



Environment is our concern and the priority of the Japan International Cooperation Agency (JICA). JICA has been providing a series of projects to protect PNG's natural environment in recent years in response to the requests by the PNG government. From 2010 onwards, JICA spends over 40 percent of its aid disbursements in environment and climate change sectors, running the total of seven projects. Today, we would like to introduce the waste management project of those projects.



## NCD waste management project, 2011-2016





NCD waste management project-Baruni dump before

Our project, J-PRISM started in February 2011 and is scheduled to run up to February, 2016. J-PRISM, or in its official title: "The Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries" covers 11 countries, including Papua New Guinea (PNG) where it focuses on Port Moresby.

J-PRISM is a capacity development project. Under this project JICA is mainly dispatching experts from Japan to advice and guide the Waste Management Division staff in NCDC and inviting the staff to train in Japan and regional countries.

It is interesting to note how solid waste management (SWM) evolved. A few centuries ago, the people living in an area would pack up and move to another place when their garbage piled up. Then four hundred years ago the governor of Manhattan, New York decided that it would be more appropriate to move the waste to other areas and he designated 5 areas as dumping sites for the city's waste. In the 1800's municipalities in the larger cities began to offer collection services and in Japan the first law on SWM was adopted in 1900. Basically SWM is necessary to protect the public health.

Towards the end of the last century it became evident that our earthly resources were not infinite and we would need to consume them more wisely. We also realized the polluting effect that poor waste management had on our health and surrounding environment. Technical aspects related to SWM had to be improved to protect the environment. And waste generators had to be made more aware of our precious resources and poor overconsumption habits.

SWM covers the discharge, collection, transport, intermediate treatment and sanitary landfill of the solid waste. Each of us living in Port Moresby within our daily activities, generate about 0.6 kilograms of waste a day; made up of food leftovers, paper, clothes, plastics and metal containers. But we hardly stop and think about how this waste is being managed?

A lot of resources go into this management and it costs NCDC about 12 million Kina annually. Also in NCDC we do not have any intermediate treatment for waste and the waste is just dumped at Baruni and set on fire. And we collect around 60% of the total generated wastes, with the rest being burnt in the streets or discarded in public spaces.

We have three outputs in our project; to improve the disposal facility at Baruni, to improve the collection system and to improve WMD's capacity to plan and monitor and the SWM operations.

Since about 30 years the solid waste is being transported to Baruni. Presently a group of about 300 people, the waste pickers make their livelihoods by removing the metal cans, plastics and other valuables from the waste arriving at Baruni and selling them. The waste then was openly burnt, with no regard to the surrounding environment and public health. Those passing by the site surely recall the continuous black smoke emitting from there and the security threats to passing vehicles.



NCD waste management project-Baruni dump now

Today the open fires have ceased and there is no black smoke hovering over Baruni. Two waste cells are being constructed at the site to allow for air to penetrate the waste layers that will be disposed there, collect and discharge the gas and leachate that will be produced from the disposed waste and to hasten the waste stabilization. While the construction is ongoing, the waste continues to arrive at the site and is now being disposed of in a much better manner. These are the achievements of the project's first output.

Our second project output promotes the improvement of the waste collection. Efficient waste collection depends to a great extent on how the waste generators discharge their waste from their premises. It is important that the waste is discharged only on the scheduled collection days and at the determined discharge points. The waste should also be put in appropriate containers and not loosely discharged. Waste collection is an expensive activity, and in the case of Port Moresby it involves operating on average 80 trucks per day of different types and employing around 300 drivers and workers to collect and transport the waste. It is therefore very important to operate this large force in an efficient manner.

The project is supporting WMD to increase its communication with the general public on the one hand, and upgrading its monitoring of the private collection companies, hired by WMD for waste collection. Our goal is to increase the waste collection rate and improve the quality of service.

Our third project output calls for better management of the solid waste system through planning and increased monitoring capabilities. Last year NCDC adopted the waste policy, and based on this policy the project team is now developing the SWM plan for Port Moresby up to the year 2024. This plan will set out the improvement targets and identify the required facilities, manpower resources and budget required for SWM for the next ten years. Within this output the project team has also implemented a number of surveys to determine the waste amounts and their composition. The project team is also working with eight schools in Port Moresby under the 3R HEART program to education the students on waste reduction, re-use and recycling.

This will be the last year of our project. We have ambitious plans to implement pilot projects for composting of market green waste and introducing community participation in planning of solid waste collection systems. We will also be making more efforts to increase public awareness on SWM.

There is a lot still to be done and WMD will continue through the J-PRISM project to develop the skills to manage the solid waste efficiently. And to the waste generators; please think twice before purchasing new goods; consider ways to reduce your waste, and separate recyclable materials from other wastes to encourage recycling. We have a common goal; to keep Port Moresby clean and healthy!

For further information, please contact JICA PNG Office on the phone (321 2677), email <pn\_oso\_rep@jica.go.jp> or visit our website (http://www.jica.go.jp/png/english/index.html).