Building a Sustainable and Resilient International Community through Efforts to Address Global Issues

As globalization advances, transboundary challenges facing humanity such as environmental issues, climate change, water-related issues, large-scale natural hazards, infectious diseases, food issues, and energy issues significantly affect not only developing countries but also the international community as a whole. These global issues cannot be solved by a single country, and require united efforts by the international community.

In July 2017, the United Nations High-level Political

Forum was held in New York for international follow-up on the SDGs. Forty-three countries including Japan presented their own initiatives regarding the 2030 Agenda. On the occasion, then Foreign Minister Kishida declared Japan's strong commitment to promoting the SDGs in both aspects of domestic implementation and international cooperation, in order to create a diverse and inclusive society where "no one will be left behind" through the implementation of the SDGs.

(1) Environment and Climate Change Actions

Environment and climate change issues have been repeatedly taken up as one of the main topics at the G7/8 and G20 Summits, and the importance of tackling these issues has been growing in international recognition in recent years. For example, these topics were also brought

up in the 2030 Agenda adopted at the United Nations General Assembly in 2015. Japan has been vigorously working on addressing these issues, and will continue to actively participate in discussions in the international community.

<Japan's Efforts>

Environmental Pollution Control Measures

Japan has accumulated abundant knowledge, experience and technology related to environmental pollution control measures, and has been utilizing them to solve pollution problems in developing countries. 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 chair. In the conference, Japan announced the provision of \$2 billion ODA support over the three years from 2014 as measures against environmental contamination in developing countries, as well as the human resources development assistance dedicated to the prevention of mercury contamination, while showing the international community Japan's proactive attitude towards establishing countermeasures for global environmental pollution.

The Minamata Convention entered into force in August 2017, and the First Meeting of the Conference of the Parties was held in Geneva, Switzerland in September the same year. Japan has accumulated the technology and know-how to prevent damage caused by mercury, through experience of Minamata disease.²⁹ At the conference, Japan expressed its intention to exercise continuous leadership by proactively transferring such technology and know-how to the world in cooperation with other countries, for the purpose of promoting global mercury countermeasures.



Participants at the first meeting of the Conference of the Parties to the Minamata Convention on Mercury holding up the calligraphy characters of "Minamata," written by students from Minamata High School (Photo: Ministry of the Environment)

Note 29: Minamata disease is a nervous system disorder poisoned by the consumption of seafood that has been contaminated with methylmercury compounds discharged from factories. The disease was officially confirmed in May 1956 in the areas near Minamata Bay in Kumamoto Prefecture, and in May 1965 in Agano River basin of Niigata Prefecture.

Climate Change

Climate change is a global issue that requires a cross-border approach, and calls for strengthening concerted efforts by the international community including both developed and developing countries. Due to 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 towards GHG emission reductions. The Paris Agreement entered into force in 2016, and COP22 was held in Marrakech during the same year setting the deadline at 2018 for adopting guidelines to implement the Agreement. Towards the adoption of the implementation guidelines, COP23 held in November 2017 made a certain degree of achievement including the development of a concrete outline and elements of the guideline, corresponding to the progress of discussions on each field. At the same time, the parties affirmed steady progress towards a goal of provision of \$100 billion by 2020 from developed countries to developing countries as funds for climate change countermeasures. In 2018, facilitative dialogues will be held to review the progress of global efforts towards reducing GHG emissions. At COP23, this dialogue platform was designed while naming it "Talanoa" which means transparency, inclusiveness, and harmony in Fijian by the proposal of Fiji, the COP23 chair.

Japan is also steadily working to achieve its Nationally Determined Contribution (NDC)* to reduce GHG emissions by a level of 26% compared to FY2013 (down by 25.4% compared to FY2005) in FY2030, and is proactively engaged in promoting the development of innovative technologies in the fields of environment and energy, as well as supporting climate change actions in developing countries.

As part of this initiative, Japan has been promoting the Joint Crediting Mechanism (JCM),* which facilitates the global diffusion of advanced low-carbon technologies. The JCM is a mechanism to evaluate Japan's contributions to GHG emission reductions or removals in a quantitative manner and use them to achieve Japan's emission reduction target through the diffusion of low-carbon technologies and implementation of climate change actions in developing countries. Japan signed the first bilateral document pertaining to JCM implementation with Mongolia in 2013, and has accordingly established the JCM with 17 countries as of the end of 2017. Since 2016, JCM credits have been issued from energy-saving and renewable energy projects in Indonesia, Mongolia, Palau, and Viet

Nam. Those JCM projects have been contributing to the global emission reduction.

In addition to these efforts, Japan also supports developing countries to tackle climate change through its contributions to the Green Climate Fund (GCF).* A total of 53 projects have been approved by GCF to date. Since JICA was accredited as an implementing entity in July 2017, Japan can be involved in projects from the phase of project formulation.

Furthermore, climate change has also been captured as one of the most serious issues that threaten security and economic prosperity on a global scale. Therefore, continuing discussions have been held through the process of the G7 Foreign Ministers' Meeting under the theme of "Climate Change and Fragility." Japan served as the G7 chair in 2016, and took the lead in these discussions. In January 2017, Japan convened the Roundtable Seminar on Climate Change and Fragility Implications on International Security, and consolidated knowledge and information from Japan and abroad. With the cooperation of research institutions and experts in Japan, the Government of Japan drew up the "Analysis and Proposal of Foreign Policies Regarding the Impact of Climate Change on Fragility in the Asia-Pacific Region - With focus on natural disasters in the Region -" and published the results on September 6, 2017. The Government of Japan has been disseminating this report taking various occasions including COP23, and also engaging in discussions with officials of other countries. Such discussions not only serve to strengthen Japan's dissemination of information in the climate change field to external parties, but are also expected to form the basis for cooperation in various diplomatic areas including SDGs, international cooperation, and disaster risk reduction.



The United Nations Climate Change Conference (COP23) held in Bonn, Germany, in November 2017

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. The Convention on Biological Diversity (CBD) was adopted in 1992 since the issues related to living organisms are borderless, and the entire world is required to tackle biodiversity issues. The objectives of the CBD are: (i) conservation of biological diversity; (ii) sustainable use of the components of biological diversity;* and (iii) fair and equitable sharing of the benefits arising from the utilization of genetic resources. Developed countries are providing economic and technical assistance to developing countries in order to facilitate the conservation and sustainable use of biological diversity worldwide.

Japan places importance on biodiversity, and hosted the 10th Meeting of the Conference of the Parties to the Convention on Biological Diversity (COP 10) in Nagoya City, Aichi Prefecture in October 2010. With the aim of building capacity of developing countries towards the achievement of the Aichi Biodiversity Targets,* Japan contributed to the "Japan Biodiversity Fund," through which the Secretariat of the Convention organizes workshops in support of the implementation of the National Biodiversity Strategies and Action Plans by developing countries.



Coast in the suburbs of Libreville, the capital of Gabon. The coastline is a biodiverse habitat, and extends for 800 km facing the Atlantic Ocean. (Photo: Nao Matsuda / Embassy of Japan in Gabon)

Conservation of the Marine Environment

The conservation of the marine environment is an urgent issue not only for Japan, which is an island country surrounded by and benefiting from the oceans, but also for the international community.

In June 2017, the UN Ocean Conference for Implementation of Sustainable Development Goal 14 (SDG 14) was convened at the UN Headquarters in New York. At the conference, Japan introduced its initiatives to promote the implementation of SDG 14 with a focus

on the conservation and sustainable use of the oceans and maritime resources, as well as its cooperation regarding the Pacific Islands Leaders Meeting (PALM) and the International Conference on Small Island Developing States (SIDS). Japan also registered voluntary commitments towards the promotion of SDG14, and expressed its continuing commitment to contribute to the achievement of the SDGs.



*Nationally Determined Contribution (NDC)

NDC refers to the GHG emission reduction target prepared by each country itself based on the Paris Agreement Article 4, paragraph 2. The Paris Agreement stipulates that each party shall communicate it every five years and take domestic mitigation measures to achieve its objectives.

*Joint Crediting Mechanism (JCM)

JCM refers to a mechanism to appropriately evaluate contributions from Japan to GHG emission reductions or removals in a quantitative manner and use them to achieve Japan's emission reduction target through the diffusion of low-carbon technologies, products, systems, services, and infrastructure, as well as implementation of mitigation actions in developing countries.

*Green Climate Fund (GCF)

GCF is a fund established by the decision of the Cancun Agreements adopted at COP 16 in 2010, in order to support low-emission (mitigation) and climate-resilient (adaptation) investments in developing countries.

*Sustainable Use of the Components of Biodiversity

This refers to maintaining the Earth's biodiversity at the levels of the ecosystem, species, and genes, as well as ensuring the sustainable use of biological resources towards the future. Humans subsist by making use of the components of biodiversity in various forms, including food production and the collection of industrial raw materials. Therefore, it is important to ensure the conservation of biodiversity from the perspective of the sustainable use of its components.

*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 Convention on Biological Diversity adopted at COP10 in 2010. The strategic plan sets a goal to realize "Living in Harmony with Nature" by 2050, and establishes 20 individual short-term targets called the "Aichi Biodiversity Targets" in order to implement actions to halt the loss of biodiversity by 2020.

(2) Mainstreaming of Disaster Risk Reduction, Measures of Disaster Risk Reduction and Post-Disaster Recovery

Disasters including earthquakes, tsunamis, typhoons, floods, droughts, debris flows, etc. that occur frequently around the world do not merely take human lives and property. 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 overall

social and economic systems in developing countries.

Therefore, it is necessary to build a disaster-resilient and flexible society to protect human lives from disasters as well as to promote the "mainstreaming of disaster risk reduction" aimed at sustainable development, by incorporating disaster risk reduction measures into every phase of every sector of development, based on assumptions of disasters of various scales.

<Japan's Efforts>

Cooperation in Disaster Risk Reduction

Japan utilizes its enriched knowledge and technology acquired through the past experiences responding to natural hazards such as earthquakes and typhoons to provide proactive support for disaster risk reduction and post-disaster recovery measures, alongside emergency assistance.

The Third UN World Conference on Disaster Risk Reduction organized by the UN was held in Sendai City in 2015 in order to discuss international disaster risk reduction strategies. Japan hosted the conference, following the first conference in Yokohama in 1994 and the second conference in Kobe in 2005, since Japan has been proactively promoting international disaster risk reduction cooperation by utilizing its expertise and experiences in disaster risk reduction. The third conference was attended by more than 6,500 participants and 185 UN member states, and became one of the largest-ever international conferences held in Japan. The total number of attendees at the conference and its related events exceeded

150,000 from Japan and abroad. The conference resulted in the adoption of the Sendai Declaration as well as the Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework), which is the successor to the "Hyogo Framework for Action," the international guiding principle for disaster risk reduction adopted at the second conference. The Sendai Framework incorporated Japan's stance on the importance of investment in disaster risk reduction, commitments of various stakeholders, the concept of "Build Back Better," the importance of women's leadership, and the "mainstreaming of disaster risk reduction" that applies the concept of disaster risk reduction in all development policies and plans, etc.

Prime Minister Abe also announced the Sendai Cooperation Initiative for Disaster Risk Reduction as a new contribution plan that would become Japan's future basic policy for cooperation in the field of disaster risk reduction. Japan announced provision of training for





The Project for Reusing Second-hand Fire Engines in Nairobi City County

Grant Assistance for Grass-Roots Human Security Projects (March 2016 - August 2016)

Nairobi is Kenya's capital with a population of around 3.9 million people and a population density of 5,652 people per square kilometer. However, the city only had three fire stations and just six fire engines, often resulting in late responses whenever a fire broke out. For example, in August 2013, a large fire occurred due to a short circuit from a switchboard at Jomo Kenyatta International Airport, the largest hub airport in East Africa. Delays in firefighting activities caused a serious situation leading to the closure of the entire airport. In December 2014, a fire broke out in Kibera, East Africa's largest slum, and the late response resulted in five deaths and damaged more than 100 houses. Despite frequent occurrences of fires, Nairobi lacked not only a sufficient firefighting system, but also fire engines.

From such backgrounds, Japan provided four secondhand fire engines to the Nairobi Fire Department with the cooperation of the Japan Firefighters Association (JFA) using the Grant Assistance for Grass-Roots Human Security Projects. Three of the four fire engines can carry up to 2,000 liters of water, making it possible to fight fires in locations without a fire hydrant or reservoir. The other fire engine suppresses

fire with a chemical that is often used in the situation where water cannot be used, such as at chemical plants.

In addition, five Japanese firefighters were dispatched to Nairobi by the JFA to provide training to 24 Kenyan firefighters on how to use and maintain the equipment on the fire engines. They also led Japanese-style firefighter training. This cooperation proved to be deeply meaningful from the standpoint of improving Nairobi's firefighting system by not only donating fire engines, but also transferring the know-how accumulated over a long time by an expert group in Japan (technical guidance).



hotograph taken on the final day of technical assistance

40,000 government officials and local leaders and financial cooperation amounting to \$4 billion in four years from 2015 to 2018. Through this initiative, 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. Japan's effort enhanced not only a quality of building structures and improvement of disaster monitoring facilities in each country, but also development of human resources for enactment of laws and plans related to disaster risk reduction, formulation of disaster risk reduction policies, and disaster monitoring. Consequently, the mainstreaming of disaster risk reduction has been promoted in each country.

At the UN summit that adopted the 2030 Agenda in September 2015, Prime Minister Abe expressed Japan's commitment to lead the implementation of the Sendai Framework, and encouraged other countries to set the UN's World Tsunami Awareness Day in order to raise awareness of tsunami. As a result, a resolution adopted at the UN General Assembly in December 2015 established November 5 as World Tsunami Awareness Day. Accordingly, Japan organized the "High School Students Islands Summit on World Tsunami Awareness Day 2017



Coinciding with the World Tsunami Awareness Day, a seminar for tsunami disaster risk reduction was jointly held by JICA and the province of Aceh, Indonesia, in November 2016. (Photo: Shigeki Ishigaki / JICA Indonesia Office)

in Okinawa" for island countries, in Ginowan City, Okinawa Prefecture, on November 7 and 8, 2017.

At the Third Asia-Pacific Water Summit held in Myanmar in December 2017, Japan introduced its policy of "Rebuilding Flood-Conscious Societies" to permanently prepare for water-related disasters throughout the entire society. Japan also proposed to conduct international dialogues by leaders in water disaster risk reduction, aiming at exchanging information on initiatives by each country.



Renovation of Local Community Learning Center for Vulnerable People of Disaster in Changu Narayan Village

Grant Assistance for Japanese NGO Projects (March 2016 - March 2017)

The large earthquake that struck Nepal in April 2015 destroyed the walls and other parts of the Women and Children's Learning Center constructed 15 years earlier by the Institute of Cultural Affairs Japan (ICA) with the assistance of the Government of Japan. Thus, bricks were replaced and repaired while the kitchen, solar panels for electricity, and water tank had to be repaired as well. Japan dispatched experts of structure architecture to check the building's earthquake resistance and construction methods.

Previously, users of the center were mainly local women involved in community reconstruction workshops, but now the consensus is that the center is a venue where both men and women can participate in the events. The center is utilized in various ways. For example, a mental health expert offered mental health services to the children that had experienced mental instability after the earthquake, such as crying at night or wetting their bed. As a result, these services reduced the children's stress and helped them to get enough sleep and regain a healthy appetite. A playground was also set up at the center to help children relieve stress. This, coupled with an environment where mothers could work with peace of mind, helped to restore the smiles on children and their mothers' faces.

The community where this cooperation was carried out has a large number of elderly people living alone, so to prevent their economic and social isolation, a club for them was opened at the center in order to foster communication. The club is led by an executive committee comprising five of the 23 club participants. This committee meets once a month to discuss and determine programs, such as gardening, handicrafts and dancing. Club members who otherwise do not have opportunities to talk with others when at home have commented that every day is fun again because they can talk to their friends at the center.



Women starting to produce sanitary napkins in the local community learning center in Changu Narayan village (Photo: Institute of Cultural Affairs Japan)

Mental health exams conducted by Japanese experts were also provided for those affected by the earthquake. Local staff helped these people to restore a positive thinking process, which has made it possible for participants who were mentally affected by the earthquake to gradually overcome their difficulties.

In addition, rural Nepalese villages have a prejudice against women's menstrual period such as isolating them in one corner of the house and forbidding them from going to school during this time. The center began making clean, high quality and affordable sanitary napkins so that young women in the community can attend school without worry. Women affected by the earthquake were given technical training on how to manufacture these sanitary napkins as part of a project to improve women's income in rural villages.

Through these efforts, activities for increasing poor families' income, were restarted after the earthquake, and users of the center totaled 8,047 people as of March 9, 2017. Today, the center continues to function as a hub of community activities.

(3) Food Security and Nutrition

The number of chronically undernourished people in the world is estimated at 815 million in 2016, rising from 777 million in the previous year, according to the "2017 State of Food Security and Nutrition in the World" jointly 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). After a prolonged decline of global hunger for over the last decade, this recent increase could signal a reversal of trends. This sends a clear warning signal that achieving the Goal 2 of the Sustainable Development Goals (SDGs), "End hunger, achieve food security and improved nutrition, and promote sustainable agriculture," will require

renewed efforts through new ways of working.

In order to achieve food security (a state where all people, at all times, can access sufficient, safe and nutritious food), there is a need for multifaceted measures based on international coordination. The measures include not only a sustainable increase in the production of food, but also improvement of nutrition (nutrition improvement during the first 1,000 days from a mother's pregnancy to her child's second birthday in particular has a significant impact on the child's growth thereafter), establishment of a social safety net (a mechanism in which people can live safely with peace of mind), provision of necessary food assistance, and implementation of countermeasures against infectious diseases among livestock.

<Japan's Efforts>

In light of these circumstances, Japan has provided food assistance based on requests from developing countries confronting food shortages. In FY2016, Japan

contributed a total of ¥4.34 billion through bilateral food assistance in 15 countries, and provided approximately 70,000 tons of grains (rice, wheat, etc.) which mainly

Japan's Diplomacy Initiatives towards Food Security

(Background)

Situation in Japan

- ✓ Depends on other countries for 60% of its food supply on a calorie basis, and 30% of its food supply on a production basis.
- Challenges in increasing production due to factors such as decline in agricultural land, aging farming population, etc.

✓

Situation in the world

- ✓ Growth in global population
- \checkmark Changes in dietary habits due to economic development in emerging countries
- ✓ Increase in production of bioenergy
- ✓ Climate change, frequent occurrences of abnormal weather conditions
- ✓ Limited number of countries with excess export capacity
- \checkmark Rise in uncertainty of food prices, and financial commoditization of agricultural products

(Japan's diplomacy initiatives)

1. Promote food production worldwide

Promote investment

To promote responsible agricultural investment, promote the "Principles for Responsible Investment in Agriculture and Food Systems" formulated by the Committee on World Food Security (CFS), provide support for studies and research conducted by FAO, the World Bank, and other organizations, organize bilateral dialogues and public-private missions towards the establishment of a food value-chain through public-private cooperation, etc.

- Promote the development of agriculture and agricultural settlements, as well as research and development and the spread of technology Coalition for African Rice Development (CARD), etc.
- · Addressing climate change, etc.

Establish prevention/early warning systems for natural disasters such as droughts, etc.

- 2. Create stable agricultural product markets and trading systems
- Initiatives towards maintaining/strengthening free trade systems, monitoring of market functions

In-principle prohibition of export restrictions under WTO, strengthen regulations on export restrictions in Economic Partnership Agreement, follow-up on price trends (Agricultural Market Information System (AMIS), etc.), measures to counter price fluctuations, etc.

- 3. Provide support/safety-nets for the vulnerable
- Collaboration with international organizations FAO, WFP, etc.
- Nutritional support Nutritional guidance, provision of dietary supplements
- Nutrition Japan Public Private Platform (NJPPP), etc.

 Support to establish social safety-nets
 Providing means of livelihood to the poorest, etc.

*At the G7 Ise-Shima Summit, the G7 Vision for Action on Food Security and Nutrition was drawn up towards the achievement of the goal of saving 500 million people from hunger and malnutrition by 2030, established at the Elmau Summit held in 2015 in Germany. The G7 International Symposium on Food Security and Nutrition was convened as a follow-up.

- 4. Develop systems in preparation for emergency situations and food crises
- International cooperative frameworks
 ASEAN+3 Emergency Rice Reserve (APTERR), G20's Rapid Response Forum (RRF)

(Note) FAO: Food and Agriculture Organization of the United Nations

include Japanese government rice. In 2018, Japan serves as the chair of the Food Aid Committee, which comprises all the Parties of the "Food Assistance Convention."

While conflicts are said to be a major factor behind starvation, the international community has been discussing the importance of addressing the starvation issue. To prevent the recurrence of starvation, Japan considers it is necessary to radically strengthen measures to tackle the fundamental causes of conflicts not only by taking post-conflict measures, but also by focusing on preventing the occurrence and recurrence of conflicts. Based on this view, Japan provided humanitarian assistance, including food distribution, and emergency assistance for the development of local human resources engaging in monitoring nutrition conditions as well as controlling and preventing pests in the Middle East and Africa regions, through international organizations such as FAO, in March and September 2017. Additionally, Japan has implemented further assistance through WFP, such as emergency food assistance, school feeding programs to improve access to education, and food assistance encouraging people to participate in development of agricultural land and social infrastructure in order to support the self-reliance of local communities. In 2016, WFP conducted activities including the distribution of approximately 3.5 million tons of food to 82 million people in 82 countries around the world. In 2017, Japan contributed a total of \$175.46 million to WFP projects. Furthermore, Japan has assisted technical cooperation for the agricultural and rural development of developing countries, establishment of international standards and norms in the food and agriculture fields, and the development of statistics, etc. through FAO.

Meanwhile, Japan has provided support for research on the variety development conducted by Consultative Group on International Agricultural Research (CGIAR), which is comprised of 15 agricultural research centers. Japan also promotes cooperation through exchanges among researchers.

In addition, Japan has also supported the efforts of developing countries to enhance their own food safety. Concerning transboundary zoonotic diseases such as foot-and-mouth disease, Japan is reinforcing countermeasures in the Asia-Pacific region, in cooperation with the World Organisation for Animal Health (OIE) and FAO, under the Global Framework for Progressive Control of Transboundary Animal Diseases (GF-TADs), etc.

As for its initiatives of nutritional improvement, Japan has provided bilateral assistance for the promotion of breastfeeding and the training of healthcare professionals, and cooperates with multilateral assistance by contributing to organizations such as UNICEF and WFP. Japan has also participated in the international nutritional improvement initiative, Scaling Up Nutrition (SUN) as a donor country. In recent years, Japan has put 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 academia (academic research institutions), Japan contributes to nutrition improvement specifically by arranging an environment that can boost initiatives of Japanese food-related enterprises, etc. for nutritional improvement in developing countries. Additionally, Japan-led efforts for nutrition improvement have been fully set out, including the launch of the "Initiative for Food and Nutrition Security in Africa (IFNA)" initiated by JICA with the aim of accelerating nutritional improvement in Africa.

(4) Securing Access to Resources and Energy

The number of people without access to electricity in the world is estimated at around 1.3 billion (equivalent to 18% of the world's population), reaching 60% of the population in Sub-Saharan Africa (approximately 630 million people) in particular. In Sub-Saharan Africa, over 70% of the populations rely on fuelwood (e.g., charcoal, kindling) for cooking, 30 which produces indoor air pollution that contributes to death of youths. 31 The lack

<Japan's Efforts>

In order to realize sustainable development and secure energy in developing countries, Japan works on the provision of services which enables modern energy supply, and the stable supply of power for industrial development. In addition, Japan provides support for the establishment of an environment-friendly infrastructure (socio-economic of electricity, gas and other energy services leads to the delay in industrial development, a loss of employment opportunities, a further increase in poverty, and restricted access to medical services and education. Stable energy supply and appropriate consideration to the environment are essential since global energy demand is expected to increase further, mainly in emerging and developing countries, particularly in Asia.

infrastructure), such as the construction of energy-saving equipment and power generation facilities that utilize renewable energy (hydropower, solar photovoltaics, wind power, geothermal power, etc.).

In view of the significant changes in the global energy situation, the Ministry of Foreign Affairs (MOFA)

announced the "Energy and Resource Diplomacy of Japan - global vision for a shared future" in July 2017, which represents Japan's future vision for energy and resource diplomacy, and the strategies towards the realization of this vision. In this announcement, Japan presented three pillars of Japan's energy and resource diplomacy; namely, (i) strengthening the strategic approach to energy and resource issues in Japan's diplomacy; (ii) taking a multi-layered approach when conducting energy and resource diplomacy so that Japan can cater to various needs; and (iii) consolidating "Japan's unique strengths" and applying them in the energy and resource fields. These pillars are based on the recognition that Japan's energy security will be promoted through its contribution to solving global energy challenges as well as the enhancement of mutual interests between Japan and resource-rich countries while prioritizing ensuring stable supply of energy and resources to Japan.

With respect to addressing the second pillar in particular, it is important to proactively use Japan's ODA in the resource and energy sectors alongside the support from the Japan Bank for International Cooperation (JBIC), Nippon Export and Investment Insurance (NEXI)

and Japan Oil, Gas and Metals National Corporation (JOGMEC). Additionally, as an international effort, the G7 initiative on "Strengthening Assistance for Complex Contract Negotiations (CONNEX)" was launched in 2014, aiming at improving the capacity to negotiate contracts on natural resources in developing countries and also contributing to the achievement of the SDGs.

Japan also proactively supports the Extractive Industries Transparency Initiative (EITI), which is a multinational cooperative framework to increase the transparency of the money flow in 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 report the amount of revenue to the EITI in order to ensure transparency of the money flow. Fifty-two resource-producing countries, many supporting countries including Japan, extracting companies and NGOs are participating in the EITI, and working together to prevent corruption and conflict, as well as to encourage responsible resource development that leads to growth and poverty reduction.





Energy Efficiency Management Program (EEMP) for Industrial Sector in Pakistan

Technical cooperation project (March 2015 - December 2016)

In Pakistan, energy issues including a lack of power supply have become serious, as the country carries out planned power cuts.* Nevertheless, there was a lack of awareness towards energy conservation and a shortage of expert leaders to provide guidance on this initiative.

Through the "Energy Efficiency Management Program (EEMP) for Industrial Sector," Japan cooperated with Pakistan's Small and Medium Enterprises Development Authority (SMEDA) as a counterparty in providing technical training on energy conservation under the guidance of Japanese experts and supporting the establishment of a practical model of energy efficiency management for manufacturers in Pakistan by selecting 10 model factories, among the foundry and auto parts industries, which are major consumers of energy.

As a result of energy conservation activities following the improvement proposal of Japanese experts, an annual reduction of 1,230,000 kWh (equivalent to ¥13.2 million) in energy usage was achieved among the model enterprises during the project period. This result was highlighted in the project's outcome dissemination seminar and local newspapers, and further promoted the effectiveness of energy conservation programs among enterprises that have never had such an opportunity before.

After the completion of this project, SMEDA is conducting



An expert instructing factory engineers on how to manage high pressure air (Photo: Yoshio Hirayama / Techno Soft Co., Ltd.)

continuous energy efficiency diagnosis, which raised the awareness that energy reduction can lead to cost savings within the manufacturing industry, and increased the number of enterprises interested in seeking energy efficiency diagnosis.

* A planned, temporary shutdown of power supply determined in advance by the power company for a certain time, date, and area in the event of a predicted shortage of power supply in order to avoid a massive power outage.