Attachment B. Solomon

B Solomon

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Attachment B-1 Daily Activity Record (Solomon Islands)

The Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM) (Solid Waste Management A, E)

No.	Date	e Activity	
1st Ass	signment in Solo	mon (Osada; SWM Expert A1/E2, Abe; SWM Expert A2)	
1	2014/5/31	• Departure from Japan (SWM Expert A1/E2, SWM Expert A2)	
2	2014/6/1	• Arrival at Solomon (SWM Expert A2)	
3	2014/6/2	• Site visit at Ranadi landfill	
		• Individual meeting with the C/Ps	
		• Arrival at Solomon (SWM Expert A1/E2)	
4	2014/6/3	Meeting with JICA Solomon Office	
		 Meeting with City Mayor and City Clerk 	
5	2014/6/4	• Visit at Tongs for the procurement of a tractor attachment	
6	2014/6/5	• Advisory meeting (television conference system)	
		• Meeting with Japanese Embassy for the application of landfill site office	
7	2014/6/6	 Meeting with Permanent Secretary, MECDM 	
8	2014/6/7	 Documents and data review 	
9	2014/6/8	 Documents and data review 	
		• Committee meeting for waste segregation pilot project at Panatina Valley	
		Community	
10	2014/6/9	• Site visit at Ranadi landfill	
		 Individual meeting with the C/Ps 	
11	2014/6/10	Meeting with Tongs	
12	2014/6/11	• Meeting with Gizo C/P to discuss the procurement of a tractor attachment	
13	2014/6/12	Joint Coordination Committee meeting	
		• Meeting with Gizo C/P to discuss the procurement of a tractor attachment	
14	2014/6/13	 Documents and data review (National holiday) 	
15	2014/6/14	• Departure from Solomon (SWM Expert A1/E2, SWM Expert A2)	
2nd As	signment in Solo	omon (Osada; SWM Expert A1/E2)	
1	2014/7/6	Arrival at Solomon	
2	2014/7/7	Individual meeting with MECDM and Honiara City Council	
3	2014/7/8	• Site visit at Ranadi landfill	
		Meeting with Tongs for the procurement of a tractor attachment	
4	2014/7/9	Honiara C/P monthly meeting	
5	2014/7/10	Preparation of awareness materials	
6	2014/7/11	Meeting with JICA Solomon Office	
7	2014/7/12	Documents and data review	
8	2014/7/13	• Committee meeting for waste segregation pilot project at Panatina Valley	
0	2014/7/14	Community	
9	2014///14	Meeting for landfill rehabilitation	
10	2014/7/15	• Site visit at Ranadi landfill	
11	2014/7/16	Meeting with City Clerk, Honiara City Council and Treasurer	
11	2014/7/16	• Meeting with Committee members for waste segregation pilot project at	
		Panatina valley Community	
10	2014/7/17	Site visit at Ranadi landrill with Japanese Embassy	
12	2014/7/17	Preparation of awareness materials	
12	2014/7/19	Weste pickers survey	
15	2014/7/10	 Briefing for house to house visit for awareness reising at Panatina Valley. 	
		Community	
14	2014/7/10	Waste pickers survey	
14	2014/7/19	 House to house visit for awareness raising at Panatina Valley Community 	
15	2014/7/20	 House to house visit for awareness raising at Panatina Valley Community 	
15	2014/7/20	 Flouse to house visit for awareness faising at 1 analita valley Community Contract with Tongs for the procurement of a tractor attachment 	
17	2014/7/21	Meeting with NZ Aid	
1/	2014/1/22	 Meeting for preparation of monitoring sheets of Eco School Program 	
18	2014/7/23	 Meeting with Alpha Metal 	
10	2014/1/23	 Preparation of awareness materials 	
19	2014/7/24	Trip from Honiara to Gizo	
17	2017///2T		

The Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM) (Solid Waste Management A, E)

No.	Date	Activity		
		• Gizo C/Ps meeting		
20	2014/7/25	• Launching of community zoning program in Gizo		
		 School visit for Clean School Program 		
21	2014/7/26	Trip from Gizo to Honiara		
		• House to house visit for awareness raising at Panatina Valley Community		
22	2014/7/27	• Documents and data review		
23	2014/7/28	Meeting with Honiara City Council		
		• Meeting with Honiara City Clerk		
24	2014/7/29	Meeting with Honiara City Council		
25	2014/7/30	• Meeting with MECDM		
		 Preparation of Polo shirts for Gizo community zoning program 		
26	2014/7/31	Departure from Solomon		
27	2014/8/1	 Arrival at Japan 		
3rd As	<mark>signment in Solo</mark>	mon (Abe; SWM Expert A2)		
1	2014/9/23	• Arrival at Solomon		
		 Meeting with Japanese Embassy 		
		Meeting with Honiara City Council		
2	2014/9/24	• Examination of cost of fence		
	2014/0/25	• Meeting with Tong and Honiara City Council for landfill schedule		
3	2014/9/25	Check of wheel loader tires		
4	2014/9/26	• Delivery of wheel loader tires and tubes to Honiara City Council		
		 Inspection and certificate for wheel loader tires and tubes Check and advice for Denedi londfill rehebilitation and exercision 		
5	2014/0/27	Check and advice for Kanadi landfill		
5	2014/9/27	She visit at Rahadi landilli		
0	2014/9/28	Meeting with Gizo C/Ps Discussion with C/Ds on Cize londfill		
/ 0	2014/9/29	Discussion with C/Fs on Gizo landing Check of a treator attachment schedule		
0	2014/9/30	 Check of a flactor attachment schedule Launching of Eco bag campaign 		
,	2014/10/1	• Meeting with C/Ps		
		 Preparation of office construction 		
		 Rehabilitation work at Ranadi 		
10	2014/10/2	• Rehabilitation work at Ranadi		
11	2014/10/3	• Monthly C/Ps Meeting		
		Meeting with JICA Solomon Office		
12	2014/10/4	Departure from Solomon		
4th As	signment in Solo	mon (Osada; SWM Expert A1/E2)		
1	2014/11/17	Arrival at Solomon		
2	2014/11/18	Meeting with JICA Solomon Office		
		• Individual meeting with the C/Ps		
		• Site visit at Ranadi landfill		
3	2014/11/19	• Data analysis Documents review (National holidays)		
4	2014/11/20	Data anarysis, Documents review (National Holidays)		
4	2014/11/20	• Site visit at Ranadi landfill with Ministry of Foreign Affairs, Japan		
		Meeting with Honiara City Council		
5	2014/11/21	• Meeting with Tongs for a tractor attachment		
6	2014/11/22	• Documents and data review		
7	2014/11/23	• Documents and data review		
		Meeting with Honiara City Council		
8	2014/11/24	Meeting with Honiara City Council		
9	2014/11/25	• Meeting with a contractor of landfill site office		
10	2014/11/26	• Site visit at Ranadi landfill with a contractor		
11	2014/11/27	Trip from Honiara to Gizo		
		• Gizo C/P team meeting		
		• Meeting with Supervising Premier and Provincial Secretary		

The Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM) (Solid Waste Management A, E)

No.	Date	Activity		
		• Site visit at Gizo landfill and check of a tractor attachment		
12	2014/11/28	• Community awareness activities at the Gizo market		
		• Handover ceremony of a tractor attachment		
		• Meeting with Director of MHMS		
13	2014/11/29	Trin from Gizo to Honiara		
14	2014/11/20	Documents and data review		
5th As	signment in Solo	mon (Osada: SWM Expert A1/F2)		
1	2014/12/1	• Site visit at Ranadi landfill		
1	2011/12/1	 Individual meeting with the C/Ps 		
2	2014/12/2	• Support to procure the materials for Ranadi landfill rehabilitation		
		• Meeting with Project Manager		
3	2014/12/3	Meeting with JICA Solomon Office		
4	2014/12/4	• Departure from Solomon to Japan		
5	2014/12/5	 Arrival at Japan 		
6th As	signment in Solo	mon (Osada; SWM Expert A1/E2)		
1	2015/1/31	Departure from Japan to Solomon		
2	2015/2/1	Arrival at Solomon		
3	2015/2/2	• Meeting with City Mayor and City Clerk, Honiara City Council		
4	2015/2/2	• Meeting with Permanent Secretary, MECDM		
4	2015/2/3	• 4 JCC (including the site visit at Ranadi landfill and Kastom Garden)		
3	2013/2/4	 Skype meeting with counterparts 		
6	2015/2/5	Meeting with IICA Solomon Islands Office		
0	2013/2/3	 Individual meeting with counterparts 		
7	2015/2/6	 Preparation for community meeting for waste segregation pilot project 		
8	2015/2/7	 Documents and data review 		
9	2015/2/8	• Community meeting for waste segregation pilot project		
10	2015/2/9	Meeting with Chief Education Officer and School Inspectorate, Honiara		
		City Council		
11	2015/2/10	• Reporting meeting for Tonga training visit by JOCV and Gizo Town Clerk		
12	2015/2/11	 Preparation for workshop for waste segregation pilot project 		
13	2015/2/12	• Site visit at Ranadi landfill		
1.4	2015/2/12	• Support for procurement of rehabilitation materials and office equipment		
14	2015/2/13	• Support for procurement of rehabilitation materials and office equipment		
15	2015/2/14	 Documents and data review Community mosting and composit demonstration for wests sogregation nilot 		
10	2013/2/13	 Community meeting and compost demonstration for waste segregation phot project 		
17	2015/2/16	 Meeting with LEAF 		
1,	_010,2,10	 Meeting for preparation of evaluation sheet of Eco School Program 		
18	2015/2/17	• Support for procurement of rehabilitation materials and office equipment		
19	2015/2/18	Trip from Honiara to Gizo		
20	2015/2/19	Meeting with Gizo counterparts		
		• Meeting with a fence construction company, JK Mabuzu Building		
		Construction		
21	2015/2/20	Documents and data review		
22	2015/2/21	Documents and data review		
22	2015/2/22	Irip from GIZO to Honiara		
23	2015/2/22	Meeting with Solomon Islands Office		
24	2013/2/23	Meeting with Project Manager		
		 Support for procurement of rehabilitation materials and office equipment 		
25	2015/2/24	 Departure from Solomon 		
7th As	signment in Solo	mon (Riad; SWM Expert E1)		
1	2015/3/1	Arrival at Solomon		

The Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM) (Solid Waste Management A, E)

No.	Date	Activity			
2	2015/3/2	 Meeting with JICA Solomon Islands Office 			
		• Meeting with MECDM			
3	2015/3/3	Check of wheel loader tires			
8th Ass	Assignment in Solomon (Osada; SWM Expert A1/E2)				
1	2015/3/24	Arrival at Solomon			
2	2015/3/25	 Meeting with JICA Solomon Office 			
		• Individual meeting with the C/Ps			
		• Site visit at Ranadi landfill			
3	2015/3/26	• Data analysis, Documents review (National holidays)			
4	2015/3/27	• Site visit at Ranadi landfill with Ministry of Foreign Affairs, Japan			
		Meeting with Honiara City Council			
5	2015/3/28	• Meeting with Tongs for a tractor attachment			
6	2015/3/29	• Documents and data review			
7	2015/3/30	• Documents and data review			
		Meeting with Honiara City Council			
8	2015/3/31	Meeting with Honiara City Council			
9	2015/4/1	• Meeting with a contractor of landfill site office			
10	2015/4/2	• Site visit at Ranadi landfill with a contractor			
11	2015/4/3	• Trip from Honiara to Gizo			
		• Gizo C/P team meeting			
		• Meeting with Supervising Premier and Provincial Secretary			
10	2015/4/4	• Site visit at Gizo landfill and check of a tractor attachment			
12	2015/4/4	• Community awareness activities at the Gizo market			
		 Handover ceremony of a tractor attachment Monting with Director of MUMS 			
		• Meeting with Director of MHMS			
9th Ass	signment in Solo	mon (Osada; SWM Expert A1/E2, Abe; SWM Expert A2)			
1	2015/5/24	• Arrival at Solomon (Abe)			
2	2015/5/25	• Meeting with landfill supervisor			
		• Site visit at Ranadi landfill			
3	2015/5/26	• Individual meeting with MECDM and City Clerk, Honiara City Council			
		• Site visit at Ranadi landfill			
4	2015/5/27	• Arrival at Solomon (Osada)			
		• Preparation of rehabilitation schedule with landfill supervisor			
		• Meeting with JICA Solomon Islands Office			
5	2015/5/28	 Meeting with landfill supervisor 			
_		 Individual meeting with MECDM and Honiara City Council 			
6	2015/5/29	Meeting with City Clerk Honiara City Council			
		 Meeting with a screening committee of Honiara City Council 			
		 Meeting with a recyclable collection company Alpha Metal 			
7	2015/5/30	 Documents and data review 			
8	2015/5/31	• Documents and data review			
		• Trip from Honiara to Gizo (Abe)			
9	2015/6/1	• Meeting with Gizo counterparts			
		• Site visit at Gizo dumpsite			
		 Meeting with a tence construction company, JK Mabuzu Building 			
10	2015/6/2				
10	2013/0/2	Meeting with Provincial Secretary, Western Provincial Government			
		Contract with JK Mabuzu Building company for fence construction			
		 School visit (Kolale School) for Eco School Program 			

The Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM) (Solid Waste Management A, E)

No.	Date	Activity		
11	2015/6/3	• Trip from Gizo to Honiara (Abe)		
		 Preparation for waste characterization survey and workshop 		
12	2015/6/4	School visit (Florence Young School) for Eco School Program		
		Participation in LEAF Coordination Committee Meeting		
13	2015/6/5	• Participation in Environmental day		
		• Questionnaire survey for waste characterization survey		
		 Meeting with JICA Solomon Islands Office 		
14	2015/6/6	• Departure from Solomon (Abe)		
		• Documents and data review		
15	2015/6/7	• Documents and data review		
		• Monitoring, community meeting and compost demonstration for waste		
		segregation pilot project		
16	2015/6/8	• Workshop for waste characterization survey		
		• Questionnaire survey for waste characterization survey		
17	2015/6/9	Waste characterization survey		
		• School visit (Palm Drive School) for Eco School Program		
		• Compost preparation for waste segregation pilot project		
18	2015/6/10	Waste characterization survey		
		 School visit (Panatina Valley School) for Eco School Program 		
19	2015/6/11	Waste characterization survey		
20	2015/6/12	 Public Holiday (Queen Elizabeth Birthday) 		
21	2015/6/13	Waste characterization survey		
21	2015/6/14	Waste characterization survey		
22	2015/6/15	Waste characterization survey		
25	2013/0/13	 Waste characterization survey Meeting with City Mayor and City Clerk, Honiara City Council 		
		 Meeting with JICA Solomon Islands Office 		
24	2015/6/16	• Waste characterization survey		
		• Departure from Solomon (Osada)		
10th A	th Assignment in Solomon (Riad; SWM Expert E1, Osada; SWM Expert A1/E2)			
1	2015/7/20	Departure from Japan to Solomon (Osada)		
2	2015/7/21	Arrival at Solomon (Osada)		
		• Site visit at Ranadi landfill		
3	2015/7/22	Meeting with JICA Solomon Office		
4	2015/7/22	 Individual meeting with counterparts 		
4	2015/7/23	Preparation for Melanesian Solid Waste management Workshop		
5	2015/7/24	 J-PRISM monthly counterparts meeting Documents and data review 		
7	2015/7/26	 Documents and data review 		
8	2015/7/27	 Discussion with counterparts 		
9	2015/7/28	• Site visit at Ranadi landfill		
		 Meeting with local NGO about composting 		
10	2015/7/29	• Site visit at Panatina Valley Community for waste segregation pilot project		
11	2015/7/30	Trip from Honiara to Gizo		
10	2015/7/21	Meeting with Gizo counterparts		
12	2015/7/31	Time and motion study in Gizo Trip from Gizo to Hopierc		
15	2013/8/1	 Imp from Gizo to Homara Documents and data review 		
		 Departure from Japan to Solomon Islands (Riad) 		
14	2015/8/2	 Documents and data review 		
		• Arrival at Solomon Islands (Riad)		
15	2015/8/3	Preparation for Melanesian Solid Waste management Workshop		

The Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM) (Solid Waste Management A, E)

No.	Date	Activity	
16	2015/8/4	• Preparation for Melanesian Solid Waste management Workshop	
17	2015/8/5	Melanesian Solid Waste Management Workshop	
18	2015/8/6	Melanesian Solid Waste Management Workshop	
19	2015/8/7	Melanesian Solid Waste Management Workshop	
20	2015/8/8	Documents and data review	
21	2015/8/9	• Documents and data review	
22	2015/8/10	• Meeting with counterparts	
23	2015/8/11	Preparation for Ranadi landfill rehailibitation	
24	2015/8/12	• Meeting with Honiara City Mayor, City Clerk, Deputy City Clerk	
25	2015/8/13	• Meeting with counterparts	
26	2015/8/14	• Preparation for terminal evaluation mission	
27	2015/8/15	• Documents and data review	
28	2015/8/16	• Trip from Honiara to Gizo	
29	2015/8/17	 Support for waste characterization study in Gizo 	
30	2015/8/18	 Trip from Gizo to Honiara 	
31	2015/8/19	• Meeting with a construction company for Ranadi landfill rehabilitation	
		• Incoming vehicle survey at Ranadi landfill	
32	2015/8/20	• Incoming vehicle survey at Ranadi landfill	
33	2015/8/21	• Incoming vehicle survey at Ranadi landfill	
34	2015/8/22	• Documents and data review	
		• Incoming vehicle survey at Ranadi landfill	
35	2015/8/23	Documents and data review	
		• Incoming vehicle survey at Ranadi landfill	
36	2015/8/24	• Kick-off meeting for terminal evaluation mission	
		• Incoming vehicle survey at Ranadi landfill	
37	2015/8/25	Incoming vehicle survey at Ranadi landfill	
38	2015/8/26	Incoming vehicle survey at Ranadi landfill	
39	2015/8/27	• Discussion of landfill operation manual and operation plan	
		• Incoming vehicle survey at Ranadi landfill	
40	2015/8/28	• Wrap-up meeting for terminal evaluation mission	
		 Incoming vehicle survey at Ranadi landfill 	
41	2015/8/29	Departure from Solomon Islands (Osada)	
11th A	ssignment in Sol	omon (Abe; SWM Expert A2)	
1	2015/10/18	Arrival at Solomon Islands (Abe)	
2	2015/10/19	• Meeting with MECDM counterparts	
		• Site visit at Ranadi landfill	
		Meeting with JICA Solomon Islands Office	
3	2015/10/20	• Site visit at Ranadi landfill	
		 Meeting with City Clerk, Honiara City Council 	
4	2015/10/21	• Discussion with landfill supervisor on the remaining work of the	
		rehabilitation	
_		Preparation of rehabilitation work	
5	2015/10/22	Preparatory of rehabilitation work	
		• Meeting with a private recyclable collection company, Alpha metal, on Gizo	
	2015/10/22	recycling system	
6	2015/10/23	• Meeting with City Clerk and Deputy City Clerk. Honiara City Council	
7	2015/10/24	Preparatory of renabilitation work on site	
/	2015/10/24	Site visit at Ranadi landfill and meeting with a landfill supervisor	
8	2015/10/25	Preparation of fanding workshop	
9	2015/10/26	Inteeting on Eco-school program	
		Preparation of renaonitation work	
10	2015/10/27	Internation of rehabilitation work	
10	2013/10/27	Implementation of lendfill workshop	
11	2015/10/29	Internation of rehabilitation work	
11	2013/10/20	- Implementation of renaointation work	

The Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM) (Solid Waste Management A, E)

No.	Date	Activity	
		Preparation of landfill workshop	
12	2015/10/29	Landfill workshop	
		• Preparation of an operation manual for Ranadi landfill	
13	2015/10/30	 Preparation of strategy workshop 	
		Meeting with JICA Solomon Islands Office	
14	2015/10/31	Departure from Solomon Islands (Abe)	
12th A	ssignment in Sol	omon (Osada; SWM Expert A1/E2)	
1	201511/7	Departure from Japan to Solomon Islands (Osada)	
2	201511/8	Mobilization from Japan to Solomon Islands (Osada)	
3	201511/9	Arrival at Solomon Islands (Osada)	
		• Site visit at Ranadi landfill	
4	201511/10	 Meeting with JICA Solomon Islands Office 	
		• Meeting with counterparts	
5	201511/11	• Site visit at Ranadi landfill	
6	201511/12	Meeting with Honiara City Council	
7	201511/13	 Meeting with counterparts 	
8	201511/14	• Documents and data review	
9	201511/15	• Documents and data review	
10	201511/16	• J-PRISM monthly counterparts meeting	
11	201511/17	 Meeting with consultants of National Strategy 	
12	201511/18	 Final awarding ceremony for Eco School Program 	
13	201511/19	• Workshop of Waste characterization study and Time & motion study for	
		Gizo counterparts	
		 Meeting with JICA Solomon Islands Office 	
		Meeting with counterparts	
14	201511/20	5th Joint Coordination Committee	
15	201511/21	 Documents and data review 	
16	201511/22	 Documents and data review 	
17	201511/23	 Workshop of waste characterization study analysis 	
		Meeting with JICA Solomon Islands Office	
18	201511/24	Departure from Solomon Islands (Osada)	

Attachment B-2 3rd JCC Meeting Minutes







MINUTES OF MEETING

FOR THE SECOND JOINT CORDINATING COMMITTEE ON JAPANESE TECHNICAL COOPERATION PROJECT FOR PROMOTION OF REGIONAL INITIATIVE ON SOLID WASTE MANAGEMENT IN THE PACIFIC ISLAND COUNTRIES

AGREED UPON AMONG

SOLOMON ISLANDS GOVERNMENT: MINISTRY OF ENVIRONMENT, CLIMATE CHANGE, DISASTER MANAGEMENT AND METEOROLOGY, MINISTRY OF HEALTH AND MEDICAL SERVICE, HONIARA CITY COUNCIL, WESTERN PROVINCIAL GOVERNMENT,

SECRETARIAT OF THE PACIFIC REGIONAL ENVIRONMENT PROGRAMME

AND

JAPAN INTERNATIONAL COOPERATION AGENCY

Honiara, Wednesday 30th January 2013

Mr. Joe Horokou Director of Environment and Conservation Division Ministry of Environment, Climate Change, Disaster Management & Meteorology SOLOMON ISLANDS Mr. Amano Shiro Chief Advisor J-PRISM Project Office SAMOA Mr. Takishita Yoshinobu Resident Representative JICA Solomon Islands Office SOLOMON ISLANDS

Mr. Tom Nanau Director of Environmental Health Division Ministry of Health & Medical Services SOLOMON ISLANDS Mr. Charles Kelly Honiara City Clerk Honiara City Council SOLOMON ISLANDS Mr. Fredrick Naphtali Chief Health Inspector Ministry of Health WPG SOLOMON ISLANDS







The Second Joint Coordination Committee on the J-PRISM Project January 30th, 2013 – Rock Haven Conference Room, Honiara

This minutes of meeting is the record of the second Joint Coordinating Committee (herein after refer to as "JCC") held on January 30th, 2013 for approval of the review and progress report of the annual work plan and technical cooperation, to formulate the annual work plan of the Project based on the tentative schedule of implementation within the frame work of the record of discussion and to review and exchange opinions on major issues that arise during the implementation of the project.

The list attendants to the meeting are attached in Annex I.

Date: 30th January 2013 Time: 9:44am- 1:21pm Venue: Rock Haven Conference Room

Chairperson: Joe Horokou (Director ECD/MECDM)) Facilitator: Rosemary Apa (Project Manager) Rapporteur: Christina Onahikeni and Jimmy Hilly

Time	Agenda Item	Responsible Person
8:30-9:00am	Arrival of Guests and Participants	
9:00- 9:05am	Opening Prayer	Jimmy Hilly
9:05-9:07	1 minute Silence to honour two Deceased Counterparts	Rosemary Apa
9:07 -9:15am	Welcome and Opening Remarks	Joe Horokou (Director of ECD/MECDM)
9:15 – 9:30am	Remarks from JICA Office	Yoshinobu Takishita (Resident Representative of JICA Solomon Islands Office)
	Agenda Items	
	1. Progress of Activities	
9:30 – 10: 00am	Honiara	George Titiulu
10:00 –10:10am	• Gizo	Fredrick Naphtali
10:20–10:40am	• Q&A	
10:40–11:00am	Morning Tea	
11:00–12:00pm	 Human Resource Changes Approval of Revised PO Approval of Work Plan Question and Answer 	Joe Horokou
12:00-12:10pm	Closing Remarks	Tom Nanau (Director of EHD/MHMS)
12:10-12:15pm	Closing Prayer	Ella Rizwold
12:15-1:00pm	Lunch	







1.0 Official Opening

Mr. Joe Horokou, as the Director of the Environment and Conservation Division, MECDM welcomed all the members of the JCC for its meeting and thanks everyone for their participation. He thanked the Government of Japan through JICA for their continuing support to the Solomon Islands waste management. He also thanked the Project Team, for its great effort in the past which had made the Solomon Project Team as the Best Team of the Year 2011.

Mr. Yoshinobu Takishita, as Residence Representative of JICA Solomon Office thanked the Government of Solomon for their support to the implementation of the J-PRISM project. He urged the counterparts for their continuing support in the future to ensure the successful achievement of the project outputs for the betterment of the Solomon Islands environment and its people.

2.0 Review of the Progress of Project Activities in JFY2012 (as of 31st December 2012)

The project has conducted the following activities mainly in JFY2012.

A more detailed review of the project progress report is shown in Annex II and III

2.1 Honiara Progress of Project Activities

Mr. George Titiulu provided a PowerPoint presentation on the progress of activities for the Honiara Project Site as summarized below:

OUTPUT	Progress of Activities up to Dec. 2012	Activities in 2013 to be Implemented
OUTPUT 1: 3R Activit	ies are Practiced in Honiara	·
Indicator for Output: 1-	1 3R strategy is developed	
1-2	2 # of options identified for recycle & waste	minimization
1.1 Develop a work	•Completed	-
plan for baseline		
survey		
1.2 Conduct the	•Full scale waste characterization study	•Print and distribution of waste
baseline surveys	was conducted and report was compiled	characterization report
including	•Incoming waste vehicle survey was	•Utilization of reports for further
environmental	conducted and report was compiled	activities
condition, public	•Elaboration of waste flow was done	•Continuation of review and
awareness, waste		elaboration of waste flow
characterization		•Full scale Time & Motion study
study, etc		
1.3 Develop and	•3Rs communication strategy was	•Print, distribution and utilization of
Communication	developed	report
Strategy	 Project News letters were issued 	







OUTPUT	Progress of Activities up to Dec. 2012	Activities in 2013 to be Implemented
1.4 Identify the feasible options for management of recyclable waste/materials	•Questionnaire survey and hearing survey for recycling enterprise was conducted •Household & market organic wastes were identified as potential candidate for 3Rs pilot project	•Compile of recycling survey •Identification of recyclable materials as candidate for 3Rs pilot project
1.5 Review of existing waste collection system	 •Review and identification of existing waste collection system •In house training for Time & Motion study •Small scale Time & Motion study 	 Full scale Time & Motion study Action plan for improvement of waste collection system
1.6 Develop the implementation plan for 3R pilot project	 Discussion for 3R pilot projects was done Planning for 3R pilot projects Action plan for 3R clean school program was done 	 Revising action plan for 3R clean school program Formulation of action plans for other pilot project
1.7 Implement the 3R Pilot project	•10-school survey was conducted•Initial teachers workshop was held in September 2012	 Implementation of 3R clean school program action plan Implementation of other 3R pilot project (Composting, Eco-bag campaign, etc.)
1.8 Prepare the draft of policies / strategies / legislation / regulation for 3R activities	•Small discussion on policies / strategies for 3R and waste minimization was done	•Development of draft national policy / strategies for 3R
1.9 Monitor the progress of pilot project	•Activities yet to be carried out	 Monitoring 3R clean school program Monitoring other 3R pilot project
OUTPUT 2: Waste disp	oosal system is improved in Honiara	
Indicator for Output: 2	2-1 Landfills are operated by the trained s developed by the project	taff according to the operation manuals
2.1 Conduct site investigation of existing dumpsite	•Site investigation and topographic survey was done and report was compiled	-
2.2 Conduct EIA study and follow the required process	•EIA Study was done and report was compiled	•Revising EIA report to ensure it complies with the Environment Act 1998
2.3 Prepare the rehabilitation plans for existing dumpsites	•Draft rehabilitation plan of Ranadi dumpsite was developed	•Finalizing Rehabilitation plan of Ranadi dumpsite
2.4 Implement the rehabilitation of dump sites	•Initial works for rehabilitation of Ranadi dumpsite were implemented	•Demonstration for rehabilitation of Ranadi dumpsite (done in Jan. 2013) •Implementation of full scale rehabilitation of dumpsite
2.5 Develop the operation manuals for each site	•Activities yet to be carried out	•Development of operation manual for Ranadi dumpsite
2.6 Train staff of dump sites on landfill operation	•Regional exchange on the job training for staff on landfill operation was conducted	•Training for landfill operation at Ranadi dumpsite







OUTPUT	Progress of Activities up to Dec. 2012	Activities in 2013 to be Implemented
OUTPUT 3: Lessons ar	nd experiences learnt are disseminated in So	lomon Islands
Indicator for Ou	tput: 3-1 Good practices on	3R and landfill management
	identified through the	project activities are applied
	in other municipalities	
3.1 Establish a	 Activities yet to be carried out 	•Establishment of a multi-stakeholder
multi-stakeholder		National Committee
National Committee		
to help disseminate		
experience to other		
areas within the		
country		
3.2 Preparation of	 Activities yet to be carried out 	•Preparation of educational materials
educational materials		
for disseminating		
experience to other		
areas		
3.3 Conduct the	•Skills that counterparts had learnt	•Workshop of good practices on 3Rs
workshop to	during training were shared in the	and landfill management to others (in
disseminate the	counterpart meeting	January - March 2014)
lessons and		
experiences learnt		

*Highlighted parts indicate activities done in 2012.

2.2 Gizo Progress of Project Activities

Mr. Fredrick Naphtali provided a PowerPoint presentation of the progress of activities for the Gizo Project Site as summarized below:

OUTPUT	Progress of Activities up to Dec. 2012	Activities in 2013 to be Implemented
OUTPUT 1: 3R Activit	ies are Practiced in Gizo	
Indicator for Output: 1-	1 3R strategy is developed	
1-2	2 # of options identified for recycle & waste	minimization
1.1 Develop a work	•Completed	-
plan for baseline		
survey		
1.2 Conduct the	•Full scale waste characterization study	•Compile of reports
baseline surveys	was conducted	•Utilization of reports for further
including	•Incoming waste venicle survey was	activities
environmental condition public	•Zoning survey was conducted	•Full scale Time & Motion study
awareness waste		•Elaboration of waste now
characterization		
study, etc		
1.3 Develop and	•3Rs communication strategy was	•Print, distribution and utilization of
Communication	developed	report
Strategy	 Project News letters were issued 	
1.4 Identify the	•Hearing survey for recycling enterprise	•Compile of recycling survey
feasible options for	was conducted	•Identification of recyclable materials
management of	•Household & market organic wastes were	as candidate for 3Rs pilot project
recyclable	identified as potential candidate for 3Rs	
waste/materials	phot project	







OUTPUT	Progress of Activities up to Dec. 2012	Activities in 2013 to be Implemented
1.5 Review of existing waste collection system	 Review and identification of existing waste collection system In house training for Time & Motion study Small scale Time & Motion study 	 Full scale Time & Motion study Action plan for rehabilitation of waste collection system
1.6 Develop the implementation plan for 3R pilot project	•Discussion for 3R pilot projects was done •Planning for 3R pilot projects -Action plan for home composting was done	 Revising action plan for home composting program Formulation of action plans for other pilot project
1.7 Implement the 3R Pilot project	•Zoning survey was conducted •Initial teachers workshop was held in September 2012	•Implementation of home composting •Implementation of other 3R pilot project (clean school program, collection of recyclables etc.)
1.8 Prepare the draft of policies / strategies / legislation / regulation for 3R activities	• No activities were done	•Development of draft national policy / strategies for 3R
1.9 Monitor the progress of pilot project	•No activities were done	 Monitoring composting program Monitoring other 3R pilot project
OUTPUT 2: Waste disp	oosal system is improved in Gizo	
Indicator for Output: 2	2-1 Landfills are operated by the trained s developed by the project	taff according to the operation manuals
2.1 Conduct site	•Site investigation and topographic survey	-
investigation of	was done and report was compiled	
existing dumpsite		
2.2 Conduct EIA	•EIA Study was done and report was	-
study and follow the	compiled	
required process		
2.3 Prepare the	•Draft rehabilitation plan of Gizo dumpsite	•Finalizing Rehabilitation plan of Gizo
rehabilitation plans	was developed	dumpsite
for existing dumpsites		
2.4 Implement the	•Initial works for rehabilitation of Gizo	•Demonstration for rehabilitation of
renabilitation of	dumpsite were implemented	Gizo dumpsite
dump sites		rehabilitation of dumpsite
2.5 Develop the	•No activities were done	•Development of operation manual for
operation manuals for	-ivo activities were done	Gizo dumpsite
each site		Gizo dumpsite
2.6 Train staff of	•Activities yet to be carried out	•Training for landfill operation at Gizo
dump sites on landfill	Activities yet to be carried out	dumpsite
operation		dumpone
OUTPUT 3: Lessons an	d experiences learnt are disseminated in So	lomon Islands
Indicator for Out	tput: 3-1 Good practices on	3R and landfill management
in the out	identified through the	project activities are applied
	in other municipalities	1
3.1 Establish a	•No activities were done	•Establishment of a multi-stakeholder
multi-stakeholder		National Committee
National Committee		
to help disseminate		
experience to other		
areas within the		
country		







OUTPUT	Progress of Activities up to Dec. 2012	Activities in 2013 to be Implemented
3.2 Preparation of educational materials for disseminating experience to other areas	•No activities were done	•Preparation of educational materials
3.3 Conduct the	•Skills that counterparts had learnt during training were shared in the counterpart	•Workshop of good practices on 3Rs
disconsingto the	meeting	and fandrin management to others (in
disseminate the	meeting	January - March 2014)
lessons and		
experiences learnt		

*Highlighted parts indicate activities done in 2012.

Both these presentations by Honiara and Gizo counterparts highlighted some challenges which presented some problems to them in making good progress to their project activities. These challenges are summarized in Annex IV







3.0 Human Resource Changes

Mr. Joe Horokou as the Director of the Environment and Conservation Division briefed the meeting regarding the Project supporting human resources as summarized below.

Project Pos	sition	Position	Organization	Name
National Project Director	Predecessor	Permanent Secretary	Ministry of Environment, Climate Change, Disaster Management & Meteorology (MECDM)	Mr. Rence Sore
	Successor	Permanent Secretary	MECDM	Mr. Frank Wickham
National Project Manager	Predecessor	Graduate Attachee	Environment & Conservation Division (ECD), MECDM	Ms. Wendy Beti
Tranager	Successor	Chief Environment Officer	ECD , MECDM	Ms. Rosemary Apa
JCC (Represent HCC)	member ative from	Permanent Secretary	Ministry of Lands & Housing	Mr. Stanley Wale
		Lord Mayor	Honiara City Council (HCC)	Mr. Andrew Mua
		City Clerk	HCC	Mr. Charles Kelly
		Chief Lands Officer	Land Department, Western Provincial Government (WPG)	Mr. Peter Buka
Change of	Organization	Chief Environment al Health Inspector	Honiara City Council (HCC)	Mr. Tom Nanau
		Director	Environmental Health Division (EHD), Ministry of Health & Medical Services (MHMS)	
Deceased		Provincial Secretary	Western Provincial Government (WPG)	Mr. Jonathan Bana
		Health Inspector	Environmental Health Division (ECD), Provincial Government (WPG)	Mr. Collin Aba

Some of the key changes to the Project are the Project Director and Project Manager appointments. He indicated that the current Acting Permanent Secretary for MECDM Mr. Frank Wickham is now replacing the former Permanent Secretary Mr. Rence Sore.







In addition the Project Manager is now with Ms Rosemary Apa, replacing the former Project Manager Wendy Beti. He explained that Ms Beti was only attached to the Environment and Conservation Division when returning from her study while waiting for the approval of a new vacancy. He indicated that new vacancies are now available and Ms Wendy Beti has already been informed. The Division is now only awaiting the formal procedures for staff recruitment.

4.0 Approval of Revised PO

Revision of Project Design Matrix (PDM) (Original PDM is shown in Annex V)
 Elaborated Indicators for outputs for Solomon Islands were agreed on in the 2nd JCC.
 Elaborated indicators are as follows.

Outputs	Original indicator	Elaborated indicators
Output1: 3R activities are practiced in Honiara and Gizo.	1-1 3R strategy is developed	1-1 National Policy/Strategy for 3R is developed
 1.1 Develop a work plan for the baseline survey 1.2 Conduct the baseline surveys including environmental condition, public awareness, waste characterization study, etc. 1.3 Develop a communication strategy 1.4 Identify the feasible options for management of recyclable waste/materials 1.5 Review of existing waste collection system 1.6 Develop the implementation plan for 3R pilot project 1.7 Implement the 3R pilot project 1.8 Prepare the draft of policies / strategies / legislation /regulation for 3R activities 	identified for recycle & waste minimization	 1-2-1 Recycle rate increases 1-2-2 Proportion of incoming wastes at the dumpsite decreases 1-3 Level of recognition on 3Rs in Honiara and Gizo increase after implementation of activities 1-4 Draft legislation for 3Rs is developed: Deposit program, waste disposal fees, etc. 1-5-1 10 schools in Honiara develop 3R action plan 1-5-2 5 schools in Gizo develop 3R action plan 1-6-1 Three 3R pilot projects are implemented in Honiara 1-6-2 Two 3R pilot projects are implemented in Gizo
 1.9 Monitor the progress of pilot project Output2: Waste disposal system is improved in Honiara and Gizo 2.1 Conduct site investigation of existing dumpsite 2.2 Conduct the EIA study and follow the required procedure 2.3 Prepare the rehabilitation plans for existing dumpsites. 2.4 Implement the rehabilitation of dump sites 2.5 Develop the operation manuals for each site 2.6 Train staff of dump sites on landfill operation 	2-1 Landfills are operated by the trained staff according to the operation manuals developed by the project	 2-1 Different types of waste materials are disposed at appropriate cells 2-2 Annual operation plan is developed 2-3-1 10 officers and operators are trained for landfill operation in Honiara 2-3-2 5 officers and operators are trained for landfill operation in Gizo 2-4 Management of Leachate is established 2-5 Waste pickers are registered and managed properly







Output3:Lessons and experiences learnt are disseminated in Solomon Islands3.1Establish a multi-stakeholder National Committee to help disseminate experience to other areas within the country3.2Preparation of educational materials for disseminating experience to other areas3.3Conduct the workshop to	3-1 Good practices on 3R and landfill management identified through the project activities are applied in other municipals	 3-1 Good practices on 3R and landfill management identified through the project activities are available in all provincial centers 3-2 Officers from each provincial government learn good practices on 3R and landfill management
3.3 Conduct the workshop to disseminate the lessons and experiences learnt		

Prior to the approval of the revised indicators, there had been some discussions of the original versions.

- Mr. Sagapolutele congratulated the counterparts for their effort but suggested to further refining of the indicators. He suggested for some rewording to shorten the sentences and perhaps confirm if these indicators could be achievable and measurable. He emphasized the importance of realistic indicators to be used to evaluation purposes.
- ✤ Mr. Tsukiji indicated that the recommended indicators were discussed and agreed to by the counterparts during the preparatory meeting for the JCC.
- ✤ Ms. Laka supported a revision of the indicators to make them simple and achievable as some indicators looked difficult to measure.
- Mr. Sagapolutele indicated that the JCC could proceed for the approval of the revised Plan of Operations and other documents while the indicators could be finalized at the end of the week after some further revisions are done.
- There were also suggestions to endorse the plan of operation subject to change however, a consensus was reached to make amendments in the meeting especially the indicators. Mr. Fred and Ms. Alison raised a concern that if the document is endorsed, is there room to make changes to it based on situation on the ground?

Three options were given to the committee

- 1. Complete program and task force to revise document after the meeting
- 2. Whole committee to revise the document







- 3. Mr. Tsukiji suggest that the JICA consultant to revise the sentences in the indicators and distribute to counterparts
- Mr. Derald Michael suggested that the JCC meeting is the only time to finalize the indicators since not everybody has access to e-mail therefore would be impossible for them to receive any circulation of this document for revision . This was also supported by Mr. Nanau. A consensus was reached and the committee agreed on option 2.
- The Chairman made a ruling for the JCC to revise the Indicators and get it done during the meeting. Some of the discussions of the indicators are mentioned below
 - Indicator 1.2.1: Before the final indicator was reached, it was concluded that more baseline survey is needed. The committee questioned the practicality of calculating the recycling rate. Mr. Nukazawa Takuro mentioned that right now, we are not able to calculate, but hopefully during progress of the J-PRISM, this can be done on a yearly basis and also to compare data before and after the introduction of 3R activities. For this to eventuate, more baseline survey is needed.
 - Indicator 1.2.2: Mr. Tsukiji mentioned that the amount of incoming waste will continue to increase as population increases year by year hence, the indicator should be reworded. After some discussion and confirmation on definition of the word, the word "proportion" was selected.
 - Indicator 1.3: It was reworded from "portion" of recognition to "level" of recognition. Initially it suggests the portion of the population recognizing but a consensus was reached to settle for level of recognition which is easier to evaluate.
 - Indicator 2.4: It was reworded to reflect the current situation with no leachate treatment.
- After much deliberation on the wording of the indicators the committee endorsed the revised indicators and these are presented in the above table.







5.0 Revision of Plan of Operation

Some discussions were made on the Revised Plan of Operation and the JCC members endorsed its revised versions as presented in Annex VI and VII.

6.0 Approval of Work Plan for JFY 2013

The meeting reviewed the proposed work plans for both Honiara and Gizo Project Sites and approved both as presented in Annex VIII and IX.

7.0 Other General Project Issues

- Mr. Charles Kelly, counterpart from HCC pledged the support of the Honiara City Council on the J-PRISM project. He acknowledged the presentation by Mr. George Titiulu, the counterpart from HCC especially the fact that the population in Honiara is increasing and land allocation for a new site is a major concern as the town boundary cannot expand. He indicated the need for counterparts to work together to address Solid Waste Management (SWM) in the City. Lastly but not the least, he also supports proposal by Counterpart from Western Province that there should be an exchange programme between Gizo and Honiara to share experiences and ideas to further strengthening the partnership of the project.
- Mr. Fredrick Naphtali mentioned that like Honiara, the population in Gizo is also increasing, however, unlike Honiara; land is not an issue for their town. The Western provincial Government has secured Land for Gizo dump site. He acknowledged the City Clerk from HCC for his support. He also acknowledges the great work of the departing Project Manager Ms Wendy Beti for her great contribution to the Project. He congratulated Ms Rosemary for her new role as the Project Manager and assured her of their support from Gizo. Lastly he acknowledged the support and contribution of the late Mr. Collin Aba to the project and wished him well.
- Mr. John Labu questioned the role of the National Government to Solid Waste management. He indicated that SWM is a National issue, and would like to know what the National government is doing about SWM in the country.
- $\boldsymbol{\diamondsuit}$ Mr. Joe Horokou responded that there is a National Solid Waste Management







Strategy in place which shows the government's interest. Furthermore, he acknowledged the support by the Japanese government through the J-PRISM project which is also part of the implementation of the National SWM Strategy.

 Mr. Tom Nanau alluded to Mr. Horokou's statement and further stated that the National SWM Strategy is a road map to addressing SWM issues in the country. The Environmental Health Division is currently working on strengthening the link between the National government, HCC and other Provincial centers. HCC cannot address Waste issues alone, there is need for stakeholder's collaboration with also the need for a more community based approach.

8.0 Closing of Meeting

Mr. Tom Nanau, as Director of Environmental Health Division, MHMS, thanked everyone for their valuable inputs during the discussions which have made the meeting more productive. He then declared the meeting officially closed.

List of Annex

- Annex I: List of Participants in Joint Coordinating Committee (JCC), 2013
 Annex II: Honiara Progress Report
 Annex III: Gizo Progress Report
 Annex IV: Challenges during the Project Activities
 Annex V: PDM (Project Design Matrix) Original Version
 Annex VI: Plan of Operation (PO) Honiara, Solomon Islands, version 2
 Annex VII: Tentative Work Plan for JFY 2013 in Honiara (drawn out from revised PO)
- Annex IX: Tentative Work Plan for JFY 2013 in Gizo (drawn out from revised PO)







Annex I: List of Participants in Joint Coordinating Committee (JCC), 2013

Name	Organization	Title					
Ministry of Environment, C	Climate Change, Disaster	Management & Meteorology					
	(MECDM)						
Joe Horokou	ECD/MECDM	Director					
Rosemary Apa	ECD/MECDM	Chief Environment Officer					
Ministry o	<u>f Health & Medical Servi</u>	ces (MHMS)					
Tom Nanau	EHD/MHMS	Director					
Jimmy Hilly	EHD/MHMS	Senior Environmental Health					
		Management Officer					
Alison Sio	MHMS	Clinical Nurse, Infection					
]	<u> Honiara City Council (HC</u>	(C)					
Charles Kelly	HCC	Honiara City Clerk					
John Labu	HCC/ Works Division	Works Manager					
Robert Bara	HCC/ Works Division	Senior Works Officer					
George Titiulu	HCC/ EHD	Chief Environmental Health					
		Inspector					
Ella Rizwold	HCC/ EHD	Principal Environmental					
		Health Inspector					
Christina Onahikeni	HCC/ EHD	Senior Environmental Health					
		Inspector					
Kozuka Satoshi	JICA	Environmental Education					
		Volunteer					
Weste	rn Provincial Governmen	t (WPG)					
Fredrick Naphtali	EHD / WPG	Chief Environmental Health					
		Inspector					
Peter Buka	Land Dept/ WPG	Chief Lands Officer					
	Gizo Town Council (GTC	()					
Derald Michael	GTC/ WPG	Gizo Town Clerk					
Japan Inte	rnational Cooperation Ag	gency (JICA)					
Takishita Yoshinobu	JICA SI Office	Resident Representative					
Laka Naoko	JICA SI Office	Project Formulation Advisor					
J-PI	<u>RISM Project Office and I</u>	Expert					
Faafetai	Regional Project	Assistant Chief Advisor					
Sagapolutele Uitime	Office, Samoa						
Nukazawa Takuro	JICA	JICA Expert					
Tsukiji Makoto	Regional Project	Project Coordinator					
	Office, Samoa	5					

Name	Organization	Title						
Hitomi Obata	Embassy of Japan	Auditor						
Robinson Fugui	USP SI Campus	Student						
Michael Maehaka	Water Resources	Senior Hydrologist						
	Division/MMERE							
Naelyn A John	REP	Community Liaison Officer						







Annex IV: Challenges during the Project Activities

1) Honiara

<u>A. Challenges</u>

1. Reflection of individual capacity in organizational capacity

Waste management in council depends or reflects the individual capacity. For enhancement of the organization, individual capacity needs to be strengthened.

2. Enhancement of coordination

We should maximize coordination. We need more coordination how we need to work. Then we can find some better ways to support. Waste management is not only council-level issues but also national-level ones. Coordination between national level and council level must be strengthened. People at the higher level in organization (such as Mayor, City Clerk, Commissioner, Permanent Secretary, Minister, etc.) play important roles in decision making process.

3. Sustainable financing/resourcing for SWM

When we formulate plans for activities, sustainable financing/resourcing is must. Fundraising effort for waste management is required to obtain budgetary support from stakeholders. Application of economic instruments for waste management is efficient not only for keeping financial resources but also for minimizing wastes and encouraging 3Rs.

B. Recommendations / Suggestions

1. Review & improvement of action strategy

We should look at strategy for SWM and attempt doing better & doing more.

- 2. Collaboration among key stakeholders
- 3. Application of economic instruments for waste management
 - * Polluter Pays Principle: waste disposal fees, environmental levy (product and visitor), deposit refund programme, etc.
 - * Tax incentives & disincentives
 - * Waste Management Trust Funds







2) Gizo

1. Lack of political will

Our Politicians need to be convinced somehow so that they give their full support to this program

2. Lack of sufficient budget

Currently there is no budget allocation for SWM so we operate under GTC budget which is very small. We hope this year we will have a budget allocation.

3. Lack of human resources

In our team we have very limited manpower to help carry out the various duties, we need to involve more people to assist us carrying out various duties involved in this program.

4. Lack of equipment

We do not have equipments like Data Projectors, Generators and Vehicles for awareness and trainings. Even our Refuse tractor is not able to handle collections.

5. Lack of knowledge and information / how to implement 3R

Citizens do not have proper knowledge on how waste management plays a very important role in our environment and Health. Implementation in the past is difficult due to lack of knowledge in this area.

However with some of the counter parts who underwent training during the course of last year and the year before we are ready, but remained a challenge.

6. Lack of awareness

Due to lack of knowledge, human resources, finance and the zoning process we are unable to do a lot of awareness, however last year we have started and are planning to go into full swing this year, despite that this still remains a challenge for us to reach out to a wider communities.

Annex V: PDM (Project Design Matrix) Original Version

Project Tittle: Japanese Technical Cooperation Project for Promotion of Regional Initiatives on Solid Waste Management in Pacific Island Countries (J-PRISM) Project Period: 5 years Target Groups: C/Ps of MECDM, MHMS, MCT. HCC. WP Final Beneficiaries: Citizens of Solomon Islands

large	et Groups. U/PS OI IMECUM, MI	HMS, MCI, HCC, WF FINAL	beneficiaries. Citizens of Solomo	n Islands	
Imple	ementing Agency: MECDM, MI	<u>HMS, HCC, WP, MCT' Targe</u>	t Area: Solomon Islands		
$Narr_{\varepsilon}$	ative Summary		Objectivity Variable Indicators	Means of Verification	Important Assumptions
Over£	all Goal		1. To be discussed	To be advised	
Susta enhar	uinable management of solid w	raste in the Pacific Region is			
Projec	ct Purpose		"1. #of experts (trainers) in the	SPREP (Regional Inventory	1. Natural disaster would not
Humê	an and institutional capacity ba	se for sustainable SWM in the	held of O listed	ot skilled people)	drastically attect the collaboration among PICs
Pacifi	ic region is strengthened through i	implementation of the Pacific	2-1 #of initiatives on waste		and SPREP
			minimization introduced	2-1 Workshop presentation	2. Political changes of PICs
			2-2 Proportion of recyclables and	2-2 Waste characterization	would not drastically affect
			green waste disposed of at the landfill is decreased by XX %	reports	the collaboration among PICs and SPREP
#	Priorities under RS2010	Outputs	1-1 3R strategy is developed	1-1 Strategy paper for 3R	
1	Sustainable financing	Output 1: 3R activities are	1-2 # of options identified for		
2^{-1}	3Rs/4Rs	practiced in Honiara and gizo	recycle & waste minimization		
2^{-2}	Waste disposal	Output 2: Waste disposal			
2^{-3}	Waste collection	system is improved in Honiara	2-1 Landfills are operated by the	2-1 Operation manuals	
3	Legislation	and Gizo	trained staff according to the		
4	Awareness/Communication/		operation manuals developed by	2-2 Operation reports	
ũ	Education	Output 3: Lessons and	the project		
9	Capacity building	experiences learnt are			
7	Environmental monitoring	disseminated in SIs	3-1 Good practices on 3R and	3-1 Workshop presentation	
x	Policy, planning, performance		landfill management identified		
6	Solid waste industry		thru the project activities are		
	Monitoring system of RS2012		applied in order municipals		
Activi	ities	Inputs		Counterpart personal keep worl	king in the field of SWM
Pleas	e see PO for details	Japanese side	Solomon Island side	Disasters, such as severe rain s	storm will not drastically affect
		Dispatch of JICA experts	Assignment of National PD/PM	the progress of project activities	
		Provision of equipment and	and CP	Necessary budget to carry out	activities is allocated from the
		materials	Local cost sharing	government	
		Provision of regional,	Provision of necessary	Pre-condition	
		sub-regional and in-country	land/facility, work space	Cooperation of community peop	le of the target area is obtained
		workshop/training			
		LOCAI CUSL SUDDUTL			







C P	LILIEX VI. FIALI UL UPELA m: 2011 ~ 2015 (5years)	MIDII (LO) - MOIIIRIA, DOIOIII	on islanus, ver	2 11018			0, 201 ete	on-going	orogress							
	Indicators of Project Purpose:	 #of initiatives on waste minimization introduced Proportion of recyclables and green waste disposed of at the lageneration of recyclables and green waste disposed of at the lageneration of recyclables and green waste disposed of at the lageneration of recyclables and green waste disposed of at the lageneration of recyclables and green waste disposed of at the lageneration of recyclables and green waste disposed of at the lageneration of recyclables and green waste disposed of at the lageneration of recyclables and green waste disposed of at the lageneration of recyclables and green waste disposed of at the lageneration of recyclables and green waste disposed of at the lageneration of recyclables and green waste disposed of at the lageneration of recyclables and green waste disposed of at the lageneration of recyclables and green waste disposed of at the lageneration of recyclables and green waste disposed of at the lageneration of the lageneratio	andfill is decreased by XX %													
	Outputs and Associated Activities	Indicators for Outputs	Person in-charge	20	7 8 9 10 11	1 2 3 4 5	2012 6 7 8 9 10	11 12 1 2 3	2013 4 5 6 7 8	9 1011112 1	2	014 7 8 9 101	1 12 1 2 3	2015 4 5 6 7 8	9 10 11 12	_
S						\$		\$								
/SC/ Eva	Steering Committee				*		*			4 4		*		*	*	
Ы	PUT 1: 3R activities are practiced in Honiara and Gizo.	1-1 National Policy/Strategy for 3R is developed 1-2-1 Recycle rate increases														
÷	Develop a work plan for the baseline survey	1-2-2 Proportion of incoming wastes at the dumpsite decreases 1-3 Level of recognition on 3Rs in Honiara and Gizo increase after	George/Ella/Christina													
1-2	Conduct the baseline surveys including environmental condition, public awareness, waste characterization study,	implementation of activities 1-4 Draft legislation for 3Rs is developed: Deposit program, waste disposal fees, etc.	George/Ella/Christina			•										
1-3	Develop a communication strategy	1-5-1 10 schools in Honiara develop 3R action plan 1-5-2 5 schools in Gizo develop 3R action plan	Edward													
1-4	Identify the feasible options for management of recyclable waste/materials	1-6-1 Three 3R pilot projects are implemented in Honiara 1-6-2 Two 3R pilot projects are implemented in Gizo	John Labu / Robert Bara/ Francis/George													
1-5	Review of existing waste collection system		John Labu / Robert Bara/ Francis/George													
1-6	Develop the implementation plan for 3R pilot project		Edward/Satosh//Ella/Jimmy/Christina/ Rosemary													
1-7	Implement the 3R pilot project		Edward/Satosh/Ella/Jimmy/Christina/ Rosemary													
-8	Prepare the draft of policies / strategies / legislation / regulation for 3R activities		Edward/George/John/Jimmy/ Rosemary													
1-9	Monitor the progress of pilot project		Edward/Satoshi/Ella/Jimmy/Christi na/													
out	PUT 2: Waste disposal system is improved in Honiara Gizo	 2-1 Different types of waste materials are disposed at appropriate cells 2-2 Annual operation plan is developed 							-		-					
2-1	Conduct site investigation of existing dumpsite	2-3-1 10 officers and operators are trained for landfill operation in Honiara 2-2-3-5 reference and exercises are brained for landfill exercision in Circo	John Labu / Robert Bara/ George													1
2-2	Conduct the EIA study and follow the required procedure	2-5-2: Domicers and operations are indirection administration 2-4 Management of Leachate is established 2-5 Waste pickers are registered and managed properly	Edward/John Labu/George/Rosem ary													
2-3	Prepare the rehabilitation plans for existing dumpsites.	-	John Labu/Robert /George/Francis													
2-4	Implement the rehabilitation of dump sites		John Labu / Robert /George/Francis/Oge													
2-5	Develop the operation manuals for each site		John Labu / Robert/Jimmy/Francis													
2-6	Train staff of dump sites on landfill operation		John Labu/George /Jimmy/Francis													
OUT	PUT 3: Lessons and experiences learnt are eminated in Solomon Islands	3-1 Good practices on 3R and landfill management identified through the project activities are available in all provincial centers.		-	-	-	-		-	-	-		-	-		
3-1	Establish a multi-state/holder National Committee to help disseminate experience to other areas within the country	3.2 Officers from each provincial government learn good practices on 3.R and landfill management.	Rosemary/Edward													
3-2	Preparation of educational materials for disseminating experience to other areas		Rosemary/Edward													
3-3	Conduct the workshop to disseminate the lessons and experiences learnt		Rosemary/Edward													UL

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Annex VII: Plan of Operation (PO) - Gizo, Solomon Islands, version 2 (As of Jan. 30, 2013)







Annex VIII: Tentative Work Plan for JFY 2013 in Honiara (drawn out from revised PO)

	Outputs and Associated Activities	Details	2013				2014							
	outputs and According Activities		2 3	4	5 6	7	8 9	10 11 1	2	1 2	3	HCC	MECDM	MHMS
ουτ	PUT 1: 3R activities are practiced in Honiara and Gizo.													
1-2	Conduct the baseline surveys including environmental condition, public awareness, waste characterization study,	Print and distribution of waste characterization report										Δ	•	
		Continuation of review and elaboration of waste flow											Δ	Δ
1-3	Develop a communication strategy	Print, distribution and utilization of report										Δ	•	Δ
1-4	Identify the feasible options for management of recyclable waste/materials	Compile of recycling survey results										Δ	•	
		Identification of recyclable materials as candidate for 3Rs pilot project										•	Δ	Δ
1-5	Review of existing waste collection system	Implementation of Full scale Time & Motion study										•	Δ	Δ
		Development of Action plan for rehabilitation of waste collection system										•	Δ	Δ
1-6	Develop the implementation plan for 3R pilot project	Revising action plan for 3R clean school program										•	Δ	•
		Formulation of action plans for other pilot project										•	Δ	Δ
1-7	Implement the 3R pilot project	Implementation of 3R clean school program action plan											Δ	•
		Implementation of other 3R pilot project (Composting, Eco-bag campaign, etc.)										•	Δ	Δ
1-8	Prepare the draft of policies / strategies / legislation / regulation for 3R activities	Development of draft national policy / strategies for 3R										Δ	•	•
1-9	Monitor the progress of pilot project	Monitoring 3R clean school program										Δ	•	Δ
		Monitoring other 3R pilot project										Δ	•	Δ
OUT and	PUT 2: Waste disposal system is improved in Honiara Gizo													
2-2	Conduct the EIA study and follow the required procedure	Revising EIA report to ensure it complies with the Environment Act 1998										Δ		Δ
2-3	Prepare the rehabilitation plans for existing dumpsites.	Finalizing Rehabilitation plan of Ranadi dumpsite										•	Δ	Δ
2-4	Implement the rehabilitation of dump sites	Implementation of full scale rehabilitation of dumpsite										•	Δ	Δ
2-5	Develop the operation manuals for each site	Development of operation manual for Ranadi dumpsite										•	Δ	Δ
2-6	Train staff of dump sites on landfill operation	Training for landfill operation at Ranadi dumpsite										•	Δ	Δ
OUT diss	PUT 3: Lessons and experiences learnt are eminated in Solomon Islands													
3-1	Establish a multi-stakeholder National Committee to help disseminate experience to other areas within the country	Establishment of a multi-stakeholder National Committee										Δ		Δ
3-2	Preparation of educational materials for disseminating experience to other areas	Preparation of educational materials										Δ		Δ
3-3	Conduct the workshop to disseminate the lessons and experiences learnt	Workshop of good practices on 3Rs and landfill management to others										Δ	•	Δ

▲ Leading implementing agency △Supporting agency







Annex IX: Tentative Work Plan for JFY 2013 in Gizo (drawn out from revised PO)

	Outputs and Associated Activities	Details	2013								2	014	In-c	harge	
	·							ուր	2 1	2 3	GIC	WPG			
OUT	PUT 1: 3R activities are practiced in Honiara and Gizo.														
1-2	Conduct the baseline surveys including environmental condition, public awareness, waste characterization study,	Compile of reports for waste characterization study and Incoming waste vehicle survey													
		Eelaboration of waste flow						T					1	•	
1-3	Develop a communication strategy	Print, distribution and												Δ	
	Identify the feesible entire for monocoment of you wight			1		_		+			-		_		
1-4	waste/materials	complie of recycling survey results												Δ	
		Identification of recyclable materials as candidate for 3Rs pilot project												•	Δ
1-5	Review of existing waste collection system	Implementation of Full scale Time & Motion study												•	Δ
		Development of Action plan for rehabilitation of waste collection system												•	Δ
1-6	Develop the implementation plan for 3R pilot project	Revising action plan for home composting program												•	Δ
		Formulation of action plans for other pilot project												•	Δ
1-7	Implement the 3R pilot project	Implementation of home composting													Δ
		Implementation of other 3R pilot project (clean school program, collection of recyclables, etc.)												•	Δ
1-8	Prepare the draft of policies / strategies / legislation / regulation for 3R activities	Development of draft national policy / strategies for 3R												Δ	•
1-9	Monitor the progress of pilot project	Monitoring home composting program												Δ	
		Monitoring other 3R pilot project				Ì								Δ	
OU1 and	PUT 2: Waste disposal system is improved in Honiara Gizo											T			
2-4	Implement the rehabilitation of dump sites	Demonstration for rehabilitation of Gizo dumpsite												•	Δ
		Implementation of full scale rehabilitation of dumpsite												•	Δ
2-5	Develop the operation manuals for each site	Development of operation manual for Ranadi dumpsite												•	Δ
2-6	Train staff of dump sites on landfill operation	Training for landfill operation at Gizo dumpsite												•	Δ
OU1 diss	PUT 3: Lessons and experiences learnt are eminated in Solomon Islands					í							·		
3-1	Establish a multi-stakeholder National Committee to help disseminate experience to other areas within the country	Establishment of a multi-stakeholder National Committee												Δ	
3-2	Preparation of educational materials for disseminating experience to other areas	Preparation of educational materials												•	Δ
3-3	Conduct the workshop to disseminate the lessons and experiences learnt	Workshop of good practices on 3Rs and landfill management to others													Δ

▲ Leading implementing agency △Supporting agency

Attachment B-3 4th JCC Meeting Minutes

The Fourth Joint Coordination Committee on the J-PRISM Project February 2nd, 2015 – Fairyland Restaurant Conference Room, Honiara

This minutes of meeting is the record of the Fourth Joint Coordinating Committee (herein refer to as "JCC") held on Tuesday 2nd February, 2015 for approval of the review and progress report of the annual work plan and technical cooperation, to formulate the annual work plan of the Project based on the tentative schedule of implementation within the frame work of the record of discussion and to review and exchange opinions on major issues that arise during the implementation of the project. The list attendants to the meeting are attached in Annex I.

Date: Tuesday 2nd February 2015 **Time:** 9:30am- 4.00pm **Venue:** Fairyland Restaurant Conference Room

Chairperson: Dr.Melchior Mataki, Ministry of Environment Climate Change Disaster Management

- and Meteorology
- Facilitators: Rosemary Apa and Wendy Beti, Ministry of Environment Climate Change Disaster Management and Meteorology
- Rapporteurs: Jayne Tebaua and Mercy Nunua, Ministry of Health and Medical Services, Honiara City Council

Time	Agenda Item	Responsible Person
8:30-9:30 am	Arrival of Guests and Participants	All participants
9:30- 9:35 am	Opening Prayer	Director /EHD ,Mr. Tom Nanau
9:35-9:45 am	Welcome and Opening Remarks	Permanent Secretary, MECDM
		Ambassador, Embassy of Japan
		Mr.Taiji Usui, JICA
	Agenda Items	
9.45-10.30am	1.Progress of Activities-Honiara	Mr. Joe Kelesi, Works/HCC
(15min x 2+QA)	2.Progress of Activities -Gizo	Mr. Fred Naphtalai
	3.Q & A	All participants
10.30-10.40am	Morning Tea	
10.40-11.30am	4.Related Activities	
(10min x4 +QA)	a. LEAF Project	Ms. Natsuko Kishimoto
	b. NZ Project	Mr. Simon James
	c. WB Support (REP)	Mr. Andrew Fanasia
	d. Q& A	-All participants
11.30-12.10pm	5. Presentation of Revised PDM/PO	Ms.Rosemary Apa
	6. Approval of Revised PDM/PO	Chair-PS/MECDM
	7. Q& A/ AOB	
	8. Activity in 2015	Mr. Akihiro Osada
12.10-12.15pm	Closing Remarks	Chief Health Inspector, HCC
12.15-12.20pm	Closing Prayer	Ella Rizwold
12.20-13.00pm	Lunch	All participants
13.00-13.30pm	Board bus for site visit	All participants
14.00-15.30pm	Site Visit in Ranadi/ Zai na tina organic	All participants
	farm.	
I. Introduction

1. The Ministry of Environment Climate Change Disaster Management & Meteorology (MECDM), Ministry of Health and Medical Services (MHMS), Honiara City Council (HCC), Western Provincial Government (WPG) and Gizo Town Council (GTC) organized the Fourth Joint Coordinating Committee Meeting on 2nd February 2015 in Honiara, Solomon Islands. The Forum was supported by Secretariat of the Pacific Regional Environment Programme (UNEP), Japan International Cooperation Agency (JICA) and the Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM/JICA).

2. The Forum was attended by approximately 36 participants, comprising of Government representatives from line Ministries, representatives from Non-Government Organizations, representatives from Donor Partners, representative from international organizations and media representative from Solomon Islands.

II. Opening Session

3. The forum was opened with a word of prayer by Tom Nanau, Director of Environmental Health Division of the Ministry of Health and Medical Services.

4. In officially opening the forum at 10am, Dr.Melchior Mataki, Permanent Secretary of the Ministry of Environment Climate Change Disaster Management and Meteorology acknowledged the presence of Donor Partners, counterparts, JICA Officials and Volunteers and other stakeholders. In his opening remarks, he briefly outlined the achievements and challenges of the project for the past four years including the baseline work done 2014 (see annex).

5. His Excellency, the Ambassador of the Embassy of Japan, Kenichi Kimiya acknowledges the presences of the Attendees and extend appreciation for support and cooperation to the JICA project. He also mentioned that of Pacific Island Countries have a lot of issues with management of various kinds of wastes due to several factors such as changing of lifestyles. He encouraged the adaptation of the 3Rs concept and Fukuoka Method in Solomon Islands. He introduced the current Embassy's Grant Assistance for HCC, and also pointed out the efforts of two JICA volunteers assigned to HCC and GTC respectively.

6. Taiji Usui, Resident Representative of Japan International Cooperation Agency (JICA) stresses their opportunities including a technical cooperation programme to help capacity development and motivation on the waste management in Solomon Islands. He mentioned that JICA will surely support the future progression of the project. He also recognized the efforts of two Environment Officers, Rosemary and Wendy into the project's implementation.

III. Presentation: Progress of Honiara Project Activities

7. Joe Kelesi, Landfill Supervisor, Public Works Division of the Honiara City Council gave a presentation on behalf of the Honiara team on the progress of activities (see annex). He highlighted some of the progress of achievements and challenges faced by the project team in implementing the pilot projects and to improve the Ranadi Landfill. Some of the progress of the Panatina Pilot Project that were achieved includes installation of waste bin stands at the community to ensure households waste bins are not disturbed by stray dogs and for easy handling during waste collections. It was also

reported that individual house to house awareness on waste separation, home composting and promotion of 3Rs concepts was also conducted. Through the J-PRISM Project, a noticeboard was provided to the community for the purpose of awareness and dissemination of information.

In addition, he updated that the Eco-School Program in Honiara was officially launched with four schools already provided a plan of action to implement the program into the school program. Of the ten schools expected to implement the pilot program, Saint Nicholas School has grasped the 3Rs concept and have put into practise some the activities at the school. He also outlined that an Eco-Bag Pilot program was launched at the Honiara Central Market last year. The Eco-Bag Pilot Program was implemented with a series of ad_hoc public awareness.

Joe also presented the challenges and achievements encountered to rehabilitate the Ranadi Landfill. He also highlighted some of the past and current situation of the Ranadi landfill with a strong recommendation for the procurement of an excavator which would help with the required work on site. He concluded the presentation by outlining some of the ongoing activities under the Project in Honiara which includes time and motion study survey, community awareness on waste segregation, eco-school program and rehabilitation of Ranadi landfill. With the Ranadi Rehabilitation, two culverts are to be installed for the drainage system to drain out the water logs and for ease of access for to the disposal site. There will also be fencing of 150m of the site office to ensure control of access and management of the dumpsite. Joe also pointed out that the Ranadi landfill also needs a master development plan and a vehicle for monitoring and conducting logistics to further improvement of the site.

III. Presentation: Progress of Gizo Project Activities

8. Fred Naphtali, Chief Health Inspector of Ministry of Health and Medical Services/ Western Provincial Government delivered a presentation on the progress of activities in Gizo. He firstly acknowledged the significance of the J-PRISM Project. He updated that with regards to 3Rs promotion in Gizo, some of the activities conducted under the project includes workshop on clean school program action plans, a follow-up workshop, a workshop with teachers to teach them on craft work. In addition to that, the project team have been involved in the World Environment Day program in Gizo. The team has also conducted regular monitoring of the 5 piloted schools and have developed an evaluation program. With the Solid Waste Management Community Zones Program, the project team have published several awareness materials and printed out t-shirts and identity cards to community zone representatives.

He also mentioned that the waste disposal site has slightly improved in Gizo. He stresses that the Gizo team have emphasized more on public awareness to market vendors, business houses, schools and communities. A baseline survey on the environmental condition of the Community was conducted. Under the Clean School Program, a total of five schools have implement the program in the school. The Community Solid Waste Management Zoning was also launched will be extended to Noro and Munda. He highlights that a communication strategy has been established, however, some of the effective activities yet to be done includes the formulation of a recycling system in consultation with private sectors in Gizo. There have been discussion on the development of a policy or legislation with the Permanent Secretary of Ministry of Environment Climate Change Disaster Management and Meteorology and the Premier of Western Province.

Fred stated that under the J-PRISM Project, a front loader attachment was provided to Gizo for the improvement of the Gizo Dumpsite. However, there are no development of an operation manual for the dumpsite which require for an additional human resource for the dumpsite. It is expected that some positive outcomes will be received from the Western Provincial Government to support in the Solid Waste Management with the appointment of a full time dumpsite supervisor. In his presentation, he

briefly stated some of the challenges faced and lessons learnt. One of the major challenges faced is people's behaviour and attitude towards solid waste management. Additionally, there is logistics issues and financial constraints to implement some the activities. To address these challenges, some of the way forward proposed is to emphasize more on awareness on solid waste management with dissemination of posters and promotion by billboards. He also recommended to strengthen cooperation between the Western Provincial Government, Ministry of Health and Medical Services and the Ministry of Environment Climate Change Disaster Management and Meteorology. Finally, he stated that provincial ordinances or by laws need to be reviewed.

Discussion (Questions and Answer)

9. Andrew Muaki, Communications Officer of Sumitomo Metal Mining (SMM) questioned if waste management can be incorporated into the school curriculum seen that some activities are already been implemented in the schools.

10. Charles Kelly, City Clerk of Honiara City Council thanked the JPRISM counterparts and remarked on the orientation of the dumpsite and applaud the project on waste segregation in Panatina, he also mentioned that there a need for the extension and continuation of the project seen that Honiara is being the dumping site for all kinds of wastes both local and overseas as population growth is one of the contributing factor. City Clerk also mentioned that He will negotiate for the extension of the J-PRISM project.

11. Tom Nanau, Director of Environmental Health Division of the Ministry of Health and Medical Services responded to Andrew Muaki that he was involved with the education team some years ago, to formulate a document in the school curriculum which was not specific to, but related to solid waste management. At the moment he had no idea on how far this document reached. He also applauded the project and presenters as solid waste management knowledge has reached the locals communities and schools and also suggested the adding of another 'R' for Refuse waste in terms of industries and importers. He thanked JICA for building the capacity of staffs in terms of training programs offered overseas.

12. Jeffery Aihunu, Refuse Collector really appreciates the improvement made at Ranadi dumpsite. He also commented that most schools in Honiara still need to management their wastes properly; there is still a need for more awareness on solid waste management except for St. Nicholas school, which I have seen that they were practicing proper waste management.

13. Lysa Wini, Project Officer of International Union for Conservation of Nation (IUNC) asked for what the criteria for choosing Panatina community and is there any plan to move to another community? George Titiulu, Chief Health Inspector of Honiara City Council responded to Lysa's query that the project is purposely to pilot out and the criteria was done by looking at a small community so that it can be easily organized, has an existing waste collection system (Contractor) and also a community with well-organized Leaders. He said that from the lesson learnt from this community, then we'll move to another community so that the Panatina community members will also share their experiences to other communities.

13. Douglas Yee, Director of Climate Change, Ministry of Environment Climate Change Disaster Management and Meteorology questioned if the Ranadi dumpsite is built for semi-aerobic and looking into the future how is the methane capture and the data coverage? As seeing from the climate change perspective waste and waste management is very important as waste is one of the contributing factor to climate change.

14. Makoto Tsukiji, Regional J-PRISM Coordinator responded to Douglas' question stating that data need to be specifically identified. Osada (JICA Expert) added that methane can be reduced by the method and exact data of methane capture can be provided. Mako again stresses that after all the activities monitoring, analysing and evaluation will also be carried out.

15. Dr.Shane Tutua, Project Manager, Zai Na Tina (Organic Farm) questioned if how serious is this project in terms of utilizing waste necessary for soil improvement and food security as most waste generated are mostly organic which can be channelled back to soil improvement. And if the Ministry of Agriculture can fit in this project? And also suggested that if Gizo to have a small shredder machine for the market waste.

16. Dr.Melchior responded briefly highlighting that JPRISM project has started four years ago and had address a lot of issues including financials, planning etc, the project focuses on composting at household level not large scales of composting but that also brings in opportunities to look at alternatives ways of treating the wastes, as the market waste are increasing and about 80 to 90% are organic. He said that there is a need to link with the Ministry of Agriculture, but from his experience, Ministry of Agriculture were using animal manure as compost which is not really accessible in urban areas. He mentioned that there are challenges that can be faced but he agreed that we need to look at a bigger level of addressing or means of treating the wastes and composting is one. He also picked on the point raised regarding the schools collection system and appreciated the feedback if helps the Ministry of Environment and other stake holders to focus on the areas that needs to be strengthen. He responds again to the question raised by the Director of climate change with the question on methane capture, there are number of possible options as one is the energy recovery and incineration. He mentioned that priorities need to be linked to budget resources so that they can be well implemented and treatment system for the diverse wastes is waste segregation and having them dumped together. It also a business opportunity and expand while derive resources from them.

VI. Presentation: LEAF Project

17. Natsuko Kishimoto, Project Coordinator of Learning and Ecological Activities Foundation for Children Project herein refer to the LEAF Project gave a presentation on the overview of the project which is a sister relationship between the Nishinomiya City in Japan and Honiara City Council. She briefly introduces the history of the project and stated that it is a partner project to JICA which focuses on addressing household waste in Honiara that will be implemented over a time frame of 3 years. She continued to inform stakeholders that the major purpose of the project is to establish a separate waste collection system of housed waste in cooperation with public and private sectors based on 3Rs concept. She outlined some of the expected outputs of the project which includes the formulation of a Cooperation Committee to hold a period of discussions to establish a separate collection of household wastes. She also stated the project will try to develop the human resource who are capable of promoting separate house waste collection and resource recovery and establish concrete practical of methods and systems of new 3Rs with cooperation of people and agencies. It will also aim to provide Residents with the opportunity to learn some of the examples to carry out 3Rs at home and rules of waste disposal. The project also aims to implement work based on separate collection system on household waste and will be implemented in the administrative field to ensure collection of recyclables to return to other country and return of organic to the soil with the provision of 300 shovels for children to learn eco-system services as it is vital to start with younger generation. The project will conduct House hold collection can in zones one to six (1 - 6). She also highlighted some of the activities conducted so far such as mapping or household waste collection research purposely collect data to

establish efficient waste collection route and problem identified with waste collection was geographical problem. She also presents the project's plan for 2015 which includes the arrival of a compactor (Mar 4th-8th), the establishment of Co-Committee (Mar 25th), Japan counterpart members to visit Honiara (April 18th to 24th), the launching of compactor (April 22nd) and the introduction of a Compressor (September).

18. Simon James, Interim Advisor for Public Works Division of the Honiara City Council (HCC) under the New Zealand Project gave a brief presentation on some of the major activities which have been carried out. One of the major activities includes the Asset Management Framework which aims to link the Honiara City Council strategic objectives with the asset management policies and objectives needed to deliver with the level of service that the asset should deliver; and guides the asset management priorities. The work required on the assets to achieve and the finance needed to support the work. He stated that there is ongoing process which will require refinement and continuous improvement over the future.

The other major activity is the asset management system which aims to position HCC to plan in the long term on the development and maintenance of its asset. The system will also look at benchmarking and defining task services the assets will be used to deliver. This system also looks at initial stock take of HCC assets such as vehicles and buildings focusing on age, conditions and life span of assets. The system is aimed to move towards operational plan and maintenance of the assets. Through the project, they are also restructuring the HCC Public Works Division into three new departments which includes Solid Waste Management, Building, Trades and Works. The new structure has been drafted waiting for consultation and each division is based more on function role. The intention of the new restricting is to streamline and clarify responsibilities and line of reporting.

19. Andrew Fanasia, Communication Media Officer of the Rapid Employment Project (REP) under the World Bank (WB) gave a brief presentation on purpose and background of the project. He stated that it is the Government initiative since 2010 and also the main key funds the Rapid Employment Project. He highlighted that the project's objectives aims to increase income for urban poor through short term employment and improve their knowledge, experience and basic employment skills that are value in the workplace and societies. Component one of the project includes Rapid Employment Scheme which includes some sub-components such as road repair and maintenance (MID); urban works and services (HCC). Component two includes pre-employment training and component three is on project management. He also presented that the implementation progress and the achievements of the project so far are under these three components.

Discussion (Questions and Answer)

20. Alference Fatai, City Mayor raised his concern on the sustainability of the project and recommends for the consideration of the extension on the project. He mentioned that more education and awareness to change the mindset to Honiara citizens with regards to Solid Waste Management and also the seven (7) meters by-law.

21. Naelyn John responded to the question raised by the Lord Mayor on the extension of the project that negotiation was already done and will be extended to 2016 to implement the phase 2 of the project. She also stresses that a lot of the project funds has been spent on street cleaning where as it should go for support of other activities such as construction of foot path and also support the solid waste management activities integrated into schools.

22. Andrew Muaki questioned if there is a link between the Market Clean-up programs, the project and the new structure that the Honiara City Council is developing. Simon James responded to Andrew that the council is fully aware and are taking it into consideration to extend the project. He mentioned that it is a huge task and the scope of the task the Honiara City Council needs to be aware of at some stage.

23. Fred stated that he was impressed with the LEAF Project and it has resulted in some positive impacts for Honiara. He recommend if the LEAF Project can be extended to Gizo in Western Province. He further commented that the sustainability of the solid waste management project is important and challenging therefore, an increase in awareness raising is vital. He stated that it is an opportunity for business houses and people who are engaged in the recycling initiatives.

VII. Presentation: Revise Plan Design Matrix (PDM)/ Plan of Operation (PO)/ Human Resource Changes

24. Rosemary Apa, Project Manager and Chief Environment Officer of the Ministry of Environment Climate Change Disaster Management & Meteorology (MECDM) presents the revised plan design matrix, plan of operation and the human resource changes under the J-PRISM Project. She mentioned that there have been minor changes with the Project PDM last year and since this is the final year of implementation the PDM remains as it is. She outlines the three major outputs of the project which includes 3Rs activities practised in Honiara and Gizo, waste disposal system is improved in Honiara and Gizo and that lessons and experiences learnt are disseminated in the Solomon Islands.

She continue to present the operational plans for Honiara and Gizo which have no changes made. However, she informed stakeholders that there were three waste characterization baseline studies conducted in Munda, Noro and Buala. She also mentioned that the plan of activities to be conducted for this year, 2015 are additional waste characterization studies in Taro (Choiseul Province), Tulagi (Central Province) and Auki (Malaita Province) under output 3. In addition to that, there will be a review of the National Solid Waste Management Strategy and continuous implementation of the 3Rs pilot projects. Other additional baseline activities to be conducted includes the full-scale time and motion study and waste audit in Honiara and Gizo. There will be continuous rehabilitation and construction of fencing for Honiara and Gizo dumpsites. She stressed that for the purpose of the session is to approve the work plan for the fiscal year, 2015.

Discussion: Questions and Answers

25. The meeting Chair, Dr.Melchior Mataki commented on how best stakeholders can provide support towards the activities as some of them are overlapping to each other. He stated that the team should allow for stakeholders feedbacks and indicate the different area of interest they have on the project. He suggested to go with the outputs basis focusing on the two pilot project sites and to review the plan of operation and make approval or indicate any areas which stakeholders are willing to participate in. He commented on output-3 stating to work on liaising with Sumitomo Metal Mining to collaborate in the Solid Waste Management in Buala.

26. Andrew Muaki responded to the Chair's comments that the company will extend its assistance towards eco-practices in Buala, Isabel Province and Choiseul Province. The Chair mentioned that under output 3, this project will also look at extending the solid waste management program to these areas. He then question the Rapid Employment Project in relation to an issue raised by one of the

Private refuse collectors who is conducting school collections in Honiara. He also pointed out that the Mataniko River Clean Up and Rehabilitation Project covers some schools along the river and if stakeholders can put together resources. He also mentioned the importance of proper drainage design and management this is due to the blockage of drains by wastes. Under the Urban works and services this should be considered in certain areas in the city. One of the focus areas to be considered in the activities is the support for private stakeholders who are involved in collection and a need for provision of personal protective equipment and trainings by the Honiara City Council plus other stakeholders such as the REP, LEAF and J-PRISM to assist in whatever areas needed.

27. Jeffery Aihunu, Private Waste Collector commented on the waste disposal into the drains by some people residing along the drainage systems in Honiara. He also stated that the request for assistance towards Private refuse collectors should be taken into consideration the use of proper equipment to carry out the work more properly. The Chair responded that it is high time for people in the higher level of the planning authority to take on board this issue and also to reemphasize the need to take this awareness raising program right throughout the country not only in urban centres.

28. Tom Nanau emphasized that the point of connection between the residents, collector and authority in any solid waste management collection service is the main focal point. He added that as a resident, it is vital to know the name of the collector and waste collection schedule for the area. There should be more effort put into awareness raising and enforcement of the seven meter by-law.

29. Fred Naphtalai raised a point on the need for some more awareness input for aluminium tins and scrap metals especially for private companies to buy and recover such recyclable wastes also request the extension of Rapid Employment Project to the Western Province. The Chair further discussed the issue raised by Fred to share knowledge and lessons learnt by the REP which was outlined in Output-3 of the Project Workplan. He also stated that it is important that Donor Partners such as ADB need to be consulted and to strengthen the links with people on the ground and those in the upper level.

30. Rendy Solomon, Senior Health Inspector of Ministry of Health and Medical Service stationed at the Western Provincial Government commented that Western Province has an industrial development and request to know the plans of the Recycling Companies to undertaking collection of recyclables waste in the province. Raj Marshall Pillai replied that the logistics issues such as with shipping and transportation of recyclables such as PET bottles is the problem.

31. Ben Maenu, Manager of Rax Boy Company also contributed that his company is also collecting scrap metals from the provinces and shipping logistics including tax is one of the major challenges. He recommend if the Government can take into consideration this issue and support the waste recovery business in the country to be exempted from any tax. Jeffery Aihunu stressed his similar concern on the government tax when their activities is supporting the Government to clean up the environment. He also commented the people generating the wastes should take the ownership of the wastes they produce to ensure they can be disposed of properly. The Chair assured the stakeholders that he is aware of the issue raised by the private sector and will take action on this at the ministerial level.

32. The Lord Mayor reiterated that awareness should be taken right down to the rural areas especially to the market vendors. He made a call to the REP office to prioritise the people in each community should be engaged to carry out the clean-up activities rather than choosing other community members to ensure the ownership of their community. Naelyn John responded that it was the indication of the project to employ those members of a particular community to clean up their own community.

33. The Chair then endorsed the work plan for Gizo Pilot site after a lengthy discussion and also mentioned that most of the items discussed are also relevant to the Honiara Plan of Operation. He stated that unless there are any other strong views on the work plan of Honiara then it is seen to be the final plan of operation.

34. The Chair then questioned if the George Titiulu, Chief Health Inspector of Honiara City Council to explain the possibility of expanding the Panatina Community Pilot Project. George Titiulu respond to P.S's question stating that we are looking into selecting five more communities within Honiara city for the same project and also with the LEAF project we will also working with other communities on the same idea.

35. The Chair further commented that the Eco school program need to increase the number of schools in order to make any impact. Rosemary Apa responded that initially there are ten (10) schools but only one school is actually putting into practice the 3Rs concept and stated that the team will continue to follow-up with the other nine schools. The Chair stressed that according to feedbacks received, only one school has taken the initiative to implement the activities on the eco-school program and request for the team to get the involvement of the other nine schools into the program. George Titiulu also explained that through the project one of the school teachers have attended a Solid Waste Management Training in Fiji to look and learn from the experiences of schools in Fiji and this may be the reason for the school to take lead in implementing the eco-school program. Jeffrey Aihunu also mentioned that he was impressed that at the St. Nicholas schools, there is always someone allocated on the school grounds during the waste collections unlike in the other schools.

36. Dr. Shane Tutua asked if composting is part of the 3Rs. And if the project is interested in learning of their two methods. Rosemary Apa responded that composting is one of the components as it is one form of reuse of waste. She also mentioned that the project is interested to see the type of composting method in place so that we can see how best we will work together to implement it in the schools and communities.

37. Tom Nanau stressed his support for those people who exported recyclables and also agreed that the Government to consider reducing their export tax or exempted from tax. Fred Naphtali also stresses his support for the government to help support the waste collectors as well as to help the environmental issues in terms of solid waste management. The Chair confirmed there is a possibility of exploring opportunities towards the environment and solid waste management.

38. Naelyn John asked how can we maintain this group so that we can continue to support and provide feedbacks to each other with information in putting together ideas and skills to addressing this solid waste management issue. The Chair explained that the purpose of the meeting held was only for J-PRISM Coordinating Committee, however, now it also brings in other private stakeholders to be part of the meeting which held annually.

39. John Labu also commented if the HCC could contract private refuse collector at least 80% so that it can reflects this ownership.

40. Jeffery Aihunu mentioned that the data produced by the LEAF project will provide a lot of information for stakeholders and encourages using of small compactors at the topography areas within Honiara city.

41. The Chair finally endorsed the Honiara Plan of Operation under JPRISM project and also takes into consideration the comments achieved and acknowledged the participation of all stakeholders into the discussion.

VIII. Official Close of Forum

42. Rosemary Apa thank everyone for the valuable inputs in the program and call upon George Titiulu to deliver the closing remarks.

43. George Titiulu mentioned in the closing remarks that one of the important point we need to acknowledge is on the history or trend of the changes mentioned by one of the Contractors that shows the improvements over time. He also mentioned the challenges that the project encountered and again stated that the ownership will rest on each stakeholders. He also requested that the team to review the areas we need to emphasized on for improvement of the solid waste management. With those few remarks he officially close the fourth Joint Coordinating Committee meeting program.

44. Ella Rizwold, Principal Health Inspector closed the meeting with a word of prayer and followed by lunch break whereby all stakeholders are invited to at 12 noon.

45. After the lunch break, all stakeholders were transported by bus and office vehicles for a site visit to the Ranadi Dumpsite and then to the Zai Na Tina Organic Farm at Burns creek.

List of Annexes

- Annex 1. List of Fourth Joint Coordinating Committee Meeting Participants
- Annex 2. Powerpoint Presentation of Honiara Progress of Activities
- Annex 3. Powerpoint Presentation of Gizo Progress of Activities
- Annex 4. Powerpoint Presentation of LEAF Project
- Annex 5. Powerpoint Presentation of New Zealand Project
- Annex 6. Powerpoint Presentation of Rapid Employment Project/ World Bank
- Annex 7. Project Design Matrix (PDM) version 3
- Annex 8. Plan of Operation (PO) (Gizo) ver. 3
- Annex 9. Plan of Operation (PO) (Honiara) ver. 3
- Annex 10. Photographs of Fourth Joint Coordinating Committee Meeting

Email																										
Telephone/Mobile																										
Organization	Works/HCC	REP/HCC	REP/HCC	MDPAC	ADB	Alpha Metals	Rax Boy	Rax Boy	Zai Na Tina Organic Farm	Private Sector	Island Sun	TMT Limited	EHD/HCC	EHD/HCC	AUNDP	JICA Project	Western Provincial Govt	JICA SI Office	JICA SI Office		Embassy of Japan	MECDM	Sumitomo Metal Mining Ltd			
Status/Position	Landfill Supervisor	Community Liaison Officer	Communication Officer		Country Representative	Director	Director	Operation Officer	Manager	Private Refuse Contractor	Reporter	Manager	Health Inspector	Health Inspector	Environment Analyst	JICA Expert	Environment Officer	Resident Representative	Project Formulation	Advisor	Ambassador	Environment Officer	Internal Lawyer			
Names	Joe Kelesi	Naelyn John	Andrew Fanasi Jnr	Siona Koti	Taiatu Ataata	Soosai Raj	Ben Maenu	Hendrick	Dr. Shane Tutua	Matthew Riibako	Ben Bilua	Jeffery Aihunu	Judith Damilea	Mercy Nunua	Lynelle Popot	Akihiro Osada	Jully Kalamana	Taiji Usui	Akiko Fukuda		Kenichi Kimiya	Wendy Beti	Andrew Muaki			
Ref	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44		45	46	47	48	49	50

Annex 2. Powerpoint Presentation of Honiara Progress of Activities







Disposal cell



Waste picker survey

Past and current situation

• CURRENT

• APRIL 2014



Drainage



Future Improvement

- Ranadi master development plan
- Excavator
- Logistic and monitoring vehicle
- Fence (compound)
- Incinerator for medical waste
- Sludge filtration(physical treatment)
- Leachate treatment(physical)

Annex 3. Powerpoint Presentation of Gizo Progress of Activities



Output 1: 3Rs Activities are Practiced in Gizo											
	Clean School Program Schedule in 2014	1									
Name	Content	Date									
Workshop	Action plan making	Мау									
Following workshop	Visit to schools and awareness talks to teachers	June									
Craft work	Demonstration of reuse paper work (Japanese Origami)	August									
International Environmental Day	Speech, Song, demonstration of clean school program work (paper craft, reused and recycled material) Clean up Gizo and schools	October									
Monitoring	To monitor 5 schools	November									
Evaluation	Evaluate and plan for next year	December									



Zoning community program schedule Name Content Date Workshop Action plan making Study of SWM June Census Census to all household Awareness of SWM and zoning system July-September Launching Awareness to public July Meeting Weekly meeting Weekly June-December International Youth Day Awareness work September International Day Awareness work Clean up Gizo October Market & shop Awareness Awareness of Solid Waste Management Awareness November		
Name	Content	Date
Workshop	Action plan making Study of SWM	June
Census	Census to all household Awareness of SWM and zoning system	July-September
Launching	Awareness to public	July
Meeting	Weekly meeting	Weekly June-December
International Youth Day	Awareness work	September
International Environmental Day	Awareness work Clean school program presentation Clean up Gizo	October
Market & shop Awareness	Awareness of Solid Waste Management	November
Evaluation	Evaluate and plan for next year	November





		Contraction of the second seco							
[Solomon Islands]	Japanese Technical Cooperation Project f on Solid Waste Management in	or Promotion of Regional Initiative Pacific Island Countries							
Output Number	Progress of Activities From September 2013 to August 2014	Activities to be implemented up to March 2015							
Out	put2: Waste disposal system is in	proved in Gizo							
2.4 Implement the rehabilitation of dump sites	 Discussion on Site plan for dumpsite rehabilitation done Provision of front loader attachment done 	 Implementation of dumpsite rehabilitation Fencing of dumpsite Appointment of dumpsite full time supervisor 							
2.5 Develop the operation manuals for each site	Not done	Develop operation manual for dumpsite							
2.6 Train staff of dump sites on landfill operation	Yet to be done	Train staff of dump sites on land fill operation							





[Solomon Islands]	Japanese Technical Cooperation Projec on Solid Waste Management	t for Promotion of Regional Initiative in Pacific Island Countries
Output Number	Progress of Activities From September 2013 to August 2014	Activities to be implemented up to March 2015
3: Lessons a	and experiences learnt are dissemina	ated in Solomon Islands
3.1 Establish a multi- stakeholder National Committee to help disseminate experience to other areas within the country	Not done	
3.2 Preparation of educational materials for disseminating experience to other areas	 Preparation of 3R Leaflet done Preparation of Waste disposal leaflet done Development of 3R Sticker done 	 Dissemination of information on potential stakeholders to other areas. Setting up of two swm billboard in town.
3.3 Conduct the workshop to disseminate the lessons and experiences learnt	Community zoning workshop done School program workshop done Wider consultations with stakeholders done	 Conduct consultations with other potential stakeholders and involve them to disseminate lessons and experience learnt as a way forward to sustain swm program

J PRTS M

Progress of Activities From September 2013 to August 2014

Collection of waste in

Refuse drums secured
 Waste collection

stations identified

town improved

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

jîca)

Output 2

waste disposal system

is improved in Gizo

SPREP

Activities to be impleme up to March 2015

stations

Construction of 4 waste

Develop schedule for effective collection

waste collection weekly.

system in town Setting waste collection drums in town Monitoring of town waste collection system by GTC and Medical

If J and the "characteristic are" Image: A state of the state of	Solid Waste Management is Everybody's Business	[Solon
Stop Burning Stop Littering Rubbish blo iu mi	re aux closense plane meter. Exclosense Division Gate Monghial Phomes #0221 aux 204	output
Be a champion of Waste Man- agement to change our behavior for better Wastern Province for tomorrow!	Produced by Produced by Star Haspital Western Province	Output
<section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	Keep Gizo Town Clean, Be a Waste Management Champion, Reduce Wasto a. Step Litter Lets Work Together To Keep Our Gizo Town Clean For Improving Waste Management And Preventing Environment Pollution	3.1 Le exper disser Island

Solomon Islands]	Japanese Technical Cooperation Project 1 on Sold Waste Management in operiences learnt are disse	er Promotion of Regional Initiative Producti Island Countries
Output number	Progress of Activities From September 2013 to August 2014	Activities to be implemented up to March 2015
3.1 Lessons and experiences learnt are disseminated in Solomon Islands	 Joint partners consultation with other stake holders done Strengthening coordination between WPG and WPHS Evaluation on community participation zoning programed on experience learnt 	 Share ideas and experience on SWM to all partners and stakeholders.

Challenges

- Insufficient logistics
- Financial constraints
- Citizen's behavior & attitude on SWM
- Market Vendors refuse

Acknowledgement

- JICA Experts for support and guidance
- Ministry of Environment for support on SWM
- MHMS for Support & guidance on SWM
- WPHS for support on SWM
- WPG for Political Will support
- Others
- Almighty for providences



Annex 4. Powerpoint Presentation of LEAF Project



Expected Outputs

- ① Hold a periodic discussion during the "Cooperation Committee" focusing on the establishment of a "separate collection system of household waste"
- ② Develop human resources who would be capable of promoting the separate collection of household waste and resource recovery.
- ③ Establish concrete Practical methods and systems of the New 3Rs with the cooperation of the people and agencies.
- ④ Provide the residents with the opportunity to learn some examples of how to carry out the New 3R at home and the rules of waste disposal.
- (5) Implement work based on the "separate collection system of household waste" will be implemented within the administrative field











Goods and Waste Flow based on the concept of the New3R





	Data for analysis													
ZO NE	Community Name	Point No	Kind	Sorting	The way of discharge (Main)	The way of discharge (Sub)/detail	Note	Photo No	Time	Time lag	Altitude (m)			
1	NAMORUKA- WHITE RIVER	1	Mix		Drum	Cardboard		1-1~3	8:46		17			
1	NAMORUKA- WHITE RIVER	2			Drum	PB(resident bring)		2-1~3	8:48	0:02	16			
1	NAMORUKA- WHITE RIVER	3		Can	PB (on the ground)			3-1~3	8:51	0:03	16			
1	NAMORUKA- WHITE RIVER	4			Drum			4-1~3	8:52	0:01	17			
1	NAMORUKA- WHITE RIVER	5			PB (on the ground)		Also collect bicycle	5-1~3	8:53	0:01	17			
1	NAMORUKA- WHITE RIVER	6	Business	Can& Bottle	PB (on the ground)	Prastic Containar		6-1~2	8:53	0:00	16			
1	NAMORUKA- WHITE RIVER	7			PB (on the ground)			7-1~2	8:56	0:03	16			
1	NAMORUKA- WHITE RIVER	8			PB (on the ground)	Basket		8-1~2	8:57	0:01	15			
1	NAMORUKA- WHITE RIVER	9			PB (on the ground)	Cutboard		9-1~3	8:58	0:01	14			
1	NAMORUKA- WHITE RIVER	10	Mix		PB (on the ground)	Prastic Containar		10-1~2	8:59	0:01	14			

Number of household collection points										
	Number of points									
Zone1	121									
Zone2	152									
Zone3	273									
Zone4	248									
Zone5	193									
Zone6	87									
Total	1,074									

The way of discharge







Others

Percentage and number 4.4% 6.7% 9.4% 9.4% 45.2% 9.4% 9.5% 9.5% 9.5% 9.5% 9.5% 9.5% 9.5% 9.5% 9.5% 9.5% 9.5% 9.5% 9.5% 9.5%

Problem for collection

Wheel Bin





Problem for collection



Honiara Public-Private Cooperation Committee (Co-Committee)

Host of the Initiative: Honiara City Council Members: City Council and members from civic organizations (community, women, churches, NGOs, youth, manufacturer, detailer, recycle business, university, etc.)

Pre-meeting for Co-Committee

- Date:14th Nov 2014
- Participants: 22 (14 stakeholders)
- Type of stakeholders:
 City Council, Community,
 Woman, Youth, University,
 Company, Recycle Business,
 NGO



Plan for 2015

- Arrival of Compactor(March 4th-8th)
- Establish Co-committee(March 25th)
- Counter part members from Japan visit Honiara(April 18th-24th)
- Launching Event for compactor(April 22nd)
- Introduce compressor(September)



Annex 5. Powerpoint Presentation of New Zealand Project

4th Joint Coordination Committee Meeting

3rd February 2015

Simon James - HCC Works Division Interim Advisor

Asset Management Framework

- Links HCC strategic objectives with the asset management policies and objectives needed to deliver them;
- Links HCC strategic objectives with the levels of service that the assets should deliver; and
- Guides the asset management priorities, the work required on the assets to achieve those objectives, and the finances needed to support the work.
- Ongoing process, that will require refinement and continuous improvement over the foreseeable future.

New Structure of HCC Works Division

- Split into three new divisions
 - Waste Management
 - · Building and Trades (Building Maintenance and Development)
 - Workshop
- · Each division is based on more functional roles
- Intention is to streamline and clarify responsibilities and lines of reporting
- Still in very draft stages of development for consultation within Council

What's next?

- Works Division Adviser (Long-term; Initially for 1 year; starting Feb-Mar 2015)
- New Zealand's Grant Funding Arrangement with Honiara City Council through the "Honiara Economic Development Support Programme" (HEDSUP) – some budget allocation to support the improvement of HCC's waste collection systems and related reforms for the Division during 2015.

HCC Works Division Interim Advisor

- Term: October 2014 March 2015
- Enable senior management to establish an effective, reliable and high performing work-force within the Works Division
- Establish and implement an Asset Management system
 Renew and re-establish asset registers for HCC assets
 Develop Asset Policy and Procedures Manual for HCC
- Prepare a draft structure for new Waste Management Division for consultation

Asset Management System

- Starting to position HCC to think long term about the development and maintenance of its assets;
- Benchmarking and defining the tasks services that the assets are used to deliver;
- Initial Stocktake of HCC assets (Vehicles and Buildings)
 What is the age, condition, value and expecting remaining life of the assets
- Move towards operational plans and maintenance plans for assets



Annex 6. Powerpoint Presentation of Rapid Employment Project/ World Bank



- SBD 14 million (US\$1.8 m) in wages transferred
- Approx. 59 percent of the participants are women, 53 percent are youths (ages 16-29)

Implementation Progress

- Component 2 Pre Employment Training (REP-HCC)
- No of person trained as of 30 Jan 2015 10,700
- No. of certificates graduates as of 30 Jan 2015- 10,680
- Resource center now in place- start of career coaching and referral services.



- Component 3. Project Management (HCC/MID)
 - Financial Progress (overall disbursement: 67 as of 13 September 2014, after 83% elapsed time)
- IDA disbursed 99%
- SPF disbursed 63%
- PRIF disbursed 72 %



Progress in Picture

Street Cleaning at Panatina Festival village area (REP-HCC)



Progress in Picture





Progress in Picture



Progress in Picture

REP-HCC Project Manager hands over the bridge to Kobito 1 community (REP-HCC)





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PDM: Version 3	Project period: Feb, 2011 - Feb, 2016 (5	Date issued: February 3, 2015 Important Assumptions	1	 Natural disaster would not drastically affect the collaboration among PICs and SAREP 	 2. Political changes of PICs would not drastically affect the collaboration among PICs and SPREP. vince 		1. Heavy machinery necessary for landfill	management is available. Action			nuals						1. Counterpart personnel keep working in the field of SWM.	will not drastically affect the progress of project activities.	 Necessary budget to carry out Neoresary budget to carry out Neork activities is allocated from the government. Neore of JLCA experts for Solomon (signals, is provided timely and (signals). 	Cooperation of community people of the
		Means of Verifications	Incoming survey	SPREP (Regional inventory of skill	 Workshop presentation Waste characterization report Activities reports Activities reports S. Inviuel Operation Plan Draft 3R activities/plan in Pro 			 1-1 Strategy paper for National Sc Nate Management for National Sc Plan (NSWMS 2015-19) 2. Report of 3R communication (Strategy 1-3. Survey Reports 1-4. Draft paper for 3Rs related 1-4. Draft paper for 3Rs related 1-4. Draft paper for 3Rs related 1-5. Action Plan Reports 1-6. Reports for Pllot Projects 	 2-1 Operational manuals 2-2 Operational Reports 2-3. Capacity Assessment Sheet 2-4. Operational manuals 2-5. Monitoring Sheet 		 1. Sharing the ICT materials, Ma 3.2. Participation of the training/workshop 						Solomon Islands side	Assignment of National PU/PWLat	Local Costs Sharing Provision of necessary land/facilit space	
Waste Management in Pacific Island Countries (J-	Final Beneficiaries: Citizens of Solomon Islands	Target Area: Solomon Islands Objectively Verifiable Indicators	1. Proportion of recyclables and green waste disposed of at the landfill is decreased.	1. 5 experts (Trainers) listed in the SPREP inventory	2-1. 5 initiatives on waste minimization introduced 2-2. Ranadi and Gizo landfill are managed as planmed in the Amrual Operation Plans. 2-3. Provincial offictes recognize the importance of 3R and SVMM and are willing opromote 3R and SVMM in their respective provinces.			 National Solid Waste Management Strategy and Action Plan (NSWMS 2009-2014) is reviewed and NSWMS (2015-2019) is developed. A notronal waste management communication strategy for 3R is developed. J. A notronal waste management communication strategy for 3R is developed. J. A notronal waste francomy. can answer wha dize, who are interviewed randomy. can answer wha 3R men. J. One darft legislation for 3Rs is drafted. J. One darft legislation for 3Rs is drafted. J. S. Stools in Greekelp 3R action plan 15-51 schools in Group 3R action plan 15-51 schools in Group are implemented in the interviewed and indiviewed and on the interviewed randomy. 	2.1 Different types of waste materials are disposed at propriate cells. 2.2 Annual operation plan is developed. 2.3.1 0 officers and operators are trained for landfill operation in Housian operators are trained for landfill 2.3.2 officers and operators are trained for landfill 2.3.2.5 officers and operators are trained for landfill 2.3.2.5 with the second secon		3-1 Good practices on 3R and landfill management itentified through the project activities are available 1 all provincial centers ar-2 Officers from each provincial government team good practices on 3R and landfill management.					- Proventing	Japanese Side		Provision of equipment and materials Provision of Regional, sub-regional and in-country workshops / training	Local cost support
gional Initiative on Solid					ement in the Pacific blid Waste	Outputs		Ourbut 1: 3R activities are practiced in Honiara and Gizo and Gizo	disposal system is improved in Honlara and Gizo.		Output 3: Lessons and experiences learnt are disseminated in Solomon Islands						Please see PO for details.			
t for Promotion of Re		nmary	c Region is enhanced.	pose	e Solid Waste Manag he Pacific Regional So	Priorities under	RS2010 Sustainable	Financing 3Rs/4Rs	Waste Disposal	Waste Collection Legislation	Awareness/Com munication/Educa tion	Capacity Building Environmental	Policy, Planning,	Solid Waste	Industry	system of RS2010	4			
Project Design Matrix (PDM) - Solomon Islands Project Title: Japanese Technical Cooperation Project SRISM)	Target Group : C/Ps of MECDM, HCC and Gizo Town	Implementing Agency: MECDM, HCC and Gizo Town Narative Sun	Sustainable management of solid waste in the Pacific	Project Pury	Human and Institutional capacity base for sustainabl Region is strengthened through Implementation of ti Management Strategy (2010-2015) (RS2010)	#		5	ç,	2-3	4	o N	4	- 1	00	*	ACTIVITIE			





Annex 8. Photographs of Fourth Joint Coordinating Committee Meeting



Caption: Permanent Secretary of MECDM delivering the opening remarks



Caption: Resident Representative of JICA delivering the short remarks



Caption: 4th Joint Coordinating Committee (JCC) Meeting Participants



Caption: Site Visit to Ranadi Landfill and proposed landfill office facilitated by Joe Kelesi



Caption: Site Visit to Zai Na Tina Organic Farm facilitated by Dr.Shane Tutua



Caption: Short Remarks by Ambassor of Embassy of Japan







Caption: Landfill Supervisor presenting the progress of Honiara activities in 2014



Caption: Chief Health Inspector presenting the progress of Activities in Gizo in 2014



Caption: LEAF Project Coordinator presenting brief background on LEAF



Caption: J-PRISM Project Manager presenting the Revised PDM /PO



Caption: NZ Project representative presentation on activities with HCC



Caption: Participants during the 4th JCC Meeting at Fairyland Restuarant

Attachment B-4 5th JCC Meeting Minutes







THE FIFTH JOINT COORDINATING COMMITTEE ON JAPANESE TECHNICAL COOPERATION PROJECT FOR PROMOTION OF REGIONAL INITIATIVE ON SOLID WASTE MANAGEMENT IN THE PACIFIC ISLAND COUNTRIES BETWEEN

SOLOMON ISLANDS GOVERNMENT MINISTRY OF ENVIRONMENT, CLIMATE CHANGE, DISASTER MANAGEMENT AND METEOROLOGY MINISTRY OF HEALTH AND MEDICAL SERVICES HONIARA CITY COUNCIL AUTHORITY WESTERN PROVINCIAL GOVERNMENT AND

SECRETARIAT OF THE PACIFIC REGIONAL ENVIRONMENT PROGRAMME JAPAN INTERNATIONAL COOPERATION AGENCY

King Solomon Hotel, Friday 20th November 2015

Director Environment & Conservation Division Ministry of Environment Climate Change Disaster Management & Meteorology Solomon Islands Chief Advisor J-PRISM PROJECT JICA Headquarters Tokyo **Japan** Resident Representative Japan International Cooperation Agency Solomon Islands Office Honiara **Solomon Islands**

Permanent Secretary Ministry of Health & Medical Services Honiara **Solomon Islands** Deputy Provincial Secretary Western Provincial Government Gizo Western Province Solomon Islands Chief Health Inspector Environmental Health Division Honiara City Council Honiara **Solomon Islands**







I. Introduction

- 1. This Minutes of Meeting is the official record of the Fifth Joint Coordinating Committee Meeting (herein after refer to as 'JCC') held on Friday 20th November 2015 for the reporting on the progress and achievements of pilot project activities both in Honiara and Gizo, for the approval of the Project Design Matrix or Plan of Operation and to update on the next steps after the J-PRISM Project. The list of meeting participants is find attached (refer to Annex 1).
- 2. The Ministry of Environment Climate Change Disaster Management & Meteorology (MECDM), Ministry of Health and Medical Services (MHMS), Honiara City Council (HCC), Western Provincial Government (WPG) and Gizo Town Council (GTC) co-organized the Fifth JCC in Honiara, Solomon Islands. The JCC was supported by Secretariat of the Pacific Regional Environment Programme (SPREP), Japan International Cooperation Agency (JICA) and the Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM/JICA).
- 3. The Fifth JCC Chairperson was Mr. Joe Horokou, Director of Environment and Conservation Division, Ministry of Environment Climate Change Disaster Management and Meteorology in the absence of the Permanent Secretary. The rapporteurs included Ms. Judith Damilea, Ms. Ella Rizwold and Ms. Jully Kalamana from Honiara City Council and Western Provincial Government respectively. The facilitator was Mr. Jimmy Hilly from Ministry of Health and Medical Services.
- 4. The JCC was attended by 45 participants comprising of representatives from Government line Ministries, Non-Government Organizations, Donor Partners, International Organizations and regional organizations. Some of the representatives that were supposed to be part of the JCC (19 participants) did not turn up for the meeting.

II. Opening Session

- 5. The meeting began with words of welcome by the facilitator, Mr. Jimmy Hilly and an opening prayer was said by Mr. Bobby Patterson.
- 6. The Permanent Secretary of Ministry of Health and Medical Services, Dr. Tenneth Dalipanda, gave the opening remarks, acknowledging the presence of all the participating stakeholders of the Fifth JCC Meeting. He continued to acknowledge the Government of Japan through JICA for their contribution in duty and support towards the project in capacity development in country and in the Pacific region. He stated that the Ministry of Health and Medical Services has received a lot of benefit from the training conducted in Japan, in the region







which empowered staff from national and provincial level to address waste management in the country. He also mentioned that dialogues being made between counterparts in Honiara in processing incinerator for National Referral Hospital and other provincial centres. He thanked the local counterparts for creating good spirited team over the past years and do hope the same is maintained for the coming years. He also congratulated local counterparts from Honiara and Gizo for taking the challenging tasks to address solid waste management in the country for the past five (5) years. He stated that from success stories and challenges faced by the project, he hoped better strategic plans were developed to improve solid waste management. He continued to state that in order to move forward in sustainable solid waste management, it is necessary to ensure the legislation are developed, reviewed and to put in place the infrastructure and operational management system, in addition to conducting the awareness activities on solid waste management. He highlighted that the Ministry of Health and Medical Services would support waste management services, focusing to the provincial level to improve service delivery for 80% of our population, and is pleased to know that the J-PRISM also heading the same direction. In his final statements, he stated that solid waste management is a national issue and so called on the local experts to assist the provinces and influence the solid waste management for a better future and healthy islands.

7. The Resident Representative of Japan International Cooperation Agency, Mr. Kyoji Mizutani also delivered short remarks at the opening session. During his short remarks, he introduced himself to all stakeholders and extended his sincere appreciation to all participants for their contributions. He then briefly highlighted that J-PRISM is a five (5) year technical cooperation project which commenced in 2011 and has been tackling solid waste management issues in Honiara and Gizo, aiming at two main outputs (i) Ranadi landfill improvement and (ii) Dissemination of 3Rs activities. He acknowledged the counterparts for the continuous effort shown from the tangible outputs of the projects. He mentioned he is pleased with Ranadi landfill rehabilitation which started this year with less environmental impacts. In terms of awareness, he stated the final awarding of the Eco-School Program was completed and you can see improvements in the school's environment. He emphasised one of the main achievements the J-PRISM established is good team work which was led by the Ministry of Environment Climate Change Disaster Management and Meteorology with Ministry of Health And Medical Services, Honiara City Council, Provincial Government, Non Government Organization and private sectors to tackle the issues on solid waste management. In addition, he also acknowledge the strong collaboration between SPREP, LEAF, New Zealand Government and Rapid Employment Project (REP), the Embassy of Japan, and JICA, including JOCVs for supporting such activities, as solid waste management become one major challenge for the country. He also recognized that Gizo too







has improved a lot from J-PRISM project through their hard work on solid waste collection system at landfill with the only tractor and the attachment JICA has provided. It is a significant progress for Gizo team, as they introduced the new collection system and returning system for aluminum cans from Gizo to Honiara. Furthermore, he highlighted the Melanesian workshop held in August 2015 hosted by the counterparts from the Solomon Island. Participants from Papua New Guinea and Vanuatu were invited. The workshop is a big event which brought all three countries for discussion on improving solid waste management in each three country. He then expressed this Fifth JCC as the last meeting and it's important for all counterparts to share their achievements and outputs of J-PRISM, and to identify challenges and way forward. He believed that this comprehensive activities shall contribute to the capacity development for officers in charge thus, he encouraged keeping close collaboration with all stakeholders and private companies to work together for the improvement of solid waste management in the country. In his last statement, he said waste management is not an easy target to achieve over a day but a long enduring duty and it's up to the people of this country to take responsibility for the future, with the continuous efforts to make the dreams come true. He concluded by expecting all participants to have fruitful discussion as this meeting which is fifth and final meeting for JCC meeting for a better, cleaner and healthier future.

8. The official key note address was given by the Director of Environment and Conservation Division of Ministry of Environment Climate Change Disaster Management and Meteorology, Mr. Joe Horokou. In his key note speech, he began by addressing the officials, guests and participants to the fifth JCC Meeting. He highlighted that he is honored to attend the fifth JCC and final meeting and to see a lot of achievements over the years since the J-PRISM project started in 2011. He also highlights a lot of challenges in the implementation of this program. He stated this fifth JCC meeting is to talk over the project achievements and to draw lessons for future presentation of solid waste management programs and its timeframe. He highlighted that J-PRISM was initiated by MECDM, JICA, MHMS, HCC, and administration officers of Western Provincial Government and funded varies aimed to improve solid waste management to waste minimization and the preservation of dumpsite in Honiara, and Gizo as well as other sites to be expanded. He said that he is pleased to announce the projects have made solid foundation for waste management and have achieved good results. He also highlighted some achievements and challenges encountered in the project. He concluded by wishing all successful discussion and sited.







III. Agenda Items of Discussion

Agenda Item 1: Results of Terminal Evaluation

9. Mr. Akihiro Osada presented a Power Point presentation on the Results of the Terminal Evaluation (Annex 2). He began greeting all participants and briefly explained the two points he would present. He mentioned that this fifth JCC meeting is important moment to share their output and way forward.

First, he briefly explained that J-PRISM is a technical cooperation project under JICA commenced in 2011 and will end on 1 February 2016, targeting eleven (11) Pacific Island Countries including Solomon Islands. The J-PRISM target areas in Solomon Islands are in Honiara and Gizo. Then, the counterparts are from MECDM, MHMS, HCC, Gizo town council and Western Provincial Government. He stated the project targeting three outputs ;(1) 3R (Reduce, Reuse, Recycle) activities for Waste Minimization, (2) Landfill improvement in Ranadi, which is managed by Honiara city council and also supported by MECDM. The Gizo landfill is managed by Gizo Town Clerk, Mr. Derald Michael and Gizo Counterparts & (3) Dissemination of Lessons Learnt to other areas.

Secondly, the results of Terminal Evaluation was explained, which was conducted in August this year from Japan. They basically evaluated the achievements of all project sites during past four and half (4.5) years through their observation and the interview with counterparts. He then gave a brief explanation and an example of how they evaluated the activities under outputs and its indicators. According to the evaluation team, most activities under the output one (1) and two (2) were mostly achieved, while output 3 was partly achieved but was likely to achieve at the end of this project. The project purpose, which is "Human & institutional capacity will be enhances", was also mostly achieved. He mentioned the rating was done in four categories that are "fully achieved", "mostly achieved", "partly achieved", and "not achieved". Based on the results from the evaluation team, all activities are relatively good, then all the outputs were evaluated as "mostly achieved".

He continued to briefly explain some positive impacts of the J-PRISM project which includes creating a position for the landfill supervisor, where Joe Kelesi was recruited in 2014. He said that creating such a position support in achieving goals. Another achievement he mentioned was that waste audit extending outside of targeted areas, which was initiated by the MECDM and supported by counterparts from Honiara and Gizo, as it is important to understand the baseline such as waste amount and composition. In addition, another impact is introduction of stakeholder meetings held monthly to share and exchange opinions.






Furthermore, Gizo introduced the return system for aluminum cans as positive initiative since Gizo itself did not have the capacity to do a recycling. The Gizo counterparts tried to collect, pack and transport to Honiara the private company (alpha metal). The last impact he highlight was post disaster waste management, so called the J-HOPE project. It was formed during the flash flooding in Honiara in April 2014. He highlighted that during the disaster we could expect lots of debris which could also be a burden for the landfill in terms of the waste capacity. He suggested that if J-PRISM project continues, these impacts may be considered to utilize the lessons learnt for the future programs.

He then stated some recommendations made by the evaluation team mission. There are four points to be considered. At first, he encouraged to continue promoting an interaction with stakeholders. In terms of resources, this may apply to share the responsibility either with private sectors or NGOs, and to strengthen communication & coordination between Honiara and Gizo counterparts. He encouraged continuing interactions between these two counterparts and other counterparts as well. From the sustainable points of view of the project, he highlighted to continue taking an initiative for the community programs, the eco school program, the waste collection system to be secured of funds and resources. He stated that it is important to secure budgets and human resources to keep it moving. Another point is the medical waste and sludge management at the landfill which needs a special attention from Solomon Water and National Referral Hospital. In his last slides he encouraged HCC to disburse an allocated budget for the project on time. He mentioned that currently waste management activities is dealt by the Environmental Health Division and Works Division of HCC, but if HCC has established a Waste Manage Division, then he believed that the division could support a lot in the implementation of activities. He concluded by stating the need for the program to continue and improve for the solid outstanding activities, and to introduce new activities.

Agenda Item 2: Progress of Honiara

10. Mr. Joe Kelesi, a Landfill Supervisor of Honiara City Council delivered a presentation on the achievements of Honiara activities particularly for the Eco-School Program, Panatina Valley Community project and Ranadi Landfill rehabilitation and management from 2011 to 2015 (Annex 3). He highlighted the presentation would cover activities under output 1, 2 and 3. Secondly, he highlighted the recommendations given by the evaluation mission team. He stated that most recommendations were presented by a JICA expert, but would comment further more on the progress.

Under the output 1, or 3R activities, he began by presenting the Activity 1; Eco School Program achievements from 2011 to 2015. Achievements includes school surveys







conducted in 2011 and 2012, school teachers workshop in 2013, initiation teachers workshop conducted by counterparts from Nadi Town Council, Fiji in 2014 launching of eco school program, look and learnt tours, cleanup activities, organizing nature games and contracted refuse collection for schools, and two incentive awards held for mid evaluation and final evaluation in 2015. He continued with slides showing pictures of implementation of activities. He also mentioned that during the awarding the J-PRISM team has chosen its model school and special trainers for schools activities.

Activity 2; Panatina Valley Community Solid Waste Initiative; he highlighted the activities in this pilot site were started in 2014 with community, followed by a baseline survey, establishment of a community subcommittee, an official launching of pilot project and installation of waste bins stands for households. The demonstration and illustration of composting in 2015 were conducted with the house to house awareness, and installation of billboard and two installation of 2 composting boxes.

Activity 3; Eco Bag Project is to give an alternative to plastic bags. It was started in 2014 following a survey conducted in the central Honiara market by volunteers from MECDM. Another achievement is the stakeholder's consultation was held for the development of eco bags after competition, engagement of local women to sew eco bags and performing of additional bags.

Under the output 2; Waste disposal system is improved; from 2011 to 2013 he mentioned that not so much was done at the Ranadi disposal site. Its first achievement of the rehabilitation in Ranadi landfill was the topography and environmental survey conducted by MECDM. Secondly, a demonstration of rehabilitation was conducted and a rehabilitation plan was developed. In addition the expansion and permission of land around the Ranadi disposal site was done. After the flash flooding in 2014, a post-disaster waste management project, so called J-HOPE, was conducted with the collaboration of the related donor partners, and the cost sharing between MECDM, MHMS and HCC were done. The rehabilitation was schedule, and the application for a grass-root funding for the administration office with a training center at site was made and its construction was completed. The procurement on the construction of warehouse for the pet bottle storage by LEAF project was done in 2015. He highlighted the rehabilitation of the Ranadi disposal site is now completed, and the leachate pond with other necessary connecting activities are also completed except a few minor activities yet to be implemented. He mentioned that machinery for the landfill is expected to arrive in December, 2015. He then extended his appreciation for Mr. Andrew and Mr. Richard for their great support. He continued to highlight that the training center at landfill has also benefited for students touring and doing







research at the disposal site. The center gave first hand information on the current situation from household to the landfill at their early learning stage.

Under Output 3, Dissemination of lesson learnt in Solomon Islands; The waste management team from MECDM conducted waste management workshops and a waste audit in Munda, Noro, and Choiseul and Isabel provinces. The results will be complied, and the report is expected to be launched in 2016. For Eco school and clean school program, he highlighted 10 schools in Honiara and 5schools in Gizo are currently promoting 3R activities. In addition dissemination of booklets, brochures, leaflets and posters were provided to provinces during workshops. Such Premiers conference also contributes ideas to improve such methods for disposal site and waste management activities. The establishment of solid waste management program including the installation of bins and the improvement of collection system were launched in Taro and Buala in collaboration with private companies for assistance.

Part 2; Recommendations from Terminal Evaluation Mission; Mr. Joe mentioned the outstanding activities that are yet to be completed includes to finalize analytical waste characterization survey, to compile the progress of analyzing waste audit and to launch it in 2016. Also the rehabilitation of Ranadi landfill should be completed. He also announced the completed report for the incoming waste survey is available. On the other hand, a full-scale time and motion study is not conducted yet. Other activities including preparing an operation manual for Ranadi landfill and organizing trainings for landfill staffs using the manual should be implemented. Currently the manual is in a drafting stage and it will be finalized on 23rd November 2015. Also the operation and management plans in Randi landfill in 2016 will be developed and funded by HCC with the promotion of the interaction with stakeholders such as waste pickers. Some meetings are held with waste pickers to make awareness for them of their safety and proper operation. The coordination and communication between Honiara and Gizo counterparts for ongoing activities should be strengthened. The multi-stakeholders' national committee for solid waste management should be established and it should be utilized for the various objectives from the national strategy review plan. It is necessary to incorporate 4 initiatives on waste management into regular program of respective responsible organization including budget and human resources, in order to continue with eco school program, involving four (4) schools along the Mataniko river; to pilot waste segregation at communities; to continue with distribution of eco bags; to conduct waste audit in Auki, Tulagi and Kirakira in 2016; and to conduct followup workshops in Noro, Buala and Taro. There are some points to be addressed: consulting Solomon Waters and National Referral Hospital for sludge and medical on proper disposal of







their waste at appropriate cells- currently, ongoing discussion was made with NRH for incinerators; disburse budget allocation for solid waste management activities on time. Lastly he stated a need to establish a waste management division within HCC, which is under discussion. He then concluded by stating strong coordination with MHMS, MECDM, and other relevant stakeholders to alien, harmonize and review strategic plan and National Environmental Health Strategy 2016 to 2020 and National Waste Strategy 2016 to 2025.

Agenda Item 3: Progress of Gizo

11. Mr. Naoya Ueno, Ms. Margaret Moveni and Mr. Derald Michael all took part in updating the progress of achievements in Gizo (Annex 4 and 5). Mr. Ueno began the presentation highlighting the four (4) activities under output one. First, he highlighted Recyclable Returning System which started in May 2015 in collaboration with a local buyer and a recycling company in Honiara. He mentioned that several shipments weighted 3,200kg were transported to Honiara with total expenses of \$11,000. The counterparts supported it by providing transportation and equipment, as well as raising the awareness by radio. He also mentioned some challenges were faced with transportation and shortage of storage bags for a returning system of aluminum can.

Secondly, he highlighted zoning of community activities. The achievements include youth organizing cleanups, house to house awareness and establishment of community committee. The counterparts have the challenges of inadequate human resources/shortage of manpower to implement the program and lack of ownership of program. Therefore, recommendation highlighted was for the community to take initiatives supported their by counterparts.

12. Third, the clean school program was presented by Ms. Margaret. She highlight five schools are currently participated, and they have challenges with a lack of manpower to monitor the activities, inadequate equipment/tools to sustain activities, and no waste management team working together.

Fourth, she highlighted activities on a waste audit and a time and motion study conducted in commercial and households in slides.

Under output 2, Gizo counterparts have developed a master plan for the disposal site in Gizo and an initial rehabilitation started in August 2012. The lessons learnt by Gizo team was to maintain the current good practices, awareness and finance. However, they also faced some challenges.

13. Then, Mr. Derald highlighted the way forward in the area of solid waste management in Gizo. Another important area he mentioned was a new collection system in Gizo town. With the only tractor and its attachment, they did improve a waste collection service by installation of bins stands and setting of collection stations. He also mentioned a feature of types of wastes







is problematic in Gizo, and he highlighted their plans to improve these problems in the future.

Agenda Item 4: Presentation and Approval of Project Design Matrix/Plan of Operation

14. The JICA Expert presented the PDM/PO and suggested some changes/modification in terms of its goals and objectives. Some indicators were moved and modified in accordance with outputs.

Regarding the indicator of the overall goal, green waste at market to landfill should be reduce by 50% in 2018, while the proportion of exported aluminum cans should be increased by 5% in 2018, compared to 2015.

- 15. Dr. Shane Tutuo, managing director of Zai Na Tina, suggested that the green waste at market to landfill could be reduced by 100% with a shredding machine.
- 16. Mr. Richard Jones, works advisor of HCC, asked if it is possible to get the prize for a shredding machine for that option and asked who will pay for that machine.
- 17. Ms. Rosemary, chief environment officer, MECDM, responded by stating most of funding activities were shared by counterparts from MECDM, MHMS and HCC.
- 18. All agreed for green waste at market to be reduce at 50% as the indicator of the overall goal.
- 19. The Chair finally endorsed the Honiara Plan of Operation under the J-PRISM and also took into a consideration of the comments, and acknowledged the participation of all stakeholders into the discussion.

Agenda Item 5: Next Steps after J-PRISM Project

20. Ms. Rosemary highlighted most of the activities in the J-PRISM will be ongoing and also will be expanded to other proposed sites; the regulation for a eco bag system and also Ranadi landfill needs to be developed; Producing and dissemination of more posters and leaflets, and making more awareness to other provinces are ongoing as well; and waste audits reports need to be launched in 2016 (see Annex 6). She also emphasized some cross-cutting activities faced by projects and also a need for establishing a waste management multi stakeholders national coordinating committee.

Agenda Item 6: Summary and Recommendations

21. Mr. Shiro Amano, Chief Advisor of J-PRISM, mentioned that J-PRISM would come to an end, appreciating all the activities done by the good collaboration of Solomon counterparts. He referred to the good practices observed during his visit at Ranadi landfill. He presented that reuse of used tires and construction debris was one of the good practices to utilize the existing resources; it was also found out that the rebar was attached to the rim of the drums







for gas vent pipes installation, which would make the set-up of additional drums easier. He said that there were some points to be improved, such as the waste dumped in the side ditch. He emphasized that it is important to find out the good practices and to seek the better ways by applying the concepts of "Simple, Clever, Low cost", as was observed in Ranadi landfill.

IV. Closing Session

- 22. The Fifth JCC meeting was officially concluded by Deputy Provincial Secretary of Western Province, Mr. Patrick Toiraena.
- 23. The meeting was closed with a word of prayer by Gizo Town clerk, Mr. Derald Michael followed by lunch at 12 noon.

Attachment B-5 Newspaper Articles



Figure B-1 Launching ceremony for Eco school program

(June 26, 2014, Newspaper "Solomon Star")



Figure B-2 Melanesian solid waste management workshop (August 6, 2015, Newspaper "Solomon Star")



Figure B-3 Melanesian solid waste management workshop (August 6, 2015, Newspaper "Solomon Star")



Figure B-4 Melanesian solid waste management workshop

(August 6, 2015, Newspaper "Island Sun")



visit to the Ranadi dump site i, Bast of Honiara to learn about waste management. During the visit the students to have undergone

about waste management at Ranadi disposal dite. This is one of the JICA volunteer's activities aiming at raising awareness of covironmental problems in Honiara.

Hanako Yasuda a JIC, volunteer and Joe Keles the Landfill Superviso for Honiara City Counci within the Works Division hosted the students.

officers told the students how importantitis to know about waste management and concept of 3R (Reduce, Reque, Recycle). The students were briefed at Japan's Grassroots Proquent to landfill tour to see how lifer and rubbish are accumulated from the city. The program is part of

a mutual cooperation be tween Japan and Solomor Islands. Reports said, the students have learnt a lot from the axemption



Figure B-5 Utilization of Ranadi landfill training center (September 19, 2015, Newspaper "Solomon Star")







Figure B-6 Opening ceremony of Ranadi landfill (February 20, 2016, Newspaper "Solomon Star")

Attachment B-6 Newsletter

CLESH NEWSLETTER

E-waste

INSIDE THIS ISSUE:

Panatina Valley Commu-1 nity SWM House-House visit

Mataniko Clean Up and 2 Rehabilitation Program Community Awareness and Consultation

Wastes Pickers Survey 2 Conducted at Ranadi

3

International Youth Day Gizo Town SWM

Gizo Community SWM 3 Workshop

HCC takes the lead in 4 cleaning up the Underground Passes

Mataniko Program Assists 4 Communities with Waste Bins

Gizo Town Communities 5 Zonation Launching

Eco-Bag Awareness Con- 6 tinues at Honiara Central Market

St.Nicholas High School 6 Creative Art Fair

VOLUME 7, ISSUE I ER. 2014 JULY ESH Newsletter Welcome to C **Panatina Valley Community** SWM House-House Visit

Solid

Hazardous

The Household Collection Point and Waste Segregation Pilot Project was initially implemented in 2013 as one of the second 3Rs Pilot Project for Honiara. This Pilot Project was developed to focus on improving the waste collection schedule for non-biodegradable wastes in a selected community in Honiara city. Earlier in February this year, the pilot project was officially launched, however, due to the recent flash flood-

ing in Honiara and parts of the country has halted some of the planned activities one of which is the house-house. visit and demonstration at the community.

Liquid

Chemical



Caption: Honiara J-PRISM Coun-As such, a four days house to house terparts engaged in Panatina Val-



house visit

The project's purpose is for a consistent and better understanding for an improvement of collection point and waste of non-biodegradable segregation wastes in Panatina Valley Community.

awareness visit was conducted on July ley house to house visit. 19 and 20; July 26 and 28, 2014 at Panatina Valley Community. The Honiara J -PRISM Counterparts coordinated by the Honiara City Council under the Environmental Health Division conducted the house to house visit. Three sets of posters on "how to do composting", waste segregation" and "what is good and not good for a compost" were distributed to more than 40 households in the community.

Demonstration on how to do a compost Caption: Christina explaining to and how to separate waste will be con- residents at Panatina Valley about ducted at a later date at the Communi- the posters during the house to ty.

CLESH Quarterly Newsletter Mataniko Clean Up and Rehabilitation Program Awareness conducted

the Ministry of Environment Climate Change Disaster completed. She urged the communities living close to Management & Meteorology has kicked off the much the river and river catchment to work closely with the needed Mataniko River Cleanup and Rehabilitation Ministry and other stakeholders. Program was started in June and is ongoing until 2020.

The volunteers contracted under the Ministry of Envi- form Honiara City into a better and cleaner place to ronment Climate Change Disaster Management and live and work. Meteorology were designated to carry out the community awareness along the Mataniko River catchment. So far seven communities have been approached to carry out the awareness program.

Debra Potakana who is the coordinator of the Mataniko River stated in an interview with the Island Sun newspaper that the awareness program is important for the project which will benefit the community and Solomon Islands Government as a whole. She stated that the next big step will be to conduct Baseline Surveygathering information to find possible strategy to im- Caption: Mataniko Clean Up and Rehabilitation plement the project. The second phase of the project Program Awareness raising in communities

The Environment and Conservation Division within will be carried out once the awareness program is

The completion of the program will contribute to the much needed effort of Honiara City Council to trans-



Waste Picker Survey conducted at Ranadi Dumpsite

Ranadi dumpsite on the 18th, 19th and 21st July 2014. lect information and register the population of waste The stakeholders involved in conducting this survey pickers present at the dumpsite. This is important as it includes the Honiara City Council, Ministry of Envi- provides vital information which is relevant for future ronment Climate Change Disaster Management & planning and policy making by the Honiara City Meteorology and Japanese International Cooperation Council as the authority responsible for the dumpsite. Agency / JICA Expert team.

conditions, understand the waste pickers needs and Project. A report will be compiled after the study . identify the future role of waste pickers in the rehabili-



A three days waste picker survey was conducted at tation of Ranadi dumpsite. The study also aims to col-

The survey was successfully conducted with the sup-The purpose of the study is to clarify the waste picker port from the various stakeholders under the J-PRISM



Caption: (Left) Michael Vaghi, Enoch Faabusu, Joe Kelesi, Jeffrey Gwai, Fred Fredly, Dylan Titiulu and Osada Akihiro who were involved in the waste picker survey at the dumpsite.

CLESH Quarterly Newsletter International Youth Day, Gizo Town Solid Waste Management

The International Youth Day, Gizo Town Solid Waste Management Zoning Community was commemorated on Friday 25th July 2014. The main objectives of the program was to:

- To tell the public people, what is SWM and what the SWM program is going to do.
- To show the public people, who are the zoning committee ٠ and leader as well as their responsibilities.
- Awareness of zoning activity in Gizo.

Gizo Hospital was the major sponsor for the program and the Caption: Youths from Gizo participating in activity has engaged different stakeholders and age groups the International Day held in Gizo

from around Gizo Town. The Gizo community youths actively participated in the program. Some of the lessons learnt and recommendations following the implementation of this program includes:

- Clean -up event activity prior to any major event. .
- Conduct awareness raising during any major event .
- Use of visual awareness materials such as posters .
- Involvement of schools in program .
- Need for more awareness raising programs in communities . in Gizo
- Proposed for a monthly clean-up program in Gizo Town .

The Gizo Solid Waste Management Team under the J-PRISM Caption: Public in Gizo took an interest in Project took the leading role in facilitating the program and the SWM Awareness materials displayed durmade it a success. ing the International Youth Day.

A four days workshop on Gizo Town Community Zoning Consultation on Solid Waste Management"

was conducted on 30/6/14 to 3/7/14. The workshop The workshop was funded by the Gizo Hospital operwas purposely implemented to:

- To gain the acknowledge of problems of solid Solid Waste Management team. . waste management in Gizo town
- To give the idea of solving solid waste manage-. ment problems and making healthy and friendly environment
- To target everyone in creating awareness on the . concept of waste minimization and 3Rs at home and community
- To understand zoning and collection systems in Gizo town
- To work on developing an "Action Plan" Gizo

town community level Solid Waste Management Program.

ational budget 2014 and was facilitated by the Gizo

Caption: Participants in the Gizo Community Solid Waste Management Workshop.







Gizo Community SWM Workshop

CLESH Quarterly Newsletter

Honiara City Council takes the lead to clean up Underground passes

The two underground passes in Honiara were recently opened for public access following improvement work being done to rehabilitate them into usable infrastructure.

On Sunday 10th August 2014 the RSIPF fire fighters, Honiara City Council officers and Rapid Employment Project volunteers from Koa Hill joined forces to clean up the two underground passes which are located near the Honiara Central Market and Point Cruz.

After the cleaning up session, the Council rehabilitated the underground passes by painting and installation of lights in the underground passes.

Following the re-opening of one of the underground pass near the Honiara Central Market, the council has provided security personnel at the site for public protection and overlooking the facility.

In an interview with the Island Sun, Chief Health Inspector of Honiara City Council emphasize that the idea is to utilize these important infrastructures as well as providing safe road-crossing for the public. He said Honiara City Council office is very supportive of the initiative as it will change the cleanliness of the Honiara Central Business District area.



Caption (a) (b): Officers from the RSIPF, HCC, REP & Volunteers who helped out in the clean up at two underground passes on Sunday 10th August 2014.

ataniko Program assi **C**(0

The Mataniko Clean Up and Rehabilitation Program recently assists the Mataniko communities with 40 drums to be distributed along Mataniko River catchment.

The drums were painted with the Honiara City Council color code as mandated under the Honiara Litter Ordinance 2009.

The provision of these drums to the community is part of the awareness program under the Mataniko Clean Up and Rehabilitation Program for proper waste disposal or management along the Mataniko River.

The next set of activities expected to be implemented this year is the implementation of baseline studies fol- Caption: Waste bins funded by the Ministry of Enlowed by provision of a contracted waste collector to vironment for the Mataniko Catchment Communities help improve the waste collection service in the area.



Gizo Town Communities Zonation Launching

Gizo recently held the launching of Zonation of Gizo Town communities on Thursday 24th July 2014. A team consisting of the J-PRISM Project Manager and JICA 3R Expert have the opportunity to be part of the official launching program.

The day's event involved school teachers, Gizo town residents, youths, private sector and various Officials from the Western Provincial Government, Ministry of Environment Climate Change Disaster Management & Meteorology and Japan International Cooperation Agency/ JICA Expert Team.

During the official launching program, the Deputy Provincial Secretary of the Western Provincial Government presented ID cards to the twenty-nine members of Gizo SWM Zonation. The Gizo zonation was purposely organized to improve and promote 3Rs which will try to address timely waste collection system in Gizo town.

This program was organized for these followings objectives

- To start off zoning community SWM program
- To show public people what is SWM and what SWM program is going to do.
- To show public people who is the zoning committee and leader. Also what they are going to do.

One of the recommendations from the program is for engagement of political and administration level through information sharing, strengthen stakeholder networking in cross-cutting sectors and to monitor the program by the end of the year. This program is also expected to continue into the next fiscal year.



Caption: Gizo Solid Waste Management Zoning Committee singing the Gizo SWM song.



Caption: Chief Environment Officer, Ministry of Environment giving a short remarks during the official launching program.



Caption: Patrick Toiraena, Deputy Premier of WPG giving the keynote remarks.



Caption: Presentation of ID cards to community SWM zoning committee representatives.

Attachment B-7 Posters of Waste Segregation for Public Awareness





Figure B-7 Posters for public awareness activities

Attachment B-8 Monitoring Sheets for Waste Segregation Pilot Project

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		Yes 10 point			Yes	Yes	Yes		Yes	Yes	Yes		Good 10 points 7 p		Good	Good	Good	Good		
Name of the Household Head:			PART1: Monitor the Improvement by Interview	1. Understanding of 3R initiatives	1.1 Do you practice waste separation at home?	1.2 Do you practice composting at your household?	1.3 Do you collect alluminum cans at your household?	2. Understanding of Rubbish Collection	2.1 Do you know the schedule of the rubbish collection?	2.2 Do you know the name of persons who collect the rubbish at Panatina Valley Community?	2.3 Do you know the contact to use when you have any problems on waste collection (contact of HCC or Mathew Riibako)?	SUB TOTAL (1)		PART2: Monitor the Improvement by Observation	1 Waste separation: Only inorganic waste is discharged in the rubbish bin.	2 Composting: They practice home composting.	3 Refuse Collection: They have a rubbish bin installed.	4 IEC Materials & Awareness: They use or put the posters distributed by the counterparts.	SUB TOTAL(2)	

Panatina Valley Community Monitoring Criteria

Date: Name of the Interviewer Household No.: Name of the Household He

Attachment B-9 Eco School Program Report



FINAL REPORT OF ECO-SCHOOL PROGRAM SOLOMON ISLAND JPRISM PROJECT



J-PRISM Honiara Counterpart final report of the Eco-School program 2012-2015 Compiled by Jerome .Enatoo-Eco-School coordinator-JPRISM Solomon Island

Introduction

Eco-School program was initiated back in 2012 after two officers from Ministry of Health and Honiara City came back from a training in Japan and an officer from Ministry of Environment with a Volunteer from Japan came from Fiji workshop. They came back from training with their action plan and merged them together and called it Eco-School for cleaner Solomon Island.

This program was mainly geared to develop actions towards a clean and healthy Environment for selected schools in Honiara and to provide provision for a wider interaction with schools on area of waste management, landscaping, beautification etc.

Furthermore, this plan is intended to provide the a broad framework and a clear understanding of the work program to be undertaking by Environmental health division in collaboration with internal stakeholders such as Ministry of Environment, Ministry of Education (Honiara city education division),National curriculum, Ministry of Health, and with the help of JPRISM.

This understanding also expresses that, while Honiara city council will be working with its schools to capture the goals and objectives, there is considerable responsibility required of related internal stakeholders for the achievement and improvements of recognized SWM issues within its school for the sustainability of the program.

On this integrated approach, consultation with JICA, through Japanese experts, volunteer (Ms Hanako) currently working for Environmental Health Division Honiara City Council, have initially, supported the concept idea to have some input in terms of material cost to be donated from JICA for the program.

AIM & OBJECTIVITIES

- To raise awareness in schools for both teachers and students on the impact of SWM to health and Environment
- To advocate and educate schools to practice 3Rs and minimise wastes
- To encourage school teachers to learn 3Rs waste reduction by equipping them with 3Rs knowledge and skills
- To have schools engage in Eco-School activities

SCHOOL SURVEY

The survey was conducted by J-PRISM Team that includes HCC, ECD and EHD on the 9th of August 2012. Under the 3Rs pilot project, 10 schools have been selected in Honiara as improve waste managements at Schools. The environment and conservation division, Honiara City council and Environmental Health Division staffs are working closely with the school principals as they show positive response towards the projects implementation phase.

This survey was conducted at these following 10 selected schools: Mbokonavera primary school and Secondary School, St John Primary School and Secondary School, Tamlan primary School, Koloale School, St Nicholas School, Coronation School, Florence Young School, Mbua Vale School, Palm Drive School and Vura School.

From the survey undertaken, recommendation are highlighted to be significant for the school to involve in the project.

- Include both secondary and primary school in the 3RS Project
- Pit could be appropriate for waste non-recyclable tins
- The box proposed box for using green waste should be used for composting of all organic waste
- Paper waste can be utilizes as carbon source for composting or be reuse to produce other useful products.
- Set a site for recyclable aluminium cans at the school entrance.
- Schools to set up a 3Rs management plan
- In house school staff training on 3Rs and waste management.

From the finding, waste management especially waste separation at school is a good practice where children can be directly involved in minimizing amount of waste disposal. This can be done with primary and secondary school level.

Also schools have related subjects like science, social science, mathematics and Health towards environment are basis for utilizing waste materials such as organic, papers, plastics into useful learning objects. This is much applicable for preschools and primary school children.

School require recycling companies such BJS and Alpha Metal for collection of recyclable cans. Therefore, there is need for schools to develop an understanding with BJS and Metal in order to sell their recyclable, may be fortnightly depending on the volume generated.

Storage facilities are required for all schools for both primary and secondary of the said 10 schools for better management practices at school.

Composting can be improved at schools that have been practicing and also can be started with new schools. However, some schools may not have potential for composting.

All schools have a responsible person or team in cleaning the school environment. As such is relevant body, it is essential that they are aware of the importance of waste management practices and to monitor the progress of the project.

TEACHERS WORKSHOP

The teachers' workshop was conducted on September 2012 for all said 10 schools. Teachers were invited to attend the training .The Aim of the training is to introduce the Eco-School program for the schools.

Total of 10 teachers attend the training. It was highlight during the training for the teachers that waste management at school should be managed well in order for the student to have a clean healthy and conceive environment to live.

During the training each teacher have draft his/her action plan for their individual school. Their action plans was based on what is their problems on waste management.

From the training, Teachers have realised that waste management is one of key area they should consider every day at their schools. However, during the training teachers have express that such training and introduction of the program to the schools in Honiara is timely and a bonus for their schools and the country as well.

Again from the training all the teachers were urged to go back to their schools and start implement their action.

Another Teachers worship was conducted by the JPRISM counterpart on June 2013 and that was when invitation of two counterpart from Fiji Nadi Town Council (Nafiza and Premila) was invited to be part of the workshop.

The aim of the training is to involve the Nadi Counterparts to share their experience on clean school program and teach the teachers on how they successfully implemented the program.

About 10 teachers attend the training as well as all the counterparts. Training took 2 days which also included field trips to the Ranadi Dump site and to botanical garden to look and learn at one of the compost site which team was assisted by one of the JICA volunteer Ms Aiko.Suzuki.

From the field visit, teachers have learned about what was happening at the Dump site and a dump site supervisor explained about waste management how important is waste and dump site operation.

Workshop was successfully completed at the end of the two days and two Nadi counterparts were presented each teacher and counterparts some clean school Hand book as well as Solomon counterpart really thanks the Nadi counterparts.



LAUNCHING OF THE ECO-SCHOOL PROGRAM

Launching of eco-School program was conducted on June 2014 which we also invited all the representatives from each piloted school to attend the launching. Invations was also send out to all other working partners like National curriculum, HCC education division, Health and medical services, Ministry of Environment, metrology conservation and Disaster Management, Medias and all the counterparts.

The aim of the launching is to bring together all the schools, relevant ministries, NGOS and individuals as well as teachers to witness the day and have a fair idea of what is going on within the Schools regarding the project.

About 50 invited guests plus teachers, media personnel attend the launching. Director of Environmental health within the ministry Tom Nanau highlighted during his speech that this project is very vital to impart the message on solid waste management on teachers and students for they are the future generation of this country. It is also told the participants that its very important that such program is introduced in schools because this is where students can learn and practice what is learnt.

It was also called on teachers to work together with the ministry of health,Hcc and other stakeholders to reach out to students in this project to ensure this very important issue on waste management sinks into the children's behaviour and attitude for the betterment of this country.

During the launching teachers of those schools were presented with certificates for the trainings they undertook on solid waste management over the years.

SCHOOL VISITS

ECO SCHOOL PRORGAM SCHOOL VISIT REPORT

In June, 2015, the J-PRISM team visited eight (8) schools to follow up the progress of Eco School Program and to exchange opinions with school principals and teachers¹. Mr. George Moffat, a teacher from St. Nicolas School, joined the school visit and gave the presentation on their school activities, which really encouraged the motivate all the participants. After this school visit, the monitoring and the middle evaluation are planned under Eco School Program.

The outline of each school visit is as follows:

¹ The school visit at Lau Valley School was cancelled due to the time constraints and the bad access roads.

1. Kolale School

Items	Descriptions							
Date	June 2, 2015							
Participants (Name/ Position)	Koloale School 1. Nixon Caleb Ledea, Principal 2. James Gaula, Deputy Principal 3. Rebecca Eretoro, Agriculture Teacher 4. John Tom, Technology Teacher 5. John Sara, Class Teacher 6. Henry F Kalamani, Chairman, PTA St. Nicholas School 7. Moffat George, Primary School Teacher 8. Jerome Enato'o, EHD, Chairman 9. Hanako Yasuda, JOCV 10. Elizabeth Rudd, EHD JICA Expert 11. Akihiro Osada 12. Niika Hiraishi							
Pictures								
Observations	Principal do mentioned that now his management will support the eco- school program and look forward to work together with eco-school committee. They even have their own grounds man which also qualify in landscaping thus school will use him to do the landscaping of the school area. Teachers conclude that such program is very important for school setting and appreciate the JPRISM for that.							

2. Florence Young Christian School

Items	Descriptions						
Date	June 4, 2015						
Participants (Name/ Position)	Florence Young Christian School1. Principal (George)2. Paul Marite- Eco-School Teacher3. Beverlyn. Honiara Eco-School Teacher						
	 <u>St. Nicholas School</u> 4. Moffat George, Primary School Teacher 						
	 <u>Honiara City Council</u> 5. Jerome Enato'o, EHD, Chairman 6. Mercy IIU- JPRISM TEAM 						
	JICA Expert 7. Akihiro Osada						
Pictures							
Observations	Principal was so surprise that St Nicholas School now take the lead with the program. He mentioned that by looking through presentations, he's now support the eco-school program and will work close to the school committee to more on such environmental programs for his school. Paul Marite continued by requesting the City Council Health inspectors to carry out health inspection for the newly Chinese buildings opposite their school due to they all divert their waste water into the drain/stream.						

3. 3. Palm Drive School

Items	Descriptions
Date	June 9, 2015
Participants (Name/ Position)	Palm Drive School 1.Timothy- Palm Drive School
	St. Nicholas School 2.Moffat George, Primary School Teacher
	Honiara City Council
	3.Jerome Enato'o, EHD, Chairman
	JICA Expert 4.Akihiro Osada
Pictures	
	<image/>
Observations	For palm drive only the Eco-school teacher (Timothy) was attend the meeting due to all the teachers and head master have some activities to do regarding the school, so they all leave early. But the meeting was successfully completed. Timothy just informs us that so far so good the administration of the school really supports the program since it was introduced. He also mentioned that at moment they only concentrated in waste separation and cleaning the school compound. This was because they don't have authority to do other activities for example landscaping etc. he told us that the SDA (mission) have all the rights over the area so they can't do much. He just promises us that he will conduct the same presentation to the teachers and principal next day.

4. Mbokonavera School

Items	Descriptions							
Date	June 12, 2015							
Participants	Mbokonavera School							
(Name/ Position)	1. Naolyn Tana- Head Mistress Primary Division							
· · · · ·	2. Victor.Kafa- Class Teacher primary							
	3. Charlies Gordon. Maney-Class Teacher Primary							
	4. Mary.Lelly- ECE Teacher							
	5. Jimaena.Ulunga- ECE Teacher							
	6. Tina. Kanai-Class Teacher ECE							
	7. Faye. Sade- Assistance Teacher ECE							
	o. Gouwin. warannu- class Teacher Frinnary							
	10 Sam Ledia Class teacher primary							
	11. Beatrice, Signari- class teacher secondary							
	12. Julian Iteli- Class teacher Secondary							
	13. Luisa.Keoari-Class Teacher Primary							
	14. Cathrine. Miabule – Deputy head teacher Primary							
	15. Annison Wate-Class teacher Primary							
	(Plus other 9 teachers)							
	St. Nicholas School							
	16. Moffat George, Primary School Teacher							
	Honiara City Council							
17. Jerome Enato'o, EHD, Chairman								
	JICA Expert							
	18. Akihiro Osada							
Pictures								
Observations	For Mbokonavera, their principal also not attends the meeting due to some commitments but we so happy that about 23 teachers were attend the meeting. It was highlighted by the deputy head mistress and their career master that during first introducing program nothing have being done due to lack of support by the admin and teachers as well as school don't have fence the compound but now they have fenced the school area that it help them to do some activities related to eco school. The career master also asked the teachers and even informs us that from now they will form an eco-school committee and start to discuss the program. From observation they still not implement their action plan and even single bin not provided.							

5. Panatina Community High School

Items	Descriptions
Date	June 10, 2015
Participants (Name/ Position)	Panatina Community High School 1. Eric .Horimae- Eco-School teacher 2. Rosely .Upwe- Deputy Head Mitress 3. Tommy. Basi- Deputy Head Master 4. Ellen. Owa- class teacher primary 5. Hellen. Richie- Class teacher 6. Hellen.Naeri-class teacher 8. Moffat George Primary School Teacher
	 <u>Honiara City Council</u> 9. Jerome Enato'o, EHD, Chairman
Observations	Principal not attend during the meeting .only head mistress primary and other teachers attend. Head mistress thanks the JPRISM team for the timely and such good initiatives to introduce to the schools. For sure they already implement some of their action plan and she acknowledges her eco-school committee for their hard. Which resulted in even they already installed some bin stands in the school. She told during the meeting that they will contact a meeting with their principal and make feedback to him. Their only concern is waste bins to be provided by council and team. As well to do regular monitoring so that they don't lost out or to show that someone is monitoring their activities.

6. Vura Community High School

Items	Descriptions
Date	June , 2015
Participants (Name/ Position)	Vura Community High School 1. Richard. Sade- Eco –School Teacher 2. Loretta – class teacher 3. Ellen- class teacher-primary 4. Margaret-class teacher primary 5. Nicholas School 5. Moffatt George, Primary School Teacher Honiara City Council 6. Jerome Enato'o, EHD, Chairman
Pictures	
Observations	Principal also not attend during the meeting but he to mention during monitoring that he support this concept because it really contribute in cleaning the school environment shaping and targeting the mindset of the students And teachers to know where to throw their rubbish and care for their environment. He told us his office will continue support the Eco-School committee to continue with outstanding activities and lease with JPRISM team for any technical support in implementing their action plan. Richard (Eco-school teacher) complains and asks whether the school refuse contractor still work or not due to this month he's not collecting their waste. Contractor's mobile phone was given to them and clarifies the situation that the month of June &December not included in the contractors agreement that he suppose not to work for this two months. Otherwise the school admin support the program and look forward to do more next term. From observation general surrounding was clean, no littering, bins provided and there's a big improvement compare to before.

SCHOOL RESUFE COLLECTION AGREEMENT SIGNED

Since the schools also generated a lot of waste every day and request was made during the teachers' workshops, the Environmental Health Division have discussed and met with Honiara City council to contract a separate contractor for the schools for waste collection. Signing of the contract was done on 2st February 2015. This contractor was purposely to collect only the school waste and this was schedule for 3 times in a week especially Mondays, Wednesdays and Fridays.

The idea was to help the school in terms of waste collection. This contractor was responsible for all the schools in the city.

Contractor was paid at the end of every month with a payment of eight thousand dollars (\$8,000.00).

From this agreement all the schools really appreciated the HCC as well as the JPRISM counterparts for this timely initiatives and help.



BUS TOUR

Bus tour (St Nicholas College)

On 9th September 2015 we organised a bus tour for St Nicholas School as part of the first award. This was co-ordinated by Hanako and Jerome Enatoo of the Environmental Health division of Honiara City Council with the help of Mr Joe Kelesi of Ranadi dump site and the two staffs from St Nicholas College Mr George Moffatt and Head Master. A total of thirty students participated. The aim of the tour is to take the students to the dump site and Alpha Metal Company to learn about waste management and see for themselves what really happen at ranadi dump site also witness the activities took place at metal factory.

At the dump site students were taken to separate disposal sites and explain to them about types of waste disposed. Joe kelesi of dump site also brief students about waste management and waste management questionnaires also distributed to the student to answer during the briefing.

After dump site, students was taken to Alpha Metal to see the can recycling machine and was also brief by the local officer working at the company.

Students really enjoyed the tour because this is their first time to visit the dump site and the recycling factory.

Students also developed some findings and they presented to the whole school on 11th September 2015 during their assembly.

Attendees

- 1. Jerome. Enatoo –HCC
- 2. Hanako-Volunteer-Hcc
- 3. George.Moffat-St Nicholas School
- 4. Head Master- St Nicholas School
- 5. Joe Kelesi- Dump site



Bus tour Florence Young Christian School

On 16th September 2015, 38 students and two Eco-School teachers from Florence Young Christian School were taken to Ranadi Dump site as part of the middle year second Awards. This was facilitated by the Honiara City Council JPRISM counterpart Mr Jerome Enatoo. Students were taken to the Ranadi Dump site and Alpha Metal recycling company.

This aim of the tour is for the students to learn about waste management at the land fill ,see what types of wastes disposed, what are the pollutions and how the land fill was managed and to see the one of the recycling company how they deal with aluminium cans. They have received some lectures by a Dump site Officer Mr. Joe Kelesi on the waste management and given questionaries to answer while teaching.

From the land fill we took them to the Alpha metal Company which one of their officer Mr. Jimmy also give a talk and explained to the students what they doing with aluminium cans and other heavy metals. Students actually saw how the machine works by compacting the cans together. Teachers and students also make some understanding between the Company to come to their school to collect their aluminium cans as small income for their eco- School program.

Tour was successfully completed by works of thanks by Jerome Enatoo at the School around 11 O'clock AM and having some refreshment.

CLEAN UP ACTIVITIES AT SCHOOLS

Clean up activity also another organised program conducted for the selected pilot Eco-Schools in Honiara.

The aim is to involve the students to be participated in cleaning of their schools environment and also in the selected areas in the city. This is to motivate students to be responsible for the waste they generate every day, keeping the environment clean, and to have a mindset of cleaning their surroundings, and not to litter in the public areas as well as ownership of the town.

Numbers of schools have participated in the activity and this was conducted in certain parts of the city. More than 60 to 100 students were involved in this cleaning up at separate times. T-shirts were also given to students to wear during the day which also motivated them to participate more actively in the program.

Plastic bags and hand cloves were provided by the organisers (JPRISM counterparts). All waste collected was taken back to their own schools for the responsible School refuse collector to collect on the next day.
NATURE GAMES WITH STUDENTS

Nature game is one of the activity conducted by the JPRISM counterparts and one of the JICA volunteer Ms Hanako .it was part of the Eco-school program.

The aim is to involve the students to go outside of the classes and learn about different environment, feel, taste, smell, touch and hear the nature. And also for the students to expose themselves to nature in order to know what are the importance of nature.

Total of 10 schools were participated in the nature game at different times. This included St Nicholas Colleague, Mbua Vale School, koloale school, Vura School, Florence young school, Panatina School, Lau valley school Chung Wah School and Palm Drive School.

From the nature game students involved in many types of games which all about nature. Solid waste management awareness also conducted on site after all the games by counterparts and Ms Hanako.

All the students and Teachers from the participated Schools really enjoyed the games and they requested if we could continue with other Classes in their schools as well.



Middle Year Awarding

Eco- school Middle year awarding and Evaluation 2015

On 7th of September Eco-School Middle year awarding and evaluation was held at St Nicholas College. This was organised by the Eco-School program co-ordinator Mr.Jerome .Enatoo of Environmental Health Division of Honiara City Council with the help of all JPRISM members. Around 60 people attend the program and most of them are students, teachers, principals, invited guests and other relevant people.

All pilot Eco-School teachers have attend except Koloale School. The main aim behind the program was to gather the schools together to witness the presentation of awards to the most clean and active school and presenting of certificates to the participated schools to encourage them to continue with program.

Director of Environment and Conservation Mr. Joe .Horokou who was officially open the program by delivering a short speech and Mr. Bobby Pattson of Ministry of Health, Environmental Health officially close the program by closing remarks. Head mistress of St Nicholas School also highlight the good practices and encourage others schools to continue with the program. Rose Mary, Apa (MECDM) and John Labu (WORKS HCC) present the Awards and Certificates to the Schools. St Nicholas College awarded with the first award which is a Trophy and second run up was Florence Young Christian School which given 50 small bins for separation of waste in their classes.

Program was successfully close with small refreshment.

List of attendees

- 1. Joe. Horokou-Director Environment, Conservation and Metrology
- 2. Rose Mary Apa-MECDM
- 3. Wendy Beti-MECDM
- 4. Bobby Pattson MHMS
- 5. Jimmy Hilly-MHMS
- 6. John. Labu-Works/HCC
- 7. Jerome Enatoo-HCC
- 8. Mercy IIu -HCC
- 9. Tina .Onahikeni-HCC
- 10. Elizabeth .Rudd-HCC
- 11. Hanako-HCC
- 12. Agata-HCC Education division
- 13. Richard.Sade-Vura School
- 14. Eric-Panatina school
- 15. Timothy-Palm Drive School
- 16. Paul Marite & Beverley-Florence Young School
- 17. Henry. Bruno-Mbua Vale School
- 18. Head mistress-St Nicholas School
- 19. Head master-St Nicholas School



Challenges

From the observation throughout the program, even though we have successfully completed some of the activities and achieved some achievements. The program have faced a lot of challenges especially the implementers which is counterparts and the schools.

Most of the times we have witness and observed that even we worked very close to the teachers and having good discussion, they sort of have lack of participant towards the programme. Especially head teachers/principals. They don't even helped the responsible teachers and spare their times to discuss with teachers responsible. This really a setback for the schools to continue with whatever action plans they have for the year.

However, one of the setback was that there lack of technical knowledge on compositing at the starting of the program. Teachers lack of knowledge on some of the proposed activities suggested by the counterparts.

Teachers and school administration also not yet have sense of ownership of the program not like other schools where they really support the whole program.

On the other hand, some teachers also expressed that, it's like an extra work for them where as they already many on their hands. This also applied for the counterparts that they sort of very busy with normal duties rather the projects.

Another challenge encountered was regular monitoring of the activities by counterparts. They sort of relaxing when experts were out of the country. Doing their other duties due to lack of manpower. From this lack of monitoring teachers used be relax as well with their activities by delaying the process.

Poor attitude and no better understand of the current solid waste management problem in Honiara. It also contributed towards the eco-school program .populace still far behind of information on waste management that result in poor participations on all waste management activities both in schools and communities which also contributed to lack of commitment towards the program.

LESSON LEARNT

Even though we have faced a lot problem and challenges during the project. We have learned a lot of new things both in the country and outside. Many of us have gained a lot of knowledge and skills from training outside of the country.

Like for the school we have learnt and noticed the some of the schools have improved in terms of eco-school activities. They have benefits from the project by having their reliable refuse contractors which very updated with waste collection three times in a week. School environment now very clean compared to before. Waste bins were provided for schools.

It's sort of changing the mindset of teachers and students where and right places of disposing certain types of waste in the separate containers/bins.

Some of the schools now having a mindset that they also played an important role in solid waste management in their schools. They came up with a lot of their own way of making useful resource out of waste they generated in their schools.

It also create a learning environment for others in school community, whereas even cleaners and shop keepers actually know how to separate waste and earned income from waste they generated each day.

Also most of the Parents have learnt a lot from their students at home especially about waste management. Students teach their parents on what we took about at school especially on 3RS.

Counterparts also experienced that time management is very important when conducting any activity. And this was due to working with the Japanese counterparts. Time is important if you missed a minute the whole program will also affected.

We have also learned that not only one person can successfully implementing a program we have to be a team work as well as work outside the box. Involved others NGOS or different people with different fields to be part of your team to facilitate the plan activities.

WAY FORWARD

It was recommended that counterparts with other stakeholders should actively continue with program and extended to other schools with a very good team.

Capacity building should be continue regionally or in country to equip counterparts with more knowledge. And also to continue with awareness raising in both schools and communities with right messages. And strongly collaborate and partnership with more stake holders and ministries with program

Work close with relevant administration/account section for the budgeting for the program each year for the availability of funds each year.

More regional look and learn to be organised for counterparts to learn from each other.

Attachment B-10 Agreement for Aluminum Returning System in Gizo

AGREEMENT FOR ALMINUM CAN RETURNING SYSTEM FOR GIZO

This "AGREEMENTFOR ALMINIUM CAN RETURNING SYSTEM FOR GIZO" is made on June 1, 2015 between

- (1) Alpha Metal trading Itd. and
- (2) Ms. Deanne

Purpose of this agreement is to create sustainable system for returning aluminum can in Gizo where the amount is limited.

1. General

(1) Image of the aluminum can returning system for Gizo is as follows.

	Gizo Team	Honiara
Step 1	 (1) Collection of aluminum can (2) Segregation of other material (3) Manual press of can (4) Measurement of weight (5) Shipment to Honiara 	
Step 2		 (1) Receiving Aluminum can at Honiara port (2) Measurement of weight (3) Mechanical press of aluminum can (4) packaging in Container (5) Returning to Malaysia or Australia
Cost sharing	 (1) Collection cost including some payment for material. (2) Handling cost of above (3) Shipment cost from Gizo to Honiara 	(1) Handling cost of above(2) Payment for Gizo Team

(Note: Alpha Metal recommends to set one collection shop in Gizo.

(2) Ms. Deanne will make collection and shipment from Gizo.

(3) Alpha Metal will receive the aluminum can sent from Gizo and export it after necessary handling. He also makes payment to Ms. Deanne SD 4.0 per kg.

2. Other condition

(1) Ms. Deanne and Alpha metal make record of shipment date and weight of aluminum can

(2) Ms. Deanne should contact with Ministry of Health and Medical Service (MHMS) and Gizo Town Council (GTC) to get possible support of MHMS and GTC.

(3) When the condition shall change for proper operation both side should discuss and make effort

3. Payment Method

Alpha Metal will pay to Ms. Deanne by bank remittance (ANZ Bank, Acc name: JK Mabuzu Building, Acc number: 4979910) after Alfa Metal receive and measure the weight of Aluminum can.

4. Contact Details

Alpha MetalPh: 7815724 e-mail: alphametals27@gmail.com Address: P.O. Box 2376 Ranadi Industrial AreaDeanne SeppyPh: 7317784 e-mail: dmseppy@gmail.comDerald MichaelPh: 7519215 e-mail: klezyderaldmichael@gmail.com

Date: June 2015

Alpha Metal Trading Ltd	Gizo Team		Witness 6	
Dr. Marshall S. Pillai 23 Managing Director	Ms. Deanne	26/06/15	Mr. Derald Michael Gizo Town Council /	<u>24/4</u> /15 Town Clark

Attachment B-11 Time and Motion Study Report







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

Time and Study Report

July 2015 Gizo, Solomon Islands

I. BACKGROUND AND PURPOSES

Currently tractors are utilized for waste collection in Gizo. The training for the Time & Motion survey has been conducted in September, 2011 and in November, 2012, under the support of Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid waste Management in Pacific island countries ("J-PRISM").

In July 31, 2015 as a part of the J-PRISM, Time & Motion study was conducted with the initiative of the Gizo Town Council and the Western Provincial Government. The purpose of this survey is to check and analyze how waste collection is done in Gizo, especially on

- Waste collection routes and possible trip number
- Waste discharge methods (waste bins, plastic bags etc.)
- Collection crews (safety gears, behavior etc.)
- Residents (relationships, cooperation for waste separation etc.)

II. STUDY DESCRIPTION

The Time & Motion study will contain the following activities:

(1) **Preparation stage**

The necessary materials and equipment should be prepared.

(2) Implementation stage

The survey itself can be conducted for one (1) day.

(3) Analysis and Reporting stage

Data entry, calculation and analysis are done and put into a Time & Motion study report.

III. STUDY RESULTS

The survey was conducted to survey all the collection areas, served by a tractor. The tractor has a trailer, whose capacity is estimated as 1 ton. The survey included collection stations and drums established in 2015. During the Study, four trips were surveyed and analyzed.

No.	Location
First Trip	Market to Dumpsite
Second Trip	Dumpsite - 4 Collection Stations - Dumpsite
Third Trip	Dumpsite - 2 Collection Stations - 7 Drums -
_	Dumpsite
Fourth Trip	Dumpsite - Market - Dumpsite



Tractor utilized for waste collection



The relationship between time and distance is shown in Figure below.



Table 1	Breakdown	of Time	Consumption
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Breakdown of Time Consumption	Time	Total
Mobilization from the dumpsite to collection points	0:48	2:11
Mobilization between collection points	0:35	
Mobilization from the last collection point to the dumpsite	0:48	
Waste loading time at collection points	0:43	1:04
Waste loading off time at the dumpsite	0:21	
Others	1:15	1:15
Total	4:30	4:30

Table 2	Time consumed	for	each	work
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Time consumed for each work	Average Time
Mobilization between the collection stations/ Market and the dumpsite	0:12
Waste loading off time at the dumpsite	0:05
Waste loading time at each collection point	0:02
Waste loading time at each drum	0:01
Change of trailer at Market	0:04

The waste collection route and time (from Market to Dumpsite) is shown in Figure below. It took 12 minutes from the Market to the Dumpsite. There are three trailers located in the market, and they usually collect and transport 2-5 times a day. Especially after the troubles in the tractor such as the breakdown, the waste tends to be accumulated in the Market, which requires more trips to remove the waste.





The waste collection route and time (Dumpsite - 4 Collection Stations - Dumpsite) is shown in Figure below. It took 56 minutes for one trip to collect the waste from four collection points. The trailer got full after the collection at four points. Also, some bulky waste was mixed, which made it difficult to transport. The collection points were maintained without any major damage; however, the littering or scattering the waste possibly caused by wind was one of the issues. The cooperation of the local residents is expected for the station maintenance as well as the efforts of the cleaners (rubbish collectors) of Gizo Town Council.





The waste collection route and time (Dumpsite - 2 Collection Stations - 7 Drums - Dumpsite) is shown in Figure below. It took 66 minutes for one trip to collect the waste from two collection points and 7 drum points (2 drums for each point; in total 14 drums). The trailer got almost full after the collection at the points. The collection station at Babylon located at Zone 5 is relatively far from the town and the access road is not well arranged, which should be taken into consideration for the collection schedule. As the collection station system expands in the whole Gizo in the near future, the preparation and monitoring of the proper collection schedule will be more important, especially for the collection of remote areas.



Figure 4 Waste collection route and time (Dumpsite - 2 Collection Stations - 7 Drums -Dumpsite)

The waste collection route and time (Dumpsite - Market - Dumpsite) is shown in Figure below. It took 30 minutes for one trip to collect the waste from the Market, including the change of the trailers. It was Friday, and more waste was observed, because there are more incoming people from other islands to sell their products at the Market.





4

The other observations are as follows:

- a) Collection routes/ points
 - When the truck became full, it went to the dumpsite. There are no fixed collection routes or schedule and the driver decides it according his experiences.
 - The collection at drums at the main roads was done smoothly. If the collection is done regularly, the waste amount at each drum will not be big.
 - If the collection stations are expanded in the rural areas, one tractor might not be sufficient.
- b) Waste discharge methods
 - Plastic bags were introduced for waste discharge at collection stations. The idea has been disseminated among the surrounding residents.
 - Waste collection stations were maintained, even though one station was partly damaged. The maintenance will be required.
- c) Collection crews
 - Some collection crews do not wear the safety gears such as gloves.
- d) Residents
 - It was observed that some residents brought waste to the collection stations, which showed the people started to utilize the stations.
 - Waste separation is another issue to be tackled.

IV. WAY FORWARDS

The following works will be necessary based on the Time and Motion Study:

- (1) Preparation and monitoring of collection schedule
 - It is necessary to develop the proper collection schedule. The tractor is also utilized for the dumpsite operation, which also should be considered in the schedule.
 - The current collection has been monitored, which should be continued.
- (2) Planning/ Expansion of waste collection system (Stations/ Drums)
 - Expansion of the collection system is ongoing, which also requires the financial support for the establishment and maintenance, as well as additional public awareness.
 - The collaboration and communication among the stakeholders, including residents should be encouraged in the planning.

REFERENCE 1: Preparation

The following preparation was done for the Study:

(1) **Preparation of materials and equipment**

Prepare the necessary materials and equipment, which are listed as follows.

No.	Item	Quantity	Note
(1)	Map of Gizo	1 unit	JICA
(2)	Watch	1 unit	-
(3)	Camera	1 unit	JICA
(4)	Stationary (pens etc.)	1 set	Margaret
(5)	Transportation (Open truck)	1 day	MHMS
(6)	Meeting room	1 days	Gizo Hospital
(7)	Water (if necessary)	1 day	MHMS
(8)	Lunch (if necessary)	1 day	MHMS

REFERENCE 2: Implementation, Analysis and Reporting

(1) Implementation

Conduct the survey as follows:

- The Study will start at the location where the tractor usually commences the work.
- The participants will join an open truck, and follow the collection tractor.
- One of the participants will fill in the recording sheet.
- One of the participants will take pictures at every collection point.
- The rest of participants will take notes about what to be observed during the collection.
- The following points will be observed:

1. Collection routes

- Is there any duplication or fragmentation of the collection route?
- Is the number of waste collection points suitable?
- How many collection points are covered by one trip?
- How long is one trip required?
- 2. Waste discharge methods
 - Are waste bins used appropriately?
 - Are waste separation done properly?
- 3. Collection crews
 - Is there any unsafe behavior by the crew?
 - Does the collection crew have suitable safety wear (hand gloves etc.)?
- 4. Residents
 - Do residents understand the collection schedule?

(2) Data entry, calculation, analysis and reporting

2-3 persons will mainly do data entry, calculation, analysis and reporting.

REFERENCE 3: Recording Sheet

The following sheet was utilized for the Study:

	Date		Start time		Sector	
	Truck no.		Туре		Volume	
	Driver		Crew No.			
					Number of	
No.	Item	Time Start	Time Finish	Odometer	Collection	Remark
					points	
1	Depart Market					
2	1st Segment					
3	2nd Segment					
4	3rd Segment					
5	4th Segment					
6	5th Segment					
7	6th Segment					
8	7th Segment					
9	8th Segment					
10	9th Segment					
11	10th Segment					
12	11th Segment					
13	12th Segment					
14	13th Segment					
15	14th Segment					
16	15th Segment					
17	16th Segment					
18	17th Segment					
19	18th Segment					
20	19th Segment					
21	20th Segment					
22	21st Segment					
23	22nd Segment					
24	23rd Segment					
25	24th Segment					
26	25th Segment					
27	26th Segment					
28	27th Segment					
29	28th Segment					
30	29th Segment					
31	30th Segment					
32	31st Segment					
33	32nd Segment					
34	33rd Segment					
35	34th Segment					
36	35th Segment					
37	36th Segment					
38	37th Segment					
39	38th Segment					
40	39th Segment					
41	40th Segment					
42	41st Segment					
43	42nd Segment					
44	43rd Segment					
45	44th Segment					

Attachment B-12 Waste Characterization Study Report

Gizo Solid Waste Characterization Study Report 2015

Solid Waste Management Team in Gizo

14th October 2015

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1. Introduction

Currently the Ministry of Environment, Climate Change, Disaster Management and Meteorology ("MECDM") has been conducting waste characterization survey in all the provinces in Solomon Islands, aiming to compile all the basic data on solid waste management. In Gizo the waste characterization survey was conducted in 2011 under the support of Japanese Technical Cooperation **P**roject for Promotion of **R**egional Initiative on Solid waste Management in Pacific island countries ("J-PRISM").

In 2015 as a part of the J-PRISM, waste characterization survey is planned with the initiative of the Gizo Town Council and the Western Provincial Government. The purposes of this survey are:

- (1) To update the data on unit waste generation rate and waste composition in Gizo
- (2) To utilize the collected data to analyze the impacts of ongoing activities and the future planning on solid waste management
- (3) To compile the basic data on solid waste management together with other provinces



Figure 1-1: Satellite Picture of Gizo Town

Source: Google Earth 11th Sep 2015

2. Methodology

Project Description

The pilot project will contain the following activities:

(1) **Preparation stage:**



In the stage, it is necessary to prepare all the equipment as well as the arrangement with the target households.

(2) Implementation stage

Questionnaire survey (for all the sampled households and commercial establishments) and waste auditing are conducted.

(3) Analysis and Reporting stage

Data entry, calculation and analysis are done and put into a waste characterization report.

(1) **Preparation stage**

Task 1: Schedule and location

Table2-1: Schedule of Waste Characterization Survey

No.	Activities	Date	Notes
(1)	Preparatory Workshop	August 12	To discuss how to do questionnaire survey and waste
	1		auditing
(2)	Questionnaire survey	August 13-14 (2 days)	Survey for all the sampled households and commercial
(3)	Waste auditing	August 17- 24 (8 days)	Waste is collected and scaled.

Task 2: Human resources

Table 2-2: The list of human resource

No	Name	Position	Organization
1	Derald Michael	Town Clerk	Gizo Town Council
2	Dobson Aseri	Treasurer	Gizo Town Council
3	Margaret Moveni	Chief Planning Officer	Western Province
4	Jully Kalamana	Environment Officer	Western Province
5	Rendy Solomon	(Ag) Chief Health Inspector	MHMS
6	Naoya Ueno	Environment Education Officer	JICA
7	Makie Jack	Environment Health Division Stuff	MHMS
8	Doni Maqu	Environment Health Division Stuff	MHMS
9	Leeroy Martin	Environment Health Division Stuff	MHMS
10	Colley Vendi	Casual Worker	
11	Tanele Gorazu	Casual Worker	
12	David Lapo	Casual Worker	
13	Nelcy Tokotoko	Casual Worker	

Task 3: Sample areas (Households)

30 houses were randomly selected but there has good road access for collecting rubbish.

Table 2-3: The list of household sample by locations

No.	Description	Notes	Total Population
(1)	Jah Mountain	10 samples	54
(2)	Top Hill	10 samples	91
(3)	Down Town	10 samples	77

Table 2-4: The list of household sample by income level

No.	Description	Notes	Total Population
(1)	High Income Level	16 samples	124
(2)	Middle Income Level	9 samples	65
(3)	Low Income Level	5 samples	33

Task 4: Sample areas (Commercial)

Table 2-5: The list of commercial sample areas

No.	Туре	Description	Notes
(1)	Hotel	Gizo Hotel/ Rekona Lodge	2 sample
(2)	Shop	Chan cooperation/ Wings	2 sample
(3)	Restaurant	Lamasa Restaurant/ PT109	2 sample
(4)	Office	Western Province Office/ WWF (NGO)	2 sample
(5)	School	Gizo Secondary/ Emmanuel School	2 sample

Task 5: Materials and equipment

All needed materials and equipment were shared budged by Gizo Town Council, Minister of Health and Medical Services and Western Province Government.

Table 2-6: The list of materials and equipment

No.	Item	Quantity	Price/ Budget				
(1)	Garbage bags (Households)	30samples x 8 days x $2 = 480$ (bags)	GTC				
(2)	Garbage bags (Commercial)	10samples x 8 days x $2 = 160$ (bags)	GTC				
(3)	Gloves(disposal)	10 persons x 8 days = 80 (pairs)	MHMS				
(4)	Masks (disposal)	10 persons x 8 days = 80 (units)	MHMS				
(5)	Scale	2 units	GTC				
(6)	Tarpaulin	2 units	WPG				
(7)	Buckets	2 units	GTC				
(8)	Stationary (pens,	*For the questionnaire surveys, the cording of	WPG				
	masking tapes etc.)	plastic bags and the recording					
(9)	Transportation	2 days (for questionnaire survey, if necessary)	MHMS				
	_	8 days (for waste bag collection)	WPG				
(10)	Water	10 persons x 10 days = 100 bottles	MHMS				
(11)	Lunch	10 persons x 10 days = 100 sets	MHMS & ENV				
(12)	Per diem for survey	(4) persons x 10 days = (40) sets	WPG				
	assistants	\$100 per day					

Task 6: Information sheets and Questionnaires

Information sheets were prepared to all house hold and Commercial for (refer attachment) The questionnaire was prepared and asked all house hold and Commercial (refer attachment). The compiled data is below.

Task 7: Preparatory workshop

Preparatory workshop was held for the survey assistants.

No.	Contents		Description	Person in
				charge
(1)	Outline of the survey	-	Survey purposes	Naoya
		-	Survey schedule	
		-	What to do during the survey	
(2)	How to separate waste	-	Demonstration	Margaret
(3)	How to conduct the	-	Understand the questionnaire	Margaret
	questionnaire survey		form contents	Naoya
		-	Ask the knowledgeable person	
			in the households	
		-	Be polite at all times	
		-	Write clearly in the forms	

(2) **Implementation stage**

Task 8: Questionnaire survey

Conduct the questionnaire surveys for all the sampled households and commercial establishments. At the same time, distribute the information sheet and plastic bags (one plastic bag for each household and two plastic bags for each commercial establishment), and explain to the residents and workers that every waste should be put into the plastic bags.

It is recommended to attach the masking tape at the entrance of each household for code identification.

Task 9: Waste auditing

Distribute and collect the waste bags.

- For the First Day, collect and transport the plastic bags to the dumpsite and discard all the waste. When collecting bags, distribute additional 2 plastic bags (one plastic bag for in organic waste and another plastic bag for organic rubbish.
- From the Second to Eighth Day, collect and transport plastic bags to the place to waste audit and implement the waste auditing at the pre-specified location.
- Waste weight will be scaled for all the samples.
- Household waste volume and composition will be studied for 15 randomly selected plastic bags: five (5) for High income, five (5) for Middle income and five (5) for Low income. Income Level was identified by Questionnaire survey.

A 110 0			Ho	use holo	l no.		
Alea	Day1	Day2	Day3	Day4	Day5	Day6	Day7
	JH8	TH5	TH5	DH2	JH3	JH9	DH3
High	TH5	TH7	DH2	DH4	JH9	TH5	DH4
Incomo	TH7	DH2	DH5	DH5	TH10	DH3	DH5
meome	DH2	DH3	DH6	DH6	DH3	DH4	DH7
	DH4	DH6	DH9	DH7	DH9	DH7	DH10
	JH1	JH1	JH1	JH1	JH1	JH6	JH1
Middle	JH7	JH6	JH6	JH7	JH7	JH7	JH6
Incomo	TH1	JH10	TH4	JH10	JH10	TH1	JH7
meome	TH6	TH4	TH6	TH1	TH1	TH6	JH10
	DH1	DH1	DH1	TH9	TH9	DH1	TH4
	JH2	JH2	JH2	JH2	JH2	JH2	JH2
Low	JH4	JH4	JH4	JH4	JH4	JH4	JH4
Low	JH5	JH5	JH5	JH5	JH5	JH5	JH5
meome	TH8	TH3	TH3	TH8	TH3	TH3	NIL
		TH8	TH8		TH8	TH8	TH8

Table 2-8: The list of selected household rubbish by income level for waste audit

*Day 1 and Day 4 has only 4 samples for Low income level due to house hold had not any rubbish *JH (Jah Mountain), TH (Top Hill), DH (Down Town)

- Commercial waste volume and composition will be surveyed for all the samples (10 samples).

(3) Analysis and Reporting stage

Task 10: Data entry, calculation, analysis and reporting

All data was compiled and prepare report. It will distribute all samples household and commercial for their information.

3. **Results**

(1) Results of waste management questionnaire for households and commercial houses

Please refer Appendix A and B

(2) Results of Household Waste Audit

Next 3 tables (table 3-1, 2 and 3) were show about the daily waste generation rate by 10 households in 3 sample locations, Jah Mountain, Top Hill and Down Town.

	Number of people living				Days / Kg						
No.	Total	Male	Female	1	2	3	4	5	6	7	Total
1	6	4	2	1.8	2.5	2.9	3.1	1.5	1.8	1.6	15.2
2	3	1	2	0.3	0.4	0.2	0.2	0.7	0.7	0.6	3.1
3	6	2	4	0.3	4.5	3.4	n.d	7.2	8.4	0.9	24.7
4	6	4	2	2.6	0.5	0.3	1.5	0.9	1.5	0.7	8.0
5	3	2	1	4.7	0.7	n.d	4.8	1.7	0.9	< 0.1	12.8
6	6	3	3	1.0	1.8	1.9	1.5	1.3	1.6	2.6	11.7
7	6	3	3	1.9	1.9	2.3	2.2	2.4	1.7	0.7	13.1
8	3	0	3	1.4	0.9	0.9	2.8	n.d	n.d	5.7	11.7
9	5	4	1	0.9	0.7	2.1	2.1	1.0	2.0	0.7	9.5
10	10	5	5	0.6	0.5	0.9	1.0	3.3	0.8	0.7	7.8
total	54	28	26	15.5	14.4	14.9	19.2	20.0	19.4	14.2	117.6

Table3-1: Jah Mountain Daily Waste Generation Rate

Table 3-2: Top Hill Daily Waste Generation Rate

	Number of people living			Days / Kg							
No.	Total	Male	Female	1	2	3	4	5	6	7	Total
1	6	3	3	3.8	3.5	5.3	3.6	4.1	1.2	5.5	27.0
2	15	7	8	2.2	2.9	3.6	0.8	1.7	1.4	0.4	13.0
3	10	4	6	nod	0.5	0.2	0.1	n.d	2.1	n.d	2.9
4	9	5	4	n.d	2.8	1.7	9.9	n.d	6.7	2.5	23.6
5	9	5	4	4.9	1.3	3.8	3.2	3.5	1.3	2.6	20.6
6	8	5	3	1.0	2.2	3.1	2.8	1.0	0.9	2.0	13.0
7	10	5	5	0.9	1.4	1.7	1.4	0.4	0.8	1.8	8.4

8	11	3	8	0.8	3.4	2.1	1.6	0.7	2.4	1.5	12.5
9	6	4	2	1.9	3.9	4.7	3.7	3.5	4.3	0.5	22.5
10	7	4	3	4.3	2.2	4.6	4.6	4.4	5.4	3.7	29.2
total	91	45	46	19.8	24.1	30.8	31.7	19.3	26.5	20.5	172.7

Table 3-3: Down	Town Da	ily Waste	Generation	Rate
-----------------	---------	-----------	------------	------

	Number of people living				Days/Kg						
No.	Total	Male	Female	1	2	3	4	5	6	7	Total
1	8	2	6	1.0	1.8	1.2	2.0	0.5	0.7	1.0	8.2
2	14	7	7	1.5	0.5	1.0	1.0	2.4	2.6	0.8	9.8
3	3	2	1	n.d	0.9	0.3	0.1	0.1	0.2	0.4	2.0
4	7	4	3	1.7	1.6	2.1	1.9	1.4	3.1	2.1	13.9
5	7	4	3	1.4	6.1	2.7	6.2	2.5	1.6	2.9	23.4
6	4	2	2	1.2	1.3	2.8	1.5	1.3	2.0	1.0	11.1
7	10	5	5	1.8	3.2	0.4	4.9	3.3	2.0	2.3	17.9
8	5	2	3	1.0	n.d	n.d	1.9	0.4	1.0	0.6	4.9
9	10	4	6	0.6	0.9	1.6	1.0	0.9	n.d	1.2	6.2
10	9	2	7	1.0	0.6	n.d	1.0	0.2	1.8	1.4	6.0
total	77	34	43	11.2	16.9	12.1	21.5	13.0	15.0	13.7	103.4

Table 3-4 was shown that the total daily waste volume by different income level. High and Middle Incomes were more than 300 litter generating per week. Low Income Household is least total volume of 7 days waste compared with high and middle income household.

Table 3-4: Total of Five Households Daily Waste Volume (5 household were randomly picked) by different income level

Day	1	2	3	4	5	6	7	Total / Litter
High Income	42.00	20.00	18.00	54.00	51.00	22.00	60.00	219.00
Level	42.00	30.00	46.00	54.00	51.00	55.00	00.00	518.00
Middle Income	36.00	20.00	42.00	62.00	62.00	20.00	20.00	212.00
Level	30.00	39.00	42.00	05.00	05.00	30.00	39.00	512.00
Low Income	45.00	22.00	18.00	28 50	21.00	20.00	21.00	106 50
Level	43.00	33.00	18.00	28.30	21.00	30.00	21.00	190.30
Total/Litter	123	102	108	145.5	135	93	120	826.5

Waste compositions for different income level (High, Middle and Low) were shown by Figures and Tables (Table 3-5, 3-6 and 3-7, Figure 3-1, 3-2 and 3-3).

From table 3-5 and Figure 3-1, the most wastes from high income level household has been generated vegetables / putrescible wastes (75.6%). The other wastes such as paper, plastics and shells have been generated about 3kg per weeks (around 4 %).

Table 3-6 and figure 3-2 indicate that most waste has been generated from middle income level was vegetables/ putrescible wastes (70.1%). Second most waste has been generated was diaper (11.9%). The other wastes were not much generated from middle income level compared with vegetable and diaper waste.

Table 3-7 and figure 3-3 was shown that the half of the waste generation from Low income level was vegetable and putrescible waste. The second and third largest amount of waste generation was diaper (13.6%) and tin (9.2%).

Vegetable / putrescible waste has been generated the highest amount in all income level. But the low income level is only 50 % of waste was vegetable / putrescible compared with middle and high income level has more than 70% of waste generation was vegetable / putrescible. Diaper waste generation rate was second highest rate in low and middle income level sector. However, diaper from high income level was not really high compare with low and middle income level.

				Days/Kg				T , 1	Total
Category	1	2	3	4	5	6	7	Weight	Weight in %
Vegetable/Putrescible	8.50	3.50	8.50	12.80	9.60	7.50	6.00	56.40	77.58
Paper/Cardboards	0.20	0.40	0.20	0.70	0.10	0.20	0.40	2.20	3.03
Textile			0.01			0.01	0.30	0.32	0.44
Plastics	0.50	0.20	0.60	0.40	0.50	0.20	0.60	3.00	4.13
PET Bottles	0.30					0.01		0.31	0.43
Grass/Leaves. Wood						0.01	0.20	0.21	0.29
Aluminum Cans			0.01	0.01	0.01	0.01	0.10	0.14	0.19
Leather/Rubber								0.00	
Metals								0.00	
Glass/Ceramics	0.40			0.10			0.10	0.60	0.83
Sanitary Pad								0.00	
Diaper	0.10	0.60	1.60	0.50				2.80	3.85
Electrical Fittings			0.01				0.01	0.02	0.03
Betel-nut	0.01		0.01	0.01			0.10	0.13	0.18
Tin	0.30	0.50	0.50	0.50	0.10	0.20	0.30	2.40	3.30
Cigarette Butt			0.01				0.01	0.02	0.03
Battery		0.01	0.01	0.01		0.01		0.04	0.06
Shells					3.30			3.30	4.54
Medicine								0.00	
E-Waste								0.00	
Miscellaneous								0.00	
Spray	0.50		0.20	0.01			0.10	0.81	1.11
total	10.8	5.2	11.7	15.0	13.6	8.2	8.2	72.70	100.00

Table 3-5: Waste Composition of High Income Level



Figure 3-1: Total Waste Composition of High Income Level in Percentage

Days/Kg								Total	Total
Category	1	2	3	4	5	6	7	Weight	Weight
Vegetable/Putrescible	6.00	7.80	6.30	16.30	7.70	4.30	6.60	55.00	70.14
Paper/Cardboards	0.20	0.10	0.30	0.10	0.40	0.30	0.10	1.50	1.91
Textile		0.01	0.01	0.10	0.10		0.10	0.32	0.41
Plastics	0.40	0.50	0.70	0.40	0.50	0.40	0.90	3.80	4.85
PET Bottles	0.10	0.10	0.10	0.01	0.20		0.10	0.61	0.78
Grass/Leaves. Wood	0.10						0.01	0.11	0.14
Aluminum Cans		0.10		0.01			0.10	0.21	0.27
Leather/Rubber					0.80			0.80	1.02
Metals					0.70			0.70	0.89
Glass/Ceramics	0.70		0.60	0.80	0.30		0.50	2.90	3.70
Sanitary Pad								0.00	
Diaper	1.70	0.50	0.40	0.90	4.00	1.30	0.50	9.30	11.86
Electrical Fittings						0.01		0.01	0.01
Betel-nut					0.01			0.01	0.01
Tin	0.30	0.50	0.40	0.50	0.10	0.30	0.60	2.70	3.44
Cigarette Butt								0.00	
Battery	0.10				0.01		0.01	0.12	0.15
Shells								0.00	
Medicine								0.00	
E-Waste					0.01			0.01	0.01
Miscellaneous	0.10		0.01		0.10			0.21	0.27
Spray			0.10					0.10	0.13
total	9.7	9.6	8.9	19.1	14.9	6.6	9.5	78.4	100.0

Table 3-6: Waste Composition of Middle Income Level



Figure 3-2: Total Waste Composition of Middle Income Level in Percentage

					Total	Total Weight			
Category	1	2	3	4	5	6	7	Weight	in %
Vegetable/Putrescible	2.80	4.20	2.40	3.60	2.80	4.50	1.60	21.90	56.20
Paper/Cardboards	0.50	0.20	0.10	0.10	0.10	0.01	0.01	1.02	2.62
Textile	0.10				0.10			0.20	0.51
Plastics	0.70	0.50	0.10	0.40	0.20	0.50	0.10	2.50	6.42
PET Bottles	0.40	0.10						0.50	1.28
Grass/Leaves. Wood				0.20	0.01			0.21	0.54
Aluminum Cans					0.10			0.10	0.26
Leather/Rubber								0.00	
Metals				0.01				0.01	0.03
Glass/Ceramics				0.40	0.40	1.70		2.50	6.42
Sanitary Pad								0.00	
Diaper	3.00			1.80	0.30	0.10	0.10	5.30	13.60
Electrical Fittings		0.10						0.10	0.26
Betel-nut				0.01	0.20			0.21	0.54
Tin	1.00	0.50	0.30	0.40	0.10	0.10	1.20	3.60	9.24
Cigarette Butt					0.01			0.01	0.03
Battery								0.00	
Shells						0.70		0.70	1.80
Medicine								0.00	
E-Waste								0.00	
Miscellaneous	0.10				0.01			0.11	0.28
Spray								0.00	
total	8.6	5.6	2.9	6.9	4.3	7.6	3.0	39.0	100.0

Table 3-7: Waste Composition of Low Income Level



Figure 3-3: Total Waste Composition of Low Income Level in Percentage

(3) Result of commercial waste audit

The table was shown that daily waste generation rate by commercial houses. Gizo hotel and Rekona Lodge has generated high amount of waste from their accommodation businesses. Also restaurant (Lamasa and PT109) has generated much rubbish too.

					Days	s / Kg			
No.	Name of business	1	2	3	4	5	6	7	Total
1	Gizo Hotel	0.9	9.0	3.5	7.7	6.6	1.3	1.5	30.5
2	Rekona Lodge	5.8	11.9	12.1	12.4	2.0	2.7	1.5	48.4
3	Chan Cooperation	5.6	0.6	3.4	0.6	1.0	1.0	0.4	12.6
4	Wing Sun Limited	1.5	1.5	0.4	0.9	3.5	n.d	3.2	11.0
5	Lamasa Restaurant	n.d	0.2	2.7	1.7	0.9	n.d	1.0	6.5
6	PT109	n.d	5.8	1.7	5.0	2.2	n.d	2.0	16.7
7	Western Provincial Office	0.6	1.0	0.6	0.1	n.d	n.d	0.6	2.9
8	WWF	0.1	0.2	n.d	0.5	n.d	n.d	0.2	1.0
9	Gizo Secondary School	n.d	2.8	n.d	2.0	n.d	n.d	0.4	5.2
10	Emmanuel School	n.d	1.6	5.8	0.2	6.1	n.d	n.d	13.7
Total		14.5	34.6	30.2	31.1	22.3	5.0	10.8	148.5

Table 3-8: Daily waste generation rate from commercial houses

Same as waste generation rate, accommodation sector has generated the highest volume of waste. Chinese shops also has high amount of volume of waste generation (shown in Table 3-9).

					D	ays				
No.	Name of business	1	2	3	4	5	6	7	Total / Bucket	Total / Litter
1	Gizo Hotel	0.25	3.25	2.00	2.00	3.00	1.00	1.00	12.50	150
2	Rekona Lodge	1.00	2.00	3.00	3.50	0.75	1.00	0.50	11.75	141
3	Chan Cooperation	2.00	1.00	3.50	1.00	1.00	1.50	0.05	10.05	120.6
4	Wing Sun Limited	1.00	1.00	0.25	0.75	2.50	n.d	2.00	7.50	90
5	Lamasa Restaurant	n.d	0.25	1.00	0.75	0.75	n.d	0.50	3.25	39
6	PT109	n.d	1.00	0.50	1.25	1.00	n.d	1.00	4.75	57
7	Western Provincial Office	0.75	1.00	0.75	0.25	n.d	n.d	0.05	2.80	33.6
8	WWF	0.125	0.25	n.d	0.50	n.d	n.d	0.05	0.93	11.1

			Days									
No.	Name of business	1	2	3	4	5	6	7	Total / Bucket	Total / Litter		
9	Gizo Secondary School	n.d	1.50	n.d	0.75	n.d	n.d	0.05	2.30	27.6		
10	Emmanuel School	n.d	1.00	3.75	0.50	3.00	n.d	n.d	8.25	99		
	Total Volume / Bucket	5.1	12.3	14.8	11.3	12.0	3.5	5.2	64.1			
	Total Volume / Litter	61.5	147	177	135	144	42	62.4		768.9		

From Table 3-8 and figure 3-4, most wastes has been generated from commercial houses like hotels were vegetables / putrescible wastes and second most wastes generated was plastic. This indicates that most visiting guest used to consumer more vegetables crops then they use plastic for other purpose like shopping bags or using for wrapping goods.

We can clearly see the flow of waste in different sector of life like for waste in shops we identify that the most generated wastes are paper/cardboard (48.5%) also plastics (23.3%) due to the fact of most items are been used to wrapped by paper they sold those item(shown in Table 3-9 and Figure 3-5).

As same as waste composition of Hotels, most wastes has generated were vegetable/Putrescible from restaurant (Table 3-10 and Figure 3-6). Also it clearly shows that glass/ceramics wastes are more generated than plastic but vegetable wastes are commonly generated with high percentages shown in the figure due to the fact that most item been used to store in glass/ ceramic are used for cooking variety of food been order by their customer.

From table 3-11 and figure 3-7, it indicates that most generated wastes from offices were paper/cardboards and vegetable/putrescible wastes. But surprise to identify that textile wastes are been increase its percentage while plastic still high in percentages than textile, this show clearly daily wastes generated from offices.

Most generated wasted from schools shown in this table 3-12 and figure 3-8 were vegetables/putrescible wastes, paper/cardboard, grass/leaves/wood and plastics due to the fact that most schools parent came to sell foods in school campus plus they have to do certain activities with paper and cardboard. Also most schools have green grass grow and leave from trees within their campus.

From all figures ant tables, we can analyze that almost same sort of wastes are produce in different stages of standard of living.

Table 3-8:	Waste	Composition	of Hotels
------------	-------	-------------	-----------

Days/Kg									Total
Category	1	2	3	4	5	6	7	Weight	Weight in %
Vegetable/Putrescible	6.00	14.10	12.50	14.50	5.00	2.60	2.50	57.20	73.35
Paper/Cardboards	0.20	0.30	0.60	0.70	0.30	0.30	0.10	2.50	3.21
Textile		0.10	0.10	0.30	0.01	0.01		0.52	0.67
Plastics	0.30	1.30	1.10	1.50	0.70	0.50	0.50	5.90	7.57
PET Bottles	0.10	0.10	0.10	0.10	0.10		0.10	0.60	0.77
Grass/Leaves. Wood				0.10				0.10	0.13
Aluminum Cans	0.10	1.00	0.10	0.10	0.40	0.30		2.00	2.56
Leather/Rubber								0.00	
Metals								0.00	
Glass/Ceramics	0.20	1.30	0.60	0.10	0.50			2.70	3.46
Sanitary Pad								0.00	
Diaper		0.90		0.40				1.30	1.67
Electrical Fittings		0.10			0.01			0.11	0.14
Betel-nut		1.30	0.10		0.90	0.01		2.31	2.96
Tin	0.10	0.20	0.30	0.20	0.10	0.10	0.01	1.01	1.30
Cigarette Butt					0.01			0.01	0.01
Battery					0.01			0.01	0.01
Shells				1.20				1.20	1.54
Medicine								0.00	
E-Waste								0.00	
Miscellaneous	0.10			0.01	0.10	0.20		0.41	0.53
Spray					0.10			0.10	0.13
total	7.1	20.7	15.5	19.2	8.2	4.0	3.2	78.0	100.0



■ Vegetable/Purtrescible

- Paper/Cardboards
- ■Textile
- Plastics
- PET Bottles
- Grass/Leaves.Wood
- Aluminium Cans
- Glass/Ceramics
- Diaper
- Electrical Fittings
- Betel-nut
- Tin
- Cigarette Butt
- Batery
- Shells

Figure 3-4: Total Waste Composition of Hotels in Percentage

				Days/Kg				Total	Total
Category	1	2	3	4	5	6	7	Weight	in %
Vegetable/Putrescible	0.60	0.10	0.01	0.30	0.30	0.01	0.30	1.62	7.70
Paper/Cardboards	3.00	1.10	1.40	0.50	2.00	0.70	1.50	10.20	48.48
Textile			0.20	0.01	0.01			0.22	1.05
Plastics	0.90	0.60	0.80	0.50	1.30	0.10	0.70	4.90	23.29
PET Bottles	0.01							0.01	0.05
Grass/Leaves. Wood			0.01		0.01			0.02	0.10
Aluminum Cans	0.10		0.30	0.01	0.10	0.01	0.01	0.53	2.52
Leather/Rubber								0.00	
Metals								0.00	
Glass/Ceramics						0.10	0.10	0.20	0.95
Sanitary Pad								0.00	
Diaper								0.00	
Electrical Fittings								0.00	
Betel-nut	0.40	0.10	0.50	0.10	0.20		0.30	1.60	7.60
Tin			0.10		0.10		0.70	0.90	4.28
Cigarette Butt	0.01	0.01	0.01		0.01			0.04	0.19
Battery								0.00	
Shells								0.00	
Medicine								0.00	
E-Waste								0.00	
Miscellaneous		0.40	0.20		0.20			0.80	3.80
total	5.0	2.3	3.5	1.4	4.2	0.9	3.6	21.0	100.0

Table 3-9: Waste Composition of Business Shops



Figure 3-5: Total Waste Composition of Business Shops in Percentage

Days/Kg								Total	Total Weight
Category	1	2	3	4	5	6	7	Weight	in %
Vegetable/Putrescible		3.90	1.80	3.90	1.60		2.00	13.20	52.91
Paper/Cardboards		0.40	0.30	0.80	0.10		0.20	1.80	7.21
Textile								0.00	
Plastics		0.70	0.70	0.60	0.50		0.40	2.90	11.62
PET Bottles			0.10	0.10				0.20	0.80
Grass/Leaves. Wood					0.01			0.01	0.04
Aluminum Cans		0.10		0.10	0.10		0.10	0.40	1.60
Leather/Rubber								0.00	
Metals								0.00	
Glass/Ceramics		1.50	1.70		0.40			3.60	14.43
Sanitary Pad								0.00	
Diaper			1.40					1.40	5.61
Electrical Fittings								0.00	
Betel-nut				0.10	0.01		0.10	0.21	0.84
Tin		0.30	0.30	0.10	0.30		0.10	1.10	4.41
Cigarette Butt					0.01		0.10	0.11	0.44
Battery								0.00	
Shells					0.01			0.01	0.04
Medicine								0.00	
E-Waste								0.00	
Miscellaneous								0.00	
Spray					0.01			0.01	0.040
total	0.0	6.9	6.3	5.7	3.1	0.0	3.0	25.0	100.0

Table 3-10: Waste Composition of Restaurants



Figure 3-6: Total Waste Composition of Restaurant in Percentage

	Days/Kg							Total	Total Weight
Category	1	2	3	4	5	6	7	Weight	in %
Vegetable/Putrescible	0.30	0.50	0.01	0.20			0.10	1.11	25.93
Paper/Cardboards	0.30	0.50	0.40	0.20			0.50	1.90	44.39
Textile	0.30		0.01					0.31	7.24
Plastics	0.10	0.10	0.10	0.10			0.10	0.50	11.68
PET Bottles		0.10						0.10	2.34
Grass/Leaves. Wood			0.10					0.10	2.34
Aluminum Cans		0.10	0.01				0.01	0.12	2.80
Leather/Rubber								0.00	
Metals								0.00	
Glass/Ceramics								0.00	
Sanitary Pad								0.00	
Diaper								0.00	
Electrical Fittings								0.00	
Betel-nut		0.10	0.01					0.11	2.57
Tin				0.01				0.01	0.23
Cigarette Butt	0.01		0.01					0.02	0.47
Battery								0.00	
Shells								0.00	
Medicine								0.00	
E-Waste								0.00	
Miscellaneous								0.00	
Spray								0.00	
total	1.0	1.4	0.7	0.5	0.0	0.0	0.7	4.3	100.0

Table 3-11: Waste Composition of Office



Figure 3-7: Total Waste Composition of Office in Percentage

Table 3-12:	Waste (Composition	of School
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	Days/Kg							T- 4-1	Total
Category	1	2	3	4	5	6	7	Total Weight	Weight in %
Vegetable/Putrescible		1.10		1.90	3.00			6.00	34.36
Paper/Cardboards		1.50	1.20	0.30	2.20		0.30	5.50	31.50
Textile		0.10	0.20		0.01			0.31	1.78
Plastics		0.30	0.80	0.10	0.80		0.10	2.10	12.03
PET Bottles		0.10	0.10		0.10			0.30	1.72
Grass/Leaves. Wood			2.80		0.01			2.81	16.09
Aluminum Cans		0.10	0.30					0.40	2.29
Leather/Rubber								0.00	
Metals								0.00	
Glass/Ceramics								0.00	
Sanitary Pad								0.00	
Diaper								0.00	
Electrical Fittings								0.00	
Betel-nut							0.01	0.01	0.06
Tin			0.01					0.01	0.06
Cigarette Butt					0.01			0.01	0.06
Battery								0.00	
Shells								0.00	
Medicine								0.00	
E-Waste								0.00	
Miscellaneous			0.01					0.01	0.06
Spray								0.00	
total	0.0	3.2	5.4	2.3	6.1	0.0	0.4	17.5	100.0



Figure 3-8: Total Waste Composition of School in Percentage
4. Challenges

- > Public still no understanding the wastes management and the segregation of wastes.
- > People just too lazy to bring the waste to the collection station.
- > High percentages of diaper wastes from middle and low income households
- Logistic Problems
- > Shortage of Finance
- > Shortage of Human resource
- Shortage Information sharing
- > Attitude and behavior problem for littering waste.

5. **Recommendations**

- > Set up more collection station, encourages town council to twice a week to collect waste.
- > For collecting and dumping wastes in future will base on collecting and handle hazard waste.
- We need to educate public more on segregation and composting more practical so that less waste will be dump because most of the waste from households is organic wastes.
- > More awareness on recycling Aluminum cans.
- > Present the waste characterization report to the Executive meeting.
- Only 80% of the public know more about 3R so we need to do house to house awareness, radio awareness and public awareness on that. And they should do action more.
- > Need to train those hotel owners for waste segregation system to avoid mixing of waste.
- Need to maintain the community zone communication in order for them to share right information on wastes management.
- > Encourage public to use plastic bags for storing waste.

6. Conclusion

- > Need are tough budget for tackle all this finance matter.
- > Encourage public to reduce using of diapers which produce a lot of waste.
- > Improve information sharing among stakeholder and executive members.
- > Need more truck for collecting waste daily within top hill zone
- > Encourage separating and composting are most effective activity to decrease waste
- This waste characterization will help to create better rubbish collection systems in Gizo, so we should do this survey every few years

Attachment B-13 Ranadi Landfill Rehabilitation Plan



Figure B-7 Ranadi landfill rehabilitation (Ground plan)



Figure B-8 Ranadi landfill rehabilitation (Longitudinal section)

Attachment B-14 Procurement List of Ranadi Rehabilitation

I

STAGE 1	Facility area clearance	Covered by	Hours	Days	QTY	Rates	Total
Equipment	Bulldozer	HCC	8	1	1	\$1,800.00	\$14,400.00
	excavator	HCC	16	2	1	\$1,600.00	\$25,600.00
Transportation	2 ways bulldozer	HCC			1	\$3,600.00	\$3,600.00
	2 ways excavator	HCC			1	\$3,600.00	\$3,600.00
Fuel	Fuel	HCC			4	\$4,000.00	\$16,000.00
Material	gravel	HCC			100 cubic	\$350.00	\$35,000.00
							\$98,200.00
STAGE 2	cell 1 Base Levelling	Covered by	Hours	Days	QTY	Rates	Total
Equipment	Excavator	MECDM	16	2	1	\$1,600.00	\$25,600.00
	bulldozer	MECDM	16	2	1	\$1,800.00	\$28,800.00
Transport	2 ways	MECDM				\$3,600.00	\$3,600.00
	2 ways	MECDM				\$3,600.00	\$3,600.00
Material	gravel	MECDM			50 cubic	\$350.00	\$17,500.00
							\$79,100.00
STAGE 3	Embankment/Road access	Covered by	Hours	Days	QTY	Rates	Total
Equipment	Excavator	MHS	32	4	1	\$1,600.00	\$51,200.00
	Transport	MHS			2 ways	\$3,600.00	\$7,200.00
material	sand	MHS					
	Road access						
Equipment	compacter	MHS	16	2	1	\$1,200.00	\$19,200.00
Material	gravel	MHS			50		\$17,500.00
							\$95,100.00
STAGE 4	leachate and sewage pond	Covered by	Hours	Days	QTY	Rates	Total
Equipment	excavator	MECDM	16	2	1	\$1,600.00	\$25,600.00
	compacter	HCC	8	1	1	\$1,200.00	\$9,600.00
	Bulldozer	MHS	8	1	1	\$1,800.00	\$14,400.00
Material	clay soil				40 cubic		
							\$49,600.00
STAGE 5	Leachate and gas venting installation	Covered by	Hours	Days	QTY	Rates	Total
Equipment	Loader tyre	JPRISM					\$58,680.00
material	leachate collection pipe	JPRISM			15 pcs	\$3,397.04	\$50,955.60
	gas venting pipes	JPRISM			50 pcs	\$807.00	\$40,350.00
	pipe sockets	JPRISM			7	\$750.00	\$5,250.00
	culverts	JPRISM			15pcs	\$1,000.00	\$15,000.00
	screen rocks	HCC			80 cubic	\$500.00	\$40,000.00
Casual workers	laying of pipes	HCC		1	4prns	\$50	\$200.00
	grow plants	HCC		1	4prns	\$50	\$200.00
	gas venting pipes installation	HCC		1	4prns	\$50	\$200.00
	picking of screen rocks	HCC		3	4prns	\$50	\$1,800.00
							\$212,635.60

Organization	Amount	Currency	Amount	Currency	%
HCC	150,200	SBD	2,248,794	Yen	28.1
MECDM	104,700	SBD	1,567,568	Yen	19.6
MHS	109,500	SBD	1,639,434	Yen	20.5
J-PRISM	170,236	SBD	2,548,767	Yen	31.8
Total	534,636	SBD	8,004,564	Yen	100.0

Attachment B-15 Procurement List of Ranadi Training Center

Procurement -J-PRISM

Lowest Price					34,700				7,300												12,810									18,880		836		0.600		2,560		0		70,792	157,478
Bowmans																				/	/									/						V				70,792	
Metal Sheet Products																		/	/	/														N		2,560					
Emco								V							\setminus		/	/									1														
g Nofokava								X							\ /	X	Ń																	0.600							
Global Printin		,	V		,								/	/	/																	3,600		_							
DJ Graphics			$\left \right $									/	/							\setminus				1								6 1,36									
se Access Plus	_						0	A	A			/ 0	0	0	0	0	0	0	0	\ 0	0		1									83				_					
Island Enterpri							2,97	Ń	Ż		1,20	70	50	95	1,90	44	1,90	4,56	22	22	22			2	0	A	A	A	A	A A						8					
ITA																		/	/	/			0 2,82	0 1,89	0 4,40	2 0	0 N/	0 N/	0 N/	0 N/				_		28,84					
Aus Mart		7	2	0	5		1	X						/	\ /	X							3,00	2,20	3,70	2,85	2,40	98	2,25	1,50 N				_							
gy Daltron	0 14,39	7,97	0 4,855	0 10,88(0 1,22						_			0	0	0	0	0								\rangle	(/	/					_							
Advanst Technolo	1 8,80	1 5,80	1 5,50	1 12,80	1 1,80		6 1,80	1 1,50	1 4,00		1,20	0 95	5 1,50	5 1,10	5 2,50	2 19	1 2,50	1 4,50	1 28	1 28	1 28			7								1		×				50		8	
Quantity											1	1													2													45		1	
					ler		Safety boots)	L			Hand gloves)	Mask)	Vest)	Rain coat)	Gunboots)		sher		nd-type)	ure-type)	ide		hairs	ble	ic)	able		t				ıner		ring (levelling)	(q	'el					
LOT1	1 Projector	2 Printer	3 Screen	4 Lap top	5 Voice record	LOT2	6 Safety gear (7 Loud speake	8 Water cooler	LOT3	9 Safety gear (10 Safety gear (11 Safety gear (12 Safety gear (13 Safety gear (14 Rake	15 Fire extingui	16 First aid kid	17 Shavel (Roui	18 Shavel (Squi	19 Drainage spa	LOT4	20 Comuputer c	21 Comupter ta	22 Chairs (Plast	23 Conference t	24 Table	25 Open cabine.	26 Side board	27 White board	LOT5	28 J-PRSIM bai	LOT7	29 Excavator hi	LOT8	30 Dumping lev	LOT9	31 Eco bags	LOT10	32 Pipes (D315,	

Attachment B-16 Incoming Vehicle Survey Sheet at Ranadi Landfill

Collection analysis (*1) Zone 1- 10

Date:

(*2) **R** = Residential area, **MA** = Market, **C** = Commercial Area (Hotel, Restaurant, Office), I = Industrial waste, **SE** = Septic waste (Sewage), **ME** = Medical waste. **SC** = School

		1/4																					
	5	Half	X																				
	ondition	3/4																					
	ling Co	Full																					
	Load	Double																					
		Triple																					
		Others																					
		Pick-up vehicle																					
	type	Flatbed truck	X																				
	Vehicle 1	Dump truck																					
		Skip truck																					
		Compactor																					
	Waste	Type (*2)	М																				
	Collection	area (*1)	3																				
	C or Private	Company Name																					
	HC	Private																					
		НСС	X																				
		Vehicle No. Plate	MA0315																				
		Coming time	10:30																				
ŀ		N0.		1	2	3	4	5	6	7	8	6	10	11	12	13	14	15	16	17	18	19	20

Attachment B-17 Report of Dispatch of Local Landfill Expert for Ranadi

Rehabilitation

Background

The purpose of the mission to the Solomon Island was to assist the Ranadi landfill supervisor and the site workers with the rehabilitation works. The installation of the leachate pipes and the gas vent pipes were of the highest priority amongst the three (3) responsible tasks given. Operations after completion may be considered once the laying of pipes and construction of the leachate pond is completed. The knowledge and good practices were also delivered to the supervisor and the site workers throughout the construction works.

Responsible tasks of the mission

- Rehabilitation work. (Laying of pipes etc.)
- **4** Landfill operations after the completion of rehabilitation.
- Preparation of a draft Operations & Management manual.

Scope of works

- Trenching & levelling base to accommodate the installation of the horizontal pipes.
- Add clay soil and compact at the base of every trenches. (Ditches)
- Installation of main leachate pipe. (Horizontal pipe)
- Setting up (preparation stage) of the concrete junction box.
- Installation of leachate branch pipes.
- Installation of vent pipes. (Vertical pipe)
- To cover main leachate pipe, leachate branch pipe & gas vent pipes with stones.



<u>Day 1</u>

- Courtesy visit to JICA Solomon office in the morning. (Morning)
- Discussions with Ranadi landfill supervisor Mr. Joe Kelesi on how to start the rehabilitation works and site visit to fully understand the condition and current situation of the site. (Afternoon)

<u>Day 2:</u>

It was observed that all the trenches (ditches) were deeper than expected so it has to be back filled with old waste, then later apply clay soil and compact. Pictures below should briefly illustrate the step by step method used before installation of the main leachate pipes, gas vent pipes and leachate branch pipes.

Step 2



Use of excavator to back fill trench with old waste & compact.





Base of trench being level and compacted with clay soil before installation of pipes.



Outlet of main leachate pipe being connected to the leachate pond.



<u>Day 3:</u>

- Courtesy visit to HCC (morning) then continue with rehabilitation works.
- Application of clay soil and compaction to the base of the trenches (Ditches) continued progressively throughout the whole day, as most of the site workers had become to understand more clearly how to implement such activity.





Main leachate pipes & leachate branch pipes were placed into the trenches. (Ditches)



<u>Day 4:</u>

Installation of the main leachate pipes and leachate branch pipes progressed as well as setting up of a gas vent pipe at the end of the leachate branch pipe. Part of the whole length of the leachate branch pipe was also covered with stones.





<u>Day 5:</u>

The field works continued progressively with the site workers as myself and the landfill supervisor Mr. Joe Kelesi conduct a mini workshop at the Ranadi administrative training centre. Different stake holders and counterparts of the JPRISM project took part in the mini workshop. It was privileged to have the deputy town clerk of HCC to participate in the mini workshop as there were supportive and encouraging comments made from his side to the stakeholders and the landfill management.

The afternoon session continued with covering of stones to the main leachate pipe, leachate branch pipe and the gas vent pipe.



Recommendation:

Landfill supervisor and at least one of the heavy equipment operator should visit Bouffa landfill (Vanuatu) to grasp the overall idea of landfill operations before starting the Ranadi landfill reclamation works. Practical observation should be considered mainly for landfill operators.

Conclusion:

However the time period of the mission was limited to achieve all the responsible tasks of this mission but the knowledge, skills and techniques had been shared (transferred) throughout the working time to the landfill supervisor and the site workers, so that they may continue to complete the rehabilitation works without difficulties.

Attachment B-18 Contract on Procurement of Tractor Attachment

JAPANESE TECHNICAL COOPERATION PROJECT FOR PROMOTION OF REGIONAL INITIATIVE ON SOLID WASTE MANAGEMENT IN PACIFIC ISLAND COUNTIRIES (J-PRISM)

IMPROVEMENT OF SOLID WASTE MANAGEMENT-EXPERTS A & E (STAGE 2) PAPUA NEW GUINEA, SOLOMON AND VANUATU

CONTRACT FOR

PROCUREMENT OF TRACTOR ATTACHMENT FOR

GIZO TOWN COUNCIL, SOLOMON

21 JULY, 2014

JICA EXPERT TEAM (YACHIYO ENGINEERING CO., LTD) AND UNITED AUTO COMPANY

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CONTRACT FOR PROCUREMENT OF TRACTOR ATTACHEMENT FOR GIZO TOWN COUNCIL, SOLOMON

This Contract is made and entered into on 21st July, 2014 by and between the JICA Expert Team for Improvement of Solid Waste Management Experts A & E (Stage 2) of Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM), (hereinafter referred to as "Buyer"), Yachiyo Engineering Co., Ltd., represented by Mr. Akihiro Osada, and United Auto Company in Honiara, Solomon Islands (hereinafter referred to as "Supplier") represented by Mr. Richard Carrick, General Manager of United Auto Company.

Whereas, the JICA Expert Team desire to procure and install the front end loader for the MF 425 Tractor of Gizo Town Council as outlined in the technical specification in Appendix A (hereinafter referred as "the Service")

Whereas, the quotation for the Service attached in Appendix B submitted by the Supplier has been accepted by the JICA Expert Team

Whereas, JICA Expert Team and the Supplier have agreed on the contents of the Service in accordance with the specification and conditions set in this contract.

Article 1. Definitions

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"The Buyer" means the <u>JICA Expert Team</u> and includes any person or persons authorized by the <u>JICA Expert Team</u>.

"The Supplier" means <u>United Auto</u> and shall include any person or persons authorized by <u>United Auto.</u>

"The Tractor" means the <u>MF 425 Tractor</u> that is owned by the Western Provincial Government and used by Gizo Town Council.

Article 2. Scope of the Services

The Supplier shall provide the Service in accordance with the terms and conditions of this contract and defined in Appendix A. The Service consists of:

- (1) Supply the Front End Loader for the MF 425 Tractor
- (2) Transportation of the MF425 Tractor from Gizo to Honiara
- (3) Installation of the Front End Loader on the MF425 tractor
- (4) Delivery of the MF425 Tractor with the Front End Loader to Gizo

Article 3. Time Schedule

The Supplier shall commence the Services from the day of the signing of this Contract, and shall complete the Services by 30th September, 2014.

Article 4. Sum of Contract and Payment Schedule

- (1) The JICA Expert Team shall pay to the Supplier the total amount of SBD 182,000.00 (One Hundred Eighty Two Thousands SBD only) for the Services in accordance with the payment schedule.
- (2) Payment of total amount of the contract will be made within twenty days from the completion of the service and acceptance by the JICA Expert Team.

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(3) The request for this payment shall be accompanied with the following document.

Delivery note of the equipment Signed Commercial Invoice Receipt of the equipment issued by JICA Expert Team

Article 5. Shipment and packing

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- (1) The Supplier shall be responsible for the transportation of the Equipment and the MF425 and for coverage of shipping charges, freight, inland transportation cost and insurance premiums.
- (2) The Supplier shall securely pack the equipment so as to avoid any damage in transit.

Article 6. Inspection, Testing and Acceptance

The supplier shall carry out necessary inspection and test of the equipment before delivery of the equipment in order to ensure that the equipment has been manufactured and is functioning in accordance with the contract document. The Buyer's authorized representatives shall have the right to inspect and test the equipment delivered by the Supplier. Final acceptance of the equipment will be given by the Buyer only upon the satisfactory completion of such final inspection and test.

Article 7. Cancellation and Amendment of the Contract

The Buyer has the right to terminate the Contract by giving a written prior notice to the Supplier, in case that the Supplier is unable to comply with the terms and conditions of this contract.

Article 8. Penalty

In case the Supplier fails to deliver all the Services within the time period specified in Article 3 of this Contract, the Buyer will deduct from the payment a sum equivalent to one-tenth of one percent (0.01%) of the total Contract Amount for each day of delay in delivery subject to a maximum amount of five percent (5%) of the total Contract Amount.

Article 9. Force Majeure

- (1) The Supplier shall not be responsible for any delay caused by Force Majeure, such as war, riot, flood, accident or any other causes beyond the control of the Supplier.
- (2) In the event of Force Majeure, both parties are to consult and agree upon the appropriate measures to be taken in order to mitigate and minimize the damage. If it continues to the end of this contract period mentioned in Article 3, the Buyer shall have the right to terminate this contract at any time.

Article 10. Liability

The Buyer shall be exempted from any damage, loss and/or accident incurred by or arising from a third party concerning any activity of the Supplier during the implementation of the Services. The Buyer shall not be liable for compensation of the death, disability, or other hazards and damage that may be incurred by the employee(s) and/or properties of the Supplier because of his/her work employment in the said services under this Contract.

Article 11. Warranty

- (1) Warranty period is twelve (12) months after delivery of the equipment.
- (2) The Supplier warrants that the equipment delivered by the Services shall be:

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- a) free from defect in design, material, workmanship and title;
- b) confirming in all respects with the terms of the Contract;
- c) the best quality if no quality is specified.
- (3) If any such defect in the equipment delivered by the Services become evident within one (1) year of operation, and the Buyer notifies the Supplier within the reasonable period of time after discovery of the defect, the Supplier shall thereupon promptly correct the defect at its expense.
- (4) If the Supplier does not replace or repair the goods as notified to the Supplier as being defective within the period of time reasonable in the circumstances, the Buyer shall have the right to remedy the said defect at the Supplier's risk, cost and expense.

Article 12. Confidentiality

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The Supplier shall not reveal any results of the Services or any primary information obtained in the course of the Services to a third party without the prior consent of the Buyer.

Article 13. Jurisdiction

This Contact shall be subject to and construed in accordance with the relevant laws in Solomon Islands. These laws shall settle any conflict during the course of this Contract.

Article 14. Others

The Buyer and the Supplier shall consult each other about any relevant matter, which is not stated in this Contract.

Date: 21st July 2014 Place: Honiara, Solomon Islands

For and on behalf of The Buyer

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Mr. Akihiro Osada JICA Expert Team (Yachiyo Engineering Co., Ltd)

For and on behalf of The Supplier

Mr. Richard Carrick General Manager, United auto Company Tel: +677 39118 Mob +677 7495218

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Appendix A Specifications

<u>1.</u> Description of the Services

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The Supplier shall provide the following services:

- (1) Supply one unit of Front end Loader for the MF 425 tractor
- (2) Transportation of the MF 425 tractor from Gizo to Honiara
- (3) Installation of the Front end Loader on the MF425 tractor
- (4) Delivery of the MF 425 tractor with Front end Loader to Gizo

2. Specification of the front end loader for MF 425 tractor

Model Description	MF425 Burder Front End Loader
Maker/ Carline	Burder equipment/ MF425FR
Model Code	MF425
Stock Type	New
Color/ Trim	Red
Body Type/ Engine Type	Front End Loader
Bucket	width 1,800 mm
	Heavy duty bucket
Safe Working Load	1,000 kg
Lift height to pin	3,500 mm
Dump height	2,700 mm under bucket
Dig depth	150 mm
Crowd angle	45 degrees
Dump angle	50 degrees
Front end loader weight	Boom only 650 kg
Other function	Mechanical self level
	2 bank valve and joystick control
	Ram horns bump guard
	Quick detach loader
	Quick change attachments
	Painted MF red to match tractor

3. (Reference) Outline of the MF 425 Tractor of Gizo Town Council

Max Power	65 hp (48.5 kw)	Transmission	8x2 center shift
Max torque	235 @ 1400 rpm	Power take off	live single speed-540 rpm
Rated engine speed	2200 rpm	Steering	Hydrostatic
Engine Type	A4-3.9	Hydraulics	3 point linkage control
Weight without ballast	2870 kg	Brake	Oil immersed
Dimension	L 4,130 mm W 2,580mm	Wheel and Tires	Front 12.4-24
	H 2,580 mm		Rear 18.4-30
Fuel tank capacity	100 liter	Transmission oil	42 liter

Model MF 425 Xtra – 4 Wheel Drive

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4. Commissioning and Training on operation and maintenance

Commissioning and Training on operation and maintenance with the operation and maintenance manual for the above equipment shall be done by the Supplier at Honiara and/or Gizo.

5. Delivery of the Equipment

The Equipment to be supplied in the Service will be delivered to Gizo Town Council in Western province, Solomon Island.

6. Contact person of Western Provincial Government and Gizo Town Council.

The supplier shall consult with Western Provincial Government and Gizo Town Council regarding transportation of the Tractor, commissioning and training of the operation and maintenance and also delivery of the Tractor with Front end Loader.

- ♦ Western Provincial Government: <u>Mr. Fredrick Naphtalai (Tel: 7466439)</u>
- ♦ Gizo Town Council: Mr. Derald Michael (Tel: 7519215)

7. Document, drawings and manuals

The Supplier shall submit the following documents:

- Detail specification and drawing of the equipment
- ♦ Operation and maintenance manual
- ♦ Test and training procedure

8. Acceptance Test and Inspection

Acceptance test and inspection shall be carried out at the Supplier's shop in Honiara in the presence of the Buyer, Visual inspection and check at the time of delivery for the equipment shall be executed by the Supplier at Gizo in the presence of the Buyer, a da ak

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Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island countries (J-PRISM) Improvement of Solid Waste Management Experts A & E (Stage 2)

Appendix B Quotation of the Service

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KGVI Complex King George Honiara, Solomon Islands

PO Box 128 Honiara Solomon Islands

Telephone: 677 39118 677 38181 Email: united@tongscorp.com

Fax:

QUOTE Quote No.: Q-2403 **Date Issued:** 11-DEC-13 Salesman: RICHARD CARRICK **Order Number: Preferred Delivery Date: CUSTOMER(S)** Mr AKIHIRO OSADA Name Phone (H) Fax Phone (W) ACN Mobile ABN Address 2-18-12 NISHIOCHIAL, SHINJUKU-KU TOKYO Licence No DOB 161-8575 JAPAN Email ak-osada@intl.yachiyo-eng.co.jp VEHICLE SPECIFICATIONS MF425 BURDER FRONT END LOADER **Model Description** Make / Carline BURDER EQUIPMENT / MF425 FR **Model Code** MF425 Stock Type NEW RED Colour / Trim **Transmission Type / Fuel Type** Body Type / Engine Type FRONT END LOADER Conditions LEAD TIME APROX 8 TO TEN WEEKS TAX & DUTY EXEMPT PRICE QUOTED FRONT END LOADER -MECHANICAL SELF LEVEL 2 BANK VALVE AND JOYSTICK CONTROL 1.8 METER HEAVY DUTY BUCKET RAMS HORNS BUMP GUARD QUICK DETACH LOADER QUICK CHNAGE ATTACHMENTS PAINTED MF RED TO MATCH TRACTOR VEHICLE PRICING RRP 165,000.00 SUB-TOTAL 165,000.00 PRICE BEFORE ON ROAD COSTS 165,000.00 Stamp Duty (calculated on 0.00) 0.00**PURCHASE PRICE** 165,000.00 PRICING SUMMARY MF425 BURDER FRONT END LOADER 165,000.00 **BALANCE PAYABLE** 165,000.00 **Cash Payment** 165,000.00

Dealer Signature

Customer Signature

Date

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BLUE OCEAN SHIPPING COMPANY LIMITED

P.O. BOX 1893, HONLARA, SOLOMON ISLANDS | IEL: 677-50162 | IEL: 677-50165

PROFURNA

No.: PP172-14

Date: 21 June 2014

TO: TONGS CORPORATION LTD HONIARA, SOLOMON ISLAND

ATT: MS. ROSE

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**** Admin tee \$10,00 - Not refinidable *** Proforma valid for 30 days from date of assued *** Subject to change without pror notice

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Attachment B-19 Contract on Procurement of Fence at Gizo Dumpsite

<u>CONTRACT FOR</u> <u>Construction Works for Fence and Gate at Gizo Dumpsite</u>

This Contract is made and entered into on June 2, 2015 by and between the JICA Expert Team for Improvement of Solid Waste Management Experts A & E (Stage 2) of Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM), (hereinafter referred to as "JICA Expert Team"), Yachiyo Engineering Co., Ltd., represented by Mr. Hiroshi Abe, and JK Mabuzu Building Construction in Gizo, Solomon Islands (hereinafter referred to as the Contractor) represented by Kisipioh Ghuena, Manager. The JICA Expert Team and the Contractor agreed to provide the services with the following terms and conditions:

Article 1 Work

The Contractor shall implement the Work as hereinafter defined under the terms and conditions of the Contract.

Article 2 Scope of the Services

The Contractor shall construct Fence and Gate at the dumpsite of Gizo, Solomon Islands according to the specification and drawings attached in here.

Article 3 Time Schedule

The Contractor shall start the works from the day of contract and complete the Work, and the Work shall be accepted by JICA Expert Team by July 31, 2015 without delay.

Article 4 Authorized Engineer

JICA Expert Team shall authorize their engineer to monitor the quality of the construction. The Contractor shall report to the Engineer as required and shall implement the construction works in accordance with the Engineer's instructions.

Article 5 Sum of the Contract & Payment

JICA Expert Team shall pay to the Contractor the Contract Amount 52,811.90 SBD (in word: Fifty Two Thousand and Eight Hundreds Eleven Point Nine Solomon Dollar only). The payment shall be made in two different phases:

- **1.** First payment: Approximately 40% (SBD 21,000.00) of the contract amount, within three days after the contract.
- 2. Final payment: Remaining amount Approximately 60% (SBD 31,811.90 SBD) of the contract amount, after the construction is finished, and checked by the JICA Expert Team

Payment will be done by Cash or Bank transfer to the designated bank account of the Contractor. The Contractor shall issue the invoice for each payment when this contract is signed and work will be completed. Also the contractor shall issue the receipt when he will receive the payment immediately.

Article 6 Cancellation, Amendment and Penalty of CONTRACT

In case the Contractor is unable to comply with the terms of this CONTRACT, JICA Expert Team shall have the right to cancel and/or amend this CONTRACT or refuse payment of all or parts of the remuneration specified in Article 5. In case of any delay from the contractor without any satisfactory reason accepted by JICA an amount (1% of the total bill per day) from the second payable amount will be deducted.

Article 7 Liability

JICA Expert Team shall be exempted from any damage, loss and/or accident incurred by or arising from the third party concerning any activity of the Contractor during the implementation of this CONTRACT. JICA Expert Team shall not be liable for compensation of the death, disability, or other hazards and damage that may be incurred by the employee(s) and/or properties of the Contractor because of his/her work employment in the said work under this contract.

Article 8 Confidentiality

The Contractor shall not reveal any results of the Services or any primary information obtained in the course of the Services to the third party without the prior consent of JICA Expert Team.

Article 9 Others

JICA Expert Team and the Contractor shall consult each other about any matter, which is not stated in this CONTRACT. Both parties have read and understood all details in this CONTRACT and here under affix their respective signatures.

Agreed in Gizo, Solomon Islands, on this day of June 1, 2015 by both parties through their authorized representatives.

JICA Expert Team

For the Contractor

Hiroshi Abe Yachiyo Engineering Co., Ltd. e-mail hr-abe@intl.yachiyo-eng.co.jp Mobile (in Solomon) 7779330 Kisipioh Ghuena Manager of JK Mabuzu Building Construction Mobile: 7521587, PO Box 150, Gizo

Attachment: Technical Specification for Construction Work for Fence and Gate

Technical Specification for Construction Work for Fence and Gate

Fence and Gate prevent the outsiders from getting into the site, and makes the demarcation of the landfill clearer. The installation shall be done at the boundary of the dumpsite (*Refer to Figure-1 of Attachment*). The height of Fence & Gate is 2 meters, and Fence is net-fencing -type. The specifications are as below.

(1) Fence

- **Type :** Net fencing with Angle support
- Height : 2.0 meter
- Wire netting size : φ 3.2mm, Diamond sharp
- **Support size :** Angle-75mm with Painted
- Support distance : 2.5 m
- **Support foundation:** Reinforced concrete (Contractor shall decide the size.)
- **Quantity:** 100 m
- Location: Shown in Figure 1
- If waste has already occupied the installation point of fence, the waste should be removed.

(2) Gate

- **Type :** Double door
- Height : 2.0 meter
- Width : 5.0 meter
- Structure : Steel structure with paint (Contractor shall decide the size of steel lumbers)
- **Foundation:** Reinforced concrete (Contractor shall decide the size.)
- Quantity: 2 piece

(3) Contact persons

The Contractor shall consult with JICA Expert Team or Gizo Town Council for any inquiries.

- 1. Mr. Akihiro Osada, JICA Expert Team, Tel: 7768994
- 2. Mr. Hiroshi Abe, JICA Expert Team, Tel: 7779330
- 3. Mr. Frederick Naphtalai, Western Province Government Tel 7466439
- 4. Mr. Derald Michael, Gizo Town Clerk, Tel: 7519215
- 5. Ms. Margaret Moveni, Planning Officer, Western Province, Tel: 7611807

(4) Location and structure



Figure 1: Location of Fence and Gate



Figure 2 Structure

Attachment B-20 Capacity Assessment Results



Figure B-9 Capacity assessment (Individual)



Figure B-10 Capacity assessment (Institutional)