







FLASH No.5

Featuring activities in Pacific region

1. Demonstration of road rehabilitation in Chuuk,FSM





Dr. Yoshinori Fukubayashi, Director, Michibushin, Community Road Empowerment (CORE)

The swampy spot on the secondary road leading to the dumpsite from the primary road was improved by using "Do-nou" technology, which was the Japanese term for soil bags, in Chuuk. "Do-nou" technology had been applied to the improvement of rural infrastructure in several developing countries,

which in the Pacific were Papua New Guinea and Solomon Island, by the Japanese NGO, Communi-

ty Road Empowerment (CORE). It requires only locally available material and labor. Mobilizing the locally available resource and getting communities involved in the maintenance of the rural infrastructures are considered as one of the solutions to improve the infrastructure which have been left

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out and in poor condition.

It was the demonstration of "Do-nou" technology as one part of the trainings to the officers of Ministry of Public Works and Environment Protection Agency held from 17th to 21st of February 2014. The trainings

were conducted by Mr. Yoshinori Fukubayashi of CORE under the arrangement of J-PRISM. The objectives of the trainings were to improve the road conditions to the dumpsite using "Do-nou" technology and to sensitize the officers of MPW and EPA on the effectiveness of labor–intensive approach towards infrastructure improvement.

During the training period, it was raining continuously. The people in Chuuk seemed not to care of getting wet, but, by considering the efficiency and quality of road works, we had to give up working once it started raining. So, the time management to complete the work satisfactorily by the end of the trainings were challenging.

The spots had been such the sunken profile that the run-off water from mountain side and high tide had been flowing into. The stagnant water had made the spot swampy. Three or four

J-PRISM Flash is a newsletter of which aims is to share the project practices and lessons learnt in the Pacific region. In addition, this newsletter would further facilitate communications among all stakeholders of the J-PRISM including project counterpart members, NGOs, private sector and international organizations relating to waste management in the region.







layers of "Do-nou" were laid even in the water to raise the road surface up to the required level. The pipes were installed under the raised road surface to cross drain the water from mountain side to sea. Fortunately, a few community members



near the dumpsite participated in the works and worked very willingly together with the staff of MPW and EPA. It was also one of the contributing factors to the success of the demo that the enough volume of material for putting in the "Do-nou" bags and surfacing, which was coral sand, were transported just next to the spot before the demo.

Finally, the identified spot was improved. At the finishing stage, the loader of MPW came and finalized the surfacing works. The road surface reinforced with "Do-nou" were intact enough to bear the weight of the loader. It proved the effectiveness of "Do-nou" technology to all the participants. It would be good if the trainings on "Do-nou" technology held in Chuuk trigger the other stakeholders' actions to mobilize the locally available resource and to get involved of communities to improve infrastructures as one of the alternatives to the equipment based approach. Wherever there is demand for the trainings on "Do-nou" technology, we, CORE are willing to come and do so.



2. 3R Activities from Vanuatu

2-1. Market waste compost in Port Vila





Before and After at Central Market in Centre Town

Since the Port Vila Municipal Market House was build, there smells, which caused the Market Environment Unhealthy and was no proper handling of Waste or proper management of waste generated by the Market. There was an open space provided for at the Market House to keep Market Waste for few days, before collected by a Council's vehicle (a 7 tons truck). This vehicle went through severe frequent break down and it took time for the staff to remove these wastes. This situation saw huge piles of rubbish sitting at the Market and produce bad

Unhygienic. As Port Vila main Market House is located in the Centre of the Town, it is an urgent priority issue for the Council to address, to maintain Port Vila City as a Tourist Destination and to increase Vanuatu's Tourism Industry.

One of the Activities under the J-PRISM template for Vanuatu is the Market Waste Compost and J-PISM Counterparts in









Before and after at Central Market in Central Town





Before and After at Freshwota Market



Organic and Green Waste at Vanuatu Direct Farm Staff of Market House Waste Management Team Ready for Composting and Mulching

from page 2

Port Vila have agreed to implement this activity. A Market Waste Compost Pilot Project was then established and launched towards the end of September 2013, and implementation of the Project started in the second week of October 2013.

The period of the Market Waste Compost Pilot Project is for Two months (October/November). The result of the Pilot Project was successful and at the end of the Pilot period, Port Vila Municipal Council is taking full responsibility to continue and sustain the Market Waste Management Activity into the future.

The Market Waste Compost Project was an initiative that saw stakeholders working together and come to an agreement where all organic and green waste from the Markets were diverted to a farming company called Vanuatu Direct, where they process and turn into Compost or mulch.

2-2. Comment from expert for market compost



Mr Mahmoud Riad J-PRISM Expert Vanuatu. PNG

We learned many lessons from implementing the Market Green Waste Composting pilot project in two markets in Port Vila. The lessons that I would like to implement in other PICs were as follows:

1) (Port Vila Municipidity) PVM took full ownership of the project and from the start declared that this was a project of PVM and not a J-PRISM project only and financed a large share of the project expenses, as well as shifting resources to the project imple-

mentation, such as supervisors and collection trucks.

2) A very strong partnership developed between PVM and the private establishment of Vanuatu Direct (VD) which received the waste at its farm and composted it for use in its farm. VD also distributed some of the produced compost to the neighboring farms. Removing the burden of composting from PVM was also a strong factor in the project's success.

3) A couple of months of public education at the markets directed at the vendors was very important to get their cooperation. Wan Smol Bag, a Vanuatu NGO successfully used various techniques as street plays, music and drawings to educate the vendors on waste separation and the project importance.

The awareness of the vendors was increased to the extent that not only did they support the project, but together with PVM cleaned up the market area and maintained this clean state. A sum of money was invested in increasing public awareness, providing safety gear for the workers, signboards and monitoring.

The benefit accrued from the project was the divergence of an amount of waste from the landfill and therefore a decrease in landfill operation costs. It was estimated that the benefit was 30% of the cost for the two months of the project but after that if the project continues for one year the benefit will exceed the initial costs by twofold.

2-3. 3R activities in Luganville

The Luganville Waste Management Team have been busy implementing 3Rs and waste

Ms Mary O'Reilly, Waste Management Officer Luganville Municipality



management activities in Luganville. In the past six months our major achievements are: the establishment of new waste legislation,

implementing a waste management financial system, recruitment of new waste management staff, and improving the management and operation of the waste disposal site signifi-



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our specific activities with all our friends in the Pacific. After completing a baseline survey on business house waste generation, we decided to introduce a user-pays business house waste collection fee. Each business was classified as Large, Medium or Small and requested to pay an annual Waste VT78,000/VT52,000/VT13,000 respectively. These fees as well as

landfill gate fees, and in time the Pre-Paid Garbage Bag Fees are transferred to the newly set up 'waste management bank account' agreed to by the Municipality. The money in this account may only be used for waste management activities and stringent deposit and withdrawal procedures have been put in place to ensure it is not misused. This is a big milestone for us, ensuring that we will always have a budget for waste manage- boxes!

cantly. We would like to share some of ment activities. At the same time we also introduced a separate collection service for flattened cardboard diverted from the usual rubbish collection service on Fridays. The cardboard is being stored in a separate area at the landfill, and is being used as cover material at the landfill until a recycling alternative is possible. In addition, the Municipality has teamed up with a local business house and two New Zealand (NZ) companies to set up a recycling (actually "Return for recycling") scheme for waste printer toner cartridges, as well as old mobile phones and chargers.

> The NZ company has given the Municipality collection boxes which have been provided free to local businesses such as Banks, Government Departments and shops. We will collect and store their contents and they will be shipped annually to

NZ free of charge by the NZ shipping company for the proper recycling. The first shipment left in March, with 27



3. Introduction of the JICA waste management projects in the Pacific

3-1. JICA partnership Program in Honiara, Solomon Islands



Mr Masayoshi Ogawa - Project Manager, LEAF Board Director



Dr Misuzu Asari - Project Advisor, LEAF Board Director / Assistant Professor, Kyoto University



Ms Natsuko Kishimoto -Local Coordinator, LEAF

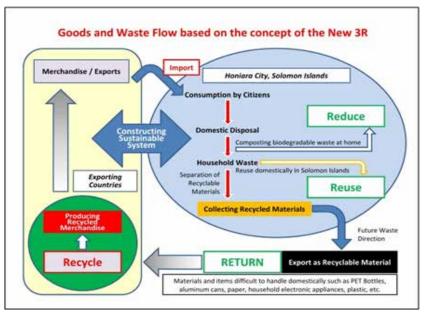
This program is implemented in collaboration with JICA, Honiara City Council and LEAF in Honiara, Solomon Islands. It is three years project(April,2014 ~March,2016).

Basic Concept of the Project

This project aims to launch activities that support the basic concept of the New 3R promoted through J-PRISM. Unlike the conventional idea of 3R (Reduce – Reuse – Recycle), by introducing the idea of RETURN as supposed to Recycle, it promotes the idea among citizens that the items returned to countries of manufacturing origin are not "waste" but they should be considered "merchandise (resources)."

For this purpose, the project will launch a mechanism where stakeholders from governments and citizens can collaboratively discuss issues surrounding waste management with the aim of implementing separate household waste collection and mini-

mizing the amount of waste brought to the final waste disposal sites, and construct new rules and systems for separate waste collection.







Honiara Council for Civic-Government Collaboration (HCCGC) is established through partnership among citizens, businesses and the governments.

HCCGC is established with the aim of constructing a household waste separate

Human resources are developed in each sector of citizens business and the governments to promote household waste reduction and recycled resource collection.

Household waste separate collection system is in place concerning the New 3R.

Concrete implementation methods and systems for the New 3R are organized in partnership with citizens and businesses.

Citizens are educated with cases of implementing New 3R at home and waste disposal rules

Systems towards waste reduction and utilization of recycled resources are organized.

Household Waste Separate Collection System operates within each waste collection zone.

3-2. Shibushi's approach to waste minimization

"Care about materials, care about people"

Shibushi City is located in Osumi Peninsula of Kagoshima Prefecture in Japan with the population of 34,000 in 290 Km2 of city area. The city council does not have an incinerator to treat municipal solid waste, which is not very common in Japan. Before introducing segregation, all the waste was disposed of at the Sanitary Landfill opened in 1990 and year after year the amount of waste going to the landfill was increasing.

2000

From the year 2000, we started source separation for household and commercial waste and separate collection of kitchen waste for compost was introduced in 2004. As a result, from 2005 we have achieved 80% reduction of waste disposal compared to that of 1998 which was the peak year of the waste amount.

The key for the success is that citizens and the city

"Mixture produces waste, separation produces resources" "Mixture produces waste, separation produces resources" "Started the separate collection of kitchen waste "Started "Sun Sun Himawari plan" Rate of the resource recovery: 75% Shibushi became No. 1 among all cities in Japan in 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012 Separation with 27 items started. Started the separate collection with 19 items Amount of waste disposal was reduced by 80% in 7 years





administration have closely worked together under the slogan of "Mixture produces waste, separation produces resources."

Our approach to waste minimization has become famous as "the Shibushi Model."

You can go anywhere at any time.

When separate collection was introduced for the first time, people complained saying

"Why should we be bothered to spend much time do such an inconvenient separation?".

In response to this, we, government officers, continuously tried to convince the citizens of the new separation practice by explaining the importance of 1) reducing waste going to the landfill, 2) recovering resources by separation of waste, 3)

conserving watershed and 4) preventing global warming and so on.

As the time went by, the number of complaints became less and less and nowadays a lot of citizens take pride in "the Shibushi Model."

Our mission as a government officer is to inspire the citizens allow them to

voluntarily take actions for the better. In order to make this happen, government officers, should not hesitate to go anywhere at any time to talk to our citizens.

From Fiji to Samoa

2008 We assisted the "Waste Minimization and Recycling Promotion Project" in Fiji from 2008 to 2012 and also implemented a project entitled the "Promotion of Shibushi Model (Waste Minimization without incineration) from Fiji Every citizen in Shibushi is asked to clean his/her waste to Pacific Island Countries" from 2011 to 2013.

My first impression in Fiji was that the way of waste discharge from households was exactly the same as that of Shibushi citizens before 1999.

They put everything in a black plastic bag and dumped it at the landfill.

I believe that the situation of Samoa is more or less similar to achieve a better and happier society.

When we explained "the Shibushi Mode,l" to Fiji we Director, Office of Environmental Policy encouraged citizens in Fiji by saying that what we can do, Shibushi City Local Government

Importance of direct communication with the citizens







you can do. Several councils in Fiji have already started their attempt to apply "the Shibushi Model" in their ways. Shibushi City is now working on developing a plan to better assist in improving solid waste management in Samoa taking into account of some lessons from Fiji..

"Care about materials, care about people"

and put it into a clear plastic bag with the name of discharger on it to be responsible for his/her own waste.

If mixed, it becomes waste, but if separated, it becomes valuable resources. It is our strong belief that the mind of taking a good care of things around us will lead to the mind of respecting our neighbors and as a result we will be able

Junichi Nishikawa





4. Climate Change Adaptation in Waste Management in Labasa, Fiji

The Pacific region is susceptible to natural disasters including floods, cyclones, earthquakes and tsunamis. Climate change impacts, such as the increased intensity and frequency of rainfall, and increasingly intense tropical cyclones will exacerbate the effects of such natural disasters. The predicted effects of these adverse events include increased damage to waste management infrastructure and facilities giving rise to disaster waste, an increased risk of environmental contamination, and potentially adverse human health impacts. Reducing the impact on the waste management sector from these climate change events is therefore a priority.

Integration of Climate Change Adaptation into the Waste Management Sector (AdaptWaste) is a 30-month pilot project (2012-2014) funded by the Australian Department of Foreign Affairs and Trade, which aims to address potential climate change impacts on the Labasa Town Dump located on Fiji's second largest island - Vanua Levu.

The main anticipated outputs of the project include:

- an improved waste disposal site that can better cope with floods, cyclones, and disaster waste;
- a waste disposal site operational plan to ensure the proper operation and maintenance of the dumpsite into the future;
- a national disaster waste management plan for Fiji;
- increased capacity of the Labasa Town Council and Depart ment of Environment staff to operate, maintain, and monitor the improved waste disposal site; and
- dissemination of guidance and lessons learnt to other Pacific island countries.

Construction on the improved waste disposal site commenced in April 2014, and is scheduled to be completed within a few months



Views of the Labasa Dumpsite



AdaptWaste is a good example of a project that integrates and addresses two priority issues (waste management, and climate change adaptation), and will serve as a model of good waste management and climate change adaptation practices for other Pacific island countries.

5. HOPE by "J-HOPE" after the flooding in Honiara, Solomon Islands



J-HOPE (J-PRISM Honiara Operations to promote Partnership and Enhancement for Managing Disaster Waste) was launched after the flooding in Honiara for the post disaster waste management conducted by Honiara City Council (HCC), Ministry of Environment, Climate Change, Disaster Management & Meteorology (MECDM) and J-PRISM/JICA in collaboration with Port Vila Municipality (PVMC), Vanuatu.

One of the memorable points of this project is to be strengthened of "South-South/Municipal-Municipal Cooperation" between Port Vila (Vanuatu) and Honiara (Solomon Islands), which is the good example in the regional cooperation.



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Before restoration







After restoration





Mr. Amos Mathias, landfill manager, was dispatched from PVMC to assist the restoration of the Ranadi disposal site in Honiara, and share his expertise, experience and lessons learned with the HCC staffs.

Mr. Joe Kelesi, landfill supervisor, HCC has taken initiative of the restoration activities with the supports of Mr. Mathias, and successfully completed the urgent restoration such as the improvement of the access road, drainage system and disposal cells, and the development of the temporary stockpile area especially for medical wastes, asbestos and sewages within the site. The community awareness and mobile chain-saw activities are also organized and implemented under the J-HOPE to reduce the health risk and minimize the disaster wastes dumped into the disposal site through the 3R concept.

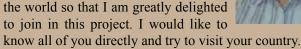
6. Hello, J-PRISM Members!

My name is Reiko Shindo. I started working from January of parts have conducted regarding fundathe present year in J-PRISM project office in charge of the mental waste management like colleccapacity development and coordination.

It is the first time for me to work in the Pacific Region. My previous experiences were mainly in the American Region, and I think we have the common issues on the waste management. The amount of the waste has grown year by year and it is highly required to reduce the wastes which go to the final disposal.

I believe that the diligent efforts that each J-PRISM counter-

tion or the landfill management and 3Rs promotion provide exemplars to our all colleagues who work on the waste management in the other parts of



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

J-PRISM Project Office

See you soon.

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 Pueina Parkinson: **Project Assistant**

SPREP

Ms Esther Richards: Solid Waste

Management Adviser

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