# Terms of Reference (TOR) 3R+Return Technical Assistant

# 1. Background

Over several decades, waste has become one of the major concerns for small island countries in the Pacific region because of severe challenges in coping with the increasing volume and changing characteristics of urban and industrial wastes. Improper waste management has potential to pose a significant negative impact on public health, water and food supply, ecosystems, tourism and trade, resources, and even climate change, which threaten the sustainable development in this region. Such unique constraints as geographical isolation, limited resources and economic scale, and dependence on foreign aid and imported goods have made management of solid waste more difficult for Pacific island countries (PICs).

Under the Pacific Regional Solid Waste Management Strategy (2016-2025) as Cleaner Pacific 2025 which has been already formulated in previous J-PRISM cooperation, JICA has conducted "Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management, Phase II (J-PRISM II)" from 2017 to 2022 as 5 years project in partnership with the responsible agencies of the waste management of each target countries and SPREP. Regarding previous J-PRISM project, successive technical cooperation programs contributed to raising capacity of local counterparts. They even became an essential resource person not only in their respective countries but also in the surrounding countries in the region, as experts or trainers.

Also, "3R+Return" concept has been promoted during J-PRISM project. Most of the countries in the region are lacking recycling facilities and limited recycle market in the country due to the small scale of the economy. The "3R+Return" concept would promote the proper resource recycling and appropriate disposal by exporting(returning) valuable waste or difficult waste for disposal, while returning organic waste into soil for the effective utilization.

To promote regional cooperation and south-south cooperation effectively and efficiently, it is expected that these human resource exchange programs would be set up as a firm system in the Pacific, not just relying on each country's initiative/effort. To realize the "3R+Return" concept, proper organic waste treatment, effective/efficient resource recycling and appropriate disposal, within and across the country would be significant. J-PRISM II will carry out the basic study in the pacific region required to establish the regional 3R+Return model.

# 2. Objectives of the Assignment

The objectives of the assignment are to assist Research work for Regional 3R+Return model construction and Logistics support for the Project (J-PRISM II) following the instructions of Supervisor (Monitoring/3R+Return Expert).

## 3. Scope of Work

- (1) To assist Research Work for 3R+Return Survey
- (2) To assist Recycle Association activities' support
- (3) To implement 3R+Return Pilot Project
- (4) To assist Logistics for activities of a), b), and c)
- (5) To organize and arrange for J-PRISM 3R+Return training to be held
- (6) To organize and arrange for J-PRISM 3R+Return seminar to be held
- (7) To submit the Inception report(April 2020), the Interim report (December 2020) and the completion report (March 2021) to Supervisor by the last working day

At the end of the first contract phase, J-PRISM II Project will instruct about the necessity of the contents of work of the next contract phase and the contract will be concluded after the contract negotiation.

# 4. Contents of Work

# 4-1. Assist Research Work for 3R+Return Survey

Based on the above survey schedule, the Monitoring/3R+Return Expert will conduct the Survey from 2020-2021. 3R+Return Technical Assistant shall necessary arrangements such as making meeting appointments, logistics, preparing meeting minutes, collecting waste management data and data compiling works following the instructions of Supervisor.

The outline of the survey implementation methods are as follows;

## 1) Target of Survey

- 9 Pacific island countries (Samoa, Tonga, Fiji, Vanuatu, Solomon, Papua New Guinea, Palau, Micronesia, Marshall)
- Waste Recycler, Recyclers Association, Collector, Transporter, Shipping company, Related ministries (Ministry of Environment, Ministry of Economy, Ministry of Finance, Customs, Central Bank etc.)
- Other donor agencies
- Recyclers and recycling facilities in other countries

## 2) Target of Waste

- Solid Waste
  - ✓ Paper and Cardboard
  - ✓ Plastic and PET bottle
  - ✓ Metals
  - ✓ Grass and Bottles
  - ✓ Bulky waste (Construction waste etc.)

#### ✓ Hazardous waste

- End of Life Vehicle, Used lead acid battery, Used Oil, Used Tire
- E-waste (Computers, TVs, Mobile phones, other electronical home appliances (White goods))

## 4-2. Recycle Association activities' support

J-PRISM II is promoting the establishment of recycling associations in the pacific island countries. We have supported the launching of three countries (Samoa, Vanuatu, and Solomon) recycling association. In order to strengthen the regional recycling network in the pacific, we plan to support the establishment of recycling association and their voluntary collection and recycling activities in the future. For this activities' support, 3R+Return technical assistant needs to support the necessary documentation work, and arrange the meeting with various stakeholders.

# 4-3. implement 3R+Return Pilot Project

For the recycling associations in the above 3 countries, J-PRISM II will support the purchase of necessary equipment for improving recycling technologies as a pilot project in 2020 fiscal year and verify its economic and environmental effects.

For this purpose, the 3R + Return Technical Assistant will make necessary arrangements with the parties involved in the purchase of equipment's, obtain quotes, check prices and specifications, and contact the JICA offices.

## 4-4 Assist Logistics for the above activities

3R+Return Technical Assistant shall prepare and submit necessary documents based on the accounting procedures of JICA and J-PRISM II, in accordance with conducting the survey, training and seminar, business trip.

# 4-5. Organize and arrange for J-PRISM 3R+Return training to be held

Based on the result of the 3R+Return Survey, 3R+Return Technical Assistant shall organize and arrange for the training to be held following the instructions of Supervisor.

## 4-6. Organize and arrange for J-PRISM 3R+Return seminar to be held

Based on the result of the 3R+Return Survey, 3R+Return Technical Assistant shall organize and arrange for the seminar to be held following the instructions of Supervisor.

## 4-7. Submit the service completion report to Supervisor by the last working day

Based on the result of the 3R+Return Survey, 3R+Return Technical Assistant shall submit

Inception report(April 2020), the Interim report (December 2020) and the completion report (March 2021) to Supervisor by the last working day. The completion report shall include the current status, issues, and following items to be addressed for the regional 3R+Return model in the future.

Two copies of the report in English shall be submitted to JICA and Supervisor (one report each). The final repot shall be submitted with CD-R containing the interception report, interim report, completion report data and necessary references. Microsoft Word and/or Excel, Access, Power point is preferable for the software used for the reports.

**END**