# **The Pacific**

## **Cooperation Focused on Dealing with Small Size, Isolation and Remoteness Issues**

The Pacific island countries have a number of common characteristics. They have small-scale domestic markets due to small land areas and populations (small size), are comprised of many islands separated by vast expanses of ocean (isolation) and have limited access to international markets (remoteness). In addition, this region is vulnerable to natural disasters and the impacts of climate change as well as environmental degradation associated with modernization. Furthermore, the Pacific island countries have very little resilience to economic crises such as sharp increases in the price of fuel or food.

JICA is providing a wide range of cooperation to overcome each country's priority issues. JICA is also extending region-wide cooperation to address common concerns throughout the region, such as disaster risk management, climate change measures and the environmental protection.

Key Aid Strategies

Providing Effective Cooperation by Applying Japanese Knowledge and Experience

JICA provides assistance to the following countries: Fiji, Samoa, Tonga, Tuvalu, the Cook Islands, Niue, Nauru (in the Polynesian region), Papua New Guinea, the Solomon Islands, Vanuatu (in the Melanesian region), Kiribati, the Marshall Islands, Micronesia, and Palau (in the Micronesian region). These countries with diverse languages also have their own distinctive cultures and customs.

The Pacific island countries used to live a traditional selfsufficient lifestyle. However, the influx of modern economics and culture made their economic structure more import-dependent; consequently, this condition resulted in creating chronic trade deficit in these countries. They have also faced natural environmental issues, including ecosystem degradation, due to urbanization and environmental pollution. Furthermore, these small islands hardly receive the benefit of necessary social services such as education and health care and transportation infrastructure connecting islands and countries is insufficient. These problems have made it difficult for these countries to achieve socioeconomic development and self-reliance.

JICA is providing region-wide cooperation to these island states to address common issues. In this case, JICA's approach to cooperation involves dispatching experts to key countries to create development models that suit common regional needs. These models are then extended to neighboring countries through such schemes as third-country training programs. As declared as important at the Sixth Pacific Islands Leaders Meeting (PALM6) of



May 2012 held in Okinawa, JICA is also providing cooperation that applies Japanese knowledge and experience, such as Okinawa's experience in overcoming issues unique to islands.

### **Priority Issues and Activities**

#### Environmental Protection

Waste management is a problem common to the small islands of the Pacific region. Since 2011, JICA, in cooperation with the Secretariat of the Pacific Regional Environment Programme (SPREP)<sup>1</sup>, has provided assistance for developing sustainable waste management systems and human resources to 11 countries in the region. Cooperation is provided at the regional level and country level toward the implementation of the Pacific Regional Solid Waste Management Strategy 2010-2015, a common regional goal. By conducting these activities, JICA is assisting in a reduction of the environmental impact of human activity, such as solid waste disposal, and helping to establish a sound material-cycle society on these islands.

Focusing on the oceans around the islands, the people of the Pacific are highly dependent on coral reef ecosystems for a variety of things, such as fishery and tourism resources and disaster prevention. However, in recent years, the coastal ecosystems have been damaged by multiple factors, including overfishing, environmental pollution caused by coastal development and the impact of climate change. JICA and the Vanuatu Fisheries Department have carried out technical cooperation to achieve sustainable management of coastal resources. In the Micronesia region, JICA has utilized the Palau International Coral Reef Center as a project base for technical cooperation in order to improve the research capabilities of coral reef ecosystems and achieve sustainable management of its ecosystems. The project is being carried out jointly with the University of the Ryukyus and the Japan Science and Technology Agency (JST).

#### Disaster Risk Management and Climate Change

The Pacific island countries are highly vulnerable to natural disasters such as cyclones, floods, earthquakes, and tsunamis.



Counterpart engaged in the sustainable management of coastal resources in Vanuatu



Establishment of a weather observation facility in Samoa under Grant Aid

Due to the large number of remote islands and limited communication and transportation, there is difficulty in spreading disaster warnings and also in delivering emergency aid to residents.

JICA has provided Technical Cooperation, Grant Aid and other cooperation to reinforce disaster prevention measures at the regional level. One specific area of cooperation involves enhancing weather observation and forecast and warning capabilities. JICA is conducting training programs at the Fiji Meteorological Service for experts from each of the countries in the region, as well as developing weather observation facilities in Samoa. In Tuvalu and the Solomon Islands, JICA provides assistance to set up radio broadcast networks for disaster information to give residents quick access to the information. In Fiji and the Solomon Islands, JICA has also engaged in technical cooperation that enables residents to evacuate properly according to information received. Overall, JICA is supplying a broad range of cooperation for disaster prevention in the region.

The Pacific island countries also are vulnerable to the impacts of climate change. In particular, Tuvalu and other lowlying atoll countries are vulnerable to sea level rise and other impacts associated with climate change. With the cooperation of the University of Tokyo and JST, JICA is providing Science and Technology Cooperation for eco-technological research to analyze the biogenic mechanism of production, transportation, and accumulation of sand by coral reefs and foraminifera.

#### Maritime Transportation

Maritime transportation is essential for the Pacific island countries to ferry people and cargo back and forth between the islands since the territories cover a vast area of ocean. From the perspective of providing access to education and medical services, maritime transportation is truly a lifeline for these countries. Up to now, JICA has provided Grant Aid for rehabilitation of harbors and provision of passenger and cargo vessels in Micronesia, Marshal Islands, Samoa, Tuvalu, Tonga and other countries in this region. In June 2012, JICA signed a loan agreement with Vanuatu as its first ODA Loan, which is to be used for the construction of an international cargo wharf in Port Vila.

SPREP: Regional international organizations guiding environmental policies. An organization consisting of 21 Pacific island countries and Australia, France, New Zealand and the United States.

#### Social Services

Because many Pacific island countries lack the proper supply and storage systems to ensure safe immunization programs, they require the establishment of a "cold chain" to provide safe supplies of vaccines. Toward that goal, in 2004, JICA committed itself jointly with the World Health Organization (WHO) to cooperation for the Pacific Immunization Programme Strengthening (PIPS). Since then, JICA has been providing the dissemination of technology and human resources development related to the management of immunization projects and vaccines in the Pacific region.

Limited access to education is a serious issue for remote areas and islands. JICA is providing cooperation in the region to increase opportunities for and the quality of education through the use of television, radio and satellite communication networks, and other methods. Through Grant Aid and Technical Cooperation, JICA is assisting with the establishment of an information and communication technology (ICT) center and the training of ICT staff at the University of the South Pacific (the main campus in Fiji), which was established by 12 countries in the Pacific region. Among other examples, in Papua New Guinea, where the primary education enrollment rate is low, JICA has constructed a national education media center and provided aid for the production of educational programs. Aid has also been given for delivering model school classes via television to elementary and junior high schools in other areas of the country.



Launching ceremony of a ferry provided to the Marshall Islands

#### Case Study Pacific Region: Efforts for Introduction of Renewable Energy in Island Countries

#### Supporting for Hard and Soft Aspects to Meet the Needs

The Pacific island countries actively work on introducing renewable energy for easing climate change and responding to rising cost of fuel necessary for power generation. JICA develops appropriate supports that meet the needs and circumstances of the countries.

# Start of Support for Intangible Aspects

The Marshall Islands sets a policy objective that 20% of currently-used energy will be replaced with renewable energy by 2020. In addition to supports by Grant Aid such as establishment of solar power plant, JICA also provides technical support including consolidation and development of the legal system and improvement of design technology. These soft aspects are needed for introducing solar power generation to power system, through the development study-type technical cooperation "Project on the Formulation of Self-Sufficient Energy Supply System" initiated from 2013.



Installation of solar panels in Micronesia

#### Utilization of Japanese Advanced Technologies

The Tongan government engages in the introduction of renewable energy. However, mass introduction of renewable energy with large variation, such as solar and wind power, makes it difficult to stabilize power supply. This also disturbs the maintenance of power quality due to frequency variation of power system. Under the "Project for Introduction of a Micro-Grid System with Renewable Energy for the Tonga Energy Road Map" JICA aims at stabilizing the power system by supporting the development of Micro-Grid control equipment and power system stabilization equipment using advanced technologies.

#### Cultivation of Human Resources with Well-developed Soft Components

In the "Project for Introduction of Clean Energy by Solar Electricity Generation System" for Micronesia, JICA installed solar panels in buildings of federal government and the College of Micronesia.

Moreover, JICA also dispatched engineers to local power authorities and colleges to provide four training programs in installation, management, and maintenance as well as preparing manuals. The introduction of the systems, including soft components, can enhance the staff ability, contributing to appropriate maintenance and management of the systems, such as accumulation of power generation data and periodic inspections.

The systems are also utilized for environment education at the college.