



From
the People of Japan

Creating a Sound Material-cycle Society in Small Islands



Japan's cooperation in the field of solid waste
management in the Pacific region



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August 2014



Pacific island countries are in need of a “Return” System

Dr. Kunitoshi Sakurai

Professor Emeritus, Okinawa University

As agreed upon at Rio+20, the world community after 2015 will make every effort to achieve sustainable development goals. The central pillar of that effort is the conversion of our society into a recycling-oriented society. That conversion in SIDSs is an extremely challenging task because of their small size and remoteness from the international recycling market. In close collaboration with SPREP, Japan has been helping Pacific island countries (PICs) to tackle solid waste problems since PALM 2. In the period of 2011-2016 under the umbrella of J-PRISM, Japan collaborated with 11 PICs to promote 3R, identify and develop good practices (GPs) in the region, and boost the exchange of GPs among PICs.

With full confidence based on successful experiences, PICs are now trying to use momentum to strengthen their effort for the conversion of their societies into sustainable ones. As such, Japan is requested to continue her support towards PICs in cooperation with SPREP. It is also necessary for PICs to establish a system to return the waste that cannot be recycled within the region to producing countries based on the extended producer responsibility (EPR). Japan is requested to play a leading role in the establishment of the “Return” system.



Mr. Masami Fuwa

Director General, Global Environment Department,
Japan International Cooperation Agency (JICA)

Since its dispatch of experts to the Secretariat of the Pacific Regional Environment Programme (SPREP) in 2000, JICA has continued to provide support for improving solid waste management in the Pacific region. Such support includes training for administrative officers responsible for solid waste management in the countries in the Pacific region, improvement of the landfill site in Samoa, and support for formulating a regional strategy for solid waste management and implementation of technical cooperation projects in Palau, Vanuatu and Fiji.

The “Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management (J-PRISM),” the five-year region-wide technical cooperation project, has committed to solving the issues of solid waste management unique to island countries and provided support for the 11 countries in the Pacific region, since its inception in 2011. Specifically, J-PRISM supports any concerted efforts in the entire region to address a number of issues, such as geographical problems, influx of materials from other countries and proper management of solid waste in a limited national land. SPREP’s support for implementing a strategy for solid waste management in the Pacific region is also one of those examples.

We hope that we will help develop resources with high-level expertise and experiences through these support programs, as well as minimize the impact on the natural environment through our active efforts in support and cooperation in each one of our partner countries and within the Pacific region. We will continue our support in a way that will protect the healthy lives of the residents.



Mr. David Sheppard

Director General, Secretariat of the Pacific Regional Environment Programme

SPREP is delighted to be a long-term partner of JICA through the innovative J-PRISM project, a project to improve the management of solid waste in the Pacific region, as this is a major issue for SPREP’s Pacific island members. What we particularly like about J-PRISM is its focus on practical and tangible outcomes and also its long-term and clear focus on building technical capacity within Pacific island countries.

We can now see the tangible on ground results of this partnership, particularly through promotion of the pioneering Japanese “Fukuoka method” of landfilling, which is based on application of aerobic methods to solid waste disposal. Prospects for further development, and ongoing mentoring of regional experts from a pool of national waste managers, are very promising, with trained waste managers already taking the lead in delivering training to their counterparts in other countries. SPREP is expanding its work on solid waste management, increasingly to cover the management of hazardous as well as solid waste, and a number of new projects have recently commenced.

We also successfully implemented the Clean Pacific Programme in the Pacific in 2012 and 2013, which has emphasized the importance of waste minimization for sustainable solid waste management in the Pacific region. All of these projects are based on the solid and effective partnership with JICA.

Countries and donors in the Pacific region are increasingly looking for performance and results. The innovative J-PRISM Project has shown that effective partnerships between agencies, such as SPREP and JICA, support Pacific countries to enhance project delivery and effectiveness.

SPREP promotes a holistic view to solid waste management, covering all key sectors, underlined by mechanisms for close partnership and cooperation. On this we are as one with JICA and this will continue into the future.

SPREP is proud to be involved with the J-PRISM project, working closely with JICA and the Governments of Pacific countries, and we look forward to continuing our close cooperation to support solid waste management priorities throughout our region.



Solid waste problems in the Pacific region

Increasing and diversifying solid waste due to changing lifestyle and concentration of the population in urban areas

Difficulties in securing the land for final disposal sites because of very limited space

Solid waste accumulated on the islands because of their geographical remoteness, special economic structure and uneconomical recycling operations

Impact on the natural environment including coral reefs and mangrove forests due to poor management of hazardous waste and improper control of final disposal sites



Response to disaster waste generated by natural disasters

The Pacific region is in an environment that is likely to be exposed to recurring natural disasters including cyclones, tsunamis and floods and to rising sea levels and extreme weather which are both suspected to be caused by climate change.

As any of the countries in the region also consists of many islands, their transportation/information and communications systems, which are supposed to connect not only urban and rural areas in these islands, but also their main and remote islands, have not been fully developed. This hampers prompt and precise communication of disaster information and prevents the residents from receiving emergency assistance. Therefore, it has become crucial that each community come up with disaster countermeasures.

In efforts to recover from these disasters, it will become a major challenge whether solid waste generated by them is managed as swiftly as possible. Therefore, it is critical to clean up post disaster waste on site taking into account of 3R (Reduce, Reuse, Recycle), in order to respond to various solid waste in a time of disaster. Ensuring prompt and proper management of solid waste is also effective in preventing infectious diseases, etc.

Countries in the Pacific region to which support for disaster waste management was provided

- 2009 Samoa (Tsunami)
- 2012 Samoa, Fiji (Flood)
- 2013 Fiji (Cyclone)
- 2014 Solomon Islands (Flood)



What JICA is looking for in solid waste management in the Pacific region

1. Developing the capacity of human resources

JICA has placed an emphasis on developing capacity of human resources who can lead solid waste management in their own countries, not relying on support from overseas, as well as developing leaders who help each other in the efforts to address solid waste management issues within the Pacific region.

2. Improving solid waste management

Proper collection, transportation and disposal of waste play an integral part in solid waste management. JICA's support has helped an increasing number of countries in the Pacific region initiate and improve waste collection service and introduce a semi-aerobic landfill system, also known as the "Fukuoka Method" (see Page 10).

3. Creating a recycling-oriented society

In order to respond to rapidly increasing solid waste, JICA has supported efforts to create a **recycling-oriented society** with the slogan of 3R+Return (see Page 11) that considers not only 3R (Reduce, Reuse, Recycle), but also circumstances unique to island countries.

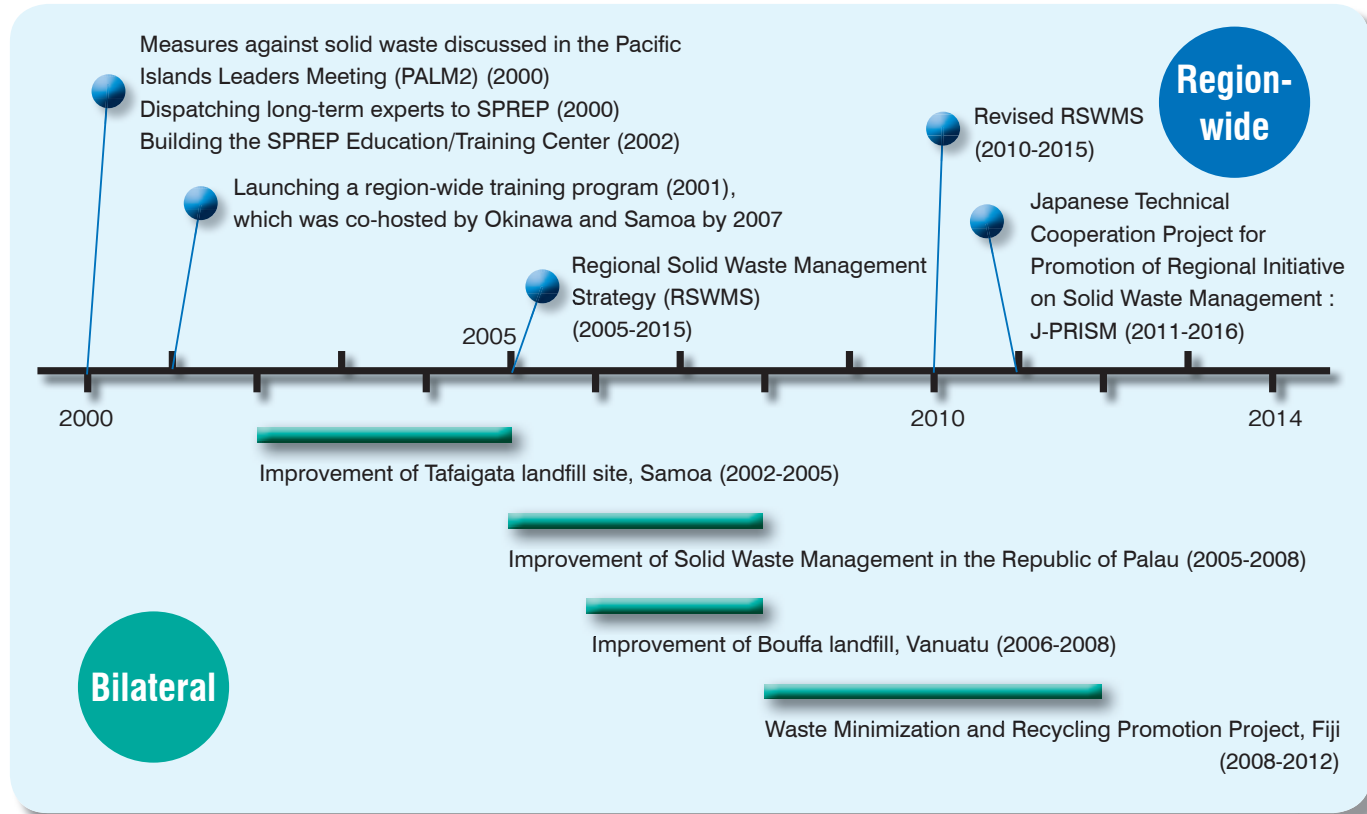
4. Cooperation at the grassroots level

Urban solid waste is generated through everyday life. Raising the people's awareness is critical in solid waste management. Experiences and technologies of the people and municipal governments in Japan have crossed the ocean and been developed in the Pacific region.

5. South-south cooperation & intraregional cooperation

Japan's cooperation over the years is producing human resources who are committed to cross-border activities within the Pacific region. Not only will JICA share Japan's experiences, but also continue to support mutual learning within the Pacific region.

Support for solid waste management in the Pacific region



Japan's Cooperation in the Pacific Region since 2000

Mr. Satoshi Kozuka

JOCV (dispatched in 2011)

Environmental education/Solomon Islands

I worked as an environmental education volunteer in Honiara, the capital of the Solomon Islands. Like other tropical countries, time passed more slowly in this country than Japan, and I used to be bewildered every day by the gap in the feeling toward time. Littering the streets has become a serious issue in today's world flooded with imported goods in terms of environmental education. For this reason, I kept picking up litter for two years.

I was able to get to know many new people and develop patience, adaptability and aggressiveness through my activities. These friends and abilities have become my precious treasures.



Ms. Ayaka Kondo

JOCV(dispatched in 2013)

Environmental education/Marshall Islands

While looking at piles of trash that are becoming higher and higher day by day, I have been working on promoting 3R+Retun (see Page 11) and offering environmental education at school, in order to prevent trash unreturnable to the soil from being generated.

Although it is very difficult to encourage the people in the Marshall Islands to understand the concept and motivate them, I would like to continue to make tireless efforts with the help of relevant organizations, JICA and J-PRISM.



Comprehensive Efforts in the Pacific region

- Regional Project Formulation Study
- Dispatch Experts to SPREP
- Solid Waste Management Project in Oceania Region (Technical Cooperation Project)
- Assistance in formulating Solid Waste Management Strategy for the Pacific Region
- Preliminary Survey on Large/Bulky Waste Management in the Pacific Island Countries
- Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management : J-PRISM (Technical Cooperation Project)

Federated States of Micronesia (FSM)

- Training in Japan
- Training in Samoa
- In-country training
- JOCV/SV
- Tofol Solid Waste Development Project (Grant Assistance for Grass-roots Project)

Marshall Islands

- Training in Japan
- Training in Samoa
- In-country training
- JOCV/SV

Republic of Nauru

- Training in Japan
- Training in Samoa
- In-country training

Republic of Kiribati

- Training in Japan
- Training in Samoa
- In-country training

Tuvalu

- Training in Japan
- Training in Samoa

Independent State of Samoa

- Training in Japan
- Training in Samoa
- JOCV/SV
- The Project for SPREP training centre in the Independent state of Samoa (Grant Aid Project)
- Provision of Incinerator (Grant Assistance for Grass-roots Project)
- Promotion of Shibushi Model (Waste Minimization without incineration) from Samoa to Pacific Island Countries (JICA Partnership Program)
- Improvement of Tafaigata landfillsite (Technical Cooperation Project)

Cook Islands

- Training in Japan
- Training in Samoa

Niue

- Training in Japan
- Training in Samoa

Kingdom of Tonga

- Training in Japan
- Training in Samoa
- Great Vava'u and Okinawa Mottainai Movement Project (JICA Partnership Program)

Republic of Fiji

- Training in Japan
- Training in Samoa
- In-country training
- JOCV/SV
- Provision of Compactor Garbage Truck to Suva City Council (Grant Assistance for Grass-roots Project)
- The Project for Improvement of Sanitary Environment in Tavua (Grant Assistance for Grass-roots Project)
- The Project for Provision of Garbage Compactor Truck to Nausori Town Council (Grant Assistance for Grass-roots Project)
- Provision of Compactor Garbage Truck to Lami Town Council (Grant Assistance for Grass-roots Project)
- Provision of Compactor Garbage Truck to Rabi Island (Grant Assistance for Grass-roots Project)
- The Project for Provision of Backhoe to Sigatoka Town Council (Grant Assistance for Grass-roots Project)
- Waste Minimization and Recycling Promotion Project (Technical Cooperation Project)
- Promotion of Shibushi Model (Waste Minimization without incineration) from Fiji to Pacific Island Countries (JICA Partnership Program)

Republic of Vanuatu

- Training in Japan
- Training in Samoa
- In-country training
- JOCV/SV
- The Project on Improvement of Bouffa Landfill (Technical Cooperation Project)
- The Project for Provision of Waste Disposal Equipment for Port Villa Municipality (Grant Assistance for Grass-roots Project)
- Promotion of Shibushi Model (Waste Minimization without incineration) from Samoa to Pacific Island Countries (JICA Partnership Program)

Republic of Palau

- Training in Japan
- Training in Samoa
- JOCV/SV
- The Project for Koror State Government Compost Facility and Recycling Center (Grant Assistance for Grass-roots Project)
- The Project for Improvement of Solid Waste Management (Technical Cooperation Project)
- Integrated Programme for Environmental-friendly Compost System in the Republic of Palau (JICA Partnership Program)

Independent State of Papua New Guinea

- Training in Japan
- Training in Samoa
- In-country training

Solomon Islands

- Training in Japan
- Training in Samoa
- In-country training
- Establishing separate collection system of household waste in cooperation with public and private sectors based on a new 3Rs(reduce, reuse, recycle and return) concept (JICA Partnership Program)

JICA Overseas office

Embassy of Japan

JOCV: Japan Overseas Cooperation Volunteers

SV: Senior Volunteers

1. Developing the Capacity of human resources



Mr. Shiro Amano

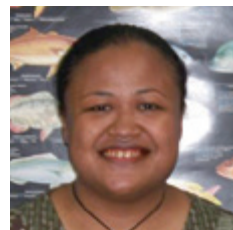
Chief Advisor
Japanese Technical Cooperation Project
for Promotion of Regional Initiative on
Solid Waste Management in Pacific
Island Countries (J-PRISM)

The objective of technical cooperation for solid waste management is not to make quick changes by forces from outside but to gradually and sustainably improve it through the increased capacity of the people based on the belief of "Building a nation starts with developing the capacity of people." The role of JICA experts as a coach is to inspire the people to awaken and to provide them with opportunities for development. It is therefore not the experts but the people who will bring about changes in solid waste management. It is required for us to further provide opportunities for those who have significantly increased their capacities through the past cooperation to assist others through South-South and Triangular cooperation.



Mr. Faafetai Sagapolutele
Assistant Chief Adviser, J-PRISM

J-PRISM's primary focus on developing the capacity and capability of waste staff in the Pacific Islands is on the right track thanks to JICA. As a former government employee, I see the impact of the J-PRISM project on the islands not only on the improvements to some facilities, but also the skills developed through various activities designed for the project counterparts to be directly involved. I believe such type of project can adjust staff to meet the waste challenges from time to time. In past years, there was hardly any information available on solid waste in almost all the countries. If there was some information, it was mainly from consultants working under some past projects. Those days are gone and we now have updated information for almost all the Pacific islands covered by J-PRISM. In addition, there are a number of local staff who can perform various surveys to extract information without consultants. This learning experience should be continued and become the focus of future projects and assistance to the islands. Improving the capacity and capability of local staff can make a big difference to islands' solid waste management conditions.



Ms. Christina Fillmed
Executive Director,
Yap Environmental Protection
Agency, FSM

There have been a number of capacity development activities in the FSM by J-PRISM and JICA in Japan in which representatives of the FSM States have participated for improvement of overall solid waste management and 3R awareness. In-country trainings in the FSM have also been held looking at improved maintenance and management of Fukuoka sanitary landfill, which began in Yap in February 2013 and subsequently held in other States. And also very important is the capacity development of all SWM personnel and staff through direct assistance and guidance of JOCV Senior Volunteers and JICA experts (coaches!).



Ms. Vivianne Morofa
Waste Management Officer,
National Capital District Commission,
PNG

The Comprehensive Solid Waste Management and 3R training in Yokohama, conducted from the 13th-3rd July has broadened my knowledge in the waste management discipline and increased my confidence as a waste professional.

Project counterparts have also acquired research skills in waste management by undertaking Time and Motion Studies and Waste Characterizations since 2011. These studies allowed counterparts to establish baseline conditions that can be used to set targets for improvement.

Communication at international conferences

JICA continues to participate in different international conferences, such as the Pacific Islands Leaders Meeting (PALM), which is hosted by Japan once every three years, the Asia-Pacific 3R Forum and the International Conference on Sustainable Development in Small Island Developing States (SIDS). It provides information of Japan's support for solid waste management at these conferences.



2. Improvements on the ground – Waste collection services

Chuuk State in the Federated States of Micronesia did not provide any collection service of household waste. The Division of Public Works has offered a waste collection service, since collection vehicles were provided through the Japanese government's Grant Assistance for Grassroots Projects in 2012. To make this service workable, not only the Chuuk State Division of Public Works, but also the Environmental Protection Agency and Japan Overseas Cooperation Volunteers working in the state played a significant role.



Mr. Jack Sham
Manger of Solid Waste Management,
Chuuk, Environmental Protection
Agency, FSM

The Weno Solid Waste Management Project is a project funded by the Chuuk Environmental Protection Agency and implemented by the Chuuk State Division of Public Works. With technical assistance from J-PRISM, and the collaboration of the Chuuk State Division of Public Works, we have rehabilitated the dumpsite, improved an access road to the dumpsite and set up a garbage collection system on the Island of Weno, the commercial and government center of Chuuk State. Prior to the implementation of this project, the collection of garbage was very limited; approximately 10% of the general and household waste was collected and illegal dumpsites were rampant. The number of illegal dumpsites has decreased by 50% and the collection of general and household waste has increased by 60%.

In 2013, the residents of the four communities started offering a waste collection service on their own in Vava'u, Tonga, which previously had provided no such service. Each community organized a solid waste management committee and came up with an action plan. Service fees have also been collected by these communities in their own right.



Ms. Wendy Beti
Environmental Officer
Ministry of Environment,
Climate Change, Disaster
Management, & Meteorology,
Solomon Islands

The Solid Waste Management Training in Kobe, Japan which is part of the recent 5th Regional 3R Forum for Asia and the Pacific held in Surabaya, Indonesia was an eye opener and worthwhile experience. The J-PRISM Project and the support from JICA as well as the SPREP have enabled the Solomon Islands Government through the relevant Waste Management agencies to come together and work collaboratively as a team to address the most urgent solid waste management issues. Our team work and leadership throughout the past two and a half years of the J-PRISM Project is the driving force to making things happen for the purpose of improving our final disposal system and addressing the waste management challenges in our country to the next level.



Ms. Feauini Veikoso Laumanu
Officer-In-Charge, Vava'u, Ministry of
Environment, Energy, Climate Change,
Disaster Management, Meteorological
Information & Communications in Tonga

Started in Sep. 2013, the J-PRISM Tonga Team is working hard to monitor the community's activities and provide technical advice when needed. After verifying the practicability, sustainability and expandability of the system, the Project selected four pilot communities for implementation before expansion to 5 communities this year 2014 and another 5 next year until we cover the whole area of Vava'u District. So far so good but we still need to establish more consistency among the households and collection team of each communities, and strengthen the "VEVE (= "Waste" in Tongan language) Committee".

Can this method work out in remote islands like Vava'u? Keep your eyes on us!

2. Improvements on the ground – Final disposal sites

The existing disposal site has been improved by counterparts at their own initiative in Pohnpei State, the Federated States of Micronesia. This experience has helped the counterparts gain huge confidence in conducting physical improvement of solid waste management on their own.



Mr. Charles Lohn
Pohnpei Environmental Protection Authority, FSM

The Dekehtik dumpsite was an open dumpsite with little control. Thanks to the support of JICA and the J-PRISM project with SPREP the dumpsite was rehabilitated into a Fukuoka type sanitary landfill in the month of June 2013 by way of a pilot project. The project was limited to a 70 x 30 meter cell due to it being a pilot project but now Pohnpei State is looking to extend the project and add in new cells that will transform the entire landfill into a semi-aerobic Fukuoka type landfill with more leachate treatment ponds. With the newly rehabilitated cell Pohnpei’s Solid waste managers and care takers are learning every day better and possible ways of handling our waste especially at the final disposal site.



Ms. Faatamaliāmio Meredith
Senior Waste Policy and Planning Officer, Ministry of Natural Resources and Environment, Samoa

It’s a pleasure for me as a Samoan Citizen and a public servant to the government of Samoa, to acknowledge and appreciate the respected valued assistance from the government of Japan through projects, trainings and workshops that I was invited to and participate in. These have enabled me to observe, study, learn and obtain what needs to be acquired from their knowledge and experiences to help Samoa improve solid waste management for a better living environment.



Mr. Teliphen Neamon
Majuro Atoll Waste Company, Marshall Islands

Thank God! Being a JICA trainee and member of J-PRISM, I am really thankful because I can achieve a lot. I want to share the knowledge I have learned with my colleagues and make progress in the solid waste management in RMI.



Weighbridge that measures solid waste brought into a final disposal site (Samoa, Tafaigata disposal site)



Prof. Yasushi Matsufuji
Professor, Fukuoka University

Unlike the other regions, we have to find a clue to the solution of solid waste problems with limited resources, in terms of goods, human resources and money in the Pacific region. At the same time, as the region is surrounded by natural beauty, we also have to be responsible for protecting it.

The “Fukuoka Method,” Japan’s own landfill technology, is simple to use and applicable to small and medium-sized landfill sites. I hope that the Pacific “Fukuoka Method” suited to local conditions will be materialized as early as possible through JICA’s cooperation.

Open dumping had been employed at the Kalaka disposal site on Vava’u island, before counterparts at the Ministry of Health in Tonga made improvements including readjustment of the landfill and rebuilding of enclosing bunds, which have drastically changed the situation of the disposal site.

Before improvement



After improvement



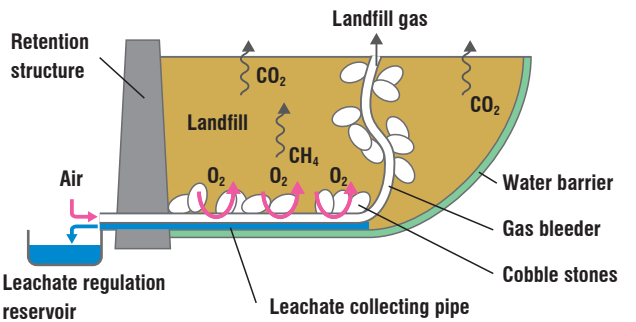
Mr. Manase Malua
Health Inspector, Vava’u, Ministry of Health, Tonga

After the successful rehabilitation work of the existing disposal site, it was technically appropriate to label Kalaka Landfill. Kalaka landfill has two cells, one cell remains in reserve while the other one is filled by the users. At the same time the landfill provides a recycling station beside the gate and inside the landfill area we allocate places for green waste to decompose in order to prevent rapid filling of the Kalaka landfill.

Making full use of Japan’s technology, the Fukuoka Method (semi-aerobic landfill system)
What is the “Fukuoka Method”?

The “Fukuoka Method” is a sanitary landfill system that was developed by Fukuoka University and Fukuoka City. It is characterized by its low-cost and simple landfill improvement technology with which leachate collecting pipes, gas venting pipes, etc. can be installed, using materials and techniques available in developing countries, with the purpose of expanding an aerobic area inside the landfill layer of solid waste.

Not only can this method reduce the impact on an environment around a final disposal site, while accelerating the breakdown of landfilled solid waste, stabilizing the landfill site earlier and removing leachate more quickly, but it can also contribute to preventing global warming through the reduction of methane gas emissions from the landfill site.



Structure of the Fukuoka Method (semi-aerobic landfill system)



Fukuoka Method employed at a disposal site in Pohnpei State, FSM

Countries in the Pacific region whose final disposal sites have been improved by the partial application of the Fukuoka Method

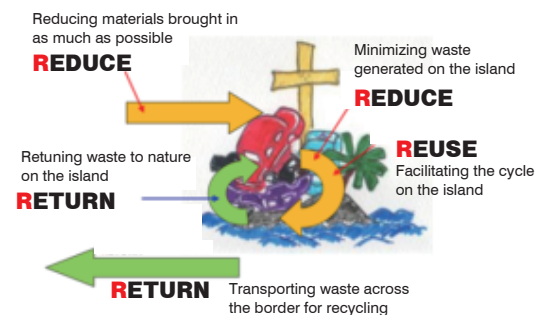
- Samoa
- Palau
- Vanuatu
- Federated States of Micronesia
- Fiji
- Tonga

3. Creating a recycling – oriented society

3R+ Return

3R (Reduce, Reuse, Recycle), a concept essential to creating a recycling-oriented society, was originally advocated by the (then) Japanese prime minister Koizumi, and the “3R Action Plan” was adopted at the G8 Sea Island Summit held in June 2004. It goes without saying that this concept is also important in island countries. However, they have not had a fully-developed industry that ensures recycling.

Thus, JICA has added the word “Return” to it to promote “3R+Return” consisting of two “Returns”: ① exporting to overseas recyclable resources and materials that are difficult to treat on island, and ② reducing organic waste to nature.



Fiji

Lautoka City Council (LCC) located in the west of Fiji has been working on compost making at home, educational programs at school and compost making with vegetable waste generated from the market with the slogan of “Ever green, Ever Clean, Lautoka City”. LCC has started the separate collection of recyclable materials and tried to reduce the amounts of solid waste to be landfilled at the disposal site. “Waste Minimization and Recycling Promotion Project”

Period: 2008-2012
Counterpart organization:
Nadi Town Council, Lautoka City Council



Mr. Shalend Singh

Senior Health Inspector, Department of Health,
Lautoka City Council, Fiji

LCC is proud to have initiated the home compost subsidy program, market waste composting, green waste chipping, clean schools program, rehabilitation of disposal site and recyclable collection service under the guidance of JICA experts. 3R activities shall be regarded as an investment and seen as municipality’s corporate responsibility towards preserving and conserving the environment for a sustainable future.

Papua New Guinea

The 3R/HEART* Initiative in Port Moresby has been implemented in Port Moresby, the capital of Papua New Guinea, with the purpose of spreading the concept of 3R.



* Health,
Environment,
Attitude,
Resource efficiency and
Thoughts



Mr. John Navara

Senior Environmental Health Officer,
National Capital District Commission, PNG

“3R HEART Initiative” is to expand the concept of 3Rs to improve our Health, Environment, Attitude, Resource efficiency and Thoughts in Port Moresby. I believe we can improve the collection and disposal system of the waste and even people’s mindset through the activities under the 3R HEART initiative.

Vanuatu

Port-Vila Municipality, the capital of Vanuatu, has started making an attempt to collect organic materials including vegetables generated at the central market, and to compost and use them for agriculture.



Mr. Roger Tary

Environmental Health Manager,
Port-Vila Municipality, Vanuatu

The purpose and objectives of the Market Waste Compost Project are to reduce the amount of waste as much as possible ending up at the Landfill and, in return use the compost material for gardening. With the constraints situation there is a need to consider what activity we can carry out within our capacity (finance, human resources, tools and equipment and facilities). Some Pacific Countries have established Recycling Companies and others maybe deal mainly with one or two categories of waste, thus other waste is ending-up at the Landfill. There is also a need to consider starting with a small scale activity and then improving and expanding it in the future. We will keep our environment clean and healthy.

4. Cooperation at the grassroots level

Introducing the Shibushi model to Fiji, Samoa and Vanuatu

Shibushi City in Kagoshima Prefecture has had no incinerators and has reduced over 80% of landfilled waste each year since 2005, (compared with 1998). This “Shibushi model” has been implemented in the Pacific region since 2011.

“Project to promote Shibushi City’s waste sorting model in the Pacific region, focusing on Fiji”

Period: 2011-2013 Responsible organization: Shibushi City

“Project to promote Shibushi City’s model in the Pacific region, focusing on Samoa”

Period: 2013-2016 Responsible organization: Shibushi City



Mr. Junichi Nishikawa

Director
Office of Environmental Policy,
Citizen-Environment Division,
Shibushi City Local Government

Solid waste management definitely needs cooperation from residents. Residents can drastically change solid waste management by sorting out their waste on their own. Please spark the imaginations of the residents. To do so, we have to directly meet and talk to the people as much as possible. In Fiji, the people have already started sorting out their waste, before taking it out. “Sorted waste turns into resources. Mixed waste creates more waste.” With that in mind, let us work hard together.

Improving roads by the use of sandbags

Road improvement was conducted with the help of Community Road Empowerment (CORE) in Japan, using locally procured materials in Chuuk State, the Federated States of Micronesia. Consequently, this improvement not only removed puddles, but also enabled the smooth running of collection vehicles on the road.



Dr. Yoshinori Fukubayashi

Director/Secretary General,
Community Road Empowerment

Part of the road to the dumpsite in Chuuk was improved with the sandbag (Do-nou) method. The improvement was done mostly by staff from the Chuuk State Division of Public Works, with the help of neighboring residents, relying on human power, not machines.

I hope that this road improvement activity will contribute to improvement of solid waste management, while motivating stakeholders to review their local resources and helping them have confidence to improve their living environment on their own with only a little ingenuity.

Promoting collaboration between citizens, the operator and the government in the Solomon Islands

Honiara City, the capital of the Solomon Islands, is now making efforts to properly manage solid waste, by building a system for proper control of solid waste through collaboration between citizens, the operator and the government.

“Project to build a system for collection and sorting of household waste based on the principle of New3R (Reduce, Reuse, Recycle + Return) through public-private collaboration”

Period: 2014-2016 Responsible organization: Learning and Ecological Activities Foundation for Children (LEAF)



Mr. Masayoshi Ogawa

Director
Learning and Ecological
Activities Foundation for
Children (LEAF)

It has been five years, since LEAF was commissioned by JICA to provide training programs on solid waste for the Pacific region, and we celebrated the sixth anniversary this year. Since the inception of the programs, we have been thinking not only about the 3R concept, but also about the significance of “Return” with our trainees.

We need to cooperate in building an international social and economic system, which allows us to return food waste to the soil as nutrients for mother earth, as well as to recycle plastic bottles, aluminum cans, etc. and return them to exporting countries as recycled products.

Turning available resources into products

A JICA Partnership Program focuses on commercializing recyclable resources in Vava’u island, one of the remote islands in Tonga.

In a training program held in Okinawa, participants reconfirmed the significance of techniques to sell recyclable resources to overseas on more favorable conditions and cooperation between residents, the government and businesses

“Great Vava’u and Okinawa Mottainai Movement Project”

Period: 2011-2014
Responsible organization: Okinawa Citizens’ Recycle Movement



Mr. Hiroshi Kogachi

Representative, Okinawa Citizens
Recycle Movement

In Tonga, I witnessed the wave of large consumption flowing into the country, ranging from disposable diapers to automobiles. In the meantime, I felt a desperate need for the venous industry in a situation where infrastructure was not fully developed enough to properly manage and recycle solid waste.

Fortunately, I was able to meet a recycle business operator and young people who respected ties within a community.

They are our precious partners in creating a recycling-oriented society.

5. South-South cooperation & intraregional cooperation

JICA has promoted improvement of solid waste management throughout the Pacific region, covering not only individual countries, but also the region as a whole, while making full use of regional characteristics in the Pacific region. Japan has in common with the countries in the region, in terms of geographical similarity (being an island country), productive structure and living foundation. These similarities facilitate joint efforts in human resource development, through enhancing knowledge about solid waste management and improving technologies. JICA has promoted development of regional foundations through various support including J-PRISM so that the whole region can strengthen its solid waste management in the future.

Dispatched to another country as a training instructor

(Support from Fiji to Solomon Islands)

In October 2013 Ms. Nafiza and Ms. Premila from Nadi Town Council held a workshop for school teachers in the Solomon Islands and introduced the Clean School Program implemented in Fiji. The name of the program is change in Solomon Islands into the Eco School Program and has become a part of educational activities at school.



Ms. Nafiza Ali

Health Inspector, Nadi Town Council,
Fiji

Nadi Town Council (NTC) has successfully sustained the Clean School Program in cooperation with the Ministry of Education.

NTC has continued with the training programs in schools and more schools have joined the CS program this year. The success stories of Nadi schools are now being disseminated to the other towns and cities in Fiji (Lautoka, Ba, Tavua, Rakiraki, Sigatoka) as well as to the Pacific Island countries of Kiribati, Solomon Islands, Tonga.

Giving tips for disaster waste management

(Support from Vanuatu to Solomon Islands)

In April 2014, the Solomon Islands was hit by a tropical cyclone, which also flooded the Ranadi disposal site in Honiara, the capital of the country. Floods also hindered the management of disaster waste. Honiara City Council staff learned a lot through the support provided by the expert of landfill management who came straight from Vanuatu.

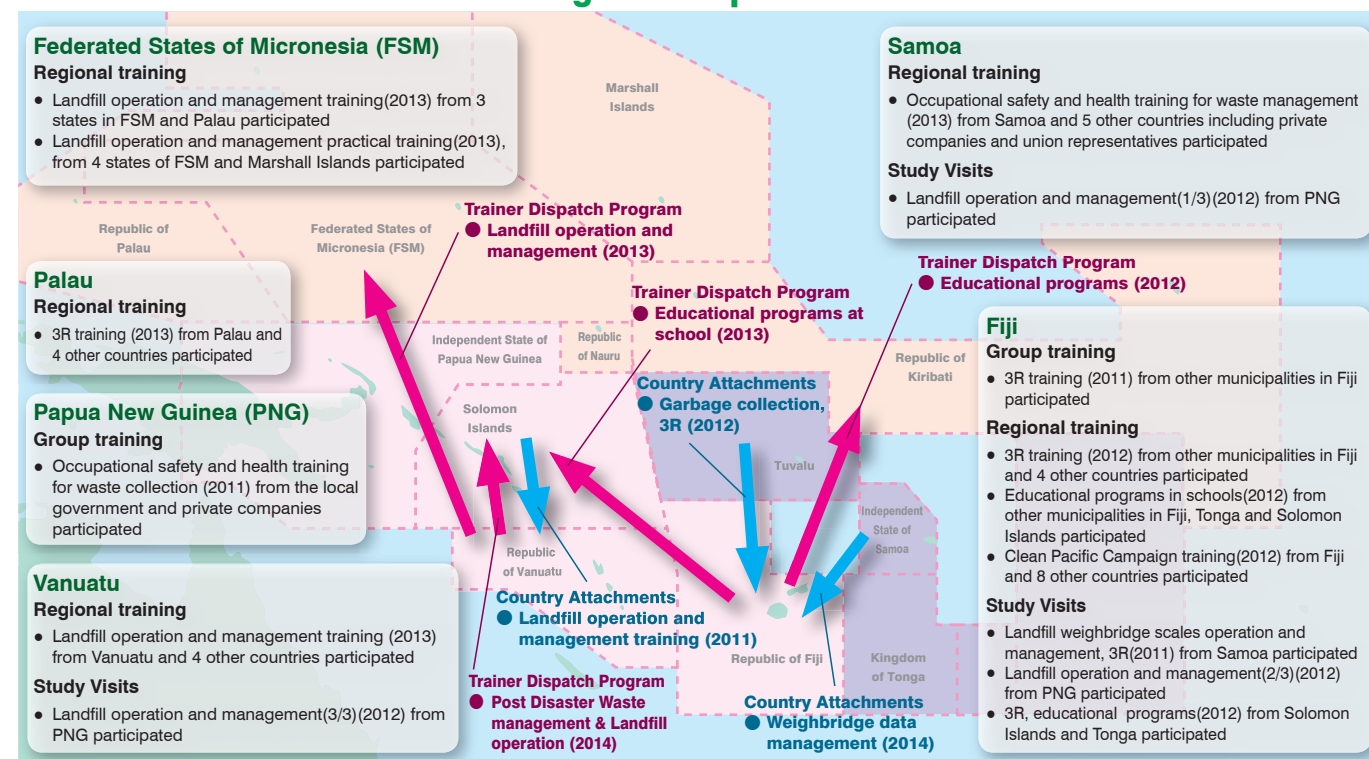


Mr. Amos Mathias

Landfill Supervisor,
Port-Vila Municipality, Vanuatu

Commonly speaking, the basis and principle for the operation, management and improvement of the disposal site are the same in the Pacific Island Countries. We have to create what we can do by ourselves effectively and efficiently under our current situation of constraints. The disposal site is the "Mirror" of the solid waste management status in the country. Let's take action to improve the site to mirror the beautiful future in our region.

Results of South-South and Triangular cooperation



Working with Various Actors

Japan has been working on improvement of waste management in the Pacific Islands Forum (PIF) countries in collaboration with various actors such as regional/international organisations, other donor agencies, NGOs, municipalities in Japan, etc. SPREP has been the partner agency of Japan's cooperation in the field of solid waste management.



Relationship among actors for improving the waste management in the Pacific Region

Pacific Islands Database of Capacity Development Activities (PIDOC)

Database built within SPREP to register those who have participated or become instructors in JICA's training programs related to solid waste management, etc. The database aims to build a human network that helps develop human resources for leadership who will become responsible for solid waste management in the Pacific region in the future, as well as allows people to learn from each other, by recording individual learning and teaching experiences.



Mr. Kosi Latu

Deputy Director General
Secretariat of the Pacific Regional
Environment Programme (SPREP)

Not only facilities but also human resources with sufficient capability are fundamental to proper solid waste management. In this context Japan has strongly contributed to improvement of solid waste management in the Pacific Region. One unique style of JICA's cooperation is working together with the SPREP officers and involving SPREP member countries both at the decision maker and officer level. We are sure that JICA and SPREP will continue working together and are now developing a database (PIDOC) of local experts that can facilitate others.

Passing on good practices to other members in the region

Holding a training program in a third country

We have applied the drink container deposit system to products imported from overseas and used them as financial resources for solid waste management in Palau. We welcomed instructors from not only Palau, but also Fiji and Kiribati, and held a training program for counterparts in the Federated States of Micronesia, Marshall Islands and Samoa.



Mr. Calvin Ikesiil

Manager, Solid Waste Office,
Bureau of Public Works,
Ministry of Public Infrastructure,
Industry and Commerce, Palau

In November 2013, a Regional Training on Promotion of 3R was held in Palau. The purpose of this training was to share the progress and lessons learned regarding existing recycling systems in the region. Countries from Federated States of Micronesia (FSM), Samoa, Marshall Islands and Kiribati participated in the training. The participants were very supportive and keen to learn about each island's experiences as well as achievements.

I believe such kind of regional workshop is important and necessary for the region as it provides opportunities for us to understand and learn from each other's experiences whether good or bad. We must cooperate and share information to achieve the best result of our solid waste management systems in our small island countries.