatched to support the activities of farmers and agricultural corporations. Kagawa Prefecture, for its part, is promoting new initiatives such as improvement of the environment for receiving technical intern trainees through an "All-Kagawa" approach with the support of private companies and related organizations. "The Xieng Khouang-Kagawa-JICA Cooperation Program is a good example that meets the needs of both Laos and Kagawa Prefecture through collaboration between ODA and the Technical Intern Training Program," says Mr. SHINOZAKI Yusuke of JICA's Economic Development Department.

"Rather than simply exporting Japanese techniques, it is important to provide guidance and advice on adapting them to local conditions," pointed out Mr. SUEZAWA Katsuhiko of NPO Active Chain Agriculture, a participant in this project. Representative Director Kondo describes the achievements of the project and future goals as follows. "Even after technical intern trainees returned to their countries, we continued to provide support so that they can apply the skills they learned in Japan in their home countries. As a result, highly motivated and talented people now apply for Technical Intern Training. We hope to continue this positive cycle and make sure that it leads to paving the way to the future."

It is expected that the success of the production area development project, which is based on the acceptance of foreign human resources, will continue to help promote agriculture in both developing countries and Japan.



A rural landscape in the province of Xieng Khouang, Laos (Photo: the Farmers' Co-op)



Technical intern trainees from Laos engaging in garlic shipment work (Photo: the Farmers' Co-op)

Efforts to Provide Food Assistance and Improve Nutrition

Japan is providing food assistance based on requests from developing countries confronting food shortages. In FY2019, Japan contributed a total of ¥4.05 billion as bilateral food aid in 13 countries and provided approximately 680,000 tons of grains (rice and wheat), which mainly included Japanese government rice.

Moreover, in cooperation with WFP, Japan provided ¥352 million in grant aid to the Nuwakot District in Nepal for the construction of facilities to provide school meals by adopting a “local production for local consumption” system for ingredients, capacity building for spreading school meals, and nutrition education trainings for local residents.

In addition to bilateral support, Japan, in cooperation with international organizations, is also engaged in efforts to provide food assistance from the perspective of preventing the occurrence and recurrence of conflicts, which is a cause of starvation. For example, through WFP, Japan implements measures such as emergency food assistance and school feeding programs to improve access to education, as well as food assistance to support the self-reliance of local communities by

encouraging people, through the distribution of food, to participate in the development of agricultural land and social infrastructure. In 2019, WFP conducted activities including the distribution of approximately 4.2 million tons of food to approximately 97.1 million people in 83 countries around the world. In 2019, Japan contributed a total of \$156.93 million to WFP projects.

As for initiatives for nutritional improvement as well, in addition to bilateral assistance for the promotion of breastfeeding and the training of health professionals, Japan also provides assistance through multilateral cooperation by contributing to organizations such as UNICEF and WFP. Japan also participates in the international nutritional improvement initiative, Scaling Up Nutrition (SUN), as a donor country. In recent years, Japan is also putting effort into promoting nutritional improvement programs in collaboration with private companies and launched the Nutrition Japan Public Private Platform (NJPPP) in 2016. Through this platform, in cooperation with partners from private companies, civil society, and academic research institutions, Japan contributes to nutrition improvement specifically by creating an environment that can boost initiatives of Japanese food-related enterprises, etc. for nutritional

Viet Nam

Collaboration Program with the Private Sector for Disseminating Japanese Technology for National Nutritionist Qualification System JICA's SDGs Business Supporting Surveys*¹ (Collaboration with the “Vietnam Nutrition System Establishment Project (VINEP)” by Ajinomoto Co., Inc.) (April 2014 – June 2016)

Public nomination

While Viet Nam has experienced remarkable growth in recent years and is becoming more affluent, health problems such as overnutrition (obesity, etc.) and a rapid increase in non-communicable diseases are beginning to appear. For this reason, there is a growing need to train dietitians who can provide accurate nutritional knowledge to the public.

In response to this situation, in 2011, Ajinomoto Co., Inc. launched the “Vietnam Nutrition System Establishment Project”^{*2} with the National Institute of Nutrition of Viet Nam, and a four-year dietitians training course was started at Hanoi Medical University in 2013. The Japan Dietetic Association, Jomonji University, Kanagawa University of Human Services, and others cooperated in the project, and the first 43 dietitians were fostered in Viet Nam in 2017.

In addition, through JICA's SDG Business Supporting Surveys, the company invited officials from the government, universities, and hospitals involved in systems related to nutrition, as well as dietitian training course instructors and students, to Japan for training. Moreover, based on the knowledge learned in Japan and what they experienced during site visits, the participants held a



Vietnamese dietitians as interns learning from dietitians at Kyoto University Hospital (Photo: The Ajinomoto Foundation)

“Nutrition Symposium” in Viet Nam to convey the importance of nutrition management and national nutrition policy. Thanks to such efforts,

dietitians were legally recognized as a civil service profession in 2015, laying the groundwork for a system to further develop the discipline.

The company continued to support the project, providing internship programs and local workshops in the field of clinical nutrition^{*3}. Furthermore, the Ajinomoto Foundation has been continuing this project since 2017, and the number of universities training dietitians has now been increased to nine. The Minister of Health of Viet Nam mentioned at the workshop that “500 dietitians in five years” would be trained, and various forms of support are being provided to achieve this goal.

In order for the newly fostered dietitians to play an active role in improving the health of people in Viet Nam, the education system still needs to be improved. The Ajinomoto Foundation is supporting the creation of a sustainable education system that will enable dietitians to play an active role.



Healthcare workers studying nutrition and project experts at the Nutrition Training Center of the National Institute of Nutrition of Viet Nam (Photo: The Ajinomoto Foundation)

*1 Collaboration Program with the Private Sector for Disseminating Japanese Technology for the Social and Economic Development (currently: SDGs Business Verification Survey with the Private Sector (SDGs Business Support Type))

*2 Vietnam Nutrition system Establishment Project (VINEP)

*3 Projects of Global Extension of Medical Technologies (2015, 2017)

Awarding of the 2020 Nobel Peace Prize to World Food Programme (WFP)

On October 9, 2020, WFP was awarded the 2020 Nobel Peace Prize. WFP is a UN organization established in 1961 to implement emergency food assistance, etc.

Prime Minister Suga and Foreign Minister Motegi each sent out messages expressing their congratulations for the award. In the messages, along with showing their profound respect for the WFP staff responding to the COVID-19 pandemic day in and day out while the world faces such an unprecedented crisis, they expressed their high appreciation for WFP's abundant experience in addressing humanitarian crises as the sole UN agency delivering food assistance, as well as their intent to continue to strongly support WFP's efforts (see also "Japanese Personnel Playing Active Roles in International Organizations across the World" in Part I regarding the activities of Japanese WFP staff).



Prime Minister Suga receiving a courtesy call and report of winning the Nobel Peace Prize from the WFP Japan Relations Office, the Japan Association for the WFP, and the WFP Parliamentary League (Photo: Cabinet Public Affairs Office of the Government of Japan)

improvement in developing countries.

Additionally, at TICAD VI, Japan launched the Initiative for Food and Nutrition Security in Africa (IFNA) with the aim of accelerating nutrition improvement in Africa, and announced Japan would extend IFNA's experience and knowledge throughout the African continent to improve the nutrition of 200 million children under the age of five in Africa at the TICAD7. In this way, efforts led by Japan have been getting underway in earnest to improve nutrition.

*** Tokyo Nutrition for Growth Summit 2021

Positioning nutrition as an important basic area for achieving UHC, Japan as the host country of the Tokyo 2020 Olympic and Paralympic Games will hold the Tokyo Nutrition for Growth Summit 2021 in December 2021. Through this summit, Japan aims to promote global initiatives for improving nutrition.

At the Summit, discussions on various topics related to nutrition will be conducted with a large number of stakeholders in order to resolve challenges. Specifically, the following five themes are planned to be discussed: integrating nutrition to UHC, building healthy and sustainable food systems, addressing malnutrition in fragile and conflict affected contexts, promoting data-driven accountability, and securing financial resources for improving nutrition (see pages 61 to 63 for details on UHC).

*** Establishment of Food Value Chains and Promotion of Agriculture, Forestry, and Fisheries

Japan is promoting the establishment of food value chains for developing countries through public-private partnership. In December 2019, Japan formulated the "Plan to Promote the Establishment of Global Food Value Chain," which stipulates priority initiatives for building food value chains in countries and regions throughout the world, and in FY2020, organized bilateral policy dialogues based on the plan with Viet Nam, Thailand, and other countries.

Moreover, with the aim of realizing food security and eradicating poverty in Africa, Japan places emphasis on agriculture as an industry that plays an important role in Africa's economic growth, and contributes to its development. For instance, Japan supports the research of NERICA (New Rice for Africa)*, a cross-breed between Asian rice and African rice, and the spread of its production techniques, as well as support for increasing rice production based on the Comprehensive Africa Agriculture Development Programme (CAADP).

Furthermore, at TICAD7 in 2019, Japan announced the launch of the Coalition for African Rice Development (CARD)* 2nd phase in order to achieve a goal of further doubling rice production in Sub-Saharan Africa (from the 2018 goal of 28 million tons to 56 million tons by 2030). Under CARD 2nd phase, efforts are strengthened toward doubling rice production by increasing the number of

Morocco

Dispatch of JICA Expert on Development of Maritime Fisheries Individual Expert (May 2017 – January 2020)

Japan and Morocco have a long history of cooperation in the development of the fisheries sector, dating back 40 years. Japan has provided multifaceted support including the development of fisheries infrastructure, promotion of coastal fisheries, fisheries education, and research on fisheries resources. Today, Morocco's fisheries sector has come to boast one of the largest catches in Africa, with fisheries products accounting for about 10% of the country's total export value. The sector, including related industries, also provides employment to as many as approximately 660,000 people. On the other hand, there are still many small-scale fishers who are in a socially and economically vulnerable position.

In response to this, JICA expert Mr. SUGIYAMA Shunji was dispatched as a fisheries development expert to the Moroccan Department of Marine Fisheries, Ministry of Agriculture, Fisheries, Rural Development, Water and Forests in May 2017.

In order to understand the reality of small-scale fisheries, Mr. Sugiyama and his colleagues from the Department spent several months visiting approximately 23 fishing villages scattered along the coast. They listened to the fish workers explaining their severe conditions and held on-site discussions with them on various possibilities such as the development of local products, cooperation



Mr. Sugiyama visiting a fishing village to observe their situation through conversations with fish workers (Photo: JICA)

between the tourism and fishery sectors, and the participation of women's groups. They compiled the results into a proposal and submitted it to the Government of Morocco. The proposal included plans to improve income opportunities for small-scale fishers through the

production of bottled sardines or cultivation of mussels, as well as initiatives for the cooperation among the fishing ports, fisheries cooperative-run restaurants, direct sales stands for fisheries products, etc., in order to attract tourists from Western countries. They also

provided technical training for direct sale of fisheries products.

In addition, Morocco is utilizing the experience in developing fisheries infrastructure, etc., learned from Japan to advance South-South cooperation*¹ with Sub-Saharan African countries. Mr. Sugiyama is also encouraging such activities in Morocco to promote cooperation for the development of the fisheries sector across the entire Africa region.

The proposal was compiled as a framework for the concrete implementation of a "Blue Economy (BE)"*² designed for the sustainable development of Morocco's fisheries sector, and through this project, Japan gained an experience in providing support in the new field of the BE. In this way, Japan and Morocco are steadily advancing a new initiative that is beneficial to both countries.

*1 See the glossary on page 118.

*2 The blue economy aims both for the conservation of marine resources and economic development through the sustainable use of resources in the sea, rivers, lakes, and other water areas. This concept involves diverse stakeholders in the goal of economic development through the effective use of local marine and fishery resources. It has come into the spotlight in recent years, and there are high hopes for the initiative not only in Morocco but in other African countries. Japan's experience in fisheries product processing and product development can be utilized.



Mr. Sugiyama exchanging ideas about local products with a women's union (Photo: JICA)

eligible recipient countries from 23 to 32 and adopting the RICE (Resilience, Industrialization, Competitiveness, Empowerment) approach* including efforts for enhancing the quality of locally-produced rice.

Moreover, in order to promote the transition from self-sufficient agriculture to income generating agricultural activities, Japan has provided training for 18,013 technical instructors and 183,042 smallholders from 29 countries, including non-African countries, toward the promotion of market-oriented agriculture through the



A Japanese expert giving an explanation on a fanning mill during a training on the post-harvest processing of upland rice in Yaounde, the capital city of Cameroon

Smallholder Horticulture Empowerment & Promotion (SHEP) approach* by the end of 2019.

In addition, in response to requests from African countries at TICAD VI for greater cooperation in the agricultural sector, Japan has launched a platform that connects African countries and Japan. Through this platform, Japan dispatched seven experienced experts from 2019 to 2020 to carry out the transfer of outstanding agricultural technology and advance human resources development as well as to promote excellent projects in the agricultural sector.

*** Food Security through a Multilateral Cooperation Approach

Under the Responsible Agricultural Investment (RAI)* initiative, the Principles for Responsible Agricultural Investment (PRAI) were formulated by FAO, IFAD, the United Nations Conference on Trade and Development (UNCTAD), and the World Bank, while the Principles for Responsible Investment in Agriculture and Food Systems (CFS-RAI) were adopted at the Committee on World Food Security (CFS) in 2014. Japan, in cooperation with relevant international organizations, promotes efforts

for conducting research to facilitate RAI and initiatives to share good practices in order to raise awareness and promote understanding at the regional level.

The G7 also announced the “G7 Vision for Action on Food Security and Nutrition” at the G7 Ise-Shima Summit in 2016. In response to the G7 Vision for Action, Japan works on the following priority areas to achieve the target by 2030: empowering women, improving nutrition through a people-centered approach, and ensuring sustainability and resilience within agriculture and food systems.

Furthermore, Japan has been involved in initiatives such as providing assistance to the Agricultural Market Information System (AMIS) in the G20, which aims to enhance the transparency of the international agricultural market. It is an inter-organizational platform launched in 2011 by the G20 as a measure to counter the wild fluctuations of food prices, and the G20 member countries, major importing and exporting countries, corporations, and international organizations utilize it to share information on the agricultural and food market (such as production volumes and prices) in a timely, accurate, and transparent manner. Japan has provided project costs to AMIS, while sharing information about Japan, to contribute to the enhancement of food security.

Japan also provides assistance in the agricultural sector

to enable developing countries to strengthen their own foundations for food production through international organizations such as FAO, IFAD, Consultative Group on International Agricultural Research (CGIAR), and WFP, while also making contributions to the enhancement of animal hygiene through the World Organisation for Animal Health (OIE) and FAO. For example, Japan has provided assistance in technical cooperation for the agricultural and rural development of developing countries, the establishment of international standards and norms in the food and agriculture fields, and the development of statistics, etc. through FAO. In addition, Japan provides support for research on the variety development conducted by CGIAR, which is comprised of 15 agricultural research institutions, and promotes collaboration with CGIAR through exchanges among researchers. Concerning transboundary zoonotic diseases such as foot-and-mouth disease and African Swine Fever (ASF), Japan is contributing to enhancing animal hygiene in the Asia-Pacific region, in cooperation with the OIE and FAO, through active contributions to the Global Framework for Progressive Control of Transboundary Animal Diseases (GF-TADs), which was established by those two organizations (see also “Master Techniques from Japan to the World” on page 149).

= Glossary



*New Rice for Africa (NERICA)

NERICA is a general term for rice developed in 1994 by the Africa Rice Center (formerly West Africa Rice Development Association [WARDA]) through the hybridization of high-yield Asian rice with African rice, which is resistant to weeds, diseases, and insect pests. In order for NERICA to suit the natural conditions of each region in Africa, they are characterized by (i) a higher yield, (ii) a shorter growth period, (iii) higher resistance to dryness (drought), and (iv) higher resistance to diseases and insect pests than conventional rice. Since 1997, Japan has partnered with international organizations and NGOs to provide support for research and development related to new types of NERICA, test cultivation, and increased production and popularization of seeds. In addition, Japan has dispatched agricultural experts and JOCVs to offer cultivation training and has also accepted trainees from Africa for training in Japan.

*Coalition for African Rice Development (CARD)

CARD is a consultative group composed of donor countries, African regional organizations, and international organizations, partnered with rice-producing countries in Africa that are interested in rice production and development. It was proposed and launched by Japan at the TICAD IV in 2008 to support self-help efforts toward the expansion of rice production in Africa.

*Resilience, Industrialization, Competitiveness, Empowerment (RICE) approach

An initiative adopted under CARD 2nd phase to realize the goal of doubling rice production in Sub-Saharan Africa. Specific efforts include stabilizing production through adaption to climate change and population growth, industrial formation in local areas in cooperation with the private sector, enhancing the quality of home-grown rice so that it can compete with imported rice, and the establishment of agricultural management systems for improving the household incomes and livelihoods of farmers.

*Smallholder Horticulture Empowerment & Promotion (SHEP) approach

The SHEP approach refers to an effort to assist smallholder farmers producing fruits, vegetables, and other produce and was started by Japan in Kenya in 2006, aimed at increasing their income by causing a mindset shift from “selling after growing” to “growing to sell” and through improvements to farm management and cultivation skills. Japan is supporting the adoption of SHEP around the world with a focus on Africa, pledging its wide expansion to African countries and human resources development (1,000 technical instructors and 50,000 smallholder organization members) at the TICAD V in 2013.

*Responsible Agricultural Investment (RAI)

RAI is an initiative that aims to maximize the interest of local residents and communities including farmers and investors, as well as minimize the risks to both sides, by balancing between the responses to the need to increase agricultural investment for reducing severe poverty in rural areas of developing countries and the responses to the unintentional negative impact of agricultural investment, such as a threat to food security and various rights including land ownership of the local people based on the need for increased global food production and sharp rises in international food prices. It was proposed by Japan at the G8 L'Aquila Summit (Italy) in 2009.

(9) Securing Access to Resources and Energy

The number of people without access to electricity is estimated at approximately 790 million in the world and more than approximately one in two people in Sub-Saharan Africa as of 2018. In 2030, it is estimated that approximately 2.3 billion people globally will not have access to clean cooking fuels and technology (electricity, LPG, natural gas, etc.), and the accompanying indoor air pollution is one of the factors of premature death. The lack of electricity, gas, and other energy supplies also leads to many issues, such as the delay in industrial development, a loss of employment opportunities, and a further increase in poverty. Stable energy supply and appropriate consideration to the environment are essential since the global energy demand is expected to increase further, mainly in emerging and developing countries, particularly in Asia.

Japan's Efforts

In order to realize sustainable development in developing countries, Japan works on the provision of services which enable modern energy supply and the stable supply of electricity for industrial

development. In addition, Japan provides support for the establishment of an environmentally friendly infrastructure (socio-economic infrastructure), such as the construction of energy-saving equipment and power generation facilities that utilize renewable energy (hydropower, solar photovoltaics, solar thermal, wind power, geothermal power, etc.). For example, Japan is providing assistance for the construction and rehabilitation of geothermal power plants in the Olkaria geothermal field in Kenya, utilizing ODA loans for clean and stable power supply regardless of weather, which contributes to a total of approximately 400 MW of power generation. Moreover, in Pacific Island countries with limited and scattered land, which are vulnerable to the influence of climate change, Japan, under the “hybrid island concept,” is providing assistance to mainstream grid-connected type renewable energy from the perspective of energy security and the realization of a low-carbon or decarbonized society. At the Pacific Climate Change Center built through Japan’s assistance in Samoa, Japan is also focusing on developing human resources in the area of climate change countermeasures in the Pacific Island region.

Azerbaijan

(1) Severnaya* Gas Combined Cycle Power Plant Project, (2) Shimal Gas Combined Cycle Power Plant Project (Second Unit) Loan Aid (ODA Loan) ((1) February 1998 – October 2003, (2) May 2005 – September 2019)

Azerbaijan, which faces the Caspian Sea, is blessed with abundant natural resources such as oil and natural gas. However, after gaining independence from the Soviet Union in 1991, the surge in demand for electricity for general household use as well as industrial use by the country’s rapid economic growth meant that the deteriorating power generation facilities constructed in the Soviet era could not meet electricity demand. In particular, aging power generation facilities and power lines that had been in continuous use since the 1980s were a serious problem.

To overcome this situation, through the implementation of this project, Japan has supported the construction of first and second generator units at the Shimal Gas Combined Cycle Power Plant in the eastern region of Azerbaijan, where electricity demand is concentrated. The combined output of these two units accounts for approximately 10% of Azerbaijan’s power generation capacity. By introducing the country’s first advanced power generation facilities with high thermal efficiency, this project has made a significant contribution to alleviating power shortages and achieving sustainable economic growth. In addition, it has also been contributing to the sustained and stable supply of electricity across the country’s entire power network.



The Shimal Gas Combined Cycle Power Plant’s second unit (Photo: JICA)

The completion of these two power

generation facilities was made possible by the dedicated efforts of Mr. SATO Mitsuyuki of Tokyo Electric Power Services Co., Ltd., who worked on the project from design to completion for over 25 years. Although it was uncertain at times as to whether the project would be completed due to financial difficulties and other problems on the Azerbaijani side, Mr. Sato worked hard to complete the project, negotiating with the staff of the implementing organization and discussing ways on how to proceed with the construction. As a result, it was possible to hold the opening ceremony for the second unit in September 2019. Mr. Sato’s achievements were highly praised by the Government of Azerbaijan, and in December 2019, he was awarded the Progress Medal by the President of the country, which is presented to those who have made distinguished contributions in the energy sector.

The effort and dedication shown by the Japanese staff, including Mr. Sato, exemplify the significant contribution that Japan has made to Azerbaijan’s development, as well as to the promotion of friendly relations between Japan and Azerbaijan.



Mr. Sato, who was awarded the Progress Medal by the President of Azerbaijan (Photo: JICA)

*The power plant is currently called “Shimal” in Azerbaijani, not “Severnaya.”



Personnel from a Japanese company giving an explanation to local elementary school students about the construction of a combined cycle (gas-fired) power plant facility at the Rades power plant in Tunisia

Japan also supports the Extractive Industries Transparency Initiative (EITI), which is a multinational cooperative framework to increase the transparency of the money flow in the development of oil, gas, mineral, and other resources. Under this framework, extracting corporations report the amount of payment to the governments of resource-producing countries, and the governments of resource-producing countries also report the amount of the revenue from extracting corporations to the EITI. In addition to 47 resource-producing countries and many supporting countries including Japan, extracting companies and NGOs are participating in the EITI, and by ensuring transparency of the money flow, are working together to prevent corruption and conflict, as well as to encourage responsible resource development that leads to growth and poverty reduction.

(10) Science, Technology, and Innovation (STI) for SDGs

In the world today, progress in science and technology, as represented by artificial intelligence (AI) and robotics, leads to social changes and underpins economic growth through utilization of information technology and information and communication technology (ICT) ⁴⁵ in diverse industries, including not only the manufacturing industry and the service industry but also agriculture and construction.

Based on the 2030 Agenda for Sustainable Development (Paragraph 70), the UN has established the United Nations Inter-agency Task Team on STI for the SDGs (UN-IATT) and promotes STI for the SDGs on a global scale, with cooperation by various countries. In addition, the United Nations Multi-Stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals (STI Forum) has been held annually since 2016. Furthermore, the Political Declaration of the SDG Summit adopted in September 2019 mentions the commitment to harnessing STI with a greater focus on digital transformation for sustainable development. As can be seen from these efforts, there are increasing international expectations for STI as a key to contribute to realizing the SDGs by fully utilizing limited resources.

Georgia

Project for Establishment of Bio-Briquettes Workshop Facility for Two Villages in Tsalka Municipality

Grant Assistance for Grass-Roots Human Security Projects (February 2019 – February 2020)

Tsalka Municipality in Georgia is located approximately 100 kilometers west of the capital of Tbilisi. This municipality is one of the most ethnically diverse areas in the country, where Armenian, Azerbaijani, and Greek ethnic groups live, including people forced to migrate from the mountainous part of western Georgia due to natural disasters and internally displaced persons due to conflicts. It is also known for its harsh, cold winters, and is sometimes called the “Siberia of Georgia”. Since only a limited variety of crops can be produced in the area, many of the people there are living in poverty.

In Tsalka Municipality, firewood stoves are still used because gas supply is not widely available. It is said that a single household



The bio-briquette production facility constructed through this project

uses as much as approximately 1 to 1.5 tons of firewood per year in order to survive the long and harsh winter. However, many poor households in the municipality cannot afford the cost of firewood, and

illegal cases of logging have been reported. Concerns have also been raised about the negative impact of logging on disaster prevention, as the trees in the area were originally planted as windbreak forests.



Producing bio-briquettes

In response to this situation, Japan supported the construction of facilities to produce processed firewood, called bio-briquettes, in two villages in the municipality through the local NGO “BRIDGE – Innovation and Development”. Bio-briquettes are cheaper than firewood because they are made from existing scrap wood residue from local peoples’ living spaces, such as chips from forest thinning and sawdust. These facilities will enable approximately 200 households (approximately 1,000 people) to use bio-briquettes, which is expected to curb logging by the local people and protect the environment in surrounding areas.

⁴⁵ See page 37, 8.

4

ODA Topics

Formulation of the Infrastructure System Overseas Promotion Strategy 2025

The Government of Japan, in order to achieve economic growth through infrastructure exports, formulated “the Infrastructure System Export Strategy” in 2013 and has been promoting the strategy toward the infrastructure system sales target of approximately ¥30 trillion per year by 2020.

At the 49th Ministerial Meeting on Strategy relating to Infrastructure Export and Economic Cooperation*1 held in December 2020, the “Infrastructure System Overseas Promotion Strategy 2025” was formulated in light of changes in the international environment, including the recent intensification of international competition over infrastructure exports and the rapid progress of digitalization, as well as the impact of the spread of COVID-19. As a five-year target starting in 2021, the new strategy sets a new Key Performance Indicator (KPI) of ¥34 trillion in infrastructure system sales in 2025.

In addition to the original objective of “achieving economic growth” by improving industry competitiveness, the new strategy also sets brand-new policies: “responding to diplomatic issues such as the realization of a ‘Free and Open Indo-Pacific (FOIP)’ through the promotion of quality infrastructure overseas” and “contributing to solving social issues and achieving SDGs in partner countries.” Concerning FOIP, the strategy mentions the formulation of projects related to the establishment of quality infrastructure that will contribute to strengthening connectivity, one of its key initiatives, as well as the promotion of a model that allows Japan to think, develop, and enjoy prosperity together with partner countries and regions in the post-COVID-19 international environment. As for SDGs, the strategy clearly states that there is an urgent need to address critical global issues such as the environment and climate change, infectious diseases, and disaster prevention, and that Japan will make efforts to formulate and participate in infrastructure projects that contribute to solving these issues. With regard to climate change,



Passengers boarding a domestic ferry docked at a ferry terminal that was newly constructed with Japan's cooperation at the Port of Dili, Timor-Leste's only international port (Photo: JICA)

it is also clearly stated that Japan will promote efforts toward realizing carbon neutrality, that is to reduce greenhouse gas emissions to net-zero, by 2050, and contribute



A trial run of an electric tricycle equipped with a lithium-ion battery at the Indian Institute of Technology. ITSEV, a private company in Toyama City, conducted a formulation survey on a project to improve urban air quality by using lithium-ion batteries suitable for high-temperature climates. (Photo: JICA)

to global decarbonization.

In addition, public-private partnerships have been positioned as one of the pillars of the specific policies of the new strategy. Japan intends to enhance its efforts in infrastructure development, operation and maintenance (O&M), legal system development, human resource development, and other areas by combining various schemes of cooperation, including ODA loans, Private Sector Investment Finance, grant aid, and technical cooperation. As an impressive package that combines the advantages of public funds, including Japan's ODA, with the technological and financial capabilities of Japanese companies, this will enable Japan to make the most effective and strategic use of development cooperation that contributes to both the overseas expansion of Japanese companies and the socio-economic development of partner countries.

In order to realize the policies set forth in the new strategy while strategically utilizing public funds including ODA, Japan intends to provide developing countries with quality infrastructure that incorporates Japan's advanced technologies and know-how and promote the overseas expansion of infrastructure in a way that meets the needs of the partner countries (See “ODA Topics” on page 35 for information on efforts to realize FOIP; for SDGs, see Part II-3. “Promoting Efforts to Address Global Issues and Human Security”).

*1 Chaired by the Chief Cabinet Secretary, this meeting is held to discuss important matters concerning Japan's economic cooperation and to ensure that it is implemented strategically and effectively.

Japan's Efforts

In the process of its economic development so far, Japan has overcome its own challenges in fields such as health and medical care, environment, and disaster risk reduction while fully utilizing STI. Based on these experiences, Japan has been engaging in cooperation of science and technology to resolve challenges faced by developing countries through the Science and Technology Research Partnership for Sustainable Development (SATREPS) and others in recent years (see “Glossary” on page 40 for details on SATREPS). The promotion of the use of geothermal power, which contributes to the realization of a low-carbon society, through the development of geothermal exploration technology in Indonesia and the identification of lead contamination mechanisms and the development of technologies for prevention/environmental remediation in Zambia are good examples of problem-solving through SATREPS (see “Master Techniques from Japan to the World” on page 149 for details on specific initiatives of SATREPS).

In December 2015, as a part of the Science and Technology Diplomacy Advisory Network utilized in the process of planning and formulating various diplomatic policies including Japan’s diplomacy and international conferences, the Advisory Board for Promoting Science and Technology Diplomacy was established and composed of academic experts in fields related to science and technology diplomacy. In May 2017, the Advisory Board released the Recommendation for the Future (STI as a Bridging Force to Provide Solutions for Global Issues) regarding specific science and technology diplomacy initiatives on implementing the SDGs, and in May 2018, released the Recommendation on Science, Technology and Innovation (STI) Roadmap for the achievement of the SDGs.



A Japan-India joint research project (the Project for Smart Cities for Emerging Countries based on Sensing, Network and Big Data Analysis of Multimodal Regional Transport System) carried out at the Indian Institute of Technology Hyderabad (Photo: JICA)

Based on these two recommendations, at the G20 Osaka Summit in 2019, the importance of STI was recognized, as well as the need for effective participation by various stakeholders, including governments,

academia, research institutions, civil society, the private sector, and international organizations in harnessing the potential of STI. As a result, the Guiding Principles for the Development of Science, Technology, and Innovation (STI) for SDGs Roadmaps, formulated by the G20 Development Working Group, were endorsed as an Annex of the G20 Osaka Leaders’ Declaration.

Alongside this, in order to encourage countries around the world to consider formulating roadmaps, the UN-IATT began an initiative known as the Global Pilot Programme and chose five countries – Ethiopia, Ghana, Kenya, India, and Serbia – to be the first pilot countries. In order to support these five countries, in cooperation with the European Union (EU) and international organizations, Japan has begun assisting particularly Kenya and India in formulating and implementing roadmaps starting from FY2020.

In addition, at TICAD7, based on the content of the Recommendations towards TICAD7: Achieving an Innovation Ecosystem together with Africa, submitted by the Advisory Board for the Promotion of Science and Technology Diplomacy, Japan contributed to discussions for promoting practical implementation of the results of international joint research and R&D with cooperation of international organizations toward STI for the SDGs. Moreover, the Yokohama Declaration 2019, adopted as the outcome document of TICAD7, also recognizes the important role of STI.

Furthermore, Japan is advancing efforts toward the establishment of the “STI for SDGs Platform,” a platform to promote the use of Japan’s advanced science and technology that can contribute to helping developing countries and others achieve the SDGs.

Japan will continue to make use of the high potential of STI and actively participate in initiatives of the international community toward resolving the extensive global issues raised by the SDGs, including climate change, changes in marine environments, reduction of biodiversity, issues with food and water resources, infectious diseases, and disasters.