

# Chapter 10

## J-PRISM: A Case Study of Regional Mutual Learning and Discovery towards an Effective Solid Waste Management in the Pacific

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### 1. Introduction

This paper intends to highlight the main features of a triangular cooperation project in waste management in the Pacific called the J-PRISM<sup>1</sup> project. Originally set up as a platform for triangular cooperation, J-PRISM is unique in that it goes beyond the usual framework of triangular cooperation in which a specific country acts as a sole pivotal partner, and instead encourages multiple countries to act as pivotal partners in their respective fields of expertise. In the project, all beneficiary countries are actively engaged in multilateral partnerships to exchange and learn about the best or advanced practices.

For maximum effectiveness and efficiency, J-PRISM has taken full advantage of the regional good practices accumulated over the past ten years. They include, for example, landfill improvements in Samoa and Vanuatu; landfill improvement and recycling in Palau; promotion of 3R (Reduce, Reuse, and Recycle) and ongoing school educational programs on the appropriate waste minimization in Fiji. By using such good practices as benchmark models, the project has been supporting capacity development at multiple levels from individuals, groups, organizations, and society at large in eleven countries during its five-year duration.

J-PRISM has also adopted a differentiated approach depending on the level of country in waste management. For countries with notably good practices, the project support has aimed to further strengthen the existing capacities; whereas for other countries with less experience, the project has aimed to first build up the capability to adequately manage their solid waste.

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1. The Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries

In the two and a half years since the start of the project, the participating countries have recorded the remarkable progress in human and organizational development for more effective solid waste management. Some of the emerging achievements include landfill improvements in Tonga and the states of Yap (underway as of September 2013), Chuuk (ongoing), and Pohnpei (ongoing) of the Federated States of Micronesia (FSM); waste education in schools and expansion of 3R activities in Tonga, Solomon Islands, Vanuatu, and Kiribati; and waste data management through the introduction of weighbridges (scales for weighing waste) in Fiji, Samoa, and Papua New Guinea (planned). While still ongoing, this initiative of regional knowledge exchange and practices is expected to lead to the further advancement of the sustained solid waste management in the region.

## **2. Context of the Initiative**

Effective waste management has become an increasingly pressing issue among Pacific island countries. In recent years, countries in the region have seen a rapid expansion of volumes of the solid waste along with the growing variety of wastes due to the modernization of lifestyles and urbanization. If left unaddressed, these changes will bring about a serious degradation of environment, including worsening public health and hygiene, with potential damage to its scarce water resources, beautiful island, and coastlines.

The challenge in these island countries is further intensified by their geographical isolation, highly limited land areas, and social traditions, such as systems of land ownership.

To support the efforts of the countries in the region to address such enormous solid waste issues, since 2000, JICA has closely cooperated with the members of the Pacific Islands Forum, comprising fourteen countries and territories. The preparation for the support started with the development of a medium and long-term vision for regional cooperation in solid waste management. As an initial step toward full-scale cooperation, waste management specialists<sup>2</sup> were dispatched by JICA in 2000 to the Secretariat of the Pacific Regional Environment Programme (SPREP), an inter-governmental organization based in

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2. Mr. Shiro Amano, current J-PRISM Chief Advisor, and his successor, Mr. Takeo Tashiro, Fukuoka City.

Samoa responsible for coordinating and supporting actions to protect the environment and resources for sustainable development in the region. From a regional perspective, the initial work done by JICA, laid the groundwork for the regional triangular cooperation that later came to fruition.

The development of full-scale triangular cooperation took several steps. In Samoa, a novel collaboration started around this time and attracted regional attention. In the initiative, JICA assisted Samoa in introducing a semi-aerobic landfill structure, an innovative cost-effective approach for landfills developed in Japan,<sup>3</sup> and the first of its kind in the Pacific.

Subsequently, JICA started to implement several regional and bilateral cooperation projects to further promote landfill improvements and 3R, including projects in Samoa, Palau, Vanuatu, and Fiji.<sup>4</sup>

During this period, however, these projects did not set out to mainstream the elements of triangular cooperation. Thus, although part of the projects' objectives included the establishment of practicable models (e.g., landfill improvements, promotion of 3R) for the Pacific region, the outcomes of their cooperation were mostly confined to individual target countries.

Nevertheless, in the meantime, the countries in the region moved toward the formulation of regional waste management strategies with SPREP functioning as the focal organization, for which process Japan and JICA also provided support. A ten-year vision for the Solid Waste Management Strategy for the Pacific Region (SWMS) was first

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3. This waste management approach using semi-aerobic landfill is popularly known as "Fukuoka Method," reflecting the fact that the method was developed in the Fukuoka City of Kyushu Region in Japan.

4 The project details are as follows:

- Solid Waste Management Project for the Oceania Region (SWAMPP; 2006 – 2010): A technical cooperation project in partnership with SPREP for the region with Samoa as a focal country
- The Project for Improvement of Solid Waste Management in Palau (2005 – 2008): A technical cooperation project to support landfill improvements and help formulate a National Waste Management Plan
- The Project on Improvement of Buffer Landfill in Vanuatu (2006 – 2008): A technical cooperation project to support landfill improvement and development of a draft Solid Waste Management Plan for Port Vila Municipality
- Waste Minimization and Recycling Promotion Project in Fiji (2008 – 2012): A technical Cooperation project to reduce waste disposal and promote recycle.

formulated by SPREP in 2005, and following it, the Pacific Regional Solid Waste Management Strategy 2010-2015 (RS2010), a revised version of the SWMS, was launched in 2009.<sup>5</sup>

It was against this backdrop that the eleven Pacific countries and Japan formed a regional partnership. Taking fully into account the lessons learned from prior cooperation that strongly pointed to the efficacy of regional approach, JICA and its partner countries then agreed to bundle together the eleven separate proposals into a single region wide project, entitled the Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM) spanning five years between February 2011 and February 2016.

### **3. J-PRISM: A Regional Knowledge Network for Solid Waste Management**

#### **3.1 Overall project design and structure**

Learning from its experiences of past interventions with insufficient regional dimension, JICA designed a workable framework to promote regional collaboration, while ensuring that whatever support specified in the framework would adequately respond to the diverse local needs of each beneficiary country.

##### **(1) General project design**

J-PRISM's aim was twofold: first, to strengthen the national waste management mechanisms in each country with their concomitant capacity development; and second, to promote the regional sharing of knowledge and expertise. National projects were designed and implemented to address the priority needs for each country in line with national waste management plans.<sup>6</sup> The activities at the regional level, on the other hand, provided space for sharing outcomes and best practices among the Pacific countries. Knowledge and expertise gained

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5. There was also another positive movement for regional actions in solid waste management. At the Fifth Pacific Islands Leaders Meeting (PALM5) in 2009, the joint declaration (Islanders' Hokkaido Declaration) stated that cooperation in waste management would continue to be promoted and strengthened in the future, and promised to support the efforts of the Pacific island countries including the effective utilization of 3R-based resources within the framework of regional waste management strategies.

6. The formulation of most of these national waste management plans had been supported by JICA's prior cooperation in collaboration with SPREP.

from regional activities were then fed back to national projects for further improvements in individual countries. In other words, J-PRISM was designed to promote a spiral process of learning and capacity development through the closely intertwined activities at both the national and regional levels.

## **(2) Project implementation structure**

The main participating organizations of J-PRISM are national waste management authorities in each country and SPREP.

To formalize the partnership, SPREP and JICA concluded a memorandum of understanding (MoU), which clarifies roles and responsibilities, including the contributions of each side, as well as the design and goals of the project. In line with the MoU, JICA set up a central coordination office (hereinafter referred to as the Project Office) at the SPREP headquarters in Samoa for the overall facilitation and support of both the regional and national activities. In addition to these arrangements, JICA also dispatched experts from Japan to each country in the region to augment the implementation of national activities.

### **Box. SPREP and the regional environmental cooperation in the Pacific**

SPREP has been playing the role of implementer as well as coordinator for the regional donor-assisted environmental projects and as such has been receiving international support from a variety of actors other than JICA. Below are some of major collaborators in terms of waste management.

- L'Agence Française de Développement (AFD): It has partnered with SPREP to carry out a regional project for a period of four years from 2011, developing and implementing education and training programs for regional waste managers at Fiji National University, and building waste oil collection systems in the region.
- Global Environment Facility (GEF) and UNEP: SPREP will implement a five-year regional project targeting the reduction of adverse impact from persistent organic pollutants in 2013.
- European Union (EU): With the assistance of EU, SPREP will also start implementing a regional project for tackling e-waste (electric and electronic waste), medical (health-care) waste, and asbestos. It is expected to launch during 2013.

All major regional environmental projects physically place their central coordination units within the office of SPREP. Such coordination efforts have further enhanced communication among the donors. As a pioneering project in solid waste management, J-PRISM has actively engaged in the regional coordination through timely sharing of the resources and data generated by the project with other ongoing regional projects for further enhancing regional impacts.

### **(3) Partnerships with other international organizations**

J-PRISM has been formulating partnerships with other international bodies. One major example is the International Labour Organization (ILO). Building on the past collaboration in Fiji with ILO prior to the launch of J-PRISM, ILO and JICA have signed an agreement to further continue and expand the achievements of past collaborations to the whole region. Listed below are some examples of specific cooperation.

- ✓ Occupational safety and health in waste management (Green Job, decent work)
- ✓ Training in Fiji in 2010, Papua New Guinea in 2011, and Samoa in 2013
- ✓ Contributing to improving productivity by including occupational safety and health perspectives

Based on these carefully designed programs and implementation structures, J-PRISM has undertaken a series of triangular cooperation activities linking actions at country and regional levels.

### **3.2 Regional exchange and capacity development through TrC: J-PRISM in action**

To promote regional exchanges of knowledge, expertise, and experiences among Pacific island countries and territories in solid waste management, J-PRISM has used a variety of tools and instruments. The following sections depict its major activities, in which such tools and instruments were utilized.

#### **(1) Dispatching local experts**

Local experts who gained technical skills through previous JICA projects have been playing a key role in J-PRISM. Recruited mainly from the participating organizations of the previous projects, these local experts have been working for J-PRISM as experts and playing various roles including those of facilitators and trainers for national and regional activities. Often, they are teamed up with Japanese experts to provide advice on the implementation and management of individual projects in several countries. They also worked as catalysts presenting their experiences of improvements in regional waste management at international conferences, including those held in Japan. Some examples of activities by local experts are listed below.

The type of local experts	The role and activities
A former officer and project counterpart at the Ministry of Natural Resources & Environment, Samoa, current J-PRISM Assistant Chief Advisor (local consultant)	<ul style="list-style-type: none"> <li><input type="checkbox"/> Individual project management (Samoa, Tonga, PNG, Solomon Islands, Vanuatu, Micronesia)</li> <li><input type="checkbox"/> Regional trainer (landfill operation and management)</li> <li><input type="checkbox"/> Presentations at symposiums in Japan and the region (Okinawa Eco-Island Symposium etc.)</li> </ul>
Current landfill supervisor at a city council, Vanuatu (former counterpart for bilateral technical program)	<ul style="list-style-type: none"> <li><input type="checkbox"/> Regional trainer (landfill operation and management)</li> <li><input type="checkbox"/> Accept and advise country attachments (landfill operation and management)</li> </ul>
Current city council officer, Fiji (former counterpart for bilateral technical program)	<ul style="list-style-type: none"> <li><input type="checkbox"/> Accept and advise country attachments (waste collection operation and management, 3R)</li> <li><input type="checkbox"/> Regional trainer (3R, OSH training)</li> </ul>
Current city council officer, Fiji (former counterpart for bilateral technical program)	<ul style="list-style-type: none"> <li><input type="checkbox"/> Accept and advise country attachments (waste collection and management, 3R)</li> <li><input type="checkbox"/> Regional trainer (3R)</li> <li><input type="checkbox"/> Presentations at international conferences in Japan (SWAPI)</li> </ul>
Current town council officer, Fiji (former counterpart for bilateral technical program)	<ul style="list-style-type: none"> <li><input type="checkbox"/> Visiting lecturer (clean school program)</li> <li><input type="checkbox"/> Regional trainer (3R)</li> </ul>

## (2) Training programs (regional, sub-regional, and in-country training/ workshop)

Group training has also been implemented using local human resources and facilities/sites with the aim of providing technologies, expertise and solutions for the issues common to the whole region, or to subsets of countries. For some programs, trainees are invited from the entire region (including the sub-regions of Micronesia, Melanesia, and Polynesia), while some programs limit the invited participants to particular sub-regions. In most programs, the host country is encouraged to invite participants not only from the municipality where



A scene of training in FSM Participants from FSM and Palau are listening to the instructions by trainers from Samoa and Vanuatu

the pilot project is being implemented but also from other municipalities with the aim of enhancing knowledge and expertise across the whole host country. Such program design thus necessitates adequate management capacity of the host organization.

	<b>Training</b>	<b>Host location</b>	<b>Participants</b>
1	Landfill operation and management training (2011)	Vanuatu	Samoa, Fiji, Solomon Islands, PNG, Vanuatu, other local governments
2	Occupational safety and health training for waste collection and disposal in collaboration with ILO (2011)	PNG	Port Moresby capital area (local government, private waste collection companies)
3	3R training in collaboration with other JICA partnership program (2011)	Fiji	Other municipalities in Fiji
4	Educational programs in schools (2012)	Fiji	Tonga, Solomon Islands, other municipalities in Fiji
5	Clean Pacific Campaign training in collaboration with SPREP (2012)	Fiji	Fiji, Kiribati, Palau, PNG, Tonga, Vanuatu, Cook Islands, Nauru, Tokelau
6	3R Training in collaboration with other JICA partnership program (2012)	Fiji	Marshall Islands, Samoa, Solomon Islands, Vanuatu, other municipalities in Fiji
7	Landfill operation and management training (2013)	Federated States of Micronesia (FSM)	Palau, 4 states of FSM
8	Landfill operation and management practical training through pilot demonstration project (2013)	FSM	Marshall Islands, 4 states of FSM
9	Occupational safety and health regional training for waste management (2013)	Samoa	Fiji, Nauru, PNG, Samoa, Solomon Islands, Vanuatu  (Government officials and private companies )
10	3R training (planned for November 2013)	Palau	FSM, Marshall Islands, Kiribati, Samoa



### (3) Country attachment, study visit, and trainers dispatch

#### *Country attachments*

J-PRISM introduced what it called “the Country Attachment (C/A) program.” It is a program in which staff members working for a waste-management related organization in a target (beneficiary) country are sent to a counterpart organization in another country for a period of about one to two weeks, to learn specific skills, knowledge, and expertise through on-the-job training (OJT). Unlike classroom training programs, the C/A program can provide opportunities for the direct exposure to concrete field practices, and for engaging in collaborative activities in day-to-day tasks. As well as conveying technology, skills, and expertise in the field, the program also provides the beneficiaries with an opportunity to observe the work ethics of the receiving individuals and organization through the day-to-day training.

	Program Description	Trainee	Destination (Resource)
1	Landfill operation and management (C/A)	Solomon Islands	Vanuatu
2	Landfill operation and management (C/A)	PNG	Samoa, Fiji, Vanuatu
3	Waste collection, 3R (C/A)	Tuvalu	Fiji (Lautoka)

#### *Study visits*

Another program aimed at exchange on site is what the project called “Study Visits” (S/V), a program through which the host country organization plans a range of site visits and lectures that respond to the needs of the partner countries. This was used as a short and convenient means of familiarization, though the On the Job Training element is generally limited compared to that of the C/A, given its short duration for a few days.

	Program Description	Trainee	Destination (Resource)
1	Landfill weighing scales operation and management, 3R (S/V)	Samoa	Fiji (Lautoka)
2	Landfill operation and management (S/V)	PNG	Samoa, Fiji
3	3R, educational programs (S/V)	Solomon Islands, Tonga	Fiji (Nadi)

***Trainer dispatch program***

The Trainer Dispatch programs (T/D) is to dispatch experts from resource countries to target countries to introduce programs or provide technical advice and coaching.

	<b>Program Description</b>	<b>Trainers (Resource)</b>	<b>Destination</b>
1	Educational programs at school (Teachers' workshop)	Fiji (Nadi Town Council staff and JOCV)	Kiribati
2	Landfill operation and management	Vanuatu (Port Vial municipal council staff)	FSM
3	Educational programs at school (Teachers' workshop)	Fiji (2 Nadi Town council staff)	Solomon Islands

**(4) Committees and the awards system for counterparts**

A meeting is held once a year to bring together project directors at the level of vice-ministers and bureau directors at the ministries for the environment in all project target countries. The main purpose of the meeting is to share overall project progress, and to discuss directions for future activities. In addition J-PRISM has instituted the following mechanisms to promote the sharing of best practices and mutual learning among all countries.

As of 2012, the project has launched the Best Team and Best Counterpart awards for the member organizations or individuals that made notable progress and produced best practices in the preceding year. The award recipients are invited to the steering committee meetings for the awards ceremony. The award-winning local experts are given an opportunity to present their achievements during the meeting, and share specific examples of best practices in front of the high-level government officials from other countries in the region. However, such experience-sharing opportunities are not limited only to those awardees. When the Project Office identifies any worthy practices with good outcomes, the Project Office may invite organizations or individuals to present their experiences at the meeting. Such conscious programming of knowledge sharing opportunities at the regular high-level meetings has helped raise the motivations of local practitioners.

Moreover, the steering committee meetings are strategically scheduled

as side events during the annual general meeting of SPREP. In so doing, other stakeholders including donor organizations are enabled to participate in the J-PRISM steering committee as observers while attending SPREP annual meetings. Such programming has helped not only to reduce the transaction cost for partners of SPREP but has also to raise the understanding and interest of the other stakeholders on the activities and achievements of J-PRISM initiatives.

### **Awardees and special invitees at the past steering committee meetings**

	<b>Host</b>	<b>Awards</b>	<b>Invited</b>
No. 1 September, 2011	Samoa	—	—
No. 2 September 2012	New Caledonia	<input type="checkbox"/> Best Team: Solomon Islands <input type="checkbox"/> Best Counterpart: Landfill supervisor, Port Vila municipality, Vanuatu	<input type="checkbox"/> Fiji, Lautoka City Council <input type="checkbox"/> Fiji, Nadi Town Council
No. 3 September 2013	Samoa	<input type="checkbox"/> Best Team: Tonga <input type="checkbox"/> Best Counterpart: Director, Yap State Environmental Protection Agency (EPA), FSM	<input type="checkbox"/> Marshall Islands, Majuro Atoll Waste Company

The above illustration of the activities of J-PRISM has proven the feasibility, relevance and advantages of the triangular approach with a region-wide scope. Above all, such substantial incorporation of triangular cooperation elements to the project have helped reduce the cost of the project more than solely relying on the Japanese specialists in the region.

The experiences of J-PRISM also have indicated that the triangular cooperation approach has been found to be both costs efficient and effective. The close similarity in geographical, environmental, and cultural features among island states meant the exchange of knowledge and expertise within the region was very useful. The numerous opportunities of seminars, workshops, and training have promoted the sharing of experiences and ideas as well as trust-building among the counterparts in the region. Providing opportunities for local experts to present their good practices and contribute to the project as the instructors and lecturers has also deepened their understanding on the

issue and strengthened their commitment to better solid waste management.

### **(5) Going beyond J-PRISM: Engagement in the international opportunities**

Another key activity of J-PRISM is its active engagement in international opportunities beyond the scope of the Pacific. Through such engagements, the J-PRISM team, consisting of local and Japanese experts, has been able to share its successful experiences in the Pacific with other parts of the world and also learn from other regions. Such joint activities of the team have also led to deeper understanding of the waste management issues and mutual trust among the J-PRISM counterparts.

One such occasion was when, in May 2012, J-PRISM members comprising Fiji, FSM, Palau, Samoa, and Tonga, as well as project experts, participated in the Okinawa Eco-Island Symposium. It was a symposium jointly sponsored by JICA and Okinawa Prefecture as a side event to PALM6. There, the team introduced J-PRISM's initiatives and exchanged opinions on the preservation of island environments.

Another occasion came in March 2013, when J-PRISM provided full-scale support for participation from the Pacific nations in the Regional 3R Forum in Asia, a high-level international meeting held in Hanoi, Vietnam. At a session for the island nations, the Project Office and representatives from Fiji, Palau, and Tonga highlighted the importance of 3R issues in the island nations through showcase presentations that were well-received by the participants. The discussion results from the session were then widely shared at the plenary of the same symposium and contributed greatly to raising the profile of the Pacific nations.

### **3.3 Achievements and challenges**

#### **(1) Outputs and outcomes thus far**

Through a variety of actions taken and outputs produced on capacity development for human resources through TrC approach mentioned above, the projects have already helped realize the following concrete improvements in waste management practices at national levels. These achievements have been realized through internalizing what they have learned through triangular cooperation.

### *Landfill improvements*

- ✓ Full completion: Tonga
- ✓ Ongoing with partial completion: Yap / Pohnpei / Chuuk
- ✓ Improvement work launched: Papua New Guinea / Solomon Islands
- ✓ Preparation process ongoing<sup>7</sup>: Samoa

### *3R Activities*

- ✓ Roll-out of educational programs about waste at schools: Fiji
- ✓ Spread of market waste composting: Fiji
- ✓ Launch of educational programs about waste in schools: Tonga / Solomon Islands / Vanuatu / Kiribati
- ✓ Introduction of deposit fee program for beverage containers (planned): Fiji / Samoa

### **(2) Some remaining challenges**

In spite of the achievements and good lessons from J-PRISM, there remain two major challenges.

The first challenge is how to systematically but meaningfully evaluate the value of its outcomes brought about by this highly process-oriented triangular cooperation. By developing and applying such evaluation approach with a process perspective, the evaluation exercise with an appropriate feed-back will help stakeholders get a clearer sense of the real benefits out of triangular cooperation. In the current absence of such methods, the awardee system illustrated above is one of the complementary actions to fill such learning gap by providing useful opportunities to help enhance their awareness of the real benefits of triangular cooperation. Through stronger regional learning process with the development of more appropriate evaluation approach, it is expected that the Pacific states will gradually become able to regionally source effective solutions and expertise without much dependence on external resources beyond the Pacific.

The other challenge is the high turn-over of the well-trained counterpart personnel partly due to the region's high mobility of workers and reliance on overseas remittances. The most talented human resources often leave looking for greener pastures in industrialized countries,

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<sup>7</sup> In preparation for the start of improvement work, collection and analysis of waste volume data using a weighbridge has started.

including Australia, New Zealand, and the United States. While the J-PRISM team has made efforts to rectify this situation, this “brain drain” will continue to pose a challenge with the view to the long-term sustainability of the initiative.

#### **4. Lessons Learned and the Way Forward**

We now turn to look at what has contributed to the performance of the project. We will first try to see the factors that have been at work, and then discuss what role an external actor—in this case JICA—has been playing for the project’s performance.

##### **4.1 Factors of success**

As the authors see it, there have been two factors that have contributed to the thus-far successful performance of J-PRISM. They are, first, a favorable environment in which the project was operated, and second, the factors that the project created for itself through its careful project design.

##### **(1) Favorable environment**

There were two underlying factors for J-PRISM’s successes, which are ownership and the presence of the regional and country policy framework at the start of the J-PRISM.

##### *Ownership*

First, there was reasonably strong sense of ownership and commitment among partners including regional organizations such as SPREP and the partner countries and territories. As we saw in Section 1, the management of rapidly increasing volume and diversity of the solid waste in these small island states has become a priority for the region. Such a sense of urgency certainly has worked to push the initiative forward. External support from the international community, including that of Japan, only reinforced this already existing sense of the strong ownership and commitment among the stakeholders of the region.

##### *Policy frameworks*

The second underlying factor was the presence of regional and country policy frameworks. At the time of the launch of the J-PRISM, the basic regional policy frameworks, including RS2010, were already in place, with support from JICA and other partners. Within the regional policy

framework, countries and territories in the region have also formulated their own country policy and planning frameworks. Such policy frameworks have underpinned the ownership.

## **(2) Project design**

### ***Regional scope in project approach***

With the backdrop of strong ownership and policy frameworks, a well-crafted project design has contributed to the good progress of J-PRISM so far. The backbone of the project design can be broadly summated to its effective and creative combination of regional approach and country-level follow-up mechanism, which are interconnected by the continuous cycle (or feedback loop) of learning and actions. Such a continuous learning process is then further complemented by the regional or sub-regional capacity development opportunities.

Informed by the lessons of the past cooperation projects in the region, JICA, SPREP, and partner countries have decided to form a single framework of projects covering all the eleven target countries with the central project office located in the SPREP headquarters in Samoa. Within the regional framework, J-PRISM has taken full advantage of the regionally available expertise for human resources development activities such as training, the dispatch of experts within the region, and exchange visits.

J-PRISM's engagement in regional policy-making processes helped raise the regional stature of J-PRISM among the key policy makers in the field. Such engagement included those with SPREP (through the steering committee meetings at the annual general meeting of SPREP) and the Pacific Islands Leaders' Meeting (by organizing side-events at the sixth summit in 2012 (Okinawa)). Also useful was the collaboration with multilateral organs like the United Nations Center for Regional Development.

### ***Field practices within the regional framework***

One notable design of J-PRISM is its combination of support to the local concrete practices along with the above-said regional actions. Though the island states in the Pacific share many common characteristics, there are also notable differences among countries when looking in greater detail. Such diversity can be found not only in the demographic, geographical, and socio-economic conditions but also in the way the

governments have acted on the waste management issues and their level of expertise. J-PRISM has responded flexibly to these situations, individually setting the targeted outputs and activities that were believed to match the needs of each country. Within the country framework, pilot country projects are then formulated to address the specific situation and needs of solid waste management in each country. Activities at the regional level are thus designed to provide complementary assistance to such country efforts through the provision of locally unavailable skills and knowledge.



Training participants from Samoa are learning about the data management of collected garbage at a waste disposal site in Fiji

#### *Development of regional expertise in medium- and long-term perspective*

The approach of regional triangular cooperation in J-PRISM rests on the regionally available expertise in solid waste management. Such possibility, however, did not automatically come about. It was made possible largely through the past and continuing efforts of human resource development in this particular field through both J-PRISM and its preceding cooperation. In such an endeavor, JICA has not only supported the training opportunities but has also consciously ensured that these regional experts were engaged in various project activities, as advisers and specialists, so they could further enhance their capabilities. Such efforts with medium- and long-term perspectives have provided an essential base for the good progress of J-PRISM.

These favorable environments, which were further reinforced with the assistance of international support and the carefully prepared project design, have together contributed to the achievements of J-PRISM thus far.

#### **4.2 The JICA's role and approaches in support for regional triangular initiative**

In discussing the effectiveness and efficiency of TrC, roles of external actors (which are often "Northern" actors) have been a subject of discussion, and in the remaining pages, the authors would like to address that issue. Based on the observations from this project, the authors would like to suggest three key roles, which JICA has played.



### **(1) Knowledge resource**

Japan through JICA has acted as one of the key knowledge resources for effective solid waste management in the region. One notable example of sharing Japanese innovative practices was the introduction and adaptation of the “Fukuoka” waste management approach using semi-aerobic landfill in several Pacific states. As described in the previous section, JICA’s knowledge support to the Pacific was not



Training participants from Marshall Islands and FSM are observing “Fukuoka methods” in Samoa

only limited to the sharing of concrete technology and skills but has also extended to the development of policy and visions at higher policy level. This JICA/Japan’s role as the knowledge provider was quite prominent during the JICA’s bilateral assistance prior to the J-PRISM, but it continued to play a role even under the region-wide initiative of J-PRISM. The provision of Japanese knowledge and expertise helped trigger the long-term process of strengthening solid waste management practices in the region.

### **(2) Knowledge facilitator**

By building on the successes of local adaptation and development of good pilot models in a number of countries in the Pacific states, the regional initiative of J-PRISM then acted as the facilitator of knowledge among these countries. In establishing a more sustainable mechanism, J-PRISM has helped institute a variety of opportunities and spaces with concomitant capacity development for continuous regional dialogue and knowledge exchanges. The examples of such spaces are illustrated in the above section, such as the regional training, study visits, country attachments, steering committee meetings with opportunities for awards and good practice presentations. These arrangements have not only helped the exchange of knowledge and experiences but also built mutual trust among stakeholders and motivate practitioners working in the field.

### **(3) “Coach” for continuing regional and country practices**

JICA through J-PRISM has played the role of “coach” both at the regional level with SPREP and the service frontline. In support of country-based activities of J-PRISM, JICA programmed the dispatch of Japanese technical experts to project partner countries rather than concentrating

all the specialists in the Project Office in Samoa. These Japanese advisers helped facilitate the efforts of continuous improvements at the country level, including the service frontlines and also provided concrete and timely technical advice to the staff members of the participating organizations as the coach. Such coaching activities at the country level were further underpinned by the resident advisers in the Project Office located within SPREP in Samoa.

**(4) Medium- and long-term commitment with the process of learning**

The hallmark of J-PRISM was the concurrent and coordinated efforts of these multiple actions at multiple levels, instituting mutual learning mechanism at the regional level while ensuring the translation of the knowledge into practice at each country level.

In retrospect, JICA did not grow to be able to play these roles overnight. The authors are of the view that this has been a learning process not only for the countries in the Pacific but also for JICA.

In fact, the process of preparation and the implementation of this challenging regional project would be best characterized as trial and error by the Pacific partners and JICA. As an effort to ensure a better project design, JICA has thus taken time and great care in project preparation. Since the early 2000s, it took sufficient time to study regional and country contexts in good depth. It has also ensured consensus among the interested countries. Such a process of careful preparation with the good engagement of partners in the region has ensured the regional legitimacy of the project and also enabled the close partnership with key regional organization such as SPREP and other international organizations active in the region.

Another point worth noting is that a mobilization of various resources enabled JICA to play various roles in such a way that is possible to meet the specific needs of its partners. The presence of committed Japanese experts and local counterparts has also been very instrumental in the successes of J-PRISM and the preceding collaboration from the early 2000s. Among them, two key individuals have played critical roles. They are Mr. Shiro Amano, JICA's Waste Management Specialist and the current J-PRISM Chief Advisor, and Dr. Kunitoshi Sakurai,<sup>8</sup> the Project

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8. Dr. Sakurai has been Professor at the Okinawa University since 2000.

Formulation Adviser for solid waste management in the Pacific in 2000<sup>9</sup> and later assumed the position of the chairman of the Japan advisory committee for J-PRISM. These two specialists and other Japanese experts,<sup>10</sup> who are highly knowledgeable both in global waste management practices, including those of Japan and the international cooperation work, have played a catalytic role in connecting Japanese and global good practices to the Pacific. The combination of resident JICA experts in both J-PRISM project offices in Samoa and partner countries, as well as the extensive JICA offices network in the region,<sup>11</sup> have enabled JICA to provide timely and flexible support for ranges of J-PRISM activities, which are regional in scope.

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9. Dr. Sakurai's work as the project formulation adviser has helped formulate the regional medium and long term for the regional solid waste management.

10. JICA has carefully selected experts, who are sufficiently equipped with the expertise in the waste management field with some prior knowledge and experiences in the Pacific Region. In addition, JICA has also made efforts of developing a pool of human resources for future dispatch.

11. JICA has nine offices in the Pacific Region.

## References

- Agamuthu, P. and Tanaka, M. 2010. *Municipal Solid Waste Management in Asia and the Pacific Islands*. Bandung: Penerbit ITB.
- Japan International Cooperation Agency (JICA) 2009. *Our Islands, Our Waste, Our Future*. Tokyo: JICA. Available from: [http://www.jica.go.jp/english/publications/jica\\_archive/brochures/pdf/solidwaste.pdf](http://www.jica.go.jp/english/publications/jica_archive/brochures/pdf/solidwaste.pdf) [02/10/2010].
- Japan International Cooperation Agency (JICA) 2010. *Ex-Ante Evaluation Report on the Project for Promotion of Regional Initiative on Solid Waste Management* (in Japanese). Tokyo: JICA.
- Japan International Cooperation Agency (JICA) 2012. *Report of the Detailed Planning Survey on the Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management* (in Japanese). Tokyo: JICA.
- J-PRISM 2012. *J-PRISM Flash*. No.1.
- J-PRISM 2013. *J-PRISM Flash*. No.2.
- J-PRISM 2013. *J-PRISM Flash*. Special Issue.
- J-PRISM 2013. *J-PRISM Flash*. No.3.
- Kawakami, T. and Khai, T. 2010. *Work Adjustment for Recycling and Managing Waste*. Bangkok: ILO.
- Sakurai, K. 2000. *Initiative for the Improvement of Waste Management in the South Pacific Region* (paper submitted to JICA in Japanese).
- Secretariat of the Pacific Regional Environment Program (SPREP) n.d.. *JICA/SPREP Regional Solid Waste Management (J-PRISM)*. Apia: SPREP. Available from: <http://www.sprep.org/Projects/jicasprep-regional-solid-waste-management-j-prism> [02/10/2013].
- Secretariat of the Pacific Regional Environment Program (SPREP) n.d.. *J-PRISM*. Apia: SPREP. Available from: <http://www.sprep.org/j-prism/about-j-prism> [02/10/2013].
- Secretariat of the Pacific Regional Environment Program (SPREP) 2010. *Pacific Regional Solid Waste Management Strategy 2010-2015*. Apia: SPREP. Available from: <http://www.sprep.org/publications/pswm-strategy-20102015> [02/10/2013].
- Secretariat of the Pacific Regional Environment Program (SPREP) 2010. *A Practical Guide to Landfill Management in Pacific Island Countries and Territories* (2nd Edition). Apia: SPREP. Available from: <http://www.sprep.org/publications/a-practical-guide-to-landfill-management-in-pacific-island-countries-and-territories-volume-1-inland-based-waste-disposal> [02/10/2010].

Secretariat of the Pacific Regional Environment Program (SPREP) 2013.  
*SPREP Annual Report 2012*. Apia: SPREP. Available from: [http://www.sprep.org/attachments/Publications/Corporate\\_Documents/AnnRep2012.pdf](http://www.sprep.org/attachments/Publications/Corporate_Documents/AnnRep2012.pdf) [02/10/2013].