

3. Addressing Global Issues

(1) Environment and Climate Change Issues

International discussions on environmental issues began in the 1970s. Through discussions at the United Nations Conference on Environment and Development (UNCED, also called the Earth Summit) in 1992 and at the World Summit on Sustainable Development (WSSD) of 2002, their importance has been increasingly recognized. At the

G8 Hokkaido Toyako Summit held in July 2008, the environment and climate change were taken up as one of the major themes and constructive discussions were held. The entire international community must address the environmental issues to ensure the prosperity of humankind in the future.

<Japan's Efforts>

● Environmental Pollution Control

With Japanese great experience and technology Japan is working for the resolution of pollution issues in developing countries. In particular, Japan supports measures against pollution and the improvement of the living environment

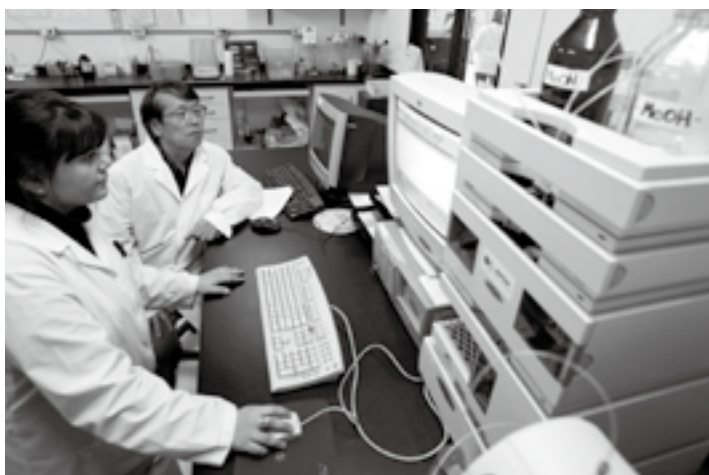
in urban areas (measures against air pollution, prevention of water contamination, waste management, etc.), mainly in Asian countries that are achieving rapid economic growth.

● Climate Change

Climate change threatens human security (see the figure on page 32) with disregard for national borders. Because it is an urgent issue for humankind, international community including both developed and developing countries should work together to strengthen measures to address the climate change.

In October 2010, Japan hosted Aichi-Nagoya Ministerial Meeting of the REDD+ Partnership in Nagoya co-chaired by Japan's Minister for Foreign Affairs Seiji Maehara and Papua New Guinea's Minister for Foreign Affairs Trade and Immigration Samuel T. Abal. At the meeting, direction was formulated to accelerate efforts toward the preservation of forests in developing countries (REDD+)*¹¹, one of the important pillars of climate change. In addition, Japan collaborated closely with the host country Mexico and other countries at the 16th Conference of the Parties of the United Nations Framework Convention on Climate Change (COP 16), resulting in the adoption of the Cancun Agreements that lead to the establishment of a comprehensive international framework, including major greenhouse gas emitters like the United States and China. The Cancun Agreements stipulate the establishment of the "Green Climate Fund" to support developing countries in the field of climate change, and the launch of a transitional

committee to design it. Japan hosted the Second Meeting of the Transitional Committee for the design of the Green Climate Fund in Tokyo, July 2011, and has actively contributed to the process of the basic design of this fund in COP17. Further, in 2009 Japan pledged \$15 billion up to 2012, including public and private finance to support developing countries that actively making efforts to reduce greenhouse gas emissions and that being particularly vulnerable to the adverse impact of climate change. Japan has already implemented over \$12.5 billion as of the end of October 2011.



A Senior Volunteer provides technical guidance for a water quality test at the National Institute of Water in Argentina with equipment provided as part of the "Project on Establishment of Control Capacity for Industrial Wastewater and Water (Project for Technical Capacity Development for Industrial Wastewater and Waste Pollution Mitigation)" (Photo: Shinichi Kuno/JICA)

Note 11: REDD: Reducing Emissions from Deforestation and Forest Degradation, in Developing Countries



Exploring a glacial lake in Bhutan as part of the “Study on GLOFs (Glacial Lake Outburst Floods) in the Bhutan Himalayas” project (Photo: Jiro Komori)



Conducting training on ecological monitoring for local environmental protection staff as part of “The Capacity Enhancement Project for Coral Reef Monitoring” in Palau (Photo: PICRC)

Additionally, at the Third TICAD Ministerial Follow-up Meeting held in Dakar, the capital of Senegal in May 2011, Japan proposed that African countries formulate their strategy to promote low-carbon growth in Africa, and is supporting to build a low-carbon society in Africa. Moreover, Japan is promoting the “East Asia Low Carbon Growth Partnership” which aims to promote dissemination of low-carbon technologies and achieve both economic growth and measures against global warming in East Asia, which is the world’s economic growth center and also includes the world’s largest emitters of greenhouse gas

● Biodiversity

The Tenth Meeting of the Conference of the Parties (COP10) to the Convention on Biological Diversity (COP10) and the Fifth Meeting of the Conference of the Parties Serving as the Meeting of the Parties to the Cartagena Protocol on Biosafety (COP-MOP5)* were held in Nagoya, Aichi Prefecture in October 2010. At the meeting, the Aichi Biodiversity Targets (the Strategic Plan for Biodiversity 2011-2020)* which is a global target beginning in 2011 to effectively implement the Convention on Biological Diversity, the Nagoya Protocol*, which specifies concrete measures for Access and Benefit-Sharing (ABS) of genetic resources that should be implemented by each of the party countries, and the Nagoya-Kuala Lumpur Supplementary Protocol* which stipulates the scope of responsibility and response measures when genetically modified organisms have damaged the ecosystem, were adopted. In addition, Japan announced the Initiative to Assist Developing Countries with the Conservation of Biodiversity (Life in Harmony Initiative) to support efforts by developing countries to achieve the Aichi Biodiversity Targets, pledging a total of \$2 billion over a period of three years beginning in 2010,

such as China and India.

Japan made constructive proposals and actively contributed to discussions at COP17, which was held in Durban, South Africa at the end of 2011. This yielded four significant results, namely progress for future frameworks, an agreement towards the establishment of the Second Commitment Period of the Kyoto Protocol, the Green Climate Fund and a series of decisions regarding the implementation of the Cancun Agreements. The basic design of the “Green Climate Fund” was agreed upon, and strides were made towards its establishment.

for areas that aid in preserving biodiversity. Moreover Japan supported the establishment of the Nagoya Protocol Implementation Fund (NPIF) at Global Environment Facility (GEF) and in 2010 contributed 1 billion yen to the fund in order to support early entry into force and effective implementation of the Nagoya Protocol.

In the future, it will be extremely important to work steadily toward achievement of these goals to conserve biodiversity and ensure its sustainable use.






Minister for Foreign Affairs Seiji Maehara speaks as a representative of the COP 10 host country at a High Level Meeting on Biodiversity in the UN General Assembly

Biodiversity



"Biodiversity" refers to the abundance of life, including the many living things that populate the earth, the ecosystems that connect and balance them, and the characteristics of the genes that living organisms transmit from the past to the future.

Biodiversity		
Diversity of ecosystems	Diversity of species	Diversity of genes
		
The existence of forests, wetlands, rivers, coral reefs, and a variety of other environments	The existence of animals, plants, bacteria, microbes, and many other living organisms (Estimated number of species of organism on the earth: 5 million to 30 million)	The existence of organisms that are resistant to dryness and heat, organisms that are resistant to disease, and a variety of other differences between individual organisms with the same species

Because living organisms have no national borders, and it is necessary for the entire world to deal with the issue of biodiversity, the "Convention on Biological Diversity" was created.

Objectives: Parties to the Convention work to achieve the maintenance and sustainable use of biodiversity through (i) the conservation of biological diversity, (ii) the sustainable use of its components, and (iii) the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, through provision of economic and technological assistance from the allocating developed countries to developing countries.

The tenth meeting of the Conference of the Parties to the Convention on Biological Diversity (COP 10) and the fifth meeting of the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety (MOP 5) were held in Nagoya, Aichi Prefecture for a period of approximately three weeks in October 2010. Over 13,000 people participated in COP 10, including representatives from 179 Party countries, international organizations, NGOs, and native populations.

In addition, approximately 350 side events were hosted simultaneously by local public entities, NGOs, and private businesses, attracting over 118,000 visitors.

Terminology

* REDD

REDD is a concept for reducing greenhouse gas emissions caused by the deforestation and forest degradation in developing countries, by setting the reference levels, based on the past trend, and giving the incentives to developing countries like financing to achieve reduction. "REDD+" refers to such efforts that also include preservation of forests, sustainable forest management, and increase of forest carbon accumulation.

* Aichi Biodiversity Targets

They are also called the "Post 2010 Biodiversity Targets." The medium/long-term goal is to achieve harmony between humans and nature by 2050, with a short-term target of implementing actions to stop the loss of biological diversity by 2020. The Targets consist of 20 individual goals, including the designation and preservation of at least 17% of land areas and 10% of ocean areas as protected areas.

* Cartagena Protocol

The Cartagena Protocol came into force in 2003. It stipulates measures to ensure sufficient protections related to safe transfer, handling, and the use of living modified organisms, to prevent living modified organisms which moved across borders from being released into the nature and adversely affect on the conservation and sustainable use of biodiversity.

* Building a Low-Carbon Society

This refers to the achievement of the society with low-carbon emissions through the use of Japan's advanced environmental technologies including the introduction of high-efficiency power station, sustainable forest management, promotion and improvement of systems related with energy-saving, renewable energy, and waste management.

* Nagoya Protocol

A protocol regarding ABS (access and benefit-sharing of genetic resources). It requires the users of genetic resources (plants, animals, and microbes that lead to the development of products such as food and pharmaceuticals) to distribute the benefits of such use to the providers of those resources in a fair manner.

* Nagoya-Kuala Lumpur Supplementary Protocol

The Nagoya-Kuala Lumpur Supplementary Protocol specifies "liability and redress" (who is responsible) and stipulates the implementation of response measures such as measures to prevent loss and measures for restoration that must be implemented by the responsible parties, when the maintenance of biodiversity, etc., has been adversely affected by the import and export of genetically modified organisms.

Brazil

“Utilization of ALOS Images to Support Protection of the Brazilian Amazon Forest and Combat against Illegal Deforestation” Technical Cooperation Project (June 2009 - Current)

Brazil’s Amazon region is facing a serious problem of decreasing forests due to illegal logging. However, it is not easy to prevent illegal logging in a vast rain forest through ground patrols. To solve this problem, Japan has provided technological aid by using satellites to discover illegal logging in Brazil. Cloud is a big problem which causes blur satellite images during the rainy season, however Japan’s ALOS is equipped with the radar that can penetrate clouds to detect illegal logging during the rainy season when the ground is hidden by clouds.



Japanese experts and Brazilian counterparts search for deforested areas (Photo: JICA)

* ALOS: Advanced Land Observing Satellite

South Africa

“Climate Simulation and Projections for Adaptation Impact in the Southern African Region” Technical Cooperation Project (April 2010 - Current)

In Southern African Region, many people are engaged in agriculture and livestock farming, highly dependent on the natural environment, however, the social infrastructure is not sufficient to deal with natural disasters, thus the region tends to be easily affected by abnormal weather caused by climate change. In this context, research institutes in Japan and the Republic of South Africa are conducting joint research to forecast climate change for the purpose of mitigating the impact of climate change on Southern African Region. This project uses both models of the atmosphere and the ocean affecting the climate of Africa’s southern region, to forecast regional climate change, and have been successful in predicting El Niño and other climate change phenomena. In the future, the project aims to further improve the accuracy of climate change forecasts and send weather forecasts to a wide range of local residents, through the Internet, mobile phones, and other means.



A Japanese researcher lectures at the University of the Western Cape (Photo: JICA)

(2) Infectious Diseases

Infectious diseases such as HIV/AIDS, tuberculosis, and malaria are a major problem that affects not only the health of individuals, but also the socio-economic development of developing countries. In addition, co-infection of HIV/AIDS and tuberculosis, and the emergence of multidrug-resistant and extensively drug-resistant tuberculosis for which conventional drugs are not effective is a significant problem. Further, the strengthening of measures against new strains of influenza, polio, and other emerging/reemerging infectious diseases

continues to be an international issue. Moreover, “neglected tropical diseases”^{*} such as Chagas’ disease, Filariasis, Schistosomiasis have infected approximately 1 billion people worldwide,¹² causing major socio-economic loss in developing countries. Because infectious diseases have an impact that crosses national borders, the international community must unite to address them. Japan cooperates closely with the relevant countries and international organizations to implement countermeasures.

<Japan’s Efforts>

● The three major infectious diseases (HIV/AIDS, tuberculosis, malaria)

Japan attaches great importance to supporting “the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund).” Discussions on measures against infectious diseases held for the first time at the G8 Kyushu-Okinawa Summit held in 2000 led to the establishment of the Global Fund as an organization to provide funding against the three major infectious diseases. As one of its founders, Japan has contributed approximately \$1.4 billion from the establishment of the Global Fund in 2002 until 2011. It is estimated that the Global Fund had saved the lives of 6.5 million people by the end of 2010. Furthermore, at the September 2010 UN Millennium Development Goals (MDGs) Summit, Japan pledged to contribute up to \$800 million to the Global Fund in the coming years from 2011. In addition, Japan also prepared to provide supplemental bilateral aid to make it possible for measures against the three major infectious diseases to be implemented effectively in developing countries that receive assisted to the Global Fund. Japan is striving to enhance the link between strengthening health systems and implementing for maternal and child health (see “Terminology” on page 61 for a description of the three major infectious diseases and health system).

In June 2011, at the milestone 10th anniversary of the United Nations Special Session on HIV/AIDS, the United Nations High-level Meeting on HIV/AIDS was held at the UN Headquarters in New York to discuss the



A baby is vaccinated for tuberculosis (BCG) in Bangladesh (Photo: Kana Matsukawa)

current issued on HIV/AIDS and the progress of the countermeasures worldwide. State Secretary for Foreign Affairs Yutaka Banno headed a delegation from Japan, and renewed the government’s commitment to contribute to international measures against HIV/AIDS, regardless of the fact that it was soon after the Great East Japan Earthquake. In addition, Japan also contributed in the aspects of expertise in launching the Global Plan towards the Elimination of New HIV Infections among Children by 2015 and keeping their Mothers Alive.

As HIV/AIDS countermeasures through bilateral aid, to prevent new infections Japan spreads knowledge, raises awareness, and provides testing and counseling, and enhance the distribution of drugs to treat HIV/AIDS.

Note 12: Source: “10 facts on neglected tropical diseases” http://www.who.int/features/factfiles/neglected_tropical_diseases/en/index.html (WHO)



Using neem leaves to make mosquito repellent incense as a measure against malaria, under the guidance of a Japan Overseas Cooperation Volunteer in Niger
(Photo: Seico Tamai)

In particular, mainly in Africa, JOCV (JICA Volunteers) on HIV/AIDS Control are vigorously engaged in the spread of knowledge and understanding of prevention, and in the care and support of infected persons and patients.

About tuberculosis, under the Global Plan to Stop TB 2006-2015, Japan assists in the implementation of a series of measures against tuberculosis such as the prevention of infection, early detection, diagnosis, and continuous treatment to the countries prioritizing for the prevention of tuberculosis that the World Health Organization (WHO) has designated and the countries with high prevalence of tuberculosis, Japan also promotes measures against co-infection of HIV/AIDS and tuberculosis. In July 2008, the Ministry of Foreign Affairs

● Influenza

Japan's international cooperation on avian and pandemic influenza has so far reached approximately \$400 million (as of April 2011) since 2005.. In addition to providing approximately \1.1 billion in emergency grant aid to WHO in September 2009 to support the provision of vaccines in developing countries, Japan provided courses of anti-viral medicine and other supplies for 1.5 million people in Asia in cooperation with the Association of Southeast Asian Nations (ASEAN) and the Asia-Europe Meeting (ASEM) in preparation for new strains of influenza that may be generated in the future. Further, Japan contributes

and the Ministry of Health, Labor and Welfare announced the "Stop TB Japan Action Plan" that was drawn up jointly with JICA, the Japan Anti-Tuberculosis Association, and the Stop TB Partnership Japan. Japan would utilize the experience and technology it had fostered through tuberculosis countermeasures domestically, and in collaboration between the public and private sectors, work to reduce the number of deaths from tuberculosis by 10% (160,000 people, based on 2006 figures) worldwide, by focusing efforts on reducing such deaths in developing countries, particularly in Asia and Africa.

Japan assists in efforts to implement measures against malaria, a major cause of infant mortality, by strengthening local communities and through cooperation with the United Nations Children's Fund (UNICEF).

proactively to the international community by providing bilateral aid to strengthen systems to monitor circumstances when there has been an outbreak of influenza and to increase vaccine production capacity, etc. Japan also promotes efforts to build a cooperative framework in the Asia-Pacific region through the World Organization for Animal Health (OIE) to implement measures against highly pathogenic avian influenza and to strengthen surveillance of diseases of wild birds, as countermeasures for the spread of the disease among birds (domestic fowl) that are kept as farm animals.

● Polio

Polio is in the final stages of eradication. Japan provides support, mainly through UNICEF, to provide polio vaccines and other related aid chiefly to the polio-endemic countries (countries in which polio has never been eradicated), Nigeria, Afghanistan, and Pakistan. In April 2009 Japan disbursed \$200,000 through UNICEF for polio vaccines to combat the urgent major outbreak of polio in Tajikistan and surrounding countries. Further, Japan has partnered with the private sector's Gates Foundation to utilize ODA loans to provide polio vaccines for approximately 32 million children under the age of five in Pakistan for supporting to eradicate polio (see page 28 for details regarding cooperation with the Gates Foundation).



A child is vaccinated for polio in Bangladesh (Photo: Daisaku Miyake)

● Neglected Tropical Diseases

Japan has taken the lead in engaging in full-scale measures against Chagas' disease in Central America, and contributes to decreasing the risk of infection by supporting the establishment of systems to implement measures against insects that transmit the disease. In regard to Filariasis,

Japan supplies antiparasitic agents as well as educational materials to provide knowledge and understanding to a large number of people. Japan also conducts preventive education through JOCV in order to reduce the number of new patients and maintain the non-epidemic status.

● Vaccinations

It has been proven that vaccinations are an inexpensive and effective method of combating infectious diseases, and it is estimated that 2 to 3 million lives could be saved each year with vaccination.¹³ In 2011, Japan made its first contribution of \$9.3 million to the GAVI Alliance¹⁴ (see "Terminology" on page 33), which was established in 2000 to

improve the vaccination rate in developing countries. It has been estimated that assistance through GAVI had saved 5.82 million lives by 2010, and that it would be able to save 4.2 million more lives by 2015, the deadline for achievement of the MDGs.

Note 13: Source: "Health Topics Immunization" <http://www.who.int/topics/immunization/en> (WHO)

Note 14: The Global Alliance for Vaccines and Immunisation See "Terminology" on page 33.

*** Emerging/reemerging infectious diseases**

Emerging diseases: SARS (severe acute respiratory syndrome), avian influenza, the Ebola virus, and other infectious diseases that were not known in the past but that have been newly recognized in recent years. Reemerging diseases: Cholera, tuberculosis, and other infectious diseases that had spread widely in the past, then subsequently saw a decrease in the number of patients and were believed to have converged, but that have increased again in recent years.

*** Neglected tropical diseases**

Chagas' disease, dengue fever, filariasis, and other diseases transmitted from parasites, bacteria, etc. The number of infected individuals has reached approximately 1 billion worldwide, with some cases resulting in death, although many of the diseases could be prevented or eradicated. In addition, because of factors such as the prevalence among the poor, there is little public concern, so the development and spread of diagnostic methods, treatment, and new drugs is lagging.

Philippines

"Projects for Prevention and Control of Leptospirosis in the Philippines" Technical Cooperation Project (April 2010 - Current)

Leptospirosis is a widely-spread infectious disease mainly in tropical and subtropical areas, which causes hepatic disorders, renal failure, pulmonary hemorrhage, and other disorders in an infected individual, and death in some cases. It is estimated that about 500,000 people are infected with this disease worldwide each year, with 23% of those cases ending in death (WHO, 1999). Because the symptoms are very similar to those of other infectious diseases, its prevention and diagnosis requires sophisticated and specialized technology. Leptospirosis is endemic in the Philippines as well. When the nation was struck by a typhoon in October 2009, there was an outbreak of the disease in the affected area, resulting in a large number of deaths. Because of the difficulty of prevention and diagnosis, effective countermeasures have not been taken. In this context, Japan has actively provided assistance for epidemiological studies in relation with Leptospirosis, as well as the development of techniques for rapid diagnosis, etc., through a framework of Science and Technology Research Partnership for Sustainable Development, which is to support joint research between research institutes in Japan and recipient countries.



Researchers engage in detection work (Photo: JICA)

Thailand

"International Training Course on STIs Case Management Skills" Third-country Training (October 2008 - March 2011)

Gonorrhea, syphilis, HIV/AIDS, and other sexually transmitted infections create approximately 340 million new patients each year. This is a serious global public health issue, but the current situation is that there is no effective countermeasure in many developing countries because there is a risk of being infected again when individuals stop taking medication believing they have been cured.

Under the cooperation between Japan and Thailand, inviting trainees from five African countries (Botswana, Kenya, Tanzania, Uganda, and Zimbabwe), this project conducts practical training on medical case control techniques, including not only diagnosing and treating patients but also counseling and educating people, and advising how to deal with a partner infected by a sexually transmitted disease, etc. As advocated at the Fourth Tokyo International Conference on African Development (TICAD-IV) held in Yokohama in 2008, Japan is working toward solving global issues by sharing successful experiences in assisting Asia with the countries of Africa.



An instructor from Thailand teaches African trainees methods of detecting sexually transmitted infections (Photo: JICA)

* STIs: Sexually Transmitted Infections

(3) Food

According to the Food and Agriculture Organization of the United Nations (FAO), the number of undernourished people at the end of 2010 remained high at an estimated 925 million putting the goal of “halve, between 1990 and 2015, the proportion of people who suffer from hunger (from 20% to 10%)” by 2015, which is not on track to meet the target (16% as of 2010). The need for food aid is increasing due to conflict, natural disasters, and the rise of

food prices. In addition, there is a need for international coordination and multifaceted measures to establish food security (guaranteeing the right of all people to sufficient food), such as ensuring social safety-net, improving nutrition, improving the balance of supply and demand through increasing food production, and measures against infectious diseases of livestock.

<Japan's Efforts>

Japan provides food aid in consideration of such circumstances. In FY2010, Japan provided a total of ¥12.2 billion in bilateral food aid to 19 countries. In terms of multilateral food assistance, Japan provided through the UN World Food Program (WFP), for emergency food aid, support for school meals programs that promote school enrollment and regular attendance, providing food to promote participation in work for development of agricultural land and social infrastructure to support the independence of the local community. In 2010, Japan contributed a total of \$214.41 million to WFP projects

being implemented around the world.

Japan also supports the efforts of developing countries to enhance their own food safety. Japan reinforces countermeasures for animal infectious diseases in the Asia-Pacific region that expand beyond national borders, such as foot-and-mouth disease, including the Global Framework for Progressive Control of Transboundary Animal Diseases (GF-TADs), in cooperation with the World Organization for Animal Health (OIE) and FAO (see page 64 for details regarding Agriculture).



A woman carries fertilizer provided through Japan's Grant Assistance for Underprivileged Farmers in Bolivia, for solving food shortage problems (Photo: Insumos Bolivia)



A market in Uganda (Photo: Koji Sato/JICA)

Zambia

"Food Crop Diversification Support Project for Enhancement of Food Security (FoDiS)" Technical Cooperation Project (October 2006 - October 2011)

The staple food of the people of Zambia is maize (corn), an important crop grown by over 80% of the nation's farmers. However, the majority of them are small-scale farmers who cultivate maize dependent on rainfall, thus the country suffers a nationwide food crisis every several years when a drought occurs. To relieve the impact of a drought and other climate changes, Japan is promoting support for the diversifying food crop cultivation, not depending on maize. This project has contributed to food security in Zambia by distributing materials for planting drought resistance tuber crops like cassava and sweet potatoes, and the seeds of upland rice named NERICA (New Rice for Africa) -which Japan is promoting for its dispersal in Africa- to small-scale farmers, and supporting their cultivation. In addition, Japan has provided assistance to improve the abilities of research institutes that carry out the propagation of seeds and selective breeding of plants create a mechanism for distribution of major crops other than maize in domestic markets, as well as support for processing technology.



A farmer holds harvested cassava. Cassava is a valuable substitute for maize. (Photo: JICA)

Afghanistan

"School Feeding in Afghanistan: Project to Provide the Opportunity to Learn for Girls" Contribution to WFP (January 2011 - October 2011)



A child holds a high-nutrient biscuit provided as part of lunch at an elementary school in Afghanistan's Herat Province. WFP distributed the biscuits provided by Japan. (Photo: WFP/Teresa Ha)

Japan is partnering with WFP to implement school feeding activities in Afghanistan, which continue to be unstable due to many years of domestic conflicts and natural disasters, etc. School feeding not only improves nutrition for children, but has a wide range of impact, including relieving their hunger and making children able to focus on their studies, and providing the opportunity to attend school for the children who could not attend school due to their poverty. The enrollment ratio is especially low for girls in Afghanistan. Providing those girls with school feeding and take-out foods to bring home deepens the understanding and cooperation of their families toward their school attendance. Japan is working to narrow the educational gap between girls and boys. In 2011, WFP's school feeding activities are implemented for approximately 2 million children who attend public schools; the assistance has been significantly worth conducting.

(4) Resources and Energy

In developing countries, over 1.3 billion people (20% of the world's population) have no access to electricity.¹⁵ The lack of electricity, gas, and other energy services leads to problems of delayed development of industry, the loss of employment opportunities, increase in poverty, limited

access to medical services and education. It is anticipated that the world's demand for energy will increase further in the future, particularly in Asia and other emerging and developing countries, so the stable supply of energy and appropriate consideration of the environment is essential.

<Japan's Efforts>

In order to secure sustainable development and energy in developing countries, Japan works on the services of modern energy supply and the stable supply of power for industrial development. In addition, Japan provides support for the establishment of an environmentally friendly infrastructure, such as the efficiency of energy use and construction of power generation facilities that utilize renewable energy (hydropower, sunlight, wind power, geothermal power, etc.).

Japan works with resource-rich countries to enable them to acquire foreign currency through the development of their resources and to develop independently. Japan also provides aid to the resource-rich countries with establishing infrastructure in the areas around mines according to their needs. Japan will use such projects to build and strengthen overall and strategic relationships. This type of assistance leads to the smooth development of resources, production, and transportation by companies, making it possible to ensure the stable supply of energy and mineral resources. It is important to utilize ODA

proactively in resource and energy area, in addition to assistance from the Japan Bank for International Cooperation (JBIC), Nippon Export and Investment Insurance (NEXI), and the Japan Oil, Gas and Metals National Corporation (JOGMEC).



A hydroelectric power plant built on the Shore of Lake Victoria in Kenya as part of the "Sundu-Miriu Hydropower Project Sang'oro Power Plant" construction project. A power generation facility is located at the end of the pipeline. (Photo: Shinichi Kuno/JICA)

Peru

"Master Plan for Development of Geothermal Energy in Peru" Technical Cooperation for Development Planning (February 2010 - September 2011)

Peru has an abundance of geothermal resources on the region of the Andes Mountains. In recent years, the Government of Peru has advanced legal measures, such as the Law for the Promotion of Electricity Generation with Renewable Energies, and has formulated policies to encourage the use of renewable energy generation including geothermal power. On the other hand, Peru does not have experience of geothermal power generation, and lacks sufficient personnel with skills and experience. Therefore, Peru has requested Japan for cooperation, and Japan has begun working on formulation of master plan that delineates a roadmap for the development of geothermal power generation, and researches to facilitate the preparation of information on geothermal power resources. The researches included the utilization of Japan's superior technology, knowledge, and experience to conduct geological and geochemical surveys of 10 major geothermal fields, as well as investigation and evaluation of resources, investigation of laws/regulations and circumstances related to electric power, and investigation of environmental and social considerations, etc. At the same time, Japan also transfers technology to related parties in Peru through the researches. These researches are expected to contribute to elaborate measures on climate change due to the development of geothermal power generation which prevent emission of carbon dioxide while generating electric power.



A Japanese investigation team and Peruvian staff members conduct a geochemical survey (spring water temperature measurement) (Photo: JICA)

Note 15: Source: "World Energy Outlook 2011" International Energy Agency (estimates as of 2009)

(5) Disaster Reduction and Post-Disaster Reconstruction

Disasters caused by earthquakes, tsunamis, typhoons, floods, mudslides, and other natural events that occur frequently in countries around the world do not merely take human lives and properties. In developing countries that are vulnerable to disasters, poverty group suffer significant damage, and become disaster refugees in many cases. In addition, secondary damage such as the deterioration of sanitary conditions and food shortages may become long-term, making the problem more severe. In this manner, disasters have a significant impact on the overall social and economic mechanisms of developing countries.

<Japan's Efforts>

Japan utilizes its superior expertise and technology acquired through past experiences with natural disasters like earthquakes and typhoons to provide proactive support in the areas of disaster prevention and post-disaster recovery, as well as emergency assistance. In 2005 at the second World Conference on Disaster Reduction in Kobe, the Hyogo Framework for Action 2005-2015 was adopted as a basic guideline for disaster reduction activities in the international community. Japan partners with the United Nations and other organizations to promote worldwide

● Japan Disaster Relief Team

Japan has established a structure to facilitate emergency assistance in response to requests from the government of a disaster-affected country or international organization, when major disaster damage has occurred. Japan utilizes four types of Japan Disaster Relief Team to provide humanitarian aid: (i) Search and Rescue Team to search and rescue victims, (ii) Medical Team to provide urgent



A member of the Japan Disaster Relief Medical Team tests for malaria as part of Japan's aid for flood damage in Pakistan (Photo: JICA)



Parliamentary Senior Vice-Minister for Foreign Affairs Osamu Fujimura meets with United Nations Secretary-General Ban Ki-moon at a special session of the UN General Assembly related to flood damage in Pakistan

implementation.

At the conference, Japan also announced the Initiative for Disaster Reduction through ODA, which represents Japan's basic policy on cooperation in disaster risk reduction. Japan expressed its intent to continue proactive support the self-help efforts by developing countries toward building a disaster-resilient society through institution building, human resource development, development of economic and social infrastructure, and other measures.

medical assistance, (iii) Expert Team to give technical advice or guidance on disaster prevention and damage mitigation, and (iv) Self-Defense Force unit to be dispatched when it has been judged to be particularly necessary when a large-scale disaster has occurred. In addition, Japan provides emergency relief goods as material aid. Japan manages several warehouses in overseas with a stock of tents, generators, blankets, and other goods needed to enable victims to live for the immediate future, and Japan is always prepared to provide relief goods to affected countries when a disaster has occurred. In addition, to provide relief to victims and evacuees from natural disasters and conflicts, Japan disburses Emergency Grant Aid to the governments of a disaster-affected country and to the International organizations and Red Cross, which provide emergency assistance areas affected by disasters.

In FY2010, Japan dispatched a total of 11 Japan Disaster Relief Teams to Pakistan, Indonesia, and New Zealand, and sent emergency relief goods on a total of 15 different occasions

to 14 countries, including Myanmar, Haiti, Ghana, and Colombia. Also in FY2010, Japan provided approximately ¥4.5 billion in Emergency Grant Aid as emergency disaster

assistance to a total of 12 countries, including Haiti, China, Chile, and Pakistan, and approximately ¥900 million in aid for democratization in Sudan and Haiti.



A Japanese expert instructs workers in Thailand about pump installation methods (Photo: JICA)



Japanese drain pump vehicles conduct work at industrial parks in Thailand. The drainage capacity of each truck is 30 m³ per minute. (Photo: JICA)

● Collaboration with International Organizations

Japan provides cooperation to the “Global Facility for Disaster Reduction and Recovery” established in the World Bank in 2006. This Facility aims at supporting efforts to improve the ability for disaster preventing planning and post-disaster recovery in low and middle-income countries that are vulnerable to natural disasters.

With the increase in recognition of the importance of disaster reduction, representatives from UN organizations that are involved in disaster reduction in each country, the World Bank and other international organizations gathered at a meeting of the UN General Assembly in 2006. At the meeting, the Global Platform for Disaster Risk Reduction was established to facilitate discussions regarding disaster prevention. The first meeting of the Global Platform was held in June 2007. Japan proactively supports the activities of the UN International Strategy for Disaster Reduction (UN/ISDR), which serves as the secretariat for the Global Platform. The Hyogo Office of the UN/ISDR was opened in October 2007.

The third session of the Global Platform for Disaster Reduction was held in May 2011 in Geneva, Switzerland. More than 2,600 delegates representing 169 governments, 25 international organizations, 65 non-governmental organizations, private sector and civil society participated in the meeting.

At the opening session, Mr. Shozo Azuma, Parliamentary Senior Vice-Minister for cabinet office, (in charge of relief), announced that Japan was willing to host the third World Conference on Disaster Reduction, and also stated that Japan was considering holding a high-level meeting in 2012 to share the experience of recent large-scale disasters. Six years have passed since the second meeting of the UN World Conference on Disaster Reduction in Kobe, so Japan is engaged proactively in follow-up to the Hyogo Framework for Action, which serves as the basic



A Japanese expert gives instruction on underground exploration using a probe as part of the “Project for Developing Countermeasures against Landslide in the Abay River Gorge” in Ethiopia (Photo: JICA)

guideline for disaster risk reduction activities in the international community, while utilizing the forums provided by meetings of the Global Platform.

Japan is also helping the ASEAN Coordinating

Centre for Humanitarian Assistance on Disaster Management (AHA Centre), which was launched in Jakarta, Indonesia, to contribute building a network for disaster-related information and dispatching experts.

Pakistan

“Project for National Disaster Management Plan” Technical Cooperation for Development Planning (March 2010 - Current)

Pakistan faces constantly by natural disasters such as floods, landslides, cyclones, and earthquakes. In October 2005, a major earthquake in northern Pakistan caused about 75,000 deaths of enormous damage. After the earthquake, the government of Pakistani reviewed its disaster planning that was for the aftermath. Pakistan has announced the National Disaster Management Ordinance and establishes the National Disaster Management Authority to take the lead in disaster management, because a national countermeasure is required to strengthen the disaster prevention structure focusing on prevention and mitigation. Through the technical cooperation including dispatch of experts based on the Japanese knowledge and experience of establishing legal systems and developing human resources, Japan supports the formulation of a national disaster management plan to serve as the basic guidelines for the concrete activities of the National Disaster Management Ordinance. Japan also supports improvement of a structure for disaster management in Pakistan led by National Disaster Management Authority (NDMA)*, as well as the development of the necessary human resources.

NDMA: National Disaster Management Authority



Disaster prevention staff members engage in group work on disaster prevention measures for their assigned regions (Photo: JICA)

New Zealand

“Dispatch of the Japan Disaster Relief Team in Response to the New Zealand Earthquake” Japan Disaster Relief Team (February 23, 2011 - March 13, 2011)

A magnitude 6.3 earthquake hit southeast New Zealand on February 22, 2011 and caused significant damage around the city of Christchurch with 185 death including 28 Japanese, many of them are students from Toyama College of Foreign Languages. In response to the request by the government of New Zealand, Japan decided to dispatch the Japan Disaster Relief (JDR) Rescue teams, and provided effective and rapid assistance that met local needs such as search-rescue operations of the missing and mental healthcare of victims. On the airplane in New Zealand JDR Rescue Team were introduced in-flight announcements and received applause and warm encouragement from other passengers. The activities of JDR Rescue Team conducted thorough searches amidst worries of aftershocks received high praise and deep gratitude from the both government and people of New Zealand.



The Japan Disaster Relief Rescue Team searches a building in Christchurch with local authorities (Photo: JICA)

(6) Transnational Crime and Terrorism

With globalization and the progress of high-tech devices, and the increased movement of individuals, transnational organized crime and terrorist activities have become threats to the entire international community. International organized crime, including the illicit trade of narcotics and firearms, illegal immigration, trafficking in women and children, smuggling of cash, forgery of currencies, and money laundering*, has become increasingly diverse and sophisticated in its methods in recent years. In spite of the death of Al Qaida leader Usama bin Laden, the international terrorist organization's force can still not be taken lightly. In particular, extremist activities conducted by affiliated organizations that have been influenced by the ideas and methods of terrorism of Al Qaida have become new threats. There are limitations for a single country to respond to transnational organized crime and terrorist activities that continue across borders. Therefore, in addition to strengthening the measures implemented by each country, it is necessary for the entire



Sri Lanka's only women's correctional facility, where a Japan Overseas Cooperation Volunteer serves. Petty offenders convicted of crimes related to prostitution, narcotics, etc., as well as vagrants, are housed there and receive vocational training. (Photo: Shinichi Kuno/JICA)

international community to eliminate all legal loopholes through efforts such as assistance for capacity building to handle criminal justice and law enforcement in developing countries.

<Japan's Efforts>

● Narcotic Drugs

In addition to participating proactively in international meetings of the United Nations Commission on Narcotic Drugs, Japan contributes to the United Nations International Drug Control Programme (UNDCP) Fund of the United Nations Office on Drugs and Crime (UNODC) to provide assistance to developing countries, particularly in Asia. In FY2010, Japan used a contribution of approximately \$1.38 million to the UNDCP fund for projects that included monitoring the illegal cultivation of

poppies (a plant used as an ingredient for the narcotic opium) and investigation of the manufacturing of illegal synthetic drugs in Myanmar, projects related to the drug control in Southeast Asia and the Pacific region, and support for the creation of plans for the drug control in Laos. Also through the United Nations Asian and Far East Institute for the Prevention of Crime and the Treatment of Offenders (UNAFEI) Japan supported the trainings for treatment of drug-dependent offenders.

● Against Trafficking in Persons and Corruption

In FY2010, Japan contributed \$90,000 to the Crime Prevention and Criminal Justice Fund (CPCJF) of the UNODC. In addition, in August 2011, Japan decided to extend assistance totaling \$2.36 million through the UN Trust Fund for Human Security which Japan had taken the lead in founding to a project entitled "Protecting and Empowering victims of trafficking in Indonesia" which is going to be implemented by the International Organization

for Migration (IOM) and other organizations.

Against trafficking in persons, Japan is focusing on supports of palliative care (psychological care through art therapy and other methods) and the social reintegration of victims. In the past, Japan has utilized donations to the CPCJF to implement projects for measures against trafficking in persons in Pattaya, Thailand (protection of children from trafficking in persons and sexual

exploitation). Japan also provides the Philippines National Police to develop Standard Operating Procedures for the investigation of trafficking in persons in the Philippines. Japan is considering support focused on Southeast Asia in the future as well. Further, Japan provides assistance through the IOM for the safe repatriation of victims and their reintegration in their home countries, who are under protection in Japan. Moreover, Japan provides support for the Bali Process, which is a framework of illegal immigration, trafficking in persons, and transnational crime in the Asia-Pacific region.

As part of its efforts against corruption, Japan utilized contributions to the CPCJF to support for hosting seminars on corruption prevention measures in Vietnam. This contributed to the strengthening of initiatives to combat corruption in Vietnam, which is also a recipient of ODA

● Counter-Terrorism

Efforts must be made to prevent methods of terrorism and safe havens from falling into the hands of terrorists, and to overcome vulnerabilities to terrorism. Japan provides assistance to developing countries that do not necessarily have sufficient capacity to counter terrorism in order to improve their counter-terrorism capabilities. In particular, Japan established Grant Aid for Cooperation on Counter-terrorism and Security Enhancement in 2006, and since that time has utilized such aid to support measures against terrorism in developing countries.

It is important to prevent terrorism and ensure safety in Southeast Asia, which has especially close ties to Japan, so Japan has placed extra emphasis on support for those efforts. Specifically, Japan provides equipment, dispatches experts, hosts seminars, and accepts trainees in the areas of immigration control, aviation security, port and maritime security, customs cooperation, export control, law enforcement cooperation, combating terrorist financing,¹⁶ international counter-terrorism conventions and protocols, etc.

For example, Japan has hosted the Seminar on Immigration Control every year between FY 1987 and 2010, inviting officials in charge of the immigration control authorities of various Southeast Asian countries, to strengthen mutual understanding and partnership through the sharing of information and ideas. The seminar also improves the capabilities of immigration control personnel in each country.

from Japan. Japan is currently holding discussions with the UNODC regarding the implementation of similar seminars in other countries in Southeast Asia in the future.

Through the UNAFEI training courses and seminars have been held for criminal justice professionals from developing countries mainly in the Asia-Pacific region and other regions. Topics included protection of witnesses and whistle-blowers prevention of corruption. Each of the topics is a priority issue stipulated in the Convention against Transnational Organized Crime and the United Nations Convention against Corruption. These efforts contribute to the sound development of criminal justice and the strengthening of cooperative relationships in each country.

In February 2011, Japan held a seminar for officials dealing counter-terrorism from South Asian countries to deepen understanding of international counter-terrorism conventions and protocols and to promote accession to them. In addition, in FY2010, Japan contributed approximately \$48,000 to the UNODC Terrorism Prevention Branch to support the establishment of counter-terrorism laws in Indonesia and other ASEAN countries. Further, in January 2011, Japan contributed \$1.75 million to the UNODC Terrorism Prevention Branch for counter-terrorism in Afghanistan and neighboring countries.



A Japanese expert and Thai customs staff members confirm procedures for customs clearance work at a customs office on the Mekong side of the Friendship Bridge that connects Thailand and Laos as part of the "Regional Cooperation Project on Risk Management for Customs in the Mekong Region" in Thailand. (Photo: Shinichi Kuno/JICA)

Note16: Measures against the flow of funds to terrorists and terrorist organizations.

● Measures against piracy

Japan is a maritime nation that depends largely on maritime transport for the import of energy and food resources and trade. Measures of ensuring the safety of maritime navigation, such as measures against terrorism and piracy, are issues that have a direct link to Japan's prosperity and existence as a nation. Furthermore, the security of sea lanes is extremely important for the economic development of the region. In recent years, many acts of piracy have occurred in the Gulf of Aden and off the coast of Somalia in eastern Africa. Although the efforts of the international community have yielded a certain degree of results, the number of acts of piracy in 2010 amounts to 219, and the area where acts of piracy occur has expanded from the coast of Somalia and the Gulf of Aden to the whole western part of the Indian Ocean. Piracy is becoming a significant threat to the maritime navigation.

In order to counter these threats, Japan is deploying two destroyers and two P-3C maritime patrol aircraft of Maritime Self-Defense Force to the area off the coast of Somalia and in the Gulf of Aden to conduct counter-piracy activities in accordance with the Anti-piracy Measures Law enacted in June 2009. On board the destroyers are officers of the Japan Coast Guard, so that they can carry out law enforcement activities like criminal investigation and arrest in case of piracy attacks.

In order to solve the issue of piracy off the coast of Somalia, it is necessary to conduct anti-piracy multilayered measures, including enhancing maritime law enforcement capacity of the countries around Somalia and stabilizing the unstable situation in Somalia, which are in the

background of increased damage from piracy. As a part of these efforts, Japan took the initiative in establishing a fund in the International Maritime Organization (IMO)¹⁷ and contributed \$14.6 million to the fund to support the construction of an anti-piracy training center and the establishment of the information sharing centers in the countries around Somalia, and other related efforts.

Japan has also contributed a total of \$1.5 million to the Trust Fund to support initiatives of States Countering Piracy off the Coast of Somalia managed by the UNODC, that facilitates prosecution of suspected pirates. In addition, JICA together with Japan Coast Guard has carried out training programs for the control of maritime crime, inviting to maritime security officers from the countries around Somalia. Since 2007, Japan has disbursed approximately \$184 million to Somalia in assistance to strengthen domestic security, provide humanitarian aid, and establish the infrastructure.



Maritime security organization and coast guard members from Asia and the Middle East receive training from Japanese Coast Guard officers in the pilothouse of a patrol vessel as part of the training "Maritime Law Enforcement for Asia and Middle East," implemented with the cooperation of the Japan Coast Guard (Photo: JICA)

Terminology

* Money laundering

Money laundering refers to the act of disguising funds or proceeds obtained from criminal activities as legally obtained assets, or the act of hiding such funds. Example) A drug dealer opens a bank account under a false name and hides money obtained through drug transactions in that account.

Note 17: On January 1, 2012, former IMO Maritime Safety Division Director Koji Sekimizu was elected as IMO Secretary-General.

Philippines

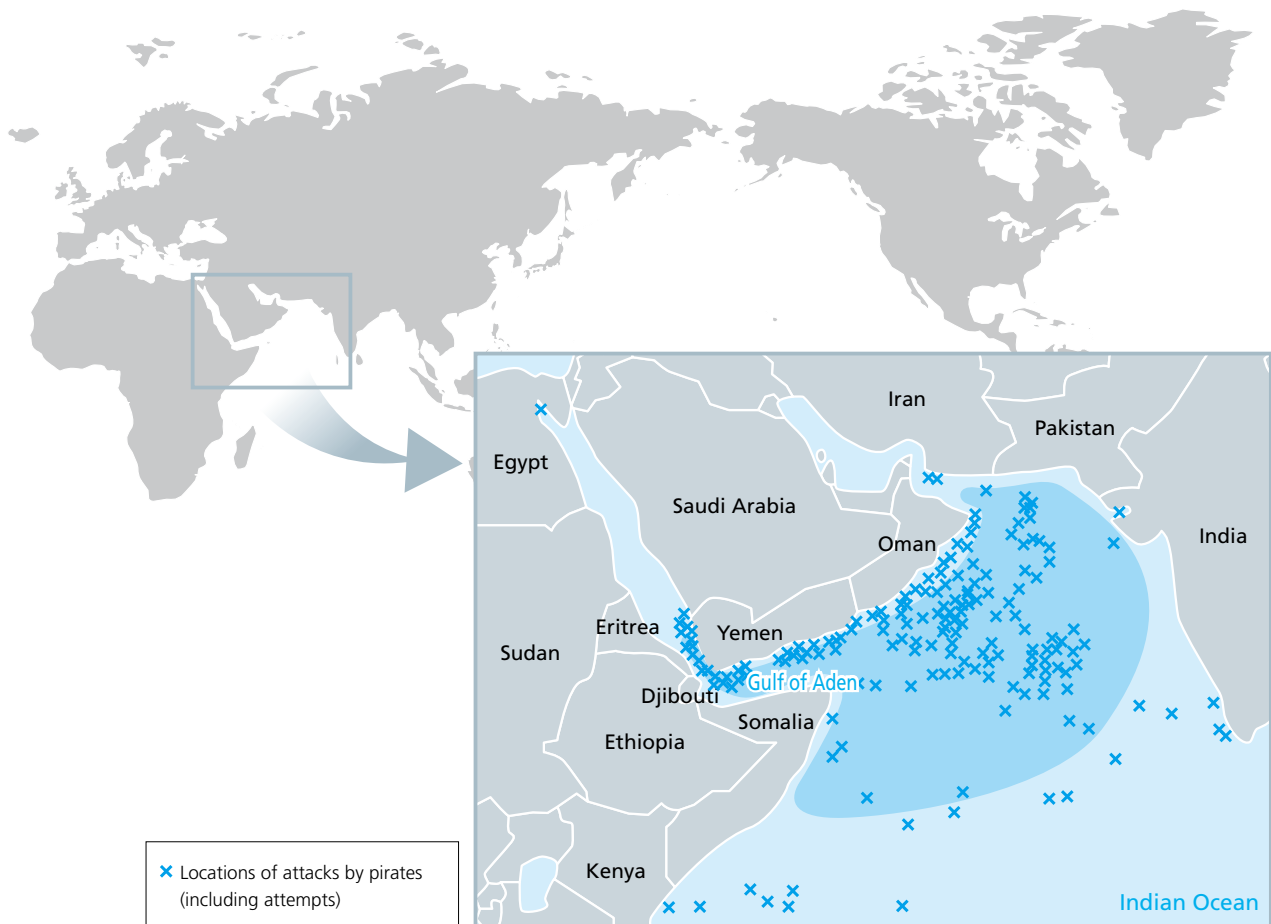
“Philippine Coast Guard Education and Human Resource Management System Development Project” Technical Cooperation Project (January 2008 - Current)

The Philippines is an island nation surrounded by the ocean like Japan, so one of its major modes of transportation is ocean transport. However, every year there are many sea accidents caused by natural and man-made disaster. In addition, since the coast guard system is insufficient, these accidents cause an extremely high number of deaths and missing persons, as well as environmental pollution by oil leaks of tankers, smuggling and illegal behavior, and terrorism and piracy. Due to these circumstances, in cooperation with the Japan Coast Guard Japan has provided technical cooperation to support the Philippine Coast Guard in its response to a variety of issues. Japan has been working to support for the establishment of an education and training system which is based on the outcome of the cooperation Japan has provided in the past, so that the Philippine Coast Guard can develop necessary human resources on its own.



Fire extinguishing training (Photo: JICA)

Ocean areas with frequent piracy



(Source) International Maritime Bureau (IMB)