

**Pacific Island Countries**

**Japanese Technical Cooperation Project  
for Promotion of Regional Initiative on  
Solid Waste Management in Pacific Island  
Countries Phase II (J-PRISM II) (Group 2)**

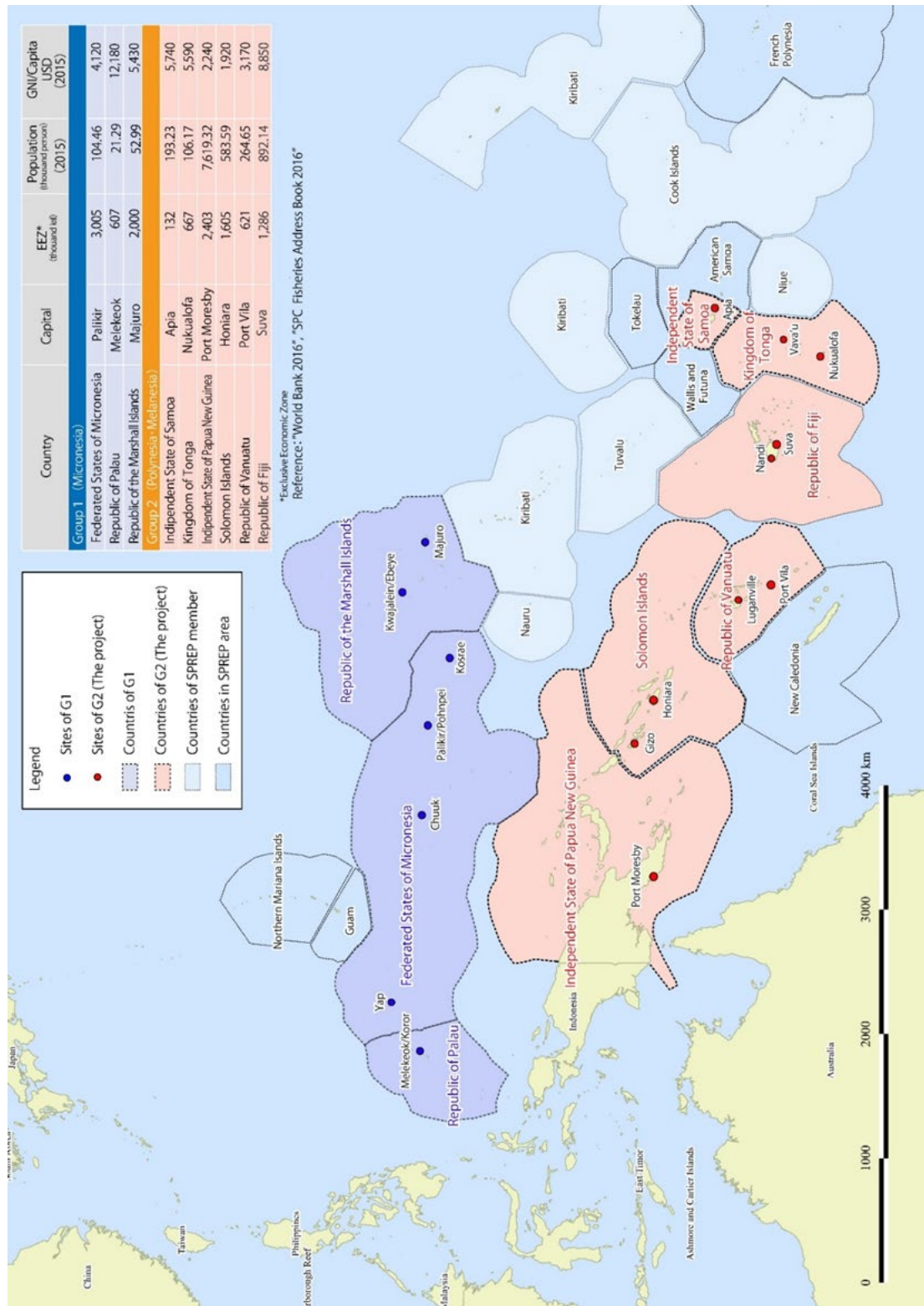
**Project Completion Report (3<sup>rd</sup> Term)**

**September 2022**

**Japan International Cooperation Agency(JICA)**

**Kokusai Kogyo Co., Ltd.  
Yachiyo Engineering Co., Ltd.**

<b>GE</b>
<b>JR</b>
<b>22-100</b>



**Target area of the Project**

# Table of Contents

<b>1</b>	<b>Outline of J-PRISM II .....</b>	<b>1-1</b>
1.1	Scope of the Project .....	1-1
1.1.1	Target countries of the Project .....	1-1
1.1.2	Target waste .....	1-1
1.1.3	Counterpart organizations .....	1-1
1.2	Implementation schedule .....	1-2
1.3	Capacity development.....	1-2
1.4	Collaboration with regional collaborative project .....	1-3
1.5	Outline of each country project, content of activities, ingenuity of project implementation, lessons learned and achievement degree of outputs.....	1-3
<b>2</b>	<b>Independent State of Papua New Guinea (PNG) .....</b>	<b>2-1</b>
2.1	Outline of the Project .....	2-1
2.1.1	Project Purpose .....	2-1
2.1.2	Output .....	2-1
2.2	Activities .....	2-1
2.2.1	Activities related to Output 1 .....	2-1
2.2.2	Activities related to Output 2 .....	2-4
2.2.3	Activities related to Output 3 .....	2-5
2.3	Challenges and lessons learnt during the Project implementation.....	2-9
2.3.1	Multi-layer and Cross-sectoral Gaps among national and local governments, and line ministries, in implementing, enforcing and monitoring NWMS in the future .....	2-9
2.3.2	Promotion of Capacity Development in Local governments through City-City Cooperation Programme .....	2-9
2.3.3	Foster opportunities on educational and training programme on MSWM for Environmental Health Officers (EHO) in local governments .....	2-10
2.3.4	Strengthening collaboration with other divisions to accelerate implementation of the activities of Output 3.....	2-10
2.3.5	Remote assistance in corona disasters.....	2-10
2.4	Achievement of the Outputs .....	2-11
2.5	Achievement of the Project purpose .....	2-13
2.6	Recommendation towards achievement of Overall Goal .....	2-14
2.7	Capacity Assessment.....	2-14
2.7.1	3 <sup>rd</sup> Capacity Assessment .....	2-14
<b>3</b>	<b>Solomon Islands .....</b>	<b>3-1</b>
3.1	Outline of the Project .....	3-1
3.1.1	Project purpose.....	3-1
3.1.2	Output .....	3-1
3.2	Activities .....	3-1
3.2.1	Activities related to Output 1 .....	3-1
3.2.2	Activities related to Output 2 .....	3-3
3.2.3	Activities related to Output 3 .....	3-5
3.3	Challenges and lessons learnt during the Project implementation.....	3-6
3.3.1	Development method of solid waste management plan.....	3-6
3.3.2	Follow-up on Solid Waste Activity in Local Areas .....	3-7
3.3.3	Support activities in line with the basic policies and activity plans of the Ministry of the Environment and Honiara City .....	3-7

3.4	Achievement of the Outputs .....	3-8
3.5	Achievement of the Project purpose .....	3-9
3.6	Recommendation towards achievement of Overall Goal .....	3-9
3.7	Capacity Assessment.....	3-9
3.7.1	3 <sup>rd</sup> Capacity Assessment .....	3-9
<b>4</b>	<b>Republic of Vanuatu .....</b>	<b>4-1</b>
4.1	Outline of the Project .....	4-1
4.1.1	Project purpose.....	4-1
4.1.2	Output .....	4-1
4.2	Activities .....	4-1
4.2.1	Activities related to Output 1 .....	4-1
4.2.2	Activities related to Output 2 .....	4-4
4.2.3	Activities related to Output 3 .....	4-7
4.3	Challenges and lessons learnt during the Project implementation.....	4-8
4.3.1	Enhancement of implementation systems and organisational capacity based on the premise of the vulnerability of counterpart organisations...	4-8
4.3.2	Project design aimed at establishing a PDCA cycle .....	4-9
4.3.3	Institutionalisation support for sustainable waste management through multi-stakeholder processes .....	4-10
4.3.4	Raising international interest in marine litter/ plastic pollution and coordinating donors.....	4-10
4.3.5	Seeking a New Scheme of Remote Technical Cooperation.....	4-11
4.4	Achievement of the Outputs .....	4-11
4.5	Achievement of the Project purpose .....	4-13
4.6	Recommendation towards achievement of Overall Goal .....	4-13
4.6.1	Capacity Development of Municipal Solid Waste Management (SWM) Through Inter-Municipality Cooperation.....	4-13
4.6.2	Renewal of the NWMPCS2016–2020 .....	4-14
4.6.3	Implementation of a Container Deposit Scheme (CDS).....	4-14
4.6.4	Strengthening PVCC’s waste management capacity .....	4-14
4.7	Capacity Assessment.....	4-14
4.7.1	3 <sup>rd</sup> Capacity Assessment .....	4-14
<b>5</b>	<b>Kingdom of Tonga .....</b>	<b>5-1</b>
5.1	Outline of the Project .....	5-1
5.1.1	Project Purpose .....	5-1
5.1.2	Output .....	5-1
5.2	Activities .....	5-1
5.2.1	Activities related to Output 1 .....	5-1
5.2.2	Activities related to Output 2 .....	5-3
5.2.3	Activities related to Output 3 .....	5-5
5.2.4	Activities related to Output 4 .....	5-6
5.3	Challenges and lessons learnt during the Project implementation.....	5-6
5.3.1	Working with WAL Headquarters’ Staff.....	5-6
5.3.2	Accumulation data of WAL's income and expenditure on waste management service in Vava’u .....	5-7
5.3.3	Operation manual for Kalaka Landfill focus on practical use.....	5-7
5.3.4	Remote assistance under the coronavirus pandemics .....	5-7
5.4	Achievement of the Outputs .....	5-7
5.5	Achievement of the Project purpose .....	5-9
5.6	Recommendation towards achievement of Overall Goal .....	5-9
5.7	Capacity Assessment.....	5-9

5.7.1	3rd Capacity Assessment .....	5-9
<b>6</b>	<b>Independent State of Samoa.....</b>	<b>6-1</b>
6.1	Outline of the Project .....	6-1
6.1.1	Project Purpose .....	6-1
6.1.2	Output .....	6-1
6.2	Activities .....	6-1
6.2.1	Activities related to Output 1 .....	6-1
6.2.2	Activities related to Output 2 .....	6-3
6.2.3	Activities related to Output 3 .....	6-4
6.3	Challenges and lessons learnt during the Project implementation.....	6-5
6.3.1	Formulation of integrated National Waste Management Strategy .....	6-5
6.3.2	Collaboration with SPREP during the process of formulating strategy ...	6-5
6.3.3	Promotion of practical learning and knowledge exchange in region through implementation of study tour .....	6-6
6.3.4	Continuous implementation of activity by conducting appropriate remote meeting.....	6-6
6.3.5	Accelerating progress of activities by resuming field work.....	6-6
6.4	Achievement of the Outputs .....	6-7
6.5	Achievement of the Project purpose .....	6-7
6.6	Recommendation towards achievement of Overall Goal .....	6-8
6.7	Capacity Assessment.....	6-8
6.7.1	3 <sup>rd</sup> Capacity Assessment .....	6-8
<b>7</b>	<b>Republic of Fiji .....</b>	<b>7-1</b>
7.1	Outline of the Project .....	7-1
7.1.1	Project Purpose .....	7-1
7.1.2	Output .....	7-1
7.2	Activities .....	7-1
7.2.1	Activities related to Output 1 .....	7-1
7.2.2	Activities related to Output 2 .....	7-5
7.3	Challenges and lessons learnt during the Project implementation.....	7-7
7.3.1	Amalgamation Policies to Local Municipalities .....	7-7
7.3.2	Roles and Responsibilities of Departments in the field of SWM .....	7-7
7.3.3	Pandemic of COVID-19.....	7-8
7.4	Achievement of the Outputs .....	7-8
7.5	Achievement of the Project purpose .....	7-9
7.6	Recommendation towards achievement of Overall Goal .....	7-9
7.7	Capacity Assessment.....	7-10
7.7.1	2nd Capacity Assessment.....	7-10
<b>8</b>	<b>Value added work based on pandemic of the COVID-19.....</b>	<b>8-1</b>
8.1	Activities for developing introductory material on project target countries .....	8-1
8.2	PNG: Activities on Improvement of Occupational Health and Safety (OHS) of Solid Waste Management Workers against Infectious Waste including COVID-19.....	8-1
8.3	Remote basis activity conducted in relation to country activities.....	8-2
8.4	Outputs from value added work.....	8-4

## Abbreviations

Abbrev	English
3R	Reduce, Reuse, Recycle
CDS	Container Deposit Scheme
CEO	Chief Executive Officer
CSP	Clean School Program
C/P	Counterpart
EIA	Environmental Impact Assessment
F/S	Feasibility Study
GPS	Global Positioning System
JET	JICA Expert Team
ILO	International Labor Organization
JCC	Joint Coordination Committee
JICA	Japan International Cooperation Agency
J-PRISM	Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries
J-PRISM II	Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase 2
M/M	Minutes of Meeting
MOU	Minutes of Understanding
MRF	Material Recovery Facility
NGOs	Non-Governmental Organizations
NSWMS	National Solid Waste Management Strategy
OJT	On the Job Training
PDCA	Plan – Do – Check - Act
PDM	Project Design Matrix
PET	Polyethylene terephthalate
PO	Plan of Operation
R/D	Record of Discussions
SPREP	Secretariat of the Pacific Regional Environment Programme
SWM	Solid Waste Management
TOR	Terms of Reference
UNDP	United Nations Development Programme
WACS	Waste Amount and Composition Survey
WG	Working Group
WHO	World Health Organization
Independent State of Samoa	
DEC	Division of Environment and Conservation
MNRE	Ministry of Natural Resource and Environment

Abbrev	English
Kingdom of Tonga	
MEIDECC	Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications
WAL	Waste Authority Limited
Republic of Fiji	
DOE	Department of Environment
DLG	Department of Local Government
NWMPCS	National Waste Management and Pollution Control Strategy
RLAs	Rural Local Authorities
WMPC	Waste Management and Pollution Control
Independent State of Papua New Guinea	
CEPA	Conservation and Environment Protection Agency
DNPM	Department of National Planning and Monitoring
NCD	National Capital District
NCDC	National Capital District Commission
PGK	Kina (Papua New Guinea currency)
PNG	Papua New Guinea
ULLG	Urban Local Level Government
Solomon Islands	
HCC	Honiara City Council
MECDM	Ministry of Environment, Climate Change, Disaster Management and Meteorology
MHMS	Ministry of Health and Medical Services
Republic of Vanuatu	
DEPC	Department of Environmental Protection and Conservation, Ministry of Climate Change Adaptation, Meteorology & Geo-Hazards, Environment, Energy and Disaster Management
DLA	Department of Local Authorities, Ministry of Internal Affairs
DUAP	Department of Urban Affairs and Planning, Ministry of Internal Affairs
PSC	Public Service Commission
PVCC	Port Vila City Council
NWMPCS	National Waste Management and Pollution Control Strategy
LMC	Luganville Municipal Council
LPB	Liquid Paper/Packaging Board
MIPU	Ministry of Infrastructure and Public Utilities
WMEHD	Waste Management, Environmental and Health Division
WMO	Waste Management Officer

# 1 Outline of J-PRISM II

## 1.1 Scope of the Project

### 1.1.1 Target countries of the Project

Nine countries (Republic of Palau, Federated States of Micronesia, Republic of Marshall, Independent States of Papua New Guinea (PNG), Solomon Islands, Republic of Vanuatu, Republic of Fiji, Kingdom of Tonga, Independent States of Samoa)

Group 2 covers PNG, Solomon, Vanuatu, Tonga, Samoa, and Fiji.

### 1.1.2 Target waste

Municipal solid waste<sup>1</sup> such as domestic / commercial waste shall be targeted in principle.

### 1.1.3 Counterpart organizations

Table 1-1 Scope of the Project

Name of Region/Country		C/P Organization
—	Pacific region	Secretariat of the Pacific Regional Environment Programme (SPREP) Waste Management and Pollution Control
Micronesia (Northern area of the Project)		
1	Republic of Palau	Ministry of Public Infrastructure, Industries and Commerce (MPIIC), Bureau of Public Works-Solid Waste Management (BPW-SWM), Koror State Government-Solid Waste Management (KSG-SWM)
2	The Federated States of Micronesia	Office of Environment & Emergency Management (OEEM), Yap: Environmental Protection Agency (EPA)/Department of Public Works and Transportation (DPW&T) Chuuk: Environmental Protection Agency (EPA)/Department of Transportation and Public Works (DT&PW) Pohnpei: Environmental Protection Agency (EPA)/Office of Transportation and Infrastructure (T&I) Kosrae: Environmental Protection Agency (EPA)/Department of Transportation and Infrastructure (DT&I)
3	Republic of Marshall Islands	(Prime) Ministry of Public Works (MPW), Majuro Atoll Waste Company (MAWC), Kwajalein Atoll Local Government (KALGOV) (Sub) Office of Environment Planning and Policy Coordination (OEPPC), Environmental Protection Authority (EPA)
Work target area: Melanesia + Polynesia (Southern area of the Project)		
4	Independent State of Papua New Guinea	Conservation and Environment Protection Agency (CEPA), National Capital District Commission (NCDC)
5	Solomon Islands	Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM), Honiara City Council (HCC)

<sup>1</sup> Defined as waste dealt with in SPREP's "CP 2025 3.4 Municipal Solid Waste Management".



Name of Region/Country		C/P Organization
6	Republic of Vanuatu	Ministry of Climate Change, Department of Environmental Protection and Conservation (DEPC), Port Vila Municipal Council (PVMC), Luganville Municipal Council (LMC), Shefa Province
7	Kingdom of Tonga	Waste Authority Limited (WAL), Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications (MEIDECC), Ministry of Health
8	Independent State of Samoa	Ministry of Natural Resource and Environment (MNRE), Division of Environment and Conservation (DEC)
9	Republic of Fiji	Ministry of Local Government, Department of Local Government (DOE), Department of Environment (DOE)

## 1.2 Implementation schedule

The Project is implemented for 5.5 years from March 2017 to September 2022, which is divided into three terms below.

First term: 14th March 2017 – 30th April 2018

Second term: 16th May 2018 – 11th May 2020

Third term: 10th July 2020 – 30th September 2022

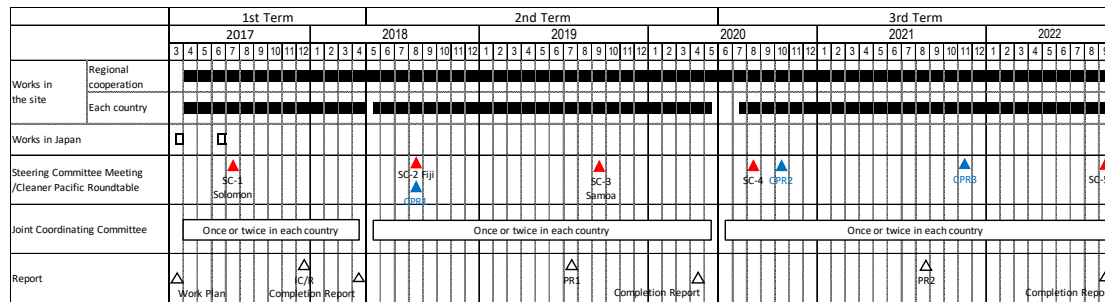


Figure 1-1 Overall Project Schedule

## 1.3 Capacity development

J-PRISM II emphasizes the importance of capacity development (CD). For this reason, in the first phase of the Project, a baseline capacity assessment (CA) was conducted to assess the current state of capacity at the institutional, social, and organizational level at the start of the Project in each target country. (Please refer to the CA results in Chapter 3 of the Inception Report and the Annex of the Project Completion Report of the first phase.) Because many of the items on the CA checklist are exhaustive and do not relate to the project activities directly, CA using the CA checklist was conducted once every two years. The checklist covers the comprehensive SWM area beyond the Project activities, so some items are not directly relevant to the outcome of the Project. Therefore, the Project determined to carry out the CA by the checklist every two years.

During the first half of the second term, a degree of capacity development was observed along with interviews. Interviews were conducted to see how organizational and individual performance are changing through the activities implemented in each country and how the experts foster a stronger sense of ownership and make interventions for strengthening the counterpart agencies' institutional and organizational capacity development. Depending on the

results, advice and recommendations were given to the counterpart agencies to accelerate the CD process. In the latter half of the term, a CA using the CA checklist was implemented as the second CA. The details of the second CA results in each country are presented in the project completion report of the second term.

In the first half of the third term, monitoring activity of the capacity development process, just like those of the second term, was not carried out, because most project activities in each country were postponed or undertaken remotely with limited support from the experts due to the coronavirus catastrophe. Preparatory work has been started in a way that allows us to conducting the 3rd CA on a remote basis at some point that remote assistance was accumulated in each county. The 3rd CA will be conducted around interview surveys with main C/Ps such as a project manager, but hearing survey from the experts will also complement the results of CA.

In the third term, each country's project activities were postponed or limited with assistance in the remote environment during the coronavirus pandemic. Therefore, the third CAs were prepared until each country's activities piled up and conducted by interviewing the main C/Ps remotely and face-to-face. The CA results were also supplemented with country-wise expert interviews.

#### **1.4 Collaboration with regional collaborative project**

Regional collaborative projects implemented by the project office (PO) sets four outputs.

Output 1: Monitoring mechanism for solid waste management in line with Cleaner Pacific 2025 is strengthened.
Output 2: Regional cooperation within the Pacific is organized and promoted by utilizing regional human resource and sharing lessons learnt in the region.
Output 3: Regional capacity of disaster waste management is strengthened.
Output 4: Practical and sustainable 3R+Return system is enhanced.

#### **1.5 Outline of each country project, content of activities, ingenuity of project implementation, lessons learned and achievement degree of outputs**

Details of each country are mentioned in Chapter 2.

## 2 Independent State of Papua New Guinea (PNG)

### 2.1 Outline of the Project

#### 2.1.1 Project Purpose

Institutional framework and implementing capacity in SWM are enhanced at national and major urban local level governments (ULLGs) level.

#### 2.1.2 Output

##### a. Output 1

Institutional capacity on SWM is enhanced through development of a National Policy, Strategy and Implementation Plan in line with the Cleaner Pacific 2025.

##### b. Output 2

Planning capacity to tackle with the issues on SWM of some ULLGs is enhanced.

##### c. Output 3

NCD WM Plan 2016–2025 is implemented sustainably as scheduled.

### 2.2 Activities

#### 2.2.1 Activities related to Output 1

CEPA who is the main counterpart (C/P) for Output 1 has compiled the report incorporated current status and challenging issues on municipal solid waste management (MSWM) in local governments to be reflected for formulation of national waste management policies, strategies and implementation plan (hereinafter referred to as “NWMS”), after a series of discussions with related stakeholders, conducting baseline surveys for waste statistic, and carrying out site visits. Based on these activities, CEPA has formulated; 1. Skelton of NWMS, 2. Zero draft of NWMS, and 3. Roadmap for NWMS development. In June 2019, CEPA organized the 1st national consultation workshop for development of NWMS in Port Moresby. After that, in September 2019, CEPA organized the 1st regional consultation workshop for development of NWMS in Kokopo for Islands Region which is one of four (4) regions in PNG.

CEPA organized the regional consultation workshop for development of NWMS in another region. (Sep. 2020; Alotau, Jul. 2021; Lae, Mar. 2022; Goroka). Through these workshops, the NWMS was updated, and the 2nd national consultation workshop for development of NWMS was held to finalize the draft of NWMS.

Activity	Progress
1-1. Study on data collection flow for CEPA to get information on SWM from local levels regularly	<ul style="list-style-type: none"> <li>• Desk-reviewed municipal solid waste management (MSWM) related reports in PNG and Pacific Island Countries (PICs), and questionnaire and other survey results conducted in the past</li> <li>• Developed the new questionnaire sheet to collect data and information from ULLGs, and submitted it to the selected ULLGs</li> </ul>

Activity	Progress
1-2. Study on necessary data to grasp current situation on SWM at local levels	<ul style="list-style-type: none"> <li>• Conducted the questionnaire survey</li> <li>• Present a current situation of waste management in ULLGs in 1st ULLGs workshop</li> <li>• Modified the questionnaire template to the “Information and Data Collection Sheet (Sheet)” based on the result of questionnaires collected from ULLGs</li> <li>• Explained and discussed details on the Sheet among CEPA, NCDC and ULLGs in the 2nd ULLGs workshop in Jun. 2018</li> </ul>
1-3. Carry out data collection from local levels	<ul style="list-style-type: none"> <li>• Collected information and data from some ULLGs</li> <li>• Conducted mission visits to all four ULLGs (Sep. 2018 and Jun. Sep. and Oct. 2019)</li> <li>• Organized the 3rd and 4th ULLGs workshop to share and discuss the result of data collection and “the way forward” among CEPA, ULLGs and NCDC in Apr. 2019 and Mar. 2020 respectively</li> </ul>
1-4. Review the data collection flow	<ul style="list-style-type: none"> <li>• Reviewed data collection flow and initiated discussion with IT team in CEPA how to develop data collection and information sharing system</li> <li>• Supported activities on site in Kokopo and Goroka, such as rehabilitation of disposal site, market waste compost and waste audit in collaboration with CEPA and NCDC (May, June, September and October 2019) (Due to a lack of capacity and training opportunities on data collection and analysis for MSWM in ULLGs, the Project established city-city cooperation programme)</li> </ul>
1-5. Analyse the collected data	<ul style="list-style-type: none"> <li>• Analyzed collected data and information among CEPA, NCDC and ULLGs Developed waste flow for selected ULLGs</li> <li>• Conducted waste audit in Goroka, Alotau and Lae (Oct. 2019,~Mar. 2021) in cooperation with NCDC</li> </ul>
1-6. Elaborate the data collection flow	<ul style="list-style-type: none"> <li>• Established the Waste Management Technical Working Group website in Apr. 2019 for further development of data collection and information sharing platform</li> <li>• Promoted city-city cooperation programme for capacity development of ULLGs including enhancement of data collection and analysis and modified the results of survey analysis under WMD of NCDC</li> </ul>

Activity	Progress
<p>1-7. Identify priority issues on SWM at the national level for development of draft National Policy, Strategy and Implementation Plan</p>	<ul style="list-style-type: none"> <li>• Established a taskforce team for development of NWMS within CEPA, officially endorsed by Managing Director of CEPA</li> <li>• Developed the TOR of the National Waste Management Committee (NWMC)</li> <li>• Compiled a skeleton for the NWMS based on priority to be obtained by Activity 1-3</li> <li>• Drafted the roadmap as well as the skeleton for the NWMS</li> <li>• Organized the 1st NWMC in Mar. 2019</li> <li>• Conduct further discussion for city-city cooperation programme with CEPA and NDOH related to implementation and monitoring of NWMS</li> <li>• Conduct further discussion to co-organize with WHO which is held the Environmental Health Forum for Environmental Health Officer who is in charge of waste management in region</li> </ul>
<p>1-8. Organize a series of national and regional consultation meetings for National Policy, Strategy and Implementation Plan</p>	<ul style="list-style-type: none"> <li>• Organized the 1st National Consultation Workshop for NWMS development in Port Moresby in Jun. 2019</li> <li>• Organized the 1st Regional Consultation Workshop for NWMS development in Kokopo (for the Islands Region) in Sep. 2019</li> <li>• Organized the 2nd Regional Consultation Workshop for NWMS development in Alotai in Sep. 2020</li> <li>• Organized the 3rd Regional Consultation Workshop for NWMS development in Lae in Jul. 2021</li> <li>• Organized the 4th Regional Consultation Workshop for NWMS development in Goloka in Mar. 2022</li> <li>• Organized the 2nd National Consultation Workshop for NWMS development in Port Moresby in Jul. 2022</li> </ul>
<p>1-9. Develop the final draft of the SWM Implementation Plan to be incorporated in the National Policy, Strategy and Implementation Plan</p>	<ul style="list-style-type: none"> <li>• Developed the final draft of the SWM Implementation Plan to be incorporated in NWMS</li> <li>• Developed a skeleton of the “Guide to Develop Municipal Solid Waste Management Plan for (U)LLGs, Papua New Guinea” to be incorporated into the NWMP</li> </ul>

## 2.2.2 Activities related to Output 2

Through project activities such as the ULLG workshop, questionnaire survey and waste flow development conducted by CEPA in relation to Output 1, challenging issues in four (4) ULLGs were identified especially for the vulnerability on waste management such as limited human resources together with a lack of technical capacities.

In order to promote a strengthening city-city cooperation programme in collaboration with CEPA, the Minutes of Agreement (MOA) on the city-city cooperation was endorsed in four (4) ULLGs (between NCDC-Goroka, and NCDC-Kokopo signed by city managers in Mar. 2020, between NCDC-Lae, and NCDC-Alotau in Apr. 2022). As a support for the activities of ULLGs, a waste audit survey was conducted in three (3) ULLGs (Goloka, Alotau and Lae). In addition, as part of promotion for strengthening city-city cooperation programme, discussion related to priority issues that are occurring in local governments was conducted in collaboration with CEPA.

Activity	Progress
2-1. Develop the programme for planning capacity enhancement on SWM	<ul style="list-style-type: none"> <li>• Analysed the participation of the JICA training on waste management from PNG in the past</li> <li>• Developed the list to identify capacity needs and resources in PNG</li> <li>• Developed the framework of NCDC/ULLGs collaboration Programme to promote city-city cooperation</li> <li>• Endorsed the city-city cooperation programme between NCDC-Goroka, and NCDC-Kokopo signed by city managers in Mar. 2020</li> <li>• Endorsed the city-city cooperation programme between NCDC-Lae, and NCDC-Alotau in Apr. 2022</li> </ul>
2-2. Organize workshop for basic data management on SWM	<ul style="list-style-type: none"> <li>• Organized the 2nd ULLGs workshop in Jun. 2018 followed by the 3rd one in Apr. 2019 to share and discuss data collection and analysis results among all stakeholders</li> <li>• Organized 4th ULLGs workshops in Mar. 2020 to update activities for ULLGs</li> </ul>
2-3. Conduct data collection to develop a waste flow	<ul style="list-style-type: none"> <li>• Developed each ULLG report (four ULLGs reports) with some PowerPoints documents to share current issues and action plans</li> <li>• Developed the Kokopo baseline report</li> <li>• Conducted waste audit in Goroka, Alotau and Lae in collaboration NCDC</li> </ul>
2-4. Develop a waste flow based on the actual data collected in some ULLGs	<ul style="list-style-type: none"> <li>• Developed waste flow for four (4) ULLGs by combination of actual collected data and estimated variables</li> </ul>

Activity	Progress																								
<p>2-5. Identify priority issues based on the developed waste flow</p>	<ul style="list-style-type: none"> <li>• Identified the priority issues in Goroka, Kokopo, Alotau and Lae</li> <li>• Conducted the consultation meetings for four ULLGs in collaboration with CEPA, NDOH and NCDC shown in the following table.</li> </ul> <table border="1"> <thead> <tr> <th>Month/Year</th> <th>Place</th> <th>Participant</th> </tr> </thead> <tbody> <tr> <td>Apr. 2019</td> <td>Port Moresby</td> <td>Goroka, Kokopo, Lae, CEPA, NDOH, NCDC</td> </tr> <tr> <td>Oct. 2019</td> <td>Kokopo</td> <td>Kokopo, CEPA, NDOH, NCDC</td> </tr> <tr> <td>Oct. 2019</td> <td>Goroka</td> <td>Goroka, CEPA, NCDC</td> </tr> <tr> <td>Mar. 2020</td> <td>Port Moresby</td> <td>Alotau, Goroka, Kokopo, Lae, CEPA, NDOH, NCDC</td> </tr> <tr> <td>Sep. 2020</td> <td>Alotau</td> <td>Alotau, Goroka, Kokopo, Lae, CEPA, NDOH, NCDC</td> </tr> <tr> <td>Jul.2021</td> <td>Lae</td> <td>Alotau, Goroka, Kokopo, Lae, CEPA, NDOH, NCDC</td> </tr> <tr> <td>Mar. 2022</td> <td>Goroka</td> <td>Alotau, Goroka, Kokopo, Lae, CEPA, NDOH, NCDC</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• Developed the draft workplan for priority activities both in Goroka and Kokopo (disposal site rehabilitation, market waste compost, etc.)</li> </ul>	Month/Year	Place	Participant	Apr. 2019	Port Moresby	Goroka, Kokopo, Lae, CEPA, NDOH, NCDC	Oct. 2019	Kokopo	Kokopo, CEPA, NDOH, NCDC	Oct. 2019	Goroka	Goroka, CEPA, NCDC	Mar. 2020	Port Moresby	Alotau, Goroka, Kokopo, Lae, CEPA, NDOH, NCDC	Sep. 2020	Alotau	Alotau, Goroka, Kokopo, Lae, CEPA, NDOH, NCDC	Jul.2021	Lae	Alotau, Goroka, Kokopo, Lae, CEPA, NDOH, NCDC	Mar. 2022	Goroka	Alotau, Goroka, Kokopo, Lae, CEPA, NDOH, NCDC
Month/Year	Place	Participant																							
Apr. 2019	Port Moresby	Goroka, Kokopo, Lae, CEPA, NDOH, NCDC																							
Oct. 2019	Kokopo	Kokopo, CEPA, NDOH, NCDC																							
Oct. 2019	Goroka	Goroka, CEPA, NCDC																							
Mar. 2020	Port Moresby	Alotau, Goroka, Kokopo, Lae, CEPA, NDOH, NCDC																							
Sep. 2020	Alotau	Alotau, Goroka, Kokopo, Lae, CEPA, NDOH, NCDC																							
Jul.2021	Lae	Alotau, Goroka, Kokopo, Lae, CEPA, NDOH, NCDC																							
Mar. 2022	Goroka	Alotau, Goroka, Kokopo, Lae, CEPA, NDOH, NCDC																							
<p>2-6 Develop an implementation plan for improvement of the prioritised issue in some ULLGs</p>	<ul style="list-style-type: none"> <li>• Developed the Kokopo disposal site rehabilitation plan which was officially endorsed by Kokopo-Vunamami ULLG</li> <li>• Implemented market waste compost pilot project in Kokopo</li> <li>• Developed the Kokopo-Vunamami Waste Management Plan</li> </ul>																								

### 2.2.3 Activities related to Output 3

The Waste Management Division (WMD) of NCDC, through the activities of J-PRISM Phase 1, has divided the Areas into four categories: A: Collection and Transportation, B: Intermediate Treatment, C: Final Disposal, and D: Management, which is the cross-cutting management of these areas from a project and technical perspective. Each Area is led by a Senior Officer and carries out its activities in accordance with the Waste Management Plan.

In the promotion of intermediate treatment, the WMD proposed a market waste composting project at the Baruni landfill site in line with the WM Plan, which was approved by the city council. However, budgeting was delayed and the project had not been implemented as of August 2022. Meanwhile, NCDC obtained an Environment Permit (Level 2: Category B) in September 2013 to upgrade the Baruni Landfill to a semi-aerobic landfill site, but the scope of the permit needs to be additionally amended to allow recycling activities and incineration. NCDC has therefore initiated the process to apply for an additional Environment Permit in May

2022.

The landfill plots (Cell-1 and 2) at the Baruni landfill site are expected to be full within two years. However, as the next landfill block (Cell-3), unlike Cell-1 and 2, has to be developed on the mountain side and PNG has no experience in developing semi-aerobic landfill sites in mountainous areas, JICA experts carried out a preliminary design NCDC prepared construction order documents based on this preliminary design drawings. A summary of this activity is given below.

The Baruni landfill site was constructed in J-PRISM Phase I at its own cost by NCDC under the technical guidance of JICA experts for the detailed design of landfill cell 1 and 2, leachate control pond and administration building to improve the open dump disposal site into a semi-aerobic landfill (Fukuoka method) site. These landfill cells started to be landfilled from Cell-1 in October 2017 and Cell-2 in August 2019, respectively; as the remaining capacity was estimated to be around 3 years as of March 2020, the JICA expert proposed to integrate Cell-1 and 2 and extend their life by stacking them about 10 m higher.

The JICA expert urged the WMD to prepare design drawings and place construction orders for the development of Cell-3 as soon as possible, as the proposed site for Cell-3 is in a mountainous area and it was the first attempt for PNG to plan a semi-aerobic landfill on a slope, unlike Cell-1 and 2 which were constructed on flatter areas. Therefore, in parallel with the WMD design work, J-PRISM II assigned additional experts with experience in planning the development of sanitary landfill sites in mountainous areas, and in two months from October 2021, the design drawings were prepared with Japanese experience.

The JICA expert sent the design drawings to the WMD in December of the same year and recommended that they be replaced with those prepared by the WMD and that the construction quantities be revised.

NCDC conducted a tender for the Cell-3 development works in January 2022 and the construction contract was signed in April 2022. However, the drawings for the order were still the same as those prepared by WMD, so the JICA expert replaced the drawings and explained the design drawings to the construction contractor together with WMD during the field work from February of the same year. In addition, the WMD requested the JICA expert to calculate the construction quantities in May, to which the JICA expert responded.

These series of tasks were completed by the end of May 2022.

Activity	Progress
3-1. Install a weighbridge and data recording system at Baruni Disposal Site.	<ul style="list-style-type: none"> <li>• The installation of the weighbridge by JICA was completed at the end of August 2018, and the construction of the entry road and installation of protective fencing was carried out at the expense of the NCDC. NCDC started weighbridge operations on 1 October 2020.</li> <li>• The weighbridge was certified for the second time by the ICCC in March 2021.</li> </ul>
3-2. Introduce a new tipping fee charging system	<ul style="list-style-type: none"> <li>• Based on the total cost of commissioning landfill operations and infrastructure at the Baruni landfill site for the period 2018 - 2021 and the final disposal volume, the unit disposal cost was calculated to be 26.3 PGK/tonne (USD 7.4/tonne).</li> </ul>



Activity	Progress
3-2. Introduce a new tipping fee charging system	<ul style="list-style-type: none"> <li>• The unit cost of operating a landfill would need to be two to six times the current level (54-143 PGK/tonne) if the unit cost of operating a controlled landfill - sanitary landfill as indicated in the World Bank's What a waste 2.0 is used as a guide.</li> <li>• User pay charged by NCDC is 54.2 PGK/tonne for general waste and 77.2 PGK/tonne for industrial waste. The Data Management Task Force recognised that the tipping fee needs to be increased to between 54 and 143 PGK/tonne as a guide to ensure that the Fukuoka method of landfill can continue to be used appropriately. The setting of tipping fees on a metered basis will be determined at the discretion of the NCDC.</li> <li>• NCDC plans to introduce a metered basis tipping fees as soon as the weighbridge can operate continuously and a system that can send weighbridge data online to the NCDC City Hall will be put into operation.</li> </ul>
3-3. Establish a data management system on SWM	<ul style="list-style-type: none"> <li>• A task force consisting of the IT division, the accounting and revenue division and the WMD within NCDC was established to operationalise the waste data management system.</li> <li>• The taskforce reviewed the data to harmonise the list of payers, disposal tickets issued at the City Hall counter and the names of collectors recorded at the weighbridge.</li> </ul>
3-4. Review the Action Plan of the NCD WM Plan 2016-2025	<ul style="list-style-type: none"> <li>• Based on the review of the WM Plan in July 2018, the WMD identified the following four projects as priorities for the realisation of the WM Plan. <ul style="list-style-type: none"> <li>(i) Establishment of a waste management data management system</li> <li>(ii) Implementation of market waste composting</li> <li>(iii) Improvement of the environment in villages and settlements (improved collection)</li> <li>(iv) Improvement of Baruni DS (including development of Cell-3)</li> </ul> </li> <li>• As it was found that an additional environmental permit was required to carry out recycling activities (composting of market waste and resource sorting) and incineration at the Baruni landfill site, the WMD started an additional application process with CEPA in April 2022.</li> </ul>

Activity	Progress
<p>3-5. Develop implementation plans based on the reviewed Action Plan of NCD WM Plan 2016-2025</p>	<ul style="list-style-type: none"> <li>• Each year, WMD prepares an implementation plan for the following year based on the four projects identified in activities 3-4 and submits a budget application to the City Council.</li> <li>• The WMD applied for budgets for projects (ii) and (iii) to be implemented in 2019, but these were not approved.</li> <li>• WMD applied for and was approved for budgets (ii), (iii) and (iv) in FY2020, but implementation was postponed due to budget shortfalls.</li> <li>• The WMD applied for and was approved for budgets (ii), (iii) and (iv) in FY2021 and will continue the project in FY2022.</li> </ul>
<p>3-6. Undertake prioritised implementation plans</p>	<ul style="list-style-type: none"> <li>• WMD is implementing the following priority projects listed in 3-4: <ul style="list-style-type: none"> <li>(i) In collaboration with other divisions such as the Income, IT, and Education, WMD built a data management system to share weighbridge data within NCD. As soon as the uninterruptible system at the Baruni disposal site was completed, the data management system became operational.</li> <li>(ii) The city council has approved the construction of a composting plant for market waste at the Baruni disposal site.</li> <li>(iii) From April 2022, environmental awareness activities in the Settlement and reduction of waste generation by promoting composting was started to improve the environment in the area.</li> <li>(iv) Conducted detailed design of Cell-3 of Baruni DS and conducted bidding for construction work. In addition, WMD reviewed the detailed design based on the Fukuoka-method sanitary landfill development drawings prepared by JICA experts and instructed the contractor to do so.</li> </ul> </li> </ul>
<p>3-7. Monitor progress of the implementation plans</p>	<ul style="list-style-type: none"> <li>• WMD plans to quantitatively monitor the quality and quantity of collection services provided by contractors, confirming collection routes with GPS loggers and counting collected volumes with scales on a monthly basis.</li> <li>• WMD has established a system to check leachate water quality and landfill gas for environmental monitoring of Baruni landfill.</li> </ul>

Activity	Progress
3-7. Monitor progress of the implementation plans	<ul style="list-style-type: none"> <li>WMD appointed a person in charge to evaluate the progress of the implementation plan of the WM Plan, and share the evaluation results within the department on a quarterly basis.</li> </ul>
3-8. Review the NCD WM Plan by assessing the progress of the Action Plan	<ul style="list-style-type: none"> <li>Created a plan summary in June 2022;</li> <li>Created a revised WM Plan at the end of August 2022.</li> </ul>

## 2.3 Challenges and lessons learnt during the Project implementation

### 2.3.1 Multi-layer and Cross-sectoral Gaps among national and local governments, and line ministries, in implementing, enforcing and monitoring NWMS in the future

In addition to the constraints of human resources and financial arrangement for CEPA, multi-layer and cross-sectoral gaps among national and local governments, and line ministries were stressed by the Project. It is essential to take measure to fill these gaps together with all stakeholders for practical implementation, enforcement and monitoring of the NWMS. One of important countermeasures need to be taken is to support (intervene) Environmental Health Offices (EHOs) who are responsible for MSWM in local governments. Such a mechanism should be established through collaboration among multi-layer and cross-sectoral stakeholders especially with local governments as well as Provincial Health Authority (PHA) under the umbrella of NDOH who is mandated to support EHOs both technically and financially. In result, the Project called for collaboration among CEPA, NDOH, WHO and NCDC and made related discussion.

### 2.3.2 Promotion of Capacity Development in Local governments through City-City Cooperation Programme

Local governments in PNG are facing challenges on waste management due to the institutional, technical and financial constraints. It is crucial to tackle with these issues in building a sustainable waste management system for PNG. From this perspective, the Project made an effort to promote mobilizing local resources such as technical capacities accumulated in NCDC (developed during the J-PRISM Phase-I), and coordinated national and local stakeholders like CEPA, NDOH, and local governments (ULLGs) jointly to access PIP trust fund (PNG government funding) in a sustainable manner. In March 2020, the Project successfully achieved to establish the mechanism to mobilize the local resources effectively through the Minutes of Agreement (MOA) on city-city cooperation signed between NCDC and Goroka, and NCDC and Kokopo respectively (In addition, the MOA on city-city cooperation between NCDC and Alotau and NCDC and Lae respectively was signed in April 2022). The Project promoted mutual improvement of waste management through this intercity cooperation, and NCDC C/Ps actively invited to support local activities which must also contribute to capacity development for NCDC. NCDC C/Ps also have management capabilities with their leadership in addition to technical capacities on waste management. Mutual discussion, communication and learning with the common local language between locals sometimes seem to be more effective and impacted than the ones with foreign experts and consultants.

### **2.3.3 Foster opportunities on educational and training programme on MSWM for Environmental Health Officers (EHO) in local governments**

MSWM in local governments is managed by the Environmental Health Officer (EHO), many of whom are graduates of Divine Word University (DWU) in Madang (The Capital City of Madang Province). However, the current status of the “Waste Management Curriculum” is not taken care by CEPA nor NDOH, and also the latest trends and activities on waste management including the formulation of NWMS are not shared with academia such as universities and research institutes in PNG. In addition, a lack of continuous educational and training opportunities on waste management after being assigned as an EHO in respective local governments have resulted in stagnation and low priority of waste management activities in their mandates. Based on the perspective, the project made discussions with stakeholders such as NDOH, WHO, DWU and NCDC, especially for

- Enhancement of the curriculum on waste management in DWU,
- Providing opportunities on capacity development for EHO strategically including JICA training in Japan, and

### **2.3.4 Strengthening collaboration with other divisions to accelerate implementation of the activities of Output 3**

To realize the NCDC solid waste management plan, it is necessary to secure appropriate funds. For this reason, it is desirable to shift from the previous per-vehicle disposal fee collection to a pay-as-you-go fee collection, as well as to increase the collection rate of the existing waste fee and increase income for waste management. Securing funds requires activities beyond the scope of WMD, so WMD should build a waste data management system based on weighbridge data in collaboration with the Accounting Division, Income Division, and IT Division etc.

This has made it possible to centrally manage costs related to waste management, together with data such as demographics and business licences (number of businesses) and the volume of collection (i.e. disposal volume) obtained from weighbridge data, and to easily review fee setting (tipping fees and disposal costs) based on objective data. In other words, it means that the NCDC's financial resources to realise the waste management plan have been systematically secured and a waste management system that enables sustainable development has been established.

### **2.3.5 Remote assistance in corona disasters**

Due to COVID-19, JICA experts have not been able to work in the field since April 2020. For this reason, the communication with the C/P of NCD-WMD was done exclusively by email. Although the frequency of email communication was much higher than before March 2020, it was not possible to confirm whether the support was effective or not because the situation in the field was not sufficiently understood.

Based on the above lessons learned, in order to increase the effectiveness of the remote support, the expert team would like to hold regular online meetings until the end of the project to ensure understanding the support required through an exchange of views with the C/P.

## 2.4 Achievement of the Outputs

1. Institutional capacity on SWM is enhanced through development of a National Policy, Strategy and Implementation Plan in line with the Cleaner Pacific 2025.		Progress: Achieved
1-1. The current status on SWM in local levels are monitored by CEPA.	<ul style="list-style-type: none"> <li>• CEPA developed the synthesis report including current status and challenging issues for ULLGs.</li> <li>• CEPA proposed the monitoring system including data collection and analysis related to SWM at the local level in this report, and initiated technical assistance for ULLGs to develop their related capacities for implementation of waste audit and development of waste management plan in collaboration with NCDC.</li> <li>• CEPA initiated discussion with stakeholders such as NDOH and Provincial Health Authority (PHA) as well as World Health Organization (WHO), who are responsible for SWM conducted by the Environmental Health officer at the local level.</li> <li>• CEPA developed the framework on “Guide to Develop Municipal Solid Waste Management Plan for (U) LLGs, Papua New Guinea” including data collection and analysis as well as monitoring methodology on SWM, which is to be attached to NWMS.</li> <li>• A system for regular monitoring and analysis for SWM in the local level to be conducted by CEPA was developed through the above activities.</li> </ul>	
2. Planning capacity to tackle with the issues on SWM of some ULLGs is enhanced.		Progress: Achieved
2-1. Four (4) ULLGs can set numerical targets based on waste management improvement plans.	<ul style="list-style-type: none"> <li>• ULLGs developed the SWM analysis report.</li> <li>• Kokopo-Vunamami ULLG (KVULLG) formulated their own SWM Plan with setting numerical targets and indicators after development of the analysis report followed by the baseline report.</li> <li>• Goroka ULLG (GULLG) conducted the waste audit for SWM quantitative analysis including numerical target setting and indicators and developed GULLG SWM Plan.</li> <li>• Alotau ULLG and Lea ULLG conducted the waste audit for development of SWM plan in cooperation with NCDC. (Mar. 2021)</li> <li>• Alotau ULLG and Lea ULLG developed the implementation plan for the identified issue with the support of CEPA.</li> </ul>	
3. NCD WM Plan 2016–2025 is implemented sustainably as scheduled.		Progress: Achieved
3-1 Solid waste of NCDC is quantitatively managed.	<ul style="list-style-type: none"> <li>• With the completion of the weighbridge automated input system, a quantitative management system for NCDC's solid waste is in place.</li> </ul>	

3. NCD WM Plan 2016–2025 is implemented sustainably as scheduled.		Progress: Achieved
<p>3-2. Main SWM Planning Targets (Collection, Recycling, Disposal) at a mid-term point in NCD WM Plan 2016 -2025 are achieved (Clarify the quantitative targets from collection, recycling and disposal respectively according to the reviewed Action Plan)</p>	<p>1. Collection: the WM Plan shows the amount collected, recycled and disposed of as planned targets against the amount generated; analysis of data from the weighbridge for the year 2021 shows that the NCD's collection rate for municipal waste (collection as a percentage of amount generated) was 68% collection rate. This is slightly short of the initial target of 71%. On the other hand, it was observed that the ratio of illegal dumping to the volume generated has decreased by 2.6% since 2018. This indicates that the planned target has largely been achieved in terms of collection improvements.</p> <p>2. Recycling: the WM Plan targets a final year recycling rate of 13.5% with an intermediate treatment facility (Material Recovery Facility (MRF) and market waste composting facility) in Baruni DS. The recycling market was booming at the time the plan was prepared (2014), but the recycling market has deteriorated sharply since the ban on the export of recyclable waste to China from January 2018 onwards. As a result, the commercialisation of the MRF has been put on hold, and for the time being, plans to develop an intermediate treatment facility based on the composting of market waste will be pursued. Meanwhile, it was found necessary to obtain an Environment Permit for recycling activities at the Baruni landfill site, and WMD has started the application process to obtain an additional one in addition to landfilling waste.</p> <p>The plan compiled by the WMD to build a market waste composting facility at the Baruni Landfill has been approved by the City Council, but has not been implemented as of April 2022 due to budget shortfalls. Meanwhile, to promote waste reduction at the source, the WMD started household composting promotion activities at the Settlement in March of the same year.</p> <p>The recycling rate in 2021 was 3.4%, which deviates significantly from the target, but this is due to the lack of intermediate treatment facilities at the Baruni disposal site.</p> <p>The WMD is implementing recycling activities outside of the disposal site, and waste reduction through public awareness-raising and composting is underway. As a result, the recycling rate is expected to exceed the target once an intermediate treatment facility is constructed at the Baruni disposal site.</p> <p>• 3. Final disposal: the final disposal volume in 2021 was 248 t/day. The planned disposal volume is 262 t/day with no intermediate treatment at the disposal site, which means that the disposal volume is generally in line with the plan.</p>	
<p>3-3. Draft revision edition of NCD WM Plan is developed.</p>	<p>• Based on the analysis of the 2021 weighbridge data, the WM Plan was reviewed and a revised framework was prepared in April 2022.</p>	

3. NCD WM Plan 2016–2025 is implemented sustainably as scheduled.		Progress: Achieved
3-3. Draft revision edition of NCD WM Plan is developed.	<ul style="list-style-type: none"> <li>• A revised draft NCD WM Plan was prepared by the end of August 2022.</li> <li>• The WMD will consult the City Council on this revised version and continue to promote improved waste management up to 2025.</li> </ul>	

## 2.5 Achievement of the Project purpose

Institutional framework and implementing capacity in SWM are enhanced at national and major urban local level governments (ULLGs) level.		Progress: Achieved
1. The roles and responsibilities of related agencies for SWM are determined at the national and local level.	<ul style="list-style-type: none"> <li>• At the national level, the relevant ministries, including CEPA, the Ministry of Health (NDOH) and the Department of National Planning (DNPM) reviewed and agreed on the framework and direction for the development of the National Waste Management Guidelines, Strategy and Implementation Plan (hereinafter referred to as the Guidelines) in accordance with the Environment Act 2000 and the Public Health Act 1973 (hereinafter referred to as the Guidelines) and reached a common understanding on the roles and responsibilities of the following relevant agencies <ul style="list-style-type: none"> <li>✓ Local waste management is under the jurisdiction of local government and is the responsibility of the Environmental Health Officer.</li> <li>✓ The activities and reporting carried out by the Environmental Health Officer are the responsibility of the local government concerned in addition to the Provincial Health Authority.</li> <li>✓ The Provincial Health Authority is responsible for providing technical and financial support to municipal waste management officers.</li> <li>✓ Provincial Health Authority is under the NDOH, and CEPA works with the NDOH to support its work in rural areas through Local Governments and Provincial Health Authority.</li> </ul> </li> <li>• Consultation meetings at local and national level was held to establish the Guidelines including roles and responsibilities of related agencies for SWM mentioned the above, with the aim of submitting a final draft to Parliament.</li> </ul>	
2. A coordination and monitoring mechanism for ULLGs in SWM is established.	<ul style="list-style-type: none"> <li>• A system for collecting information and data on solid waste management in local cities (ULLG) has been developed (e.g. preparation of data collection sheets, conducting briefing sessions on how to use the sheets, development of a waste management information portal site).</li> </ul>	

Institutional framework and implementing capacity in SWM are enhanced at national and major urban local level governments (ULLGs) level.		Progress: Achieved
2. A coordination and monitoring mechanism for ULLGs in SWM is established.	<ul style="list-style-type: none"> <li>• A Memorandum of Understanding (MoU) for city-city cooperation has been signed between CEPA, NCDC and 4-ULLG, and a support system to local cities for technology transfer and capacity building for data collection, analysis methods and planning, by NCDC, which plays a pioneering role in the field of solid waste management in PNG has been developed.</li> <li>• Cross-sectoral consultations with relevant agencies (CEPA, NDOH, WHO, DWU, NCDC, etc.) to promote education and training opportunities for Environmental Health Officers responsible for local waste management are continuing. It is expected that this will enable monitoring of solid waste management in local cities.</li> </ul>	

## 2.6 Recommendation towards achievement of Overall Goal

In order to achieve the overall goal (Sustainable management of solid waste in the Pacific region is enhanced based on Pacific Regional Waste and Pollution Management Strategy 2016-2025 (Cleaner Pacific 2025)), in PNG, in PNG, based on the developed national strategy, CEPA is playing a central role in waste management for the entire country. In addition, the knowledge and lessons learned on waste management obtained by NCDC is utilized to improve proper waste management in local areas by CEPA and NCDC.

## 2.7 Capacity Assessment

### 2.7.1 3<sup>rd</sup> Capacity Assessment

In the third term, the third CA (endline) was conducted by monitoring the project activities and using the checklist from 10 April and 4 May 2022. The results of the third CA are shown in the figure below.

The capacity of 1) Institutions and policies at the national level increased. As of the third CA, CEPA was preparing the fourth version of NWMPS. It is expected that CEPA will hold a national consultation meeting and formulate a final draft before the Project ends. Workshops for NWMPS were held in four regions, and forums for explaining and discussing the policies and strategies with stakeholders, including the private sector in each region was made. As the understanding of the NWMPS deepened, the capacity of 2) Situations faced by Relevant Actors was also improved.



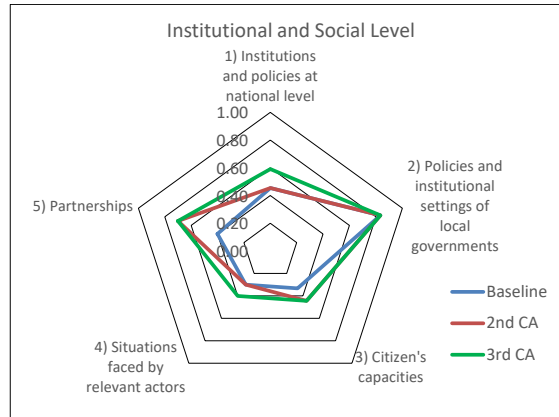


Figure 2-1 CA results at the Institutional/Social level in PNG

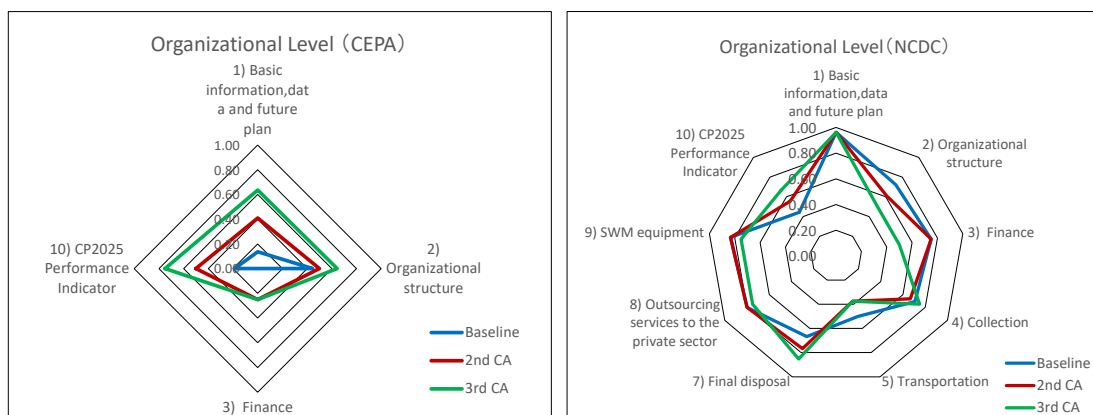


Figure 2-2 CA results at the Organizational level in PNG

As for CEPA's capacities at the organizational level, all aspects except 2) Finances increased. CEPA collected the essential information and data related to SWM through the formulation of NWMPs (Output 1). They also deepened the knowledge of survey methods and results (e.g. MSW generation rate) by assisting the waste amount and composition surveys in regional cities and towns together with NCDC under the City-City Cooperation scheme (Output 2). These activities contributed to the capacity enhancement of 1) Basic information, data and future plan and 10) CP2025 Performance Indicator.

Regarding 2) Organizational structure, CEPA's organizational structure has no changes, and the number of full-time staff actually decreased by three to one<sup>2</sup>. However, CEPA connected and deepened partnerships with ministries (Ministry of Health, Department of National Planning and Monitoring) and local governments (ULLG, Provincial Government) related to local solid waste management. It can be said that the capacity at the organizational level has increased as a result of CEPA's increased presence as a competent agency related to waste management.

Compared to the baseline, it can be said that the organizational capacity of CEPA for waste management has improved dramatically. In order to maintain and further improve the organizational capacity of CEPA, it is desirable to increase the number of full-time staff.

NCDC's organizational capacity has slightly improved in the third term. Specifically, the capacity for 7) final disposal has increased due to the commencement of operation of the

<sup>2</sup> There are 3 project based officers in CEPA including J-PRISM II assistant,

weighing bridge installed at the Baruni landfill. On the other hand, the capacity regarding 2) organizational structure and 3) finance has decreased. There are multiple reasons for this. First, the organizational structure of the upper management of NCDC has changed (from four deputy mayors and four department heads to two deputy mayors, four directors, and four department heads). So, it takes time to communicate information within the organization and execute the budget. Secondly, regular meetings of senior staff level within WMD, which were held in the past, are no longer being held. As a result, the budget is not executed as planned, and information on budget execution is not sufficiently shared within the organization. These factors have led to a reduction in NCDC's capacity at the organizational level.

Compared to CEPA, NCDC has a higher capacity at the baseline, and there is no significant difference in average capacity compared to the baseline. However, it is undeniable that the improvement of the implementation capacity of the solid waste management project was sluggish due to the organizational change of the NCDC itself and the tight financial situation. On the other hand, by introducing the weighbridge and City-City cooperation, many NCDC staff deepened their knowledge and insight into the performance indicators (per capita generation of MSW, waste capture rate, user-pays systems for waste collection, waste disposal, etc.) for monitoring the implementation of CP2025. This indicates that, as an advanced municipality in PNG, the NCDC's broad experience and knowledge regarding solid waste management have improved. In the future, it is believed that these experiences and knowledge will serve as a basis for further improving the implementation capacity of NCDC's solid waste management projects.

### 3 Solomon Islands

#### 3.1 Outline of the Project

##### 3.1.1 Project purpose

Institutional capacity for SWM is strengthened at the national and provincial centers' levels.

##### 3.1.2 Output

###### a. Output 1

Capacity of Solid Waste Management of HCC is strengthened.

###### b. Output 2

Lessons learnt from the activities related to SWM in Honiara and Gizo are promoted and practiced in the targeted provincial centers.

###### c. Output 3

Economic measures for sustainable SWM in the SI are specified.

#### 3.2 Activities

##### 3.2.1 Activities related to Output 1

The current situation of solid waste management in Honiara City was clarified and issues were identified (Activity 1-1). The framework of SWM plan was developed and numerical targets for the target year were set (Activity 1-2). The SWM Plan Committee (Activity 1-3) was organized as working group and a series of discussions for SWM plan was held. When the SWM plan was drafted (Activity 1-4), consultation meeting to build a consensus among the stakeholders was held (Activity 1-5). The finalized SWM plan reflecting the opinions and comments obtained at the consultation meeting was submitted to the Honiara City Council in November 2019 and approved.

After obtaining approval for the SWM plan, actions are taken to improve waste management based on the action plan indicated in the SWM Plan. The establishment of Waste Management and Control Division, one of the highest priority actions, has already been completed, and the activity has already started since January 2020 as a new division in Honiara, an activity report has been developed regularly. As another priority Action, the tipping fee system has been commenced in September 2020, in parallel with the official process of enactment of the tipping fee ordinance (Activity 1-7-1). In addition, in order to improve waste collection, the skip bins were relocated, a new waste collection schedule was created, and waste collection based on this schedule has been started (Activity 1-7-2). For the construction of a new landfill site, information about discussions of candidate site was collected and comments and advices on site selection was given so that it would be an appropriate candidate site (Activity 1-7-3).

Activities	Results of activities
1-1 Review the existing data and conduct supplementary survey of the current SWM situation and organizational management issues	<ul style="list-style-type: none"> <li>The latest information on solid waste management in Honiara City was collected and analyzed.</li> </ul>

Activities	Results of activities
1-1 Review the existing data and conduct supplementary survey of the current SWM situation and organizational management issues	<ul style="list-style-type: none"> <li>• The amount of solid waste for the planned target year of Honiara City was forecasted.</li> <li>• The waste flows of the current situation and planned target year of Honiara City were updated.</li> </ul>
1-2 Develop a framework of the SWM plan	<ul style="list-style-type: none"> <li>• The outline of SWM plan of Honiara City was finalized.</li> <li>• The numerical targets for the target year in SWM plan was set.</li> </ul>
1-3 Organize a working group to discuss institutional, technical and financial arrangements for the SMW system in HCC	<ul style="list-style-type: none"> <li>• The SWM Plan Committee was launched as a working group to consider SWM plan of Honiara City.</li> </ul>
1-4 Formulate a draft SWM plan, including recommendations for the necessary arrangements based on the results of discussion in the working group	<ul style="list-style-type: none"> <li>• A workshop of the SWM Plan Committee was held to discuss SWM plan. The SWM Plan was drafted.</li> </ul>
1-5 Conduct consultation meeting to build a consensus among stakeholders on the draft SWM plan	<ul style="list-style-type: none"> <li>• Consultation meeting for the draft SWM plan was held in May 2019, hosted by the SWM Plan Committee.</li> <li>• In consultation meeting, current situation and issues of solid waste management in Honiara City, as well as future basic policies and action plans was explained.</li> <li>• The opinions and comments obtained at the consultation meeting were compiled and reflected in the plan, and draft SWM Plan was finalized.</li> </ul>
1-6 Develop a landfill operation manual based on the draft SWM plan	<ul style="list-style-type: none"> <li>• Information about the current situation of the Ranadi disposal site was collected and compiled.</li> <li>• The current situation of environmental impact caused by Ranadi disposal site was identified.</li> <li>• The current issues concerning disposal site operation was compiled.</li> <li>• The realistic operation and monitoring method of disposal site were discussed.</li> <li>• Landfill operation manual for disposal site was developed and revised in 2022.</li> </ul>
1-7 Monitor and prepare an annual monitoring report of the activities of SWM	<ul style="list-style-type: none"> <li>• The SWM Plan was submitted, and approved by Honiara City Council.</li> <li>• Based on the action plan indicated the SWM Plan, activities are being implemented to improve solid waste management.  [Priority: High]  Action 1: Establishment of solid waste management division  Action 2: Development of Ordinance  Action 3: Establishment of proper waste collection system</li> </ul>

Activities	Results of activities
1-7 Monitor and prepare an annual monitoring report of the activities of SWM	Action 4: Development of new landfill site (Construction plan) [Priority: Medium] Action 5: Establishment of proper landfill operation system Action 6: Development and implementation of public awareness plan [Priority: Low] Action 7: Development and implementation of monitoring plan on private contractor Action 8: Consideration of intermediate treatment technology Action 9: Dissemination of home compost <ul style="list-style-type: none"> <li>• As one of the high priority activities, the Solid Waste Management and Control Division was established.</li> <li>• Solid Waste Management and Control Division is making report periodically.</li> </ul>
1-7-1 Develop and enforce ordinance for tipping fee to introduce tipping fee system	<ul style="list-style-type: none"> <li>• The fee collection method and fee table, etc was discussed for the introduction of the system.</li> <li>• The tipping fee system was commenced in September 2020.</li> <li>• Data of tipping fee is continuously recorded.</li> <li>• Draft of ordinance was developed and on the procedure to be official.</li> </ul>
1-7-2 Develop and implement new waste collection plan including skip bin relocation to improve waste collection service	<ul style="list-style-type: none"> <li>• A waste collection schedule was developed and waste collection activity was started in line with new schedule..</li> <li>• Data of waste collection vehicles has been recorded at the disposal site.</li> <li>• Skip bins was relocated considering the current situation.</li> </ul>
1-7-3 Develop concept paper of new sanitary landfill to facilitate a discussion about the construction of new landfill site	<ul style="list-style-type: none"> <li>• A draft of concept figure for a new disposal site was developed.</li> <li>• Information about discussion of candidate site for new landfill site is collected and proper location for landfill site was discussed.</li> </ul>

### 3.2.2 Activities related to Output 2

The lessons learned from solid waste management activities implemented in Honiara City and Gizo Town were collected and compiled as a report (Activity 2-1). Also, using the lessons learned, useful training material for implementing activities in other provincial areas was developed (Activity 2-2). In order to finalize the training material, a workshop was held to review the training material by reflecting the opinions of C/Ps in Honiara City and Gizo Town (Activity 2-3). The developed training material were used in a workshop conducted at Tulagi (Provincial centers), and were used for the development of SWM plan and the implementation of waste audit survey (Activity 2-4).

As an activity that utilizes the lessons learned so far, a SWM plan in Provincial centers was formulated with the support of the Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM) and Honiara City Council. Tulagi (Provincial center) has finalized the SWM plan and in the process of submitting to full assembly meeting. In addition, basic information and data in Auki (Provincial center) was collected from Auki's C/Ps and a draft of SWM plan was developed (Activity 2-5).

Activities	Results of activities
2-1 Review and compile lessons learnt from activities related to SWM implemented in Honiara and Gizo	<ul style="list-style-type: none"> <li>• The lessons learnt from activities related to solid waste management implemented in Honiara City and Gizo Town was collected.</li> <li>• By reviewing the collected lessons learnt, the lessons learnt which is useful for provincial centers was selected and compiled.</li> <li>• The lessons learnt from activities related to solid waste management implemented in Honiara City and Gizo Town were developed as a report.</li> <li>• In order to review and update, the report on lessons learnt was discussed with the C/Ps who implemented activity in Gizo Town.</li> </ul>
2-2 Develop draft training material on SWM based on the results of 2-1	<ul style="list-style-type: none"> <li>• The composition and contents of the training material on solid waste management was discussed.</li> <li>• Based on the lessons learnt from activities related to solid waste management implemented in Honiara City and Gizo Town, a draft of training material, which is useful for conducting activities in other areas, was developed.</li> </ul>
2-3 Conduct material review workshop with officers of MECDM, MHMS, HCC, and GTC to verify and finalize training material	<ul style="list-style-type: none"> <li>• The material review workshop with officers of MECDM, MHMS, HCC, and GTC to verify and finalize training material was conducted in February of 2019.</li> <li>• The training material were finalized based on the comments and opinions obtained at the workshop.</li> <li>• The training material was revised in 2022 with additional information about waste audit survey and waste flow.</li> </ul>
2-4 Conduct in-country workshops for officers involved in SWM of targeted provincial centers to prepare SWM plans, utilizing the above training material	<ul style="list-style-type: none"> <li>• Candidate sites to be the target provincial centers was discussed.</li> <li>• In-country workshop to develop SWM plan was held in March 2019 at Aukii, one of the target provincial centers.</li> <li>• In-country workshop to develop SWM plan was held in July 2019 at Tulagi, one of the target provincial centers.</li> </ul>
2-5 Support and monitor targeted provincial centers for implementation of SWM plans	<ul style="list-style-type: none"> <li>• With the assistance of the C/Ps, one of the lessons learnt indicated in training material, waste audit survey was conducted with the staff in charge of Tulagi.</li> </ul>

Activities	Results of activities
2-5 Support and monitor targeted provincial centers for implementation of SWM plans	<ul style="list-style-type: none"> <li>• Activities for development of SWM plan in Tulagi and Auki was followed up by MECDM and HCCs.</li> <li>• The SWM plan in Tulagi was developed and finalized. It is ready to be submitted to the full assembly meeting.</li> <li>• In order to develop SWM plan in Auki, basic information and data were provided by Auki C/Ps.</li> <li>• The SWM plan in Auki was discussed and drafted with Auki' C/Ps.</li> </ul>

### 3.2.3 Activities related to Output 3

The financial information of Solomon Islands and Honiara City was collected and compiled, and then analyzed (Activity 3-1). A study on economic measures that are effective in maintaining solid waste management was conducted, and options considered to be effective were extracted. In addition, the study results of economic measures were compiled as a draft basic study report (Activity 3-2).

Among the extracted economic measures, the single-use plastic regulation was selected, which is considered desirable for early introduction, and clarified the procedures and actions required to enact as the regulation (Activity 3-3). In addition, a draft of Instruction, which describes the content of regulations and related information necessary for the regulations, was developed based on consultation and advice from the Attorney General's Chamber, which prepares regulations (Activity 3-4).

Activities	Results of activities
3-1 Review the existing revenue and expenditure on SWM	<ul style="list-style-type: none"> <li>• Information on central government finance was obtained. The financial situation at the national level was compiled and analyzed.</li> <li>• The budget data of Honiara City was obtained. The income and expenditure related to solid waste management in Honiara City was compiled and analyzed.</li> <li>• Information on finances of the MECDM was obtained. The financial situation of the MECDM was compiled and analyzed.</li> </ul>
3-2 Conduct a basic study on various options of economic measures applicable to the Solomon Islands to sustain SWM	<ul style="list-style-type: none"> <li>• A feasibility study (pre-FS) on the Container Deposit System (CDS) was conducted.</li> <li>• A study on economic measures that are effective in maintaining solid waste management was conducted, options considered to be effective were extracted.</li> <li>• The study results of economic measures were compiled as a draft basic study report.</li> </ul>
3-2-1 Consider options for economic measures	<ul style="list-style-type: none"> <li>• The options of effective economic measures for maintaining solid waste management was discussed.</li> </ul>

Activities	Results of activities
3-2-1 Consider options for economic measures	<ul style="list-style-type: none"> <li>The options considered to be effective at the national level and Honiara City level were extracted.</li> </ul>
3-2-2 Examine how to introduce these economic measures	<ul style="list-style-type: none"> <li>A study on the introduction method of economic measures was conducted.</li> </ul>
3-2-3 Implement cost-benefit analysis of the economic measures	<ul style="list-style-type: none"> <li>Based on the analysis results of the collected information, cost-effectiveness analysis for economic measures was implemented.</li> </ul>
3-3 The necessary steps and actions required to implement the identified economic measures is clarified	<ul style="list-style-type: none"> <li>Single-use plastic regulation is identified as one of the economic measures.</li> <li>The necessary steps and actions required to regulate Single-use Plastic regulation is clarified and schedule was made.</li> </ul>
3-4 Compile produced information and data required for initiating the economic measure	<ul style="list-style-type: none"> <li>Draft Instruction for Single-use Plastic regulation which would be submitted to Attorney General's Chamber was developed.</li> </ul>

### 3.3 Challenges and lessons learnt during the Project implementation

#### 3.3.1 Development method of solid waste management plan

In Honiara City, two divisions, the Works Division and the Environmental Health Division, were in charge of waste management. The Works Division was mainly responsible for service of waste collection and transportation and the Ranadi disposal site management, and the Environment Health Division was responsible for the management of private collection companies and the public awareness concerning environmental health including waste. As both departments were in charge of practices of waste management, therefore, it was not clear of leading department, they did not have an opportunity to get any experience in developing plans concerning solid waste management in the whole of Honiara City such as SWM plan, and also they did not have enough knowledge to develop plans. In addition to that, it was not familiar for C/Ps to write a report and use PC, so, it could not be proceed with making draft of SWM plan as planned.

At the beginning, each C/Ps was assigned a person in charge based on their actual task, and required to consider and make a report for the designated part individually. But this was not suitable way for C/Ps, therefore, development method was changed. A workshop of the SWM Plan Committee was often held. At the workshop, all participants together made a discussion or group discussions was conducted by the divided small groups. Through these discussions, each item of the draft of SWM plan was confirmed and developed one by one.

It is expected that SWM plan will be developed in other provincial areas besides Honiara City. Therefore, it was expected that through the development of SWM plan in Honiara City, the C/Ps of Honiara City can understand well about development process of SWM plan and make advice and support to other provincial areas. As a result, the C/Ps of Honiara City is supporting by introducing the SWM plan in Honiara City and the method of development of SWM plan to other area (provincial centers targeted for Output 2).



### **3.3.2 Follow-up on Solid Waste Activity in Local Areas**

A local business trip to Gizo Town was planned and conducted to discuss with C/Ps in order to confirm the lessons learnt of the activities in Phase 1, and the importance of follow-up was re-realized. Most of the pilot projects implemented in Gizo Town have obtained remarkable results during the project period, and the results and effects are compiled as lessons learnt. On the other hand, it can be said that the difficulty in securing sustainability after the project has clarified again.

Regarding collection activity, which is one of the major issues at present, the eight collection stations established in the pilot project were functioning but not regularly collected. Although there are several factors for this incident such as the change of waste personnel, securing of personnel, and cost, one of the factors is that Gizo Town has not been able to collect waste continuously. It is essential not only to support hard aspect but also to support the improvement of stable collection activity for relative department from a long-term perspective. Gizo Town C/Ps also stated that continuous follow-up is essential for the sustainable implementation of proper waste management.

There is a further plan to expand effective lessons learnt to other areas by using the training material related to the lessons learnt after closing the project, it is necessary to continuously conduct monitoring and support/guidance for activity after the expansion.

### **3.3.3 Support activities in line with the basic policies and activity plans of the Ministry of the Environment and Honiara City**

One of the important basic policies for the Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM) is to develop capacity of waste management not only in Honiara City but also in local provinces. For this reason, the MECDM provides assistance to local provincial governments in the development of SWM plan and the implementation of waste audit survey. On the other hand, in the activities of J-PRISM project, in accordance with the basic policy of the MECDM, the development of SWM plan and the implementation of waste audit survey were assisted by Japanese expert and the C/Ps of the MECDM.

Honiara City also recognizes that waste management is one of the city's most important challenges. Therefore, the development of SWM plan and the establishment of new division specializing in solid waste management were top priorities. On the other hand, in the activities of the J-PRISM, in order to solve the highest priority issues recognized by Honiara City, the SWM plan was developed as an activity of PDM Output 1, and Based on the SWM plan, the establishment of a new waste management division, which is a top priority issue, has been realized. The activities of the J-PRISM and the actions for the highest priority issues of the C/Ps are matched.

In this way, by adopting activities that is in line with the basic policies of the MECDM and Honiara City and/or activities that are directly related to the practice of the C/Ps, the awareness of the C/Ps regarding activities related to PDM is improved, the C/Ps ownership is ensure, in addition, the continuity of activities can be expected.

### 3.4 Achievement of the Outputs

1. Capacity of Solid Waste Management of HCC is strengthened.		Progress: Achieved
Indicator 1-1: Draft SWM plan is submitted to the city council.	<ul style="list-style-type: none"> <li>Based on discussions in the SWM Plan Committee meeting, draft of SWM plan was developed. The draft SWM plan was submitted to and approved by the Executive Committee meeting on November 14, 2019, with the approval of the Waste Management &amp; Control Standing Committee, and became the official plan of Honiara City</li> </ul>	
Indicator 1-2: Landfill management and waste collection service are carried out in accordance with the developed SWM Plan. (Numerical target indicators will be set based on the plan)	<ul style="list-style-type: none"> <li>Ranadi landfill site is being managed based on the developed landfill operation manual for disposal site. Waste collection is started with the newly created waste collection schedule. High priority actions are implemented in accordance with the SWM plan.</li> </ul>	
2. Lessons learnt from the activities related to SWM in Honiara and Gizo are promoted and practiced in the targeted provincial centers.		Progress: Achieved
Indicator 2-1: Training material is developed and revised at least once during the project	<ul style="list-style-type: none"> <li>The lessons learnt from solid waste management activities implemented in Honiara City and Gizo Town was compiled as a report, and training material that will be useful for implementing activities in other areas was finalized. Workshops were held using the created training materials, and revisions were made based on the obtained knowledge.</li> </ul>	
Indicator 2-2: SWM plans are prepared in at least three provincial centers.	<ul style="list-style-type: none"> <li>A workshop for development of SWM plan was held at Tulagi (Provincial center), and a draft of SWM plan was developed. Based on the information and data of C/Ps of Auki (Provincial center), a draft of the SWM plan was developed.</li> </ul>	
Indicator 2-3: SWM plans are monitored in at least three provincial centers.	<ul style="list-style-type: none"> <li>The SWM plan in Tulagi (Provincial center) was finalized, that is under the process of submitting to full assembly meeting. A draft of the SWM plan in Auki was developed.</li> </ul>	
3. Economic measures for sustainable SWM in the SI are specified.		Progress: Achieved
Indicator 3-1: Feasible options of economic measures are identified through the basic study.	<ul style="list-style-type: none"> <li>The budget data of the central government and Honiara City and subsidy system was obtained and compiled as report. Based on the results of the basic survey, effective economic measures was discussed and options considered to be effective was extracted.</li> </ul>	
Indicator 3-2: The documents necessary to legally process the economic options are prepared	<ul style="list-style-type: none"> <li>In addition to clarifying the processes required to regulate the extracted economic measure (single-use plastic regulation), the necessary information was compiled as instructions</li> </ul>	

### 3.5 Achievement of the Project purpose

1. Institutional capacity for SWM is strengthened at the national and provincial centers' levels.		Progress: Achieved									
Indicator 1: Activities proposed in the SWM plan are revised annually.	<ul style="list-style-type: none"> <li>The SWM plan was developed and approved by the Honiara City Council (Executive Committee). Based on the SWM plan, Solid Waste Management Division was newly established. Activities are being implemented according to the action plan indicated in the SWM plan. Activities is checked and reported in the annual report and annual plan by Waste Management and Control Division.</li> </ul>										
Indicator 2: SWM activities reflecting lessons learned are practiced in at least two provincial centers during the project period.	<ul style="list-style-type: none"> <li>The lessons learnt from solid waste management activities implemented in Honiara City and Gizo Town have been compiled as a report, and a training material that is useful for implementing activities in other areas was finalized. A workshop was held at provincial center (Tulagi) by using training material. In addition, by utilizing lessons learned, waste audit survey was conducted, and SWM plan was developed.</li> </ul> <p>[Results]</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Provincial centers lessons learned</th> <th style="text-align: center;">Tulagi</th> <th style="text-align: center;">Auki</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Development of SWM plan</td> <td style="text-align: center;">Done (Finalized)</td> <td style="text-align: center;">Done (Draft)</td> </tr> <tr> <td style="text-align: center;">Implementation of waste audit survey</td> <td style="text-align: center;">Done</td> <td style="text-align: center;">Done</td> </tr> </tbody> </table>		Provincial centers lessons learned	Tulagi	Auki	Development of SWM plan	Done (Finalized)	Done (Draft)	Implementation of waste audit survey	Done	Done
Provincial centers lessons learned	Tulagi	Auki									
Development of SWM plan	Done (Finalized)	Done (Draft)									
Implementation of waste audit survey	Done	Done									
Indicator 3: Necessary actions are taken for legalization of selected economic measures.	<ul style="list-style-type: none"> <li>Effective economic measures at the national and Honiara city levels to contribute to stable implementation of solid waste management were identified. Aiming for legalization, an Instruction for Single-use plastic regulation to be submitted to the Attorney General's Chamber, which draws up regulations, was developed.</li> </ul>										

### 3.6 Recommendation towards achievement of Overall Goal

In order to achieve the overall goal (Sustainable management of solid waste in the Pacific region is enhanced based on Pacific Regional Waste and Pollution Management Strategy 2016-2025 (Cleaner Pacific 2025)), in Solomon Islands it is necessary to establish nationwide waste management framework leading by MECDM. In Honiara City, activities will be carried out according to the action plan shown in the SWM plan to improve solid waste management. In addition to that, it is required to support the improvement of solid waste management in other provinces in cooperation with MECDM utilizing the knowledge and lessons learned.

### 3.7 Capacity Assessment

#### 3.7.1 3<sup>rd</sup> Capacity Assessment

In the third term, the third CA (endline) was conducted by interviewing the progress of project activities with the country-wise experts and using the checklist as a questionnaire to the main counterparts from 26 July and 26 August 2022. The results of the third CA are shown in the

figure below.

At the institutional and social level, no significant changes were seen overall from the second term. However, it was confirmed that the impact of the National Waste Pollution Control Strategy (NWCPS) 2017-2026, which was approved in the second term, is beginning to emerge. As of the baseline, although environmental Act 1998, the fundamental law for waste management in Solomon Islands, does not categorize or define waste, major wastes such as solid and hazardous wastes were clearly explained in the NWCPS2017-2026. It is recommended that significant wastes be defined in legislation. MECD is currently discussing the review of the Environment Act 1998, and new chapters on "Waste Management" and "Chemical Waste Management" are expected according to the NWCPS 2017-2026. This can significantly impact improving the institutional capacity for solid waste management at the national level in the Solomon Islands. Compared to the baseline, the above-mentioned approval of NWCPS2017-2016 and the completion of HCC's solid waste management plan have dramatically improved the capacity of 1) Institutions and policies at the national level and 2) Policies and institutional settings of local governments.

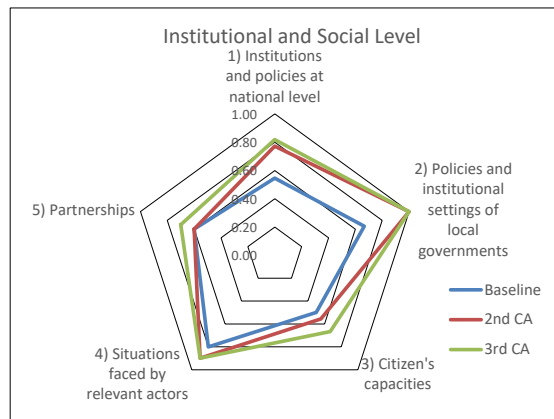


Figure 3-1 CA results at the Institutional/Social level in Solomon Islands

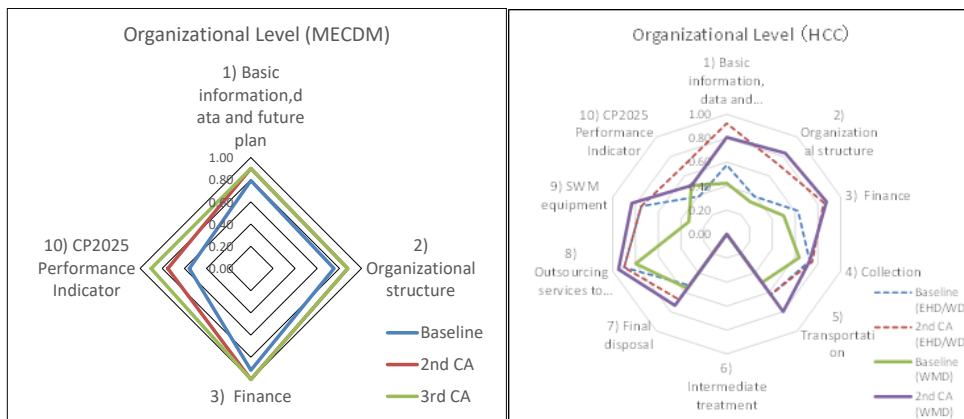


Figure 3-2 CA results at the Organizational level in Solomon Islands

Regarding the capacity at the organizational level, MECDM has not changed much since the second term. The most improved MECDM's capacity compared to baseline capacity is 10) CP2025 Performance Indicators. These indicators include the "Per capita generation of Municipal Solid Waste (MSW)," "Waste collection coverage (% of the population)" necessary for municipalities to formulate waste management plans, as well as "Container Deposit Program" and "User-pays systems for waste collection." It was confirmed that the understanding and knowledge of these indicators had been deepened by the activities related to the assist the formulation of SWM plan of HCC and provincial centers, and the identification

of economic measures for sustainable waste management.

Regarding HCC's organizational level capacity in the third term, the Waste Management and Control Division, newly established in January 2020 as planned in the SWM plan in the second term, was the target of the 3rd CA. It is because waste management in HCC used to be handled by the Environmental Health Division (EHD) and the Works Division (WD). However, all waste management operations were transferred to WMD after a transition period.

Figure 3-2 shows the 1st CA (baseline) results of WMD conducted in the second term and the 2nd CA conducted in the third term by the solid line, while the past CA results by EHD and WD by the dotted line. There was a large gap between the 1st CA (baseline) result of WMD, which has many newly hired staff, and the 2nd CA result of EHD/WD, which has been in charge of waste management and formulated a waste management plan. However, the results of the 2nd CA of WMD show no significant gaps in all items except two. This is because the SWM plan was formulated by following HCC's regulations practically, and the plan is being implemented. WMD did not take over daily operations but also started to change the collection schedule and collect tipping fees based on the SWM plan. Although there was a change in the human resources involved in waste management, it was confirmed from the CA results that the HCC could continue and improve the waste management services according to the plan. Therefore, it can be said that HCC's organizational capacity has been strengthened compared to the baseline.

## **4 Republic of Vanuatu**

### **4.1 Outline of the Project**

#### **4.1.1 Project purpose**

A foundation of implementing and monitoring SWM activities in line with the Vanuatu National Waste Management and Pollution Control Strategy (NWMPCS) is built.

#### **4.1.2 Output**

##### **a. Output 1**

Institutional capacity of DEPC to implement NWMPCS is enhanced with the cooperation of the Working Group.

##### **b. Output 2**

SWM activities of PVCC are properly implemented and monitored in line with the SWM Plan.

##### **c. Output 3**

Economic incentive scheme is initiated for promotion of 3R + Return in Vanuatu.

### **4.2 Activities**

#### **4.2.1 Activities related to Output 1**

In Vanuatu, the Project was started just after major experienced C/Ps left their positions in the Department and Municipality as described later. In such circumstance, the Working Group (WG), whose initial members were representatives of the Department of Environmental Protection (DEPC), Port Vila City Council (PVCC) and Luganville Municipal Council (LMC), was organized under the leadership of DEPC in June 2018 (Activity 1-1). Through the WG activities, C/Ps and J-PRISM II conducted a baseline survey in Port Vila and Luganville (Activity 1-2) and summarised lessons learned from the past technical cooperation (Activity 1-3). After that, based on the survey results, the “PVCC Annual Waste Management Plan 2019” was compiled on a pilot basis so that it can be also used as a model for other Provincial and Municipal Government Councils when they prepare their waste management plans (Activity 1-4).

Output 1 was designed to introduce a PDCA cycle to enhance the implementing and monitoring capacity of SWM in Vanuatu, therefore activities to select, plan and implement the priority activities (Activity 1-5 to 1-8) were repeated annually through the six (6) Working Group (WG) meetings in total.

In the third term, a new lessons guide based on the Luganville School Environmental Program was prepared and submitted to the Ministry of Education and Training (MoET). A final evaluation report of NWMPCS 2016-2020 was compiled and made available to the public through the DEPC website. It was also distributed to the counterparts and relevant stakeholders in the fourth JCC meeting (Activity 1-8). The results of each activity related to the Output 1 are shown below.

Activities	Results of activities
<p>1-1 Formulate a WG and conduct WG meetings to study and review the Implementation Plan of NWMPCS, including the current SWM activities of other agencies</p>	<ul style="list-style-type: none"> <li>• Total of six WG meetings were held during the project period.</li> <li>• Final monitoring evaluation report of NWMPCS 2016-2020 was reviewed with C/Ps including WG members and observers in the 4th JCC meeting on 30th November 2021.</li> <li>• As a related activity, J-PRISM II gave advice to DEPC on ToR of NWMPCS Coordinating Committee for preparing the next NWMPCS.</li> </ul>
<p>1-2 Update the present conditions of municipal SWM in Port Vila and Luganville to understand the baseline of NWMPCS 2016-2020 with WG</p>	<ul style="list-style-type: none"> <li>• Present condition of municipal SWM in Port Vila and Luganville was updated with support of the WG in August 2018.</li> </ul>
<p>1-3 Compile lessons learnt of SWM in Port Vila and Luganville for formulating practical implementation plan of NWMPCS</p>	<ul style="list-style-type: none"> <li>• The following five lessons learnt in Phase 1 of the Project were compiled and shared, namely i) market compost, ii) organisational and institutional capacity and appointment of Waste Management Officer (WMO), iii) separation of cans for recycling, iv) landfill operation and v) environmental education.</li> <li>• Lessons learnt were reflected in the PVCC SWM Plan 2019.</li> <li>• Lessons learnt of financial management in PVCC and LMC were compiled in a report and shared with related divisions in PVCC through the stakeholders' workshop in January 2019.</li> <li>• Lessons learnt were shared and discussed through WG to develop a detailed action plan on the priority activities of NWMPCS.</li> </ul>
<p>1-4 Study and renew the framework of annual SWM plan in PVCC as a pilot activity of implementation of NWMPCS by utilizing existing data and resources of PVCC</p>	<ul style="list-style-type: none"> <li>• Annual SWM Plan 2019 in PVCC was developed and approved by the Council in October 2018.</li> </ul>
<p>1-5 Decide the priority activity(ies) that will be implemented with WG in line with the Implementation Plan</p>	<ul style="list-style-type: none"> <li>• Four priority activities during the year of 2019 were selected in accordance with the monitoring results of NWMPCS, and approved by the 2nd JCC Meeting in October 2018 as follows:             <ol style="list-style-type: none"> <li>1) Promotion of the planning standard on SWM, and penetration of framework of SWM plan into Provincial and Municipal Government Councils (Thematic 1. NWMPCS).</li> <li>2) Pre-feasibility study of a Container Deposit Scheme (CDS) to support the polluter pays principle (Thematic 2, NWMPCS)</li> </ol> </li> </ul>

Activities	Results of activities
<p>1-5 Decide the priority activity(ies) that will be implemented with WG in line with the Implementation Plan</p>	<p>3) Discussion of option of waste minimisation to reflect to the NWMPCS (Thematic 4, NWMPCS)</p> <p>4) Coordination to develop awareness materials based on the experience of LMC and discussion on dissemination to relevant stakeholders with Ministry of Education. (Thematic 7, NWMPCS)</p> <ul style="list-style-type: none"> <li>• Priority activities for 2020 were decided in October 2019, and approved by the third JCC Meeting in February 2020.</li> </ul> <p>1) Dissemination of an annual SWM planning and monitoring system in the Provincial and Municipal Government Councils (Thematic 1, NWMPCS).</p> <p>2) Detailed design of a Container Deposit Scheme (CDS) for its initial setup (Thematic 2, NWMPCS) (to be implemented as Output 3 of PDM3)</p> <p>3) Development and endorsement of a waste minimisation plan (Thematic 4, NWMPCS)</p> <p>4) Promotion of a Clean School Programme by identifying one school in each province as an environment model school and environment ambassador (Thematic 7, NWMPCS)</p>
<p>1-6 Develop a detailed action plan of priority activity(ies) in the Implementation Plan of NWMPCS, based on the discussion of WG</p>	<ul style="list-style-type: none"> <li>• A detailed action plan of the priority activities in 2019 and 2020 were developed and published through the DEPC's website<sup>3</sup>.</li> </ul>
<p>1-7 Implement the priority activity (ies) based on the action plan with WG</p>	<ul style="list-style-type: none"> <li>• The following activities were implemented until February 2021 in accordance with the detailed action plan developed in Activity 1-6.</li> <li>• [Priority activity 1] Annual waste management planning form was developed and disseminated to the Provincial and Municipal Governments through the Department of Local Authorities.</li> <li>• [Priority activity 1] As a wrap-up activity, the first National Solid Waste Management Planning Workshop was held in Port Vila on 28th February 2020. The proceedings of the workshop were distributed to all Provincial and Municipal councils. It is also available through the DEPC website.</li> </ul>

<sup>3</sup> DEPC website: Environmental Protection-Waste Management (<https://environment.gov.vu/index.php/environmental-protection/waste-management>, accessed on 29 August 2022)



Activities	Results of activities
1-7 Implement the priority activity (ies) based on the action plan with WG	<ul style="list-style-type: none"> <li>• [Priority activity 1] SWM data, such as a SWM Plan in each Provincial and Municipal Government and the national waste management flow in Vanuatu, was made available to the public through the DEPC website in February 2020<sup>4</sup>.</li> <li>• [Priority activity 2] The National Waste Minimization Plan (2021-2025) was drafted.</li> <li>• [Priority activity 3] CDS preliminary survey was conducted in March 2019. The Council of Ministers (COM) decided in principle to accept the introduction of a CDS in Vanuatu in October 2019.</li> <li>• [Priority activity 4] A new lessons guide based on the Luganville School Environmental Program was prepared and submitted to the Ministry of Education and Training (MoET)</li> </ul>
1-8 Monitor and prepare an annual monitoring report of NWMPCS including overall evaluation in the final year 2020 for reflection in the next term of NWMPCS	<ul style="list-style-type: none"> <li>• Progress monitoring of NWMPCS was evaluated and summarized by DEPC in November 2018 and October 2019, which reflected the detailed action plan of the priority activities for the next year. Monitoring results were made available to the public through the DEPC's website.</li> <li>• A final evaluation report of NWMPCS 2016-2020 was compiled in May 2021 and finalised in November 2021. It was distributed in the 4th JCC meeting and made available to the public through the DEPC's website<sup>5</sup>.</li> </ul>

#### 4.2.2 Activities related to Output 2

Output 2 was added in the 2nd JCC Meeting on October 29, 2018, and the framework of the PVCC Solid Waste Management Plan 2021-2030 was organised based on the existing data and additional survey data (Activities 2-1 and 2-2). After that, stakeholder workshops and pilot projects were implemented (Activities 2-3 and 2-4).

In the third term, the Solid Waste Management Plan for PVCC and Shefa Province (2021-2030) was developed and approved by the full Council on 31st March 2021 (Activity 2-6). Based on the approved plan, a landfill operation manual was prepared and the priority activities were carried out (Activity 2-7 and 2-8). In conclusion, monitoring results in 2021 and early 2022 were reviewed and an action plan for the next three years (2022-2024) was developed (Activity 2-9). The results of each activity related to the Output 2 are shown below.

<sup>4</sup> DEPC website: National Waste Management Flow in Vanuatu (<https://environment.gov.vu/index.php/environmental-protection/waste-management/national-waste-management-flow-in-vanuatu>)

<sup>5</sup> DEPC website: Waste Management Planning (<https://environment.gov.vu/index.php/environmental-protection/waste-management/waste-management-planning>, accessed on 29 August 2022)

Activities	Results of activities
2-1 Review the existing data and conduct supplementary survey of the current SWM situation	<ul style="list-style-type: none"> <li>• Existing data was reviewed by November 2018 and supplementary surveys (boundary of wards, landownership of Bouffa landfill, EIA related regulations, financial analysis etc.) were conducted.</li> </ul>
2-2 Develop a framework of SWM Plan (2021-2030) by utilizing the results of activity in 1-4	<ul style="list-style-type: none"> <li>• Framework of SWM Plan (2021-2030) was developed in February 2019, including the conceptual plan of institutional, technical and financial arrangement.</li> </ul>
2-3 Organize stakeholders' workshop(s) to discuss the framework of SWM Plan, including institutional, technical and financial arrangement	<ul style="list-style-type: none"> <li>• Stakeholders were identified based on the framework of the SWM plan.</li> <li>• The framework of the SWM Plan was presented to the councillors of Port Vila City Council in March 2019.</li> <li>• Total of 17 community workshops were held for waste collection improvement with support of the ward secretary in May and June 2019.</li> <li>• A series of stakeholder's workshops were held with Shefa Province to discuss the framework of the SWM Plan in June, October and November 2019.</li> <li>• Memorandum of Understanding (MOU) was agreed between PVCC and Shefa Province in March 2020 for cooperation of solid waste management planning.</li> </ul>
2-4 Formulate a draft SWM Plan including recommendations for necessary arrangements considering the discussion of the stakeholders' workshops	<ul style="list-style-type: none"> <li>• Preliminary design of Bouffa disposal site, including outline design of Cell-2&amp;3 was developed in February 2020.</li> <li>• First draft of the SWM plan was developed in March 2020.</li> </ul>
2-5 Implement SWM pilot project(s) to test the suitability of institutional, technical and financial systems recommended in the draft SWM plan	<ul style="list-style-type: none"> <li>• The following eight pilot projects were selected in December 2019 and implemented in 2020.               <ol style="list-style-type: none"> <li>1) Waste collection improvement with community</li> <li>2) Private collection monitoring (GPS trucking survey) in collaboration with DEPC and Shefa Province</li> <li>3) Waste pickers survey and safety training</li> <li>4) Promotion of market composting</li> <li>5) Promotion of home composting and gardening</li> <li>6) Promotion of Clean School Program (to be linked with the priority activity 4 of OUTPUT 1)</li> <li>7) Awareness raising activities during the National Environmental Week</li> <li>8) Yellow Bag Review Committee</li> </ol> </li> </ul>

Activities	Results of activities
2-6 Finalize the SWM Plan	<ul style="list-style-type: none"> <li>• Based on the results of the pilot projects, the SWM Plan was finalized in December 2021 and approved by the full council on 31st March 2021.</li> <li>• PVCC SWM Plan was made open to the public through the DEPC's website<sup>6</sup>.</li> </ul>
2-7 Develop a landfill operation manual based on the SWM Plan	<ul style="list-style-type: none"> <li>• Based on the PVCC SWM Plan, the "Development Guide and Operation Manual for Bouffa Disposal Site" was developed.</li> <li>• In addition, based on the manual, technical guidance was given to improve the Bouffa disposal site. Specifically, using an excavator procured by the JICA Vanuatu office and an existing bulldozer, J-PRISM II instructed PVCC to construct a drainage system on the on-site roads and new access roads so that waste collection vehicles can reach the designated disposal area even in the heavy rain. PVCC requested the Ministry of Infrastructure and Public Utilities (MIPU) to install five (5) cross-road drainage pipes (one of which is for leachate) with a total length of about 102m, and excavated a drainage channel on the side of the on-site roads.</li> </ul>
2-8 Implement the priority activity (ies) determined in the SWM Plan	<ul style="list-style-type: none"> <li>• The following activities were selected as priority activities in 2022 at the 4th JCC meeting on 30th November 2021 and implemented accordingly.</li> </ul> <p>[The priority activities that PVCC and JET implement together in 2022]</p> <ol style="list-style-type: none"> <li>i. Training on data management and analysis for improvement of SWM;</li> <li>ii. Rehabilitation and improvement of the main access road at the Bouffa landfill site;</li> <li>iii. Technical assistance for construction of Cell-2 at the Bouffa landfill site;</li> <li>iv. Yellow Bag review committee for renewal of procurement contract in 2022.</li> </ol> <p>[The priority activities that PVCC implement by themselves in 2022]</p> <ol style="list-style-type: none"> <li>i. Feasibility study for weighbridge installation</li> <li>ii. Promotion of Clean School Program</li> <li>iii. Divisional capacity development - training for drivers, workers and mechanics</li> </ol>

<sup>6</sup> DEPC website: Waste Management Planning (<https://environment.gov.vu/index.php/environmental-protection/waste-management/waste-management-planning> accessed on 29 August 2022, reposted)

Activities	Results of activities
2-8 Implement the priority activity (ies) determined in the SWM Plan	<ul style="list-style-type: none"> <li>iv. Management of maintenance of machineries and equipment</li> <li>v. Improvement of financial management through independent account for SWM</li> </ul>
2-9 Monitor the SWM activities based on the SWM Plan	<ul style="list-style-type: none"> <li>• Incoming vehicle records in 2021 and early 2022 were analysed and waste flow was updated.</li> <li>• Progress of the SWM Plan was reviewed and the activity monitoring results up to August 2022 were summarised. Based on that, an action plan (2022-2024) was prepared.</li> </ul>

#### 4.2.3 Activities related to Output 3

Based on the Council of Ministers (COM) decision for introducing the Container Deposit Scheme (CDS) in principle, a CDS technical working group consisting of government officials, producers such as beverage manufacturers and importers, civil society, and other CDS stakeholders was established, to design the CDS system in Vanuatu in December 2019 (Activity 3-1). In the third term, activities to conduct a series of stakeholders consultation, review the legal framework, conduct a full feasibility study and develop the drafting instructions (Activity 3-2, 3-3, 3-4 and 3-5) were implemented. Based on the results of these activities, report of lessons learnt was compiled (Activity 3-6). This report can be used to take over the CDS support in Vanuatu as well as a good learning material for other countries in introducing CDS in their country. In this sense, it could be a good promotion tool for encouraging regional cooperation. The results of each activity related to the Output 3 are shown below.

Activities	Results of activities
3-1 Set up a working group to develop the detailed design of the Container Deposit Scheme (CDS) under overall direction of DEPC	<ul style="list-style-type: none"> <li>• Based on the COM decision for introduction of CDS in principle in October 2019, a CDS Technical Working Group was established in December 2019.</li> </ul>
3-2 Conduct a series of stakeholders consultation through the WG	<ul style="list-style-type: none"> <li>• The WG consisting of government officials, producers such as beverage manufacturers and importers, civil society, and other CDS stakeholders held nine (9) meetings in total.</li> <li>• Series of individual consultations were carried out from 2019 including information exchange with other donors such as PacWaste Plus and SCE.</li> </ul>
3-3 Review the legislation necessary to implement the CDS	<ul style="list-style-type: none"> <li>• Existing legislation was reviewed for scenario analysis of options of the Managing Agency model in February and March 2020.</li> </ul>
3-4 Conduct a full feasibility study to determine the details of the CDS	<ul style="list-style-type: none"> <li>• HS tariff numbers of target beverage containers were identified.</li> <li>• A sample form of a product stewardship plan was drafted.</li> <li>• Comparison analysis chart of the options of a Managing Agency model was prepared.</li> </ul>

Activities	Results of activities
3-4 Conduct a full feasibility study to determine the details of the CDS	<ul style="list-style-type: none"> <li>Feasibility of recycling liquid paper/packaging boards (LPB) was investigated, including trends in the recycling market in New Zealand and other countries.</li> </ul>
3-5 Develop a draft instruction of the container deposit legislation with a consultation of related authorities	<ul style="list-style-type: none"> <li>Based on the results of the review of the legal framework and a series of discussions through the WG, drafting instructions were prepared ready to be submitted to the State Law Office.</li> </ul>
3-6 Compile lessons learnt of CDS in Vanuatu for regional cooperation	<ul style="list-style-type: none"> <li>The process of introduction of CDS in Vanuatu was summarised and the lessons learned was compiled so that it could be a reference for promoting its introduction within the region and in other countries.</li> </ul>

### 4.3 Challenges and lessons learnt during the Project implementation

#### 4.3.1 Enhancement of implementation systems and organisational capacity based on the premise of the vulnerability of counterpart organisations

Based on what was learned in Phase 1, J-PRISM II focused on strengthening not only individual but also organisational and institutional capacities in Vanuatu. At the beginning of Phase 2, neither DEPC nor PVCC had senior staffs responsible for waste management. J-PRISM II carefully consulted with the C/P and as a result, DEPC assigned a Principal Waste Management and Pollution Control Officer in January 2019, after an absence of many years. In September 2021, DEPC newly appointed a pollution control officer and its position was then made permanent. Currently, DEPC is proposing a new organisational structure including additional staff for waste management and pollution control. In conclusion, it can be said that the organisational capacity has been enhanced.

There was also tremendous progress in PVCC. In August 2018, PVCC assigned a Waste Management Officer, and based on this fact, Output 2 was officially added in PDM version 2. After 2020, due to COVID-19 spread and travel restrictions to Vanuatu, it was eighteen months before Japanese experts could enter into Vanuatu. In such circumstances, PVCC had established the Waste Management, Environmental and Health Division (WMEHD) in January 2020 their own initiative, and appointed a new Waste Management Manager and additional Waste Management Officer in December 2020 and July 2021 respectively. Initially, there were 48 staff belonging to WMEHD in 2020. Currently, the number of staff has increased up to 88 as of August 2022. Moreover, PVCC endorsed the “Waste Management By-law No. 6 of 2021” dated on 22nd April 2021. It can be said that both organisational and institutional capacities of PVCC in waste management were drastically enhanced.

On the other hand, LMC has seen little project progress due to inconsistency from the Municipality. J-PRISM II paid a courtesy call to the new mayor in February 2020 and high commitment from the LMC was confirmed. As a result in the 3rd JCC Meeting, high officials from the LMC, the Acting Town Clerk and the Executive Secretary, were newly added as the C/Ps in order to strengthen the project implementation system.

Shefa Province was also newly added as a C/P in the 3rd JCC Meeting. In February 2020, Shefa Provincial Government signed a Memorandum of Understanding (MOU) with PVCC on the

formulation of the PVCC Solid Waste Management Plan 2021-2030, which led to the strengthening of cooperation between PVCC and Shefa Province. In addition, Shefa Province newly assigned a Waste Management Officer in 2019. Since he had little experience in waste management, a Waste Management Officer was replaced by a new staff with rich experience in waste management in July 2021. Shefa Province were thereby strengthening the capacity and its waste management systems.

It should be noted that as expected from the beginning of the project, there were frequent C/P personnel changes, and both the Project Director and Project Manager were changed (the second Project Director and the third Project Manager were assigned at the end of the project). Despite these circumstances, the common awareness among those involved was recognised through the above-mentioned efforts to improve organisational strength, and the later-mentioned 'project design aimed at establishing a PDCA cycle' as well as 'institutionalisation through a multi-stakeholder process'. As a result, the project was smoothly implemented while ensuring the consistency of all activities.

#### **4.3.2 Project design aimed at establishing a PDCA cycle**

The basic policy of the project design of Output 1 was to put into practice the PDCA cycle, in which plan, do, check and action, based on the NWMPCS 2016-2020, aimed at establishing activities within the C/P organisation. At the beginning of the project, the PDM in Vanuatu (PDM1) had only Output 1, but working group activities were developed and Output 2 was added in October 2018, and Output 3 in February 2020. In each field, planning and implementation of activities based on national strategies were gradually habituated.

Specifically, for Output 1, the process of creating, approving, and implementing an annual activity plan was put into practice by DEPC, together with the WG, based on the regular monitoring results of the progress of the NWMPCS. Through these process, J-PRISM II encouraged DEPC to obtain enough capacity to implement the NWMPCS by themselves. Regarding Output 2, PDCA cycle was practiced by dividing the planning term into two, i.e. a short-term (planning period: 1 year) and a medium- to long-term (planning period: 10 years). The approach saw advances in all of the following;

- (1) Compliance can be thorough (the annual SWM Plan is required to be submitted every year under the Waste Management Act No.24 of 2014);
- (2) Short-term plans enable PVCC to accumulate more experience in the PDCA cycle of planning and improvement based on SWM practices, and;
- (3) Medium-to Long-term plans, including organisational restructuring and infrastructure investment such as vehicle procurement and landfill improvement and extension construction, enables the scale-up of improvement work including the coordination with donors or funds to secure the budget for such work.

As a result, the annual activity plans were developed based on the monitoring results of last year constantly from 2017 to 2020, and awareness of the importance of achieving NWMPCS 2016-2020 in C/P agencies was enhanced. In addition, ownership was fostered for the revision of the strategy by themselves. It turned out that the project design that was conscious of the PDCA cycle had enabled opportunities to engage with decision makers on an ongoing and timely basis, and C/P organisations got to prioritise institutionalising and budgeting the waste management processes.

#### **4.3.3 Institutionalisation support for sustainable waste management through multi-stakeholder processes**

In Vanuatu, J-PRISM II focused not only on the capacity development of C/P, but also on ensuring sustainability through establishing the cooperation relationship between C/P organizations, and utilizing the local resources. For example, cooperation between C/P organizations was promoted by strengthening the coordination between national and local governments through the NWMPCS Working Group activities (Output 1). Another example is a conclusion of the Memorandum of Understanding (MOU) with PVCC and the Shefa Provincial Government on the development of a Solid Waste Management Plan 2021-2030 (Output 2), which makes their collaboration at the field level stronger than before. In terms of the utilisation of local resources, it was effective to work with decision-makers from relevant ministries and agencies, such as the Director General of the Ministry of Climate Change (MCC) and the Director of the Department of Local Authorities (DLA). On-site training and support were designed and provided in collaboration with local NGOs and local consultants as far as possible so that the knowledge and experience were disseminated widely. In parallel, J-PRISM II encouraged DEPC to update relevant authorities, such as the Public Service Commission (PSC) and the Department of Urban Affairs and Planning (DUAP) that was newly established in April 2021, in order to keep strengthening the waste management system of local governments in a sustainable manner in Vanuatu.

In consideration of waste management as a public service, public/social acceptance is very important and should be taken into consideration in the process of the entire project implementation. For Output 1, information disclosure was strengthened for the establishment of the NWMPCS coordinating committee, including public disclosure of waste management data and related materials on the website, including the NWMPCS final monitoring report and Waste Management Plans of each Provincial and Municipal Government. For Output 2, community meetings were held in 17 different areas with the Ward Secretaries, to determine measures for improving waste collection. For Output 3, a CDS Technical Working Group consisting of government officials, producers such as beverage manufacturers and importers, civil society, and other CDS stakeholders was established in December 2019 to design the CDS system in Vanuatu based on the agreement of all concerned. There were nine (9) meetings held during the project period and stakeholders opinions were well reflected in the final design of the CDS system that was described in the drafting instructions prepared by DEPC.

#### **4.3.4 Raising international interest in marine litter/ plastic pollution and coordinating donors**

Waste management was a hot topic in Vanuatu reflecting of global concern for marine litter/plastic pollution. Against this background, it seems that it was the right timing to implement the preliminary survey for introducing CDS to increase its social impact. On the other hand, the rapid increase in aid related to marine litter had led to inadequate coordination of said aid by international organisations, or rather there was a mood of resentment as a recipient country regarding attitudes toward aid that do not respect the needs of the National and Local governments in Vanuatu. Delays to regular government operation due to miscoordination of international aid related to this matter were observed in a certain period. J-PRISM II, who had the on-site experience cultivated up to now and its excellent relationship with the C/P, made efforts to provide other donors with necessary information like baseline survey reports, information on aid needs etc. as far as possible, to reduce the burden by supporting aid coordination when requested by the DEPC and JICA Vanuatu Office.

In addition, it can be said that strengthening the capacity of aid coordination for the DEPC as a supervisory authority is a future task necessary for sustainable development. During the project period, J-PRISM II supported DEPC, as an administrative agency, to create a mechanism for information disclosure, as this was identified during the consensus building process with stakeholders including the CDS technical working group as important. As such all relevant reports were published on the DEPC website.

#### 4.3.5 Seeking a New Scheme of Remote Technical Cooperation

The coronavirus (COVID-19) pandemic had a massive impact on the project progress of the J-PRISM II. Even in such difficult circumstances, J-PRISM Experts were continuing the technical support remotely from Japan. The key factors for remote technical cooperation were the effective utilisation of online tools and local resources. After September 2020, a National Coordinator was assigned as a focal point in Vanuatu to fill in the information gap caused by the online communication and to provide in-country support to the counterpart organisations. It was quite effective and enabled us to achieve some progress as far as we could remotely in these circumstances. For example, for Output 3, the CDS expert living in New Zealand and the legal expert living in Australia were assigned and the full-feasibility study for introducing the Container Deposit Scheme (CDS) in Vanuatu was restarted by networking with four countries, i.e. New Zealand, Australia, Japan and Vanuatu. This scheme enabled us to finalise the drafting instructions on CDS with the counterpart within the project period.

#### 4.4 Achievement of the Outputs

1. Institutional capacity of DEPC to implement NWMPCS is enhanced with the cooperation of the Working Group.		Progress: Achieved
OVI 1-1: Detailed action plan of the priority activity(ies) in the Implementation Plan of NWMPCS is processed through the relevant government agencies for implementation from 2019.	<ul style="list-style-type: none"> <li>• Priority activities in 2019 and 2020 were selected and approved by the second JCC and the third JCC respectively.</li> <li>• Detailed action plans of priority activities, including role and responsibility of relevant government agencies, budget and implementation schedule of priority activities, in 2019 and 2020 were developed. WG members fulfilled their responsibility and implemented the priority activities in accordance with the detailed action plans.</li> <li>• Detailed action plans of priority activities were made available to the public through the DEPC's webpage<sup>7</sup>.</li> </ul>	
OVI 1-2: The annual monitoring report of NWMPCS is made available to the public (through DEPC webpage, published reports, etc.)	<ul style="list-style-type: none"> <li>• The annual monitoring of NWMPCS was done by DEPC in November 2018 and October 2019, which reflected the detailed action plan of the priority activities for the next year.</li> <li>• Final monitoring evaluation report on NWMPCS 2016-2020 was prepared in November 2022 and distributed to the stakeholders in the 4th JCC meeting.</li> <li>• The monitoring results (2017, 2018, 2019 and 2020) and final monitoring evaluation report were made available to the public through the DEPC's website<sup>7</sup>.</li> </ul>	

<sup>7</sup> DEPC website: Environmental Protection - Waste Management (<https://environment.gov.vu/index.php/environmental-protection/waste-management>, accessed on 29 August 2022, reposted)



1. Institutional capacity of DEPC to implement NWMPCS is enhanced with the cooperation of the Working Group.		Progress: Achieved
OVI 1-3: With the support of the WG as the priority activity, National SWM planning and monitoring system in Provincial and Municipal Government Councils is established.	<ul style="list-style-type: none"> <li>• The National SWM planning and monitoring system was established with the consultation form, newly developed by the DEPC in collaboration with the Department of Local Authorities<sup>8</sup>.</li> <li>• As a wrap-up activity to implement the new system and form, the 1st National Solid Waste Management Planning Workshop was held in Port Vila on 28th February 2020. The proceedings of the workshop were distributed to all Provincial and Municipal Councils. It is also available through the DEPC website<sup>9</sup>.</li> </ul>	
OVI 1-4: With the support of the WG as the priority activity, national waste minimization plan is developed.	<ul style="list-style-type: none"> <li>• The National Waste Minimization Plan (2021-2025) was drafted.</li> </ul>	
OVI 1-5: With the support of the WG as one of the priority activity, clean school program is promoted.	<ul style="list-style-type: none"> <li>• A new lessons guide based on the Luganville School Environmental Program was prepared and submitted to the Ministry of Education and Training (MoET).</li> <li>• Clean School Program was promoted on a small scale as a pilot project of PVCC in Output 2.</li> </ul>	
2. SWM activities of PVCC are properly implemented and monitored in line with the SWM Plan.		Progress: Achieved
OVI 2-1: Results of SWM pilot project(s) in line with a draft SWM Plan are evaluated in a stakeholder's workshop.	<ul style="list-style-type: none"> <li>• The results of the pilot projects were confirmed by the relevant division (town planning) in PVCC and reflected in the final SWM Plan.</li> <li>• Results of SWM pilot projects were shared with Shefa Province and the target area of the SWM Plan was determined (extended).</li> </ul>	
OVI 2-2: SWM Plan of PVCC (2021-2030) is submitted to the Council.	<ul style="list-style-type: none"> <li>• The framework of the SWM Plan was presented to the Councillors of Port Vila City Council in March 2019.</li> <li>• Town Planning Committee decided to set up a waste management division and budget for the new division. It was proposed in a PVCC business plan in 2020.</li> <li>• The SWM Plan (2021-2030) was finalized in December 2020 and approved by the full Council on 31st March 2021. It is available on the DEPC's website.<sup>10</sup></li> </ul>	
OVI 2-3: Landfill management in Bouffa disposal site is improved following the landfill operation manual.	<ul style="list-style-type: none"> <li>• Based on the PVCC SWM Plan, the "Development Guide and Operation Manual for Bouffa Disposal Site" was developed.</li> </ul>	

<sup>8</sup> DEPC website: Waste and Pollution Forms (<https://environment.gov.vu/index.php/forms-and-fees/waste-and-pollution>, accessed on 29 August 2022)

<sup>9</sup> DEPC website: Waste Management Planning (<https://environment.gov.vu/index.php/environmental-protection/waste-management/waste-management-planning>, accessed on 29 August 2022, reposted)

<sup>10</sup> DEPC website: Waste Management Planning (<https://environment.gov.vu/index.php/environmental-protection/waste-management/waste-management-planning>, accessed on 29 August 2022, reposted)

2. SWM activities of PVCC are properly implemented and monitored in line with the SWM Plan.		Progress: Achieved
OVI 2-3: Landfill management in Bouffa disposal site is improved following the landfill operation manual.	<ul style="list-style-type: none"> <li>In addition, based on the manual, technical guidance was given to improve the Bouffa disposal site. Specifically, using an excavator procured by the JICA Vanuatu office and an existing bulldozer, J-PRISM II instructed PVCC to construct a drainage system on the on-site roads and new access roads so that waste collection vehicles can reach the designated disposal area even in the heavy rain. PVCC requested the Ministry of Infrastructure and Public Utilities (MIPU) to install five (5) cross-road drainage pipes (one of which is for leachate) with a total length of about 102m, and excavated a drainage channel on the side of the on-site roads.</li> </ul>	
OVI 2-4: Monitoring results of SWM activities are reflected in the annual SWM Plan (2022).	<ul style="list-style-type: none"> <li>Incoming vehicle records in 2021 and early 2022 were analyzed and waste flow was updated.</li> <li>Progress of the SWM Plan was reviewed and the activity monitoring results up to August 2022 was summarised. Based on them, an action plan (2022-2024) was prepared.</li> </ul>	
3. Economic incentive scheme is initiated for promotion of 3R + Return in Vanuatu.		Progress: Achieved
OVI 3-1: Documents necessary to progress the container deposit legislation are prepared.	<ul style="list-style-type: none"> <li>A series of CDS Technical Working Group meetings were held and the documents necessary to progress the container deposit legislation (i.e. drafting instructions) were prepared by DEPC.</li> </ul>	

#### 4.5 Achievement of the Project purpose

A foundation of implementing and monitoring SWM activities in line with the Vanuatu National Waste Management and Pollution Control Strategy (NWMPCS) is built.		Progress: Achieved
OVI 1: Based on the monitoring results of NWMPCS 2016-2020, the gaps and issues of the implementation plan are evaluated and reflected to the next term of NWMPCS.	<ul style="list-style-type: none"> <li>Progress of NWMPCS 2016-2020 was annually monitored (2017, 2018, 2019 and 2020). Monitoring results were reflected in the detailed action plan of priority activities in 2019 and 2020 respectively.</li> <li>A detailed action plan, including annual monitoring report of NWMPCS, was renewed annually, which enables DEPC to enhance their institutional capacity and to implement the NWMPCS through the practice of PDCA cycle.</li> <li>The final evaluation report on NWMPCS 2016-2020 was compiled and the gaps and issues of the implementation plan were evaluated.</li> </ul>	

#### 4.6 Recommendation towards achievement of Overall Goal

The counterparts in Vanuatu discussed the recommendations for achieving the overall goal (Sustainable management of solid waste in the Pacific region is enhanced based on Pacific Regional Waste and Pollution Management Strategy 2016-2025 (Cleaner Pacific 2025)) in the 5th JCC meeting and its results are summarised below.

##### 4.6.1 Capacity Development of Municipal Solid Waste Management (SWM) Through Inter-Municipality Cooperation

DEPC is expected to proactively promote SWM capacity development in municipalities, in

collaboration with the Department of Local Authorities (DLA) of the Ministry of Internal Affairs, and relevant ministries and agencies.

#### **4.6.2 Renewal of the NWMPCS2016–2020**

The Vanuatu National Waste Management, Pollution Control Strategy and Implementation Plan 2016–2020 needs to be renewed. In addition, the National Waste Minimisation Plan 2021–2025 (Draft) is expected to be endorsed and implemented.

#### **4.6.3 Implementation of a Container Deposit Scheme (CDS)**

The practice of 3R+Return by means of a CDS will contribute greatly to solving SWM problems unique to island countries. The Government of Vanuatu is expected to launch CDS without any further delay. A CDS based on participative management by multiple enterprises is an advanced initiative in the Pacific region, and is expected to become a model for south-to-south cooperation. In addition, it is also expected that the scope of the system will be expanded in the future to include electrical appliances, waste batteries, and automobiles.

#### **4.6.4 Strengthening PVCC's waste management capacity**

PVCC is expected to strengthen its solid waste management capacity in implementing the "SWM Plan 2021-2030" by paying attention to the following points.

##### **a. Improvement of financial management through independent account for SWM**

Financial management improvement is one of the priority activities in 2022 that was decided in the previous JCC meeting. PVCC should reinforce the financial management system so that the income generated from the yellow bags selling and gate fee will be used properly for SWM.

##### **b. Urgent improvements to the next landfill section at Bouffa disposal site**

As the existing cell (landfill area) of the Bouffa disposal site is already full, the construction of a new access road and the expansion of the next cell is urgently needed.

##### **c. Appropriate maintenance of waste disposal equipment**

Waste management (collection, transport and landfill) is not possible without equipment. In order to continue with proper waste management, PVCC is required to ensure that equipment is well maintained to keep it in good condition at all times.

### **4.7 Capacity Assessment**

#### **4.7.1 3<sup>rd</sup> Capacity Assessment**

In the third term, the third CA (endline) was conducted by interviewing the progress of project activities with the country-wise experts and using the checklist as a questionnaire to the main counterparts from 16 August and 31 August 2022. The results of the third CA are shown in the figure below.

In the third term, the capacity of 2) Policies and institutional settings of local governments has improved. For example, PVCC established waste management by-law No. 6 of 2021, stipulating waste collection rules, dated 22 April 2021. In addition, PVCC and LMC formulated the SWM Plan 2021-2030. Also, the capacity of 4) Situations faced by relevant actors and 5) Partnerships enhanced because the government's encouragement of recycling projects by

private companies was strengthened through the establishment of the Vanuatu Recycling Association.

Compared to the baseline, in the 2nd CA, Vanuatu experienced a temporary decline in capacity. However, through the formulation and implementation of DPEC's NWMPC2016-2020 and municipalities' SWM plan, the capacity of 2) Policies and institutional settings of local governments greatly improved. In addition, as the PVCC's waste collection services improved, 3) Citizen's capacities, such as the cooperation of residents in discharging garbage using paid garbage bags and the reduction of road garbage, also improved.

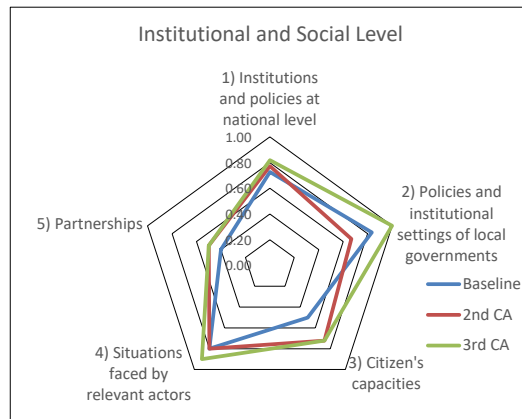


Figure 4-1 CA results at the Institutional/Social level in Vanuatu

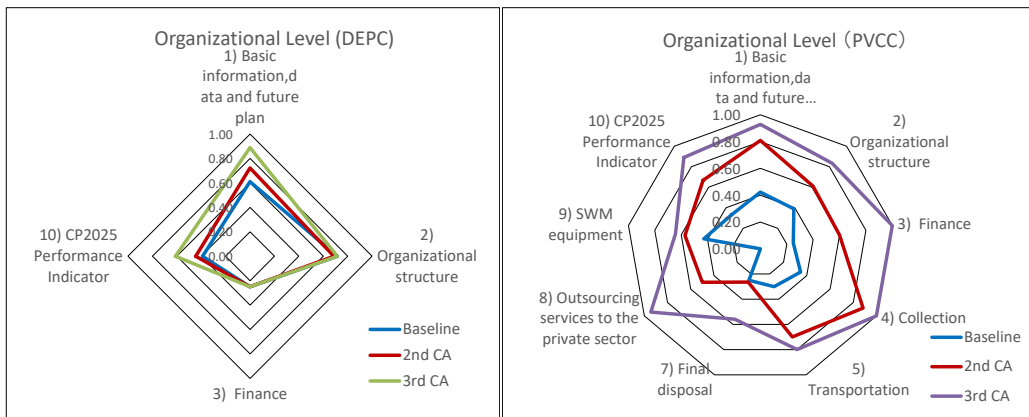


Figure 4-2 CA results at the Organizational level in Vanuatu

## 5 Kingdom of Tonga

### 5.1 Outline of the Project

#### 5.1.1 Project Purpose

A foundation of sustainable solid waste management is built in the Tongan outer islands\*1, with emphasis on practical implementation.

#### 5.1.2 Output

##### a. Output 1

WAL's 5 year business plan for expanding waste management services throughout Tonga is formulated.

##### b. Output 2

WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in Vava'u.

##### c. Output 3

SWM action plans for the main islands of Ha'apai and Eua are developed.

##### d. Output 4

WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in Ha'apai and 'Eua.

### 5.2 Activities

#### 5.2.1 Activities related to Output 1

WAL issues a "Business Plan" annually. The result of Baseline Survey (Activity 1-1) was reflected in the "Business Plan" which aimed to expand waste management service to outer islands. In August 2017, WAL clearly provided a statement of expansion of waste operations in Vava'u, Ha'apai and 'Eua in the "Combine Utilities Business Plan 2018 - 2022", an integrated 5-year business plan of multiple public enterprises under the Ministry of Public Enterprise. In the second term, WAL together with experts have studied collected data on the amount of waste carried into Tapuhia landfill and estimated the total amount of waste throughout Tonga (Activity 1-2) and assessed the current solid waste management and implementing capacity (Activity 1-3), and developed "Ha'apai Waste Management Service Plan" and "'Eua Waste Management Service Plan" accordingly (Activity 1-4). Furthermore, WAL has studied Vava'u's financial state; revenues and expenditures on waste management service in order to consider financial sustainability (Activity 1-5).

In the third term, the financial state in Vava'u was continuously monitored to study financial sustainability for expanding waste services to outer islands.

Activities	Results of activities
1-1 Conduct the waste management baseline survey for mainly Tongatapu island	<ul style="list-style-type: none"> <li>• Following survey was conducted;                             <ul style="list-style-type: none"> <li>A) Collection and review of law and regulation</li> </ul> </li> </ul>

Activities	Results of activities
1-1 Conduct the waste management baseline survey for mainly Tongatapu island	B) Incoming waste to landfill site (data analysis) C) Time & Motion survey for observing waste collection situation D) Review of waste collection schedule and its actual performance E) Collection of census information F) Collection of geographical information G) Review of financial information, H) UAV topographic survey for landfill site I) Observation accompanying customer service survey
1-2 Conduct Waste Amount and Composition Surveys (WACS) to identify the generation amount and characteristics of solid waste throughout Tonga (if necessary).	<ul style="list-style-type: none"> <li>WAL is responsible for discharged waste for collection service instead of generation amount. Thus, this project collected data on the amount of waste carried into Tapuhia landfill and estimated the total amount of waste throughout Tonga. I</li> </ul>
1-3 Assess the current solid waste management implementing capacity (human resources, technical skills, business system, asset, capital, etc.) of WAL.	<ul style="list-style-type: none"> <li>Information was continuously gathered on implementation capacity of SWM for WAL's business expansion toward remote islands. At WAL's headquarters, a manager in charge of accountings, public relations and disposal sites operation is assigned. Before the start of the service in Vava'u, the manager of Vava'u office was received OJT at the headquarters, and after the launch, each manager is dispatched as needed to provide technical guidance in respective aspect. From this, it can be evaluated that as for human resources, technical skills and business implementation system WAL has a basic skills of implementing SWM that is necessary for the service expansion to the remote islands.</li> </ul>

Activities	Results of activities
1-4 Formulate WAL's 5 year business plans of expanding the waste management service area into the Tongan outer islands, in line with Waste Management Act 2005 and other official documents concerned national policy.	<ul style="list-style-type: none"> <li>WAL issued "Combine Utilities Business Plan 2018 - 2022" in August 2017. The plan states that "Waste Management Services – Extension to Outer Islands" set as second priority for next 2 years. The plan was commonly issued among Utility Public Enterprises including Tonga Power Limited, Water Board, and others as the name of plan indicates.</li> <li>WAL issued "Business Plan" annually. The plan mentioned the expanding the waste management service area into the Tongan outer islands.</li> </ul>
1-5 Study on financial sustainability for expanding waste management services to the Tongan outer islands.	<ul style="list-style-type: none"> <li>Vava'u's financial state of revenues and expenditures was confirmed. Sustainability for service expansion to outer islands was examined based on actual figures of revenues and expenditures.</li> </ul>

### 5.2.2 Activities related to Output 2

WAL and JICA Expert Team reviewed the draft Solid Waste Management Plan of Vava'u and supplementary conduct the baseline survey (Activity 2-1). Base on this, the project formulated an action plan of expanding the waste management services in Vava'u (Activity 2-2). WAL conducted stakeholders meeting in Vava'u in July 2017 (Activity 2-5) and started waste management service in April, 2018 (Activity 2-6). Especially in this term, WAL developed monitoring system and conducted OJT regarding collection/ landfill to provide waste management service in Vava'u, and made it used for sustainable SWM capacity development (Activity 2-3 and Activity 2-4). To date, WAL reviewed the result of implementation of waste management service in Vava'u in which emphasized monitoring results and attempt to utilize the results to expand their waste management service into other outer islands (Activity 2-7). In the third term, the status of waste management service in Vava'u such as operation of collection vehicles and landfill site was continuously reviewed. The details of Output 2 activities are described below.

Activities	Results of activities
2-1 Review the draft Solid Waste Management Plan of Vava'u and supplementary conduct the baseline survey.	<ul style="list-style-type: none"> <li>The draft reviewed. WAL's waste management service to Vava'u will be a little different approach from the proposed collection system in the draft. Because, the draft argues that waste collection conducted by each community initiative assuming without public service</li> </ul>

Activities	Results of activities
<p>2-1 Review the draft Solid Waste Management Plan of Vava'u and supplementary conduct the baseline survey.</p>	<ul style="list-style-type: none"> <li>• Supplementary baseline survey has been conducted including following items; geographical information, population census, UAV topographic survey for landfill site, on-site observation survey for collection route. Besides, discharging amount rate per capita is estimated based on the survey result in Tongatapu.</li> </ul>
<p>2-2 Formulate an action plan of expanding the waste management services in Vava'u.</p>	<ul style="list-style-type: none"> <li>• Action plan to commence the waste management service since Jan 2018 was formulated</li> <li>• Waste management service plan formulated including objective figures; planned service population and place, planned collection amount, planned revenue (waste management service fee) and planned expenditure</li> <li>• Waste collection service schedule and detailed route were drafted</li> </ul>
<p>2-3 Prepare the monitoring sheet of service operation for Vava'u office.</p>	<ul style="list-style-type: none"> <li>• Truck driver's operation record that is supposed to be a component of the monitoring sheet was developed.</li> <li>• After the service commenced, other monitoring sheets were developed to check whether the collection service according to schedule is provided or not.</li> <li>• Monitoring sheet for daily work of landfill manger was developed.</li> </ul>
<p>2-4 Conduct OJT such as waste collection service, landfill operation, public awareness raising, etc. for WAL to provide waste management service in Vava'u</p>	<ul style="list-style-type: none"> <li>• At WAL headquarter, a manager in charge of accountings, public relations and disposal site operation is assigned. Before the start of the service in Vava'u, the manager of Vava'u office was provided OJT at the headquarters, and after the launch, each manager is dispatched as needed to provide technical guidance in respective aspect.</li> <li>• WAL Vava'u Branch manager and JICA Experts conducted OJT on waste collection service, landfill disposal, and public awareness for his staff</li> <li>• JICA Experts provided Landfill operation with an operator of heavy machine at Kalaka Landfill.</li> </ul>



Activities	Results of activities
2-5 WAL conducts stakeholders meeting in Vava'u.	<ul style="list-style-type: none"> <li>The project conducted stakeholders meeting on Jul 2017. WAL CEO presented stakeholders including Lord Governor, representatives from ministries, representatives from residents about WAL business plan in Vava'u</li> </ul>
2-6 WAL implements the waste management service in Vava'u.	<ul style="list-style-type: none"> <li>WAL started waste management service in Vava'u in May, 2018</li> </ul>
2-7 Review the result of implementation of waste management service in Vava'u.	<ul style="list-style-type: none"> <li>WAL conducted a review of implementation after commencement of service.</li> <li>The review was continued and compiled as a monitoring report based on the result of two year monitoring.</li> <li>Operation and monitoring status of Vava'u's waste management service (collection and landfill management) was continuously reviewed.</li> </ul>

### 5.2.3 Activities related to Output 3

WAL and JICA Experts conducted Baseline Survey in Ha'apai and 'Eua (Activity 3-2). In Ha'apai, WAL and JICA Experts organized Stakeholders Meeting (Activity 3-1) and developed "Action Plan for providing waste management service" (Activity 3-3). In 'Eua, WAL drafted the Action Plan and organized a Stakeholders Meeting for 'Eua people between in August 2020. The details of Output 3 activities are described below.

Activities	Results of activities
3-1 Facilitate inception workshops for action plan for the main islands of Ha'apai and Eua.	<ul style="list-style-type: none"> <li>A stakeholders meeting was conducted in December, 2018. CEO of WAL give an explanation on business summary to the governor and community leaders of Ha'apai.</li> <li>In 'Eua, WAL has prepared for the stakeholders meeting which would be held in March 2020, but it was postponed due to COVID19.</li> <li>Postponed stakeholders meeting in 'Eua was held in August 2020, and the action plan was explained.</li> </ul>
3-2 Conduct baseline surveys to develop the Action plan and Business implementation plan of the main islands of Ha'apai and Eua.	<ul style="list-style-type: none"> <li>Baseline survey was conducted in Ha'apai in December, 2018 and 'Eua in December 2019. Following information was reviewed;               <ol style="list-style-type: none"> <li>Law and regulation</li> <li>Geographical</li> <li>Demographic</li> <li>Amount of final disposal waste</li> <li>Cash forecast</li> <li>Waste collection route, etc.</li> </ol> </li> </ul>

Activities	Results of activities
3-3 Formulate the Action plan(s) for providing waste management service to the main islands of Ha'apai and Eua based on the experience in Vava'u and the results of stakeholder's workshops held in these islands.	<ul style="list-style-type: none"> <li>Based on stakeholders meeting, Action Plan on Ha'apai's Waste Management Service Plan was developed.</li> <li>'Eua's Waste Management Service based on Vava'u implementation experience was developed.</li> </ul>

#### 5.2.4 Activities related to Output 4

PDM was revised and activities related to Output 4 were added in the 3rd JCC meeting held in October 2020. WAL commenced waste management service in 'Eua and Ha'apai on October and November 2020 respectively (Activity 4-3). Around the time of the launch, WAL dispatched Vava'u branch manager and conducted OJT on collection, landfill and monitoring methodology for managing vehicle operation (Activity 4-1, 4-2).

Activities	Results of activities
4-1 Prepare the monitoring sheet of service operation for Ha'apai and 'Eua office.	<ul style="list-style-type: none"> <li>Ha'apai and Eua office has started to record the operation of collection vehicles by using same monitoring sheet in Va'vau.f</li> </ul>
2-4 Conduct OJT such as waste collection service, landfill operation, public awareness raising, etc. for WAL to provide waste management service in Ha'apai and 'Eua	<ul style="list-style-type: none"> <li>Around the time of the launch of waste management service, WAL dispatched Vava'u branch manager and conducted OJT on collection and monitoring methodology for managing vehicle operation in 'Eua.</li> <li>WAL dispatched Vava'u branch manager and conducted OJT on collection, landfill and monitoring methodology for managing vehicle operation in 'Ha'apai.</li> </ul>
2-6 WAL implements the waste management service in Ha'apai and 'Eua.	<ul style="list-style-type: none"> <li>WAL started waste management service in 'Eua in October, 2020.</li> <li>WAL started waste management service in Ha'apai in November, 2020.</li> </ul>
2-7 Review the result of implementation of waste management service in Ha'apai and 'Eua.	<ul style="list-style-type: none"> <li>By gathering collection vehicle records of monitoring sheet, the state of waste collection service in Ha'apai and 'Eua was confirmed.</li> </ul>

### 5.3 Challenges and lessons learnt during the Project implementation

#### 5.3.1 Working with WAL Headquarters' Staff

J-PRISM 2 aims at technical assistance on WAL's service extension to outer islands namely Vava'u. Meanwhile WAL's primary business is in Tongatapu even after they extended to outer islands. Thus, JICA Experts emphasized in working with WAL headhunters staff; a manager in charge of Accountings, Public Relations and Disposal Site Operation is assigned, while it mainly focuses on service extension to outer islands. Specifically, JICA experts discussed "Eua Waste Management Service Plan" frequently with WAL staff in WAL's Managers Meeting. It enable people attending the meeting including WAL CEO to do a quick decision, such as diversion of budget funds between Main Island and Outer islands. And WAL CEO

accompanied JICA experts to join “Baseline Survey in Outer Island” and “Current Situation Survey in Vava’u” to identify the status and problems of activity at the site. This made it possible to do quick response for problems through discussion between the CEO and JICA Experts.

### 5.3.2 Accumulation data of WAL's income and expenditure on waste management service in Vava’u

WAL has accumulated its income and expenditure data on waste management in Vava’u since June, 2018, and almost two years’ worth of data was consolidated. It was a very precious example, because WAL has operated and provided waste management service by collected waste fee, without subsidies from central government. In particular, as of August 2022, WAL Vava'u Branch, to which J-PRISM II has mainly provided support, can operate without the diversion of budget from the main island (Tongatapu Island). There is possibly their work will be shown as quantified success story.

### 5.3.3 Operation manual for Kalaka Landfill focus on practical use

With regard to revision of operation manual for Kalaka landfill, JET carried out sufficient discussion with working level staff and provided on the job training at the landfill as well. These discussions and lesson learned from the OJT were reflected to the operational manual. And then, JET developed a check sheet for security officers at Kalaka landfill to facilitate self-care in accordance with the manual. The data and information from the check sheet will offer helpful perspective to improve the manual and reviewing by using check sheet” at once developed a practicable operation manual. This check sheet will also be introduced to landfill management on Ha'apai and 'Eua. It is expected that the on-site situation will improve as soon as possible.

### 5.3.4 Remote assistance under the coronavirus pandemics

Due to the spread of the infection of coronavirus, short-term experts were unable to visit the field since March 2020. Shifting to email communication with C/Ps and remote assistance based on their requests, the experts participated online from Japan in the 3rd JCC held in October 2020. With little prospects to field visit, a routine of virtual C/P meeting to catch up the progress was established and the remote assistance (on-line vehicle operation and maintenance training) were conducted.

## 5.4 Achievement of the Outputs

1. WAL's 5 year business plan for expanding waste management services throughout Tonga is formulated.		Progress: Achieved
OVI 1-1: WAL's 5 year business plan for providing waste management services in the Tongan outer islands is approved by WAL board meeting and submitted to Ministry of Public Enterprise	<ul style="list-style-type: none"> <li>WAL's 5 years business plan was formulated in Aug 2017 and approved by board meeting. It also was already submitted to the Ministry of public enterprise.</li> <li>WAL issued “Business Plan” annually which envisaged the expanding the waste management service area into the Tongan outer islands.</li> </ul>	
OVI 1-2: Necessary human resources, technical support, infrastructure, capital are incorporated into the WAL's 5 year business plan.	<ul style="list-style-type: none"> <li>WAL developed “Waste Management Service Plan” for Vava’u, Ha’apai and ’Eua. These plans mention necessary human resource, operational structure, and financial scheme</li> </ul>	

1. WAL's 5 year business plan for expanding waste management services throughout Tonga is formulated.		Progress: Achieved
OVI 1-3: Mid-long term of WAL's Objectives and Strategies are specified in 5 years Business Plan	<ul style="list-style-type: none"> <li>Mid-long term of WAL's Objectives and Strategies was stated in WAL's 5 years business plan</li> </ul>	
2. WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in Vava'u.		Progress: Achieved
OVI 2-1: WAL collects solid waste in accordance with the collection schedule in Vava'u.	<ul style="list-style-type: none"> <li>By using monitoring sheet since February 2018, it has been confirmed that WAL collects solid waste management in accordance with collection schedule in Vava'u.</li> </ul>	
OVI 2-2: WAL operates and maintains Kalaka landfill site according to O&M manual to be updated through OJT.	<ul style="list-style-type: none"> <li>Landfill operation manual was developed in March, 2019. WAL Vava'u office follows the rules of the manual, conducts a monitoring, and records the monitoring results.</li> </ul>	
OVI 2-3: WAL Vava'u office manages waste collection and landfill activities in accordance with the monitoring sheet of service operation for Vava'u office.	<ul style="list-style-type: none"> <li>WAL Vava'u office developed and utilized monitoring sheets to manage the service operation</li> </ul>	
3. SWM action plans for the main islands of Ha'apai and Eua are developed.		Progress: Achieved
OVI 3-1: Actual situation of solid waste management in the main islands of Ha'apai and Eua is grasped.	<ul style="list-style-type: none"> <li>A baseline survey was conducted in Ha'apai in November 2018, and 'Eua in December 2019.</li> </ul>	
OVI 3-2: WAL identifies the issues to be solved for providing solid waste management service in the main islands of Ha'apai and Eua.	<ul style="list-style-type: none"> <li>Stakeholders meetings for Ha'apai and 'Eua were conducted in December, 2018 and August 2020 to discuss issues to be solved for providing waste management service.</li> </ul>	
4. WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in Ha'apai and 'Eua.		Progress: Achieved
OVI 4-1: WAL collects solid waste in accordance with the collection schedule in Ha'apai and 'Eua.	<ul style="list-style-type: none"> <li>WAL started the waste service in 'Eua and Ha'apai in November and December 2020 respectively and continue the services according to the collection schedule.</li> </ul>	
OVI 4-2: WAL office manages waste collection and landfill activities in accordance with the monitoring sheet of service operation for Ha'apai and 'Eua office.	<ul style="list-style-type: none"> <li>Both Ha'apai and 'Eua office introduced the monitoring sheets of service operation. It was confirmed that both Ha'apai and 'Eua office have been compiling the results of monitoring to manage the waste collection and landfill activity,</li> </ul>	

## 5.5 Achievement of the Project purpose

A foundation of sustainable solid waste management is built in the Tongan outer islands*1, with emphasis on practical implementation.		Progress: Almost achieved
OVI 1: SWM action plan of Tongan outer islands is reflected in WAL's 5 year business plan.	<ul style="list-style-type: none"> <li>WAL clearly specified the expansion of waste services in the WAL's 5 years plan, contained in Combine-Utilities Business Plan 2018-2022. Action plans for outer islands were reflected to the annual Business Plan which were In line with the 5 years plan,</li> </ul>	
OVI 2: 100% of households in the main island of Vava'u receive waste collection service provided by WAL by the end of the Project.	<ul style="list-style-type: none"> <li>WAL Vava'u office provides the waste collection service to all households in the main island, and collects the wastes from the outer islands of Vava'u.</li> </ul>	
OVI 3: The waste fee collection rate in Vava'u exceeds 80% due to the improvement of public awareness.	<ul style="list-style-type: none"> <li>The average rate (June 2018 – July 2019) was 82.9%.</li> </ul>	

## 5.6 Recommendation towards achievement of Overall Goal

In order to achieve the overall goal “Sustainable management of solid waste in the Pacific region is enhanced based on Pacific Regional Waste and Pollution Management Strategy 2016-2025 (Cleaner Pacific 2025)”, in Tonga it is advisable to formulate the national solid waste management strategy. In addition to that, at the implementation level, it is advisable to strengthen the capacity for upgrading the landfill site and landfill management.

## 5.7 Capacity Assessment

### 5.7.1 3rd Capacity Assessment

In the third term, the third CA (endline) was conducted by monitoring the project activities and using the checklist from 5 to 9 September 2022. The results of the third CA are shown in the figure below.

At the institutional and social level, the item of 3) Citizen's Capacity improved in the third term. This is because WAL notified how to discharge and conducted the awareness program against illegal dumping in various ways such as radio program and warning signboard, after they started waste collection services in 'Eua and Ha'apai since 2020 in addition to Vava'u. It was confirmed the illegal dumping on roads and public places by residents have decreased. Since the Project focus on the implementation of solid waste management on remote islands, compared to the baseline period, the capacity of policies and institutions at the national level and the capacity of relevant actors including the private sector regarding the situation has no improvement was observed.

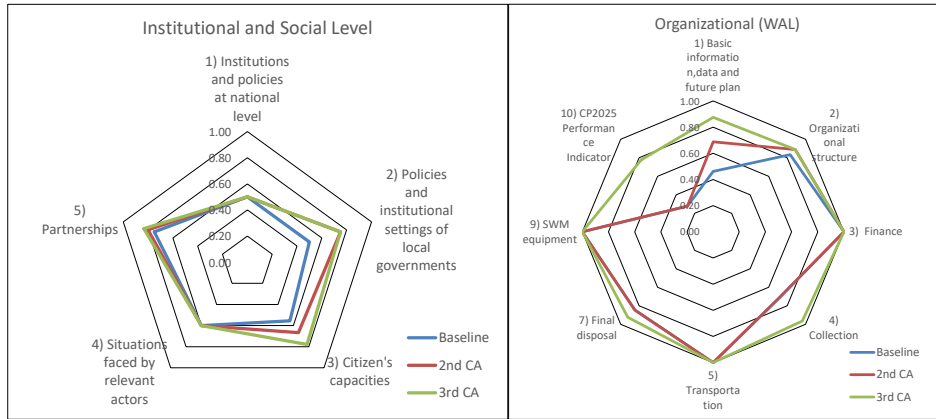


Figure 5-1 CA results at the Institutional/Social and Organizational Level in Tonga

The organizational level capacity of WAL, as the implementing agency of the SWM, had high capacity from the baseline. In the third term, the monitoring method for waste management introduced on Vava'u (vehicle daily report, incoming wastes at the dumping site, etc.) was also adopted on each remote island, and records have been continuously recorded since the start of the service. It led to the additional points for improving the capacity of 4) Collection.

In addition, as the result that the C/P, the manager of WAL Vava'u branch, has gained experience in training in Japan and participating in a Waste Audit on Vava'u Island, it can be said that the knowledge related to 1) Basic information, data and future plan and 10) CP2025 performance indicators. In order to continue to improve WAL's capacity to implement waste management projects at the organizational level, it is hoped that knowledge of waste management will be disseminated within the organization and that management capacity will be further improved based on data.

## 6 Independent State of Samoa

### 6.1 Outline of the Project

#### 6.1.1 Project Purpose

Solid waste is appropriately managed based on the National Waste Management Strategy (NWMS).

#### 6.1.2 Output

##### a. Output 1

NSWMS is developed.

##### b. Output 2

Rubbish collection monitoring system is established.

##### c. Output 3

Feasibility study on financial option (user pay system) is implemented.

### 6.2 Activities

#### 6.2.1 Activities related to Output 1

As for Output 1, throughout the period of the 1st term, baseline survey was conducted and the result was summarized (Activity 1-1, 1-2) in line with confirmation of formulation process of NSWMS and identification of the members of working group and stakeholders (Activity 1-3, 1-4) then, draft framework of NSWMS was developed. In the 2nd term, based on the draft framework, the first draft of the strategy with whole contents was developed and it was discussed during the working group and stakeholder meetings (Activity 1-6) then finalized in October 2018 as “National Waste Management Strategy 2019-2023” which integrates Solid Waste Management Strategy and Chemical and Hazardous Waste Management Strategy (Activity 1-7). The final draft was approved by the cabinet in January 2019, then additional activities (Activity 1-8 - 1-10) which support implementation phase of the strategy were added in the 2nd JCC. FY2019 (started from July 2019) is the first implementation year of the strategy and the planning and monitoring on implementation and progress were followed up (Activity 1-8 - 1-10). During the 3rd term, due to the restriction on public gathering caused by COVID-19, the steering committee meeting wasn't conducted in FY2020 but the progress report was developed and circulated to the steering committee member in May 2022 (Activity 1-8 - 1-10). Details on the progress of activities under output 1 are shown in the table below.

Activities	Results of activities
1-1 Conduct Baseline Survey	<ul style="list-style-type: none"><li>• Baseline Survey was completed.</li><li>• Incoming waste record will be continued</li></ul>
1-2 Summarize the result of Baseline Survey	<ul style="list-style-type: none"><li>• Result of the Baseline survey was summarized in the strategy.</li></ul>
1-3 Clarify the process of formulation of NSWMS	<ul style="list-style-type: none"><li>• The process was clarified based on discussions with C/P.</li></ul>

Activities	Results of activities
1-4 Identify the working group and stakeholders related to the formulation of NSWMS	<ul style="list-style-type: none"> <li>Based on discussions with C/P, the stakeholders were identified (ministries and government agencies, private sector and community). In addition to that, steering committee consists from CEOs and ACEOs and technical working group consist from Principal Officer of relevant ministries and government agencies were formulated.</li> </ul>
1-5 Develop the draft NSWMS	<ul style="list-style-type: none"> <li>The first draft was developed based on the agreed framework with C/P and the result of internal meeting in DEC.</li> <li>The second draft was developed based on the result of discussions during 1st Steering committee meeting, Consultation meeting for private sector and community.</li> </ul>
1-6 Conduct working group meeting and stakeholder meeting based on the formulation process of NSWMS.	<ul style="list-style-type: none"> <li>Based on the agreed formulation process, following meetings were conducted               <ul style="list-style-type: none"> <li>-Internal meeting in DEC</li> <li>-1st Steering committee meeting</li> <li>-Consultation meeting for private sector</li> <li>-Consultation meeting for community</li> <li>-Technical working group meeting</li> <li>-2nd Steering committee meeting</li> </ul> </li> </ul>
1-7 Finalize the draft NSWMS	<ul style="list-style-type: none"> <li>The draft was finalized based on the result of discussions during technical working group and 2nd Steering committee meeting.</li> <li>The final draft was submitted to the cabinet and approved in January 2019.</li> <li>Official launching of the strategy was conducted in November 2019.</li> </ul>
1-8 Assist Developing annual management plan and implementation plan	<ul style="list-style-type: none"> <li>Annual Management Plan for FY 2019 – 2022 was developed.</li> </ul>
1-9 Coordinate and monitor the progress of implementation of the Action Plan	<ul style="list-style-type: none"> <li>The progress of implementation of the Action Plan for FY2019 -2021 was coordinated and monitored.</li> </ul>
1-10 Review the Action Plan based on the progress of implementation	<ul style="list-style-type: none"> <li>The steering committee for FY2019 was conducted and the progress of implementation was summarized as of February 2020 (There was no revision of action plan in FY2019.).</li> <li>The progress report as of May 2022 was developed and circulated to the steering committee member.</li> </ul>



## 6.2.2 Activities related to Output 2

Output2 was added based on the 2nd JCC conducted in January 2019. Implementation was started from March 2019, existing documents were collected and analyzed (Activity 2-1), then based on the result, the framework of rubbish collection monitoring system was designed (Activity 2-2). Stakeholder meeting was conducted in November 2019 (Activity 2-3). Based on the result of discussion, the framework was finalized (Activity 2-4). Preparation for the rubbish collection monitoring system was done by February 2020 (Activity 2-5). In March, trial for the monitoring system was commenced (Activity 2-6). During the 3rd term, the trial was continued until October 2020 then, the monitoring system was fully introduced since November 2020 when the contract of rubbish collection service was renewed. The data obtained from rubbish collection monitoring system was summarized and analyzed continuously (Activity 2-7). Details on the progress of activities under output 2 are shown in the table below.

Activities	Results of activities
2-1 Collect and analyze existing documents (Terms and references in the current contract, payment process to contractors, on site inspection report, incoming waste record at landfill and etc.)	<ul style="list-style-type: none"> <li>Existing documents were collected and analyzed (Terms and references in the current contract, payment process to contractors, on site inspection report, incoming waste record at landfill and etc.)</li> </ul>
2-2 Based on the result of 2-1, design the framework of rubbish collection monitoring system (Performance Report, Daily Report, Monthly Report, Performance Evaluation Sheet, Roles and Responsibility, Workflow chart)	<ul style="list-style-type: none"> <li>Based on the result of 2-1, the framework of rubbish collection monitoring system was designed (Long Term Performance Evaluation, Monthly Performance Evaluation, Work Plan / Work Report, Complain Record, Incoming Waste Record, Roles and Responsibility, Workflow chart)</li> </ul>
2-3 Conduct stakeholder meeting on rubbish collection monitoring system (Contractor, Relevant ministries and government agencies, Community)	<ul style="list-style-type: none"> <li>Stakeholder meeting on rubbish collection monitoring system was conducted (Contractor, Relevant ministries and government agencies, relevant section in MNRE)</li> <li>Meeting with Community was not conducted due to the coordination with government stakeholders and contractors was prioritized in the process of design for the monitoring system.</li> </ul>
2-4 Based on the result of 2-3, finalize the framework of rubbish collection monitoring system	<ul style="list-style-type: none"> <li>Based on the result of 2-3, the framework of rubbish collection monitoring system was finalized (Some modification could be made based on the feedback obtained during the trial period with regards to 2-6.)</li> </ul>
2-5 Prepare for the operation of rubbish collection monitoring system	<ul style="list-style-type: none"> <li>Preparation was done for the operation of rubbish collection monitoring system</li> </ul>
2-6 Commence operation of rubbish collection monitoring system	<ul style="list-style-type: none"> <li>The trial of the monitoring system was commenced from March 2020 until October 2020.</li> </ul>

Activities	Results of activities
2-6 Commence operation of rubbish collection monitoring system	<ul style="list-style-type: none"> <li>The monitoring system was fully introduced since November 2020.</li> </ul>
2-7 Summarize and analyze data obtained from rubbish collection monitoring system	<ul style="list-style-type: none"> <li>The data obtained from rubbish collection monitoring system was summarized and analyzed continuously.</li> </ul>

### 6.2.3 Activities related to Output 3

Output3 was added based on the 2nd JCC conducted in January 2019. Implementation was started from April 2019, existing documents were collected and analyzed (Activity 3-1), then preliminary survey was conducted prior to the detail consideration of the system (Activity3-2). In September 2019, study tour to Vanuatu, Tonga and Fiji where already introduced user pay system was conducted (Activity 3-3). Based on these results, options to introduce the system were developed (Activity 3-4). The options were discussed among stakeholders during the steering committee in February 2020 (Activity 3-5) and it was basically agreed to continue further discussion and consideration on pay as you go prepaid bag user pay system based on Vanuatu model. As for public consultation meeting (Activity 3-6), based on the request from C/Ps to conduct within the 2nd term, preparation was in progress. However, due to pandemic of corona virus, the meeting was postponed. During the 3rd term, still implementation was affected by restriction of public gathering caused by COVID-19 and political instability after national election in Samoa, but public consultation was conducted with using questionnaire (Activity 3-6) then draft proposed system was developed (Activity 3-7). Steering committee was conducted on 22nd June 2022 where proposed system was discussed (Activity 3-8) and then recommendation and future direction was summarized. During the 3rd Joint Coordinating Committee meeting, Activity 3-6 and 3-9 were modified considering the situation of COVID-19. Details on the progress of activities under output 3 are shown in the table below.

Activities	Results of activities
3-1 Collect existing information (such as other countries' case and past documents in Samoa)	<ul style="list-style-type: none"> <li>Existing documents and information were collected (Cases of user pay system in Tonga, Vanuatu and New Zealand and documents and discussions on user pay method in Samoa for Electricity, Water and phone).</li> </ul>
3-2 Conduct preliminary survey (legal framework, profiling stakeholders, initial estimation)	<ul style="list-style-type: none"> <li>Preliminary survey was conducted (Confirmation of legal framework and development of draft Legal Advice Request to legal expert, profiling stakeholders, simple initial estimation based on documents and information collected through 3-1)</li> </ul>
3-3 Conduct study tour to countries where already introduced user pay system (such as prepaid bag, co-billing system with electricity)	<ul style="list-style-type: none"> <li>Study tour was conducted to the countries where already introduced user pay system; Vanuatu (Prepaid bag), Tonga (co-billing system with electricity) and Fiji (Waste fee).</li> </ul>

Activities	Results of activities
3-4 Prepare options to introduce the system	<ul style="list-style-type: none"> <li>Following options to introduce the system were prepared; Prepaid bag system based on Vanuatu model, Co-billing system with water based on Tonga model.</li> </ul>
3-5 Conduct steering committee	<ul style="list-style-type: none"> <li>Steering committee was conducted in February 2020 in which the options prepared under 3-4 were discussed among stakeholders from relevant ministries and government agencies.</li> </ul>
3-6 Conduct public consultation	<ul style="list-style-type: none"> <li>Public consultation had been suspended due to COVID-19 but conducted in May 2022 with using questionnaire.</li> </ul>
3-7 Develop draft proposed system	<ul style="list-style-type: none"> <li>Based on opinions obtained by Activity 3-6, draft proposed system was developed.</li> </ul>
3-8 Finalize the proposed system on steering committee	<ul style="list-style-type: none"> <li>Steering committee was conducted on 22nd June 2022 where draft proposed system developed in Activity 3-7 was discussed.</li> </ul>
3-9 Summarize recommendation and future direction on proposed system	<ul style="list-style-type: none"> <li>Based on discussion in Activity 3-8, recommendation and future direction on proposed system was summarized.</li> </ul>

### 6.3 Challenges and lessons learnt during the Project implementation

#### 6.3.1 Formulation of integrated National Waste Management Strategy

Output 1 of Samoa is focused on support for formulation of solid waste management strategy. However, during the process of formulation of the strategy, it was confirmed that C/P was willing to formulate chemical and hazardous waste management strategy at the same time of formulating the solid waste management strategy.

Considering the situation, relevant staffs discussed and agreed on formulating integrated National Waste Management Strategy which includes both solid waste management and chemical and hazardous waste management on condition that C/P's officer in charge of chemical and hazardous waste management would develop the chemical and hazardous waste management part with relevant officer of SPREP within designated period. Since the chemical and hazardous waste part was developed within the period, integrated National Waste Management Strategy was developed.

Formulation of the integrated strategy effectively contributed to enhance motivation and interest of C/P and relevant ministries on the formulation of the strategy.

#### 6.3.2 Collaboration with SPREP during the process of formulating strategy

During the formulation of the strategy, the project tried working with SPREP's officer as much as possible. Especially, the project asked SPREP's officer in charge of solid waste to attend series of meetings and obtained advice on the formulation process and structure of the strategy.

As it was mentioned above, C/P's officer in charge of chemical and hazardous waste

management developed the chemical and hazardous waste management part with relevant officer of SPREP.

It was possible to share the same understanding on priority issues by developing national strategy among JICA, SPREP and C/P.

### **6.3.3 Promotion of practical learning and knowledge exchange in region through implementation of study tour**

Under output3 for Samoa, prior to the consideration of options for user pay system, study tour to Vanuatu, Tonga and Fiji was conducted for Samoa to learn from neighbor countries.

Since the program was designed clearly focusing on user pay system, the participants kept highly motivated and the tour became an opportunity for practical learning. Right after the tour, the participants from Samoa developed report which summarized the result of the tour, then options for user pay system were developed based on the report.

On the other hand, the tour not only provided an opportunity for Samoan to learn from their visited countries, there was an opportunity for both sides; those hosted and participants from Samoa to exchange knowledge and learn from each of countries. Especially from Tongan side, there was a suggestion to learn waste management in Samoa by visiting Samoa in near future. Thus, there was indication of possibility that international relationship developed through the tour may assist further inter-regional cooperation.

### **6.3.4 Continuous implementation of activity by conducting appropriate remote meeting**

When there is no clear outlook of traveling to Samoa due to the impact of COVID-19, conducting remote meetings at appropriate times enabled to confirm the progress of each activity, the local situation regarding COVID-19 and national election, and the policy of implementation of activities on remote and was effective for the continuation of the project activities. On the other hand, in Samoa, there are increasing number of opportunities of remote meetings for C/P including other donors. Therefore, in order to utilize remote meetings, it is important to consider the pressure on C/P's resources caused by remote meetings then schedule the meeting on appropriate frequency by clarifying the purpose of the meetings and agenda to be discussed.

### **6.3.5 Accelerating progress of activities by resuming field work**

Possibility of traveling to Samoa had been pursued even under the COVID-19 outbreak situation and it was realized in March 2022. Resume of field work accelerated progress of activities. Direct communication with C/P in Samoa which enabled the project to discuss, consider and plan on feasible implementation option under restriction caused by COVID-19, then public consultation and steering committee under output 3 were conducted which had been suspended and since the outbreak of the COVID-19.

## 6.4 Achievement of the Outputs

<b>1. NSWMS is developed.</b>		<b>Progress: Achieved</b>
OVI1-1: The draft final NSWMS with consensus among stakeholders is submitted to the Cabinet	<ul style="list-style-type: none"> <li>The strategy was formulated as National Waste Management Strategy by integrating solid waste management and chemical and hazardous waste management. The draft was finalized with consensus among stakeholders by conducting meetings with government ministries, private sector. Final draft was submitted and approved by the Cabinet in January 2019.</li> </ul>	
<b>2. Rubbish collection monitoring system is established.</b>		<b>Progress: Achieved</b>
OVI2-1: Data for rubbish collection monitoring system is collected on a regular basis	<ul style="list-style-type: none"> <li>Rubbish collection monitoring system was fully introduced since November 2020 and the data from the system is collected on a regular basis.</li> </ul>	
OVI2-2: Supervision to the contractor is made based on the data collected from the system	<ul style="list-style-type: none"> <li>Based on the data collected from the rubbish collection monitoring system, contractor's work is evaluated and necessary supervisions are being made.</li> </ul>	
OVI2-3: Revised contract format is proposed based on the rubbish monitoring system	<ul style="list-style-type: none"> <li>Revision of contract document based on rubbish collection monitoring system was proposed, then installation of GPS and the description on noncompliance penalty were included and collection map was attached with the new contract.</li> </ul>	
<b>3. Feasibility study on financial option (user pay system) is implemented.</b>		<b>Progress: Achieved</b>
OVI3-1: Suitable system is consulted with public and stakeholders	<ul style="list-style-type: none"> <li>The 1st Steering Committee was conducted and options for user pay system was discussed with relevant ministries and government agencies.</li> <li>By targeting public in the country, public consultation was conducted and opinions on user pay option were collected.</li> </ul>	
OVI3-2: Suitable system is determined on steering committee	<ul style="list-style-type: none"> <li>The second steering committee meeting was conducted and discussion was made to determine suitable system which to be further considered.</li> </ul>	
OVI3-3: Recommendation and future direction on user pay system is summarized	<ul style="list-style-type: none"> <li>Recommendation and future direction on user pay system was summarized.</li> </ul>	

## 6.5 Achievement of the Project purpose

<b>1. Solid waste is appropriately managed based on the National Waste Management Strategy (NWMS).</b>		<b>Progress: Achieved</b>
OVI 1-1: Top priority activities listed in the NWMS related to waste collection service are implemented.	<ul style="list-style-type: none"> <li>Top priority activities listed in the NWMS related to waste collection service were implemented though implementation of output 2 and output 3.</li> </ul>	
OVI 1-2: Annual Management Plan is developed based on the NSWMS.	<ul style="list-style-type: none"> <li>Through activity 1-8, Annual Management Plan for FY2019 - FY2022 was developed based on NSWMS.</li> </ul>	

1. Solid waste is appropriately managed based on the National Waste Management Strategy (NWMS).		Progress: Achieved
OVI 1-3: Basic data on SWM is updated as scheduled in the NSWMS.	<ul style="list-style-type: none"> <li>Basic data on SWM was updated based on the result of the filed survey implemented in relation to the NSWMS.</li> </ul>	

## 6.6 Recommendation towards achievement of Overall Goal

Towards achievement of overall goal (Sustainable management of solid waste in the Pacific region is enhanced based on Pacific Regional Waste and Pollution Management Strategy 2016 – 2025 (Cleaner Pacific 2025).), for Samoa, it is necessary to continue PDCA cycle by implementing waste management based on the National Waste Management Strategy and regularly evaluate and revise the strategy.

## 6.7 Capacity Assessment

### 6.7.1 3<sup>rd</sup> Capacity Assessment

In the third term, the third CA (endline) was conducted by interviewing the progress of project activities with the country-wise experts and using the checklist as a questionnaire to the main counterparts from July 13th to July 21st, 2022. The results of the third CA are shown in the figure below.

In the third term, MNRE conducted a public consultation in May 2022, and the results of “Citizen’s awareness toward wastes” and “Willingness to pay for waste” in the questionnaire were reflected in the results of 3) Citizen’s capacities and 4) Partnership. In addition, various recycling activities after the establishment of the Samoa Recycling Waste Management Association led to additional points for 4) Situations faced by relevant actors. Compared to the baseline, 2) Policies and institutional settings of local governments have improved significantly. This is because, in Samoa, where there are no local governments, MNRE formulated the National Waste Management Strategy, the municipality’s waste management plan, as the implementing agency of waste management. In addition, it can be said that the establishment of a steering committee as a forum for stakeholder consultations on waste management, such as formulating a national solid waste strategy and monitoring the implementation of the strategy, has led to strengthening of capacity in terms of partnerships at the institutional and social levels.

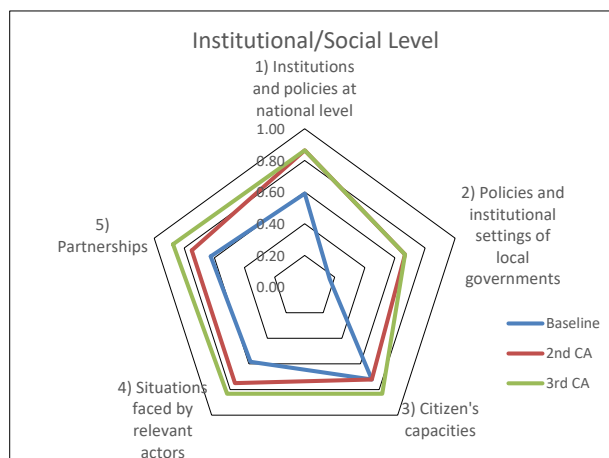


Figure 6-1 CA results at the Institutional/Social level in Samoa

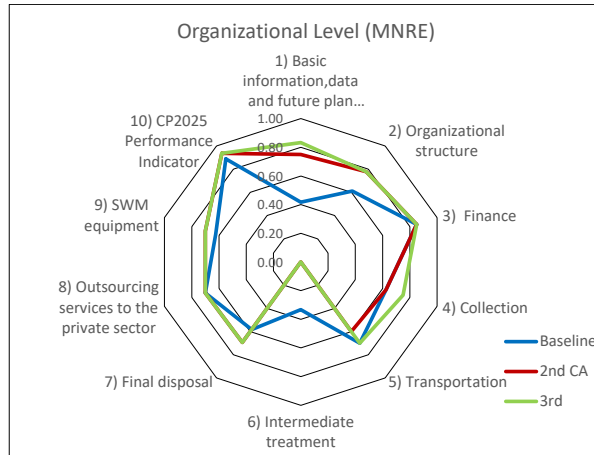


Figure 6-2 CA results at the Organizational level in Samoa

At the organizational level, the capacity of 4) Collection greatly improved. This is because in the third term, MNRE introduced a new monitoring system using a GPS system, improved the efficiency of monitoring work, stipulated penalties for non-compliance with collection contractors, and obliged collection vehicles to be equipped with GPS, Improvements have been made to consignment collection operations, such as the attachment of a collection map. Compared to the baseline, capacity has improved in all items except 6) Intermediate treatment. In particular, with regard to 1) Basic information, data and future plan for Solid Waste Management, the capacity has been strengthened since MRNE conducted various surveys necessary for formulating the strategy together with experts, monitored implementation of the strategy, conducted the public consultation, and so on.

## **7 Republic of Fiji**

### **7.1 Outline of the Project**

#### **7.1.1 Project Purpose**

Solid waste is managed appropriately based on the National Waste Management and Pollution Control Strategy 2018-2028.

#### **7.1.2 Output**

##### **a. Output 1**

By the initiative of Department of Local Government, Evidence-based policy is promoted based on 3R concept.

##### **b. Output 2**

Pilot study(s) for 3R + Return program are implemented.

### **7.2 Activities**

#### **7.2.1 Activities related to Output 1**

Just before the start of J-PRISM2 activities in Fiji, the Public Health Act and Local Government Act were amended in July, 2018, and this made the Department of Local Government, DLG, the competent authority for the municipal solid waste management, along with local governments,. Therefore Output 1 was implemented with DLG as the main C/P organization along with 13 local governments. In addition, the amendment of above mentioned acts changed the responsible organizations to provide solid waste collection services in rural areas from rural local authorities, RLAs, to local governments, and this drastically widen local governments' responsible areas for solid waste collection.

The Output 1 aims at improving the municipal solid waste management policies and plans, by supporting 13 local governments to formulate the solid waste management plan, SWM plan, under the leadership of DLG and to continue to implement the following activities.

- Decide the monitoring items in consultation with DLG and prepare for a monitoring form
- Conduct regular monitoring based on the form and submit the monitoring report to DLG
- Analyse the monitoring result and modify the SWM plan based on the result of the analysis

In the second phase, the Study team supported local governments to formulate the SWM plans based on the solid waste management plan format, and seven councils submitted the draft plans. In the third phase, the remaining six councils prepared for the draft plans by October, 2020. The baseline data, however, was collected in 2019 and did not include the data on the collection service in rural areas, so the baseline data was updated, while the SWM plan was modified, including the collection plan in rural areas<sup>11</sup>.

---

<sup>11</sup> Since the post of Health Inspector had been vacant for more than half year since November, 2021, Ba Town Council could not updated the solid waste management plan nor implement the quarterly monitoring when it started in January 2022.



The monthly monitoring based on the monitoring sheet started in December, 2020, in order to check the progress of the SWM plan. The monitoring items in the first year did not include basic quantitative data such as collected waste amount and recycled amount, and this made it impossible to know the recycling rate or waste reduction rate. The study team decided to modify the monitoring system, adding the following monitoring items while decreasing the monitoring frequency from monthly to quarterly, in consultation with DLG and local governments. In order to start new monitoring items, training programs of MS excel and GIS mapping were provided for local government officers, before the start of the modified monitoring system in January 2022.

- Collected amount of general waste (household waste, green waste, bulky waste) in the council area)
  - ✓ Councils using the Naboro or Vunato disposal site: weight amount (tons)
  - ✓ Councils using disposal sites without a weighbridge: trip numbers of collection vehicles (if an open track is used, the volume amount is estimated.)
- Recycled amount (weight)
- Market waste amount used for composting (weight or volume amount)
- Collected amount of general waste in rural areas
- Information on illegally waste dumping sites (not only the number of sites but also their location data, waste type, photos, and maps)
- Number of complaints by type
- Financial data (once a year)

The study team decided to use the data on trip numbers of collection vehicles, instead of weight amount of collected waste for councils using disposal site without a weighbridge (if waste is collected by an open truck or in containers, volume amount is also estimated). The data input method of collection vehicles at the disposal site was improved, while a training program of data analysis was provided. The total trip numbers by waste source, waste type and vehicle ID are obtained every month and reported in the quarterly monitoring report. The disposal site data in the second quarter from Levuka Town Council is shown below as a reference.

Table 7-1 The disposal site data in the second quarter from Levuka Town Council  
(Unit: Trip number)

	Household	Green waste	Factory waste	Household mix	OBRL Supermarket	Grand Total
<b>1. Municipal waste + mix</b>	<b>72</b>	<b>7</b>	<b>2</b>	<b>2</b>		<b>83</b>
<b>HO382</b>	<b>52</b>					<b>52</b>
Apr	8					8
May	29					29
Jun	15					15
<b>HP609</b>	<b>20</b>	<b>7</b>	<b>2</b>	<b>2</b>		<b>31</b>
Apr	12	1	2			15
May		3				3
Jun	8	3		2		13
<b>2. Factory waste</b>			<b>32</b>			<b>32</b>
<b>HP609</b>			<b>32</b>			<b>32</b>
Apr			12			12
May			11			11
Jun			9			9
<b>3. Others</b>					<b>1</b>	<b>1</b>
<b>HP609</b>					<b>1</b>	<b>1</b>
May					1	1
<b>Grand Total</b>	<b>72</b>	<b>7</b>	<b>34</b>	<b>2</b>	<b>1</b>	<b>116</b>

In the first year, the monitoring result showed only the number of illegally waste dumping places, and this made it difficult to grasp the situations well. The study team proposed to record the location data and waste type along with photos and to submit the map of illegally dumping places as a part of the monitoring report.

In order to grasp the situations of collection services in rural areas after the Amalgamation, the study team conducted hearings based on the written questions followed by online interviews. The report was submitted to DLG and shared with local governments. In addition, the Waste Amount and Composition Surveys, which were left unimplemented during the second phase, was conducted in Suva and Lautoka from April to May, 2022, and the survey report was submitted to DLG and shared with local government in May.

During the third phase, the following two workshops were organized.

Activities	Results of activities
1-1. Conduct baseline survey (Population, Boundary maps, Financial status, Waste characterization survey, Collection coverage, 3R activities) for local government waste management plan	<ul style="list-style-type: none"> <li>• All the surveys except waste characterization survey were conducted in the second phase.</li> <li>• WACS was conducted in April and May in Suva and Lautoka.</li> <li>• Hearings were conducted from June to August, 2021, to know the situations of collection service in rural areas after the amalgamation.</li> </ul>
1-2. Analyze the result of baseline survey	<ul style="list-style-type: none"> <li>• Boundary map was analyzed on detail. As for the other items, it analyzed especially targeting Nasinu and Nausori town council on pilot scale.</li> <li>• Result of baseline survey was basically presented in the workshop of 1-4. In particular financial situation was analyzed based on information then to figure out relativity between waste management operation and revenue, expenditure of each municipal council.</li> </ul>
1-3. Prepare the form of local government waste management plan based on baseline survey (supposed to include those goals: Collection coverage of rural, finance the waste management service, procurement plan of trucks)	<ul style="list-style-type: none"> <li>• Template for waste management master plan was developed on Aug 2019. The template is composed of chapters of those; concept, outline of municipal council, current situation of waste management and future plan. Template is made for expressing numerically situation and plan as much as possible.</li> </ul>
1-4. Conduct the workshop to present the result of base-line survey and training for local government waste management plan	<ul style="list-style-type: none"> <li>• The workshop for training on waste management master plan was conducted at Suva city on 11th Sep and Lautoka city on 13th Sep respectively. The one for Suva was participated in by 7 municipal councils from North and Central division, while the one of Lautoka was 6 municipal councils from Western division.</li> </ul>

Activities	Results of activities
1-4. Conduct the workshop to present the result of base-line survey and training for local government waste management plan	<ul style="list-style-type: none"> <li>• J-PRISM experts visited municipal councils to see person in charge as often as possible for making close communication, since the workshop is supposed to be participated in by directors and CEOs. It is difficult to visit all municipal councils frequently so that experts visited particularly municipal councils that need advice from experts.</li> </ul>
1-5. Each council formulate waste management plan	<ul style="list-style-type: none"> <li>• Master plan formulation was processed in two stages in order for all municipal councils could make master plan in accordance with template as much as possible rather than making it all once. First stage focused on up to chapter 3 and all 13 municipal councils have completed formulation and submission of that as of Dec 2019.</li> <li>• Seven councils prepared and submitted the draft SWMP, including the Chapter 4 Master Plan, by March 2020, and the remaining 6 councils submitted their plans by February, 2021.</li> <li>• 12 councils updated the baseline data and finalized the SWMP by August, 2022.</li> </ul>
1-6. Monitor the implementation progress of local government waste management plans	<ul style="list-style-type: none"> <li>• Councils started monthly SWM monitoring using a prepared monitoring form in December, 2020, and continued the monitoring and submit the results to DLG every month since then.</li> <li>• Modified regular monitoring started in January, 2022, adding such monitoring items as collected waste mount, recycled amount, market waste amount used for composting, while decreasing the frequency from monthly to quarterly.</li> </ul>
1-7. Conduct the workshop for sharing the progress of local government waste management plans	<ul style="list-style-type: none"> <li>• Workshop for expansion of solid waste collection service in rural areas was organized in May, 2021, in order to report the current situations and to discuss problems.</li> <li>• Second workshops were organized in May, 2022, in Lautoka and Suva, in order to discuss and share how to collect, manage, and use quantitative SWM data.</li> </ul>
1-8. DLG evaluate and decide the policy based on the progress of local government waste management plans	<ul style="list-style-type: none"> <li>• The results of the monitoring are submitted to DLG for review.</li> </ul>

## 7.2.2 Activities related to Output 2

DOE was translated from then Ministry of Local government, town planning and environment to Ministry of waterways and environment shortly after R/D between Fiji government and JICA signed. This might have influenced the project for J-PRISM experts had to take certain period to get full assignment of DOE as official counterpart on Output 2. On Nov 2019 director of DOE has basically agreed on the contents of output and activities in PDM in R/D. Based on the agreement, activities were progressed since 2020 then it has been officially agreed at the JCC on November 2020.

Statistic information for import and export, and weigh-bridge data of Naboro landfill site was acquired. Questionnaire surveys to recycling business and local bottlers, are completed in the report.

During the report period (Third term), the questionnaire survey report is written after collecting the questionnaire including supplemental information collection through the site visit.

As for the waste amount and composition survey from households, the survey was suspended due to the pandemic of COVID-19 in Fiji, although it was planned to start the arrangement from March 2021. Finally the survey was conducted and completed since Mar 2022 after the pandemic was relatively settled down.

There is a bit of shortage on indicators and obvious database related to recycling in Fiji at the beginning period of the project. This survey on Output 2 could help certain area on figuring out some data and numbers for recycling. Fiji government has drafted national 5R policy in 2020 and keep updating the draft. Data and numbers obtained through this project can give advantage on setting national target or monitoring for national policy.

Table 7-2 Waste Discharge Amount in Fiji

Waste Generation Rate	Suva	Lautoka	Total
Waste Generation Rate per day (g/person/day)	557	326	429

Table 7-3 Waste Composition in Fiji

Waste Composition Rate	Suva	Lautoka	Total
Green	21%	39%	29%
Food Scrap	36%	8%	25%
Paper	7%	4%	6%
Cardboard	8%	7%	8%
Plastic Bags	4%	5%	4%
PET Bottles	2%	2%	2%
Plastic Containers	3%	3%	3%
Diaper	7%	16%	10%
Glass	3%	4%	3%
Ceramic	0%	0%	0%
Steel	0%	0%	0%
Aluminium	0%	1%	1%

Waste Composition Rate	Suva	Lautoka	Total
Other metal	3%	3%	3%
Textile	3%	4%	3%
Rubber	0%	0%	0%
Others	2%	4%	3%
Total	100%	100%	100%

Activities	Results of activities
2-1. Identify the issues and challenges of 3R+Return activity in Fiji based on the current situation	<ul style="list-style-type: none"> <li>• It identified the issues and challenges through observation visit, interview and survey existing documents</li> <li>• Feasibility study for Container Deposit Scheme (CDS) was conducted in 2008 by UNDP and concluded the scheme is positive to introduce in Fiji. However, it is not introduced yet.</li> <li>• Current situation for 3R+Return was briefly understood through visit and interview with main recycling business operators. There are three major recyclable traders in Fiji while a paper-recycling company exists and so on.</li> <li>• Fiji is not an exception as other neighbor pacific countries do so; aluminium cans and scrap metals are undergoing to international market as part of economic circuit. On contrary, PET bottles and plastics are facing big challenge for 3R.</li> </ul>
2-2. Formulate plans for pilot study(s)	<ul style="list-style-type: none"> <li>• Contents of pilot study was decided on Nov 2019 after discussion with DOE. They are composed of those such as waste audit (working with Output 1), weigh-bridge data analysis, statistical information survey on import and export, questionnaire survey from recycling related businesses and beverage bottlers.</li> </ul>
2-3. Conduct pilot study(s) such as development of database on packaging containers and various options of 3R+Return activity	Weigh bridge data and trade statistics information was acquired and questionnaire survey to recyclers and beverage companies was conducted.
2-4. Summarize the results of pilot study (s) with recommendations for options of 3R+R activity	<ul style="list-style-type: none"> <li>• The report of questionnaire survey to recyclers and beverage companies were made and summarized</li> <li>• Waste amount and composition survey was conducted and the result is summarized.</li> <li>• The recommendations was done based on the survey result in combination with JICA recycling data collection survey result.</li> </ul>

## **7.3 Challenges and lessons learnt during the Project implementation**

### **7.3.1 Amalgamation Policies to Local Municipalities**

Amalgamation policy for local government impacts significantly the waste management service on local municipalities that is given responsibilities to provide waste collection service into area beyond the municipal boundary so called rural area. On national average, the population in local municipality accounts for 32% of total population in Fiji which indicates 68% of remaining in rural area will be covered by local municipalities. Especially municipalities that has population less than 20% of total responsible population in terms of waste management gets significant challenges such as those; Ba, Labasa, Levuka, Nadi, Rakiraki, Savusavu, Sigatoka, Tavua. Out of those municipalities, 4 municipalities have only 5% of total responsible population to be remarked how those municipalities perform their responsibility imposed by Amalgamation policy.

The result of the follow-up survey shows that RLA already provided a solid waste collection service in some rural areas before the Amalgamation and the collection works were taken over by councils after the Amalgamation. The Lami Town Council smoothly took over the Health and Building works, including garbage fee collection work, with departments concerned cooperating together, while the Nausori Town Council took over the solid waste collection service but not garbage fee collection work. Councils have different ideas about the garbage fee and take different approaches to collection service in rural areas. The result of the follow-up survey was submitted to DLG and shared with local governments. In order to expand the collection areas in rural, it is critical to seek a financial source other than subsidies and to necessary to implement a user-pay system through negotiations with local residents.

### **7.3.2 Roles and Responsibilities of Departments in the field of SWM**

DOE is operating daily work based on Environment management act 2005. On the other hand, DLG is responsible for task and operation based on Local government act 1985. DOE can be considered as an organization that is primarily responsible for waste management in Fiji however DOE is more responsible for environment protection and pollution control rather than ordinary waste management service. Namely DOE waste management and pollution control unit is mainly engaged in issuing license for waste disposal permit to facilities that treat waste and recyclable, and monitoring those facilities. Also DOE is in the position to develop national strategy and policy. DLG has been situated to look after waste management in local government since the law amendment in 2018. However, there is few detailed descriptions in law for DLG to play role and responsibility on waste management service in local government so that it is not much effective in practical service. Also no post for waste management technical officer is allocated in DLG that is leading lack of capacity to do govern waste management service in local government. Local governments are doing their daily waste management service with own effort. Most of local governments are facing challenges and difficulties due to lack of human resource and finance.

Those challenges and issues might have been caused from that Fiji government did not apply a law that regulates comprehensively roles and responsibility on waste management in nationwide. This kind of law can be Waste management act in other countries such as Samoa, Tonga or Vanuatu in neighbor countries.

In this situation above-mentioned, J-PRISM experts attempted to work with DLG on Output 1 and DOE on Output 2. The 13 Municipal Waste Management Master Plans and monitoring format developed in Output 1 is expected to be shared with DOE as well as DLG although such

kind of information flow is not currently set in place. That was original intention of the project that developed those materials through the project activities. The output of the project is expected to be the link in near future in order to solve the middle or long term challenges such as formulating the fundamental waste management law and so on.

### 7.3.3 Pandemic of COVID-19

Due to the pandemic of COVID-19, field visit of short-term experts was suspended for about a year from March 2020 to March 2021, and short-term experts participated online from Japan in the JCC held in November 2020. Under J-PRISM in Fiji, the team works collaboratively with two ministries as main counterparts and 13 municipalities as grassroots counterparts. It was not efficient to work with multi-stakeholders only online and it was a burden to the counterparts.

At the start of the third phase, three short-term experts went back to Fiji and resumed planned works, organizing the second workshop (Output 1) and collecting the information on recyclers. During their stay in Fiji, however, the new corona cases were confirmed for the first time in a year, and this made it impossible for short-term experts to travel to Fiji until November, 2021.

In order to implement activities of Output 1 smoothly while a Japanese expert worked in Japan remotely, a project assistant had been assigned since May, 2021. Implementing Output 1 requires staff of local governments to improve the SWM abilities such as the data management. The assignment of the local assistant, who knows very well about SWM situations in Fiji and has technical knowledge and abilities to provide trainings on Excel and GIS mapping for C/Ps of local governments under the instruction of the Japanese expert, made it possible for C/Ps to work for J-PRISM and take trainings when they have time between daily works. It can be said that this is one of the few advantages of remote working during the coronavirus pandemic.

## 7.4 Achievement of the Outputs

1. By the initiative of Department of Local Government, Evidence-based policy is promoted based on 3R concept.		Progress: Achieved
OVI 1-1. Format Local Government Waste Management Plan is developed.	• Format of Local Government Waste Management Plan has been developed.	
OVI 1-2. Training for developing Local Government Waste Management Plan is conducted by the initiative of DLG.	• Training for developing Local Government Waste Management Plan has been conducted by initiative of DLG.	
OVI 1-3. Functional PDCA cycle for waste management between Department of Local Government and municipal councils is identified.	• DLG established a mechanism of cycle for Plan, Do, Check, Act, through the SWM plan and regular monitoring system in cooperation with local governments.	
2. Pilot study(s) for regional 3R + Return program are implemented.		Progress: Almost achieved
OVI 2-1. Recommendations for options of regional 3R+Return program are made.	<ul style="list-style-type: none"> <li>• Basic surveys including waste amount and composition survey were completed.</li> <li>• Recommendations for the option was done.</li> </ul>	

## 7.5 Achievement of the Project purpose

Solid waste is managed appropriately based on the National Waste Management and Pollution Control Strategy 2018-2028		Progress: Almost achieved
OVI 1. Waste management plan of 8 municipal councils is formulated.	<ul style="list-style-type: none"> <li>All the 13 councils prepared for the draft SWMPs by February, 2021, and 12 councils finalized the Plans by August 2022.</li> </ul>	
OVI 2. Waste management indicators in NWMPCS 2018-2028 are figured out in Local government waste management plans.	<ul style="list-style-type: none"> <li>Municipal master plan and monitoring report developed and established in the output 1 included the indicators similarly to CP 2025 although NWMPCS 2018-2028 is not endorsed yet.</li> </ul>	
OVI 3. Roadmap for waste management coverage to rural area is identified based on Local government waste management plan.	<ul style="list-style-type: none"> <li>At the workshop, organized in May, 2021, 12 local governments presented the collection expansion plan in the middle and long term. It is still necessary to discuss how to secure the budget, including introducing user-pay system (collecting garbage fees).</li> </ul>	

## 7.6 Recommendation towards achievement of Overall Goal

As to achieve Overall Goal (Sustainable management of solid waste in the Pacific region is enhanced based on Pacific Regional Waste and Pollution Management Strategy 2016 – 2025 (Cleaner Pacific 2025).), the endorsement of waste management strategy in national level could be the next important target in Fiji. As for the municipal council level, monitoring report needs to be continuously conducted based on the master plan developed in the project. The DLG is expected to govern the monitoring report as a supervising organization for municipal councils.



## 7.7 Capacity Assessment

### 7.7.1 2nd Capacity Assessment

The second CA at the institutional/social level for DLG and at the second organizational level for 13 local governments nationwide were conducted in December 2021 and July 2022. The results of the 2nd CA are shown in the figure below.

In terms of institutional and social level capacity, all items improved compared to the baseline. This is because the DLG, which became in charge of waste management of local governments due to the amended law in 2018 at the baseline CA, is working on waste management with the municipalities. Specifically, under the management of DLG, 13 local governments formulated solid waste management plans with guidance from Japanese experts. DLG officers accompanied the guidance in each municipality, grasped the status of waste management in each municipality, and examined monitoring items for waste management plans. In particular, the formulation of waste management plans and the establishment of monitoring systems by local governments have progressed, and as a result, 2) Policies and institutional settings of local governments has improved.

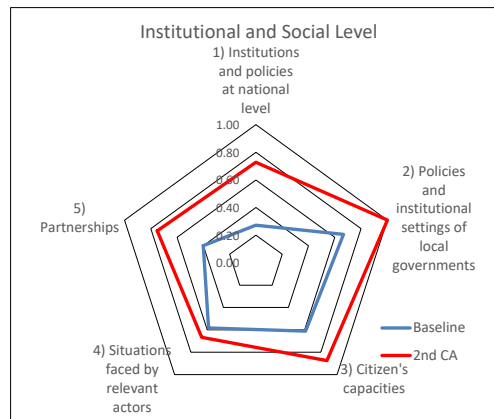
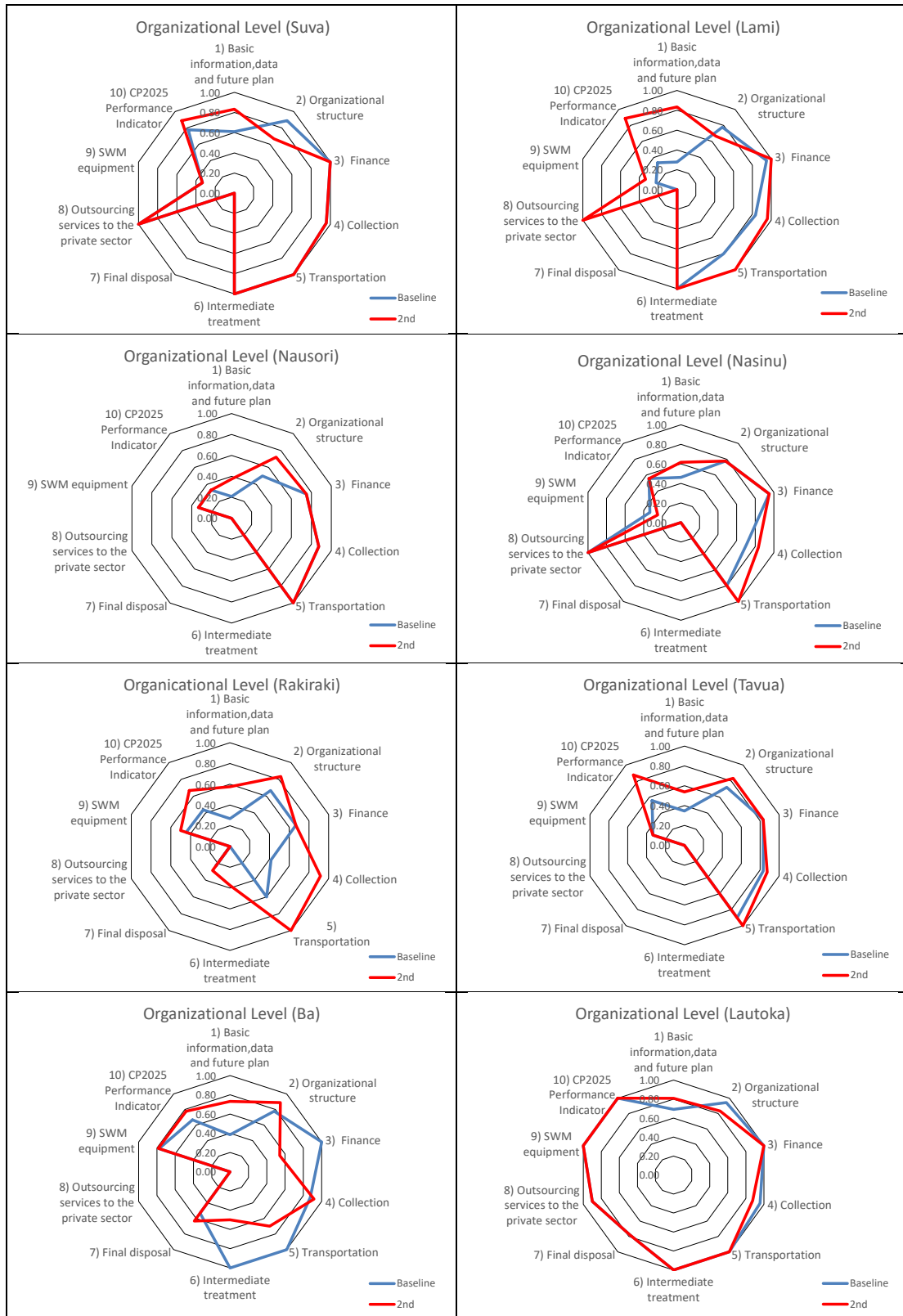


Figure 7-1 CA results at the Institutional/Social level in Fiji

At the organizational level, the second CA was conducted for each municipality. Regarding 1) Basic information, data and future plan for SWM, all local governments have improved their capacity. This is because each municipality reorganized and updated the basic information and data related to waste management and formulated a waste management plan. In addition, there is a slight difference between municipalities in terms of "finance," "collection," "transportation," and "intermediate treatment," which are directly linked to the improvement of waste management in all municipalities. This indicates that due to changes of CEOs, transfers of health inspectors, financial conditions, etc. in municipalities during the two years from the baseline, there is a rise and fall in capacity at the organizational level. In the future, in order to maintain or improve a certain organizational level capacity for waste management, it is expected that each municipality will build on the solid waste management plans formulated by them.



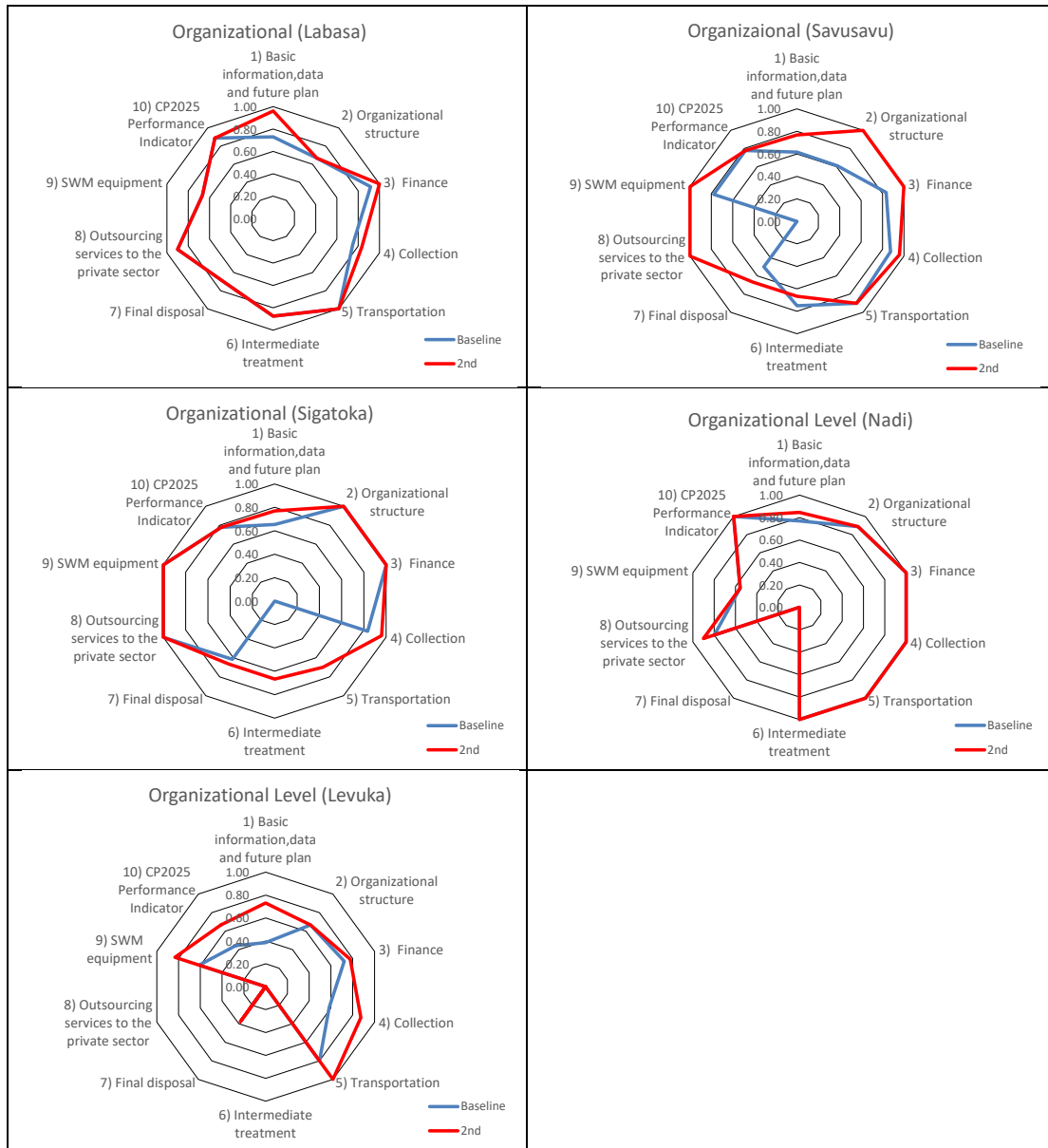


Figure 7-2 CA results at the Organizational level in Fiji<sup>12</sup>

<sup>12</sup> It is necessary to note that the capacity's perspective and balance will differ depending on preconditions, such as whether the municipality outsources collection and transportation to the private sector and whether intermediate processing, such as composting and recycling, is in place, and whether it has a final disposal site. Items with a score of "0" do not carry out services related to the item.

## 8 Value added work based on pandemic of the COVID-19

### 8.1 Activities for developing introductory material on project target countries

Under the situation where it was difficult to travel to the project target countries due to the pandemic of COVID-19, work which is expected to enhance added value of the project, activities for developing introductory materials which introduce status of waste management, organize cases of good practices and introduce fee collection/financial situation on waste management on the project target countries was done. Details on each activities are shown in the table below.

Activities	Results of activities
1 Develop introductory material on status of waste management for each country	<ul style="list-style-type: none"> <li>Snapshot on Solid waste management for each countries and introduction of activities conducted under J-PRISM for PNG, Solomon, Vanuatu, Tonga, Samoa and Fiji and summary version of that for J-PRISM II target countries (9 countries) were developed (Japanese, English).</li> </ul>
2 Organize cases of good practices based on the template provided by Project Office.	<ul style="list-style-type: none"> <li>“Formulation of National Waste Management Strategy (Target country: Samoa)”, “Establishment of Nationwide Waste Management with Developing Capacity of Local Governments (Target countries: PNG, Vanuatu, Solomon) and “Waste Management fee collection” (Target countries: Vanuatu, Tonga) were developed (English).</li> </ul>
3 Develop introductory material on fee collection/financial situation on waste management for each countries.	<ul style="list-style-type: none"> <li>“Case studies on waste management fee collection (Target countries: 9 target countries under J-PRISM II) was developed (English).</li> </ul>

### 8.2 PNG: Activities on Improvement of Occupational Health and Safety (OHS) of Solid Waste Management Workers against Infectious Waste including COVID-19

The awareness on the importance of Occupational Health and Safety (OHS) against infectious waste had been increased worldwide with the spread of COVID-19. In response to the growing needs for OHS guidance in PNG, technical guidance on OHS for waste management workers was additionally implemented. In particular, several activities were carried out, such as a preparation of manuals specializing in infectious waste countermeasures, distribution of safety equipment, and OHS training. NCDC had participated in training organized by the International Labor Organization (ILO) in the past. Since OHS activities in PNG can be a model in the PICTs, OHS training was shot to be shared as a training video to the remote islands in PNG and other countries in PICTs. The results of each activity are shown below.

Activities	Results of activities
1 Develop a NCDC OHS manual against infectious waste in municipal solid waste management	<ul style="list-style-type: none"> <li>OHS manual was prepared and finalized with NCDC staff. 150 copies were printed and distributed.</li> </ul>

Activities	Results of activities
2 Develop a OHS awareness leaflet against infectious waste	<ul style="list-style-type: none"> <li>Based on the OHS manual, OHS leaflets were prepared.</li> <li>1,180 OHS leaflets were distributed in total (150 copies/design, 3 designs (for waste collection workers, for drivers, for landfill workers and for community).</li> </ul>
3 Implement OHS training and outreach activities based on the manual and leaflet	<ul style="list-style-type: none"> <li>The list of trainees (196 collection workers and 43 landfill workers) was finalized and OHS training and outreach activities were carried out by NCDC.</li> </ul>
4 Produce a OHS training movie	<ul style="list-style-type: none"> <li>OHS training movie was produced in collaboration with NCDC's public relations.</li> </ul>
5 Distribute safety gears on a pilot basis	<ul style="list-style-type: none"> <li>Specifications and quantity of safety gears were confirmed by NCDC and finalized.</li> <li>Safety gears were handed over to NCDC on 26th April 2022. Details of safety gear are as follows: <ul style="list-style-type: none"> <li>➢ 239 Re-usable Face Mask</li> <li>➢ 239 Safety Hand Gloves</li> <li>➢ 43 Safety Trouser &amp; Safety Sleeve Shirt</li> <li>➢ 43 Goggles (clear and dark)</li> <li>➢ 43 Saety Gum Boots (Pairs)</li> <li>➢ 30 Noncontact Thermometers</li> <li>➢ 60 Hand Sanitizer</li> </ul> </li> </ul>
6 Monitor OHS implementation with provided safety gears	<ul style="list-style-type: none"> <li>Monitoring system and methods on OHS implementation with provided safety gears were finalized and first monitoring was implemented in September 2022.</li> </ul>

### 8.3 Remote basis activity conducted in relation to country activities

Activities	Results of activities
1 Technical guidance services for the construction of the next landfill block (Cell-3) at the Baruni Landfill Site, PNG, including the preparation of preliminary design drawings for the construction of Cell-3.	<ul style="list-style-type: none"> <li>The short-term expert prepared preliminary design drawings for the construction of Cell-3 in Japan in October-November 2021, based on the Fukuoka method sanitary landfill.</li> <li>The short-term expert sent the design drawings to NCDC in December 2021, provided an email-based explanation of the design details and guidance on incorporating them into the tender documents for the selection of the contractor.</li> </ul>
2 A portable gas monitor and a portable water quality meter will be procured for environmental monitoring at the Baruni disposal site in PNG, and support will be provided for the construction of an environmental monitoring system at NCDC.	<ul style="list-style-type: none"> <li>Gas monitors and water quality meters were procured in Japan and delivered to NCDC on 28 February 2022.</li> </ul>

Activities	Results of activities
<p>2 A portable gas monitor and a portable water quality meter will be procured for environmental monitoring at the Baruni disposal site in PNG, and support will be provided for the construction of an environmental monitoring system at NCDC.</p>	<ul style="list-style-type: none"> <li>• Test measurements of landfill gas and leachate quality were carried out at the Baruni disposal site on 21 and 22 March of the same year, confirming that the equipment was functioning properly.</li> <li>• The JICA experts held discussions with NCDC on the establishment of a monitoring system, the first of which was to be carried out using both water quality tests covering PNG national effluent standard items and our simple water quality meter, which will be used as baseline data and the basis for future monitoring.</li> </ul>
<p>3 Provide technical support for the procurement of heavy equipment for Bouffa landfill site by JICA Vanuatu Office.</p>	<ul style="list-style-type: none"> <li>• An expert was dispatched to Vanuatu twice in October-November 2021 and August 2022 to provide technical support to JICA Vanuatu office in the process of the procurement of heavy machinery for disposal sites. Specifically, the expert provided technical support and advice on: <ol style="list-style-type: none"> <li>1) Specifications of procured equipment and tender documents</li> <li>2) Selection of equipment to be procured</li> <li>3) Confirmation of specifications</li> <li>4) Preparation of tender documents</li> <li>5) Implementation process of tender.</li> <li>6) Proposal evaluation by summarizing technical evaluation results</li> </ol> </li> <li>• The expert attended the bidding meeting held on November 17, 2021 and provided operational support related to procurement procedures.</li> <li>• Heavy machinery maintenance and management system at the PVCC workshop was confirmed, and a series of trainings for mechanics was conducted.</li> </ul>
<p>4 Conduct On-line Training on Operation and Maintenance of Collection Vehicles and Heavy Machines in Tonga</p>	<ul style="list-style-type: none"> <li>• From December 2021 to August 2022, on-line training on vehicle operation and maintenance were conducted by the expert on vehicle maintenance. The details are as follows.</li> <li>• Equipment lists and check lists in each island were collected, and the current practices of daily inspection before and after services were confirmed by video for review.</li> <li>• To confirm the current situation and issues on daily and periodic inspection in each island, consultation meetings were conducted four times. Based on the results of the meetings, training contents and materials were prepared.</li> </ul>

Activities	Results of activities
4 Conduct On-line Training on Operation and Maintenance of Collection Vehicles and Heavy Machines in Tonga	• On-line training on daily and periodic inspections for vehicle operation and maintenance was conducted twice.

\*There is relevant description in each country's activity.

#### 8.4 Outputs from value added work

No	Title of outputs/documents	Creation date	Summary
1	Introductory material on status of waste management	Sep 2022	Snapshot on Solid waste management for each countries and introduction of activities conducted under J-PRISM for PNG, Solomon, Vanuatu, Tonga, Samoa and Fiji and summary version of that for J-PRISM II target countries (9 countries) in Japanese and English
2	Cases of good practices	Jan 2022	“Formulation of National Waste Management Strategy (Target country: Samoa)”, “Establishment of Nationwide Waste Management with Developing Capacity of Local Governments” (Target countries: PNG, Vanuatu, Solomon)” and “Waste Management fee collection (Target countries: Vanuatu, Tonga)” in English
3	Case studies on waste management fee collection	Jan 2022	“Case studies on waste management fee collection (Target countries: 9 target countries under J-PRISM II)” in English
4	PNG: Deliverables related to Activities on Improvement of Occupational Health and Safety (OHS) of Solid Waste Management Workers against Infectious Waste including COVID-19	Sep 2022	Implementation Report on OHS improvement against Infectious Waste in PNG (including OHS manual, OHS leaflets, OHS training movie etc.)
5	Vanuatu: Deliverables related to Technical Support for Procurement of Heavy Equipment for Bouffa Landfill Site by JICA Vanuatu Office	Aug 2022	Implementation Report on Technical Support for Procurement of Heavy Equipment For Bouffa Landfill Site (Comparison Table of Technical Specifications, Maintenance Management Procedure Manual, Inspection Form for Excavator Before Starting the Works, Field Note etc.)
6	Output through technical guidance services for the construction of the next landfill block (Cell-3) at the Baruni Landfill Site, PNG	Nov 2021	Preliminary design drawings for the construction of Cell-3

No	Title of outputs/documents	Creation date	Summary
7	Output through On-line Training on Operation and Maintenance of Collection Vehicles and Heavy Machines in Tonga	Aug 2022	Training material



*Annex A : Attachment for Independent  
state of Papua New Guinea*

## Table of Contents

<b>1</b>	<b>Lists of Project outputs and related documents.....</b>	<b>1</b>
<b>2</b>	<b>Inputs and Work schedule .....</b>	<b>1</b>
2.1	Inputs.....	1
2.1.1	Dispatch of Japanese experts .....	1
2.1.2	Acceptance of trainees .....	1
2.2	Work schedule.....	2
<b>3</b>	<b>Work flow chart.....</b>	<b>3</b>
3.1	Work flow chart based on PO2 .....	3
<b>4</b>	<b>Changes of PDM .....</b>	<b>4</b>
<b>5</b>	<b>JCC .....</b>	<b>4</b>
5.1	Program of 4th JCC.....	4
5.2	Minutes of Meeting (Including participants list) .....	5

## 1 Lists of Project outputs and related documents

Table 1-1 Lists of Project outputs and related documents (PNG)

No.	Name of the Outputs	Issued date	Outline
1	National Waste Management Policy 2022-2032 (version 4)	Jun. 2022	Draft policy on solid waste management updated by the counterpart
2	Waste flow Figures	Aug. 2022	Flow diagram showing the waste stream from generation to disposal for 4ULLGs
3	Implementation plan to improve the priority issues of the 4ULLGs	Apr. 2022	Implementation plans for priority issues extracted from each of the 4ULLGs
4	Draft revision edition of NCD WM Plan	Aug. 2022	NCD Waste Management Plan 2016-2025 Based on the 2021 data obtained from Weighbridge, the plan revises the activities for the period 2022-2025, taking into account the progress of waste flow and action plans.
5	4th JCC meeting materials	Apr. 2022	Project progress, activity reports, MOA of city-city cooperation etc

## 2 Inputs and Work schedule

### 2.1 Inputs

#### 2.1.1 Dispatch of Japanese experts

No.	Name	Expert	Dispatch period		PM	PM
			Start date	End date		
1	Junji Anai	Sub Team leader / SWM D2	2022/2/12	2022/4/30	2.07	2.07
2	Yoshinosuke Hamada	SWM F2	2022/4/10	2022/5/10	1.03	1.03
			2022/8/21	2022/9/18	0.97	0.97
3	Mitsuko Nakamura	Capacity Development E	2022/4/10	2022/5/10	1.03	1.03
Total						5.10

\*Regarding dispatch period of Anai, 62 days are for assignment of this project, and 16 days are for other assignment.

\*Work in Japan is separately summarized.

#### 2.1.2 Acceptance of trainees

There was no acceptance of trainees.

## 2.2

### Work schedule

Activities	2017		2018				2019				2020				2021				2022				
	Plan	Actual	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
<b>Sub-Activities</b>																							
<b>Output 1: Institutional capacity on SWM is enhanced through development of a National Policy, Strategy and Implementation Plan in line with the Cleaner Pacific 2025.</b>																							
1-1. Study on data collection flow for CEPA to get information on SWM form local levels regularly	Plan	Actual																					
1-2. Study on necessary data to grasp current situation on SWM at local levels	Plan	Actual																					
1-3. Carry out data collection from local levels	Plan	Actual																					
1-4. Review the data collection flow	Plan	Actual																					
1-5. Amalisse the collected data	Plan	Actual																					
1-6. Elaborate the data collection flow	Plan	Actual																					
1-7. Identify priority issues on SWM at the national level for development of draft National Policy, Strategy and Implementation Plan	Plan	Actual																					
1-8. Organize a series of national and regional consultation meetings *** for National Policy, Strategy and Implementation Plan	Plan	Actual																					
1-9. Develop the final draft of the SWM Implementation Plan to be incorporated in the National Policy, Strategy and Implementation Plan	Plan	Actual																					
<b>Output 2: Planning capacity to tackle with the issues on SWM of some ULLGs is enhanced.</b>																							
2-1. Develop the programme for planning capacity enhancement on SWM	Plan	Actual																					
2-2. Organize workshop for basic data management on SWM	Plan	Actual																					
2-3. Conduct data collection to develop a waste flow	Plan	Actual																					
2-4. Develop a waste flow based on the actual data collected in some ULLGs	Plan	Actual																					
2-5. Identify priority issues based on the developed waste flow	Plan	Actual																					
2-6. Develop an implementation plan for improvement of the prioritised issue in some ULLGs	Plan	Actual																					
<b>Output 3:NCD SWM Plan 2016-2025 is implemented sustainably as scheduled.</b>																							
3-1. Install a weighbridge and data recording system at Baruni Disposal Site	Plan	Actual																					
3-2. Introduce a new tipping fee charging system	Plan	Actual																					
3-3. Establish a data management system on SWM	Plan	Actual																					
3-4. Review the Action Plan of the NCD WM Plan 2016 -2025	Plan	Actual																					
3-5. Develop implementation plans based on the reviewed Action Plan of NCD WM Plan 2016 - 2025	Plan	Actual																					
3-6. Undertake prioritised implementation plans	Plan	Actual																					
3-7. Monitor progress of the implementation plans	Plan	Actual																					
3-8. Review the NCD WM Plan 2016 - 2025 by assessing the progress of the Action Plan	Plan	Actual																					

### 3 Work flow chart

#### 3.1 Work flow chart based on PO2

Term Year	1st Term 2017												2nd Term 2018												3rd Term 2019												2020												2021												2022											
	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12		
C. Activities in PNG [Output] The study on SWM is enhanced through development of a National Policy, Strategy and Implementation Plan in line with the Charter Pacific 2025. [Output] Planning capacity is made with the issue on SWM of some ULLGs is enhanced. [Output] NCD WM Plan 2016-2025 is implemented sustainably as scheduled.	C-1-1 Study on data collection flow for CEPA to get information on SWM form local levels regularly C-1-2 Study on necessary data to grasp current situation on SWM at local levels C-1-3 Carry out data collection from local levels C-1-4 Review the data collection flow C-1-5 Analyze the collected data C-1-6 Establish the data collection flow C-1-7 Identify priority issues on SWM C-1-8 Draft the SWM parts in the National Policy, Strategy and Implementation Plan												C-2-1 Develop the programme for planning capacity enhancement on SWM C-2-2 Organize workshop for basic data management on SWM C-2-3 Conduct data collection to develop a waste flow C-2-4 Develop a waste flow based on the actual data collected in some ULLGs C-2-5 Identify priority issues based on the developed waste flow C-2-6 Develop an implementation plan for improvement of the prioritized issues in some ULLGs												C-3-1 Install a weighbridge and data recording system at Baruni Disposal Site C-3-2 Introduce a new tipping fee charging system C-3-3 Establish a data management system on SWM C-3-4 Review the Action Plan of the NCD WM Plan 2016-2025 C-3-5 Develop implementation plans C-3-6 Undertake prioritized implementation plans C-3-7 Monitor progress of the implementation plans C-3-8 Review the NCD WM Plan 2016-2025 by assessing the progress of the Action Plan																																															

## 4 Changes of PDM

There was no changes of PDM during the 3rd term.

## 5 JCC

The 4th JCC was conducted on April 26th 2022.

### 5.1 Program of 4th JCC

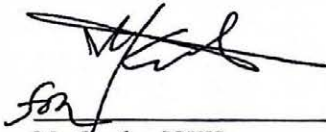
- Date: 26th April 2022
- Time: 9:00 – 13:00
- Venue: Kumul Conference Room, Holiday Inn Hotel
- Agenda:


PNG Time	Agenda	Facilitator/Resource person
09:00 – 09:30	Registration	All participants
09:30 – 09:40	1. Opening Remarks & Introduction of participants	Mr. Maino Virobo - Director, Policy Division, CEPA
09:40 – 09:50	2. Objectives and Agenda	Facilitator: Mr. Simeon Terina, Project Coordinator, NCDC
09:50 – 10:05	3. CEPA's Report on Output 1	Mr. Veari Kula Manager, Infrastructure, Utilities and Conventions Branch, CEPA
10:05 – 10:45 (10mins each)	4. ULLGs Report on Output 2 Alotau ULLG Goroka ULLG Kokopo/Vunamami ULLG Lae City Authority	Representative of AULLG Representative of GULLG Representative of KVULLG Representative of LCA
10:45 – 11:00	5. NCDC Report on Output 3	Mr. John Navara Manager, NCDC WM Division
10:40 – 11:00	Coffee Break	
11:00 – 11:40	6. Confirmation of project progress and remaining activities based on the 10th Monitoring sheet  Question & Answer  Signing of Minutes of Meeting	JICA Experts Mr. Yoshinosuke HAMADA Mr. Junji ANAI Ms. Mitsuko NAKAMURA
11:40 – 11:55	7. Signing Ceremony on Minutes of Agreement (MOA) between NCDC & AULLG / NCDC & LCA	MC: Ms. Janet HAUA, Director, Community and Social Services, NCDC CEPA, NCDC, AULLG, LCA, JICA
11:55 – 12:10	8. Handover Ceremony for Personal Protective Equipment (PPE)	JICA PNG Office - NCDC
12:10 – 12:20	9. Closing remarks	JICA PNG Office
12:20 - 13:00	Lunch	


## 5.2 Minutes of Meeting (Including participants list)


**MINUTES OF MEETING  
FOR  
THE FOURTH JOINT COORDINATING COMMITTEE  
ON  
THE JAPANESE TECHNICAL COOPERATION PROJECT  
FOR PROMOTION OF REGIONAL INITIATIVE ON SOLID WASTE  
MANAGEMENT IN PACIFIC ISLAND COUNTRIES PHASE II (J-PRISM II)  
IN  
THE INDEPENDENT STATE OF PAPUA NEW GUINEA**

Port Moresby, PNG, 26<sup>th</sup> April 2022

  
Mr. Gunther JOKU  
Project Director,  
Managing Director,  
Conservation and Environment Protection  
Agency,  
Independent State of Papua New Guinea

  
Mr. Ravu FRANK  
City Manager,  
National Capital District Commission,  
Independent State of Papua New Guinea

  
Mr. Reichert THANDA  
Acting First Assistant Secretary,  
Development Cooperation and Management  
Division,  
Department of National Planning and  
Monitoring,  
Independent State of Papua New Guinea

  
Mr. Junji ANAI  
Deputy Team Leader,  
JICA Expert G2 Team, J-PRISM II

*Witnessed by:*

  
Mr. Masato KOINUMA  
Chief Representative,  
Papua New Guinea Office,  
Japan International Cooperation Agency

### **The Fourth Joint Coordinating Committee of the J-PRISM II Project**

26<sup>th</sup> April 2022, Holiday Inn, Port Moresby, PNG

1. Meeting started at 09:45 a.m.
2. Attendants list of the meeting is given in **ANNEX-1**
3. Opening of the meeting

Opening remark was given by Mr. Maino Virobo, Director of Policy Division, Conservation and Environment Protection Agency (CEPA). Subsequently, Mr. Simeon Terina, J-PRISM II Project Coordinator, Waste Management Division (WMD), National Capital District Commission (NCDC) acted as a facilitator.

4. Confirmation and Agreement

Ms. Terina proceeded the meeting in accordance with the programme in **ANNEX-2**. All the attendants confirmed and agreed the following matters:

- (1) Progress of the Project

JCC acknowledged that the several activities were carried out by the counterparts with technical assistance of JICA Expert Team (JET) from the 3<sup>rd</sup> JCC to April 2022 according to the presentation by CEPA, Alotau, Goroka, Kokopo and Lae ULLGs, NCDC and JET.

- (2) Uncompleted activities

The JCC confirmed that activities 1-8, 1-9, 2-6, 3-2, 3-3 and 3-8 in the PDM had not been completed and agreed to continue to complete the activities until the end of the project. It was also confirmed among the counterparts that efforts will be made to further complete the activities that are generally completed.

- (3) Modification of PO

The JCC approved a change in the project end date due to the project duration being extended by seven months to 30<sup>th</sup> September 2022 due to activity constraints in COVID-19, and a proposed reschedule of uncompleted activities. JCC agreed no modification of the Project Design Matrix (PDM) and modification of the Plan of Operation (PO) shown as **ANNEX-3** and **ANNEX-4** respectively.

- (4) Updated List of Counterparts





JCC updated List of Counterpart shown as **ANNEX-5**.

#### 5. Outcome of discussion

Key outcome of discussion of JCC are as follows;

- With regard to Output 1, the JCC confirmed that CEPA has revised the National Waste Management Policy 2020-2030 based on the results of the four Regional Consultation Workshops held so far and that a National Consultation Workshop will be held in July this year to finalise it.
- For Output 2, the JCC confirmed that Kokopo and Goroka, Alotau and Lae, with technical assistance from NCDC and JICA experts, have studied the current status of waste management and prepared a waste flow Kokopo has already prepared a waste management plan based on this study. Goroka, Alotau and Lae confirmed that they intend to develop improvement implementation plans for the identified priority issues by the end of the project.
- With regard to Output 3, the JCC confirmed that NCDC has taken steps to address the frequent power outages at the Baruni disposal site and that a permanent weighbridge operational structure will soon be in place and an NCDC data management system, including weighbridge data, will be in place. It also confirmed that the NCD WM Plan will be revised by the end of July and submitted to the NCDC in August.
- The JCC and the attendees confirmed that the JICA experts will continue to evaluate and analyse the results of the implementation of J-PRISM II to strengthen Counterparts' waste management capacity through the content of the deliverables and interviews with relevant stakeholders.

#### 6. Others

Participants came to have a common understanding on the following matters.

- (1) On April 26, 2022, Alotau and Lae signed a memorandum of understanding for City-City cooperation on waste management with NCDC, respectively, based on the intercity cooperation program launched on March 10, 2019 in collaboration with CEPA.

- (2) Delivery of personal protective equipment (PPE)

JICA has added to J-PRISM II the provision of personal protective equipment (PPE) as an infection prevention measure to workers at the Baruni disposal site as part of COVID-19 measures. This PPE was handed over to NCDC, which

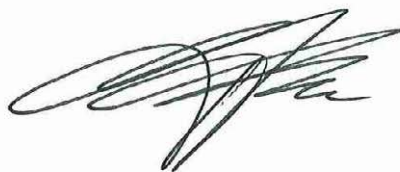


operates and manages the Baruni disposal site, by JICA on April 26, 2022.

7. Closing of the meeting

The meeting was closed at 12:30pm

- ANNEX 1: List of Attendants
- ANNEX 2: Agenda of 4<sup>th</sup> JCC
- ANNEX 3: Project Design Matrix (PDM<sub>3</sub>)
- ANNEX 4: Plan of Operation version 3 (PO<sub>3-2</sub>)
- ANNEX 5: Revised List of Counterparts



MK

ANNEX1



CONSERVATION & ENVIRONMENT PROTECTION AUTHORITY  
J-PRISM II PROJECT 4TH JOINT COORDINATION COMMITTEE MEETING  
DATE: 26TH APRIL 2022  
VENUE: HOLIDAY INN HOTEL, PORT MORESBY

No.	Name	Project Position	Position	Organization	Email	Sign
1	Mr. Gunther Joku	National Project Director	Managing Director	Conservation & Environment Protection Authority (CEPA)	guntherjoku@yahoo.com	
2	Mr. Maimo Yirobo	JCC member	Director, Policy Division	CEPA	maimo681@gmail.com	
3	Mr. Ravu Frank	JCC member	a/City Manager	National Capital District Commission (NCDC)	janeth@ncdc.gov.pg	
4	Ms. Janet Haua	Counterpart	Director, Department of Community and Social Services	NCDC	janeth@ncdc.gov.pg	
5	Mr. Veari Kula	Co-National Project Manager	Manager, Infrastructure Utilities and Conventions Branch	CEPA	vearikula@gmail.com	
6	Mr. John Navara	Co-National Project Manager	Manager, Waste Management Division	NCDC	johnm2@ncdc.gov.pg	
7	Ms. Carmel Joriduo	JCC member	Senior Policy Officer, Policy Division	CEPA	earmel.joriduo@gmail.com	
8	Ms. Rebecca Rami	JCC member	Senior Assessment Officer, Infrastructure Utilities and Conventions Branch, Environment Protection	CEPA	rramitende@gmail.com	
9	Ms. Anita Pessi	JCC member	Project Coordinator, ODS Project (GIZ)_IUC Branch	CEPA	anitaspessi909@gmail.com or aposesi@cepa.gov.pg	
10	Ms. Kathrina Mogia	JCC member	Project Assistant, ODS Project (GIZ)_IUC Branch	CEPA	kathrinamogia@gmail.com.pg	
11	Ms. Patricia Toreia	JCC member	Project Coordinator, MIA Project (GEF)_IUC Branch	CEPA	patoreia31@gmail.com	
12	Ms. Boga Biru	JCC member	J-PRISM II Project Coordinator	J-PRISM/CEPA	bbiru231014@gmail.com or bbiru@cepa.gov.pg	
13	Ms. Nopulee Henao	JCC member	Assistant, UNEP Special Programme	UNEP Special Programme/CEPA	nopuleehenao@gmail.com	
14	Mr. Simeon Terina	Counterpart	Project Coordinator	WMD, NCDC	sterina@ncdc.gov.pg	
15	Mr. James Rieky	Counterpart	Waste Management Engineer	WMD, NCDC	jamesr@ncdc.gov.pg	
16	Mr. Walter Aukleya	Counterpart	Senior Waste Management Officer (Disposal Management)	WMD, NCDC	WalterA@ncdc.gov.pg	
17	Ms. Violet Loi	Counterpart	Waste Management Officer (Disposal Management)	WMD, NCDC	VioletL@ncdc.gov.pg	
18	Mr. Ronnie Ranu	Counterpart	Senior Waste Management Officer (Industrial and Hazardous Waste)	WMD, NCDC	ronnier@ncdc.gov.pg	
19	Ms. Vivianne Morofa	Counterpart	Senior Waste Management Officer (Hazardous Waste, Public Places, Sanitary Pan)	WMD, NCDC	viviannem@ncdc.gov.pg	
20	Ms. Dianna Wapyyer	Counterpart	Waste Management Officer (Hazardous Medical Waste)	WMD, NCDC	DiannaW@ncdc.gov.pg	

21	Mr. Paul Wisi	Counterpart	Senior Waste Management Officer (Domestic, Commercial)	WMD, NCDC	Paul.W@ncdc.gov.pg	
22	Ms. Raehael Inamuka	Counterpart	Waste Management Officer (Settlements, Villages)	WMD, NCDC	rachaeli@ncdc.gov.pg	
23	Mr. Joshua Robert	Counterpart	Supervisor (Landfill)	WMD, NCDC	JoshuaR@ncdc.gov.pg	
24	Mr. Josing Salimbi	JCC member	Programme Officer Environment	National Department of Health (NDOH)	jsalimb47@gmail.com	
25	Ms. Dorcas Hutu	JCC member	Aid Coordinator, Japan Desk	Department of National Planning and Monitoring (DNPM)	dorcas_hutu@planning.gov.pg	
26	Mr. Jovitha Simbiken	JCC member	Graduate Trainee, Bilateral Branch	DNPM		
27	Mr. Katsushi Ohara	JCC member	JICA Development Advisor	DNPM & DoT	katsutimor@hotmail.com	
28	Mr. Johnson Kilis	JCC member	Senior Scientific Officer, Mitigation Division	CCDA	kilisyaj37@gmail.com	
29	Prof. Frank Griffin	JCC member	Vice Chancellor	University of Papua New Guinea (UPNG)	frankg@upng.ac.pg	
30	Mr. Peter Saguba	JCC member	Senior Lecturer, Environment Science Branch	Pacific Adventist University (PAU)	Peter.Saguba@pau.ac.pg	
31	Mr. Jonathan Iping	Counterpart	Director, Community and Social Services	Lae City Authority (LCA)	jipang@gmail.com	
32	Ms. Concitha Lalo	JCC member	Senior Environment Health Officer	Lae City Authority (LCA)	laloconcitha@gmail.com	
33	Mr. Harold Abori	JCC member	Town Manager	Goroka Urban Local Level Government (GULLG)	harold@ulig-png-egg	
34	Ms. Revie Taplar	Counterpart	Senior Environment Health Officer	Kokopo Vanuamami ULLG	revietaplar@gmail.com	
35	Mr. Mickey Gahinem	JCC member	Town Manager	Aloiau ULLG	mickeygahinem@gmail.com	
36	Mr. Ivan Maraka	Counterpart	Senior Environment Health Officer	Aloiau ULLG	ivan.maraka@gmail.com	
37	Mr. Satoshi ISONO	Observer	Councillor	Embassy of Japan in Papua New Guinea	satoshi.isono@mofa.go.jp	
38	Mr. Atsushi Namba	Observer	Councillor	Embassy of Japan in Papua New Guinea	atsushi.namba-2@mofa.go.jp	
39	Mr. Masato Koiuma	JCC member	Chief Representative	JICA PNG Office	Koiuma.Masato@jica.go.jp	
40	Mr. Takahiro Yokota	JCC member	Senior Representative	JICA PNG Office	Yokota.Takahiro@jica.go.jp	
41	Mr. Go Abe	JCC member	Representative	JICA PNG Office	abe.go@jica.go.jp	
42	Ms. Fiona Silo	JCC member	Administration Assistant	JICA PNG Office	Silo-Fiona@jica.go.jp	
43	Mr. Junji Anai	JCC member	Deputy Team Leader	JICA Project Team	anai.junji@gmail.com	
44	Mr. Yoshinosuke Hamada	JCC member	JICA Expert / Waste Management	JICA Project Team	ys-hamada@yachiyo-eng.co.jp	
45	Ms. Misako Nakamura	JCC member	JICA Expert / Capacity Development	JICA Project Team	mtsk.nakamura@gmail.com	
46	Ms Dorucas Hutu	Observer	A person in charge of the Japan Desk	DNPM		
47	Ms Jovitha Simbiken	Observer	Graduated Training.	DNPM		

	Name	Position	Organisation	Email	Signature	Project Position
48	Mrs EMILY M.P	M.H. Officer	CCDA	emulvin1@gmail.com		
49	Mrs Chantelle-I	CEPA NOU	CEPA	prgnou@gmail.com		
50	Mrs BEVIN J	MEMBER ADULT &	ADULT			
51	Mrs BIGUALE I	S. STAFF	ADULT	ilcaiah.biguale@aulg.gov.pg		
52	Mr ALVIN M	JICA Rep	JICA	Mokavelega - Alvin@jica.go.jp		
53	PAUL TAMMIKITY		NBC	tammikp@gmail.com		
54	CYNTHIA MUKU		EMTV	emateventv.com.pg		
55	Lucy ANENE		EMTV	lucy@emtv.com.pg		
56	Lorraine Jimal		The National	ann.marrimjimal@gmail.com		
57	AMELIA HAWA		FM100	ahawad@fm100.com.pg		
58	FARSIAN: BUNGEAT	PR	NEDC	Farsiab@nedc.gov.pg		
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70						

A

MK

## ANNEX 2



### The 4<sup>th</sup> Joint Coordination Committee (JCC) Meeting of J-PRISM II (Draft)

1. **Date**  
Tuesday, 26<sup>th</sup> April 2022
2. **Time**  
09:00 am – 13:00 pm
3. **Venue**  
Kumul Conference Room, Holiday Inn Hotel, Port Moresby

#### 4. Agenda

PNG Time	Agenda	Facilitator/Resource person
09:00 – 09:30	Registration	All participants
09:30 – 09:40	1. Opening Remarks & Introduction of participants	Mr. Maino Virobo - Director, Policy Division, CEPA
09:40 – 09:50	2. Objectives and Agenda	Facilitator: Mr. Simeon Terina, Project Coordinator, NCDC
09:50 – 10:05	3. CEPA's Report on Output 1	Mr. Veari Kula Manager, Infrastructure, Utilities and Conventions Branch, CEPA
10:05 – 10:45 (10mins each)	4. ULLGs Report on Output 2  Alotau ULLG Goroka ULLG Kokopo/Vunamami ULLG Lae City Authority	Representative of AULLG Representative of GULLG Representative of KVULLG Representative of LCA
10:45 – 11:00	5. NCDC Report on Output 3	Mr. John Navara Manager, NCDC WM Division
10:40 – 11:00	Coffee Break	
11:00 – 11:40	6. Confirmation of project progress and remaining activities based on the 10 <sup>th</sup> Monitoring sheet  Question & Answer  Signing of Minutes of Meeting	JICA Experts Mr. Yoshinosuke HAMADA Mr. Junji ANAI Ms. Mitsuko NAKAMURA
11:40 – 11:55	7. Signing Ceremony on Minutes of Agreement (MOA) between NCDC & AULLG / NCDC & LCA	MC: Ms. Janet HAUA, Director, Community and Social Services, NCDC CEPA, NCDC, AULLG, LCA, JICA
11:55 – 12:10	8. Handover Ceremony for Personal Protective Equipment (PPE)	JICA PNG Office - NCDC
12:10 – 12:20	9. Closing remarks	JICA PNG Office
12:20 - 13:00	Lunch	

#### 5. **Expected Participants (Name of Organizations):**

- Conservation & Environment Protection Authority (CEPA)
- National Capital District Commission (NCDC)
- ULLGs (Alotau, Goroka, Kokopo, Lae)

MC



- Department of National Planning and Monitoring (DNPM)
- National Department of Health (NDOH)
- University of Papua New Guinea (UPNG)
- Pacific Adventist University (PAU)
- Climate Change & Development Authority (CCDA)
- Japan International Cooperation Agency (JICA) PNG Office / JICA Project Office / JICA HQ

**ANNEX 3**  
**Project Design Matrix Ver.2 (PDM<sub>2</sub>)**

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p><b>Overall Goal</b> Sustainable management of solid waste in the Pacific region is enhanced based on Pacific Regional Waste and Pollution Management Strategy 2016-2025 (Cleaner Pacific 2025).</p>			
<p><b>Project Purpose</b> (Region-wise) Human and institutional capacity base for sustainable SWM* in the Pacific region is strengthened through implementation of Cleaner Pacific 2025.</p>			<p>1. Natural disaster would not drastically affect the collaboration among participating countries. 2. Political changes would not drastically affect the collaboration of participating countries.</p>
<p>(Country) Institutional framework and implementing capacity in SWM are enhanced at national and major urban local level governments (ULLGs)** level.</p>	<p>(Country) 1. The roles and responsibilities of related agencies for SWM are determined at the national and local level. 2. A coordination and monitoring mechanism for ULLGs in SWM is established.</p>	<p>1. National Policy, Strategy and Implementation Plan 2. National Policy, Strategy and Implementation Plan</p>	
<p><b>Output 1:</b> Institutional capacity on SWM is enhanced through development of a National Policy, Strategy and Implementation Plan in line with the Cleaner Pacific 2025.</p>	<p>1-1. The current status on SWM in local levels are regularly updated by CEPA. 1-2. Final draft of SWM Implementation Plan is incorporated into the National Policy, Strategy and Implementation Plan to be submitted to the parliament for endorsement</p>	<p>1-1. Analysis report on SWM in local levels 1-2. Final draft of SWM Implementation Plan</p>	<p>3. Counterpart personnel keep working in the field of SWM. 4. Counterpart personnel do not leave the post without handing over the skills/ knowledge to the new staff. 5. Budget for the project activities is allocated and disbursed timely from C/P agencies.</p>
<p><b>Output 2:</b> Planning capacity to tackle with the issues on SWM of some ULLGs is enhanced.</p>	<p>2-1. Four (4) ULLGs can set numerical targets based on waste management improvement plans</p>	<p>2-1. Related document of implementation plan developed by ULLGs</p>	
<p><b>Output 3:</b> NCD WM Plan 2016-2025 is implemented sustainably as scheduled.</p>	<p>3-1. Solid waste of NCDC is quantitatively managed 3-2. Main SWM Planning Targets (Collection, Recycling, Disposal) at a mid-term point in NCD WM Plan 2016 -2025 are (Clarify the quantitative targets from collection, recycling and disposal respectively according to the reviewed Action Plan)</p>	<p>3-1. Weighbridge data (collection amount, recycled amount, disposal amount, tipping 3-2. Annual report prepared by NCDC</p>	
	<p>3-3. Draft revision edition of NCD WM Plan is developed.</p>	<p>3-3. Draft revision edition of NCD WM Plan</p>	



Activities	Inputs	The PNG Side	Important Assumption
<p>&lt;Output 1&gt; 1-1. Study on data collection flow for CEPA to get information on SWM from local levels regularly 1-2. Study on necessary data to grasp current situation on SWM at local levels 1-3. Carry out data collection from local levels 1-4. Review the data collection flow 1-5. Analyse the collected data 1-6. Elaborate the data collection flow 1-7. Identify priority issues on SWM at the national level for development of draft National Policy, Strategy and Implementation Plan 1-8. Organize a series of national and regional consultation meetings *** for National Policy, Strategy and Implementation Plan 1-9. Develop the final draft of the SWM Implementation Plan to be incorporated in the National Policy, Strategy and Implementation Plan</p> <p>&lt;Output 2&gt; 2-1. Develop the programme for planning capacity enhancement on SWM 2-2. Organize workshop for basic data management on 2-3. Conduct data collection to develop a waste flow 2-4. Develop a waste flow based on the actual data collected in some ULLGs 2-5. Identify priority issues based on the developed waste flow 2-6. Develop an implementation plan for improvement of the prioritised issue in some ULLGs</p> <p>&lt;Output 3&gt; 3-1. Install a weighbridge and data recording system at Barunt Disposal Site 3-2. Introduce a new tipping fee charging system 3-3. Establish a data management system on SWM 3-4. Review the Action Plan of the NCD WM Plan 2015-2025 3-5. Develop implementation plans based on the reviewed Action Plan of NCD WM Plan 2016-2025 3-6. Undertake prioritised implementation plans 3-7. Monitor progress of the implementation plans 3-8. Review the NCD WM Plan by assessing the progress of the Action Plan</p>	<p>The Japanese Side</p> <p>1. Dispatch of experts 2. Training 3. Local cost for the activities of experts 4. Necessary cost and equipment (Weighbridge)</p>	<p>The PNG Side</p> <p>1. Allocation of counterpart 2. Office space and facilities for Japanese experts 3. Operational expenses for administrative work, transportation, training, and seminar, etc.</p>	<p>Counterpart personnel working in the field of SWM are sufficiently secured under C/P Agencies.</p> <p>&lt;Issues and countermeasures&gt;</p>

\* SWM stands for Solid Waste Management,  
\*\* "Local level government" is the third administrative authority of PNG under Provinces and Districts.  
\*\*\* J-PRISM will support the consultation meeting for national policy, Strategy and implementation plan organized by CEPA in

*Handwritten signature*

*Handwritten signature*

**ANNEX 4**  
**Plan of Operation Ver3-2**

Activities	2017				2018				2019				2020				2021				2022						
	Plan	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV		
<b>Sub-Activities</b>	Actual																										
<b>Output 1: Institutional capacity on SWM is enhanced through development of a National Policy, Strategy and Implementation Plan in line with the Cleaner Pacific 2025.</b>																											
1-8. Organize a series of national and regional consultation meetings *** for National Policy, Strategy and Implementation Plan	Plan																										
	Actual																										
1-9. Develop the final draft of the SWM Implementation Plan to be incorporated in the National Policy, Strategy and Implementation Plan	Plan																										
	Actual																										
<b>Output 2: Planning capacity to tackle with the issues on SWM of some ULLGs is enhanced.</b>																											
2-5. Identify priority issues based on the developed waste flow	Plan																										
	Actual																										
2-6. Develop an implementation plan for improvement of the prioritised issue in some ULLGs	Plan																										
	Actual																										
<b>Output 3: NCD SWM Plan 2016-2025 is implemented sustainably as scheduled.</b>																											
3-1. Install a weighbridge and data recording system at Baruni Disposal Site	Plan																										
	Actual																										
3-2. Introduce a new tipping fee charging system	Plan																										
	Actual																										
3-3. Establish a data management system on SWM	Plan																										
	Actual																										
3-4. Review the Action Plan of the NCD WM Plan 2016 -2025	Plan																										
	Actual																										
3-5. Develop implementation plans based on the reviewed Action Plan of NCD WM Plan 2016 - 2025	Plan																										
	Actual																										
3-6. Undertake prioritised implementation plans	Plan																										
	Actual																										
3-7. Monitor progress of the implementation plans	Plan																										
	Actual																										
3-8. Review the NCD WM Plan 2016 - 2025 by assessing the progress of the Action Plan	Plan																										
	Actual																										

ANNEX5

Table 4. List of Counterparts (as of February 2022)

LIST OF COUNTERPART PERSONNEL OF PNG (As of February 2022)					Related Outputs		
	Project Position	Position	Organization	Name	1	2	3
1	Project Director	Managing Director	CEPA	Mr. Gunther Joku	✓	✓	✓
2	JCC member	Director, Environment Protection Division	CEPA	Mr. Michael Wau	✓		
3	Co-Project Manager	Manager, Infrastructure Utilities and Conventions	CEPA	Mr. Veari Kula	✓	✓	✓
4	Co-Project Manager	Acting Manager, Waste Management Division	NCDC	Mr. John Navara	✓	✓	✓
5	Counterpart	Senior Assessment Officer, Environment Protection Division	CEPA	Ms. Rebecca Rami	✓	✓	
6	Counterpart	National Ozone Unit Project Officer, IUC Branch	CEPA	Ms. Anita Poesi	✓		
7	Counterpart	MIA Project Officer, IUC Branch	CEPA	Ms. Patricia Torea	✓		
8	Counterpart	Senior Policy Officer, Policy Division	CEPA	Ms. Carmel Jonduo	✓		
9	Counterpart	Director, Community and Social Services	NCDC	Ms. Janet Haua		✓	✓
10	Counterpart	Waste Management Engineer	WMD, NCDC	Mr. James Ricky		✓	✓
11	Counterpart	Senior Waste Management Officer (Industrial and Hazardous Waste)	WMD, NCDC	Mr. Ronnie Ranu		✓	✓
12	Counterpart	Waste Management Officer (Disposal & illegal dumping)	WMD, NCDC	Mr. Walter Aukleya			✓
13	Counterpart	Waste Management Officer (Disposal & illegal dumping)	WMD, NCDC	Ms. Violet Loi			✓
14	Counterpart	Acting Senior Waste Management Officer (Hazardous Waste, Public Places, Sanitary Pan)	WMD, NCDC	Ms. Vivianne Morofa		✓	✓
15	Counterpart	Waste Management Officer (Hazardous Medical Waste)	WMD, NCDC	Ms. Dianna Wapyer			✓
16	Counterpart	Waste Management Officer (Domestic, Commercial)	WMD, NCDC	Mr. Paul Wisi			✓
17	Counterpart	Waste Management Officer (Settlements, Villages)	WMD, NCDC	Ms. Racheal Inamuka			✓
18	Counterpart	Supervisor (Landfill)	WMD, NCDC	Mr. Joshua Robert			✓
19	Counterpart	Senior Waste Management Officer (Technical advisor)	WMD, NCDC	Mr. Simeon Terina	✓	✓	✓
20	Counterpart	Senior Environment Health Officer	Alotau ULLG	Mr. Ivan Maraka		✓	
21	Counterpart	Town Engineer and Sewage / Landfill Project Engineer	Goroka City Council	Mr. Hamilton Tubavai		✓	
22	Counterpart	Senior Environment Health Officer, Kokopo ULLG	Kokopo ULLG	Ms. Relvie Taplar		✓	
23	Counterpart	Environment Health Officer, Kokopo ULLG	Kokopo ULLG	Ms. Helen Samuel		✓	
24	Counterpart	Civil Engineer	Kokopo ULLG	Mr. Francis Moro		✓	
25	Counterpart	Manager, Public Health & Sanitation	Lae City Authority	Mr. Jonathan Ipang		✓	
	Counterpart	Environment Health Officer	Lae-ULLG	Mr. Paul Wiwi		✓	
26	Counterpart	Environment Health Officer	Lae City Authority	Ms. Concitha Lalo		✓	
27	JCC member	Town Manager	Alotau ULLG	Mr. Mickey Gahinem	✓	✓	
28	JCC member	Town Manager	Goroka ULLG	Mr. Harold Abori	✓	✓	
29	JCC member	Town Manager	Kokopo ULLG	Mr. Freddy Lemeki	✓	✓	
	JCC-member	City Manager	Lae-ULLG	Mr. Joel Koland	✓	✓	
30	JCC member	a/City Manager	Lae City Authority	Mr. Robin Calestus	✓	✓	

Note: CEPA: Conservation Environment Protection Authority  
NCDC: National Capital District Commission  
NDoH: National Department of Health  
WMD: Waste Management Division  
ULLG: Urban Local Level Government

Handwritten signatures and initials in black and blue ink, including a large signature and initials 'MK'.



*Annex B : Attachment for  
Solomon Islands*

## Table of Contents

<b>1</b>	<b>Lists of Project outputs and related documents.....</b>	<b>1</b>
<b>2</b>	<b>Inputs and Work schedule .....</b>	<b>1</b>
2.1	Inputs.....	1
2.1.1	Dispatch of Japanese experts .....	1
2.1.2	Acceptance of trainees .....	1
2.2	Work schedule.....	2
<b>3</b>	<b>Work flow chart.....</b>	<b>3</b>
3.1	Work flow chart based on PO2 .....	3
3.2	Work flow chart based on PO3 .....	4
<b>4</b>	<b>Changes of PDM .....</b>	<b>5</b>
4.1	Project Purpose .....	5
4.2	Outputs, Indicator and Activities .....	5
4.2.1	Output 1.....	5
4.2.2	Output 2.....	6
4.2.3	Output 3.....	7
<b>5</b>	<b>JCC .....</b>	<b>8</b>
5.1	JCC Program .....	8
5.1.1	4 <sup>th</sup> JCC.....	8
5.1.2	5 <sup>th</sup> JCC.....	9
5.2	Minutes of Meeting.....	11
5.2.1	4 <sup>th</sup> JCC.....	11
5.2.2	5 <sup>th</sup> JCC.....	14
5.3	List of participants .....	18
5.3.1	4 <sup>th</sup> JCC.....	18
5.3.2	5 <sup>th</sup> JCC.....	20

## 1 Lists of Project outputs and related documents

Table 1-1 Lists of Project outputs and related documents (Solomon)

No.	Name of the Outputs	Issued date	Outline
1	Solid waste management plan in Honiara	Nov. 2019	Plan indicating the basic policy of solid waste management in Honiara City (approved by the Honiara city council)
2	Landfill operation manual	Aug. 2022	Revised version of the manual indicating operation management and regular operation and maintenance methods at the landfill site
3	Training material for workshop	Aug. 2022	Training material utilizing for workshops related to dissemination of lessons learned
4	Basic study report related to economic measures	Mar. 2020	Results of the survey on financial situation in Solomon Islands and Honiara City
5	Solid waste management plan in Tulagi	Aug. 2022	Plan indicating the basic policy of solid waste management in Tulagi
6	4th JCC meeting materials	Apr. 2022	Project progress, activity reports, PDM revisions, etc
7	5th JCC meeting materials	Aug. 2022	Project progress, activity reports, etc

## 2 Inputs and Work schedule

### 2.1 Inputs

#### 2.1.1 Dispatch of Japanese experts

No.	Name	Expert	Dispatch period		PM	PM
			Start date	End date		
1	Yoshinosuke Hamada	SWM F2	2022/6/29	2022/8/20	1.77	1.77
Total						1.77

\*Work in Japan is separately summarized.

#### 2.1.2 Acceptance of trainees

There was no acceptance of trainees.

2.2

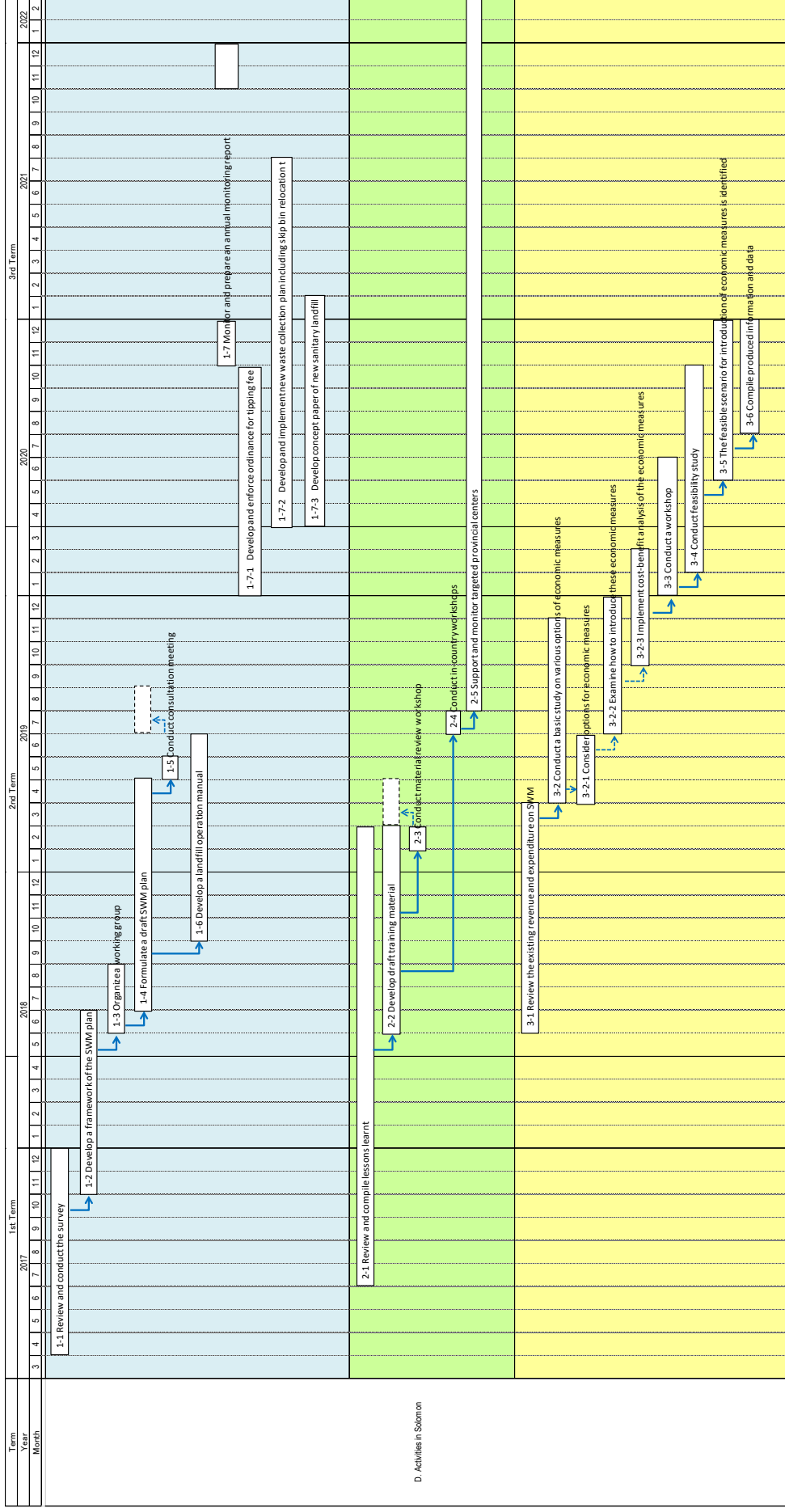
Work schedule

Activities	2017		2018				2019				2020				2021				2022				Achievements		
	Plan	Actual	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV			
<b>Output 1: Capacity of Solid Waste Management of HCC is strengthened</b>																									
1-1 Review the existing data and conduct supplementary survey of the current SWM situation and organizational management issues	Plan	Actual																							Done
1-2 Develop a framework of the SWM plan	Plan	Actual																							Done
1-3 Organize a working group to discuss institutional, technical and financial arrangements for the SWM system in HCC	Plan	Actual																							Done
1-4 Formulate a draft SWM plan, including recommendations for the necessary arrangements based on the results of discussion in the working group	Plan	Actual																							Done
1-5 Conduct consultation meeting to build a consensus among stakeholders on the draft SWM plan	Plan	Actual																							Done
1-6 Develop a landfill operation manual based on the draft SWM plan	Plan	Actual																							Done
1-7 Monitor and prepare an annual monitoring report of the activities of SWM	Plan	Actual																							Done
1-7-1 Develop and enforce ordinance for tipping fee to introduce tipping fee system	Plan	Actual																							Done
1-7-2 Develop and implement new waste collection plan including skip bin relocation to improve waste collection service	Plan	Actual																							Done
1-7-3 Develop concept paper of new sanitary landfill to facilitate a discussion about the construction of new landfill site	Plan	Actual																							Done
<b>Output 2: Lessons learnt from the activities related to SWM in Honiara and Gizo are promoted and practiced in the targeted provincial centers</b>																									
2-1 Review and compile lessons learnt from activities related to SWM implemented in Honiara and Gizo	Plan	Actual																							Done
2-2 Develop draft training material on SWM based on the results of 2-1	Plan	Actual																							Done
2-3 Conduct material review workshop with officers of MECDM, MHMS, HCC, and GTC to verify and finalize training material	Plan	Actual																							Done
2-4 Conduct in-country workshops for officers involved in SWM of targeted provincial centers to prepare SWM plans in the targeted area, utilizing the above training material	Plan	Actual																							Done
2-5 Support targeted provincial centers for development of SWM plans and implementation of SWM activities reflecting lessons learnt	Plan	Actual																							Done
<b>Output 3: Economic measures for sustainable SWM in the SI are specified</b>																									
3-1 Review the existing revenue and expenditure on SWM	Plan	Actual																							Done
3-2 Conduct a basic study on various options of economic measures applicable to the Solomon Islands to sustain SWM	Plan	Actual																							Done
3-2-1 Consider options for economic measures	Plan	Actual																							Done
3-2-2 Examine how to introduce these economic measures	Plan	Actual																							Done
3-2-3 Implement cost-benefit analysis of the economic measures	Plan	Actual																							Done
3-3 The necessary steps and actions required to implement the identified economic measures is clarified	Plan	Actual																							Done
3-4 Compile produced information and data required for initiating the economic measure	Plan	Actual																							Done



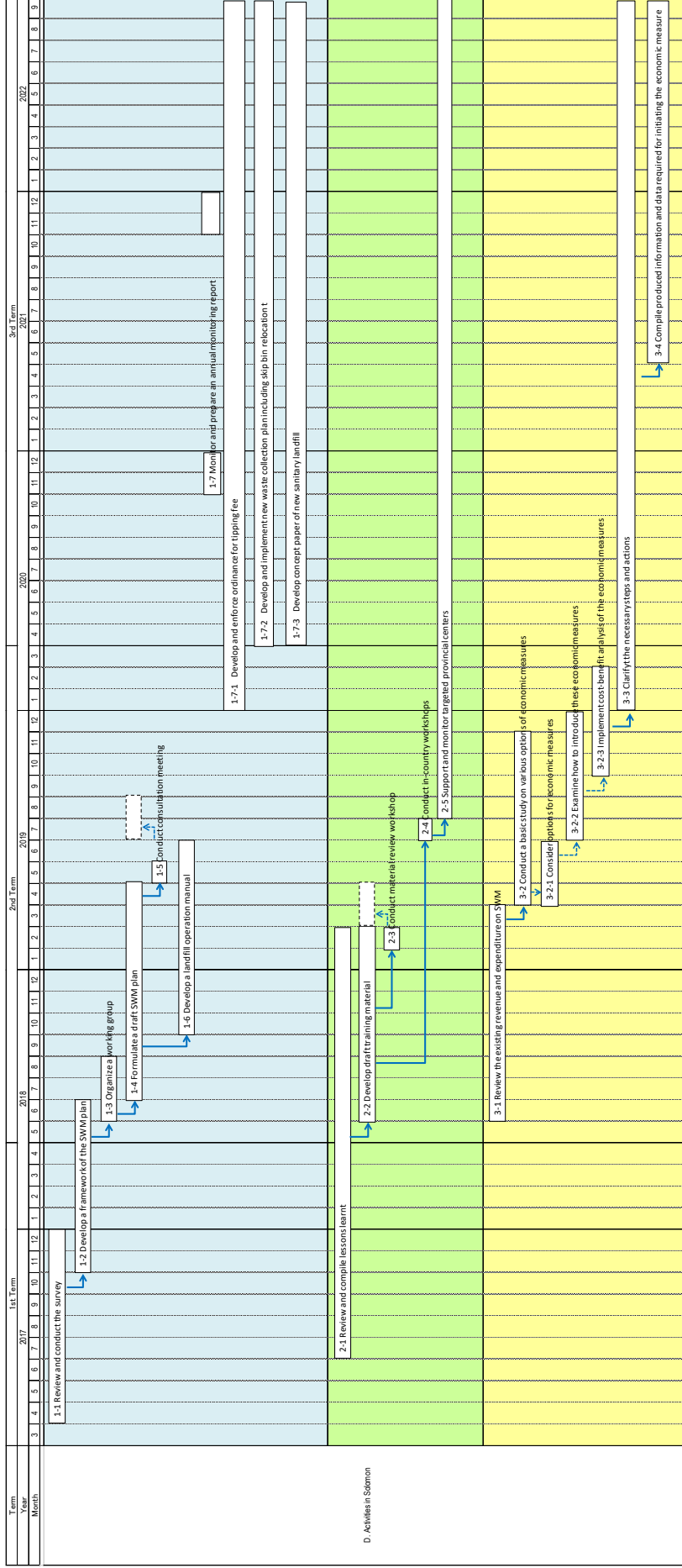
### 3 Work flow chart

#### 3.1 Work flow chart based on PO2



D. Activities in Solomon

### 3.2 Work flow chart based on PO3



## 4 Changes of PDM

PDM3 was modified and approved in the 4th JCC held on 20th April 2022, and no modification in the 5th JCC held on 17th August 2022.

### 4.1 Project Purpose

PDM2	PDM3
Project purpose	
Institutional capacity for SWM is strengthened at the national and provincial centers' levels.	No change
Objectively Verifiable Indicators	
1. Activities proposed in the SWM plan are revised annually. 2. SWM activities reflecting lessons learned are practiced in at least three provincial centers during the project period 3. Necessary actions*1 are taken for legalization of selected economic measures	No change

### 4.2 Outputs, Indicator and Activities

#### 4.2.1 Output 1

PDM2	PDM3
Output 1	
Capacity of Solid Waste Management of HCC is strengthened	No change
Objectively Verifiable Indicators	
1-1 Draft SWM plan is submitted to the city council. 1-2 Landfill management and waste collection service are carried out in accordance with the developed SWM Plan. (Numerical target indicators will be set based on the plan)	No change
Activities	
1-1 Review the existing data and conduct supplementary survey of the current SWM situation and organizational management issues 1-2 Develop a framework of the SWM plan 1-3 Organize a working group to discuss institutional, technical and financial arrangements for the SMW system in HCC	No change

PDM2	PDM3
<b>Activities</b>	
1-4 Formulate a draft SWM plan, including recommendations for the necessary arrangements based on the results of discussion in the working group 1-5 Conduct consultation meeting to build a consensus among stakeholders on the draft SWM plan 1-6 Develop a landfill operation manual based on the draft SWM plan 1-7 Monitor and prepare an annual monitoring report of the activities of SWM 1-7-1 Develop and enforce ordinance for tipping fee to introduce tipping fee system 1-7-2 Develop and implement new waste collection plan including skip bin relocation to improve waste collection service 1-7-3 Develop concept paper of new sanitary landfill to facilitate a discussion about the construction of new landfill site	No change

#### 4.2.2 Output 2

PDM2	PDM3
<b>Output 2</b>	
Lessons learnt from the activities related to SWM in Honiara and Gizo are promoted and practiced in the targeted provincial centers	No change
<b>Objectively Verifiable Indicators</b>	
2-1 Training material is developed and revised at least once during the project 2-2 SWM plans are prepared in at least three provincial centers. 2-3 SWM plans are monitored in at least three provincial centers.	2-1 Training material is developed and revised at least once during the project 2-2 SWM plans are prepared in at least two provincial centers. 2-3 SWM plans are monitored in at least two provincial centers.
<b>Activities</b>	
2-1 Review and compile lessons learnt from activities related to SWM implemented in Honiara and Gizo 2-2 Develop draft training material on SWM based on the results of 2-1 2-3 Conduct material review workshop with officers of MECDM, MHMS, HCC, and GTC to verify and finalize training material	No change

PDM2	PDM3
Activities	
2-4 Conduct in-country workshops for officers involved in SWM of targeted provincial centers to prepare SWM plans in the targeted area, utilizing the above training material	No change
2-5 Support targeted provincial centers for development of SWM plans and implementation of SWM activities reflecting lessons learned	

#### 4.2.3 Output 3

PDM2	PDM3
Output 3	
Economic measures for sustainable SWM in the SI are specified	No change
Objectively Verifiable Indicators	
3-1 Feasible options of economic measures are identified through the basic study	3-1 Feasible options of economic measures are identified through the basic study
3-2 The documents necessary to legally process the economic options are prepared	3-2 The document necessary to legally process one economic option is prepared
Activities	
3-1 Review the existing revenue and expenditure on SWM	3-1 Review the existing revenue and expenditure on SWM
3-2 Conduct a basic study on various options of economic measures applicable to the Solomon Islands to sustain SWM	3-2 Conduct a basic study on various options of economic measures applicable to the Solomon Islands to sustain SWM
3-2-1 Consider options for economic measures	3-2-1 Consider options for economic measures
3-2-2 Examine how to introduce these economic measures	3-2-2 Examine how to introduce these economic measures
3-2-3 Implement cost-benefit analysis of the economic measures	3-2-3 Implement cost-benefit analysis of the economic measures
3-3 Conduct a workshop to explain the results of basic study to stakeholders and discuss various scenarios combining the economic measures	3-3 The necessary steps and actions required to implement the identified economic measures is clarified
3-4 Conduct feasibility study on proposed scenarios for introduction of combined options	3-4 Compile produced information and data required for initiating the economic measure
3-5 The feasible scenario for introduction of economic measures is identified	
3-6 Compile produced information and data required for initiating the legal process to implement the economic measures	

## 5 JCC

### 5.1 JCC Program

#### 5.1.1 4<sup>th</sup> JCC

- Date: 20th April 2022
- Time: 10:00 – 12:00
- Venue: MECDM Conference room (Advanced Technology Building) & Online
- Agenda:

Time	Provisional Agenda Item	Responsible Person
9:30-10:00 am	Arrival of Participants Participants logging in to the zoom link	All participants
<b>Session 1-Official Opening of Meeting</b>		
10:00-10:10am	Welcome	Ms. Debra Kereseke, Co-Project Manager/MECDM
10:10-10:15am	Opening Prayer	Ms. Ella Rizwold, Acting Chief Health Inspector, EHD/HCC
10.15-10:35 am	1. Keynote Remarks	1. Mr. Chanel Iroi, Deputy Secretary Technical, MECDM 2. Mr. Motoyuki Uegaki, Resident Rep, JICA SI
10.35-10.40 am	2. Group Photo	All participants
<b>Session 2- Presentation of Project Progress of Outputs</b>		
10.40-10.43 am	3. Presentation 1-Objectives of JCC	Mr. Hamada, JICA Expert, JICA/JPRISM II Project Team
10:43-11:00 am	3.a. Presentation 2-Progress of Activities under Output 1	Mr. George Bogese, Director, Waste Management Pollution Control Division, HCC
11.00-11.05 am	3.b. Presentation 3-Progress of Activities under Output 2 &3	Ms. Wendy Beti, Senior Environment Officer/MECDM
11.05-11.10 am	3. c. Presentation 4-Summary of Monitoring Sheet	Mr. Hamada, JICA Expert, JICA/JPRISM II Project Team
11.15-11.20am	3.d. Presentation on update of J-PRISM II Regional Activities	Mr. Faafetai Sagapolutele, Assistant Chief Advisor, J-PRISM II Project
11.20-11.30am	Plenary Session (Question & Answer)	MC to lead facilitate discuss-Mr. Justus Denni, City Clerk, HCC

Time	Provisional Agenda Item	Responsible Person
<b>Session 3- Endorsement &amp; Approval of Project PDM, PO &amp; Project Counterparts Personal</b>		
11:30-11:40 am	4. Presentation on Documents for Endorsement/Approval i. Revision of PDM ii. Modification of PO iii. Human Resource Changes iv. Q & A on modified documents	Mr. Hamada, JICA Expert, JICA Project Team Ms. Wendy Beti, Senior Environment Officer/MECDM
11:40-11:50 am	5. Endorsement of Project Documents - PDM, PO, Human resources, etc	Chair to facilitate JCC endorsement of PDM/PO/CP list - Mr. Chanel Iroi, Deputy Secretary Technical, MECDM
<b>Session 4- Closing of Meeting</b>		
11.50-12.00pm	6. Any other Business	MC- Justus Denni, City Clerk, HCC
11:50-12:00 pm	7. Closing Remarks	1. Mr. Mimura Satoru, Chief Advisor, J-PRISM II Project (tbc) 2. Mr. Justus Denni, City Clerk, Honiara City Council
12:00-12:10 pm	Closing Prayer	Mr. Eddie Gaza, Works Manager, HCC

### 5.1.2 5<sup>th</sup> JCC

- Date: 17th August 2022
- Time: 10:00 – 12:00
- Venue: Rock Haven Conference room
- Agenda

Time	Provisional Agenda Item	Responsible Person
<b>Session 1- Official Opening of Meeting</b>		
10:00- 10:10 am	Welcome	Ms. Debra Kereseke, Co-Project Manager / MECDM
10:10- 10:15 am	Opening Prayer	Ms. Ella Rizwold, Acting Chief Health Inspector, EHD/ HCC (tbc)
10:15- 10:35 am	1. Keynote Remarks	1. Mr. Chanel Irori, Deputy Secretary Technical, MECDM 2. Mr. Takeshi Watanabe, JICA SI Office
10:35- 10:40 am	2. Group Photo	All participants

Time	Provisional Agenda Item	Responsible Person
Session 2- Presentation of Project Achievements		
10:40 – 10:45 am	3. Presentation 1- objectives of JCC	Mr. Hamada, JICA Expert, JICA/ PRISM II Project Team (tbc)
10:45- 11:00 am	4. a. Presentation 2- Project Achievements under Output 1	Mr. Abednigo Maeohu, D/ Director, Waste Management Pollution Control Division, HCC
11:00- 11:15 am	4. b. Presentation 3. Project Achievements under Outputs 2 & 3	Ms. Wendy Beti, Senior Environment Officer/ MECDM
11.15-11.25am	4.c. Achievement of Project Purpose	Ms. Debra Kereseke, Co- Project Manager
11:15- 11:25 am	5. Summary of Phase II activity and way forward	Mr. Hamada, JICA Expert, JICA project Team
11:25- 11:45 am	Plenary session (Question & Answers)	MC to lead facilitate discuss- Mr. Justus Denni, City Clerk, HCC
Session 3-		
11:45- 11:55 am	5. Adoption of a. J-PRISM Phase II activity achievements and Way forward b. J-PRISM II Project Counterparts list for remaining period of project	Chair– Mr. Chanel Irori, Deputy Secretary Technical, MECDM (tbc)
Session 4- Closing of Meeting		
11:55- 12:05 pm	Any other Business	MC- Justus Denni, City Clerk HCC (tbc)
12:05- 12:10 pm	Closing Remarks	1. Mr. Justus Denni, City Clerk Honiara City Council
12:10- 12:15 pm	Closing Prayer	Mr. Eddie Gaza, Works Manager, HCC



## 5.2 Minutes of Meeting

### 5.2.1 4<sup>th</sup> JCC

			
<p><b>Minutes of Meeting</b> on the <b>Fourth Joint Coordinating Committee</b> of the <b>Japanese Technical Cooperation Project</b> <b>For the Promotion of Regional Initiative on Solid Waste Management in the</b> <b>Pacific Island Countries Phase II (J-PRISM II)</b> In <b>Solomon Islands</b></p> <p>Honiara, Solomon Islands, 20<sup>th</sup> April 2022</p>			
			
<p>Mr. Mimura Satoru Chief Advisor Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in the Pacific Island Countries Phase II (J-PRISM II)</p>	<p>Mr. Chanel Iroi Deputy Secretary Technical Ministry of Environment Climate Change Disaster Management &amp; Meteorology Solomon Islands</p>		
<p><b>Witnessed by:</b></p>			
			
<p>Mr. Motoyuki Uegaki Resident Representative Japan International Cooperation Agency Solomon Islands Office</p>	<p>Mr. Justus Denni Co-Project Manager/City Clerk Honiara City Council Solomon Islands</p>		



**Fourth Joint Coordinating Committee Meeting of the J-PRISM II Project  
20 April 2022- Virtual Meeting, Solomon Islands**

1. Meeting started by Opening Prayer.  
One of the Project Counterparts opened the meeting with a word of prayer.
2. Opening of the Meeting

Due to time, all participants were not able to introduce themselves formally but when all logged in were able to greet everyone prior to the start of the meeting. An opening welcome was given by Ms. Debra Kereseka, Deputy Director Environment of the Environment & Conservation Division under the Ministry of Environment Climate Change Disaster Management & Meteorology (MECDM). Mr. Chanel Iroi, Deputy Secretary Technical of MECDM and Mr. Motoyuki Uegaki, Resident Representative of Japan International Cooperation Agency of Solomon Islands gave keynote remarks. Mr. Chanel Iroi acted as Chair and declared the meeting opened. The main points discussed as follows.

3. Agreement & Confirmation  
Several Presentations on the purpose of JCC, Progress of Project Outputs and Regional Project Activities were presented. Following the presentations, plenary discussions were followed. The meeting chairperson, Mr. Chanel Iroi then proceeded the meeting with the confirmation of the following matters:

3.1. Progress of Project Outputs

The JCC acknowledged that the progress of each output made by several activities carried out by the Project Counterparts and the JICA Expert team from the 3<sup>rd</sup> JCC to the end of March 2022 according to the presentation by MECDM & HCC as below:

(i) OUTPUT 1

One of the major outcomes of the Honiara City Council Solid Waste Management Plan is the establishment of the new Waste Management & Pollution Control Division. Under the new division, relevant staff were recruited to man the different sections of the division. The presentation on progress of output 1 as shown in ANNEX VII.

(ii) OUTPUT 2

The draft Solid Waste Management Plan for Tulagi (Central Province) and Auki (Malaita Province) was developed in consultation with the Provincial Counterparts. The development of the draft Plans was compiled following a follow-up workshop and lead by Provincial Counterparts supported by MECDM and JICA Expert. The presentation on progress of output 2 as shown in ANNEX VII.

(iii) OUTPUT 3

The Basic study report was developed and completed. It will be reviewed and updated when necessary. There were some activities under the output which will be considered for amendment for the remaining project time-frame. The presentation on progress of output 3 as shown in ANNEX VII.



The JCC understood and approved the monitoring sheet (no.10) presented by JICA Project Expert as shown as ANNEX IV.

3.2. Revision of Project Design Matrix (PDM) and Plan of Operation (PO)

JCC understood and approved the revision of Project Design Matrix (PDM) proposed by MECDM, HCC and the JICA Expert team as PDM version 2 shown as ANNEX II.

JCC understood and approved the modification of the Plan of Operation proposed by MECDM, HCC and the JICA Expert team as PO version 2-1 shown as ANNEX II.

3.3. Revision and Update List of Project Counterparts

JCC understood and approved the modification of the Counterparts list shown as ANNEX III.

4. Conclusion

The following are the conclusions made at the Fourth JCC Meeting;

- JCC confirmed the progress of the project from the 3<sup>rd</sup> JCC to the end of March 2022
- JCC approved the PDM revised version and revised PO
- JCC approved the revised list and additional names discussed during the meeting

The record of meeting minutes is as shown as ANNEX V.

5. Closing of the Meeting

Mr. Justus Deni, City Clerk of Honiara City Council gave the closing remarks and officially closed the meeting at 12pm.

**ANNEX I: JCC Program**

**ANNEX II: Revised version of Project Design Matrix and Plan of Operation**

**ANNEX III: Revised version of Counterparts list**

**ANNEX IV: Summary of Monitoring Sheet (No.10)**

**ANNEX V: List of Meeting Participants**

**ANNEX VI: Presentations on Progress of Project Outputs & Regional activities**

**ANNEX VII: Records of Meeting**

5.2.2 5<sup>th</sup> JCC



MINUTES OF MEETING  
OF THE  
FINAL JOINT COORDINATING COMMITTEE MEETING ON

JAPANESE TECHNICAL COOPERATION PROJECT FOR PROMOTION OF REGIONAL INITIATIVE  
ON SOLID WASTE MANAGEMENT IN PACIFIC ISLAND COUNTRIES  
PHASE II

BETWEEN

SOLOMON ISLANDS GOVERNMENT  
MINISTRY OF ENVIRONMENT, CLIMATE CHANGE, DISASTER MANAGEMENT AND  
METEOROLOGY  
MINISTRY OF HEALTH & MEDICAL SERVICES  
HONIARA CITY COUNCIL AUTHORITY  
GIZO TOWN COUNCIL  
AND  
JAPAN INTERNATIONAL COOPERATION AGENCY

Rock Haven Conference room, Honiara, Solomon Islands  
Wednesday 17<sup>th</sup> August 2022

濱田 善之助

Mr. Yoshinosuke Hamada  
JICA Expert  
JICA Expert G2 Team  
J-PRISM II

Mr. Chanel Iroi  
Deputy Secretary Technical  
Ministry of Environment Climate Change  
Disaster Management & Meteorology

Witnessed by:

for

久我 卓也

Mr. Takeshi Watanabe  
Resident Representative  
JICA SI Office



Dr. Nemai Bainivalu  
Deputy Secretary Technical  
Ministry of Health & Medical  
Services

Mr. Abegnigo Maeohu  
Deputy Director  
Waste Management &  
Control Division  
Honiara City Council



**THE FINAL JOINT COORDINATING COMMITTEE MEETING ON THE J-PRISM II PROJECT ,  
WEDNESDAY 17<sup>TH</sup> AUGUST 2022 – ROCK HAVEN CONFERENCE ROOM, HONIARA,  
SOLOMON ISLANDS**

The minutes of meeting is the record of the Final Joint Coordinating Committee on the J-PRISM II (herein referred to as the " JCC ") held on Wednesday 17<sup>th</sup> August 2022 to update and report on the information on J-PRISM II, for confirmation of the project achievements based on the Project Design Matrix and Plan of operation of implementation within the frame work of the record of discussion and to exchange opinions on major issues that arise during the implementation of the project.

The list of meeting participants is attached in Annex 1.

**Date:** Wednesday 17<sup>th</sup> August 2022

**Time:** 10: 00am – 12:00 pm

**Venue:** Rock Haven Conference room, Honiara, Solomon Islands

**Chairman:** Mr.Chanel Iroi, Deputy Secretary Technical, Ministry of Environment Climate Change Disaster Management & Meteorology

**Facilitator:** Ms. Debra Kereseka, Deputy Director Environment of Environment & Conservation Division of MECDM

### 1. Introduction

The Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM), Ministry of Health & Medical Services (MHMS) and Honiara City Council (HCC) co-organised the Final Joint Coordinating Committee Meeting of the Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management Phase II on Wednesday 17<sup>th</sup> August 2022 in Honiara, Solomon Islands. The JCC was supported by the JICA Project Expert and Solomon Islands Project Counterparts.

The JCC was attended by participants (See Annex I) who are mainly the core stakeholders from the Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM), Ministry of Health and Medical Services (MHMS), Honiara City Council, Japan International Cooperation Agency (JICA), JICA Expert Project Team and relevant project partners. There were also two observers from the Solomon Islands Recycling & Waste Management Association (SIRWMA) who also participated in the meeting.

The meeting agenda is in Annex II.

2



## 2. Opening of Meeting

The meeting was formally opened with a word of prayer.

An opening welcome was given by Ms. Debra Kereseka, Deputy Director Environment of the Environment & Conservation Division under the Ministry of Environment Climate Change Disaster Management & Meteorology (MECDM). Mr. Chanel Iroi, Deputy Secretary Technical of MECDM and Mr. Takuya Kuga, Project Formulation Advisor of Japan International Cooperation Agency of Solomon Islands gave keynote remarks. Mr. Chanel Iroi acted as Chair and declared the meeting opened. The main points discussed as follows.

## 3. Agreement & Confirmation of Project Achievements

Several Presentations on the purpose of JCC, achievement of Project activities, overall achievement of project purpose and summary of achievement of Project Activities were presented. Following the presentations, plenary discussions were followed. The meeting chairperson, Mr. Chanel Iroi then proceeded the meeting with the confirmation of the following matters:

### 1.1. Achievement of Project Outputs

The JCC acknowledged that the achievement of each output made by several activities carried out by the Project Counterparts and the JICA Expert team during the Project period according to the presentation by MECDM & HCC as below:

#### (i) OUTPUT 1

Some of key achievements of the Honiara City Council includes the development of Solid Waste Management Plan which establishes the new Waste Management & Control Division. Under the new division, staff were recruited to man the different sections of the division. Another key achievement is the development of a landfill operation manual and the implementation of the tipping fees at the Ranadi landfill. Most of the project activities have been implemented and achieved. The presentation on project output 1 achievements is shown in ANNEX III.

#### (ii) OUTPUT 2

Key project output 2 achievements over the past years includes the development of the SWM training manual which enables project counterparts to utilize to support Tulagi and Auki to develop their SWM plans. The development of the SWM Plans for Tulagi and Auki was compiled by Provincial Counterparts and supported by MECDM, MHMS & HCC and JICA Expert. Most of the project activities under the project output 2 are completed and achieved. The presentation on project output 2 achievements is shown in ANNEX IV.

#### (iii) OUTPUT 3

The Basic study report was developed and completed. The outcome of the basic study report is for the plastic ban. Draft drafting instructions for regulation on plastic is developed and clarifications on next steps and actions done. Project activities under the

Am

Q  
A

JICA

KAI

3



project output 3 is achieved. The presentation on project output 3 achievements is shown in ANNEX V.

(iv) ACHIEVEMENT OF THE PROJECT

JCC confirmed that the most of outputs and indicators set in the PDM were achieved. This was reflected in the presentation delivered by the Co-Project Manager is shown in Annex VI. The presentation on the achievement of project purpose and summary of the overall project achievements is shown in ANNEX VII.

#### 4. Close of Meeting

The chair delivered the final wrap of the meeting discussions. Following the final wrap up of the meeting discussions, the meeting was officially closed with a closing remarks from Mr. Abednigo Maeohu, Deputy Director of Waste Management & Control Division, Honiara City Council at 12pm.

Annex I- List of meeting participants

Annex II- Final Joint Coordinating Committee Meeting Agenda

Annex III- Presentation on Project Output 1 by Honiara City Council

Annex IV- Presentation on Project Output 2 by Ministry of Environment Climate Change Disaster Management & Meteorology

Annex V- Presentation on Project Output 3 by Ministry of Environment Climate Change Disaster Management & Meteorology

Am

SA

2/12/12

SA

### 5.3 List of participants

#### 5.3.1 4<sup>th</sup> JCC




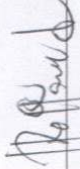


Ref	Names	Positions	Organizations	Email
1	Chanel Iroi	Deputy Secretary Technical	Ministry of Environment Climate Change Disaster Management & Meteorology	<a href="mailto:CIroi@meccdm.gov.sb">CIroi@meccdm.gov.sb</a>
2	Debra Kereseka	Deputy Director Environment	Environment & Conservation Division/ Ministry of Environment Climate Change Disaster Management & Meteorology	<a href="mailto:DKereseka@meccdm.gov.sb">DKereseka@meccdm.gov.sb</a>
3	Wendy Beti	Senior Environment Officer	Environment & Conservation Division/ Ministry of Environment Climate Change Disaster Management & Meteorology	<a href="mailto:WBeti@meccdm.gov.sb">WBeti@meccdm.gov.sb</a>
4	Justus Denni	City Clerk	Honiara City Council	<a href="mailto:justusdenni@honiaracitycouncil.com.sb">justusdenni@honiaracitycouncil.com.sb</a>
5	Ella Rizwold	Acting Chief Health Inspector	Environmental Health Division/Honiara City Council	<a href="mailto:rizwoldella@gmail.com">rizwoldella@gmail.com</a> / <a href="mailto:ERizwold@hcc.gov.sb">ERizwold@hcc.gov.sb</a>
6	George Bogese	Director	Waste Management & Pollution Control Division/ Honiara City Council	<a href="mailto:georgebgs59@gmail.com">georgebgs59@gmail.com</a>
7	Eddie Gaza	Works Manager	Works Division/ Honiara City Council	<a href="mailto:worksmanger.hcc@gmail.com">worksmanger.hcc@gmail.com</a>
8	Oliver Oli	Chief Health Promotion Officer	Environmental Health Promotion Division/ Honiara City Council	<a href="mailto:OOli@hcc.gov.sb">OOli@hcc.gov.sb</a>
9	Josiah Puia	Senior Health Inspector	Environmental Health Division/Honiara City Council	<a href="mailto:JPuia@hcc.gov.sb">JPuia@hcc.gov.sb</a>
10	Billy Gedi	Health Inspector	Environmental Health Division/Honiara City Council	<a href="mailto:BGedi@hcc.gov.sb">BGedi@hcc.gov.sb</a>
11	Francis Fiku	Senior Works Officer	Waste Management & Pollution Control Division/ Honiara City Council	
12	Chelsea Hou	Senior Health Inspector	Environmental Health Division/Honiara City Council	
13	George Titiulu	Deputy Director	Environmental Health Division/Ministry of Health & Medical Services	<a href="mailto:GTitiulu@moh.gov.sb">GTitiulu@moh.gov.sb</a>
14	Beverly Ramo		National Health Promotion Division/Ministry of Health & Medical Services	<a href="mailto:BRamo@moh.gov.sb">BRamo@moh.gov.sb</a>
15	Kelton Sikala		National Health Promotion Division/Ministry of Health & Medical Services	<a href="mailto:KSikala@moh.gov.sb">KSikala@moh.gov.sb</a>
16	Vaelyn Moli	Senior Health Inspector	Environmental Health Division/Guadalcanal Provincial Government	



17	Charles Kelly	Town Clerk		Gizo Town Government	Council/ Western Provincial	<a href="mailto:charleskelly74@gmail.com">charleskelly74@gmail.com</a>
18	Renee Rario	Waste Management Officer		Gizo Town Government	Council/ Western Provincial	<a href="mailto:renerario@gmail.com">renerario@gmail.com</a>
19	Yamaguchi Hamada			JICA Expert Engineering	/JICA Project Team/Yachiyo	<a href="mailto:ys-hamada@yachiyo-eng.co.jp">ys-hamada@yachiyo-eng.co.jp</a>
20	Nakamura Mimura			J-PRISM II Project		
21	Jurji Anai			J-PRISM II Project		
22	Shinosuke Oda					
23	Motoyuki Uegaki	Resident Representative		Japan International Cooperation Agency		<a href="mailto:Uegaki.Motoyuki@jica.go.jp">Uegaki.Motoyuki@jica.go.jp</a>
24	Yutaka Fukase					
25	Nonka Yamada					
26	Laisani Lewanavanua			SPREP		
27	Ayako Yoshida	Regional Cooperation Coordinator				
28	Evangelina Potifara					
29	Maeshima					
30	Mimura Satoru					

5.3.2 5<sup>th</sup> JCC

Attendance List\_ Meeting Participants for Final JCC Meeting

Ref	Names	Positions	Organizations	Email	Signature
1	Chanel Iroi	Deputy Secretary Technical	Ministry of Environment Climate Change Disaster Management & Meteorology	<a href="mailto:C.Iroi@meccdm.gov.sb">C.Iroi@meccdm.gov.sb</a>	
2	Debra Kereseke	Deputy Environment Director	Environment & Conservation Division/ Ministry of Environment Climate Change Disaster Management & Meteorology	<a href="mailto:DKereseke@meccdm.gov.sb">DKereseke@meccdm.gov.sb</a>	
3	Wendy Beti	Senior Environment Officer	Environment & Conservation Division/ Ministry of Environment Climate Change Disaster Management & Meteorology	<a href="mailto:WBeti@meccdm.gov.sb">WBeti@meccdm.gov.sb</a>	
4	Justus Derrni <i>Justus Derrni</i>	City Clerk	Honiara City Council	<a href="mailto:justusdenni@honiaracitycouncil.com.sb">justusdenni@honiaracitycouncil.com.sb</a>	
5	Ella Rizwold	Acting Chief Inspector	Environmental Division/Honiara City Council	<a href="mailto:rizwoldella@gmail.com">rizwoldella@gmail.com</a> <a href="mailto:ERizwold@hcc.gov.sb">ERizwold@hcc.gov.sb</a>	
6	George Bogese	Director	Waste Management & Pollution Control Division/ Honiara City Council	<a href="mailto:georgebgs59@gmail.com">georgebgs59@gmail.com</a>	
7	Eddie Gaza	Works Manager	Works Division/ Honiara City Council	<a href="mailto:worksmanger.hcc@gmail.com">worksmanger.hcc@gmail.com</a>	
8	Oliver Oli	Chief Health Promotion Officer	Environmental Health Promotion Division/Honiara City Council	<a href="mailto:OOli@hcc.gov.sb">OOli@hcc.gov.sb</a>	
9	Josiah Puia	Senior Health Inspector	Environmental Division/Honiara City Council	<a href="mailto:JPuia@hcc.gov.sb">JPuia@hcc.gov.sb</a>	
10	Billy Gedi	Health Inspector	Environmental Division/Honiara City Council	<a href="mailto:BGedi@hcc.gov.sb">BGedi@hcc.gov.sb</a>	

	Francis Fiku	Senior Works Officer	Waste Management & Pollution Control Division/ Honiara City Council
11			
12	Chelsea Hou	Senior Health Inspector	Environmental Division/Honiara City Council
13	George Titulu	Deputy Director	Health Division/Ministry of Health & Medical Services
14	Beverly Ramo		National Health Promotion Division/Ministry of Health & Medical Services
15	Kelton Sikala		National Health Promotion Division/Ministry of Health & Medical Services
16	Vaelyn Moli	Senior Health Inspector	Health Division/Guadalcanal Provincial Government
17	Charles Kelly	Town Clerk	Gizo Town Council/ Western Provincial Government
18	Yamaguchi Hamada	JICA Project Expert	JICA Expert /JICA Project Team/Yachiyo Engineering
19	Motoyuki Uegaki	Resident Representative	Japan International Cooperation Agency
20	Ezekiel Talataua LAKING BIA	Environmental - Health Inspector	EHD/MHMS ECD/MECDM
21	Methoda Ifuimae	Chief Health Management Officer	EHD/MHMS
22	Ezekiel Leghunau	Environment officer	ECD/MECDM

23 lowaine SIPWMA  
Rini

No.	Name	Position	ECI/MECDM	ECI/MECDM	Contact	Signature
23	Leon Labuga	Graduate Intern			<a href="mailto:halaitelo08@gmail.com">halaitelo08@gmail.com</a>	
24	Patrina Millie	Graduate Intern			<a href="mailto:patrinamilie@gmail.com">patrinamilie@gmail.com</a>	
25	<del>Jeremy Enaitoo</del> Desmond Maedin	Environmental Inspector Intern	EHD/HCC E-D		<a href="mailto:jenatoo@gmail.com">jenatoo@gmail.com</a>	
26	Christina Onahikeni	Senior Health Inspector	EHD/HCC		<a href="mailto:COناهikeni@moh.gov.sb">COناهikeni@moh.gov.sb</a>	
27	Jewin Maqa	Waste Management Officer	WMCD/HCC		<a href="mailto:jewin@gmail.com">jewin@gmail.com</a>	
28	<del>William Odete</del> Michael Suwabo	Landfill Supervisor <del>SEO</del> SEO	WMED/HCC E-D		<a href="mailto:odelawills@gmail.com">odelawills@gmail.com</a>	
29	Dr. Nemia Bainivalu	Deputy Secretary Health Improvement	MHMS		<a href="mailto:NBainivalu@moh.gov.sb">NBainivalu@moh.gov.sb</a>	
30	<del>Michael</del> Mabachy	Deputy Project (WHCC)	HCC		<a href="mailto:mabachyandhu@gmail.com">mabachyandhu@gmail.com</a>	
31	Sosimo NAREASA	PCONS	MECDM		<a href="mailto:sunreisimedun.gov.sb">sunreisimedun.gov.sb</a>	

x  
x

32. Takuya  
Kuga  
Project  
Formulation  
Advisor  
JICA  
SI office  
Kuga.Takuya  
@jica.go.jp

33. Andrew  
Nixon Hori  
Senior Director  
Korleku (WHCC)  
HCC  
Andrew.nixon050@gmail.com

34. Jewin Maqa  
WHCC  
HCC  
Jewin Maqa  
WHCC  
HCC  
SIAWMA  
Jewin@gmail.com

35. Joe Kelvin  
HCC  
SIAWMA  
Joe Kelvin

*Annex C : Attachment for  
Republic of Vanuatu*

## Table of Contents

<b>1</b>	<b>Lists of Project outputs and related documents.....</b>	<b>1</b>
<b>2</b>	<b>Inputs and Work schedule .....</b>	<b>2</b>
2.1	Inputs.....	2
2.1.1	Dispatch of Japanese experts .....	2
2.2	Acceptance of trainees .....	2
2.3	Work schedule.....	3
<b>3</b>	<b>Work flow chart.....</b>	<b>5</b>
3.1	Work flow chart based on PO3 .....	5
3.2	Work flow chart based on PO3.1 .....	6
<b>4</b>	<b>Changes of PDM .....</b>	<b>7</b>
4.1	Project Purpose .....	7
4.2	Outputs, Indicator and Activities .....	7
<b>5</b>	<b>JCC .....</b>	<b>8</b>
5.1	JCC Program.....	8
5.1.1	4 <sup>th</sup> JCC.....	8
5.1.2	5 <sup>th</sup> JCC.....	9
5.2	Minutes of Meeting of JCC (including participants list) .....	10
5.2.1	4 <sup>th</sup> JCC.....	10
5.2.2	5 <sup>th</sup> JCC.....	27

## 1 Lists of Project outputs and related documents

Table 1-1 Lists of Project outputs and related documents (Vanuatu)

No.	Name of the Outputs	Issued date	Outline
<b>Technical Cooperation Products</b>			
A	Outline of Counterparts (Summary of Baseline Survey)	Feb. 2018	C/P list, Organization structure, Baseline survey results
	Solid Waste Management (SWM) plan of PVMC1 (2019)	Oct. 2018	Outline of PVCC, Waste flow and composition, collection and transport, landfill, priority activities, action plan in 2019 etc.
B	Detailed action plan of the priority activities of NWWMPCS (2019, public version)	Mar. 2019	Monitoring results of NWMPCS (2018), Detailed action plan (2019)
	Detailed action plan of the priority activities of NWWMPCS (2020, public version)	Mar. 2020	Monitoring results of NWMPCS (2017-2019 and 2020 provision), Detailed action plan (2020)
	Final evaluation report of NWMPCS	May 2021	Final evaluation of monitoring results of NWMPCS, outcomes and Issues to be solved in the next term of the NWMPCS
C	PVCC and Shefa province SWM Plan (2021-2030)	Dec. 2020	Current status of SWM, issues, waste flow, future plan of SWM system, action plan etc.
D	Drafting Instructions on Product Stewardship for Selected Beverage Containers in Vanuatu (as of July 2021)	Aug. 2022	Instructions that the DEPC has to submit to the State Law Office (SLO) so that SLO will draft the regulation of CDS accordingly.
<b>General</b>			
1	Press release	Jul. 2020 - Sep. 2022	Articles on JICA website, DEPC website and local newspaper etc.
2	Presentation material of the 4th JCC meeting	Nov. 2021	C/P activity report, Progress of activities and achievements through J-PRISM II etc.
	Presentation material of the 5th JCC meeting	Aug. 2022	
<b>Output 2 related documents</b>			
3	Development Guide and Operation Manual For Bouffa Disposal Site	Aug. 2022	Development Guide of Bouffa Disposal Site, Landfill extension procedure, Landfill Operation Manual, Emergency Measures (Accident, fire) etc.
4	PVCC Waste Management Action Plan 2022-2024	Aug. 2022	Monitoring results on the progress of the SWM plan 2021-2030 as of the mid of 2022, Actions to be completed in 2022-2024

<sup>1</sup> Port Vila Municipal Council changed its name to "Port Vila City Council" in January 2020.

No.	Name of the Outputs	Issued date	Outline
Output 3 related documents			
5	Lessons Learnt on Consensus Building Process for Introducing the Container Deposit Scheme in Vanuatu (confidential and internal review only)	Aug. 2022	Chronology and Activity Timelines, Key Factors Concerning the Introduction of CDS into Vanuatu & Analysis of Constraining Factors, Lessons Leant etc.
6	Implementation Notes for CDS from J-PRISM II (public version)	Aug. 2022	Action plans including the potential Technical Assistance areas for implementing CDS in Vanuatu.

## 2 Inputs and Work schedule

### 2.1 Inputs

#### 2.1.1 Dispatch of Japanese experts

No.	Name	Position	Dispatch period		PM	PM
			Start date	End date		
1	Mr. Junji ANAI	Sub Team Leader/SWM D2	21/10/2021	05/12/2021	1.53	2.56
			24/07/2022	23/08/2022	1.03	
2	Ms. Rikae KODANI	SWM F3	21/10/2021	05/12/2021	1.53	2.70
			12/08/2022	15/09/2022	1.17	
3	Mr. Tetsuo Yatsu	Heavy Equipment Procurement	21/10/2021	21/11/2021	1.07	1.87
			02/08/2022	25/08/2022	0.80	
					Total	7.13

\*Work in Japan is separately summarized.

### 2.2 Acceptance of trainees

There was no acceptance of trainees.

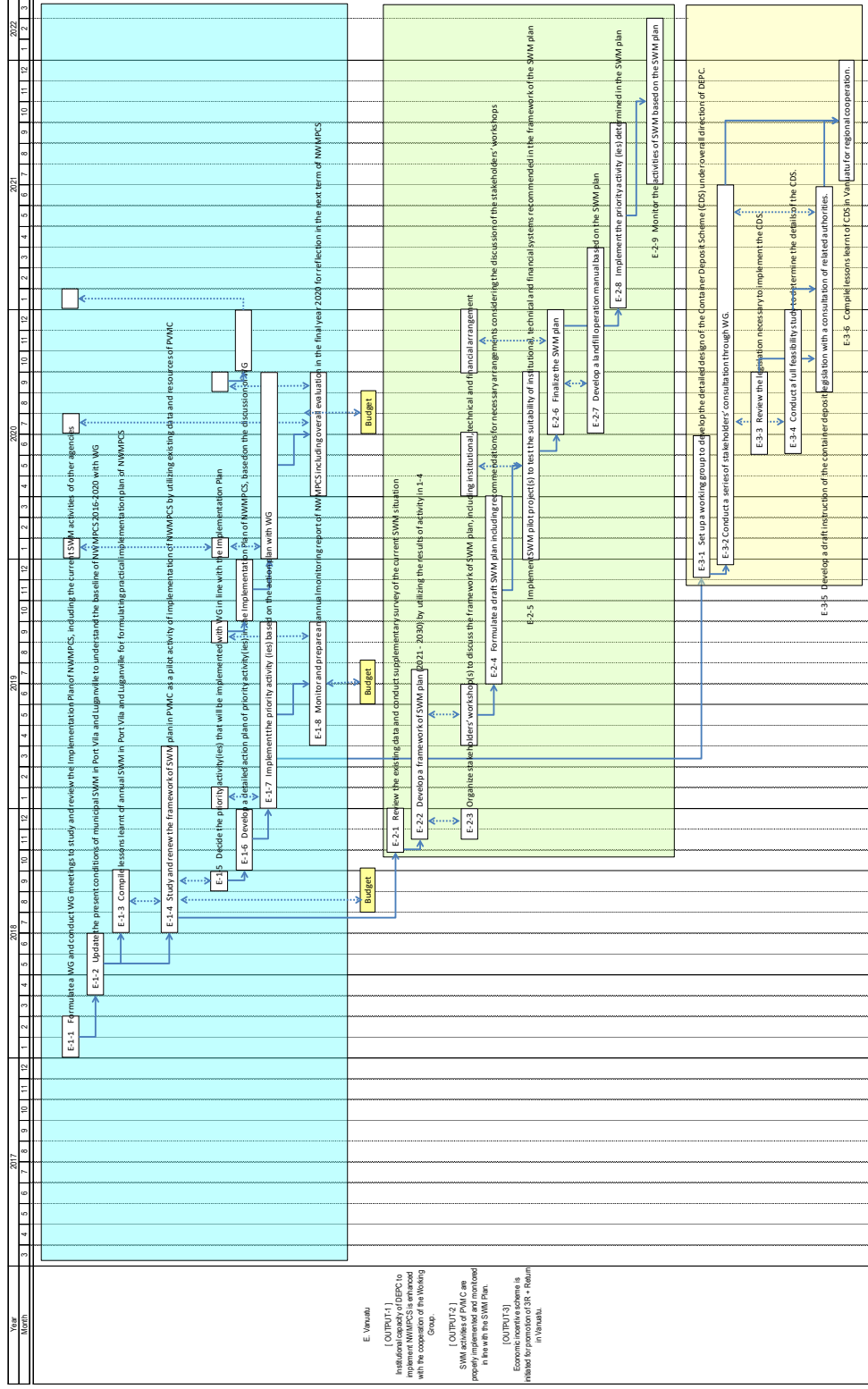




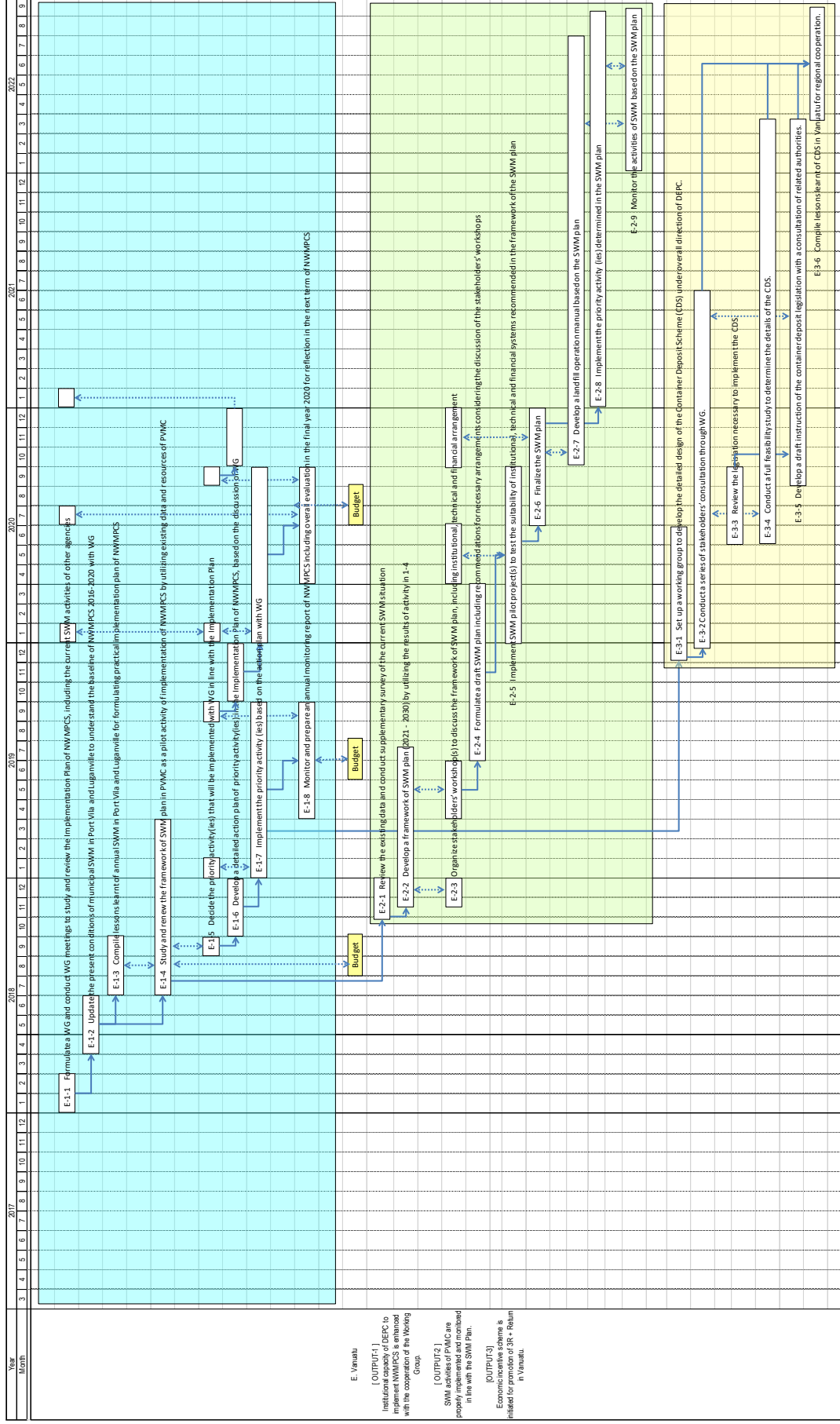
Activities	2017		2018				2019				2020				2021				2022					
	Plan	Actual	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV		
<b>Output 2: SWM activities of PVCC are properly implemented and monitored in line with the SWM Plan.</b>																								
2-1 Review the existing data and conduct supplementary survey of the current SWM situation	Plan	Actual																						
2-2 Develop a framework of SWM plan (2021 - 2030) by utilizing the results of activity in 1-4	Plan	Actual																						
2-3 Organize stakeholders' workshop(s) to discuss the framework of SWM plan, including institutional, technical and financial arrangement	Plan	Actual																						
2-4 Formulate a draft SWM plan including recommendations for necessary arrangements considering the discussion of the stakeholders' workshops	Plan	Actual																						
2-5 Implement SWM pilot project(s) to test the suitability of institutional, technical and financial systems recommended in the framework of the SWM plan	Plan	Actual																						
2-6 Finalize the SWM plan	Plan	Actual																						
2-7 Develop a landfill operation manual based on the SWM plan	Plan	Actual																						
2-8 Implement the priority activity (ies) determined in the SWM plan	Plan	Actual																						
2-9 Monitor the activities of SWM based on the SWM plan	Plan	Actual																						
<b>Output 3: Economic incentive scheme is initiated for promotion of 3R + Return in Vanuatu.</b>																								
3-1 Set up a working group to develop the detailed design of the Container Deposit Scheme (CDS) under overall direction of DEPC	Plan	Actual																						
3-2 Conduct a series of stakeholders' consultation through WG	Plan	Actual																						
3-3 Review the legislation necessary to implement the CDS	Plan	Actual																						
3-4 Conduct a full feasibility study to determine the details of the CDS	Plan	Actual																						
3-5. Develop a draft instruction of the container deposit legislation with a consultation of related authorities	Plan	Actual																						
3-6. Compile lessons learnt of CDS in Vanuatu for regional cooperation	Plan	Actual																						

### 3 Work flow chart

#### 3.1 Work flow chart based on PO3



### 3.2 Work flow chart based on PO3.1



## 4 Changes of PDM

PDM3 was revised as PDM3.1 in the 4th JCC held on November 30th, 2021 with the following changes. There was no further changes in the 5th JCC held on August 19th, 2022.

### 4.1 Project Purpose

PDM3	PDM3.1
Project purpose	
A foundation of implementing and monitoring SWM activities in line with the Vanuatu National Waste Management and Pollution Control Strategy (NWMPCS) is built.	No change
Objectively Verifiable Indicator	
1. Based on the monitoring results of NWMPCS 2016-2020, the gaps and issues of the Implementation Plan are evaluated and reflected to the next term of NWMPCS.	No change
Means of Verification	
1. Summary of the monitoring reports submitted to the NWMPCS coordinating committee.	1. Summary of the monitoring reports shared with stakeholders identified in the NWMPCS.

### 4.2 Outputs, Indicator and Activities

There was no changes of outputs, indicator and activities during the 3rd term.

## 5 JCC

### 5.1 JCC Program

#### 5.1.1 4<sup>th</sup> JCC

- Data: Tuesday, November 30th, 2021
- Venue: Conference Room at the Melanesian Hotel
- Chairperson: Ms. Donna Kalfatak, Director, DEPC
- Agenda:

Time	Agenda Items	Presenter/Responsible Person
9:30-10:00	Registration of Guests and Participants	Registration by All participants
10:00-10:02	Opening Prayer	Mr. Sandy Mwetu, PVCC
10:02-10:10	Welcome Toktok	Project Director: Ms. Donna Kalfatak, Director, DEPC
10:10-10:20	Keynote Remarks of JICA Vanuatu Office	Ms. Rika Uemura, Resident Representative of JICA in Vanuatu
10:20-10:25	Introduction of participants	Project Director
10:25-10:30	Confirmation of Minutes of Meeting of the third JCC	Ms. Rikae Kodani, J-PRISM II
10:30-10:45	Final Evaluation of NWMPCS 2016-2020, next term of strategy & national coordinating committee and Progress of CDS Introduction	Ms. Ionie Bolenga, DEPC Ms. Annabelle Alilee, DEPC
10:45-11:00	Improvement of SWM based on the PVCC SWM Plan 2021-2030	Mr. Jason Andrews, PVCC Mr. Sandy Mwetu, PVCC Ms. Felicity Bebe, PVCC
11:00-11:15	Bouffa Landfill Development Plan and Operation Manual	Mr. Junji Anai, J-PRISM II
11:15-11:30	Current situation of SWM in Shefa Province	Mr. Solomon Jimmy, Shefa Province
11:30-11:45	LMC and Sanma SWM Plan (2021-2025) and current status of SWM in Luganville	Ms. Gina Tari, LMC Mr. Ray Vilvil, LMC Mr. Leonard Lolo, LMC
11:45-12:00	Summary of J-PRISM II activities, revised PDM/PO and counterpart list in Vanuatu	Ms. Rikae Kodani, J-PRISM II
12:00-12:20	Q&A Section and Approval of Revised PDM/PO and Confirmation of Minutes of Meeting	Project Director: Ms. Donna Kalfatak, Director, DEPC
12:20-11:28	Closing Remarks	Project Manager: Mr. Peter Sakita, Town Clerk, PVCC
12:28-12:30	Closing Prayer	Mr. Solomon Jimmy, Shefa Province
12:30-13:30	Group Photo & Lunch	-

### 5.1.2 5<sup>th</sup> JCC

- Data: Friday, August 19th, 2022
- Venue: Conference Room at the Melanesian Hotel
- Chairperson: Ms. Ionie Bolenga, Acting Director, DEPC
- Agenda:

Time	Agenda Items	Presenter/Responsible Person
9:30-10:00	Registration of Guests and Participants	Registration by All participants
10:00-10:02	Opening Prayer	Mr. Sandy Mwetu, PVCC
10:02-10:10	Welcome Toktok	Ms. Ionie Bolenga, Acting Director, DEPC
10:10-10:20	Keynote Remarks of JICA Vanuatu Office	Ms. Rika Uemura, Resident Representative of JICA in Vanuatu
10:20-10:25	Introduction of participants	Project Director
10:25-10:30	Confirmation of Minutes of Meeting of the previous JCC	Ms. Rikae Kodani, J-PRISM II
10:30-10:45	Achievements of Output 1 & Output 3	Ms. Ionie Bolenga, DEPC Ms. Annabelle Alilee, DEPC
10:45-11:00	Achievements of Output 2	Mr. Jason Andrews, PVCC Mr. Sandy Mwetu, PVCC Ms. Felicity Bebe, PVCC
11:00-11:15	Lessons learnt of CDS introduction in Vanuatu	Mr. Alice Leney, J-PRISM II
11:15-11:30	Discussion and Way Forward	Ms. Ionie Bolenga, Acting Director, DEPC
11:30-11:45	Confirmation of Minutes of Meeting	Mr. Junji Anai, J-PRISM II
11:45-11:55	Closing Remarks	Project Manager: Mr. Peter Sakita, Town Clerk, PVCC
11:55-12:00	Closing Prayer	Mr. Solomon Jimmy, Shefa Province
12:00-13:00	Group Photo & Lunch	-

## 5.2 Minutes of Meeting of JCC (including participants list)

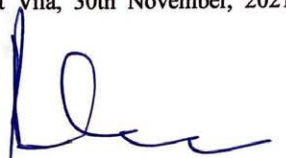
### 5.2.1 4<sup>th</sup> JCC

**MINUTES OF MEETING  
ON  
THE FOURTH JOINT COORDINATING COMMITTEE  
OF  
THE JAPANESE TECHNICAL COOPERATION PROJECT  
FOR PROMOTION OF REGIONAL INITIATIVE ON SOLID WASTE  
MANAGEMENT IN PACIFIC ISLAND COUNTRIES PHASE II (J-PRISM II)  
IN  
THE REPUBLIC OF VANUATU**

Port Vila, 30th November, 2021



Ms. Donna Kalfatak  
Project Director  
Director of Department of Environmental  
Protection and Conservation,  
Ministry of Environment,  
Republic of Vanuatu



Mr. Peter Sakita  
Project Manager  
Town Clerk,  
Port Vila City Council,  
Republic of Vanuatu



Mr. ANAI Junji  
Sub Team Leader,  
JICA Expert G2 Team,  
J-PRISM II

*Witnessed by:*



Ms. UEMURA Rika  
Resident Representative  
Japan International Cooperation Agency  
Vanuatu Office



### Fourth Joint Coordinating Committee of the Project

30 November 2021 – the Melanesian Hotel Conference Room, Port Vila, Vanuatu

1. Meeting started at 10:00 am
2. Attendance list of the meeting is given in **Appendix 1**
3. Opening of the meeting

Opening remarks were given by Ms. Donna Kalfatak, Director of the Department of Environmental Protection and Conservation (DEPC). Subsequently, Ms. Uemura Rika, Resident Representative of JICA Vanuatu Office, gave keynote remarks on behalf of the Japanese side. Ms. Donna Kalfatak as the chair declared the meeting open.

At the beginning, the chairperson provided a brief on the minutes of the 3<sup>rd</sup> JCC meeting and all the participants confirmed it.

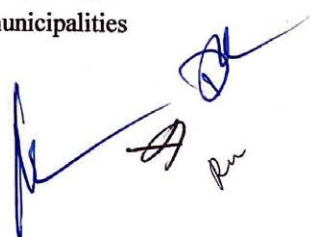
4. Agreement and Confirmation

The chairperson proceeded the meeting in accordance with the program in **Appendix 2**. All the attendants confirmed and agreed with the following matters:

(1) Progress of the Project

JCC confirmed that several activities were carried out by the Counterparts and JICA Expert Team (JET) after the 3<sup>rd</sup> JCC on 24<sup>th</sup> February 2020 up to the present for a year and a half (hereinafter referred to as “this period”) based on the presentation by DEPC, Port Vila City Council (PVCC), Luganville Municipal Council (LMC), Shefa province and JET.

On the other hand, JCC also acknowledged that there were some areas that had not progressed as per the Plan of Operation (PO), as inputs by JET had to be limited to the activities that could be supported remotely during this period due to the border closure caused by the global spread of the coronavirus diseases 2019 (COVID-19). In particular, the strategic support for OUTPUT 1 and OUTPUT 3 by JET were carried out remotely with support of local resources even though the progress had to be slowed down. However, it was inevitable that JET struggled to provide remote support for the capacity development for improving the Solid Waste Management (SWM) in practice for OUTPUT 2. JCC recognized that during this period, in the municipalities



directly responsible for waste management, the implementation of the waste management plan had not been carried out as planned due to insufficient measures in terms of financial and human resources, as the absence of JET had resulted in a lack of communication between the people in charge of the worksites and the top management of the municipalities.

i) OUTPUT 1

JCC confirmed the final monitoring and evaluation report on the National Waste Management and Pollution Control Strategy (NWMPCS) 2016-2020, and acknowledged that all activities planned for the OUTPUT 1 were completed.

It should be noted that OUTPUT 1 was initially planned to be done by early 2021 but due to the absence of JET, information disclosure process of the final report had not been realized up to the present.

In addition, DEPC requested that JET would continue to support the establishment of the NWMPCS coordinating committee for formulating the next NWMPCS, even though it was confirmed in the 3<sup>rd</sup> JCC meeting that the DEPC would take full responsibility for renewal of the strategy. In consideration of the urgency of this matter, JET agreed to continue supporting DEPC within the remaining assignments of experts. JCC recommended that the next NWMPCS should take over the remaining targets that had not achieved during the current target period and also cover the emerging topics identified in the final evaluation report presented by DEPC. JCC also discussed the membership of the NWMPCS coordinating committee that should be updated based on the proposal in 2016 in consideration for adding new members such as Efate waste management association, Customs, Public Health department, Biosecurity Vanuatu, Vanuatu Recycling and Waste Management Association (VRWMA).

ii) OUTPUT 2

PVCC appreciated the waste collection vehicle and heavy equipment that had been procured in December 2020 and to be procured in March 2022 by the Government of Japan, along with the current intensive support of technical assistance for the on-site road construction at the Bouffa landfill site. JCC recognized some remarkable progress in PVCC such as an establishment of the new division dedicating for waste management, endorsement of waste management by-laws and the SWM plan 2021-2030, practice of promotion for environmental education in school, and



strengthening the city-city cooperation between PVCC and LMC initiated by the Department of Urban Affairs and Planning (DUAP) that had been newly established in April 2021.

At the same time, JCC was aware of the lack of maintenance capacity of PVCC for collection vehicles and heavy landfill equipment. JCC also recognized the current status of the Bouffa landfill site that waste was dumped everywhere in the site due to the inadequacy of on-site road at Bouffa, and that the landfill area was in an open dump state without being covered with soil.

In these circumstances, JCC recommended improving the maintenance capacity of equipment and strengthening the landfill operation capacity of the Bouffa landfill site as priority areas for next year to improve waste management.

JET also pointed out that the root causes of inappropriate equipment maintenance and landfill operation were the insufficient budget allocation and frequent replacement of staff leading to the outflow of the knowledge and experience that should be accumulated as an organizational capacity of PVCC. JCC deeply understood the importance of this matter and recommended strongly that PVCC should ensure the budget disbursement along with maintaining and positioning staff in accordance with the waste management plan.

### iii) OUTPUT 3

JCC confirmed that the detailed design for introducing the Container Deposit Scheme (CDS) was in progress through the CDS technical working group whose regular meetings had been done five times during this period connected virtually among Vanuatu, Australia, New Zealand and Japan. DEPC showed its gratitude for continuous inland support of JICA Vanuatu Office during this period. JCC understood that the drafting instructions for CDS would be ready by the end of 2021 and recommended it should be submitted to the State Law Office without delay for smooth implementation.

### (2) Modification of PDM

Originally, the NWMPCS coordinating committee was supposed to be established by 2020 initiated by DEPC in the process of implementation of the NWMPCS 2016-2020. However, it has not been established yet in such a way. During the Project, two working groups were established for realizing the NWMPCS; one is the working

group for solid waste management composed of the national and local governments, and another is the CDS technical working group composed of the governmental organizations, private sectors and NGOs. As such, DEPC through J-PRISM II encouraged stakeholder participation and communication on SWM in Vanuatu.

Against the background, DEPC and JET proposed a slight change of the terms describing the means of verification for the project purpose and JCC approved the amendment of the Project Design Matrix (PDM) as the PDM version 3.1 shown as ANNEX I.

(3) Confirmation of the Project Period and Modification of PO

JCC acknowledged that the duration of the Project was extended until 30<sup>th</sup> September 2022 because of the global spread of COVID-19 based on the Record of Discussion (R/D) signed on 24<sup>th</sup> February 2021, and recognized the necessity of the modification of PO reflected to the extension of the Project.

In addition, JICA decided to donate the excavator for landfill operation to PVCC that would be procured in March 2022 and dispatched the heavy equipment procurement expert in November 2021 as additional inputs from the Japanese side.

For these reasons, JET proposed the modification of PO and JCC approved the PO version 3.1 as shown in ANNEX II.

(4) Updates of the List of Counterparts

PVCC had established the waste management and environmental health division in January 2020 and enhanced human resources gradually, including the requirement of the new manager of the division in December 2020 followed by the recruitment of other new staff in the division. Besides, there were regular personal shifts in DEPC, PVCC, LMC and Shefa province that should be reflected in the list of counterparts.

JCC understood that there was no change on the organization chart and approved the updated counterpart list proposed by JET shown as ANNEX III and ANNEX IV respectively.

(5) Remaining Activities of J-PRISM II in Vanuatu

i) OUTPUT 1

As above-mentioned, DEPC recognized the necessity of renewal of the NWMPCS 2016-2020 and made a commitment to establishing the NWMPCS coordinating

committee by the end of December 2021 for formulating the next strategy, while DEPC adopted the NWMPCS 2016-2020 and its final evaluation and monitoring report as an interim strategy.

JCC also agreed to follow up on the approval process of the national waste minimization plan and dissemination of “Lessons Guide for Vanuatu Primary School’s Waste Management” for promotion of the Clean School Program (CSP) nationwide in collaboration with the Ministry of Education and Training.

ii) OUTPUT 2

JCC confirmed the key priority areas and activities in 2022 among nine priority areas identified in the PVCC SWM plan 2021-2030. PVCC and JET agreed to make a commitment from both sides for implementation of those activities as follows:

[The priority activities that PVCC and JET will implement together in 2022]

- i. Training on data management and analysis for improvement of SWM;
- ii. Rehabilitation and improvement of the main access road at the Bouffa landfill site;
- iii. Technical assistance for construction of Cell-2 at the Bouffa landfill site;
- iv. Yellow Bag review committee for renewal of procurement contract in 2022.

[The priority activities that PVCC will implement by themselves in 2022]

- i. Feasibility study for weighbridge installation
- ii. Promotion of Clean School Program
- iii. Divisional capacity development – training for drivers, workers and mechanics
- iv. Management of maintenance of machineries and equipment
- v. Improvement of financial management through independent account for SWM

iii) OUTPUT 3

As above-mentioned, JCC recommended that DEPC should proceed with the necessary consulting process without delay and submit the drafting instructions on CDS to SLO by the end of 2021. DEPC requested the continuous support from JET after submission of the drafting instructions and JET agreed to support where necessary based on the queries from SLO and relevant authorities until the end of the Project.

DEPC also requested that JET would support planning the preparation for launching

CDS. JET recognized the DEPC's needs and agreed to seek the possibility to expand the scope of detailed design, including the dispatch of the CDS expert to Vanuatu within the remaining assignment of expert, though it would depend on the situation of border closure of Vanuatu.

#### 5. Others

- DEPC requested that JET would support formulating the next NWMPCS.
- DEPC recognized the necessity to seek the fund for seed money to launch the CDS and facilitate the donor coordination to support the operation of CDS.
- JCC recommended that LMC should endorse the Waste Management Plan 2021-2024 forthwith.
- Shefa province requested that JET would provide technical assistance on drafting a waste management plan for Shefa province.
- Shefa province also sought technical assistance from JET to draft waste management by-law on Green Islands declared physical boundary.
- JCC acknowledged that the city-city cooperation scheme initiated by DUAP was effective and recommended that involvement of DUAP in the Project should be encouraged.

#### 6. Conclusion

JCC made the conclusions as follows;

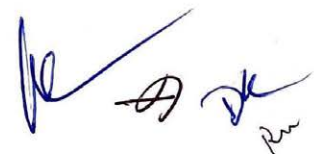
- JCC confirmed the progress of the Project after the 3<sup>rd</sup> JCC on 24<sup>th</sup> February 2020 up to the present.
- JCC approved the PDM and PO version 3.1.
- JCC approved the updated List of Counterparts.
- JCC confirmed and made a suggestion about the implementation policy for each output.

#### 7. Closing of the meeting

The chairperson closed the meeting at 13:30 p.m.

Appendix 1: List of Attendants

Appendix 2: Agenda of 4<sup>th</sup> JCC



- ANNEX I: Revised version of the Project Design Matrix**
- ANNEX II: Revised version of the Plan of Operation**
- ANNEX III: Project Organization Chart**
- ANNEX IV: Revised version of the Counterpart List**

A handwritten signature in blue ink, consisting of a stylized 'K' followed by 'A' and 'D' with a flourish underneath.

## Appendix 1: List of Attendants

### (1) On-site

SN	Position	Organization	Name
1	Director	DEPC	Ms. Donna Kalfatak
2	Principal Waste Management and Pollution Control Officer	DEPC	Ms. Ionie Bolenga
3	Senior Officer Chemical and Ozone	DEPC	Ms. Roselyn Bue
4	Pollution Control Officer	DEPC	Ms. Annabelle Alilee
5	Waste Management Manager, Waste Management and Environmental Health Division	PVCC	Mr. Jason Andrews
6	Principle Waste Management Officer, Waste Management and Environmental Health Division	PVCC	Mr. Mwetu Serge Sandy
7	Waste Management Officer, Waste Management and Environmental Health Division	PVCC	Ms. Felicity Bebe
8	Environmental Waste Management Officer, Waste Management Unit, Physical Planning Division	Shefa Province	Mr. Solomon Jimmy
9	Resident Representative of JICA Vanuatu Office	JICA Vanuatu Office	Ms. Uemura Rika
10	Assistant Representative (Project Formulation)	JICA Vanuatu Office	Mr. Motegi Akihito
11	Program Officer	JICA Vanuatu Office	Ms. Loughman Orsiany
12	Deputy Team Leader/ Solid Waste Management Expert	J-PRISM II Project Team	Mr. Anai Junji
13	Solid Waste Management Expert	J-PRISM II Project Team	Ms. Kodani Rikae
14	National Coordinator	J-PRISM II Project Team	Ms. Mary O'Reilly

DEPC: Department of Environmental Protection and Conservation

PVCC: Port Vila City Council



(2) Online

SN	Position	Organization	Name
1	Director	JICA Headquarters	Mr. Matsuoka Hideaki
2	Environmental Management Group Global Environment Department	JICA Headquarters	Mr. Miura Sho
3	Environmental Management Group Global Environment Department	JICA Headquarters	Ms. Yamada Noriko
4	Chief Advisor	J-PRISM II Project Office in Samoa	Mr. Mimura Satoru
5	Assistant Chief Advisor	J-PRISM II Project Office in Samoa	Mr. Faafetai Sagapolutele
6	Aid Coordination / Project Coordinator	J-PRISM II Project Office in Samoa	Ms. Yoshida Ayako
7	Solid Waste Management Training/Monitoring	J-PRISM II Project Office in Samoa	Ms. Nomura Mayu
8	Monitoring/3R+Return	J-PRISM II Project Office in Samoa	Ms. Onuma Yoko
9	Project Assistant	J-PRISM II Project Office in Samoa	Ms. Evangeline Potifara
10	CDS Expert	J-PRISM II Project Team	Mr. Alice Leney
11	Project Manager	SCE	METAYER Matthieu
12		SCE	ANEX Camille
13		SCE	Marc-Antoine Morel
14		SCE	Paul Mooney
15	Acting Director	SPREP (WMPC)	Mr. Anthony Talouli
16		IUCN	KATIREWA Paula

pm

**Attendance List of the 4th JCC meeting in Vanuatu**

Date: Tuesday, 30th November 2021

Venue: Conference Room, The Melanesian Hotel Port Vila

No.	Organization	Position	Name	Signature
1	PVCC	Manager - Waste management	Jason Andrews	
2	PVCC	Principal waste officer	Murphy Sackey	
3	PVCC	Waste management officer	Melicity Bese	
4	DEPC	Senior officer	Roselyn Bue	
5	DEPC	Public Control officer	Amabelle Akico	
6	DEPC	Director	Douma Kalfeldt	
7	JICA	Resident Representative	RIKA UEMURA	Rika Uemura
8	JICA	Assistant Representative	Akihito MOTEKI	
9	JICA	Program officer	Christy Loughman	
10	Shefa Council	Waste Management officer	Blouin Jimmy	
11	DEPC	Principal officer: NMPC	Ioni Bolenga	
12	JICA	Sub-Leader, J-PRISM II G2	Junji ANAI	
13	JICA	National Coordinator	Mary O'Reilly	
14	JICA/J-PRISM II	JICA Consultant/SWM Expert	Ritae Kalini	
15				
16				
17				
18				

## Appendix 2: Agenda of 4th JCC



### Fourth Joint Coordinating Committee Meeting for J-PRISM II Port Vila, Vanuatu

**Date:** Tuesday, 30 November 2021

**Venue:** Conference Room, The Melanesian Hotel Port Vila & Online (Zoom)

**Participants:** J-PRISM II Counterparts and stakeholders

**Chairperson:** Ms. Donna Kalfatak, Director, DEPC

**Agenda:**

Time	Agenda Items	Presenter/Responsible Person
9:30-10:00 am	Registration of Guests and Participants	Registration by All participants
10:00-10:02 am	Opening Prayer	Mr. Sandy Mwetu, PVCC
10:02-10:10 am	Welcome Toktok	Project Director: Ms. Donna Kalfatak, Director, DEPC
10:10-10:20 am	Keynote Remarks of JICA Vanuatu Office	Ms. Rika Uemura, Resident Representative of JICA in Vanuatu
10:20-10:25 am	Introduction of participants	Project Director
10:25-10:30 am	Confirmation of Minutes of Meeting of the third JCC	Ms. Rikae Kodani, J-PRISM II
10:30-10:45 am	Final Evaluation of NWMPCS 2016-2020, next term of strategy & national coordinating committee and Progress of CDS Introduction	Ms. Ionie Bolenga, DEPC Ms. Annabelle Alilee, DEPC
10:45-11:00 am	Improvement of SWM based on the PVCC SWM Plan 2021-2030	Mr. Jason Andrews, PVCC Mr. Sandy Mwetu, PVCC Ms. Felicity Bebe, PVCC
11:00-11:15 am	Bouffa Landfill Development Plan and Operation Manual	Mr. Junji Anai, J-PRISM II
11:15-11:30 am	Current situation of SWM in Shefa Province	Mr. Solomon Jimmy, Shefa Province
11:30-11:45 am	LMC and Sanma SWM Plan (2021-2024) and current status of SWM in Luganville	Ms. Gina Tari, LMC Mr. Ray Vilvil, LMC Mr. Leonard Lolo, LMC
11:45-12:00 pm	Summary of J-PRISM II activities, revised PDM/PO and counterpart list in Vanuatu	Ms. Rikae Kodani, J-PRISM II
12:00-12:20 pm	Q&A Section and Approval of Revised PDM/PO and Confirmation of Minutes of Meeting	Project Director: Ms. Donna Kalfatak, Director, DEPC
12:20-12:28 pm	Closing Remarks	Project Manager: Mr. Peter Sakita, Town Clerk, PVCC
12:28-12:30 pm	Closing Prayer	Mr. Solomon Jimmy, Shefa Province
12:30-13:30 pm	Group Photo & Lunch	-



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

*[Handwritten signatures]*

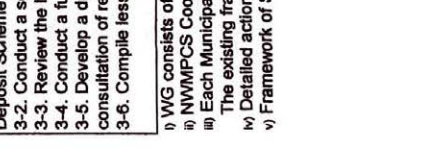
Annex I

**Project Design Matrix: PDM**

**Project Title:** Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II)  
**Implementing Agency:** Department of Environmental Protection and Conservation (DEPC), Port Vila City Council (PVCC), Luganville Municipal Council, Shefa Province  
**Target Group:** DEPC, PVCC, Working Group (WG.I)  
**Period of Project:** 2017-2022 (5 years)  
**Project Site:** Vanuatu

**Version 3.1**  
**Dated 30th November 2021**

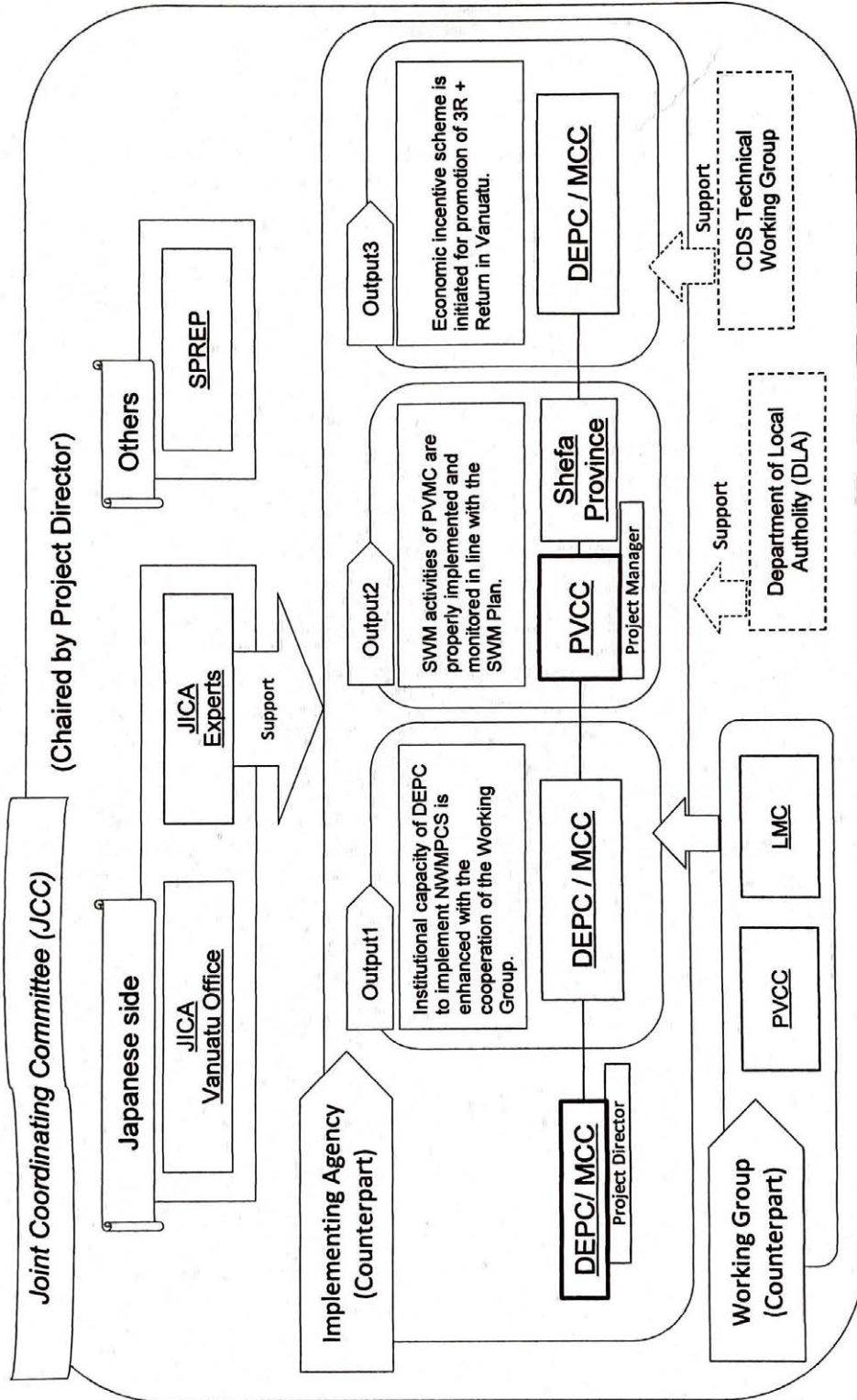
Overall Goal	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p><b>Narrative Summary</b></p> <p>Sustainable management of solid waste in the Pacific region is enhanced based on Pacific Regional Waste and Pollution Management Strategy 2016-2025 (Cleaner Pacific 2025)</p>			
<p><b>Project Purpose (Region-wise)</b></p> <p>Human and institutional capacity base for sustainable Solid Waste Management (SWM) in the Pacific region is strengthened through implementation of Cleaner Pacific 2025.</p> <p><b>(Country)</b></p> <p>A foundation of implementing and monitoring SWM activities in line with the Vanuatu National Waste Management and Pollution Control Strategy (NWMPCS) is built.</p>	<p><b>(Country)</b></p> <p>1. Based on the monitoring results of NWMPCS 2016-2020, the gaps and issues of the Implementation Plan are evaluated and reflected to the next term of NWMPCS.</p>	<p><b>(Country)</b></p> <p>1. Summary of the monitoring reports shared with stakeholders identified in the NWMPCS. ii)</p>	<p>1. Natural disaster would not drastically affect the collaboration among participating countries.</p> <p>2. Political changes would not drastically affect the collaboration of participating countries.</p>
<p><b>Outputs</b></p> <p>1. Institutional capacity of DEPC to implement NWMPCS is enhanced with the cooperation of the Working Group.</p> <p>2. SWM activities of PVCC are properly implemented and monitored in line with the SWM Plan.</p> <p>3. Economic incentive scheme is initiated for promotion of 3R + Return in Vanuatu.</p>	<p>1-1. Detailed action plan of the priority activity(ies) in the Implementation Plan of NWMPCS is processed through the relevant governmental agencies for implementation from 2019.</p> <p>1-2. The annual monitoring report of NWMPCS is made open to the public (through DEPC webpage, published reports, etc.)</p> <p>1-3. With the support of WG as the priority activity, national SWM planning and monitoring system in provincial and municipal government councils is established.</p> <p>1-4. With the support of WG as the priority activity, national waste minimization plan is developed.</p> <p>1-5. With the support of WG as one of the priority activity, clean school program is promoted.</p> <p>2-1. Results of SWM pilot project(s) in line with a draft SWM plan are evaluated in a stakeholder's workshop.</p> <p>2-2. SWM Plan of PVCC (2021-2030) is submitted to the council.</p> <p>2-3. Landfill management in Bourfa disposal site is improved following the landfill operation manual.</p> <p>2-4. Monitoring results of SWM activities are reflected to the annual SWM plan iii) (2022).</p> <p>3-1. Documents necessary to process the container deposit legislation are prepared.</p>	<p>1-1. Detailed action plan of the priority activity(ies) in the Implementation Plan of NWMPCS</p> <p>1-2. Annual monitoring report(s) of NWMPCS</p> <p>1-3. Annual waste management planning form</p> <p>1-4. National waste minimization plan (2021-2025)</p> <p>1-5. Draft lessons Guide of environmental education</p> <p>2-1. Minutes of meeting of a stakeholders workshop/ Pilot project(s) report</p> <p>2-2. SWM Plan of PVCC (2021-2030)</p> <p>2-3. Landfill operation manual</p> <p>2-4. Annual SWM plan of PVCC(2022)</p> <p>3-1. Draft instruction of the container deposit legislation</p>	<p>3. Counterpart personnel keep working in the field of SWM.</p> <p>4. Counterpart personnel do not leave the post without handing over the skills/ knowledge to the new staff.</p>

Activities	Inputs	Important Assumption
<p><b>&lt;Output 1&gt;</b> 1-1 Formulate a WG and conduct WG meetings to study and review the Implementation Plan of NWMPCS, including the current SWM activities of other agencies 1-2 Update the present conditions of municipal SWM in Port Vila and Luganville to understand the baseline of NWMPCS 2016-2020 with WG 1-3 Compile lessons learnt of SWM in Port Vila and Luganville for formulating practical implementation plan of NWMPCS 1-4 Study and renew the framework of annual SWM plan (ii) in PVCC as a pilot activity of implementation of NWMPCS by utilizing existing data and resources of PVCC 1-5 Decide the priority activity(ies) that will be implemented with WG in line with the Implementation Plan 1-6 Develop a detailed action plan (iv) of priority activity(ies) in the Implementation Plan of NWMPCS, based on the discussion of WG 1-7 Implement the priority activity (ies) based on the action plan with WG 1-8 Monitor and prepare an annual monitoring report of NWMPCS including overall evaluation in the final year 2020 for reflection in the next term of NWMPCS</p> <p><b>&lt;Output 2&gt;</b> 2-1 Review the existing data and conduct supplementary survey of the current SWM situation 2-2 Develop a framework of SWM plan v) (2021-2030) by utilizing the results of activity in 1-4 2-3 Organize stakeholders' workshop(s) to discuss the framework of SWM plan, including institutional, technical and financial arrangement 2-4 Formulate a draft SWM plan including recommendations for necessary arrangements considering the discussion of the stakeholders' workshops 2-5 Implement SWM pilot project(s) to test the suitability of institutional, technical and financial systems recommended in the draft SWM plan 2-6 Finalize the SWM plan 2-7 Develop a landfill operation manual based on the SWM plan 2-8 Implement the priority activity (ies) determined in the SWM plan 2-9 Monitor the SWM activities based on the SWM plan</p> <p><b>&lt;Output 3&gt;</b> 3-1. Set up a working group to develop the detailed design of the Container Deposit Scheme (CDS) under overall direction of DEPC 3-2. Conduct a series of stakeholders' consultation through WG 3-3. Review the legislation necessary to implement the CDS 3-4. Conduct a full feasibility study to determine the details of the CDS 3-5. Develop a draft instruction of the container deposit legislation with a consultation of related authorities 3-6. Compile lessons learnt of NWMPCS</p>	<p><b>The Japanese Side</b></p> <ol style="list-style-type: none"> <li>1. Dispatch of experts</li> <li>2. Training</li> <li>3. Local cost for the activities of experts</li> <li>4. Necessary cost and equipment</li> </ol> <p><b>The Vanuatu Side</b></p> <ol style="list-style-type: none"> <li>1. Allocation of counterpart</li> <li>2. Office space and facilities for Japanese experts</li> <li>3. Operational expenses for administrative work, transportation, training, and seminar, etc.</li> </ol>	<p><b>Pre-Conditions</b></p> <p>Counterpart personnel working in the field of SWM are sufficiently secured under C/P Agencies.</p> <p>&lt;Issues and countermeasures&gt;</p>
<p>ii) WG consists of the related agencies of SWM, tentatively including Port Vila City Council and Luganville Municipal Council. DEPC will manage and coordinate the WG activities. iii) NWMPCS Coordination Committee member organization is listed in Appendix-1 of NWMPCS 2016-2020 iv) Each Municipal Council or a Provincial Government Council must formulate, adopt and implement an annual Waste Management Plan in line with the Waste Management Act No.24 of 2014. v) Detailed action plan of the priority activity(ies) includes WBS (Work Breakdown Structure) showing responsibility and detailed schedule of each action, and budget amount. vi) Framework of SWM plan includes present condition of SWM in Port Vila, main issues and possible countermeasures for the future plan (such as waste collection plan, landfill rehabilitation plan, institutional and financial plan)</p>		



Annex III

Project Organization Chart



## Annex IV

LIST OF COUNTERPART PERSONNEL OF VANUATU (As of 30 November 2021)							
	Project Position	Position	Organization	Name	Related Output		
					1	2	3
1	Project Director	Director	DEPC	Ms. Donna Kalfatak	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	Project Manager	Town Clerk	PVCC	Mr. Peter Sakita	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	Counterpart	Principal Waste Management and Pollution Control Officer	DEPC	Ms. Ionie Bolenga	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	Counterpart	Senior Officer Chemical and Ozone	DEPC	Ms. Roselyn Bue	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
5	Counterpart	Pollution Control Officer	DEPC	Ms. Annabelle Alilee	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
6	Counterpart	Senior Officer - Provincial Environment Coordinator	DEPC	Mr. Rontexstar Mogeror	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
7	Counterpart	Manager, Town Planning Division	PVCC	Mr. Mandes Tangaras		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8	Counterpart	Waste Management Manager, Waste Management and Environmental Health Division	PVCC	Mr. Jason Andrews		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9	Counterpart	Principle Waste Management Officer, Waste Management and Environmental Health Division	PVCC	Mr. Mwetu Serge Sandy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10	Counterpart	Waste Management Officer, Waste Management and Environmental Health Division	PVCC	Ms. Felicity Bebe		<input checked="" type="checkbox"/>	
11	Counterpart	Administration Officer, Waste Management and Environmental Health Division	PVCC	Ms. Rollina Kalonikara		<input checked="" type="checkbox"/>	
12	Counterpart	Environment and Health Officer, Waste Management and Environmental Health Division	PVCC	Ms. Rebecca Vuta	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13	Counterpart	Chief Mechanic, Waste Management and Environmental Health Division	PVCC	Mr. George Taun		<input checked="" type="checkbox"/>	
14	Counterpart	Heavy Equipment Operator, Landfill Unit, Waste Management and Environmental Health Division	PVCC	Mr. Arnold Sarginson		<input checked="" type="checkbox"/>	
15	Counterpart	Driver, Landfill Unit, Waste Management and Environmental Health Division	PVCC	Mr. Mark Calo		<input checked="" type="checkbox"/>	
16	Counterpart	Landfill Gate Keeper, Landfill Unit, Waste Management and Environmental Health Division	PVCC	Ms. Annie Tama		<input checked="" type="checkbox"/>	
17	Counterpart	Driver, CBD Unit, Waste Management and Environmental Health Division	PVCC	Mr. Essou Samson		<input checked="" type="checkbox"/>	
18	Counterpart	Town Clerk	LMC	Mr. Jonathan Iavere	<input checked="" type="checkbox"/>		
19	Counterpart	Executive Secretary	LMC	Ms. Gina Tari	<input checked="" type="checkbox"/>		
20	Counterpart	Community Service Manager	LMC	(to be nominated)	<input checked="" type="checkbox"/>		
21	Counterpart	Environmental Officer	LMC	Mr. Ray Vilvil	<input checked="" type="checkbox"/>		
22	Counterpart	Waste Management Officer	LMC	Mr. Leonard Lolo	<input checked="" type="checkbox"/>		
23	Counterpart	Secretary General	Shefa Province	Mr. Morris Kaloran		<input checked="" type="checkbox"/>	
24	Counterpart	Compliance Officer	Shefa Province	Mr. Willie Shran Kalo		<input checked="" type="checkbox"/>	
25	Counterpart	Environmental Waste Management Officer, Waste Management Unit, Physical Planning Division	Shefa Province	Mr. Solomon Jimmy		<input checked="" type="checkbox"/>	
26	Counterpart	Filing Clerk, Property Tax Unit, Physical Planning Division	Shefa Province	Mr. Tetuwi Jeannat		<input checked="" type="checkbox"/>	
27	Counterpart	Property Tax Officer, Property Tax Unit, Physical Planning Division	Shefa Province	Mr. Owen Joel Sisi		<input checked="" type="checkbox"/>	

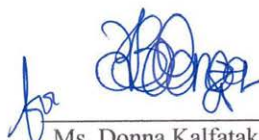
Note: Counterpart personnel will be added as the need arises for the smooth and effective implementation of the Project.  
DEPC: Department of Environmental Protection and Conservation, Ministry of Climate Change  
PVCC: Port Vila City Council  
LMC: Luganville Municipal Council



5.2.2 5<sup>th</sup> JCC

MINUTES OF MEETING  
ON  
THE FINAL JOINT COORDINATING COMMITTEE  
OF  
THE JAPANESE TECHNICAL COOPERATION PROJECT  
FOR PROMOTION OF REGIONAL INITIATIVE ON SOLID WASTE  
MANAGEMENT IN PACIFIC ISLAND COUNTRIES PHASE II (J-PRISM II)  
IN  
THE REPUBLIC OF VANUATU

Port Vila, 19th August 2022



Ms. Donna Kalfatak  
Project Director  
Director of Department of Environmental  
Protection and Conservation,  
Ministry of Environment,  
Republic of Vanuatu



Mr. Peter Sakita  
Project Manager  
Town Clerk,  
Port Vila City Council,  
Republic of Vanuatu



Mr. ANAI Junji  
Sub Team Leader,  
JICA Expert G2 Team,  
J-PRISM II

*Witnessed by:*



Ms. UEMURA Rika  
Resident Representative  
Japan International Cooperation Agency  
Vanuatu Office

### Final Joint Coordinating Committee (JCC) of the Project

19<sup>th</sup> August 2022 – the Melanesian Hotel Conference Room, Port Vila, Vanuatu

1. Meeting started at 10:00 am
2. Attendance list of the meeting is given in **Appendix 1**
3. Opening of the meeting

Opening remarks were given by Ms. Ionie Bolenga, Acting Director of the Department of Environmental Protection and Conservation (DEPC). Subsequently, Ms. Uemura Rika, Resident Representative of JICA Vanuatu Office, gave keynote remarks on behalf of the Japanese side. Since Ms. Donna Kalfatak was absent due to her health condition, Ms. Ionie Bolenga, as the chair on behalf of the Director, declared the meeting open.

At the beginning, the JICA Expert Team provided a brief on the minutes of the 4th JCC meeting and all the participants confirmed it.

4. Agreement and Confirmation

The chairperson proceeded the meeting in accordance with the program in **Appendix 2**. All the attendees confirmed and agreed with the following matters:

(1) Achievements of the Project

Representatives from DEPC and Port Vila City Council (PVCC) gave a presentation on the final evaluation of the achievements of the Project and JCC confirmed that the all outputs and indicators set in the PDM were achieved. Lessons learned extracted in the process of introduction of the Container Deposit Scheme (CDS) was also shared and confirmed among the attendees.

(2) Discussion and Way Forward

JCC concluded that in general, the waste management in Vanuatu, especially in Port Vila City, is on its way to sound operation. JCC acknowledged the support of J-PRISM II for a long time and showed the expectation for the continued support.

The following are some of the remaining/upcoming issues needed to be solved as well as recommendations for the better waste management in the future:



**1) Capacity development of municipal Solid Waste Management (SWM) through inter-municipality cooperation**

DEPC is expected to proactively promote SWM capacity development in municipalities, in collaboration with the Department of Local Authorities (DLA) of the Ministry of Internal Affairs, and relevant ministries and agencies.

**2) Implementation of a Container Deposit Scheme (CDS)**

The practice of 3R+Return by means of a CDS will contribute greatly to solving SWM problems unique to island countries. The Government of Vanuatu is expected to launch CDS without any further delay.

A CDS based on participative management by multiple enterprises is an advanced initiative in the Pacific region, and is expected to become a model for south-to-south cooperation. In addition, it is also expected that the scope of the system will be expanded in the future to include electrical appliances, waste batteries, and automobiles. When the CDS is introduced, Technical assistance may be needed to ensure a smooth operation.

**3) Strengthening PVCC's waste management capacity**

PVCC is expected to strengthen its solid waste management capacity in implementing the "SWM Plan 2021-2030" by paying attention to the following points.

- Improvement of financial management through independent account for SWM  
Financial management improvement is one of the priority activities in 2022 that is decided in the previous JCC meeting. PVCC should reinforce the financial management system so that the income generated from the yellow bags selling and gate fee will be used properly for SWM.

- Urgent improvements to the next landfill section at Bouffa disposal site  
As the existing cell (landfill area) of the Bouffa disposal site is already full, the construction of a new access road and the expansion of the next cell is urgently needed.

- Appropriate maintenance of waste disposal equipment.  
Waste management (collection, transport and landfill) is not possible without equipment. In order to continue with proper waste management, PVCC is

required to ensure that equipment is well maintained to keep it in good condition at all times.

#### 5. Conclusion

The JCC made the following conclusions:

- The three expected outputs of J-PRISM II have been completed, and the project purpose of "A foundation of implementing and monitoring SWM activities in line with the National Waste Management and Pollution Control Strategy" has been mostly achieved.
- Phase 3 of J-PRISM is scheduled to be implemented from next year, and we must sustainably develop the results of Phase 2 and link to Phase 3.

#### 6. Closing of the meeting

The chairperson closed the meeting at 13:00 p.m.

- Appendix 1: List of Attendants  
Appendix 2: Agenda of 5<sup>th</sup> JCC



## Appendix 1: List of Attendants

### (1) On-site

SN	Position	Organization	Name
1	Town Clerk	PVCC	Mr. Peter Sakita
2	Acting Director / Principal Waste Management and Pollution Control Officer	DEPC	Ms. Ionie Bolenga
3	Pollution Control Officer	DEPC	Ms. Annabelle Alilee
4	Senior Officer - Provincial Environment Coordinator	DEPC	Mr. Rontexstar Mogeror
5	Waste Management Manager, Waste Management and Environmental Health Division	PVCC	Mr. Jason Andrews
6	Principle Waste Management Officer, Waste Management and Environmental Health Division	PVCC	Mr. Mwetu Serge Sandy
7	Waste Management Officer, Waste Management and Environmental Health Division	PVCC	Ms. Felicity Bebe
8	Environmental Waste Management Officer, Waste Management Unit, Physical Planning Division	Shefa Province	Mr. Solomon Jimmy
9	Physical Planner	Torba Province	Mr. Jamesly Tavuti
10	Resident Representative of JICA Vanuatu Office	JICA Vanuatu Office	Ms. Uemura Rika
11	Assistant Representative (Project Formulation)	JICA Vanuatu Office	Mr. Motegi Akihito
12	Program Officer	JICA Vanuatu Office	Ms. Obed Tarish
13	Program Officer	JICA Vanuatu Office	Ms. Patricia Abock
14	Deputy Team Leader/ Solid Waste Management Expert	J-PRISM II Project Team	Mr. Anai Junji
15	Heavy Equipment Maintenance Expert	J-PRISM II Project Team	Mr. Yatsu Tetsuo
16	CDS Expert	J-PRISM II Project Team	Mr. Alice Leney

DEPC: Department of Environmental Protection and Conservation

PVCC: Port Vila City Council

(2) Online

SN	Position	Organization	Name
1	Chief Advisor	J-PRISM II Project Office in Samoa	Mr. Mimura Satoru
2	Assistant Chief Advisor	J-PRISM II Project Office in Samoa	Mr. Faafetai Sagapolutele
3	Monitoring/ 3R + Return	J-PRISM II Project Office in Samoa	Ms. Yoko Onuma
4	Aid Coordination / Project Coordinator	J-PRISM II Project Office in Samoa	Ms. Yoshida Ayako
5	Project Assistant	J-PRISM II Project Office in Samoa	Ms. Evangeline Potifara
6	Solid Waste Management Expert	J-PRISM II Project Team	Ms. Kodani Rikae
7	National Coordinator	J-PRISM II Project Team	Ms. Mary O'Reilly



## Appendix 2: Agenda of the Final JCC meeting



### Final Joint Coordinating Committee Meeting for J-PRISM II Port Vila, Vanuatu

**Date:** Friday, 19 August 2022

**Venue:** Conference Room, The Melanesian Hotel Port Vila & Online (Zoom)

**Participants:** J-PRISM II Counterparts and stakeholders

**Chairperson:** Ms. Ionie Bolenga, Acting Director, DEPC

**Agenda:**

Time	Agenda Items	Presenter/Responsible Person
9:30-10:00 am	Registration of Guests and Participants	Registration by All participants
10:00-10:02 am	Opening Prayer	Mr. Sandy Mwetu, PVCC
10:02-10:10 am	Welcome Toktok	Ms. Ionie Bolenga, Acting Director, DEPC
10:10-10:20 am	Keynote Remarks of JICA Vanuatu Office	Ms. Rika Uemura, Resident Representative of JICA in Vanuatu
10:20-10:25 am	Introduction of participants	Project Director
10:25-10:30 am	Confirmation of Minutes of Meeting of the previous JCC	Ms. Rikae Kodani, J-PRISM II
10:30-10:45 am	Achievements of Output 1 & Output 3	Ms. Ionie Bolenga, DEPC Ms. Annabelle Alilee, DEPC
10:45-11:00 am	Achievements of Output 2	Mr. Jason Andrews, PVCC Mr. Sandy Mwetu, PVCC Ms. Felicity Bebe, PVCC
11:00-11:15 am	Lessons learnt of CDS introduction in Vanuatu	Mr. Alice Leney, J-PRISM II
11:15-11:30 am	Discussion and Way Forward	Ms. Ionie Bolenga, Acting Director, DEPC
11:30-11:45 am	Confirmation of Minutes of Meeting	Mr. Junji Anai, J-PRISM II
11:45-11:55 am	Closing Remarks	Project Manager: Mr. Peter Sakita, Town Clerk, PVCC
11:55-12:00 pm	Closing Prayer	Mr. Solomon Jimmy, Shefa Province
12:00-13:00 pm	Group Photo & Lunch	-



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

*Annex D : Attachment for Kingdom of  
Tonga*



## Table of Contents

<b>1</b>	<b>Lists of Project outputs and related documents.....</b>	<b>1</b>
<b>2</b>	<b>Inputs and Work schedule .....</b>	<b>1</b>
2.1	Inputs.....	1
2.1.1	Dispatch of Japanese experts .....	1
2.1.2	Acceptance of trainees .....	1
2.2	Work schedule.....	2
<b>3</b>	<b>Work flow chart.....</b>	<b>3</b>
3.1	Work flow chart based on PO2 .....	3
3.2	Work flow chart based on PO3 .....	4
<b>4</b>	<b>Changes of PDM .....</b>	<b>5</b>
4.1	Project Purpose .....	5
4.2	Outputs, Indicator and Activities .....	5
4.2.1	Output 1.....	5
4.2.2	Output 2.....	6
4.2.3	Output 3.....	7
4.2.4	Output 4.....	7
<b>5</b>	<b>JCC .....</b>	<b>8</b>
5.1	JCC Program.....	8
5.1.1	3 <sup>rd</sup> JCC.....	8
5.1.2	4 <sup>th</sup> JCC.....	9
5.2	Minutes of Meeting (including participants list).....	10
5.2.1	3 <sup>rd</sup> JCC.....	10
5.2.2	4 <sup>th</sup> JCC.....	20

## 1 Lists of Project outputs and related documents

Table 1-1 Lists of Project outputs and related documents (Tonga)

No	Title of outputs/documents	Creation date	Summary
1	WAL 5-years Business Plan	August, 2017	Mid-long term Business plan published in the Combine Utilities Business Plan 2018 – 2022
2	Vava'u waste management service action plan	July, 2017	The action plan for the commencement of Vava'u waste management service targeted on Jan 2018 then
3	Vava'u waste management service basic plan/ JCC presentation material	April 2017 – December 2018	Collection schedule and monitoring sheets prepared before the commencement of waste services in Vava'u
4	Ha'apai Action Plan for Waste Management Service	January, 2019	The working plan for starting waste management service in Ha'apai
5	'Eua Action Plan for Waste Management Service	February, 2020	A working plan for starting waste management service in 'Eua
6	3rd JCC Meeting materials	October, 2020	Materials regarding progress of the project, report on activities, and revision of PDM
7	4th JCC Meeting materials	September, 2022	Materials regarding progress of the project, report on activities, and revision of PDM

## 2 Inputs and Work schedule

### 2.1 Inputs

#### 2.1.1 Dispatch of Japanese experts

No.	Name	Expert	Dispatch period		PM	PM
			Start date	End date		
1	Shinnosuke ODA	Team Leader / SWM D1	2022/08/28	2022/08/31	0.13	0.13
2	Junji Anai	Sub Team Leader/ SWM D2	2022/8/23	2022/9/16	0.83	0.83
3	Mitsuko NAKAMURA	Capacity Development E	2022/8/7	2022/9/19	1.47	1.47
Total						2.43

\*Work in Japan is separately summarized.

#### 2.1.2 Acceptance of trainees

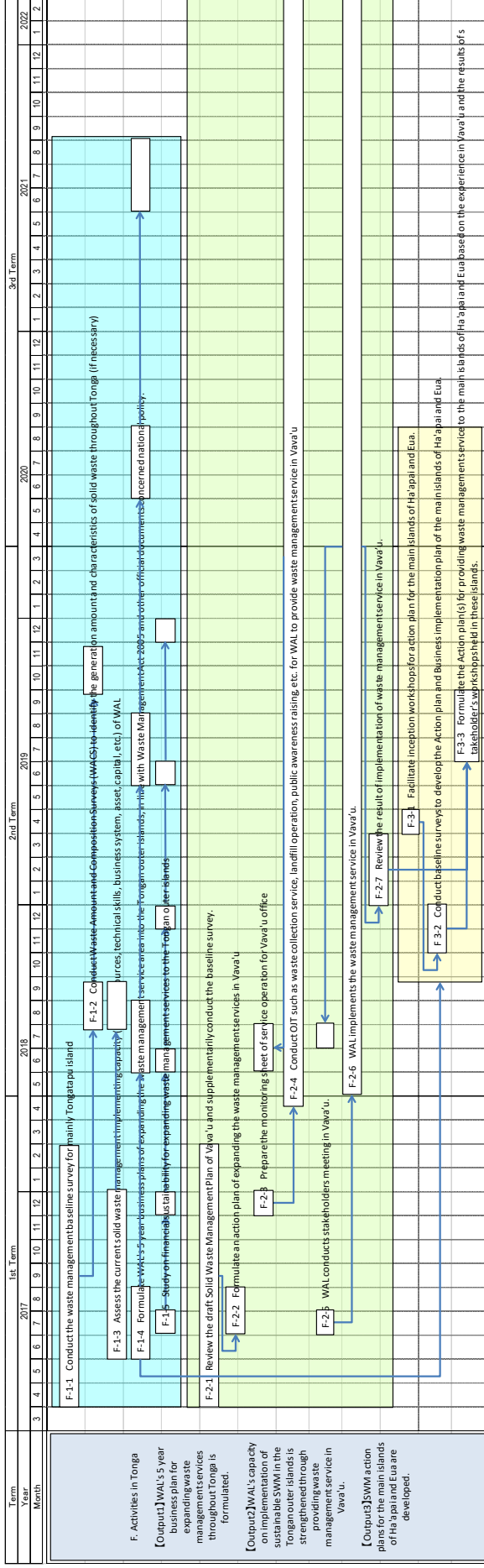
There was no acceptance of trainees.

## 2.2 Work schedule

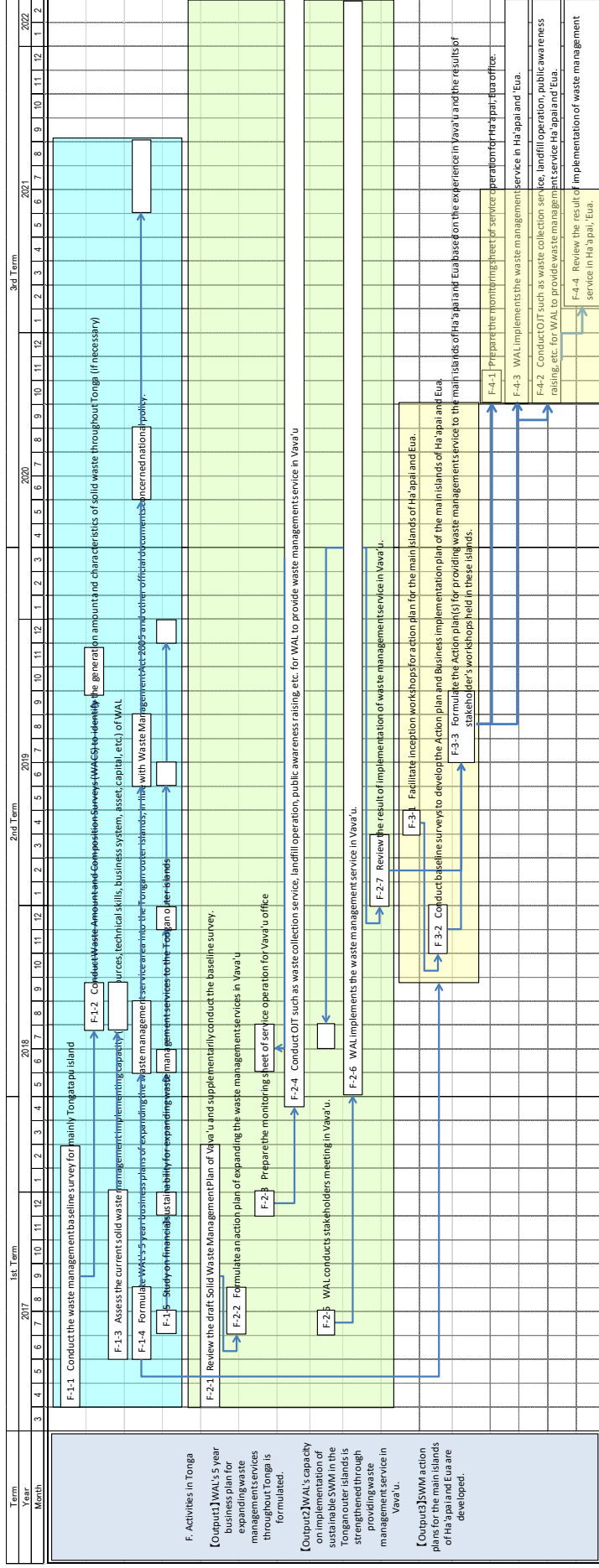
Activities Sub-Activities	2017		2018			2019			2020			2021			2022		
	Plan	Actual	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III
<b>Output 1: WAL's 5 year business plan for expanding waste management services throughout Tonga is formulated</b>																	
1-1 Conduct the waste management baseline survey for mainly Tongatapu island	Plan																
	Actual																
1-2 Conduct Waste Amount and Composition Surveys (WACS) to identify the generation amount and characteristics of solid waste throughout Tonga (if necessary)	Plan																
	Actual																
1-3 Assess the current solid waste management implementing capacity (human resources, technical skills, business system, asset, capital, etc.) of WAL	Plan																
	Actual																
1-4 Formulate WAL's 5 year business plans of expanding the waste management service area into the Tongan outer islands, in line with Waste Management Act 2005 and other official documents concerned national policy.	Plan																
	Actual																
1-5 Study on financial sustainability for expanding waste management services to the Tongan outer islands	Plan																
	Actual																
<b>Output 2: WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in Vava'u.</b>																	
2-1 Review the draft Solid Waste Management Plan of Vava'u and supplementarily conduct the baseline survey.	Plan																
	Actual																
2-2 Formulate an action plan of expanding the waste management services in Vava'u	Plan																
	Actual																
2-3 Prepare the monitoring sheet of service operation for Vava'u office	Plan																
	Actual																
2-4 Conduct OJT such as waste collection service, landfill operation, public awareness raising, etc. for WAL to provide waste management service in Vava'u	Plan																
	Actual																
2-5 WAL conducts stakeholders meeting in Vava'u.	Plan																
	Actual																
2-6 WAL implements the waste management service in Vava'u.	Plan																
	Actual																
2-7 Review the result of implementation of waste management service in Vava'u.	Plan																
	Actual																
<b>Output 3: SWM action plans for the main islands of Ha'apai and Eua are developed.</b>																	
3-1 Facilitate inception workshops for action plan for the main islands of Ha'apai and Eua.	Plan																
	Actual																
3-2 Conduct baseline surveys to develop the action plan and business implementation plan of the main islands of Ha'apai and Eua.	Plan																
	Actual																
3-3 Formulate the Action plan(s) for providing waste management service to the main islands of Ha'apai and Eua based on the experience in Vava'u and the results of stakeholder's workshops held in these islands.	Plan																
	Actual																
<b>Output 4: WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in Ha'apai and Eua.</b>																	
4-1 Prepare the monitoring sheet of service operation for Ha'apai and Eua office	Plan																
	Actual																
4-2 Conduct OJT such as waste collection service, landfill operation, public awareness raising, etc. for WAL to provide waste management service in Ha'apai and Eua office	Plan																
	Actual																
4-3 WAL implements the waste management service in Ha'apai and Eua	Plan																
	Actual																
4-4 Review the result of implementation of waste management service in Ha'apai and Eua	Plan																
	Actual																

### 3 Work flow chart

#### 3.1 Work flow chart based on PO2



### 3.2 Work flow chart based on PO3



## 4 Changes of PDM

PDM2 was revised and approved as PDM3 in the 3rd JCC which was held on October 22<sup>nd</sup>, 2020. There was no revision of PDM in the 4<sup>th</sup> JCC held on September 13<sup>th</sup> 2022.

### 4.1 Project Purpose

PDM2	PDM3
Project purpose	
A foundation of sustainable solid waste management is built in the outer islands of Tonga, with emphasis on practical implementation.	A foundation of sustainable solid waste management is built in the Tongan outer islands, with emphasis on practical implementation.
Objectively Verifiable Indicator	
<ol style="list-style-type: none"> <li>1. SWM action plan of Tongan outer islands is reflected in WAL's 5 year business plan.</li> <li>2. 100% of households in the main island of Vava'u receive waste collection service provided by WAL by the end of the Project.</li> <li>3. The waste fee collection rate in Vava'u exceeds 80% due to the improvement of public awareness.</li> </ol>	No changed

### 4.2 Outputs, Indicator and Activities

#### 4.2.1 Output 1

PDM2	PDM3
Output 1	
WAL's 5 year business plan for expanding waste management services throughout Tonga is formulated.	No changed
Objectively Verifiable Indicator	
<ol style="list-style-type: none"> <li>1-1 WAL's 5 year business plan for providing waste management services in the Tongan outer islands is approved by WAL board meeting and submitted to Ministry of Public Enterprise</li> <li>1-2 Necessary human resources, technical support, infrastructure, capital are incorporated into the WAL's business plan.</li> <li>1-3 Mid-long term of WAL's Objectives and Strategies are specified in 5 years Business Plan</li> </ol>	No changed
Activities	
<ol style="list-style-type: none"> <li>1-1 Conduct the waste management baseline survey for mainly Tongatapu island.</li> <li>1-2 Conduct Waste Amount and Composition Surveys (WACS) to identify the generation amount and characteristics of solid waste throughout Tonga (if necessary).</li> <li>1-3 Assess the current solid waste management implementing capacity (human resources, technical skills, business system, asset, capital, etc.) of WAL.</li> </ol>	No changed

PDM2	PDM3
Activities	
1-4 Formulate WAL's 5 year business plans of expanding the waste management service area into the Tongan outer islands, in line with Waste Management Act 2005 and other official documents concerned national policy.	No changed
1-5 Study on financial sustainability for expanding waste management services to the Tongan outer islands.	

#### 4.2.2 Output 2

PDM2	PDM3
Output 2	
WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in Vava'u.	No changed
Objectively Verifiable Indicator	
2-1 WAL collects solid waste in accordance with the collection schedule in Vava'u	No changed
2-2 WAL operates and maintains Kalaka landfill site according to O&M manual to be updated through OJT.	
2-3 WAL Vava'u office manages waste collection and landfill activities in accordance with the monitoring sheet of service operation for Vava'u office.	
Activities	
2-1 Review the draft Solid Waste Management Plan of Vava'u and supplementary conduct the baseline survey.	No changed
2-2 Formulate an action plan of expanding the waste management services in Vava'u.	
2-3 Prepare the monitoring sheet of service operation for Vava'u office.	
2-4 Conduct OJT such as waste collection service, landfill operation, public awareness raising, etc. for WAL to provide waste management service in Vava'u.	
2-5 WAL conducts stakeholders meeting in Vava'u.	
2-6 WAL implements the waste management service in Vava'u.	
2-7 Review the result of implementation of waste management service in Vava'u.	

### 4.2.3 Output 3

PDM2	PDM3
Output 3	
SWM action plans for the main islands of Ha'apai and Eua are developed.	No changed
Objectively Verifiable Indicator	
3-1 Actual situation of solid waste management in the main islands of Ha'apai and Eua is grasped. 3-2 WAL identifies the issues to be solved for providing solid waste management service in the main islands of Ha'apai and Eua.	No changed
Activities	
3-1 Facilitate inception workshops for action plan for the main islands of Ha'apai and Eua 3-2 Conduct baseline surveys to develop the Action plan and Business implementation plan of the main islands of Ha'apai and Eua. 3-3 Formulate the Action plan(s) for providing waste management service to the main islands of Ha'apai and Eua based on the experience in Vava'u and the results of stakeholder's workshops held in these islands.	No changed

### 4.2.4 Output 4

PDM2	PDM3
Output 4	
	WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in Ha'apai and Eua.
Objectively Verifiable Indicator	
	4-1 WAL collects solid waste in accordance with the collection schedule in Ha'apai and Eua. 4-2 WAL Ha'apai and Eua office manages waste collection and landfill activities in accordance with the monitoring sheet of service operation for Vava'u office.
Activities	
	4-1 Prepare the monitoring sheet of service operation for Ha'apai and Eua office. 4-2 Conduct OJT such as waste collection service, landfill operation, public awareness raising, etc. for WAL to provide waste management service in Ha'apai and Eua. 4-3 WAL implements the waste management service in Ha'apai and Eua. 4-4 Review the result of implementation of waste management service in Ha'apai and Eua.



## 5 JCC

### 5.1 JCC Program

#### 5.1.1 3<sup>rd</sup> JCC

- Date: 22nd October 2020
- Venue: JICA Tonga Office
- Chairperson: Dr. Siale 'Akau'ola (CEO, MOH)
- Agenda

Time (Tonga)	Agenda	Facilitator/Resource Person
13:30 – 14:00	Registration	All participants
14:00 – 14:05	Opening prayer	
14:05 – 14:10	Opening remarks	Dr. Siale 'Akau'ola (CEO, MOH)
14:10 – 14:20	Keynote Remarks of JICA Tonga Office	Mr. Nobuaki MATSUI (Resident Representative, JICA)
14:20 – 14:40	Project Progress	Mr. Malakai Lomu Sika, (CEO, WAL)
14:40 – 14:50	Presentation on PDM and PO	Mr. Hitoshi Katayama (JPRISM II)
14:50– 15:00	Confirmation of forthcoming schedule	MEIDECC, MOE, WAL, JICA, and JPRISMII
15:00– 15:10	Closing remarks	Dr. Siale 'Akau'ola (CEO, MOH)

### 5.1.2 4<sup>th</sup> JCC

- Date: 13th, September, 2022
- Venue: Board Room, Waste Authority Limited
- Chairperson: Dr. Siale 'Akau'ola (CEO, MOH)
- Agenda

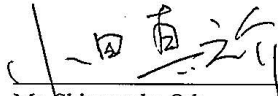
Time (Tonga)	Agenda	Facilitator/Resource Person
10:00 – 10:30	1. Registration	All participants
10:30 – 10:35	2. Opening prayer	
10:35 – 10:40	3. Opening remarks	Dr. Siale 'Akau'ola (CEO, MOH)
10:40 – 10:50	4. Keynote Remarks of JICA Tonga Office	Mr. Hiroaki TAKASHIMA (Resident Representative, JICA)
10:50 – 11:20	5. Project Progress 5-1. Output 1&3 5-2 Output 2 5-3 Output 4	Mr. Stalini, (WAL Manager, Special Projects) Mr. Tevita (WAL Vava'u Branch Manager) Mr. Maali (WAL Ha'apai Branch Manager) Mr. Anitelu (WAL 'Eua Branch Managers)
11:20 – 11:30	6. Summary of PDM	Ms. Mitsuko NAKAMURA (JPRISM II)
11:30– 11:50	7. Discussions	MEIDECC, MOH, WAL, JICA, and JPRISMII
11:50– 12:00	8. Closing remarks	Mr. Paula Ma'u (CEO, MEIDECC)

## 5.2 Minutes of Meeting (including participants list)

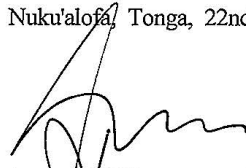
### 5.2.1 3<sup>rd</sup> JCC

**MINUTES OF MEETINGS  
ON  
THE THIRD JOINT COORDINATING COMMITTEE  
OF  
THE JAPANESE TECHNICAL COOPERATION PROJECT  
FOR PROMOTION OF REGIONAL INITIATIVE ON SOLID WASTE  
MANAGEMENT IN PACIFIC ISLAND COUNTRIES PHASE II (J-PRISM II)  
IN  
THE KINGDOM OF TONGA**

Nuku'alofa, Tonga, 22nd October, 2020



Mr. Shinnosuke Oda  
Team Leader,  
JICA Expert G2 Team,  
Technical Cooperation Project for  
Promotion of Regional Initiative on Solid  
waste Management in Pacific Island  
Countries Phase II (J-PRISM II)



Mr. Paula Ma'u  
Chief Executive Officer  
Ministry of Metrology, Energy, information,  
Disaster Management, Environment,  
Climate Change and Commutations  
The Kingdom of Tonga

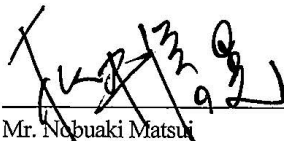


Dr. Siale 'Akau'ola  
Chief Executive Officer  
Ministry of Health  
The Kingdom of Tonga



Mr. Malakai Lomu Sika  
Chief Executive Officer  
Waste Authority Limited  
The Kingdom of Tonga

*Witnessed by:*



Mr. Nobuaki Matsui  
Resident Representative  
TONGA Office  
Japan International Cooperation Agency

Main Points Discussed

The chairperson, Dr. Siale 'Akau'ola, proceeded the meeting in accordance with the program in Appendix 2. All the attendances agreed and confirmed the following matters;

1. Progress of the project

JCC acknowledged that the activities carried out by Counterparts and JICA Expert Team (JET) from the 1<sup>st</sup> JCC to the beginning of October 2020, according to the presentation by WAL and JET.

2. Modification of PDM and PO

JCC understood and approved the modification of The Project Design Matrix (PDM) and Plan of Operation (PO) shown as ANNEX I and ANNEX II . There are no modifications in this JCC meeting except for the addition of Output4. Record of discussion of the Project will be modified accordingly in timely manner.

3. List of Counterparts

JCC understood and approved the modification of the counterparts list shown as ANNEX III

**ANNEX I: Project Design Matrix Version 3**

**ANNEX II: Plan of operation Version 3**

**ANNEX III: Organization chart**

**ANNEX IV: List of Counterparts**

Appendix 1: List of Attendance

Appendix 2: Agenda of 3rd JCC

Appendix 1: List of Attendance

No.	Name	Position	Organization
1	Dr. Siale 'Akau'ola	CEO	MOH
2	Mr. Malakai Lomu Sika	CEO	WAL
3	Ms. Mafie'o Masi	Chief Environmentalist, DoE	MEIDECC
4	Ms. Lucy Fa'anunu	OIC Vavau, MEIDECC	MEIDECC
5	Ms. Filisi Tonga	Public Health Inspector Graduate	MOH
6	Ms. LoLa Liava'a Tonga	Manager of Administration & Special Projects	WAL
7	Mr. Nobuaki Matsui	Resident Representative	JICA Tonga Office
8	Mr. Tetsuji Nakasone	Project Formulation Advisor	JICA Tonga Office
9	Mr. Alfred Vaka	Program officer	JICA Tonga Office
10	Ms. Yu Sugita		JICA HQ
11	Mr. Satoru Mimura	Chief Advisor	J-PRISM II Project Office
12	Mr. Faafetai Sagapolutele	Assistant Chief Advisor	J-PRISM II Project Office
13	Ms. Ayako Yoshida	Regional Cooperation Coordinator	J-PRISM II Project Office
14	Ms. Mayu Nomura	Expert on Solid Waste Management Training/Monitoring	J-PRISM II Project Office
15	Ms. Yoko Onuma	Expert, Monitoring/3R+Return	J-PRISM II Project Office
16	Ms. Evangeline Potifara	Project Assistant	J-PRISM II Project Office
17	Mr. Shinnosuke Oda	Team Leader/ Solid Waste management Expert	J-PRISM II Project short term expert Team
18	Mr. Hitoshi Katayama	Solid Waste management Expert	J-PRISM II Project short term expert Team

Appendix 2: Agenda of 3rd JCC

**J-PRISM II**  
**3rd Joint Coordinating Committee (JCC) Meeting**

Date: Thursday, 22th October, 2020

Venue: JICA Tonga Office

Chairperson: Dr. Siale 'Akau'ola (CEO, MOH)

Purpose: To confirm over all progress including the outcome of the project and challenges to achieve our goals, and to get approval for adding Output 4.

Time (Tonga)	Agenda	Facilitator/Resource Person
13:30 – 14:00	Registration	All participants
14:00 – 14:05	Opening prayer	Mr. Sione Pahulu (JICA)
14:05 – 14:10	Opening remarks	Dr. Siale 'Akau'ola (CEO, MOH)
14:10 – 14:20	Keynote Remarks of JICA Tonga Office	Mr. Nobuaki MATSUI (Resident Representative, JICA)
14:20 – 14:40	Project Progress	Mr. Malakai Lomu Sika, (CEO, WAL)
14:40 – 14:50	Presentation on PDM and PO	Mr. Hitoshi Katayama (JPRISM II)
14:50– 15:00	Confirmation of forthcoming schedule	MEIDECC, MOE, WAL, JICA, and JPRISMII
15:00– 15:10	Closing remarks	Dr. Siale 'Akau'ola (CEO, MOH)

**Project Design Matrix (PDM)**

**Project Title:** Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II)  
**Implementing Agency:** Waste Authority Limited (WAL), Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications (MEIDECC),  
Ministry of Health (MOH)


**Target Group:** Staff and C/Ps of WAL, C/Ps of MEIDECC and MOH

**Period of Project:** 2017 – 2022 (5 years in regional project)

**Project Site:** Tonga

**Version 3**  
**Dated: 22 October 2019**

	Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<b>Overall Goal</b> Sustainable management of solid waste in the Pacific region is enhanced based on Pacific Regional Waste and Pollution Management Strategy 2016 – 2025 (Cleaner Pacific 2025).				
<b>Project Purpose</b> (Regional) Human and institutional capacity base for sustainable Solid Waste Management (SWM) in the Pacific region is strengthened through implementation of Cleaner Pacific (CPAC) (Country) A foundation of sustainable solid waste management is built in the Tongan outer islands*, with emphasis on practical implementation.		<ol style="list-style-type: none"> <li>1. SWM action plan of Tongan outer islands is reflected in WAL's 5 year business plan.</li> <li>2. 100% of households in the main island of Vavatu receive waste collection service provided by WAL by the end of the Project.</li> <li>3. The waste fee collection rate in Vavatu exceeds 80% due to the improvement of public awareness.</li> </ol>	<ol style="list-style-type: none"> <li>1. Business Plan of WAL</li> <li>2. Record of waste collection service</li> <li>3. Record of waste fee collection</li> </ol>	
<b>Outputs</b> 1. WAL's 5 year business plan for expanding waste management services throughout Tonga is formulated.  2. WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in Vavatu.  3. SWM action plans for the main islands of Ha'apai and Eua are developed.		<ol style="list-style-type: none"> <li>1-1 WAL's 5 year business plan for providing waste management services in the Tongan outer islands is approved by WAL board meeting and submitted to Ministry of Public Enterprise</li> <li>1-2 Necessary human resources, technical support, infrastructures, capital are incorporated into the business plan for each outer islands.</li> <li>1-3 Mid-long term of WAL's Objectives and Strategies are specified in 5 years Business Plan</li> <li>2-1 WAL collects solid waste in accordance with the collection schedule in Vavatu.</li> <li>2-2 WAL operates and maintains Kalaka landfill site according to O&amp;M manual to be updated through OJT.</li> <li>2-3 WAL Vavatu office manages waste collection and landfill activities in accordance with the monitoring sheet of service operation for Vavatu offices.</li> <li>3-1 Actual situation of solid waste management in the main islands of Ha'apai and Eua is grasped.</li> <li>3-2 WAL identifies the issues to be solved for providing solid waste management service in the main islands of Ha'apai and Eua.</li> </ol>	<ol style="list-style-type: none"> <li>1-1 WAL's 5 year business plan</li> <li>1-2 Business plan for each outer islands</li> <li>1-3 WAL's 5 year business plan</li> <li>2-1 Operation records of WAL</li> <li>2-2 Operation records of WAL</li> <li>2-3 Record of collection works, landfill works and summary of operations compiled by WAL Vavatu office</li> <li>3-1 Report of baseline survey of the target island(s)</li> <li>3-2 Solid waste management plan in the target island(s)</li> </ol>	

<p>4. WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in Ha'apai and 'Eua.</p>	<p>Activities</p> <p>&lt;Output 1&gt; 1-1 Conduct the waste management baseline survey for mainly Tongatapu island. 1-2 Conduct Waste Amount and Composition Surveys (WACS) to identify the generation amount and characteristics of solid waste throughout Tonga (if necessary). 1-3 Assess the current solid waste management implementing capacity (human resources, technical skills, business system, asset, capital, etc.) of WAL. 1-4 Formulate WAL's 5 year business plans of expanding the waste management service area into the Tongan outer islands, in line with Waste Management Act 2005 and other official documents concerned national policy. 1-5 Study on financial sustainability for expanding waste management services to the Tongan outer islands.</p> <p>&lt;Output 2&gt; 2-1 Review the draft Solid Waste Management Plan of Vavau and supplementarily conduct the baseline survey. 2-2 Formulate an action plan of expanding the waste management services in Vavau. 2-3 Prepare the monitoring sheet of service operation for Vavau office. 2-4 Conduct OJT such as waste collection service, landfill operation, public awareness raising, etc. for WAL to provide waste management service in Vavau 2-5 WAL conducts stakeholders meeting in Vavau. 2-6 WAL implements the waste management service in Vavau. 2-7 Review the result of implementation of waste management service in Vavau.</p> <p>&lt;Output 3&gt; 3-1 Facilitate inception workshops for action plan for the main islands of Ha'apai and 'Eua. 3-2 Conduct baseline surveys to develop the Action plan and Business implementation plan of the main islands of Ha'apai and 'Eua. 3-3 Formulate the Action plan(s) for providing waste management service to the main islands of Ha'apai and 'Eua based on the experience in Vavau and the results of stakeholder's workshops held in these islands.</p> <p>&lt;Output 4&gt; 4-1 Prepare the monitoring sheet of service operation for Ha'apai and 'Eua office 4-2 Conduct OJT such as waste collection service, landfill operation, public awareness raising, etc. for WAL to provide waste management service in Ha'apai and 'Eua office 4-3 WAL implements the waste management service in Ha'apai and 'Eua 4-4 Review the result of implementation of waste management service in Ha'apai and 'Eua</p> <p>Eua *1: Tongan outer islands" means Main islands of Vavau, Ha'apai and 'Eua.</p>	<p>Inputs</p> <p>The Japanese Side</p> <p>1. Dispatch Experts 2. Training 3. Local cost of Japanese experts 4. Material cost for the training in Vavau</p>	<p>The Tonga Side</p> <p>1. Allocation of counterpart 2. Office space and facilities for Japanese experts 3. Operational expenses for administrative work, transportation, training, and seminar, etc.</p>	<p>Important Assumption</p> <p>1. National Waste Management Strategy is endorsed by Cabinet.</p> <p>Pre-Conditions</p> <p>1. Legal base of WAL is secured to expand waste services to the outer islands.</p> <p>Issues and countermeasures</p> 	<p>4-1 Operation records of WAL 4-2 Operation records of WAL</p>
---	---	--	--	--	--



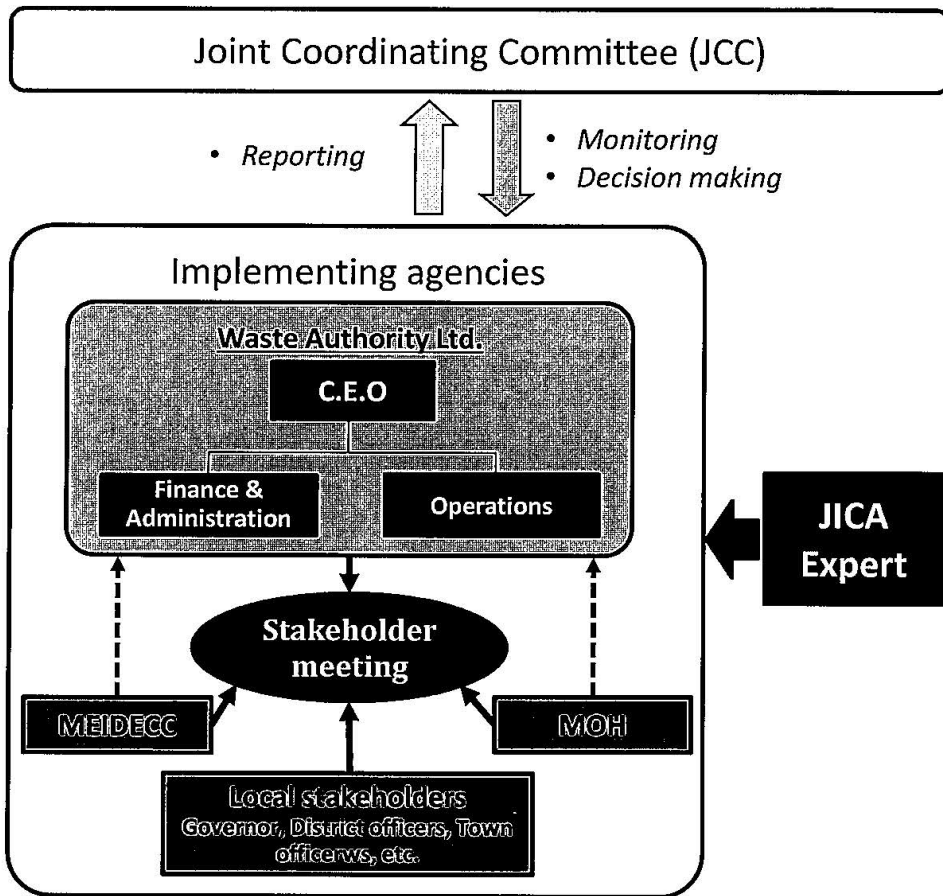
**Plan of Operation**

Version 3  
Dated: 22 October, 2020  
Project Title: Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II)  
Project site: Tonga

Activities	2017				2018				2019				2020				2021				2022			
	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual		
<b>Sub-Activities</b>																								
<b>Output 1: WAL's 5 year business plan for expanding waste management services throughout Tonga is formulated.</b>																								
1-1 Conduct the waste management baseline survey for mainly Tongatapu island																								
1-2 Conduct Waste Amount and Composition Surveys (WACS) to identify the generation amount and characteristics of solid waste throughout Tonga (if necessary)																								
1-3 Assess the current solid waste management implementing capacity (human resources, technical skills, business system, asset, capital, etc.) of WAL																								
1-4 Formulate WAL's 5 year business plans of expanding the waste management service area into the Tongan outer islands, in line with Waste Management Act 2005 and other official documents concerned national policy.																								
1-5 Study on financial sustainability for expanding waste management services to the Tongan outer islands																								
<b>Output 2: WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in Vava'u.</b>																								
2-1 Review the draft Solid Waste Management Plan of Vava'u and supplementarily conduct the baseline survey.																								
2-2 Formulate an action plan of expanding the waste management services in Vava'u																								
2-3 Prepare the monitoring sheet of service operation for Vava'u office																								
2-4 Conduct OJT such as waste collection service, landfill operation, public awareness raising, etc. for WAL to provide waste management service in Vava'u																								
2-5 WAL conducts stakeholders meeting in Vava'u.																								
2-6 WAL implements the waste management service in Vava'u.																								
2-7 Review the result of implementation of waste management service in Vava'u.																								

<b>Output 3: SWM action plans for the main islands of Ha'apai and Eua are developed.</b>																																																																				
3-1 Facilitate inception workshops for action plan for the main islands of Ha'apai and Eua.																														Plan																																						
3-2 Conduct baseline surveys to develop the Action plan and Business implementation plan of the main islands of Ha'apai and Eua.																														Actual																																						
3-3 Formulate the Action plan(s) for providing waste management service to the main islands of Ha'apai and Eua based on the experience in Vavatu and the results of stakeholder's workshops held in these islands.																														Plan																																						
3-3 Actual																														Actual																																						
<b>Output 4: WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in Ha'apai and Eua.</b>																																																																				
4-1 Prepare the monitoring sheet of service operation for Ha'apai and Eua office																														Plan																																						
4-2 Conduct OJT such as waste collection service, landfill operation, public awareness raising, etc. for WAL to provide waste management service in Ha'apai and Eua office																														Actual																																						
4-3 WAL implements the waste management service in Ha'apai and Eua																														Plan																																						
4-4 Review the result of implementation of waste management service in Ha'apai and Eua																														Actual																																						

\*1 Target outer islands are assumed to be Ha'apai and/or Eua and will be selected in due course.



*[Handwritten signatures and initials]*


### List of Counterparts

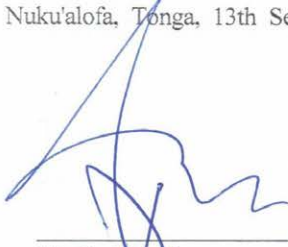
No.	Project Position	Name	Position	Organization	Related Output		
					1	2	3
1	Co-Project Director	Paula Ma'u	CEO	MEIDECC			<input checked="" type="checkbox"/>
2	Co-Project Director	Siale 'Akau'ola	CEO	MOH			<input checked="" type="checkbox"/>
3	Project Manager	Malakai Lomu Sika	CEO	WAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	Counterpart	Lupe Matoto	Director, DoE	MEIDECC		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	Counterpart	Mafile'o Masi	Chief Environmentalist, DoE	MEIDECC		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	Counterpart	Filimone Lapao'o	Senior Environmentalist, DoE	MEIDECC		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7	Counterpart	Siosua Latu	Conservation Officer, DoE	MEIDECC		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8	Counterpart	Feauini Veikoso	Principal Energy Planner	MEIDECC		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9	Counterpart	Lucy Fa'anunu	OIC Environment in Vava'u	MEIDECC		<input checked="" type="checkbox"/>	
10	Counterpart	Reynold 'Ofanoa	Chief Medical Officer, Public Health	MOH			<input checked="" type="checkbox"/>
11	Counterpart	Sela Taniela Fa'u	Supervising Public Health Inspector	MOH			<input checked="" type="checkbox"/>
12	Counterpart	John Lee	OIC in Vava'u	MOH		<input checked="" type="checkbox"/>	
13	Counterpart	Ma'ana 'Akau'ola	Finance Manager	WAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14	Counterpart	Lola Liava'a Tonga	Manager of Administration & Special Projects	WAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
15	Counterpart	Tevita 'Ofafonua Toli	WAL Vava'u manager	WAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
16	Counterpart						
17	Counterpart						
18	Counterpart						
19	Counterpart						

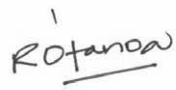
5.2.2 4<sup>th</sup> JCC


MINUTES OF MEETINGS  
ON  
THE FORTH JOINT COORDINATING COMMITTEE  
OF  
THE JAPANESE TECHNICAL COOPERATION PROJECT  
FOR PROMOTION OF REGIONAL INITIATIVE ON SOLID WASTE  
MANAGEMENT IN PACIFIC ISLAND COUNTRIES PHASE II (J-PRISM II)  
IN  
THE KINGDOM OF TONGA

Nuku'alofa, Tonga, 13th September, 2022

  
Mr. ANAI Junji  
Sub Team Leader,  
JICA Expert G2 Team,  
Technical Cooperation Project for  
Promotion of Regional Initiative on Solid  
waste Management in Pacific Island  
Countries Phase II (J-PRISM II)

  
Mr. Paula Ma'u  
Chief Executive Officer  
Ministry of Metrology, Energy, information,  
Disaster Management, Environment,  
Climate Change and Commutations  
The Kingdom of Tonga

  
for Dr. Siale 'Akau'ola  
Chief Executive Officer  
Ministry of Health  
The Kingdom of Tonga

  
Mr. Malakai Lomu Sika  
Chief Executive Officer  
Waste Authority Limited  
The Kingdom of Tonga

Witnessed by:

  
Mr. TAKASHIMA Hiroaki  
Resident Representative  
TONGA Office  
Japan International Cooperation Agency

  
for

Main Points Discussed

The chairperson, Mr. Paula Ma'u, proceeded the meeting in accordance with the program in Appendix 2. All the attendances agreed and confirmed the following matters;

1. Achievements of the Project

JCC confirmed that the achievements of the Project carried out by Counterparts and JICA Expert Team (JET), according to the presentation by WAL and JET.

2. List of Counterparts

JCC understood and approved the modification of the counterparts list shown as ANNEX III

**ANNEX I: Project Design Matrix Version 3**

**ANNEX II: Plan of operation Version 3**

**ANNEX III: Organization chart**

**ANNEX IV: List of Counterparts**

Appendix 1: List of Attendances

Appendix 2: Agenda of 4th JCC

*ROJ*  
*ML* *KA*  
*h*

ANNEX I

**Project Design Matrix (PDM)**

**Project Title:** Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II)  
**Implementing Agency:** Waste Authority Limited (WAL), Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications (MEIDECC),  
Ministry of Health (MOH)

**Target Group:** Staff and C/Ps of WAL, C/Ps of MEI, ECC and MOH

**Period of Project:** 2017 – 2022 (5 years in regional project)

**Version 3**  
**Dated: 22 October 2020**

Project Site: Tonga	Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal Sustainable management of solid waste in the Pacific region is enhanced based on Pacific Regional Waste and Pollution Management Strategy 2016 – 2025 (Cleaner Pacific 2025).				
Project Purpose (Regional) Human and institutional capacity base for sustainable Solid Waste Management (SWM) in the Pacific region is strengthened through implementation of Cleaner Pacific 2025. (Country) A foundation of sustainable solid waste management is built in the Tongan outer islands*, with emphasis in practical implementation.		<ol style="list-style-type: none"> <li>1. SWM action plan of Tongan outer islands is reflected in WAL's 5 year business plan.</li> <li>2. 100% of households in the main island of Vavau receive waste collection service provided by WAL by the end of the Project.</li> <li>3. The waste fee collection rate in Vavau exceeds 80% due to the improvement of public awareness.</li> </ol>	<ol style="list-style-type: none"> <li>1. Business Plan of WAL</li> <li>2. Record of waste collection service</li> <li>3. Record of waste fee collection</li> </ol>	
Outputs 1. WAL's 5 year business plan for expanding waste management services throughout Tonga is formulated.		<ol style="list-style-type: none"> <li>1-1 WAL's 5 year business plan for providing waste management services in the Tongan outer islands is approved by WAL board meeting and submitted to Ministry of Public Enterprise</li> <li>1-2 Necessary human resources, technical support, infrastructure, capital are incorporated into the business plan for each outer islands.</li> <li>1-3 Mid-long term of WAL's Objectives and Strategies are specified in 5 years Business Plan</li> </ol>	<ol style="list-style-type: none"> <li>1-1 WAL's 5 year business plan</li> <li>1-2 Business plan for each outer islands</li> <li>1-3 WAL's 5 year business plan</li> </ol>	
2. WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in Vavau		<ol style="list-style-type: none"> <li>2-1 WAL collects solid waste in accordance with the collection schedule in Vavau.</li> <li>2-2 WAL operates and maintains Kalaika landfill site according to O&amp;M manual to be updated through OJT.</li> <li>2-3 WAL Vavau office manages waste collection and landfill activities in accordance with the monitoring sheet of service operation for Vavau office.</li> </ol>	<ol style="list-style-type: none"> <li>2-1 Operation records of WAL</li> <li>2-2 Operation records of WAL</li> <li>2-3 Record of collection works, landfill works and summary of operations compiled by WAL Vavau office</li> </ol>	
3. SWM action plans for the rain islands of Ha'apai and Eua are developed		<ol style="list-style-type: none"> <li>3-1 Actual situation of solid waste management in the main islands of Ha'apai and Eua is grasped.</li> <li>3-2 WAL identifies the issues to be solved for providing solid waste management service in the main islands of Ha'apai and Eua.</li> </ol>	<ol style="list-style-type: none"> <li>3-1 Report of baseline survey of the target island(s)</li> <li>3-2 Solid waste management plan in the target island(s)</li> </ol>	

*[Handwritten signatures and initials]*

<p>4. WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in 'Ha'apai and 'Eua</p> <p>4-1 WAL collects solid waste in accordance with the collection schedule in 'Ha'apai and 'Eua</p> <p>4-2 WAL office manages waste collection and landfill activities in accordance with the monitoring sheet of service operation.</p>	<p>Inputs</p> <p>The Japanese Side</p> <ol style="list-style-type: none"> <li>1. Dispatch Experts</li> <li>2. Training</li> <li>3. Local cost of Japanese experts</li> <li>4. Material cost for the training in Vavau</li> </ol>	<p>The Tonga Side</p> <ol style="list-style-type: none"> <li>1. Allocation of counterpart</li> <li>2. Office space and facilities for Japanese experts</li> <li>3. Operational expenses for administrative work, transportation, training, and seminar, etc.</li> </ol>	<p>Important Assumption</p> <ol style="list-style-type: none"> <li>1. National Waste Management Strategy is endorsed by Cabinet.</li> </ol>
<p>4. WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in 'Ha'apai and 'Eua</p> <p>4-1 WAL collects solid waste in accordance with the collection schedule in 'Ha'apai and 'Eua</p> <p>4-2 WAL office manages waste collection and landfill activities in accordance with the monitoring sheet of service operation.</p>	<p>Activities</p> <p>&lt;Output 1&gt;</p> <ol style="list-style-type: none"> <li>1-1 Conduct the waste management baseline survey for mainly Tongatapu island.</li> <li>1-2 Conduct Waste Amount and Composition Surveys (WACS) to identify the generation amount and characteristics of solid waste throughout Tonga (if necessary).</li> <li>1-3 Assess the current solid waste management implementing capacity (human resources, technical skills, business system, asset, capital, etc.) of WAL.</li> <li>1-4 Formulate WAL's 5 year business plans of expanding the waste management service area into the Tongan outer islands, in line with Waste Management Act 2005 and other official documents concerned national policy.</li> <li>1-5 Study on financial sustainability for expanding waste management services to the Tongan outer islands.</li> </ol> <p>&lt;Output 2&gt;</p> <ol style="list-style-type: none"> <li>2-1 Review the draft Solid Waste Management Plan of Vavau and supplementarily conduct the baseline survey.</li> <li>2-2 Formulate an action plan of expanding the waste management services in Vavau.</li> <li>2-3 Prepare the monitoring sheet of service operation for Vavau office.</li> <li>2-4 Conduct OJT such as waste collection service, landfill operation, public awareness raising, etc. for WAL to provide waste management service in Vavau.</li> <li>2-5 WAL conducts stakeholders meeting in Vavau.</li> <li>2-6 WAL implements the waste management service in Vavau.</li> <li>2-7 Review the result of implementation of waste management service in Vavau.</li> </ol> <p>&lt;Output 3&gt;</p> <ol style="list-style-type: none"> <li>3-1 Facilitate inception workshops for action plan for the main islands of Ha'apai and Eua.</li> <li>3-2 Conduct baseline surveys to develop the Action plan and Business implementation plan of the main islands of Ha'apai and Eua.</li> <li>3-3 Formulate the Action plan(s) for providing waste management service to the main islands of Ha'apai and Eua based on the experience in Vavau and the results of stakeholder's workshops held in these islands.</li> </ol> <p>&lt;Output 4&gt;</p> <ol style="list-style-type: none"> <li>4-1 Prepare the monitoring sheet of service operation for 'Ha'apai and 'Eua office</li> <li>4-2 Conduct OJT such as waste collection service, landfill operation, public awareness raising, etc. for WAL to provide waste management service in 'Ha'apai and 'Eua office</li> <li>4-3 WAL implements the waste management service in 'Ha'apai and 'Eua</li> <li>4-4 Review the result of implementation of waste management service in 'Ha'apai and 'Eua</li> </ol>	<p>Pre-Conditions</p> <ol style="list-style-type: none"> <li>1. Legal base of WAL is secured to expand waste services to the outer islands.</li> </ol>	<p>&lt;Issues and countermeasures&gt;</p>

RO. [Signature] [Signature] [Signature] [Signature]

\*1: "Tongan outer islands" means Main Islands of Vavau, Ha'apai and 'Eua.



**Plan of Operation**

Version 3  
Dated: 13 September, 2022

**Project Title: Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II)**

Project site: Tonga	2017		2018		2019		2020		2021		2022			
	Plan	Actual	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>Activities</b>														
Sub-Activities														
<b>Output 1: WAL's 5 year business plan for expanding waste management services throughout Tonga is formulated.</b>														
1-1	Plan	Actual												
	Actual													
1-2	Plan	Actual												
	Actual													
1-3	Plan	Actual												
	Actual													
1-4	Plan	Actual												
	Actual													
1-5	Plan	Actual												
	Actual													
<b>Output 2: WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in Vava'u.</b>														
2-1	Plan	Actual												
	Actual													
2-2	Plan	Actual												
	Actual													
2-3	Plan	Actual												
	Actual													
2-4	Plan	Actual												
	Actual													
2-5	Plan	Actual												
	Actual													
2-6	Plan	Actual												
	Actual													
2-7	Plan	Actual												
	Actual													

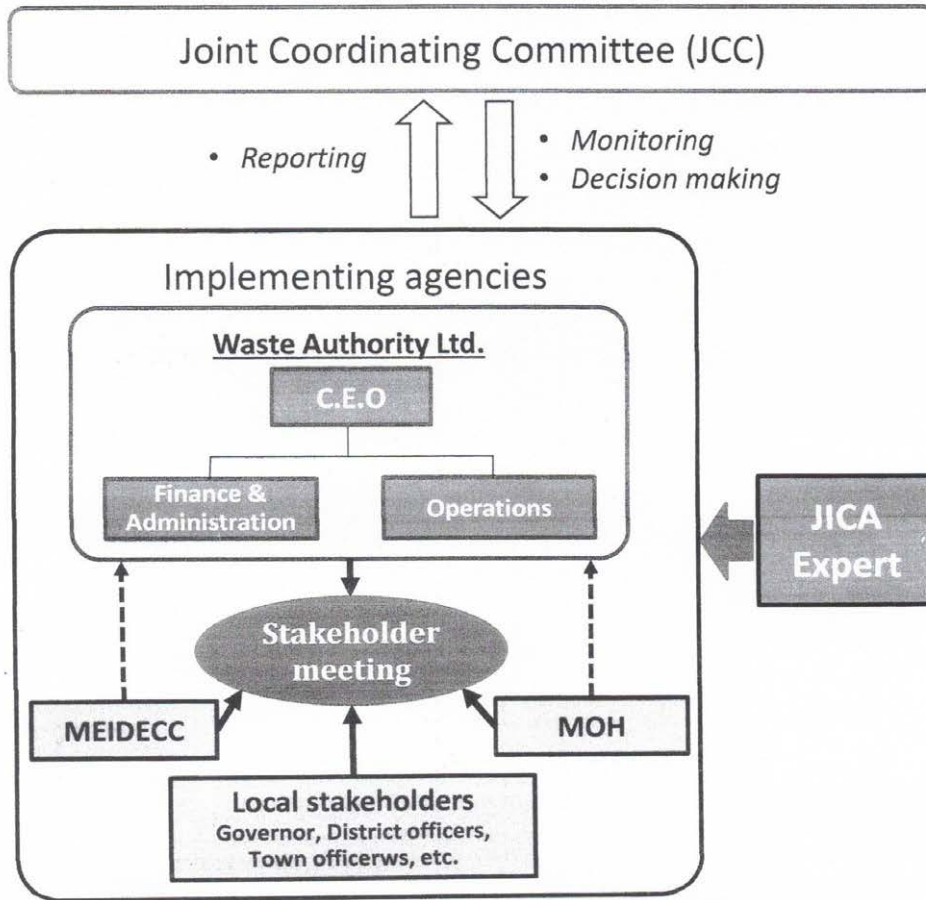
*RO*  
*MU*  
*h*  
*A*

**Output 3: SWM action plans for the main islands of Ha'apai and Eua are developed.**

	Plan	Actual		Plan	Actual		Plan	Actual		Plan	Actual
	Plan	Actual		Plan	Actual		Plan	Actual		Plan	Actual
3-1 Facilitate inception workshops for action plan for the main islands of Ha'apai and Eua.											
3-2 Conduct baseline surveys to develop the Action plan and Business implementation plan of the main islands of Ha'apai and Eua.											
3-3 Formulate the Action plan(s) for providing waste management service to the main islands of Ha'apai and Eua based on the experience in Vava'u and the results of stakeholder's workshops held in these islands.											
<b>Output 4: WAL's capacity on implementation of sustainable SWM in the Tongan outer islands is strengthened through providing waste management service in Ha'apai and 'Eua.</b>											
4-1 Prepare the monitoring sheet of service operation for 'Ha'apai and 'Eua office											
4-2 Conduct OJT such as waste collection service, landfill operation, public awareness raising, etc. for WAL to provide waste management service in 'Ha'apai and 'Eua office											
4-3 WAL implements the waste management service in 'Ha'apai and 'Eua											
4-4 Review the result of implementation of waste management service in 'Ha'apai and 'Eua											

\*1 Target outer islands are assumed to be Ha'apai and/or Eua and will be selected in due course.

ANNEX III



Handwritten signatures and initials in blue ink, including what appears to be 'RO' and 'L A'.

ANNEX IV

List of Counterparts

No.	Project Position	Name	Position	Organization	Related Output		
					1	2	3
1	Co-Project Director	Paula Ma'u	CEO	MEIDECC			<input checked="" type="checkbox"/>
2	Co-Project Director	Siale 'Akau'ola	CEO	MOH			<input checked="" type="checkbox"/>
3	Project Manager	Malakai Lomu Sika	CEO	WAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	Counterpart	Lupe Matoto	Director, DoE	MEIDECC		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	Counterpart	Mafile'o Masi	Chief Environmentalist, DoE	MEIDECC		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	Counterpart	Filimone Lapao'o	Senior Environmentalist, DoE	MEIDECC		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7	Counterpart	Siosua Latu	Conservation Officer, DoE	MEIDECC		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8	Counterpart	Feauini Veikoso	Principal Energy Planner	MEIDECC		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9	Counterpart	Lucy Fa'anunu	OIC Environment in Vava'u	MEIDECC		<input checked="" type="checkbox"/>	
10	Counterpart	Reynold 'Ofanoa	Chief Medical Officer, Public Health	MOH			<input checked="" type="checkbox"/>
11	Counterpart	Sela Taniela Fa'u	Supervising Public Health Inspector	MOH			<input checked="" type="checkbox"/>
12	Counterpart	John Lee	OIC in Vava'u	MOH		<input checked="" type="checkbox"/>	
13	Counterpart	Ma'ana 'Akau'ola	Finance Manager	WAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14	Counterpart	Lola Liava'a Tonga	Manager, Administration & Projects	WAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
15	Counterpart	Stalini Naufahu	Managers, IT, Support & Special Projects	WAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
16	Counterpart	Charlynn Lautaha	Manager, Operations	WAL			<input checked="" type="checkbox"/>
17	Counterpart	Tevita 'Ofafonua Toli	WAL Vava'u manager	WAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
18	Counterpart	Anitelu Toea'pi	WAL 'Eua Manager	WAL			<input checked="" type="checkbox"/>
19	Counterpart	Ma'ali Folau	WAL Ha'apai Manager	WAL			<input checked="" type="checkbox"/>

*ROT* 

Appendix 1: List of Attendances

	Name	Position	Organization
1	Mr. Paula Ma'u	CEO	MEIDECC
2	Dr. Siale 'Akau'ola	CEO	MOH
3	Mr. Malakai Lomu Sika	CEO	WAL
4	Ms. Lupe Matoto	Director, DoE	MEIDECC
5	Ms. Mafile'o Masi	Chief Environmentalist, DoE	MEIDECC
6	Mr. Reynold 'Ofanoa	Chief Medical Officer, Public Health	MOH
7	Ms. Ma'ana 'Akau'ola	Finance Manager	WAL
8	Ms. Lola Liava'a Tonga*	Manager, Administration & Projects	WAL
9	Mr. Stalini Naufahu	Manager, IT Support & Special Projects	WAL
10	Mr. Tevita 'Ofafonua Toli	WAL Vava'u Manager	WAL
11	Mr. Maali Folau	WAL Ha'apai Manager	WAL
12	Mr. Anitel Toeapi	WAL 'Eua manager	WAL
13	Mr. Koji Maeshima*	Deputy Director, Environmental Management Team 1, Environmental Management Group, Global Environment Dept.	JICA Headquarter
14	Mr. Hiroaki Takashima	Resident Representative	JICA Tonga Office
15	Mr. Tetsuji Nakasone	Project Formulation Advisor	JICA Tonga Office
16	Ms. Hiroko Oka	Project Formulation Advisor	JICA Tonga Office
17	Mr. Alfred Vaka	Program Officer	JICA Tonga Office
18	Mr. Satoru Mimura*	Chief Advisor	J-PRISM2 Project Office
19	Mr. Faafetai Sagapolutele*	Assistant Chief Advisor	J-PRISM2 Project Office
20	Ms. Shinnosuke Oda*	Team leader/Solid Waste Management	J-PRISM2 Project team
21	Mr. Junji Anai	Sub-team leader/Solid Waste Management	J-PRISM2 Project Team
22	Ms. Mitsuko Nakamura	Capacity Development	J-PRISM2 Project Team

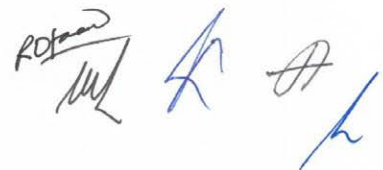
\* On-line

Appendix 2: Agenda of 4<sup>th</sup> JCC

**J-PRISM II**  
**4th Joint Coordinating Committee (JCC) Meeting**

- Date: 13<sup>th</sup>, September, 2022
- Time: 10:00 – 12:00
- Venue: Board Room, Waste Authority Limited
- Chairperson: Dr. Siale 'Akau'ola (CEO, MOH)
- Purpose: To confirm the progress and achievements of all outputs and project purpose.

Time (Tonga)	Agenda	Facilitator/Resource Person
10:00 – 10:30	1. Registration	All participants
10:30 – 10:35	2. Opening prayer	(TBC)
10:35 – 10:40	3. Opening remarks	Dr. Siale 'Akau'ola (CEO, MOH)
10:40 – 10:50	4. Keynote Remarks of JICA Tonga Office	Mr. Hiroaki TAKASHIMA (Resident Representative, JICA)
10:50 – 11:20	5. Project Progress 5-1. Output 1&3 5-2 Output 2 5-3 Output 4	Mr. Stalini, (WAL Manager, Special Projects) Mr. Tevita (WAL Vava'u Branch Manager) Mr. Maali (WAL Ha'apai Branch Manager) Mr. Anitelu (WAL 'Eua Branch Managers)
11:20 – 11:30	6. Summary of PDM	Ms. Mitsuko NAKAMURA (JPRISM II)
11:30– 11:50	7. Discussions	MEIDECC, MOH, WAL, JICA, and JPRISMII
11:50– 12:00	8. Closing remarks	Mr. Paula Ma'u (CEO, MEIDECC)



*Annex E : Attachment for Independent  
state of Samoa*

## Table of Contents

<b>1</b>	<b>Lists of Project outputs and related documents.....</b>	<b>1</b>
<b>2</b>	<b>Inputs and Work schedule .....</b>	<b>1</b>
2.1	Inputs.....	1
2.1.1	Dispatch of Japanese experts .....	1
2.1.2	Acceptance of trainees .....	1
2.2	Work schedule.....	2
<b>3</b>	<b>Work flow chart.....</b>	<b>4</b>
3.1	Work flow chart based on PO2 .....	4
3.2	Work flow chart based on PO3 .....	5
<b>4</b>	<b>Changes of PDM .....</b>	<b>6</b>
4.1	Project Purpose .....	6
4.2	Outputs, Indicator and Activities .....	6
4.2.1	Output 1.....	6
4.2.2	Output 2.....	7
4.2.3	Output 3.....	8
<b>5</b>	<b>JCC .....</b>	<b>9</b>
5.1	Program of 3rd JCC .....	9
5.2	Minutes of Meeting.....	10
5.3	List of participants .....	18



## 1 Lists of Project outputs and related documents

Table 1-1 Lists of Project outputs and related documents (Samoa)

No	Title of outputs/documents	Creation date	Summary
1	National Waste Management Strategy and Action Plan	January 2020	National Waste Management Strategy and Action Plan which was approved in January 2019 through activity under output 1.
2	Format of Rubbish Collection Monitoring System	March 2020	Format of Rubbish Collection Monitoring System which was developed and being operated through activity under output 2.
3	Proposal on user pay system	July 2022	The proposal which summarizes recommendation and future direction finalized in July 2022 through activity under output 3. The user pay option and result of public consultation is attached.
4	Meeting documents for the 3 <sup>rd</sup> JCC	June 2022	Progress of activities, Revision on PDM and etc.

## 2 Inputs and Work schedule

### 2.1 Inputs

#### 2.1.1 Dispatch of Japanese experts

No.	Name	Experty	Dispatch period		PM	PM
			Start date	End date		
1	Hiroshi Tsuruta	SWM G	2022/3/4	2022/7/8	3.53	3.53
Total						3.53

\*Work in Japan is separately summarized.

#### 2.1.2 Acceptance of trainees

There was no acceptance of trainees.

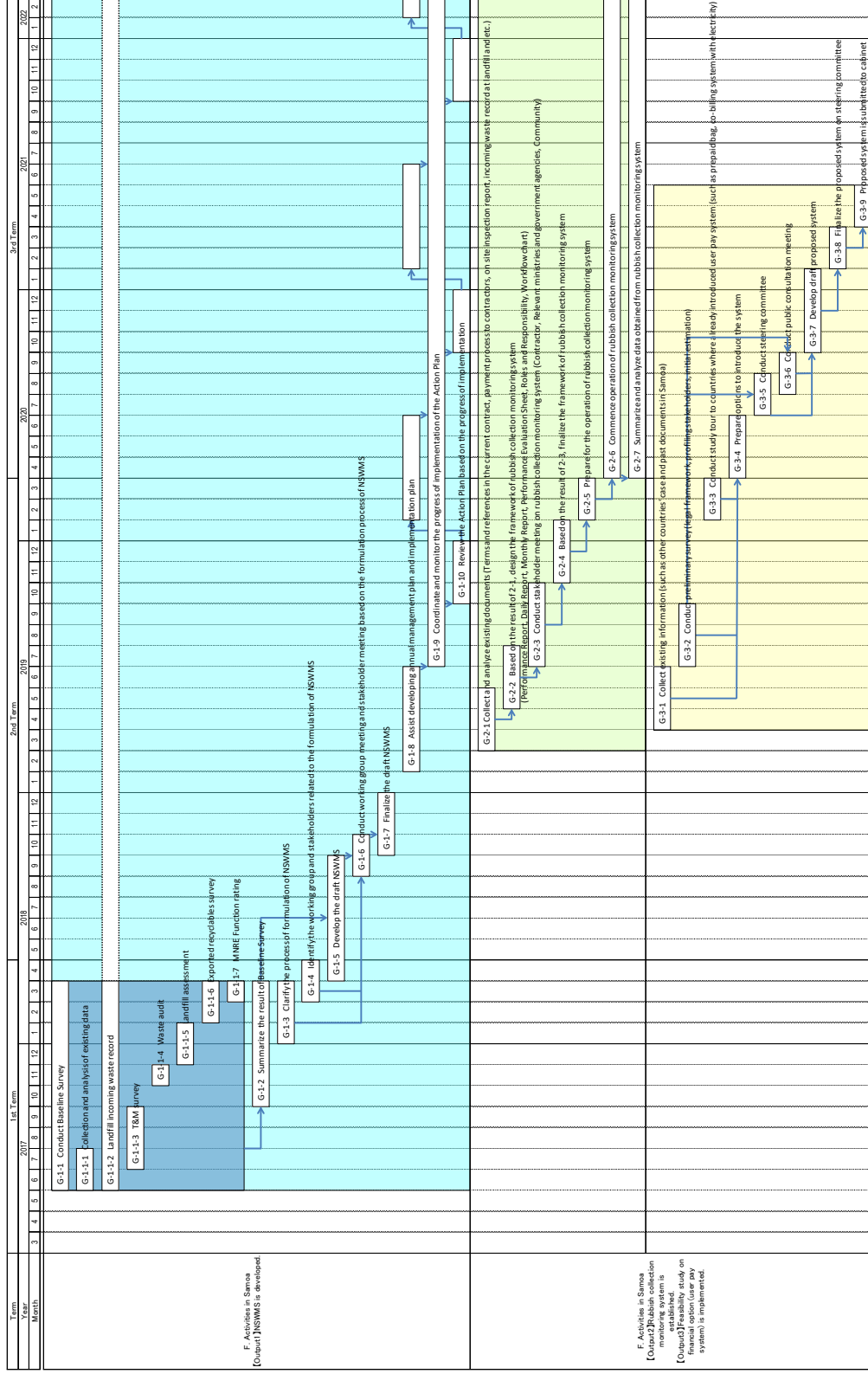
## 2.2 Work schedule

Activities	Plan	2017				2018				2019				2020				2021				2022			
		Actual	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV			
<b>Output 1: NSWMS is developed</b>																									
1-1 Conduct Baseline Survey	Plan																								
	Actual																								
1-1-1 Collection and analysis of existing data	Plan																								
	Actual																								
1-1-2 Landfill incoming waste record	Plan																								
	Actual																								
1-1-3 T&M survey	Plan																								
	Actual																								
1-1-4 Waste audit	Plan																								
	Actual																								
1-1-5 Landfill assessment	Plan																								
	Actual																								
1-1-6 Exported recyclables survey	Plan																								
	Actual																								
1-1-7 MNRE Function rating	Plan																								
	Actual																								
1-2 Summarize the result of Baseline Survey	Plan																								
	Actual																								
1-3 Clarify the process of formulation of NSWMS	Plan																								
	Actual																								
1-4 Identify the working group and stakeholders related to the formulation of NSWMS	Plan																								
	Actual																								
1-5 Develop the draft NSWMS	Plan																								
	Actual																								
1-6 Conduct working group meeting and stakeholder meeting based on the formulation process of NSWMS	Plan																								
	Actual																								
1-7 Finalize the draft NSWMS	Plan																								
	Actual																								
1-8 Assist developing annual management plan and implementation plan	Plan																								
	Actual																								
1-9 Coordinate and monitor the progress of implementation of the Action Plan	Plan																								
	Actual																								
1-10 Review the Action Plan based on the progress of implementation	Plan																								
	Actual																								

Activities	2017		2018				2019				2020				2021			2022				
	Plan	Actual	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	
<b>Output 2: Rubbish collection monitoring system is established.</b>																						
<b>Sub-Activities</b>																						
2-1 Collect and analyze existing documents (Terms and references in the current contract, payment process to contractors, on site inspection report, incoming waste record at landfill and etc.)	Plan																					
2-1 Collect and analyze existing documents (Terms and references in the current contract, payment process to contractors, on site inspection report, incoming waste record at landfill and etc.)	Actual																					
2-2 Based on the result of 2-1, design the framework of rubbish collection monitoring system (Performance Report, Daily Report, Monthly Report, Performance Evaluation Sheet, Roles and Responsibility, Workflow	Plan																					
2-2 Based on the result of 2-1, design the framework of rubbish collection monitoring system (Performance Report, Daily Report, Monthly Report, Performance Evaluation Sheet, Roles and Responsibility, Workflow	Actual																					
2-3 Conduct stakeholder meeting on rubbish collection monitoring system (Contractor, Relevant ministries and government agencies, Community)	Plan																					
2-3 Conduct stakeholder meeting on rubbish collection monitoring system (Contractor, Relevant ministries and government agencies, Community)	Actual																					
2-4 Based on the result of 2-3, finalize the framework of rubbish collection monitoring system	Plan																					
2-4 Based on the result of 2-3, finalize the framework of rubbish collection monitoring system	Actual																					
2-5 Prepare for the operation of rubbish collection monitoring system	Plan																					
2-5 Prepare for the operation of rubbish collection monitoring system	Actual																					
2-6 Commence operation of rubbish collection monitoring system	Plan																					
2-6 Commence operation of rubbish collection monitoring system	Actual																					
2-7 Summarize and analyze data obtained from rubbish collection monitoring system	Plan																					
2-7 Summarize and analyze data obtained from rubbish collection monitoring system	Actual																					
<b>Output 3: Feasibility study on financial option (user pay system) is implemented.</b>																						
<b>Sub-Activities</b>																						
3-1 Collect existing information (such as other countries' case and past documents in Samoa)	Plan																					
3-1 Collect existing information (such as other countries' case and past documents in Samoa)	Actual																					
3-2 Conduct preliminary survey (legal framework, profiling stakeholders, initial estimation)	Plan																					
3-2 Conduct preliminary survey (legal framework, profiling stakeholders, initial estimation)	Actual																					
3-3 Conduct study tour to countries where already introduced user pay system (such as prepaid bag, co-	Plan																					
3-3 Conduct study tour to countries where already introduced user pay system (such as prepaid bag, co-	Actual																					
3-4 Prepare options to introduce the system	Plan																					
3-4 Prepare options to introduce the system	Actual																					
3-5 Conduct steering committee	Plan																					
3-5 Conduct steering committee	Actual																					
3-6 Conduct public consultation	Plan																					
3-6 Conduct public consultation	Actual																					
3-7 Develop draft proposed system	Plan																					
3-7 Develop draft proposed system	Actual																					
3-8 Finalize the proposed system on steering committee	Plan																					
3-8 Finalize the proposed system on steering committee	Actual																					
3-9 Summarize recommendation and future direction on proposed system	Plan																					
3-9 Summarize recommendation and future direction on proposed system	Actual																					

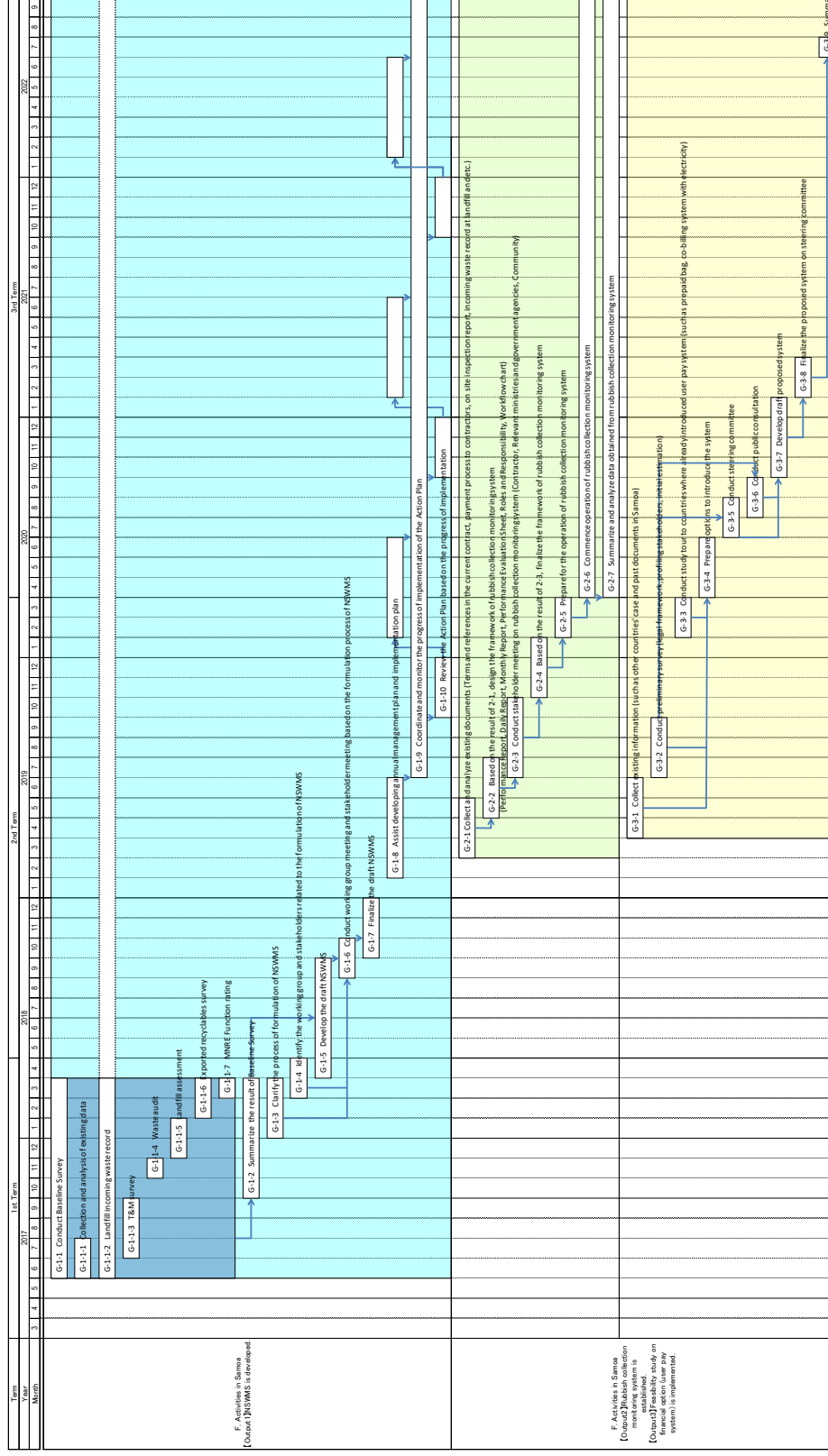
### 3 Work flow chart

#### 3.1 Work flow chart based on PO2



3.2

Work flow chart based on PO3



## 4 Changes of PDM

PDM2 was revised and approved as PDM3 in the 3rd JCC held on June 22, 2022.

### 4.1 Project Purpose

PDM2	PDM3
Project purpose	
Solid waste is appropriately managed based on the National Waste Management Strategy (NWMS).	No change
Objectively Verifiable Indicator	
1 Top priority activities listed in the NWMS related to waste collection service are implemented. 2. Annual Management Plan is developed based on the NSWMS. 3. Basic data on SWM is updated as scheduled in the NSWMS.	No change

### 4.2 Outputs, Indicator and Activities

#### 4.2.1 Output 1

PDM1	PDM2
Output 1	
NSWMS is developed.	No change
Objectively Verifiable Indicator	
1. The draft final NSWMS with consensus among stakeholders is submitted to the Cabinet	No change
Activities	
1-1 Conduct Baseline Survey 1-2 Summarize the result of Baseline Survey 1-3 Clarify the process of formulation of NSWMS 1-4 Identify the working group and stakeholders related to the formulation of NSWMS 1-5 Develop the draft NSWMS 1-6 Conduct working group meeting and stakeholder meeting based on the formulation process of NSWMS 1-7 Finalize the draft NSWMS 1-8 Assist Developing annual management plan and implementation plan 1-9 Coordinate and monitor the progress of implementation of the Action Plan	No change

PDM1	PDM2
Activities	
1-10 Review the Action Plan based on the progress	No change

#### 4.2.2 Output 2

PDM2	PDM3
Output 2	
Rubbish collection monitoring system is established.	No change
Objectively Verifiable Indicator	
2-1 Data for rubbish collection monitoring system is collected on a regular basis 2-2 Supervision to the contractor is made based on the data collected from the system. 2-3 Revised contract format is proposed based on the rubbish monitoring system	No change
Activities	
2-1 Collect and analyze existing documents (Terms and references in the current contract, payment process to contractors, on site inspection report, incoming waste record at landfill and etc.) 2-2 Based on the result of 2-1, design the framework of rubbish collection monitoring system (Performance Report, Daily Report, Monthly Report, Performance Evaluation Sheet, Roles and Responsibility, Workflow chart) 2-3 Conduct stakeholder meeting on rubbish collection monitoring system (Contractor, Relevant ministries and government agencies, Community) 2-4 Based on the result of 2-3, finalize the framework of rubbish collection monitoring system 2-5 Prepare for the operation of rubbish collection monitoring system 2-6 Commence operation of rubbish collection monitoring system. 2-7 Summarize and analyze data obtained from rubbish collection monitoring system	No change

### 4.2.3 Output 3

PDM2	PDM3
Output 3	
Feasibility study on financial option (user pay system) is implemented.	No change
Objectively Verifiable Indicator	
3-1 Suitable system is consulted with public and stakeholders	3-1 No change
3-2 Suitable system is determined on steering committee	3-2 No change
3-3 Proposed system is submitted to cabinet	3-3 Recommendation and future direction on user pay system is summarized
Activities	
3-1 Collect existing information (such as other countries' case and past documents in Samoa)	3-1 No change
3-2 Conduct preliminary survey (legal framework, profiling stakeholders, initial estimation)	3-2 No change
3-3 Conduct study tour to countries where already introduced user pay system (such as prepaid bag, co-billing system with electricity)	3-3 No change
3-4 Prepare options to introduce the system	3-4 No change
3-5 Conduct steering committee	3-5 No change
3-6 Conduct public consultation meeting	3-6 Conduct public consultation
3-7 Develop draft proposed system	3-7 No change
3-8 Finalize the proposed system on steering committee	3-8 No change
3-9 Proposed system is submitted to cabinet	3-9 Summarize recommendation and future direction on proposed system



## 5 JCC

The 3rd JCC was conducted on 22nd June 2022.

### 5.1 Program of 3rd JCC

- Date: 22nd June 2022
- Time: 15:00 – 16:30
- Venue: TATTE CONVENTION CENTRE (Ground floor)
- Agenda

Item	Time	Presenter
Opening Remarks	15:00 – 15:10	Ms. Lealaisalanoa Frances Reupena Chief Executive Officer, MNRE
Objective of JCC	15:10 – 15:20	JICA Expert Team
Progress of J-PRISM II	15:20 – 15:40	Mr. Aliimuamua Setoa Apo Principal waste management officer, MNRE
Presentation on PDM, PO & Counterparts	15:40 – 16:00	JICA Expert Team
Presentation on pilot project in Samoa	16:00 – 16:05	J-PRISM II Project Office
Q&A	16:05 – 16:15	
Approval at revised PDM/PO & Counterparts Signing the MM	16:15 – 16:20	
Closing Remarks	16:20 – 16:30	Ms. Yumiko Asakuma Resident Representative, JICA

## 5.2 Minutes of Meeting

**MINUTES OF MEETINGS  
ON  
THE THIRD JOINT COORDINATING COMMITTEE  
OF  
THE JAPANESE TECHNICAL COOPERATION PROJECT  
FOR PROMOTION OF REGIONAL INITIATIVE ON SOLID WASTE  
MANAGEMENT IN PACIFIC ISLAND COUNTRIES PHASE II  
(J-PRISM II)  
IN  
INDEPENDENT STATE OF SAMOA**

Apia, Samoa, 22<sup>nd</sup> June 2022

三村 悟

Mr. Satoru Mimura  
Chief Advisor  
J-PRISM II



Ms. Lealaisalanoa Frances Reupena  
Chief Executive Officer  
Ministry of Natural Resources and  
Environment  
The Independent State of Samoa

Witnessed by:



Ms. Yumiko Asakuma  
Resident Representative  
Samoa Office  
Japan International Cooperation Agency

### Main Points Discussed

**1. Replacement of the Project Director**

Ms. Lealaisalanoa Frances Reupena has appointed as CEO on January 2021 after the former CEO resigned. Accordingly, the project Director position is replaced with Ms. Lealaisalanoa Frances Reupena.

**2. Modification of PDM and PO**

JCC understood and approved the modification of the Project Design Matrix (PDM) and Plan of Operation (PO) as version three (3) shown as ANNEX I and ANNEX II respectively (Amendments are shown as follows).

**Period of Project**

Before (Version two)	After (Version three)
2017 - 2022 (5 years)	2017 - 2022 (5.5 years)
Reason: Based on agreement on Record of Discussion signed on 19th February 2021, extended Period of Project is reflected.	

**Objectively Verifiable Indicators for output 3**

Before (Version two)	After (Version three)
3-1 Suitable system is consulted with public and stakeholders	(No change)
3-2 Suitable system is determined on steering committee	(No change)
3-3 Proposed system is submitted to cabinet	3-3 Recommendation and future direction on user pay system is summarized
Reason: Objectively Verifiable Indicators 3-3 is revised to make alignment with revision of activity 3-9.	

**Means of Verification for output 2**

Before (Version two)	After (Version three)
2-1 Performance Report, Daily Report	2-1 Monthly Evaluation Sheet
2-2 Monthly report, Performance Evaluation Sheet	2-2 Monthly Evaluation Sheet
2-3 Revised contract format	(No change)
Reason: Based on the established system, "Monthly Evaluation Sheet" provides the information (The record of collected data and supervision to the contractors which are) to be confirmed by Means of Verification 2-1 and 2-2.	

### Means of Verification for output 3

Before (Version two)	After (Version three)
3-1 Report of public consultation	3-1 Report of public consultation, Brief note on comments from Steering Committee.
3-2 Minutes of S/C	(No change)
3-3 Cabinet submission document	3-3 Document on recommendation and future direction
Reason: As for Means of Verification 3-1, "Brief note on comments from Steering Committee" serves as additional Means of verification to confirm consultation with stakeholders. Means of Verification 3-3 is revised to make alignment with revision of activity 3-9.	

### Important Assumption

Before (Version two)	After (Version three)
The Cabinet approves the NSWMS.	1. The Cabinet approves the NSWMS.
Reason: In order to make it clear the assumption is for Output 1, number is assigned.	

### Activities for output 3

Before (Version two)	After (Version three)
3-1 Collect existing information (such as other countries' case and past documents in Samoa)	(No change)
3-2 Conduct preliminary survey (legal framework, profiling stakeholders, initial estimation)	(No change)
3-3 Conduct study tour to countries where already introduced user pay system (such as prepaid bag, co-billing system with electricity)	(No change)
3-4 Prepare options to introduce the system	(No change)
3-5 Conduct steering committee	(No change)
3-6 Conduct public consultation meeting	3-6 Conduct public consultation
3-7 Develop draft proposed system	(No change)
3-8 Finalize the proposed system on steering committee	(No change)
3-9 Proposed system is submitted to cabinet	3-9 Summarize recommendation and future direction on proposed system
Reason: Activity 3-6 and 3-9 are revised considering followings;  Samoa's National Election and COVID-19 outbreak delayed implementation of output 3 and also changed the political and socio economic situation of Samoa.	

Considering the COVID-19 situation in Samoa, public consultation was conducted using questionnaire. And there were people who don't support the system.

In this situation, it is difficult to foresee the completion of activity 3-9 "Proposed system is submitted to cabinet" within the project period. This is because the process may includes political decision which beyond the control of the project in this situation.

In response to this situation, the project suggest to revise activity 3-9 to "Summarize recommendation and future direction on proposed system".

### 3. List of Counterparts

JCC understood and approved modification of the counterparts list version three (3) attached herein as ANNEX III (No.1 Project Director replaced. No.6 Senior chemical & hazardous waste management officer has appointed. No.8 Waste policy & planning officer replaced).

Annex1: Project Design Matrix version three (3)

Annex2: Plan of Operation version three (3)

Annex3: Counterpart list version three (3)



**Project Design Matrix: PDM**

**Project Title:** Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II)  
**Implementing Agency:** Division of Environment and Conservation (DEC), Ministry of Natural Resources and Environment (MNRE)

**Target Group:** C/P of MNRE

**Period of Project:** 2017 - 2022 (5.5 years)

**Project Site:** Samoa

**Version 3**  
**Dated 22nd June 2022**

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p><b>Overall Goal</b> Sustainable management of solid waste in the Pacific region is enhanced based on Pacific Regional Waste and Pollution Management Strategy 2016 – 2025 (Cleaner Pacific 2025).</p>	(To be discussed)	(To be discussed)	
<p><b>Project Purpose</b> (Regional) Human and institutional capacity base for sustainable Solid Waste Management (SWM) in the Pacific region is strengthened through implementation of Cleaner Pacific 2025.  (Country) Solid waste is appropriately managed based on the National Waste Management Strategy (NWMS)3.</p>	(To be discussed)	<p>(To be discussed)</p> <p>1. Annual Report, Monitoring sheet 2. Annual management plan, NSWMS 3. Result of survey, NSWMS</p>	<p>1. Natural disaster would not drastically affect the collaboration among participating countries. 2. Political changes would not drastically affect the collaboration of participating countries.</p>
<p><b>Outputs</b> 1. NSWMS is developed. 2. Rubbish collection monitoring system is established. 3. Feasibility study on financial option (user pay system) is implemented.</p>	<p>1. Top priority activities listed in the NWMS related to waste collection service are implemented. 2. Annual Management Plan is developed based on the NSWMS. 3. Basic data on SWM is updated as scheduled in the NSWMS.</p> <p>1. The draft final NSWMS with consensus among stakeholders is submitted to the Cabinet 2-1 Data for rubbish collection monitoring system is collected on a regular basis. 2-2 Supervision to the contractor is made based on the data collected from the system 2-3 Revised contract format is proposed based on the rubbish monitoring system 3-1 Suitable system is consulted with public and stakeholders 3-2 Suitable system is determined on steering committee 3-3 Recommendation and future direction on user pay system is summarized</p>	<p>1. Cabinet submission document, draft final NSWMS, Minutes of workshop and meeting 2-1 Monthly Evaluation Sheet 2-2 Monthly Evaluation Sheet 2-3 Revised contract format 3-1 Report of public consultation, Brief note on comments from Steering Committee. 3-2 Minutes of S/C 3-3 Document on recommendation and future direction</p>	<p>1. The Cabinet approves the NSWMS.</p>



Activities	Inputs	Important Assumption
<p>&lt;Output 1&gt; 1-1 Conduct Baseline Survey*1 1-2 Summarize the result of Baseline Survey 1-3 Clarify the process of formulation of NSWMS 1-4 Identify the working group and stakeholders related to the formulation of NSWMS 1-5 Develop the draft NSWMS 1-6 Conduct working group meeting and stakeholder meeting based on the formulation process of NSWMS. 1-7 Finalize the draft NSWMS 1-8 Assist Developing annual management plan and implementation plan 1-9 Coordinate and monitor the progress of implementation of the Action Plan 1-10 Review the Action Plan based on the progress &lt;Output 2&gt; 2-1 Collect and analyze existing documents (Terms and references in the current contract, payment process to contractors, on site inspection report, incoming waste record at landfill and etc.) 2-2 Based on the result of 2-1, design the framework of rubbish collection monitoring system (Performance Report, Daily Report, Monthly Report, Performance Evaluation Sheet, Roles and Responsibility, Workflow chart) 2-3 Conduct stakeholder meeting on rubbish collection monitoring system (Contractor, Relevant ministries, and government agencies, Community) 2-4 Based on the result of 2-3, finalize the framework of rubbish collection monitoring system 2-5 Prepare for the operation of rubbish collection monitoring system 2-6 Commence operation of rubbish collection monitoring system. 2-7 Summarize and analyze data obtained from rubbish collection monitoring system &lt;Output 3&gt; 3-1 Collect existing information (such as other countries' case and past documents in Samoa) 3-2 Conduct preliminary survey (legal framework, profiling stakeholders, initial estimation) 3-3 Conduct study tour to countries where already introduced user pay system (such as prepaid bag, co-billing system with electricity) 3-4 Prepare options to introduce the system 3-5 Conduct steering committee <b>3-6 Conduct public consultation</b> 3-7 Develop draft proposed system 3-8 Finalize the proposed system on steering committee <b>3-9 Summarize recommendation and future direction on proposed system</b></p>	<p>The Japanese Side 1. Dispatch Experts 2. Training 3. Local cost for the activities of experts 4. Necessary cost and equipment for pilot project</p> <p>The Samoan Side 1. Allocation of counterparts 2. Office space and facilities for Japanese experts 3. Operational expenses for administrative work, transportation, training, and seminar etc.</p>	<p>Pre-Conditions</p>

\*1 The survey consists from collection and existing data analysis, Landfill incoming record, Waste audit, Time and motion survey, Landfill assessment, Exported recyclables survey, MINRE function<sup>2</sup> rating  
\*2 MINRE function rating will be conducted as part of baseline survey  
\*3 NSWMS(National Waste Management Strategy) covers the component of solid waste management which was initially expected to be developed as NSWMS(National Solid Waste Management Strategy) in output 1

Plan of Operation

Version 3  
Dated 22nd June 2022

Project Title: Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II)

Project site: Samoa

	Plan	2017				2018				2019				2020				2021				2022				Remarks			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV				
<b>Inputs</b>																													
<b>Expert</b>																													
Junji ANAI (Deputy Team Leader, SWM D2)	Plan																									Deputy Team leader from the second term.			
Shinnoh ODA (Team Leader, SWM D1)	Plan																									Team leader from the second term.			
Mitsuho Nakamura (Capacity Assessment E)	Plan																												
Hiroshi TSURUTA (SWM G1)	Plan																												
<b>Equipment</b>																													
Procurement of two sets of large monitor with stand through JICA Samoa Office																													
<b>Training in Japan</b>																													
<b>In-country/Third country Training</b>																													
<b>Activities</b>																													
<b>Sub-Activities</b>																													
<b>Output 1: NSWMS is developed</b>																													
1-1 Conduct Baseline Survey	Plan																									Short-term Experts	MNRE		
1-1-1 Collection and analysis of existing data	Plan																										Short-term Experts	MNRE	
1-1-2 Landfill incoming waste record	Plan																										Short-term Experts	MNRE	
1-1-3 T&M survey	Plan																										Short-term Experts	MNRE	
1-1-4 Waste audit	Plan																										Short-term Experts	MNRE	
1-1-5 Landfill assessment	Plan																										Short-term Experts	MNRE	
1-1-6 Exported recyclables survey	Plan																										Short-term Experts	MNRE	
1-1-7 MNRE Function rating	Plan																										Short-term Experts	MNRE	
1-2 Summarize the result of Baseline Survey	Plan																										Short-term Experts	MNRE	
1-3 Clarify the process of formulation of NSWMS	Plan																										Short-term Experts	MNRE	
1-4 Identify the working group and stakeholders related to the formulation of NSWMS	Plan																										Short-term Experts	MNRE	
1-5 Develop the draft NSWMS	Plan																										Short-term Experts	MNRE	
1-6 Conduct working group meeting and stakeholder meeting based on the formulation process of NSWMS	Plan																										Short-term Experts	MNRE	
1-7 Finalize the draft NSWMS	Plan																										Short-term Experts	MNRE	
1-8 Assist developing annual management plan and implementation plan	Plan																										Short-term Experts	MNRE	
1-9 Coordinate and monitor the progress of implementation of the Action Plan	Plan																										Short-term Experts	MNRE	
1-10 Review the Action Plan based on the progress of implementation	Plan																										Short-term Experts	MNRE	
<b>Output 2: Rubbish collection monitoring system is established.</b>																													
2-1 Collect and analyze existing documents (Terms and references in the current contract, payment process to contractors, on site inspection report, incoming waste record at landfill and etc.)	Plan																										Short-term Experts	MNRE	
2-2 Based on the result of 2-1, design the framework of rubbish collection monitoring system (Performance Report, Daily Report, Monthly Report, Performance Evaluation Sheet, Roles and Responsibility, Workflow)	Plan																										Short-term Experts	MNRE	
2-3 Conduct stakeholder meeting on rubbish collection monitoring system (Contractor, Relevant ministries and government agencies, Community)	Plan																										Short-term Experts	MNRE	
2-4 Based on the result of 2-3, finalize the framework of rubbish collection monitoring system	Plan																										Short-term Experts	MNRE	
2-5 Prepare for the operation of rubbish collection monitoring system	Plan																										Short-term Experts	MNRE	
2-6 Commence operation of rubbish collection monitoring system	Plan																										Short-term Experts	MNRE	
2-7 Summarize and analyze data obtained from rubbish collection monitoring system	Plan																										Short-term Experts	MNRE	
<b>Output 3: Feasibility study on financial option (user pay system) is implemented.</b>																													
3-1 Collect existing information (such as other countries' case and past documents in Samoa)	Plan																										Short-term Experts	MNRE	
3-2 Conduct preliminary survey (legal framework, profiling stakeholders, initial estimation)	Plan																										Short-term Experts	MNRE	
3-3 Conduct study tour to countries where already introduced user pay system (such as prepaid bag, co-)	Plan																										Short-term Experts	MNRE	
3-4 Prepare options to introduce the system	Plan																										Short-term Experts	MNRE	
3-5 Conduct steering committee	Plan																										Short-term Experts	MNRE	
3-6 Conduct public consultation	Plan																										Short-term Experts	MNRE	
3-7 Develop draft proposed system	Plan																										Short-term Experts	MNRE	
3-8 Finalize the proposed system on steering committee	Plan																										Short-term Experts	MNRE	
3-9 Summarize recommendation and future direction on proposed system	Plan																										Short-term Experts	MNRE	
<b>Duration / Phasing</b>																													
<b>Monitoring Plan</b>																													
<b>Monitoring</b>																													
Joint Coordinating Committee	Plan																												
Set-up the Detailed Plan of Operation	Plan																												
Submission of Monitoring Sheet	Plan																												
Monitoring Mission from Japan	Plan																												
Joint Monitoring	Plan																												
Post Monitoring	Plan																												
<b>Reports/Documents</b>																													
Inception Report	Plan																												
Progress Report	Plan																												
Project Completion Report	Plan																												
<b>Public Relations</b>																													
Plan																													
Actual																													



List of Counterpart Personnel of SAMOA, version 3

No.	Project position	Position	Name	Related output
1	Project Director	Chief Executive Officer, MNRE	<b>Ms. Lealaisalanoa Frances Reupena</b>	All
2	Project Manager	Assistant CEO, MNRE	Mr. Seumalo Afele Failagi	All
3	Counterpart	Principal solid waste management officer	Mr. Setoa Apo	All
4	Counterpart	Principal chemical & hazardous waste management officer	Ms. Fiasosoitamalii Siasosi	All
5	Counterpart	Senior waste policy & planning officer	Ms. Faatamalii Meredith	All
6	Counterpart	Senior chemical & hazardous waste management officer	<b>Mr. Darren Bartley</b>	All
7	Counterpart	Senior landfill officer	Mr. Fualaga Pemitia	All
8	Counterpart	Waste policy & planning officer	<b>Ms. Bhavana Sanele</b>	All
9	Counterpart	Landfill officer	Mr. Falaniko Tino	All

Note: Counterpart personnel will be added as the need arises for the smooth and effective implementation of the Project

### 5.3 List of participants

Participants list for 3<sup>rd</sup> Joint Coordinating Committee (JCC3) on J-PRISM II  
22nd June 2022 at TATTE CONVENTION CENTER

No	Name	Organization Position	Contact	Signature
1	Frances Reupera	CEO	67200	
2	Jayanthi Afele	MEO	67200	
3	AYAKO YOSHIDA	JPRISM/JICA	2228983	吉田 綾子
4	Evangelini Potifera	JPRISM/SLM	7664525	
5	Charles . Bern	MCR	7963649	
6	Yumiko <del>ASAKUMA</del>	JICA	22572	✓
7	Shoichi Iwata	JICA	22572	✓
8	Rebecca Nun Yan	JICA	22572	
9	Anquet An Ya	MPE	34500	
10	Mimura Satou	JPRISM	7770463	

Participants list for 3<sup>rd</sup> Joint Coordinating Committee (JCC3) on J-PRISM II  
22nd June 2022 at TATTE CONVENTION CENTER

No	Name	Organization Position	Contact	Signature
11	WATA Shoichi	JICA	7701252	
12	Faisosaitandili Saosi	MNRE-DEC	67200	
13	Fualaga . Peneta .	MNRE-DEC	22281	FP.
14	Darren Bentley	MNRE-DEC	67200	D.
15	Hiroshi TSURUTA	J-PRISM Expert	7586762	
16	Seloa Apo	PSWMO DEC	7717975	
17	Bhavana Sandle	WPPD	7758172	Bhavana

Participants list for 3<sup>rd</sup> Joint Coordinating Committee (JCC3) on J-PRISM II  
22nd June 2022 at TATTE CONVENTION CENTER (Participants from Web meeting)

No	Name	Organization Position
1	Mr. Koji Maeshima	JICA Head Quarter
2	Mr. Faafetai Sagapolutele	J-PRISM, Project Office
3	Mr. Shimosuke Oda	J-PRISM, Short Term Expert
4	Ms. Atsuko Orimoto-Etheridge	Terminal Evaluation Team
5	Mr. Junji Anai	J-PRISM, Short Term Expert
6	Ms. Mistuko Nakamaura	J-PRISM, Short Term Expert
7	Ms. Laisani Lewanavanua	J-PRISM, Senior Technical Assistant (Fiji)

*Annex F : Attachment for Republic of Fiji*

## Table of Contents

<b>1</b>	<b>Lists of Project outputs and related documents.....</b>	<b>1</b>
<b>2</b>	<b>Inputs and Work schedule .....</b>	<b>2</b>
2.1	Inputs.....	2
2.1.1	Dispatch of Japanese experts .....	2
2.1.2	Acceptance of trainees .....	2
2.2	Work schedule.....	3
<b>3</b>	<b>Work flow chart.....</b>	<b>4</b>
3.1	Work flow chart based on PO1 .....	4
3.2	Work flow chart based on PO2 .....	5
<b>4</b>	<b>Changes of PDM .....</b>	<b>6</b>
4.1	Project Purpose .....	6
4.2	Outputs, Indicator and Activities .....	6
4.2.1	Output 1.....	6
4.2.2	Output 2.....	7
<b>5</b>	<b>JCC .....</b>	<b>8</b>
5.1	JCC Program .....	8
5.1.1	2nd JCC.....	8
5.1.2	3 <sup>rd</sup> JCC.....	9
5.2	Minutes of Meeting.....	10
5.2.1	2 <sup>nd</sup> JCC .....	10
5.2.2	3 <sup>rd</sup> JCC.....	15
5.3	List of participants .....	20
5.3.1	2 <sup>nd</sup> JCC .....	20
5.3.2	3 <sup>rd</sup> JCC.....	21

## 1 Lists of Project outputs and related documents

Table 1-1 Lists of Project outputs and related documents (Fiji)

No	Title of outputs/documents	Creation date	Summary
1	2nd JCC Meeting Documents	Nov. 2020	Documents which show the purpose of the JCC, progress & issues of each output, and changes of PDM
2	Finalized Solid Waste Management Plans	Aug 2022	Solid waste management plans for the next 10 years submitted by 13 councils in 2019 and finalized in 2022.
3	Monthly monitoring report	1st and 2nd quarter, 2022	Quarterly monitoring reports prepared by local governments and submit to DLG
4	Documents of workshop for waste collection service expansion in rural areas	May 2021	Workshop program, presentation materials, and minutes of the meeting
5	Survey report on beverage business establishments	May 2021	Report of an interview survey on beverage business establishments
6	Survey report on recycling establishments	May 2021	Report of an interview survey on recycling establishments
7	Report of follow-up hearing survey on monthly monitoring results	July 2021	Result of hearing survey on the collection systems, in particular rural areas
8	Report of Waste Amount and Composition Survey in Suva and Lautoka	May 2022	Result of WACS survey in April and May in Suva and Lautoka
9	Documents of workshop for SWM quantitative data management	May 2022	Workshop program, presentation materials, and minutes of the meeting
10	3rd JCC Meeting Documents	Sep 2022	Documents which show the purpose of the JCC, progress & issues of each output, and changes of PDM

## 2 Inputs and Work schedule

### 2.1 Inputs

#### 2.1.1 Dispatch of Japanese experts

No.	Name	Expertise	Dispatch period		PM
			Start date	End date	
1	Shinnosuke Oda	Team Leader/ SWM D1	2021/3/9	2021/5/23	1.03*
			2021/11/20	2021/12/18	0.97
			2022/2/12	2022/2/28	0.57
			2022/5/10	2022/6/30	0.87
			2022/8/10	2022/8/26	0.53
2	Junji Anai	Sub Team leader / SWM D2	2021/3/9	2021/5/23	0.50*
3	Mitsuko Nakamura	Capacity Development E	2021/11/20	2021/12/18	0.97
			2022/6/24	2022/7/22	0.97**
4	Keiko Kani	SWM H	2021/12/4	2021/12/18	0.50
			2022/5/21	2022/6/4	0.50
			2022/8/12	2022/8/27	0.53
3	Hiroshi Tsuruta	SWM G	2021/3/9	2021/5/23	0.47*
Total					8.41

\*The person-months shows the total length of the stay in Fiji and it includes a certain periods used for another JICA project

\*\*The person-months shows the total length of the stay in Fiji and it includes a certain periods used for activities in other J-PRISM countries

\*\*\*Work in Japan is separately summarized.

#### 2.1.2 Acceptance of trainees

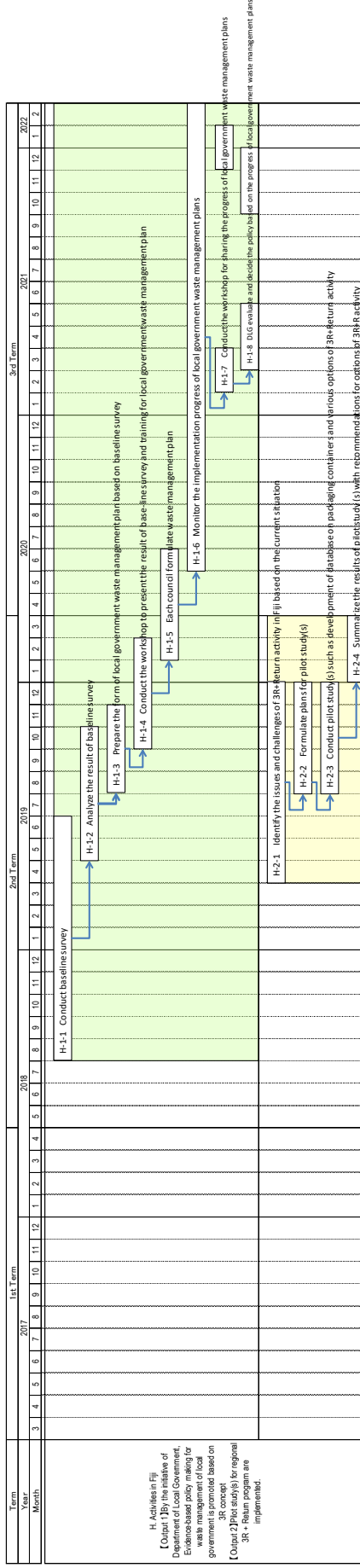
There was no acceptance of trainees.



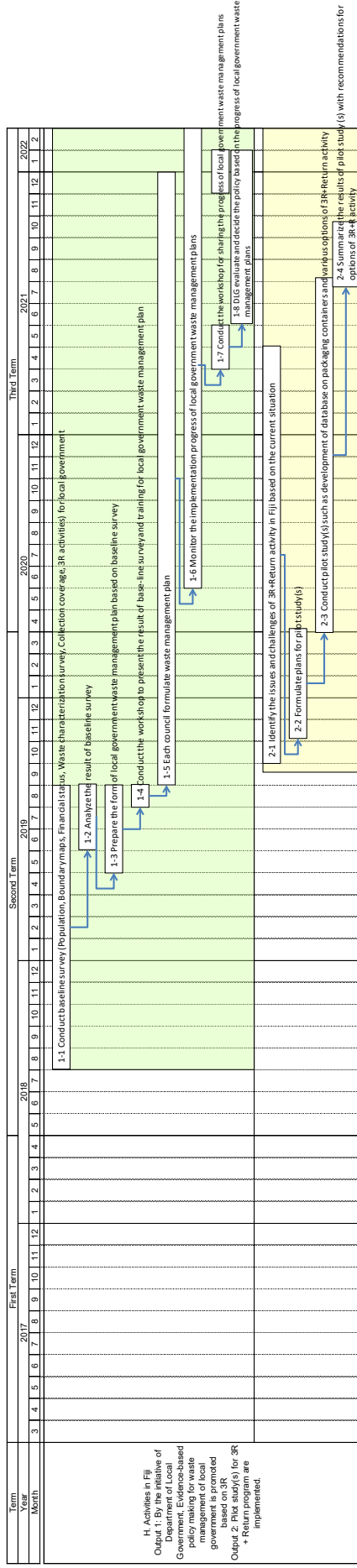


### 3 Work flow chart

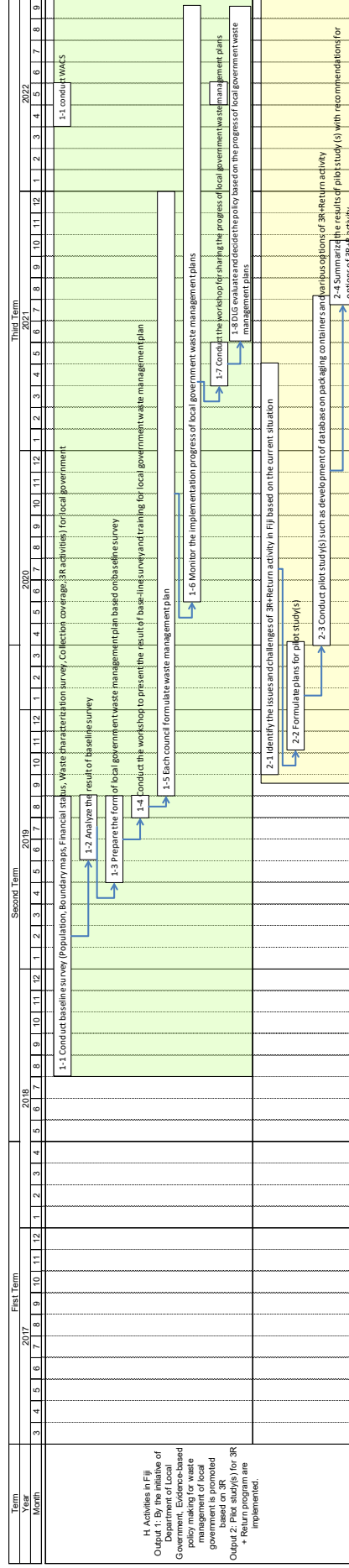
#### 3.1 Work flow chart based on PO1



### 3.2 Work flow chart based on PO2



### After the project was extended to September 2022



## 4 Changes of PDM

PDM2 was approved at the 2nd JCC Meeting held on November 25, 2020. There was no change of PDM at the third JCC meeting.

### 4.1 Project Purpose

PDM1	PDM2
Project purpose	
Solid waste is managed appropriately based on the National Waste Management and Pollution Control Strategy 2018-2028	No change
Objectively Verifiable Indicator	
1. Waste management plan of 8 municipal councils is formulated. 2. Waste management indicators in NWMPCS 2018-2028 are figured out in Local government waste management plans. 3. Roadmap for waste management coverage to rural area is identified based on Local government waste management plan	No change

### 4.2 Outputs, Indicator and Activities

#### 4.2.1 Output 1

PDM1	PDM2
Output 1	
By the initiative of Department of Local Government, Evidence-based policy is promoted based on 3R concept	No Change
Objectively Verifiable Indicator	
1. Format of Local Government Waste Management Plan is developed. 2. Training for developing Local Government Waste Management Plan is conducted by the initiative of DLG. 3. Functional PDCA cycle for waste management between Department of Local Government and municipal councils is identified.	No Change
Activities	
1-1 Conduct baseline survey (Population, Boundary maps, Financial status, Waste characterization survey*1, Collection coverage, 3R activities) for local government waste management plan 1-2 Analyze the result of baseline survey	No Change

PDM1	PDM2
Activities	
1-3 Prepare the form of local government waste management plan based on baseline survey (supposed to include those goals: Collection coverage of rural, finance the waste management service, procurement plan of trucks) 1-4 Conduct the workshop to present the result of base-line survey and training for local government waste management plan 1-5 Each council formulate waste management plan 1-6 Monitor the implementation progress of local government local government waste management plans 1-7 Conduct the workshop for sharing the progress of waste management plans 1-8 DLG evaluate and decide the policy based on the progress of local government waste management plans。	No Change

#### 4.2.2 Output 2

PDM1	PDM2
Output 2	
Pilot study(s) for regional 3R + Return program are implemented.	Pilot study(s) for 3R + Return program are implemented.
Objectively Verifiable Indicator	
2-1 Recommendations for options of regional 3R+Return program are made.	2-1 Recommendations for options of 3R+Return program are made.
Activities	
2-1 Identify the issues and challenges of 3R+Return activity in Fiji based on the current situation 2-2 Formulate plans for pilot study(s) 2-3 Conduct pilot study(s) such as development of database on packaging containers and various options of 3R+Return activity 2-4 Summarize the results of pilot study (s) with recommendations for options of 3R+R activity	Not Change

## 5 JCC

### 5.1 JCC Program

#### 5.1.1 2nd JCC

- Date: 25th November 2020
- Time: 13:45 – 16:25
- Venue: Albert Park Pavilion
- Agenda

Time	Agenda	Presentator
13:45-13:50	Opening remarks	Mr. Joshua Wycliffe Permanent Secretary, Ministry of Waterways & Environment
13:50-13:55	Remarks from JICA Fiji Office	Ms. Yukari Ono Resident Representative
13:55-14:05	Outline of J-PRISM II activities	Mr. Shinnosuke Oda JICA Expert
14:05-14:45	OUTPUT1 Briefing Waste Management Master Plan as drafted	Representatives of Councils (Suva, Lautoka, Nadi, Levuka)
14:45-14:55	Presentation for points of discussion on OUTPUT1	Mr. Shinnosuke Oda JICA expert
14:55-15:05	Discussion	Chaired by PS
15:05- 15:20	Tea Break	
15:20-15:35	OUTPUT2 Survey Progress	Representative from DOE
15:35-15:45	Presentation for points of discussion on OUTPUT2	Mr. Shinnosuke Oda JICA expert
15:45-15:55	Discussion	Chaired by PS
15:55-16:05	Briefing proposed PDM(Project Design Matrix), PO(Plan of Operation) & Counterparts nomination	Mr. Shinnosuke Oda JICA Expert
16:05-16:15	Discussion	Chaired by PS
16:15-16:20	Signing of MM	
16:20-16:25	Closing Remarks	Ms Dimity Fifer Permanent Secretary, Ministry of Local Government
	End of Program	

### 5.1.2 3<sup>rd</sup> JCC

- Date: 5th September 2022
- Time: 13:30-16:30
- Venue: Suva Civic Centre Hall
- Chairperson Ms. Bindula Devi (Director of Local Government)
- Agenda

Time	Agenda	Presentator
1. 13:30-13:40	Opening remarks	Ms. Bindula Devi Director of Local Government
2. 13:40-13:50	Outline of J-PRISM II activities	Mr. Shinnosuke Oda JICA Expert
3. 13:50-15:10	OUTPUT1 Launching Waste Management Master Plan from Municipal Councils	Representatives of Councils (13 municipal councils)
4. 15:10-15:20	Certificate Handing Out to Municipal Councils	Ms. Laisani Lewanavanua Project Assistant
5. 15:20-15:30	Coffee and Tea Break	
6. 15:30-15:40	Briefing the output of projects	Mr. Shinnosuke ODA, JICA expert
7. 15:40-15:50	Presentation about J-PRISM Phase 3	JICA HQ
8. 15:50-16:15	Discussion	
9. 16:15-16:30	Closing Remarks from JICA Fiji Office	Ms. Mayumi Amaike Resident Representative

## 5.2 Minutes of Meeting


### 5.2.1 2<sup>nd</sup> JCC

MINUTES OF MEETINGS  
ON  
THE SECOND JOINT COORDINATING COMMITTEE  
OF  
THE JAPANESE TECHNICAL COOPERATION PROJECT  
FOR PROMOTION OF REGIONAL INITIATIVE ON SOLID WASTE  
MANAGEMENT IN PACIFIC ISLAND COUNTRIES PHASE II (J-PRISM II)  
IN  
THE REPUBLIC OF FIJI

Suva Fiji, 25<sup>th</sup> November 2020



Mr. Shinnosuke Oda  
Team Leader,  
JICA Expert G2 Team,  
J-PRISM II



Mr. Joshua Wyllie  
Co-Project Director  
Permanent Secretary for Waterways &  
Environment



Ms. Dimity Fifer  
Co-Project Director  
Permanent Secretary for Local Government

*Witnessed by:*



Ms. Yukari Ono  
Resident Representative  
Fiji Office  
Japan International Cooperation Agency

### Main Points Discussed

The chairperson, Mr. Joshua Wycliffe, proceeded the meeting in accordance with the program in Appendix 2. All the attendances agreed and confirmed the following matters;

#### 1. Co-Project Director

JCC understood the project shall be directed by Co-Project Director because Department of Environment (DOE) is transferred to Ministry of Waterways and Environment from Ministry of Local Government. Permanent Secretary for Ministry of Waterways and Environment is continuously assigned as the Co-Project Director as a representative from DOE, and Permanent Secretary for Ministry of Local Government is assigned as the Co-Project Director as a representative from Department of Local Government (DLG).

#### 2. Co-Project Manager

JCC understood the project shall be managed by Co-Project Manager as same reason with Co-Project Director. Director of Environment is assigned as Co-Project Manager for DOE, and Director of Local Government is assigned as Co-Project Manager for DLG.

#### 3. Modification of PDM and PO

JCC understood and approved the modification of The Project Design Matrix (PDM) and Plan of Operation (PO) as version two (2) shown as ANNEX I and ANNEX II, respectively. Project time line is rescheduled to take into consideration of delay due to COVID-19. Record of discussion of the Project will be modified accordingly in timely manner.

#### 4. List of Counterparts and Project Organization Chart

JCC understood and approved the modification of Project Organization Chart and Counterparts list in accordance with the contents of PDM version two (2) shown as ANNEX III and ANNEX IV, respectively.

#### 5. Progress of activities

JCC understood and acknowledged the progress of activities presented at the meeting including draft waste management master plan and monitoring sheet.

**ANNEX I: Project Design Matrix version two**  
**ANNEX II: Plan of Operation version two**  
**ANNEX III: Project Organization Chart version one**  
**ANNEX IV: Counterpart list version two**



ANNEX I

Project Design Matrix ( version 1 )  
Project Title: Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II)  
Implementing Agency: Department of Local Government (DLG), Department of Environment (DOE)  
Target group: Counterparts of DLG, DOE and Local Governments.  
Period of Project: 2018 -2022.  
Version: 2  
Dated: 25 Nov 2020

Country: The Republic of Fiji		Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p><b>Overall Goal</b> Sustainable management of solid waste in the Pacific region is enhanced based on Pacific Regional Waste and Pollution Management Strategy 2016 – 2025 (Cleaner Pacific 2025).</p> <p><b>Project Purpose (Regional)</b> Human and institutional capacity base for sustainable Solid Waste Management (SWM) in the Pacific region is strengthened through implementation of Cleaner Pacific 2025.</p> <p><b>(Fiji)</b> Solid waste is managed appropriately based on the National Waste Management and Pollution Control Strategy 2018-2028</p>	<p>1. Waste management plan of 8 municipal councils is formulated.</p> <p>2. Waste management indicators in NWMPCS 2018-2028 are figured out in Local government waste management plans.</p> <p>3. Roadmap for waste management coverage to rural area is identified based on Local government waste management plan</p>	<p>1. Waste management plans formulated</p> <p>2. Waste management plans formulated</p> <p>3. Waste management plans formulated</p>		
<p><b>Outputs</b></p> <p>1. By the initiative of Department of Local Government, Evidence-based policy is promoted based on 3R concept</p> <p>2. Pilot study(s) for 3R + Return program are implemented.</p>	<p>1-1 Format of Local Government Waste Management Plan is developed.</p> <p>1-2 Training for developing Local Government Waste Management Plan is conducted by the initiative of DLG.</p> <p>1-3 Functional PDCA cycle for waste management between Department of Local Government and municipal councils is identified.</p> <p>2-1 Recommendations for options of 3R+Return program are made.</p>	<p>1-1 Format developed</p> <p>1-2 Training reports</p> <p>1-3 Flowchart for PDCA cycle identified</p> <p>2-1 Pilot study reports</p>		

Activities	The Japanese Side	Inputs	Important Assumption
<p>1-1 Conduct baseline survey (Population, Boundary maps, Financial status, Waste characterization survey)*1, Collection coverage, 3R activities) for local government waste management plan 1-2 Analyze the result of baseline survey 1-3 Prepare the form of local government waste management plan based on baseline survey (supposed to include those goals: Collection coverage of rural, finance the waste management service, procurement plan of trucks) 1-4 Conduct the workshop to present the result of base-line survey and training for local government waste management plan 1-5 Each council formulate waste management plan 1-6 Monitor the implementation progress of local government local government waste management plans 1-7 Conduct the workshop for sharing the progress of waste management plans 1-8 DLG evaluate and decide the policy based on the progress of local government waste management plans 2-1 Identify the issues and challenges of 3R+Return activity in Fiji based on the current situation 2-2 Formulate plans for pilot study(s) 2-3 Conduct pilot study(s) such as development of database on packaging containers and various options of 3R+Return activity 2-4 Summarize the results of pilot study (s) with recommendations for options of 3R+R activity</p>	<p>1. Dispatch of experts 2. Training 3. Local cost for the activities of experts</p>	<p>The Fiji Side 1. Allocation of counterpart 2. Office space and facilities for Japanese experts 3. Operational expenses for administrative work, transportation, training, and seminar</p>	<p>Counterpart personnel do not leave the post without handing over the skills/knowledge to the new staff.  Budget of DLG and councils are allocated conduct the activities in timely manner  Pre-conditions 1. NWMPCS 2018-2028 does not drastically changed. 2. National 3R policy does not drastically changed.</p>

\*1 Waste characterization survey will be conducted by Fiji side.

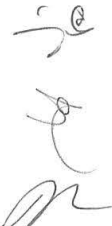
**ANNEX II**  
Version 2  
Dated: 25/11/2020

**Plan of Operation (PO)**

**Project Title:** Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II)  
**Country:** The Republic of Fiji

Activities	2017				2018				2019				2020				2021				2022	
	Plan	Actual	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II		
<b>Sub-Activities</b>																						
<b>Output 1: By the initiative of Department of Local Government, Evidence-based policy making for waste management of local government is promoted based on 3R concept</b>																						
1-1 Conduct baseline survey (Population, Boundary maps, Financial status, Waste characterization survey, Collection coverage, 3R activities) for local government waste management plan	Plan	Actual																				
1-2 Analyze the result of baseline survey	Plan	Actual																				
1-3 Prepare the form of local government waste management plan based on baseline survey (supposed to include those goals: Collection coverage of rural, finance the waste management service, procurement plan of trucks)	Plan	Actual																				
1-4 Conduct the workshop to present the result of base-line survey and training for local government waste management plan	Plan	Actual																				
1-5 Each council formulate waste management plan	Plan	Actual																				
1-6 Monitor the implementation progress of local government waste management plans	Plan	Actual																				
1-7 Conduct the workshop for sharing the progress of local government waste management plans	Plan	Actual																				
1-8 DLG evaluate and decide the policy based on the progress of local government waste management plans	Plan	Actual																				
<b>Output 2: Pilot study(s) for 3R + Return program are implemented.</b>																						
2-1 Identify the issues and challenges of 3R+Return activity in Fiji based on the current situation	Plan	Actual																				
2-2 Formulate plans for pilot study(s)	Plan	Actual																				
2-3 Conduct pilot study(s) such as development of database on packaging containers and various options of 3R+Return activity	Plan	Actual																				
2-4 Summarize the results of pilot study (s) with recommendations for options of 3R+R activity	Plan	Actual																				

2



**5.2.2 3<sup>rd</sup> JCC**

**MINUTES OF MEETINGS  
ON  
THE SECOND JOINT COORDINATING COMMITTEE  
OF  
THE JAPANESE TECHNICAL COOPERATION PROJECT  
FOR PROMOTION OF REGIONAL INITIATIVE ON SOLID WASTE  
MANAGEMENT IN PACIFIC ISLAND COUNTRIES PHASE II (J-PRISM II)  
IN  
THE REPUBLIC OF FIJI**

Suva Fiji, 5<sup>th</sup> September 2022

\_\_\_\_\_  
Mr. Shinosuke Oda  
Team Leader,  
JICA Expert G2 Team,  
J-PRISM II

\_\_\_\_\_  
Mr. Joshua Wycliffe  
Co-Project Director  
Permanent Secretary for Waterways &  
Environment

\_\_\_\_\_  
Mr. Shaheen Ali  
Co-Project Director  
Acting Permanent Secretary for Local  
Government

*Witnessed by:*

\_\_\_\_\_  
Ms. Mayumi Amaike  
Resident Representative  
Fiji Office  
Japan International Cooperation Agency

Main Points Discussed

The chairperson, Ms. Bindula Devi, proceeded the meeting in accordance with the program in Appendix 2. All the attendances agreed and confirmed the following matters;

1. Progress and result of activities

JCC understood and acknowledged the progress and results of activities presented at the meeting including draft waste management master plan and monitoring sheet.

- ANNEX I: Project Design Matrix version two**  
**ANNEX II: Plan of Operation version three**  
**ANNEX III: Project Organization Chart version one**  
**ANNEX IV: Counterpart list version three**

ANNEX I

Project Design Matrix (version 1)  
Project Title: Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II)  
Implementing Agency: Department of Local Government (DLG), Department of Environment (DOE)  
Target group: Counterparts of DLG, DOE and Local Governments  
Period of Project: 2018 -2022  
Country: The Republic of Fiji

Version: 2  
Dated: 5 Nov 2020

	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p><b>Overall Goal</b> Sustainable management of solid waste in the Pacific region is enhanced based on Pacific Regional Waste and Pollution Management Strategy 2016 – 2025 (Cleaner Pacific 2025).</p> <p><b>Project Purpose (Regional)</b> Human and institutional capacity base for sustainable Solid Waste Management (SWM) in the Pacific region is strengthened through implementation of Cleaner Pacific 2025.</p> <p><b>(Fiji)</b> Solid waste is managed appropriately based on the National Waste Management and Pollution Control Strategy 2018-2028</p>	<p>1. Waste management plan of 8 municipal councils is formulated.</p> <p>2. Waste management indicators in NWMPCS 2018-2028 are figured out in Local government waste management plans.</p> <p>3. Roadmap for waste management coverage to rural area is identified based on Local government waste management plan</p>	<p>1. Waste management plans formulated</p> <p>2. Waste management plans formulated</p> <p>3. Waste management plans formulated</p>	
<p><b>Outputs</b></p> <p>1. By the initiative of Department of Local Government, Evidence-based policy is promoted based on 3R concept</p> <p>2. Pilot study(s) for 3R + Return program are implemented.</p>	<p>1-1 Format of Local Government Waste Management Plan is developed.</p> <p>1-2 Training for developing Local Government Waste Management Plan is conducted by the initiative of DLG.</p> <p>1-3 Functional PDCA cycle for waste management between Department of Local Government and municipal councils is identified.</p> <p>2-1 Recommendations for options of regional 3R+Return program are made.</p>	<p>1-1 Format developed</p> <p>1-2 Training reports</p> <p>1-3 Flowchart for PDCA cycle identified</p> <p>2-1 Pilot study reports</p>	

Activities	Inputs	Important Assumption
<p>The Japanese Side</p> <p>1. Dispatch of experts 2. Training 3. Local cost for the activities of experts</p>	<p>The Fiji Side</p> <p>1. Allocation of counterpart 2. Office space and facilities for Japanese experts 3. Operational expenses for administrative work, transportation, training, and seminar</p>	<p>Counterpart personnel do not leave the post without handing over the skills/knowledge to the new staff.</p> <p>Budget of DLG and councils are allocated conduct the activities in timely manner</p> <p>Pre-conditions 1. NMMPCS 2018-2028 does not drastically changed. 2. National 3R policy does not drastically changed.</p>
<p>1-1 Conduct baseline survey (Population, Boundary maps, Financial status, Waste characterization survey)*1, Collection coverage, 3R activities) for local government waste management plan 1-2 Analyze the result of baseline survey 1-3 Prepare the form of local government waste management plan based on baseline survey (supposed to include those goals: Collection coverage of rural, finance the waste management service, procurement plan of trucks) 1-4 Conduct the workshop to present the result of base-line survey and training for local government waste management plan 1-5 Each council formulate waste management plan 1-6 Monitor the implementation progress of local government local government waste management plans 1-7 Conduct the workshop for sharing the progress of waste management plans 1-8 DLG evaluate and decide the policy based on the progress of local government waste management plans 2-1 Identify the issues and challenges of 3R+Return activity in Fiji based on the current situation 2-2 Formulate plans for pilot study(s) 2-3 Conduct pilot study(s) such as development of database on packaging containers and various options of 3R+Return activity 2-4 Summarize the results of pilot study (s) with recommendations for options of 3R+R activity</p>		

\*1 Waste characterization survey will be conducted by Fiji side.

# ANNEX II

Version 3  
Dated: 5/9/2022

## Plan of Operation (PO)

**Project Title:** Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phasell (J-PRISM II)

**Country:** The Republic of Fiji

Activities	2017				2018				2019				2020				2021				2022			
	Plan	Actual	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV		
<b>Output 1: By the initiative of Department of Local Government, Evidence-based policy making for waste management of local government is promoted based on 3R concept</b>																								
1-1 Conduct baseline survey (Population, Boundary maps, Financial status, Waste characterization survey, Collection coverage, 3R activities) for local government waste management plan	Plan																							
	Actual																							
1-2 Analyze the result of baseline survey	Plan																							
	Actual																							
1-3 Prepare the form of local government waste management plan based on baseline survey (supposed to include those goals: Collection coverage of rural, finance the waste management service, procurement plan of trucks)	Plan																							
	Actual																							
1-4 Conduct the workshop to present the result of base-line survey and training for local government waste management plan	Plan																							
	Actual																							
1-5 Each council formulate waste management plan	Plan																							
	Actual																							
1-6 Monitor the implementation progress of local government waste management plans	Plan																							
	Actual																							
1-7 Conduct the workshop for sharing the progress of local government waste management plans	Plan																							
	Actual																							
1-8 DLG evaluate and decide the policy based on the progress of local government waste management plans	Plan																							
	Actual																							
<b>Output 2: Pilot study(s) for 3R + Return program are implemented.</b>																								
2-1 Identify the issues and challenges of 3R+Return activity in Fiji based on the current situation	Plan																							
	Actual																							
2-2 Formulate plans for pilot study(s)	Plan																							
	Actual																							
2-3 Conduct pilot study(s) such as development of database on packaging containers and various options of 3R+Return activity	Plan																							
	Actual																							
2-4 Summarize the results of pilot study (s) with recommendations for options of 3R+R activity	Plan																							
	Actual																							



### 5.3 List of participants

#### 5.3.1 2<sup>nd</sup> JCC

**J-PRISM II 2<sup>nd</sup> Joint Coordinating Committee (JCC) Meeting held on 25. 11. 2020,**

**1.00pm to 4.00pm**

**Attendance Register**

No.	Name	Organization	Designation
1	Vineel Kumar	Ministry of Economy	Policy Analyst
2	Rezithy Raj	MOE	Budget Analyst
3	Ronika Mishra	BTL	Health Inspector
4	Shameel Ram	Nasinu Town Council	Health Inspector
5	Mufeed Shah	Nasinu Town Council	Acting Health Supervisor
6	Sitiveni Cakautabaki	Nausori Town Council	LPO
7	LOSALINI BAIKELBWA	SANISAVU TOWN COUNCIL	Health Inspector
8	Seini L. Ubitau	Lakasa Town Council	Asst. Health Inspector
9	Semi V. Waga	Nausori Town Council	Asst. Health Inspector
10	Luke Bakinabuli	Lemba Town Council	Asst. Health Inspector
11	Shahend P Singh	Lautoka City Council	Senior Health Inspector
12	TAITO R. WHELAVANAVA	SIVA CITY COUNCIL	HEALTH EDUCATOR
13	Aleph Lal	Nausori Town Council	Environment Dept
14	Selama Maitoga	Lami Town Council	SPL
15	Michelle Balekarasa	M. ENVIRONMENT	use of power (EO Awareness)
16	Miliakere Korosijuta	Local Govt	SAO
17	Joshua Wycliffe	PS Min of Environment	PS
18	Craig Powell	NTC & STC	CEO
19	(Jojo) Tolomakua	Ministry of Economy	HoB
20	Reipeli Sivo	Min of Local Govt	SAO
21	Sandesh Singh	DOE	Director
22	Dorrie	DOE	EO
23	Dimitry Fifer	Local Govt	PS. Local Govt
24	Mohammed Anees Khan	LCC	C.E.O.
25	Mr. Taisuke Iwano	Embassy of Japan	First Secretary
26	Ms Yukari ONO	J.I.C.A	Resident Representative
27	Mr. Kazunobu Suzuki	✓	Deputy ✓ ✓
28	Ms. Rina KURUMISAWA	✓	Assistant ✓ ✓
29	Ms. Ilisapei Bai	J-PRISM	Project Assistant
30	Nila Inaosa	JICA	Program Officer
31	Tevita Tuibau	Economic office	MOE Economy
32	Ateah Lal	Nausori	Assistant Health
33		Town Council	Inspector
34	→ Semi Waga	✓	✓

top 10

Handwritten signature

5.3.2 3<sup>rd</sup> JCC



Japanese Technical Cooperation Project for Promotion of Regional Initiative  
on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II)

3rd Joint Coordination Committee in Fiji

Date: Monday, 5 September 2022

Venue: Suva Civic Centre Lower Hall

REGISTRATION FORM

NO.	NAME	DESIGNATION	ORGANISATION	SIGNATURE
1	Vauling Nasewe	Assistant Health Inspector	Sigatoka Town Council	<i>Nasewe</i>
2	Sayad Shah	Assistant Health Inspector	Sigatoka Town Council	<i>Shah</i>
3	Arishma Ashmita Chand	Health Inspector	Labasa Town Council	<i>Arishma</i>
4	Shalend Singh	SHD	L.C.C	<i>Shalend</i>
5	Rohit K Singh	MHS	VCC	<i>RK</i>
6	Serovi	Health Inspector	Rakiraki / Tavua Town Council	<i>Serovi</i>
7	Nirvi Lal	3R officer	Rakiraki Town Council	<i>Nirvi</i>
8	Nischal Kumar	3R Officer	Tavua Town Council	<i>Nischal</i>
9	Satya Saggi	Environment officer	Lenaka Town Council	<i>Saggi</i>
10	Gymneth Chan	Environment officer	Samsam Town Council	<i>GChan</i>
11	Maria Vulava	Health Educator	SCC	<i>Maria</i>



NO.	NAME	DESIGNATION	ORGANISATION	SIGNATURE
12	Reydel S	SAB	MLG	
13	Birchula Den	DLG	MLG	
14	Seleima M	HI	Lami TC	
15	Sihveni. V	Compost officer	"	
16	Semi W.	HI	Ba TC	
17	Muni Reddy	ACEO	Nadi TC	
18	Nafza Ali	SHI	"	
19	Arishma Chand	Assistant HI	Labasa TC	
20	Lesalini	HI	Nasinu TC	
21	Azan	HI	Nausori TC	
22				
23				
24				
25				
26				

**LIST OF PARTICIPANTS - JPRISM II JCC WORKSHOP**

(JICA SIDE)

NO.	NAME.	DESIGNATION	ORGANIZATION
1	Mayumi Amaike	Resident Representative	JICA FIJI OFFICE
2	Makumo Iwatani	Assistant Resident Reperesentative	JICA FIJI OFFICE
3	Takashi Oba	Assistant Resident Reperesentative	JICA FIJI OFFICE
4	Nila Prasad	Senior Program Officer	JICA FIJI OFFICE
5	Shiho Watanabe	Volunteer Coodinator	JICA FIJI OFFICE
6	Iori Yasuda	Volunteer Coodinator	JICA FIJI OFFICE
7	Liki Finauga		JICA FIJI OFFICE
8	Shinnosuke Oda	Waste Management Expert	J-PRISM 2
9	Laisani Lewanavanua	Project Assistant	J-PRISM 2
10			
11	Shiro Amano	J-PRISM 3 Detail Design Survey team	JICA HQ
12	Koji Maeshima	J-PRISM 3 Detail Design Survey team	JICA HQ
13	Issei Hamana	J-PRISM 3 Detail Design Survey team	JICA HQ
14	Atsuko Orimoto	J-PRISM 3 Detail Design Survey team	
<b>PARTICIPANTS VIRTUALLY</b>			
1	Satoru Mimura	Chief Advisor	J-PRISM 2
2	Faafetai Sagapolutele	Deputy chief advisor	J-PRISM 2
3	Ayako Yoshida	Regional Cooperation	J-PRISM 2
4	Keiko Kani	Waste Management Expert	J-PRISM 2

*Annex G : Attachment on Input for Work  
in Japan*

## Table of Contents

1	Input for Work in Japan.....	1
---	------------------------------	---

## 1 Input for Work in Japan

Following input was made for Work in Japan.

No.	Name	Experty	PM
1	Shinnosuke Oda	Team Leader / SWM D1	4.54
2	Junji Anai	Sub Team Leader / SWM D2	5.17
3	Mitsuko Nakamura	Capacity Development E	4.35
4	Makoto Tsukji	SWM F1	3.23
5	Yoshinosuke Hamada	SWM F2	6.35
6	Rikae Kodani	SWM F3	6.76
7	Hiroshi Tsuruta	SWM G	6.08
8	Hitoshi Katayama	SWM H	3.05
9	Keiko Kani	SWM H	3.77
10	Tetsuo Yatsu	Heavy equipment procurement	0.13
11	Yoshiyuki Nishimura	Preliminary design for landfill	1.00
12	Koji Uzawa	Vehicle Maintenance Training	1.00
Total			45.43