The Pacific — Overcoming Vulnerabilities of Island Countries

The small island countries of the Pacific Region, which are separated by vast expanses of ocean, are subject to vulnerabilities such as limited land areas and populations as well as small domestic markets and poor access to international markets, which mean that they face many difficulties in developing their economies. The region also faces problems with regard to natural disasters, the effects of climate change, and the management of increasing solid waste. Accordingly, the region's challenge is to overcome these vulnerabilities on the economic and environmental fronts, which are peculiar to the island countries. Paying due regard to the situation of each country, JICA is actively providing support aimed at resolving priority issues in addition to region-wide cooperation to address issues of common concern throughout the region such as environmental issues.

Key Aid Strategies — Increasing Aid Efficiency by Promoting Region-Wide Cooperation

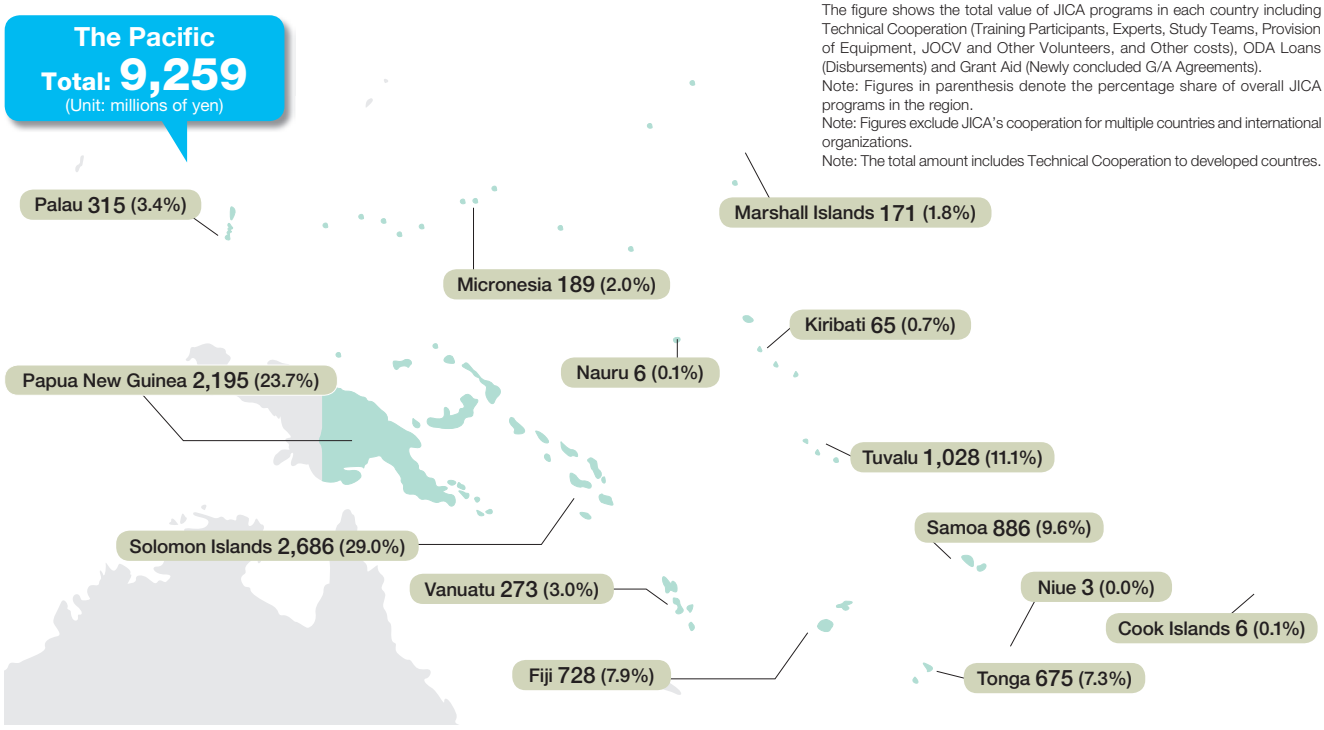
JICA provides assistance to the following members of the Pacific Islands Forum (PIF): Fiji, Kiribati, the Marshall Islands, Micronesia, Nauru, Palau, Papua New Guinea, Samoa, the Solomon Islands, Tonga, Tuvalu and Vanuatu, as well as the Cook Islands and Niue. These countries are dispersed across the three subregions of Polynesia, Melanesia and Micronesia, each with its own diverse languages and unique cultures.

In recent years, these island countries have run large trade deficits as a result of changes in the import-dependent economic structure brought about by the influx of modern economic and cultural influences into what were traditional self-sufficient economies. Environmental issues such as an increase in solid waste that is difficult to treat on the islands have also surfaced. Furthermore, as these countries are small and consist of islands dotted about in the sea, they suffer from inadequate social services and a lack of transportation infrastructure, which has made it difficult to achieve social and economic development or self-supporting economies.

A summit meeting called the Pacific Islands Leaders Meeting is held every three years between Japan and the island nations of the Pacific. At the Fifth Pacific Islands Leaders Meeting (PALM5), which was held in May 2009, the participants confirmed the necessity of responding to environmental and climate change-related issues, overcoming vulnerabilities from the perspective of human security, and enhancing people-to-people exchanges.

JICA is working to provide region-wide cooperation in the region including solid waste management, climate change, health and education, in order to address issues common to these island

JICA Programs in the Pacific (Fiscal 2010)



The figure shows the total value of JICA programs in each country including Technical Cooperation (Training Participants, Experts, Study Teams, Provision of Equipment, JOCV and Other Volunteers, and Other costs), ODA Loans (Disbursements) and Grant Aid (Newly concluded G/A Agreements).
Note: Figures in parenthesis denote the percentage share of overall JICA programs in the region.
Note: Figures exclude JICA's cooperation for multiple countries and international organizations.
Note: The total amount includes Technical Cooperation to developed countres.

countries while paying due regard to the uniqueness of each country. In this kind of cooperation, JICA's approach involves the creation of development models to be shared across the region by dispatching experts to countries that play key roles, and the dissemination of such models to neighboring countries through such means as third-country training programs. JICA is making efforts to ensure the efficient provision of support by promoting collaboration with international and regional organizations such as the Secretariat of the Pacific Regional Environment Programme (SPREP) and the World Health Organization (WHO).

Priority Issues and Efforts

Adaptation to Climate Change

The Pacific Ocean takes up the largest area on the globe, and Japan has a share in its benefits, and thus does its part to assist the countries in the region. Low-lying atoll countries such as Tuvalu are especially vulnerable to climate change and rising sea levels. Strengthening the capacity of those countries to adapt to the phenomena is an urgent issue.

With a view to minimizing damage from disasters, JICA is making efforts to improve the capacity for weather forecasting and providing early warnings, and to speed up the communication of disaster information to residents through the improvement of radio broadcasting networks for disaster prevention in Tuvalu and the Solomon Islands, and by upgrading the weather observation facilities in Samoa. JICA is also supporting the enhancement of the community's disaster prevention capacity in the Solomon Islands and Fiji [➡ See the Case Study on page 73].

In Tuvalu, JICA also supports the Science and Technology Research Partnership Project for Sustainable Development with an ecological engineering approach to identify the mechanisms by which islands are formed and maintained as sediments are produced by creatures (foraminifera) and sand drifts accumulate. The project also devises long-term measures to prevent soil erosion and considers measures to protect the coastline.

As part of its cooperation toward the mitigation of climate change, JICA is also providing support for the introduction of solar power generation in Micronesia, Palau, the Marshall Islands and Tonga, as well as support for the enhancement of monitoring capacity for forest preservation in Papua New Guinea.

Strengthening Environmental Management

Waste management is a common challenge for the small islands in the Pacific. JICA supported Samoa in its efforts to improve waste disposal sites and raise management and operation capacities from 2000, and subsequently supported efforts in neighboring countries to improve waste management practices. With the help of Shibushi City in Kagoshima Prefecture in Japan, which has had success in reducing waste generation, JICA pursued cooperation programs in Fiji to recycle garbage and reduce volume.

Seawater flowing over a road (Tuvalu)

From fiscal 2010, in order to disseminate these initiatives throughout the Pacific, JICA has been working with the Secretariat of the Pacific Regional Environment Programme (SPREP), a regional international organization, to provide support to 11 countries in the region for the formulation and implementation of a Solid Waste Management Strategy in each country, with the main focus on reducing, reusing and recycling waste. In this way, JICA is expanding its regional cooperation to support the creation of a sound material-cycle society by reducing the impact of human activity on the environment as represented by waste, with a view to achieving sustainability on these small islands [➡ See the Case Study on page 106].

Health and Medical Services

In the Pacific, where the improvement of the vaccination rate has been a challenge for the prevention of infectious diseases, many donor organizations, centered on the World Health Organization (WHO) have been promoting vaccination and have achieved some successes, including the eradication of Poliomyelitis from the region. Previously, many countries in the region were suffering from insufficient capacity to manage the cold chain networks necessary for vaccine logistics, and the systems required for safe immunization were not adequately established. To address this issue, in 2004 the governments in the region, international organizations such as the WHO and the United Nations Children's Fund (UNICEF), and bilateral donor agencies from countries such as Australia, New Zealand, the United States and Japan committed themselves to extending cooperation for the Pacific Immunization Programme Strengthening (PIPS) framework as a means of invigorating immunization projects.

Since 2005, JICA has been playing a leading role in PIPS by supporting the dissemination of technology and human resource

development related to the management of immunization projects and vaccines in 13 countries in the Pacific from a base established in Fiji. The cooperation extended by experts working in the field is also highly evaluated in the recipient countries.

Meanwhile, the WHO is improving its support for human resource development in response to the lack of health personnel in the island countries of the Pacific. In cooperation with the WHO, JICA has also strengthened its efforts toward human resource development for community health as well as toward improving medical facilities and research equipment in order to achieve synergistic effects through the provision of both structural and non-structural support.

Education

In order to expand the education opportunities available in each country, JICA provides support for distance learning programs utilizing television, radio and satellite communication networks, and for the improvement of the quality of education on remote islands.

The University of the South Pacific (USP), headquartered in Fiji, is a regional university founded by 12 countries in the region in 1968. With Japanese support, USP was equipped with a satellite communications network, allowing interactive communication between the main campus in Fiji and branch campuses located throughout the region. JICA is currently providing support to upgrade facilities and equipment and enhance the education implementation system with the objectives of further improving access to higher education and enhancing the quality of ICT education for which there has been a particular increase in demand in recent years **[➡ See the Case Study below]**.

Meanwhile, in Papua New Guinea, the enrollment rate in basic education is extremely low, and the improvement of the implementation system of basic education represents a challenge for the entire country. JICA is supporting the production of educational programs at the National Education Media Centre, which was established through Grant Aid, providing classes conducted at model schools to elementary and junior high schools in rural areas via television, and raising awareness among local residents about education. In this way, JICA is providing valuable support to expand opportunities for basic education in rural areas.

In the area of primary education, Japan Overseas Cooperation Volunteers (JOCV) and JICA Senior Volunteers are working to improve the quality of mathematics education in several countries in the region. For example, in Vanuatu, a cooperation framework was established between those involved in primary mathematics education at the local level and JICA volunteers, and a mathematics association was established to improve the teachers' skills. In Samoa, with the implementation of a volunteer-led project to improve the capabilities of teachers to provide basic education in mathematics and science, JICA has been supporting the improvement of the education level through such means as training local teachers.

Case Study **The Program for Distance Education and ICT in the Pacific**

Providing Opportunities for Higher Education to Many People by Utilizing Information Communication Technology

In the Pacific, there are relatively few institutes of higher education and access to information is not easy. Distance learning is an effective means of providing opportunities for higher education to people living in such areas. Through the provision of support in the area of information communication technology (ICT), JICA is working to improve the learning environment of the inhabitants of these island countries and contributing to human resource development in the ICT area in the region.

A New Base for Distance Learning and ICT Education

In July 2010, the Japan-Pacific ICT Centre opened at the University of the South Pacific (USP) located in Suva, the capital of Fiji. The Centre was established through a Grant Aid project as the USP's new base for distance learning and ICT education and also as a core facility for the utilization of ICT in the entire Pacific.

In keeping with the words of Vice-Chancellor and President of USP Rajesh Chandra, "In order to further enhance the livelihoods of people in the Pacific, USP will utilize all the knowledge, human resources and infrastructure that it possesses. By utilizing ICT, we will expand the USP network at the community level in the rural areas of the member countries," the Centre is expected to enhance education opportunities for people not only in Fiji but also in other countries throughout the region. USP is a higher education institution established and managed by 12 island countries in the region.

On the other hand, since February 2010, JICA also has been supporting the enhancement of the USP Net System by using satellite communication, as well as by establishing a new ICT bachelor's degree program, etc. The implementation of this project over a three-year period is expected to result in a steady increase in the number of areas in which it will be possible to receive a high-quality education equivalent to the education received on the main campus.

The Japan-Pacific ICT Centre, which is expected to play a leading role in the development of ICT in the Pacific, in addition to serving as a base for distance learning for the island countries of the region.

Enhancing the Capacity to Respond to Natural Disasters Throughout the Region

The island countries of the Pacific are vulnerable to natural disasters and are strongly affected by climate change. JICA is making efforts to enhance the capability of the entire region on disaster prevention area by improving 1) the capability of governments to manage disasters, 2) the capability of communities to respond to disasters, and 3) the capability to conduct weather observation and forecasting and to issue warnings, through a combination of Technical Cooperation projects, third-country training programs and Grant Aid.

A briefing session on a simplified rain gauge held as part of the project in Nasolo Village, Fiji

Island Countries with Lands Separated by the Ocean

The Pacific is vulnerable to frequent natural disasters such as cyclones, tsunamis and flooding, as well as the effects of sea level rise and extreme weather that are considered caused by climate change. In addition, every country in the region is comprised of more than one island, and there cannot be said to be sufficient transportation or information and communication systems linking the various towns and villages on each respective islands or between the main islands of each country and the more remote islands. Because disaster information is not promptly and accurately communicated to the residents and emergency relief cannot be easily provided to all the necessary areas, it is important that disaster countermeasures be taken at each community level.

Providing Disaster Information More Promptly and Accurately

Given such a situation, in October 2010, JICA began to extend cooperation to Fiji and the Solomon Islands for the purpose of enhancing the disaster prevention capabilities of national governments and local communities and promoting cooperation between them.

In this project, community disaster prevention activities are conducted by the residents themselves (installation planning, management and maintenance of simplified rain gauges and water gauges; creation of hazard maps; disaster prevention education activities targeting residents; and evacuation drills) in the target communities.

The project is also aimed at enhancing the capacity to respond to disasters through the use of emergency response manuals created by the National Disaster Management Offices (NDMO) of the two countries, which are responsible for issuing warnings and responding to emergency situations at times of disaster, and through simulated practice and disaster drills conducted according to the manuals. Efforts are also being made to improve the system of collecting meteorological and hydrological data utilized by the Meteorological Service and related organizations, and to enhance the capacity to conduct analysis by establishing a flooding forecasting model.

By sharing the lessons learned and achievements obtained from these activities between both countries, JICA aims to establish a system where there is a functional collaboration system among organizations at the time of disaster, with evacuation information and warnings promptly issued based on reliable information, and the residents can feel safe and evacuate at an appropriate timing.

Combination of Region-Wide Cooperation and Bilateral Cooperation

Since 2001, the Fiji Meteorological Service (FMS), with observation and forecasting equipment by Grant Aid has been contributing to the fostering of weather forecasters and technicians in 11 countries in the region by providing third-country training programs. In collaboration with this training, weather observation facilities and communication equipment are being established in Samoa through Grant Aid.

Since fiscal 2010, JICA has also been working to secure a method of communicating emergency information, such as disaster information for communication to the residents, by supporting the improvement of radio broadcasting networks in Tuvalu, where atoll islands spread across a wide area around the capital city, and in the Solomon Islands, where the existing broadcasting equipment had broken down.

From Our Counterpart

Akisi Korodrau
Principal Disaster Management Officer, Fiji National Disaster Management Office (NDMO)

The people in the community are extremely vulnerable to damage from flooding. That is why educational activities implemented as part of the project that can help the residents take disaster prevention measures on their own are important. JICA's project is changing the awareness of the staff of the NDMO, particularly the younger ones. We anticipate that in the future the response measures being taken against disasters at the national level will be integrated with those at the community level.

From the Grassroots

Alice Mary Basile
Village Nurse of Tamboko Village, Guadalcanal Province, Solomon Islands

In the past when flooding occurred, people evacuated after their houses and buildings became flooded, and this resulted in a continuing stream of damage with people being injured and their precious household goods being washed away. The workshops and evacuation drills have helped residents to understand the appropriate actions that should be taken at the time of flooding. If water gauges and rain gauges are installed in the future and we can receive warnings prior to the flooding, it will become possible to take more prompt and safer evacuation action. We will also be better able to protect the drugs and the wireless equipment at the clinics, communicate damage information, and give emergency medical treatment to the evacuees.

Emergency response simulation conducted by the NDMO of the Solomon Islands