# **The Pacific**

## **Overcoming Vulnerabilities of Island States**

The countries of the Pacific are small islands separated by vast expanses of open sea. This geography brings problems peculiar to the island countries, including increasing solid waste, inadequate social services and infrastructure development, and deterioration of marine resources. The Pacific and its islands nations are also attracting attention as the area most vulnerable to the effects of rising sea levels caused by climate change.

The environment and climate change were the main agenda items at the Fifth Pacific Islands Leaders Meeting (PALM5) held in Hokkaido, Japan, in May 2009. JICA has cooperated in the environment sector for many years now, and is actively involved in efforts to address climate change, for instance, a project aiming to increase the resilience of the small atoll island of Tuvalu.

## Key Aid Strategies

### Promoting Region-Wide Cooperation

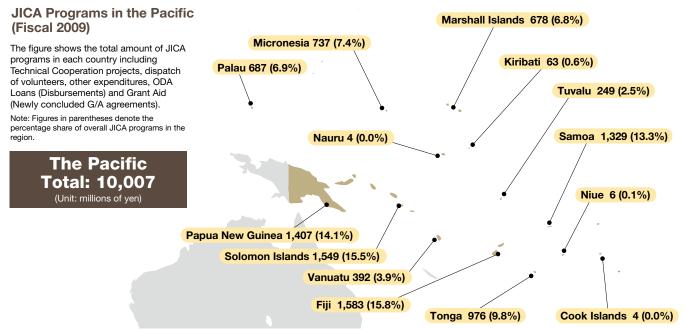
JICA provides assistance to the following members of the Pacific Islands Forum (PIF): Fiji, Kiribati, the Marshall Islands, the Federated States of Micronesia, Nauru, Palau, Papua New Guinea, Samoa, the Solomon Islands, Tonga, Tuvalu and Vanuatu, as well as the Cook Islands and Niue. These countries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

Dispersed as they are across a vast expanse of ocean, the vulnerabilities of the island nations of the Pacific mean that they face many difficulties in developing their economies. The domestic market is small, with populations of only 10,000 to 800,000 when excluding Papua New Guinea, and they are isolated from international markets.

In recent years, the countries have faced environmental

problems such as an increase in solid waste that is difficult to treat on the islands, resulting from the influx of the modern economy and culture into traditional self-sufficient lifestyles. Inadequacy of social services caused by small-scale government resources and lack of transportation infrastructure restrict social and economic development and pose challenges to a self-supporting economy.

JICA provides support to address issues common to the region such as waste management, infectious disease and education, giving regard to the characteristics of each country. To ensure effective, efficient implementation, JICA promotes regional programs in collaboration with international and regional organizations such as the Secretariat of the Pacific Regional Environment Programme (SPREP), the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF). In such cooperation, JICA's



Note: Figures exclude JICA's cooperation to multinational and international organizations.

approach involves the dispatch of experts to countries to play a key role in creating development models and good practices and then disseminating these to other countries in the region.

JICA plans to promote regional cooperation with a stronger focus on addressing the vulnerabilities of island nations, such as

fostering societies with an environmentally sound material cycle and human resource development in health and medical services. JICA also focuses on measures to assist with adaptation to climate change.

## Case Expanding Organic Farming with Grassroots Study Technical Cooperation

Valuing Traditional Lifestyles and Nature

The waters around the Solomon Islands are fishing grounds for Japan's deep-sea fishing industry, and bonito and tuna caught there are used for dried bonito flakes and canned tuna. The fallout from the civil war lasting from the late 1990s to 2003 and the environmental deterioration caused by logging for lumber exports and excessive slash-and-burn cultivation have become major issues for the Solomon Islands.

JICA provides grassroots Technical Cooperation to support the introduction and establishment of fixed type organic farming, which has a low environmental impact, on Malaita Island, the cause of the dispute.

#### Working for Self-Supported Economic Development

Malaita Island in the Solomon Islands has little industry, and migrant workers who find work in the Guadalcanal Islands, such as Honiara, the capital of the Solomon Islands, are the main source of cash revenue for the island. However, this has led to tension with the local population on Guadalcanal Island and triggered conflicts. As a result, many people have returned to Malaita Island, but the island has almost no industry to employ these people. At the same time, slash-and-burn cultivation is widely carried out on the island, but excessive land clearing and deforestation are carried out to boost revenue, and this is raising environmental concerns.

Accordingly, JICA is working with the NGO Asia Pacific Sustainable Development (APSD)<sup>1</sup> to foster the island's self-support capacities by promoting fixed type organic farming minimizing impact on the environment, in Auki, Malaita's capital. The project aimed to augment the training facilities known as the APSD Perma Culture Center (PCC)<sup>2</sup> over a three-year period from 2006, which accepts 30-50 young people every year from the entire Solomon Islands (not just Malaita Province) for training in organic farming. The trainees became leaders for regional development. The project aims to create a new culture while respecting traditional lifestyles in the Solomon Islands and the local natural environment, and enhance the natural abundance and quality of life for residents. In line with this goal, facilities such as PCC, Solomon Organic Center (SOC)<sup>3</sup> and the Diffusion Center<sup>4</sup> were established in the northern and eastern regions of Malaita Province. Malaita was the first province to establish legislation to promote organic farming. APSD's organic agriculture was designated as the development model for rural agriculture.

JICA will continue to work with APSD to provide support for distribution and development of markets for agricultural products so that previous cooperation leads to the sustainable development of the region.

- 1. APSD: An NGO engaged in supporting local development to promote conflict recovery, expand sustainable, fixed type organic farming and improve the lives of the impoverished
- 2. Perma Culture Center: A human resource development base. APSD accepts 30-50 young men every year from the entire country for a one-year training program in organic agriculture.
- 3. Solomon Organic Center: SOC works to improve the lives of PCC graduates and local residents through small-scale industrial revitalization by operating an organic restaurant serving food made with farm products, selling organic fertilizer and organic feed and purchasing farm crops produced by PCC graduates.
- 4. Diffusion Center (northern and eastern regions of Malaita Province): Site for dissemination and popularization of agricultural technology, information and agricultural produce. This center was established to disseminate agricultural technology and related information and serve as a gathering place for farmers.

#### A Grassroots View

Malaita Province Organic Farming Promotion Project

#### **Ruben Mori**

Solomon Islands

#### Representative, Asia Pacific Sustainable Development, Solomon Islands

Our project targets residents of rural villages. We work to improve their lives by providing appropriate training and market opportunities. The scope of activities that a single NGO can cover is limited, and we believe that cooperation with international aid organizations such as JICA, the Solomon Islands government and other NGOs will be even more important in the future.

#### Simon Ui

#### PCC Graduate in 2008

After graduating from PCC, I grew rice and vegetables with my family on a small scale, and the knowledge and techniques I had learned were really helpful. In the future, I would like to carry out projects that engage groups and the community. I will need basic accounting and management skills to do this, so I hope APSD will provide further support in these areas.



Trainees engaged in organic agriculture

## **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.

JICA is supporting countries in the Pacific to minimize damage from natural disasters with its efforts to improve weather observation, forecasting and early warnings. In Tuvalu and the Solomon Islands, JICA supported the improvement of radio broadcasting networks, and in Samoa, the improvement of weather observation facilities.

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 living creatures and sand drifts accumulate. The project also devises long-term measures to prevent soil erosion and considers measures to protect the coastline.

JICA has also provided cooperation for efforts to mitigate the impacts of climate change by providing solar power generators in Micronesia, Palau, the Marshall Islands and Tonga, and has conducted a preparation survey on forest sinks 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. JICA is working with the regional international organization the Secretariat of the Pacific Regional Environment Programme (SPREP) to establish a Solid Waste Management Strategy in the small island countries and develop human resources to disseminate these initiatives throughout the Pacific.

In May 2009, JICA hosted the Solid Waste Management Workshop in Japan, inviting officials in charge of waste management from each government in the region to identify their needs and devise a future cooperation framework.

JICA will provide support for the implementation of the Solid Waste Management Strategy, as regional cooperation, with a focus on reducing, reusing and recycling waste. JICA will also expand its regional cooperation to reduce the impact of human activity on the environment of small islands, such as waste, and create environmentally sound material cycle societies that makes life on the islands sustainable.

#### **Health and Medical Services**

Many donor organizations have been supporting the Expanded Programme for Immunization (EPI) in the Pacific. It has achieved great successes, including the eradication of Poliomyelitis from the region. However, many countries in the region are still suffering from insufficient capacity to maintain the cold chain networks necessary for vaccine logistics. To address this, in 2004 the governments in the region adopted a declaration vowing to strengthen vaccination programs. This initiative led to the Pacific Immunization Programme Strengthening (PIPS) framework with development partners such as Japan, Australia, WHO and UNICEF.

JICA has been taking a leading role in PIPS through a five-year Technical Cooperation project since 2005 for 13 countries. PIPS supports the management of vaccination programs, technology dissemination, and human resource training programs for vaccine management and the safe disposal of medical waste. This project is highly regarded in countries because many stakeholders are involved in discussing the project activities.

In recent years, WHO has focused on the lack of health personnel in the island countries. JICA has also joined in this effort through human resource development for community health as well as improvement of medical facilities in order to integrate Technical Cooperation and Grant Aid.

#### **Education**

JICA provides assistance to improve the quality of education on remote islands and to support distance learning programs utilizing correspondence education, short-wave radio and satellite communication networks to expand educational opportunities on the islands.

The University of the South Pacific, headquartered in Fiji, is a regional university founded by 12 countries in the region in 1968. With Japanese support, the university was equipped with a satellite communications network, allowing interactive communication between the main campus in Fiji and branch campuses located throughout the region.

In Papua New Guinea, JICA supported the establishment of a national media center where educational programs are produced. JICA also promoted TV-based education for primary and secondary school students. These activities helped to raise awareness among local residents about the importance of education and have improved students' academic standing.

JOCV and JICA Senior Volunteers have been dispatched to work on improving the quality of mathematics in primary education in the Federated States of Micronesia, Marshall Islands and Palau. In Vanuatu, JICA established a cooperation framework in primary mathematics based on volunteer programs to improve teachers' skills. Moreover, a volunteer-led project to improve the capacity of teachers in mathematics and science has been established in Samoa.

#### Case Study Conserving Nature and Biodiversity

Environmental pollution has become a serious issue for the island nations of the Pacific as they have modernized. Port Moresby in Papua New Guinea lacks sewage service in the coastal area, and this has led to the pollution of the coastal sea. Concerns have been raised about the negative impact on residents and the coral reefs. JICA has started an ODA Loan project to support the construction of a sewer facility in Port Moresby starting in January 2010.

The Independent State of Papua New Guinea consists of the eastern half of New Guinea Island and several other islands. In the 1970s, three sewage treatment plants were built on the inland side of Port Moresby by Australia. However, since no sewage treatment plants were built in the coastal area, sewage is discharged untreated from the coastal areas offshore and/or into the soil. Pollution of the sea has caused serious health problems among coastal residents. Moreover, concerns have been raised about the negative impacts on the ocean's ecosystems, including coral reefs, due to the pollution of the sea. Under these circumstances, Papua New Guinea's government designated public sanitation services as a priority area for the current medium-term development strategy and launched countermeasures.

In January 2010, JICA commenced an ¥8.3 billion Japanese ODA Loan project to repair and construct sewage treatment plants

in Port Moresby. This project is aligned with the infrastructure development for climate change adaptation announced at the Fifth Pacific Islands Leaders Meeting held in May 2009. This project includes the construction of a sewage treatment plant, sewer facilities in the coastal area, the construction and repair of pumps, and the laying of pipes. This project is expected to help reduce the health impacts from polluted water, conserve the beautiful coral reefs and recover fisheries resources.

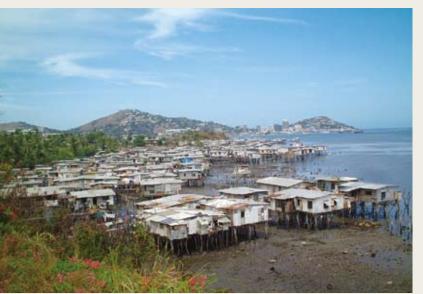
(Photo by Kenshiro Imamura)

#### Independent State of Papua New Guinea Port Moresby Sewerage System Upgrading Project

A Grassroots View

Lot G Zauya Project Manager, Port Moresby Water and Sewerage Corporation

I am grateful for the Japanese government's support for this improvement project for Port Moresby's sewage system. It is also our pleasure to see how advanced Japanese technology can contribute to a better environment for coastal residents.



Improved sanitation and water quality are also expected for the residents living on the water.



