



# FLASH No.7

Featuring activities in Pacific region

## Training for trainers for Solid Waste Management, Labasa, Fiji

The Regional Training for Trainers in the area of Solid Waste Management was a unique training conducted in the region by J-PRISM/JICA.

This training brought together 14 senior waste management officers from 8 countries (Fiji, Tonga, PNG, FSM, Samoa, Solomon, Palau and Vanuatu) to share their strengths based on their developed skills on various areas of solid waste management through their direct involvement with J-PRISM activities and other JICA waste projects.



These officers will be registered in the PIDOC (Pacific Islands Database of Capacity Development Activities) which is currently being developed for its operation. While sharing their areas of strength and expertise, they also learned lessons from others on areas of their weaknesses.

The 14 senior officials were given opportunities to present different areas of their expertise (E.g. Waste surveys; Waste planning, policy and legislations; Waste minimization (3Rs); Public awareness and education; Contracts management; Waste Landfill Design, Development and Management; Community Based Waste Management Initiatives and Waste Occupational and Health Safety) as well as to learn at the

### December 2014, No. 7 Contents

1. Training for PIC's SWM trainers, Labasa, Fiji
2. 4th Steering Committee Meeting for J-PRISM
3. JICA / SPREP / IPLA Side Event at UN SIDS Conference, Apia, Samoa
4. Short term study trip to Fiji re: composting
5. Used Oil Report from Luganville, Vanuatu

same time from others. "It was a total different experience from the usual training concept, where we used to come to training to listen and take notes." according to Mr. Sharlend Singh of Lautoka City Council.

During this training, participants provided lectures on various aspects and answered questions from other fellow participants. "Such an opportunity is vital to facilitate the capacity development within the region through south-south and triangular cooperation." according to Mr. Shiro Amano (J-PRISM Project Chief Advisor and facilitator of the Training).

*Continue to page 6*



## 4th Steering Committee Meeting for J-PRISM

6:00pm – 8:00pm, Tuesday, 30th September 2014

Melele Room, Marshall Islands Resort Hotel, Majuro, Republic of the Marshall Islands (RMI)

The 4th J-PRISM Steering Committee Meeting was opened by the meeting chair, Mr. Casten N. Nemra, Chief Secretary, Office of the President, RMI, followed by the remarks of H.E. Kazuhiko Anzai, Ambassador, Embassy of Japan in RMI who encouraged Pacific-SIDS and other stakeholders to take actions according to the outcome of UNSIDS conference held in Apia, Samoa in early September.

After the presentation of Mr. Shiro Amano, Chief Advisor of J-PRISM, country representatives of the J-PRISM reviewed the progress of regional and national activities in 11 project member countries, and also discussed the proposed modification of the project documents for better implementation for the 18 months of the remaining project period. J-PRISM has been implemented by JICA with the partnership of SPREP for the purpose of increasing human and institutional capacity in Solid Waste Management in PICs, through the implementation of the “Pacific Regional Solid Waste Management Strategy 2010-2015.”

At this meeting, three project member countries were given an opportunity to present their progress and achievement. Ms. Patricia Pedrus, Sustainable Development Planner, Environment and Sustainable Division, Office of Environment and Emergency Management (OEEM), FSM, introduced 3Rs and



other waste management activities in each state of FSM including OEEM as a coordination agency to promote sharing information and lessons learnt with all states. She emphasized the effectiveness of the “Learning by doing” approach being taken by J-PRISM for the human and institutional capacity development. Mr. Calvin Ikesiil, Manager, Department of Public Works, Ministry of Public Infrastructure, Industry and Commerce, (Palau) presented a variety of activities in Palau including successful management of the Container Deposit Legislation (CDL) system and on-going discussion for the construction



of a new landfill.

Then Mr. Teliphen Neamon, Environmental officer, Majuro Atoll Waste Company (RMI) and Ms. Ayaka Kondo JOCV/Environmental officer, Education Awareness Division, Environmental Protection Authority (RMI) presented activities on environmental awareness and education at the grass-root level, and the expansion program from Majuro to another atoll in RMI.

In addition, the awards for 2013 were given from Mr. Amano to the following counterparts and team.

Best Counterpart of the Year 2013

- Mr. Roger Tari, Environmental Health Manager, Port Vila Municipality, Vanuatu

Best C/P Team of the Year 2013

- Office of Environment and Emergency Management (OEEM), FSM  
Special Award

- Mr. Friden Ewen, Equipment Operator, Department of Transportation and Public Works, Chuuk State, FSM

- Mr. Henning Narruhn, Tradesman, Department of Transportation and Public Works, Chuuk State, FSM

Meeting was closed by the remarks from Mr. David Shepard, Director General, SPREP, and Mr. Naoki Mori, Deputy Director General, Global Environment Department, JICA.

They both emphasized the importance of the sustainable and durable partnership, such as the long-term partnership between JICA and SPREP, and strengthening south to south cooperation through the capacity development in the region.

# JICA / SPREP / IPLA Side Event at UN SIDS Conference, Apia, Samoa

J-PRISM actively participated in this once every 10 years opportunity of UN SIDS Conference held in Apia, Samoa from 1 to 4 September 2014, by organizing a side event, and joining a Multi-stakeholder Partnership Dialogue of “Water and Sanitation, Food Security and Waste Management.”

The title of the side event was “Expanding Waste Management Services of Pacific Island Countries through International Public Private Partnerships (PPPs)” scheduled in the morning of 3 September in the SPREP campus, of which purposes are (1) to consider the regional PPP for a sustainable waste management in PICs, (2) to identify the policy and institutional measures for treating plastics and e-waste issues in PICs, (3) to recognize the concept and initiatives on 3R + “Return”, and (4) to discuss the need to develop an effective regional cooperative framework to promote it.

The meeting achieved these purposes through a variety of presentations and fruitful discussions in collaboration with SPREP, the International Partnership for Expanding Waste Management Services of Local Authorities (IPLA)/ United Nations Center for Regional Development (UNCRD), Griffith



University, and United Nations Department of Economic and Social (UNDESA) as well as country representatives and relevant stakeholders. Details are as follows:

## 1. Opening Remarks



**Mr. David Sheppard,**  
*Director General,*  
*SPREP*

“Vulnerability”, “SIDS specific responses”, and “Sustainable and Durable Partnerships” are key elements for sustainable development of SIDS.

It is important to recognize that the threats arising from pollution and poor waste management are elevated by SIDS specific constraints and limitations.

Recycling waste is a critical component of the sustainable solid waste management process, but this is not usually practical on small islands and on atolls. Therefore, “Returning” waste, generally to a developed nation, for recycling, is an essential component of long-term sustainable waste management practices in the region.



**Hon. Kazumasa Shibuta**  
*Ambassador, Embassy of*  
*Japan in Samoa*

SIDS are facing critical challenges in managing various wastes under specific constraints. Japanese Government has conducted technical cooperation on waste management in the Pacific under the principles of “Capacity Development”, “Continuity”, and “Aid Coordination” in collaborate with SPREP. Our objective

is not to make quick changes by forces from outside but to gradually and sustainably improve it through the increased capacity of the people in SIDS.

We recognize that our role is to make the capacity for players expanded through providing a variety of opportunities for a sustainable waste management.



**Mr. Nikhil Seth**  
*Director, Division for*  
*Sustainable Development,*  
*United Nations Department of*  
*Economic and Social Affairs*  
*(DSD/UN DESA)*

The “Recognition of Diversity of SIDS” like a variety of vulnerability profiles among SIDS and “Need for Developing resilience of SIDS” at national level, regional level like a SIDS-SIDS cooperation, and global level are important elements for the sustainable development in SIDS.

Institutional capacity, financing, and access to technologies that could be easily accessed and adapted locally. I am glad to note that J-PRISM and SPREP are working together for the improvement of waste management in PICs and minimization of the waste disposal at landfills through “3R+ Return” approach. PPP can provide win-win solutions both for the local authorities and private sector if duly supported by appropriate policy frameworks.

## JICA / SPREP / IPLA Side Event at UN SIDS Conference, Apia, Samoa

### 2. Presentations



**Dr. David Haynes**  
Director, WMPC  
Division, SPREP

It is important to understand that a typical Pacific waste streams consist of 50% organic waste, with recyclable items making up around 30% of the rubbish. To overcome of the specific difficulties in implementing integrated waste management and recycling like dispersed populations, small volumes of recyclable wastes, poor transport networks, it is important that we focus on and expand the following types of system;

- Establish a network of Pacific based recyclers
- Explore partnerships with manufacturers and producers
- Establish long-term relationships with developed country recyclers to secure preferential access to recycling services

Improved waste and pollution management is an urgent priority for SPREP, JICA and the SIDS.

We look forward to continue to work in partnership with Pacific communities to protect our amazing region.



**Mr. Suluimalo Amataga**  
Penaia, CEO, MNRE,  
Samoa

There are some emerging issues on waste streams in Samoa like source segregation, collection, technical knowledge and the right information for the recyclers (dismantling, packaging, shipment etc), policy and regulations to operate stewardship system, and financing issue. We need to change our perspective from Waste Management to Resource Management to tackle with those challenging issues as follows;

- Implement 3R Policies and scale up to the Regional and International level to support waste flows,
- Promote and develop green economic activities within the local, regional and international markets
- Create effective PPPs to improve technical, institutional capacities and financial viability suitable to national situations/conditions
- Life-cycle perspective (Cradle to Grave) for sustainable resource and waste management (broader view)



**Mr. Shiro Amano,**  
Chief Advisor,  
J-PRISM, JICA

J-PRISM promotes 3R + "Return" which mean "Return recyclable materials out of the islands for environmentally sound recycling" and "Return organic material back to the soil".

These are suitable options to tackle with the specific challenging issues on waste management in SIDS under the special constraints like geographical isolation, limited land space, remoteness, and dependency. The promo-

tion of establishment for CDL, green tax, pre-paid garbage bag system, tipping (disposal) fee, charging on plastic shopping bags, and EPR are the sustainable financing methods to secure "Return" of recyclables to large markets outside. We need for an improvement of recyclable collection and initial treatment skills of recyclers, an institutional arrangement by the government, a development of the ocean transport network, a cost reduction effort on ocean freight, and accurate information database at the national, regional and inter-regional level.



**Dr. Melchior Mataki**  
Permanent Secretary,  
MECDM, Solomon Islands

3R alone is inadequate for sustainable waste management in SIDS, because SIDS has their own specific constraints like small land & population, limited industrial base, no markets for recycle materials, increasing number of wastes, and changing quality of wastes (E-waste, plastics, etc). The broader view of waste management like a systems-based framework to invigorate its activities is

required. This is a paradigm shift from waste management to material flow, which consists of material, consumption and waste management system.

This framework can be possible to track the flow of the materials, and also increase opportunities for managing interventions.



**Ms. Lusiana Ralogaivau**  
GEF - Project Coordinator,  
SPREP

Griffith University has provided trainer's trainings on waste management for PICTs in collaborate with SPREP, AFD, GEFPAS, UNEP, JICA, and Fiji National University. This would be a good "Case Study" for PICTs to strengthen capacity development on waste management for officers in charge in PICTs to tackle with the many issues under specific constraints of PICTs. The tainting meets the needs as follows;

- Mainstreaming integrated and sustainable waste management strategies such as ISWM
- Knowledge about institutional, business and financial models that have been successful in addressing specific waste problems
- Awareness raising and capacity building programs targeting local authorities and other stakeholders
- Knowledge about innovative projects, appropriate technologies, accessing expertise, promoting waste exchange and waste-resource related opportunities, and Developing Public Private Partnerships

## JICA / SPREP / IPLA Side Event at UN SIDS Conference, Apia, Samoa

### 3. Chair's Summary

Integrated waste management programmes must be developed and implemented. As noted by Dr. Mataki, from the Government of the Solomon Islands, there are no “silver bullets”, there is no one “correct way of dealing with this issue”, and a range of approaches to waste management must be applied. However, these approaches must be tailored to country needs and priorities and backed up by leadership at all levels, particularly at the political level. Laws and policies are an important indicator of political leadership but they must be backed up by enforcement and communication.

Community behaviour and attitudes to waste management must change. As Dr. Mataki also noted, the key issue for waste management is: “95% changing behaviour, 5% tactics policy and strategy”. It is thus important to link waste management programmes with awareness and outreach programmes, to change attitudes and behaviour. As an example, I recall growing up in Australia in the 1950's and 1960's when throwing litter from cars was not considered an issue or a problem.

However, if someone threw rubbish from a car in Australia today it would be completely unacceptable and someone would pull the offender over and give them a “good talking too”. Behaviours can and must change, as they have for this example. Disposal of waste must be considered as an issue to be addressed by everyone in the community not just the authorities dealing with this issue.

Capacity Development is essential. However, capacity development must be sustainable and result in long term outcomes. Capacity development should also be considered at two levels, both for individual staff and for the organisation itself. Reform and strengthening of

agencies is evident in the example of the Samoa Ministry of Natural Resources and Environment, which went from a Ministry of a handful of staff twenty years ago to an organisation currently fully staffed and capable of effectively addressing environmental issues, including waste management.

We need to change the way we look at waste management. Mr. Amano, from JICA, and Dr. Melchior emphasised the importance of looking “up-stream” and to reduce the sources of waste and reduce waste coming into countries in the first place. Many speakers noted the need to shift the view of waste from “being a problem to being an opportunity”. In this context Mr. Amano and Dr. Haynes, from SPREP, noted there are a number of economic instruments that can and are being applied to waste in the Pacific. For example, Palau has developed a “Green Fee”, a fee paid by departing visitors which is paid directly into a fund which supports environmental projects in



Palau, including those for waste management. In the Federated States of Micronesia, a deposit levy is placed on certain recyclable products which can be refunded after use. Mr. Amano also proposed a very interesting model in his presentation regarding expansion of the “Deposit-Refund” scheme which could be applied in the Pacific region. Mr. Marceline, from the IFC/World Bank, shared valuable suggestions on the application of financial incentives to waste management and noted that such

incentives must be: “good and financially viable from the perspective of the private sector”. Dialogue and partnership between governments and the private sector in the design and implementation of such systems is thus essential.

Partnerships are essential for effective waste management. Such partnerships must be

sustainable, durable and long term. The J-PRISM Project is an example of such a partnership which is long term, now over fifteen years, has a sustainable financing framework, and has clarity in terms of roles and responsibilities of key actors. SPREP is delighted to partner with the Government of Japan on the J-PRISM Project and is also pleased to partner with the European Union (EU) on the PacWaste Project, as well as with other development partners. SPREP recognises the importance of working with partners to develop work programmes focused on country needs and priorities, and to work within the context of agreed regional strategies for waste management. In the Pacific it is also critically important to work with and through local communities, a point emphasised by Ms. Miricescu of the EU in her intervention.

*Continue to page 6*

## Training for trainers for Solid Waste Management, Labasa, Fiji

*Continue from page 1*

Dr. Kunitoshi Sakurai as the Chairman of the Advisory Committee for J-PRISM, advised the participants to start working together as a Pacific family to improve solid waste management in the region using their developed skills and knowledge.

Ms. Ma Bella Guinto of SPREP (Solid Waste Management Adviser) also indicated that the in-depth knowledge of these senior officers from the region is vital in the development of the Regional Solid Waste Management Strategy 2016- 2025. The participants indicated the training as a very successful one with their hope for more similar opportunities in the future. The training ended with the official opening of the rehabilitated Labasa Waste disposal site, which is considered as a pilot semi-aerobic waste landfill adaptable to climate changes like flooding in a mangrove area. J-PRISM has provided technical assistances during the designing and construction of this facility.



### JICA / SPREP / IPLA Side Event at UN SIDS Conference, Apia, Samoa

*Continue from page 5*

#### 4. Recommendations

- To make awareness to change communities' mindset such as avoiding littering, purchasing environmentally sound goods, and using reusable and long life goods in collaboration with manufacturing companies as well as a consideration of the Expanded Producer, Responsibility (EPR)
- To develop a source separation and a separated collection system, pre-paid bag system, and these awareness for communities in collaboration with private sectors
- To strengthen and promote Import/Entrance Control such as Container Deposit Legislation (CDL), Green Fee (tax) in collaboration with private sectors, promote a creation of green jobs by providing opportunities for training/capacity develop-

ment on preliminary processing of recyclables

- To develop information database on good examples, material flow and recycling (return) for officers and private sectors
- To collaborate with the Port Authority and shipping companies to store and return recyclables effectively
- To promote to establish of a network of Pacific based recyclers, to manage to collect and return recyclables to outside of PICTs
- To develop and maintain a regional directory of capacity development activities and human resources on solid waste management to foster and expand the south-to-south and tri-angular cooperation within the region (Pacific Islands Database of Capacity Development Activities; "PIDOC" by SPREP/J-PRISM)
- To expand a regional cooperation framework such as J-PRISM/SPREP for the purpose of the capacity development in PICTs

# Short term study trip to Fiji re: composting

By: Nanai Raga : Hewlett-Packard Company

The week long study from the 25th – 29th of August 2014 to the three places (Lautoka City, Sigatoka town & Suva City, ended successfully.

The purpose of the study was to see the different techniques and methods used in composting in the three places.

The Waste Management Division in National Capital District Commission, in its efforts to keep the city clean has come up with projects and programs in conjunction with JICA and other relevant stakeholders for same, such as the Baruni Dump Rehabilitation project, the 3R HEART Eco School Project, Market Waste Compost Pilot Project.

According to Waste Characterization Studies done in 2011, 2013 & 2014 shows that 31% of wastes is from Organic Wastes. Realizing the need to decrease the amount of wastes been disposed at the Baruni landfill, composting of organic wastes was thought of.

Thus the trip to Fiji. The lessons learnt and the technical aspects of composting learnt were quite interesting.

All three places visited showed different techniques used and also machineries, which resulted in different qualities of compost produced.

There was so much to learn in the 6 days trip, which we will adopt some of the techniques followed by the people concerned in the three places mentioned visited.

Finally, I would like to thank JICA PNG, SPREP, Lautoka City Council, Sigatoka Town Council, and Suva City Council for making my short term study a successful and memorable one. Also to the Manager and Staff of Waste Management, NCDC for their support and the J-PRISM team for their continuous support.

Thank you all.

Nanai Raga

Waste Management Officer,

National Capital District Commission, Port Moresby

Papua New Guinea

ITEM	LAUTOKA	SIGATOKA	SUVA
Target Wastes	Market Wastes	Market Wastes	Market Wastes
Composting Location	Vunato Landfill	Farm (NGO)	Compost Site (Sambula)
Composting System ( Equipment Used)	Open Windrows Excavator Sieve Wood chips (Base & Cover) Sell compost	Bunker Micro Env. Organisms 4 weeks In-house use	Open with shelter Shredder Weighing Scale Separate wastes in 2. (depending on decomposition speed) Selling
Issues (2&3)	1.Non shredding results in decomposition longer. 2.Market Segregation not perfect thus not only green wastes.	Leachate Problem Odour	1.Leachate Problem Amount of green wastes not so much.

J-PRISM Webpage now available !

J-PRISM webpage is now available under the SPREP website. Please access the following web address We welcome your feedback, so send your comments to the Project Office.

Please circulate this newsletter to your friends and people around to share our experiences in the Pacific.

J-PRISM Webpage: <http://www.sprep.org/j-prism>

# Used Oil Report from Luganville, Vanuatu



**Mr. Ryoma Masuda,**  
**JOCV, Luganville**  
**Municipality**

It is estimated that approximately 750,000 litres of lubricating oils are imported into Vanuatu on an annual basis. On the island of Santo, it is estimated that about 120,000 litres of oils are imported. Several month ago, one garage owner was accused of disposing used oil inappropriately.

The Municipality punished him with a fine. However, he denied to pay a fine and alleged that this fine is unfair. His argument in some ways is fair because there is no official collection system or safe method of disposal provided in Santo.

Used oil generators struggle to dispose of used oil through a lack of suitable options. Used oil management is an urgent issue. Even now, about 450,000 liters of used oil pollute the land and sea environment of Vanuatu. To establish an official collection system, our first step was to gather information about used oil from local businesses. We visited each business and assessed the used oil situation in Luganville. We found out that an estimated 9000 litres of oil is imported per month and only a couple of hundred litres of used oil is collected by oil supply company. In the process of this examination, we also discovered one possible solution of disposal that is to export used oil to India. This advice was given by Pacific Petroleum and they actually manage their used oil in this way. However, there were two concerns about export. First, we would need to stockpile a minimum of 100 drums for each shipment. The shipping cost would be offset by sales of our used oil by the Indian company, but it is risky and expensive to pay initial shipping cost every time. Also there are strict rules that must be adhered to regarding how and where the used oil is stored before it is shipped.

These requirements are currently outside of our budget.

Secondly, we must consider relevant international laws such as the Basel Convention to export "waste" as an authority. It would need a lot of effort and resources to establish if we can export used oil without contravening any legislation.

Therefore, we realized we needed to reconsider our plan and look for a more local solution. Our next plan is reuse used oil as fuel in a local factory. Coconut Oil Production Santo Limited (COPSL) is an Australian owned business based in Luganville that mills coconut oil for export. The process of milling the coconut for oil requires many high temperature furnaces which are currently powered by a combination of used oil and virgin oil. COPSL would like to power their furnaces with 100% used oil as a cost saving measure, therefore this presents us with a potentially simple and eco-friendly management option for used oil in Santo.

We have presented several options to COPSL about how this arrangement could work and it is still under negotiation. At this stage it is looking most likely that COPSL pays each used oil generator a set fee per drum for the used oil. The generators or the Municipality will be responsible for dropping the waste oil at the COPSL premises. The Municipality can assist with establishment of regulation (monitoring and enforcement) and raising awareness of this service.

There are lots of issues we need manage and this project is just at the beginning stage. We hope this plan will be successful and contribute to making Luganville a more health and clean environment for all.



## About our project

Japanese Technical Corporation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM), the 5 years, regional project implemented by the Japan International Corporation Agency (JICA) in partnership with the Secretariat of the Pacific Regional Environment Programme (SPREP) officially commenced in February 2011. The purpose of J-PRISM is capacity development on waste management in the eleven (11) member countries in the Pacific.

Member countries (Federated States of Micronesia, Republic of Fiji, Republic of Kiribati, Republic of Marshall Islands, Republic of Palau, Independent State of Papua New Guinea, Independent State of Samoa, Solomon Islands, Kingdom of Tonga, Tuvalu and Republic of Vanuatu).

## J-PRISM Project Office

c/o P.O. Box 240, Secretariat of the Pacific Regional Environment Programme (SPREP) Apia, Samoa Tel: +685 21929 (ext 324)

## Member (as of May 2013)

Mr. Shiro Amano :	Chief Advisor
Mr. Faafetai Sagapolutele :	Assistant Chief Advisor
Ms. Reiko Shindo :	Project Coordinator
Mr. Makoto Tsukiji :	Project Coordinator
Ms. Ayako Yoshida :	Project Coordinator
Ms. Pueina Parkinson:	Project Assistant

## SPREP

Ms. Ma Bella Guinto :	Solid Waste Management Adviser
-----------------------	--------------------------------