フィジー国廃棄物減量化・資源化促進プロジェクト

JCC議事録 (1~10)

# MINUTES OF MEETING

### **FOR**

### THE FIRST JOINT COORDINATING COMMITTEE

ON

## WASTE MINIMIZATION AND RECYCLING PROMOTION PROJECT

IN

### THE REPUBLIC OF THE FIJI ISLANDS

Suva, 13 November, 2008

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Mr. Epeli Nasome Project Director

Director, Department of Environment,

Ministry of Local Government and Urban

Development & Housing and Environment

Mr. Jope Davetanivalu

Project Manager

Principal Environment Officer,

Department of Environment,

Ministry of Local Government and Urban Development & Housing and Environment Mr. Junji Anai Chief Advisor,

JICA Expert Team,

Kokusai Kogyo Co., Ltd.

Mr. Rajendra Pratap

Co-Project Manager

Director Health Services, Health Department, Lautoka City Council

Witnessed by:

Mr. Sakaraia Serau

Co-Project Manager

Head of Health Department,

Nadi Town Council

Mr. Nariaki Mikuni

for Resident Representative,

Japan International Cooperation Agency

(JICA)

Fiji Office



### First Joint Coordinating Committee on the Project

13 November, 2008 - JICA Fiji Office Conference Room, Suva, Fiji

- 1. Meeting started at 2:45 p.m.
- Attendants list of the meeting are given in Appendix 1
- 3. Opening of the meeting

Mr. Jope Davetanivalu, Ministry of Local Government and Urban Development & Housing and Environment, Department of Environment (hereinafter, DOE), acted as MC and opened the first Joint Coordinating Committee (hereinafter, JCC) by welcoming all of the participants. The DOE Director, Mr. Epili Nasome, then made an opening speech to comment on the importance of solid waste management in Fiji and the Waste Minimization and Recycling Promotion Project in the Republic of the Fiji Islands (hereinafter, the project). All attendees introduced themselves and the MC gave apologies from those unable to attend from the Ministry of Local Government, Urban Development & Housing and Environment: Mr. Ram Chandar (Acting Permanent Secretary), and Mr. Mosese Kama (Director of Local Government).

### 4. Agreement and Confirmation

The Chief Advisor, Mr. Junji Anai, JICA Expert Team (hereinafter, JET), presented the Inception Report (draft final) (hereinafter, IC/R) and reviewed matters that had been discussed between the Japan and Fiji sides (both sides). All the attendees agreed and confirmed the following items:

- (1) Strengthening of DOE capacity
  - DOE will attend all the meetings and events held in Lautoka City Council (hereinafter, LCC) and Nadi Town Council (hereinafter, NTC).
- (2) Cooperation with the Ministry of Education (hereinafter, MOE) on environmental education
  - All attendees acknowledged that MOE participates in the Project was essential and agreed to have a further discussion on its involvement among the stakeholders.





### (3) Publicity of the project

 As soon as IC/R is approved by JCC, then DOE, LCC and NTC will announce an outline and commencement of the Project to the citizens and concerned agencies

### (4) Cooperation with other donors

 Collaboration with other donors is important for the government of Fiji, whose resources are limited. To establish sustainable cooperation with other donors, DOE will take the initiative and collaborate with JET for support on matters, method and arrangement. JET will attend the meeting with the other donors.

### (5) Development of environmental education materials/programmes

- LCC, NTC develops environmental education materials/programmes considering local characteristics
- DOE develops a popular edition of environmental education materials/programmes based on the materials prepared by LCC and NTC.

### (6) Definition of 3Rs

 Definition of 3Rs "Reduce Reuse and Return" mentioned in the Minutes of Meeting held on the 25<sup>th</sup> July, 2008 was changed as "Reduce Reuse and Recycle/Return".

### (7) Additional activity

 The activity of "Conduct on-the-job-training (OJT) for Operation and Maintenance of Lautoka Landfill" even after the pilot project is completed will be added as described in D2.10 in page 34 of the Inception Report.

# (8) Amendment of Project Design Matrix version 1 (hereinafter, PDM1)

• Since the terms and indexes in the PDM<sub>1</sub> are indefinitive, PDM<sub>1</sub> will be amended and agreed as the PDM<sub>2</sub> in the 2nd JCC to be held in March 2009.





### (9) Plan of Operation

The Plan of Operation attached in the Minutes of Meeting signed on 25<sup>th</sup> July, 2008 is amended based on the results of the JCC meeting as given in Appendix 2.

### Further discussion

Further discussion took place on the above matters as follows:

- The scope of the project was clarified that it includes both composting and recyclables. JICA Expert Team (JET) clarified that the waste flow would be developed, and based on this, plans for both composting and recyclables are to be developed.
- LCC and NTC agreed to forward records of meetings to DOE if they are unable to attend, and stakeholders will remain flexible with meeting times.
- Donors and other stakeholders may be included in the project to coordinate
  their activities and also avoid any overlap or interference. These donors and
  other stakeholders may offer resources in various forms, e.g. financial,
  expertise, etc., and will be discussed by members of JCC before being
  included in the project. JCC is held at least twice a year, but can be held at
  any time considering the necessity and urgency of the matter.
- Based on the results of JCC meeting, the Inception Report attached was endorsed by the JCC.
- Mr. Jope Davetanivalu requested JICA to consider transportation needs of DOE to regularly attend meetings in Lautoka and Nadi to ensure the component in the project purpose to strengthen the capacity of DOE. Mr. Davetanivalu also suggested that the other counterparts, namely LCC and NTC, should also be provided access to any vehicle provided for the project should such a proposal be approved. Mr. Shinya Tamio (JICA, Assistant Resident Representative) suggested that JICA could consider additional support for this in view of implementation conditions of the Project.

### 6. Keynote Presentation

Mr. Junichi Nishikawa, Director of the Office of Environmental Policy, Shibushi City, Japan gave a lively presentation for the keynote presentation, "The Environmental

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Policy of Shibushi City", assisted with English translation by Mr. Shiro Amano, (JICA, Senior Advisor), on the accomplishments of this municipality in waste minimization without the use of incineration. Mr. Nishikawa stressed the primary importance of meeting directly with citizens and their cooperation in activities.

Attendees discussed the possibility of a partnership between Shibushi City and LCC and NTC under a sister city relationship, as LCC and NTC could learn many things from Shibushi City.

### 7. Closing of the meeting

Mr. Takeshita, Resident Representative of JICA, said that this is the first and last JCC for him because he would be transferred to Japan. He presented his delight on the commencement of the Project and expressed his wish for the Project's success.

Chairman Nasome concluded that JCC agreed on the annual operational work plan of the Project discussed.

Meeting closed at 4:45 p.m.

List of Attendants Appendix 1:

Appendix 2: Plan of Operation

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# Appendix 1: List of Attendants

Ministry of Local Government and Urban Development & Housing and Environment, Department of Environment (DOE)

1st JCC Chairman1 ENasome2@environment.go Mr. Epeli Nasome Project Director

v.fi Director of Environment

Project Manager of the Project JDavetanivalu@environment. Mr. Jope Davetanivalu

Principal Environmental Officer gov.fj

lusiana.ralogaivau@environ **Environmental Officer** Ms. Lusiana Ralogaivau

ment.gov.fi

laisani.lewanavanua@enviro Temporary Environment Officer Ms. Laisani Lewanavanua

nment.gov.fi

Ministry of Health, Central Board of Health (BOH)

Secretary to Central Board of tyoung@health.gov.fi Mr. Timothy Young

Health

Lautoka City Council (LCC)

Co-Project manager of the Project lcc@connect.com.fj Mr. Rajendra Pratap Director Health Services

Mr. Prem Sundar Senior Health Inspector

Co-Project manager of the Project

Mr. Rouhit K. Singh Health Inspector

Nadi Town Council (NTC)

Mr. Junji Anai

of Health Department, Head serau 7@yahoo.com Mr. Sakaraia Serau

Health Inspector

JICA Expert Team (JET) Advisor/Solid Waste Chief anai.junji@gmail.com

Management

Waste

susumus@tkd.att.ne.jp Minimization/recycling[1]/Fin'l, Mr. Susumu Shimura

inst'l and org aspects

stevensundstrom@yahoo.co. Project Coordinator[2] Mr. Steven Sundstrom

jp

JICA Advisory Committee (JAC)

Member of Advisory Committee, z-nishikaawa@city.shibushi.l Shibushi City, Director of Office of Mr. Junichi Nishikawa g.jp

**Environmental Policy** 

Member of Advisory Committee,

Amano.Shiro@jica.go.jp (Waste Mr. Shiro Amano Senior Advisor

Management), JICA

JICA Fiji Office (JFO)

Takeshita.Teiji@jica.go.jp Resident Representative Mr. Teiji Takeshita Mikuni.Nariaki@jica.go.jp Deputy Resident Representative Mr. Nariaki Mikuni

Resident Assistant Tamio.Shinya@jica.go.jp Mr. Shinya Tamio

Representative Formulation.

**Project** Advisor Saso.Fumiaki@jica.go.jp Mr. Fumiaki Saso

(Environment)

cowboybebop2040@yahoo.c Environmental Educator, JOCV Mr. Kazuva Yao attached to Suva City Council om

Director Nasome suggested that a Chairman be nominated and the floor nominated Director Nasome. This was approved by all of the attendees and the meeting continued with Director Nasome as Chairman.

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### MINUTES OF MEETING

**FOR** 

### THE SECOND JOINT COORDINATING COMMITTEE

ON

### WASTE MINIMIZATION AND RECYCLING PROMOTION PROJECT

IN

### THE REPUBLIC OF THE FIJI ISLANDS

Suva, 11 March 2009

Mile

Ms. Maraia UBITAU
Deputy Secretary,
Ministry of Local Government and Urban
Development & Housing and Environment

Mr. Junji ANAI Chief Advisor,

ЛСА Expert Team,

Kokusai Kogyo Co., Ltd.

VII. Jope DAVETANIVALU

Project Manager

Principal Environment Officer,

Department of Environment,

Ministry of Local Government and Urban Development & Housing and Environment Mr. Rajendra PRATAP

Co-Project Manager

Director Health Services, Health

Department, Lautoka City Council

Witnessed by:

Mr. \$akaraia SERAU
Co-Project Manager
Head of Health Department,
Nadi Town Council

Mr. Juichiro SASAKI Resident Representative, Japan International Cooperation Agency (JICA) Fiji Office

# Second Joint Coordinating Committee on the Project

11 March 2009 - ЛСА Fiji Office Conference Room, Suva, Fiji

- 1. Meeting started at 10:00 a.m.
- 2. Attendants list of the meeting are given in Appendix 1
- 3. Opening of the meeting

Opening welcomed by Mr. Davetanivalu and Mr. Sasaki, followed by introduction of participants. Mrs. Ubitau acted as chair and declared the meeting open.

## 4. Agreement and Confirmation

The Chief Advisor, Mr. Junji Anai, JICA Expert Team (hereinafter, JET), presented the progress of the project, framework of Solid Waste Management (SWM) Master Plan, Plan of Pilot Projects and Plan of Operation for the 2<sup>nd</sup> year based on the progress report (1). And Mr. Takazawa made a presentation on the methodology of the Capacity Assessment Survey. All the attendants agreed and confirmed the following items:

(1) Implementation of the Activity B4.1 mentioned in the Inception Report (IC/R) was not included in the Progress Report(1)

Regarding the Activity B4.1 "Review of Environmental Educational Materials in Japan, Fiji, and other Countries," JET gave additional clarification that, although the activity B4.1, which was the provisional work for development of the environmental education materials planned to be carried out from the middle of the 1<sup>st</sup> year to the early part of the 2<sup>nd</sup> year, was conducted. However, there was no output that could be explained because it was halfway through the work. Therefore, JET gave assurance to summarize the provisional works, such as collecting and arranging environmental materials that had been conducted in the 1<sup>st</sup> year together with the 2<sup>nd</sup> year's output, in the next phase.

### (2) PDM Indicators

JET was asked about the possible timing of the establishment of PDM indicators for 1 and 4 of project purpose as well as 3-1, 3-2, 3-3 and 4 of output by the member of the JCC. Mr. Anai answered that the indicators might be prepared after the finalization of waste flow expected in May 2009.

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Therefore, it was suggested that an additional JCC to be held in June or July to confirm the PDM indicators.

(3) Plan of Pilot Projects and Framework for the SWM master plan

JCC approved the framework for the SWM master plan as well as the plan of pilot
projects consisting of 3R and partial improvement for the Lautoka (Vunato) landfill
presented by JET. Therefore, the C/P and JET are requested to clarify more detailed
plan in the next proposed JCC to be held in June or July based on the finalized
waste flow.

The Director Health Services, Mr. Rajendra Pratap, chaired the meeting after tea break as the Deputy Secretary, Ministry of Local Government joined for another meeting.

(1) Recommendation of Equipment for pilot projects

Regarding the equipment namely multipurpose truck, shredder, grass cutter, composter and excavator which are considered in the plan of pilot projects, JCC decided to recommend its necessity to JICA Headquarters to be included in the pilot project shown as appendix 2.

### (2) CAPACITY ASSESSMENT

Further discussion took place on the above matters as follows:

- Mr. Sasaki (Resident Representative of JICA Fiji Office) commented that
  the report by the Project was prepared based on fact and it should be
  disseminated to the public through mass media. And the Fiji side agreed to
  this comment.
- Regarding the involvement of the Ministry of Education confirmed in the first JCC, (Director of Environment) was requested to issue a letter on behalf of the Fiji side to Curriculum Development Unit of Ministry of Education in order to invite the representative for next JCC meeting.
- Mr Kama (Director of Local Government) was requested to write to the municipal councils of Tayua, Ba, and Sigatoka for their representatives to attend to weekly meeting s to be held at Lautoka and Nadi Town Council.
- Mr. Uniasi Bera the representative of Central Board of Health, Ministry of Health was also requested to inform Raki Raki, Tavua, Ba, Lautoka, Nadi,



and Sigatoka Rural Local Authority representative to attend the weekly meeting of the project in Lautoka and Nadi.

• JICA explained that the vehicle which had been requested by DOE in the 1<sup>st</sup> JCC held on 13<sup>th</sup> November 2008 would not be provided. The members of JCC understood and agreed to this clarification.

Because of all the presentation in this JCC meeting was made by JET, Mr.
 Sasaki requested that more active participation by Fiji C/P is essential since this project is jointly implemented by the Government of Fiji and JICA. The members of JCC recognized its necessity.

### 3. Conclusion

JCC approved the progress of the Project in the 1<sup>st</sup> year, plan of Pilot Project as well as framework of the SWM master plan and the activities proposed for the 2<sup>nd</sup> year. The equipment proposed in the pilot project plan is recommended by JCC to be procured in 2<sup>nd</sup> year's activities.

Also, JCC decided to hold the 3<sup>rd</sup> JCC meeting in June or July 2009 to confirm the PDM indicators as mentioned in 4-(2) above, framework of the master plan with numerical target and detailed implementation plan of the pilot projects.

# 4. Closing of the meeting

Chairman Mr. Pratap closed the meeting.

Meeting closed at 12:45 p.m.

Appendix 1: List of Attendants

Appendix 2: Recommendation of the Equipment

Appendix 3: Progress report (1)

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# Appendix 1: List of Attendants

Ministry of Local Government and Urban Development & Housing and Environment

Deputy Secretary of Local

Government and Urban Mrs. Maraia Ubitau development & Housing and

**Environment** 

Mr. Mosese Kama Director, Local Government.

Project Manager of the Project

Mr. Jope Davetanivalu Department of Environment(DOE)

Principal Environmental Officer

DOE, Environmental Officer

DOE.

Temporary Environment Officer

Ministry of Health, Central Board of Health (BOH)

Senior Health Inspector, Central Mrs. Unaisi Bera

Board of Health

Second Secretary

Ms. Lusiana Ralogaivau

Ms. Laisani Lewanavanua

**Embassy of Japan** Mr. Yukihiro Tsujimura

Lautoka City Council (LCC)

Co-Project manager of the Project Mr. Rajendra Pratap

**Director Health Services** 

Mr. Shalend P Singh Senior Health Inspector

Nadi Town Council (NTC)

Co-Project manager of the Project

Mr. Sakaraja Serau Head of Health Department. serau 7@vahoo.com

Health Inspector

JICA Expert Team (JET)

Chief Advisor/Solid Waste Mr. Junji Anai anai.junji@gmail.com Management

Mr. Koji Kusunoki Waste Minimization/recycling[2] kusunoki@exri.co.jp

Environmental and Social

Masayuki\_takazawa@kkc.co. Mr. Masayuki Takazawa Consideration/Capacity jр Assessment

JICA Fiji Office (JFO)

Mr. Juichiro Sasaki Resident Representative Sasaki.Juichiro@jica.go.jp

Assistant Resident Mr. Shinya Tamio Tamio.Shinya@jica.go.jp

Representative Project Formulation Advisor

Mr. Fumiaki Saso Saso.Fumiaki@jica.go.jp (Environment)

JDavetanivalu@environment.

lusiana.ralogaivau@environ

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Icc@connect.com.fj

# Appendix 2: Recommendation of the Equipment

1. List of Equipment recommended for the Pilot Project

Taxing and	· · · · · · · · · · · · · · · · · · ·	
Equipment	Qt.	Purpose of use
A. 3R Pilot Project		
Multipurpose truck	1 unit	To transport of chipped green waste
- 3ton dump truck		To collect recyclables in the community 3R activities
·	:	To tract mobile shredder     As an advertising car of 3R
2. Mobile shredder  - Traction-type  - D>200mm	1 unit	To shred green waste for reduction of the volume
3. Grass cutter	20 units	To be used for the public area cleaning
<ul> <li>Corresponding to the</li> </ul>	(LCC:10)	carried out by the residents/community
nylon cutter	(NTC:10)	
4. Composter	100 units	• To compost the kitchen waste in the
Made of plastic	(LCC:50) (NTC:50)	household
B. Pilot Project on partial imp		toka landfill site
5. Excavator – 0.5m3 of backet	1 unit	To maintain the drains within the landfill site
capacity	:	To maintain the creek
	, ·	<ul> <li>To move the approach road (concrete plates)</li> </ul>
		<ul> <li>To dig holes for dumping of condemned food articles and dead animals.</li> </ul>
		To shape the landfilled waste

LCC: Lautoka City Council, NTC: Nadi Town Council

# 2. Necessity of procuring equipment for the Pilot Project

### A. Equipment for 3R Pilot Project

The 3R Pilot Project aims to establish on-site and/or off-site recycling systems which consist of recyclables collection, volume reduction of green waste, home compost, etc., and promote public participation in the public area cleansing. Therefore, the equipment recommended is necessary to realize the recycling systems.

B. Equipment for Pilot Project on partial improvement of Lautoka landfill site LCC has to lease equipment for additional works other than landfill work because it only has a bulldozer. The project aims to establish an appropriate sanitary landfill operation, so the excavator used for maintaining drains and creeks, moving approach road, and shaping landfilled waste, digging of holes (pit for burial of condemned food articles and dead animals is necessary.

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### MINUTES OF MEETING

### **FOR**

# THE THIRD JOINT COORDINATING COMMITTEE

ON

# WASTE MINIMIZATION AND RECYCLING PROMOTION PROJECT

IN

### THE REPUBLIC OF THE FIJI ISLANDS

Suva, 24 June 2009

Ms. Maraia UBITAU
Deputy Secretary,
Ministry of Local Government and Urban
Development & Housing and Environment

Mr. Junji ANAI Chief Advisor, JICA Expert Team, Kokusai Kogyo Co., Ltd.

Mr. Jope DAVETANIVALU

Project Manager

Principal Environment Officer,

Department of Environment,

Ministry of Local Government and Urban Development & Housing and Environment Mr. Rajendra PRATAP

Co-Project Manager

Director Health Services, Health

Department, Lautoka City Council

Witnessed by:

Mr. \$akaraia SERAU Co-Project Manager

Head of Health Department,

Nadi Town Council

Mr. Juichiro SASAKI

Resident Representative,

Japan International Cooperation Agency

(ЛСА) Fiji Office

### Third Joint Coordinating Committee on the Project

24 June 2009 - JICA Fiji Office Conference Room, Suva, Fiji

- 1. Meeting started at 10:00 a.m.
- 2. Attendants list of the meeting are given in Appendix 1
- 3. Opening of the meeting

All the participants introduced themselves. Subsequently, an opening welcome was given by Mr. Sasaki, Chief Representative of JICA Fiji Office. Acting Director Health and Environmental Service, Lautoka City Council, Mr. Gyneshwar RAO acted as chair and declared the meeting open.

At the beginning, the chairman briefed the minute of meeting of the 2<sup>nd</sup> JCC meeting and all the participants confirmed it. Mr. Jope Davetanivalu, the project manager, added the information that the Department of Woman as well as Department of Fijian Affairs etc. expressed their support to this Project at the training/workshop held on the 10<sup>th</sup> of June by JICA Expert Team (JET).

### 4. Agreement and Confirmation

The Chief Advisor, Mr. Junji Anai, JICA Expert Team (hereinafter, JET), presented the progress of the project. Subsequently, Mr. Shalend Prem SINGH, who is a Health Inspector of the Department of Health of Lautoka City Council, and Mr. Sakaraia Serau, who is the Director of Health department of Nadi Town Council, presented their own framework for solid waste Management (SWM) plan and implementation plan of the Pilot Project respectively. Mr. Anai proposed modification of Project Design Matrix (PDM). All the attendants agreed and confirmed the following matters explained in the above presentation:

### (1) Progress of the Project

JCC acknowledged that the activities carried out by the Counterparts and JET from the last JCC to the end of June 2009.

### (2) Framework for the SWM Plan

JCC approved the frameworks for the SWM plan of Lautoka City and Nadi Town and confirmed that the draft Solid Waste Management Plan would be developed based on these frameworks by the next JCC, which may be held in early October 2009.



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Mr. Sasaki asked how to set the numerical target in the framework. Mr. Anai gave the following explanation of his estimation:

Calculations of amount of waste recycled were made for four types of waste: household, business, landfilled, and public area and green waste. This was based on set assumptions from analysis of the current state of waste management. The 'Recycling Rate of MSW to Generation' was then calculated by dividing the total amount of waste recycled by the total waste generated.

### (3) Plan of Pilot Project

JCC approved the implementation plans of pilot project of Lautoka City and that of Nadi Town.

## (4) Equipment for the pilot projects

JCC acknowledged that JICA headquarter had allocated the budget to procure one excavator, one multipurpose truck, one shredder, 20 grass cutters and 100 composters for the pilot project according to the recommendation given in the 2<sup>nd</sup> JCC meeting. Therefore, JCC approved the procurement of this equipment to implement the Pilot Projects.

### (5) Modification of PDM

JCC understood the reasons for modification (appendix 2) and approved those in the Project Design Matrix (PDM) proposed by the JET as PDM version 2 shown as appendix 3.

### 5. Others

### (1) Involvement of Ministry of Education (MOE)

Mr. Tamio, Assistant Resident Representative of JICA Fiji Office, asked how to involve the MOE in the Project. Ms. Prabha Nair said it was necessary to involve the authority in the Project and requested JCC to issue a letter to high-ranking officials of MOE. And she mentioned that the Memorandum of Understanding (MOU) might be necessary in some cases. Mr. Tamio replied that the member of JCC were ready to prepare the MOU anytime if necessary. Mr. Jope Davetanivalu responded he would send a letter to the MOE.

And Ms. Nair mentioned that the activities MOE could support for the Project would be those mainly concerned with schools.





Ms. Premila Chandra, senior assistant health inspector of Nadi Town Council, reported that the activities involving a Japan Overseas Cooperation Volunteers (JOCV) member of environmental education had already commenced in the Muslim school in Nadi and it might be used as a model of the Project.

### (2) Setting up a site on the Homepage

Mr. Anai asked the Fiji side which homepage should be used to set up the site introducing the Project to be developed by JET. All attendants recognized DOE, LCC, and NTC have their own homepages. Therefore, JCC suggested that the website of the Project should be set up on the homepage of DOE and it should be linked with the LCC's and NTC's homepages.

### (3) Mutual monitoring

Mr. Sasaki pointed out that the mutual monitoring of the 3R activities especially for the pilot activities carried out in the municipalities involving the school and mass media would be important from a sustainable point of view even after the completion of the Project.

# (4) 4<sup>th</sup> JCC

Mr. Jope Davetanivalu proposed to hold the next JCC meeting in the project site. All attendants accepted this proposal.

### 6. Conclusion

JCC committee made the conclusions as follows;

- JCC approved the progress of the Project from the 2<sup>nd</sup> JCC to the end of June 2009
- JCC approved the implementation plan of Pilot Project in Lautoka City and Nadi Town as well as framework for the SWM plan
- JCC approved the PDM version 2
- JCC approved to procure the equipment for the pilot project had been recommended in the 2<sup>nd</sup> JCC meeting.

Lastly, JCC committee confirmed that the next JCC would be held in the western region and JCC members would visit the project sites.



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# 7. Closing of the meeting

Chairman Mr. Gyneshwar RAO closed the meeting.

Meeting closed at 12:45 p.m.

Appendix 1: List of Attendants

Appendix 2: Reasons for modifications and proposed indicators

Appendix 3: Project Design Matrix version 2 (PDM<sub>2</sub>)

Appendix 4: Project Design Matrix version 1 (PDM<sub>1</sub>)





# Appendix 1: List of Attendants

Ministry of Local Government and Urban Development & Housing and Environment

Mr. Jope Davetanivalu Project Manager of the Project

JDavetanivalu@environment.gov.fi Department of Environment(DOE)

Principal Environmental Officer

Ms. Laisani Lewanavanua DOE.

Temporary Environment Officer

laisani.lewanavanua@environment.

gov.fj

Ministry of Health, Central Board of Health (BOH)

Mrs. Unaisi Bera

Senior Health Inspector, Central

Board of Health

Una.bera@health.gov.fj

MINISTRY OF EDUCATION

Ms. Prabha Nair

MOE (CDU)

nairprabha@hotmail.com

**Embassy of Japan** 

Mr. Yukihiro Tsujimura

Second Secretary

Yukihiro.tsujimura@mofa.go.jp

Lautoka City Council (LCC)

Mr. Prem Sundar

Acting Director Health Services Senior Health Inspector LCC

sundarprem3@yahoo.com

Mr. Gyneshwar Rao

Mr. Shalend P Singh

Acting Director Health Services Senior Health Inspector LCC

gyneshwarrao@yahoo.com

Health Inspector LCC

Shalendsingh75@yahoo.com

Nadi Town Council (NTC)

Mr. Sakaraia Serau

Co-Project manager of the Project

Head of Health Department,

serau 7@yahoo.com

Mr. Robin Ali

Health Inspector **CEO Nadi Town Council** 

naditowncouncil@connect.com.fj

Ms. Premila Chandra

Senior Assistant Health Inspector

chandrapremila@hotmail.com

NTC

JICA Expert Team (JET)

Mr. Junji Anai

Chief Advisor/Solid

Management

Assessment

Waste

anai.junji@gmail.com

Mr. Koji Kusunoki

Waste Minimization/recycling[2]

Mr. Masayuki Takazawa

and

kusunoki@exn.co.jp

Environmental

Consideration/Capacity

Social

Masayuki\_takazawa@kkc.co.jp

JICA Fiji Office (JFO)

Mr. Juichiro Sasaki

Resident Representative

Sasaki, Juichiro@jica.go.jp

Mr. Shinya Tamio

Assistant

Resident

Tamio.Shinya@jica.go.jp

Mr. Fumiaki Saso

Representative Project Formulation

Advisor

Saso.Fumiaki@jica.go.jp

(Environment)

indicators
proposed
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Reasons for modifications and proposed indicate
Appendix 2 Reas

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旧	JY/(Q)		
Original indicators	Reasons formodification	Proposed Indicators	Notes
Project purpose			
Capacity of 3R (Reduce, Reuse, Recycle/Re	Capacity of 3R (Reduce, Reuse, Recycle/Return) of Department of Environment (DOE), Lautoka City and Nadi Town is increased through developing a 3R model for Fili	toka City and Nadi Town is increased through	developing a 3R model for Fiji.
1. At least XX seminars/workshops on 3R	Seminar/workshops on 3R promotion in	1. Total recycle rate* to the MSW	Increase of capacity on 3Rs must be proved
Professional are organized by DOE.	the project site are organized by LCC and NTC.	generation amount in Lautoka City and Nadi Town will be 14.4% and 16.7%	by the results of activities.
	⇔ If the seminar/workshop organized by	respectively by the end of the Project.	
	DOE targets the other municipal		
	+	- [	"1: lotal recycle rate: The rate of
2. Action plan for SR promotion is drafted by DOE.	1 - C Action plan for 3R promotion will be	2. Disposal rate** to the MSW generation	the sum total of recycled amount of household business public area and
		will decrease by 2.2% and 11.5%	green waste to the waste generation
	by DOE is not clear.	respectively from 2008's by the end of	amount of MSW.
	_	the Project.	*2 Disposal rate: The rate of disposal
3. Policy and budget for 3R promotion is	Û	3. DOE holds seminars to explain the	amount to the MSW generation amount.
secured within DOE.	achieve the overall goal.	guidelines and manuals targeting more	Disposal rate in LCC and NIC in 2008 are estimated as 72 8% and 86 1%
		which provide waste collection service	ectively.
4. Amount of waste disposal is decreased	d c> More concrete indicator is given based		
by XX% in Lautoka City and Nadi			
IOWII.	framework.		V
Output 2			
Lautona City and Ivadi Towil Obtain the capa	Laurona City and Iowil Obtain the capacity for proper SVVM through the implementation of the Pilot Project		
Evaluation reports on Pilot Projects	← This must not be an indicator.	3R projects and pa	⇔ Planning of pilot projects itself must be a
		Improvement of landfill sites are	good practice to obtain the capacity, so
		רו פרשום פת.	the preparation of the plan of PP is
7 The improved area of lautoka landfill	┿	in all a land	proposed as one indicator.
	will be confined during project		v whether LCC and NIC obtain
planned.	1	to implement 3R promo	Knowledge and experience or not will be
-	the capacity development for landfill	as well as operation and maintenance	evaluated in the capacity assessment.
	operation will be conducted only during	of the final disposal site through the	
	pilot project.	pilot project.	
Output 3			
Lautoka City and Ivadi Iown obtain the capacity for 3K promotion activities	acity for 3K promotion activities at whole area of	at whole area of Lautoka City and Nadi Town.	
1. AA% of nousenoids in Lauroka City	û —	1. An action Plan for 3R promotion is	♣ An action plan (A/P) is indispensable (a
and or training on 3D		prepared.	part of capacity) in promoting the 3Rs for
מומים משווים סו סוי	of nouseholds participated seminar and training.		LCC and NTC.
2. XX% of households in Lautoka City	Û	2. Lautoka City and Nadi Town conduct	c⟩ It is considered that appropriate
	)		





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* Conginalindicators	🏄 🕶 🐂 Reasons for modification 🔭 🔭	A Proposed Indicators the second	Notes.
and Nadi Town conduct 3R.	households conducting 3R activities.	Action Plan for 3R promotion	implementation of the A/P means LCC
		- 1	and NIC obtain the capacity.
3. At least one segregation station is	ᡠ	3. Capability for 3R promotion of the staff	Results of the Capacity Assessment
established per XX households.	of the options for 3R activities, but it is	of Lautoka City and Nadi Town	(CA) is most suitable source to conclude
	not adopted yet.	improved.	whether LCC and NTC obtain the
			capability of 3R promotion.
4. Reports on 3R promotion project			
-	Plan is more suitable way to conclude		
	whether the LCC and NTC obtain the	-	
	capacity or not.		
Output 4			
Awareness of residents in Lautoka City and I	Awareness of residents in Lautoka City and Nadi Town is raised through implementation of environmental education activities on 3R promotion.	environmental education activities on 3R promo	otion.
1. Awareness of XX% of households in	Awareness of XX% of households in   c>lt is difficult to identify how many percent	1. More than half of households in LCC	
Lautoka City and Nadi Town is	of households' awareness is raised.	and NTC will participate in the	number of participants of the education
improved.		community meeting for 3R promotion by	is a very important factor.
		- 1	
		2. Recycle rate of the households in LCC	⇔ It is considered that the recycle rate will
	1	and NTC will be 2.9% and 1.5%	increase as awareness is raised.
		respectively by the end of the Project.	
Output 5			
3R model for Fiji is developed and recommended.	nded.		
1. Guideline, manuals, etc. are developed. ⇔ No change	다 No change	1. Guideline and manuals are developed	
2. Seminars to present the guideline ⇔ This indicator is adopted	⇔ This indicator is adopted for the project		
manuals are conducted to more than purpose.	purpose.		
conduct waste collection.	y Delete tills to avoid repetition.		





Appendix 3: Project Design Matrix Version 2 (PDM<sub>2</sub>)

Project Title: Waste Minimization and Recycling Promotion Project

Duration: October 2008 – March 2012(3.5 years), Farget Area: Lautoka City and Nadi Town

Target Group: The staff of the Department of Environment, the staff of Lautoka City and Nadi Town Councils and

=[	iger Group. The stall of the Department of Environment	nt, the staff of	raiget Group. The staff of the Department of Environment, the staff of Lautoka City and Nadi Town Councils and their residents	side		)raft	Draft PDM Version 2
	Narrative Summary		Objective Verifiable Indicators		Means of Verification	1	Important Assumptions
	Overall Goal 3R (Reduce, Reuse, Recycle/Refurn) is progressed in Fiji, mainly in Western Division.		Other municipalities mainly in Western Division introduce the 3R model for Fiji.	<del>.</del>	Interview with officials in charge of SWM in the municipalities	<del>-</del>	National waste management policy is still in line with 3D
	Project Purpose Capacity of 3R (Reduce, Reuse, Recycle/Return) of Department of Environment (DOE), Lautoka City and Nadi Town is increased through developing 3R model for Fiii.	<del>-</del>	Total recycle rate to the Municipal Solid Waste (MSW) generation amount in Lautoka City and Nadi per will be 14.4% and 16.7% respectively by the and of the Droises.	←:	Survey on Solid Waste Management (SWM) situations: Pblic Opinion	-	Awareness is not spoiled by opening new landfills mainly in Western division.
		2. Disposa Lautoka and 11. Project.	Disposal rate ii to the MSW generation amount in Lautoka City and Nadi Town will decrease by 2.2% and 11.5% respectively from 2008's by the end of the Project.	લ છ	amount, report from recyclers, weighbridge data) Weighbridge data Reports on seminar	vi ei	Municipalities mainly in Western division is not dramatically changed.  Market situation of
		3. DOE manu in Fiji	DOE holds seminars to explain the guidelines and manuals targeting more than half of the municipalities in Fiji which provide waste collection service.			4.	ĭsi York Vertir
<del></del>	Outputs Solid Waste Management Plans focusing on 3R are developed respectively in Lautoka City and Nadi	1. Solic 2.1 Plan	nagement plan is established. projects and partial improvement of	1.7.	1 =	<del>-</del> -	Counterpart personnel keep working in the field of
<b>6</b>	Lautoka City and Nadi Town obtain the capacity for proper Solid Waste Management (SWM) through the implementation of Dilet projects.	2.2	landfill sites are prepared.  Lautoka City and Nadi Town accumulate knowledge and experiences to implement 3R promotion as well		- Plan of 3RPP - Plan of partial improvement of Lautoka	6	SWM. Political disorder does not occur in Fiji.
<u>က်</u>		3.1 Action	as operation and maintenance of the linal disposal site through the pilot project.  Action Plan for 3R promotion is prepared.	2.2	Report of Capacity Assessment		
4,			SR promotion appropriately.  Stability for 3R promotion of the staff of Lautoka	3.5	on 3R p		
<u>го</u>	3R model for Fiji is developed and recommended.	4.1 Mor	City and Ivadi Town Improved.  More than half of households in Lautoka City and Nadi Town will participate in the community meeting	υ, 4. υ, 1	Report of Capacity Assessment Report on community		
		for 3 4.2 Rec Nad	for 3R promotion by the end of the Project.  Recycle rate of the households in Lautoka City and Nadi Town will be 2.9% and 1.5% respectively by the		ys ed data of i d by		
(		end 5-1 Guic	end of the Project. Guideline and manuals are developed	7-7	collection activities Guidelines, manuals		





Activities	Inputs		
1-1 Survey the current status of SWM.	Japanese side	Fili side	
1-2 Conduct a field survey on Lautoka City Vunato Landfill site (Lautoka		Personnel	
	1. Chief advisor	- Assign necessary number of	
1-3 Trace the current waste flow from generation to final disposal and identify	2. Solid waste management	counterpart personnel at	
issues to be addressed.	3. Waste minimization and	ty Council a	
	recycling	=	
	4. Solid waste education and b)	Office space and facilities	
	awareness raising	Office space and facilities	
1-7 Finalize SWM plans.	5. Capacity assessment c)	Machinery, equipment and	
2-1 Conduct a community survey.	ш		
2-2 Select pilot areas on the basis of the community survey.	organizational aspects d)	Administrational	
2-3 Develop a pilot project plan on 3R.	7. Final disposal (planning,	operational cost	
24 Conduct trainings, on the job trainings, etc. for the staff of Lautoka City	construction and operation e)	Others	
Council and Nadi Town Council to implement the pilot projects.	of sanitary landfill)	Provision of necessary data.	
2-5 Conduct the pilot project on 3R at pilot areas.	_	information, etc.	
2-6 Develop a pilot project plan on a partial improvement of Lautoka Landfill.	9. Environmental and social		
2-7 Complete the Environmental Impact Assessment (EIA) process required for	consideration		
the pilot project on a partial improvement of Lautoka Landfill.	10. Project coordinator		
2-8 Conduct the pilot project on a partial improvement of Lautoka Landfill		•	
2-9 Review and evaluate the pilot projects	b) Counterpart training	•	
2-40 Conduct O.T for operation and maintenance of Lautoka landfill	c) Machinery equipment and		
3-1 Develop a 3R promotion action plan at whole area of I autoka City and Nadi	materials		Drocondition
Town			
3.2 Conduct training on the jet training of for the staff of 1 offers Office			
o-z Contact definitions, on the job definitions, let the stand of Educadors			
Soundi and had lower council to implement on promotion.			
3-3 implement 3K promotion.			
3-4 Review and evaluate 3R promotion.			
4-1 Review on environmental educational tools/programmes in Fiji, Japan and			
other countries.	.,,		
4-2 Develop effective educational tools/programmes.			
4-3 Conduct trainings, on the job trainings, etc. for the groups & personnel			
concerned on 3R promotion in Lautoka and Nadi Town.			
4-4 introduce the educational tools/programmes in the pilot project areas.			
4-5 Evaluate the educational tools/programmes.			
4-6 improve the educational tools/programmes.			
4-7 Implement activities to raise awareness through using the educational			
tools/programmes in Lautoka City and Nadi Town.	_		
5-1 Review all the process & results of the activities for 3R promotion by the			
project and extract findings.			
5-2 Develop draft guidelines, manuals on 3R model for Fiji, etc. for its promotion.			
5-3 Finalize the guidelines, manuals, etc.			
5-4 Conduct seminars to present other municipalities the guidelines and			
manuals.			



i Total recycle rate: A rate of the sum total of recycled amount of household waste, business waste, public area waste and green waste to the waste generation amount of MSW
 ii Disposal rate: A rate of disposal amount to the MSW generation amount. Disposal rate in Lautoka City and NTC in 2008 are estimated as 72.8% and

86.1% respectively.

iii Recycle rate of households. A rate of recycled waste amount of household to the generation amount of MSW.

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Matrix Ve
<b>Design</b> I
<b>Project</b>
Appendix 4:

Project Title: Waste Minimization and Recycling Promotion Project

Duration: 2008-2011(3.5 years),

Target Group: The staff of Department of Environment, the staff of Lautoka City and Nadi Town Councils and their residents

	Narrative Summary	Narrative Summary Objective Verifiable Indicators	Means of Verification		Important Assumptions
	Overall Goal 3R (Reduce, Reuse, Return) is progressed in Fiji, mainly in Western Division.	Other municipalities mainly in Western     Division introduce the 3R model for Fiji.	<ol> <li>Interview with officials in charge of SWM in the municipalities.</li> </ol>	in charge of es.	1. National waste management policy is still in line with 3R
	Project Purpose Capacity of 3R (Reduce, Reuse, Return) of Department of Environment (DOE), Lautoka City and Nadi Town is increased through developing 3R model for Fiji.	At least XX seminars/workshops on 3R promotion are organized by DOE.     Action plan for 3R promotion is drafted by DOE.     Policy and budget for 3R promotion is secured within DOE.     Amount of waste disposal is decreased by XX% in Lautoka city and Nadi town.	1. Report on the seminars 2. 3R promotion action plan 3. Relevant documents to verify the status of policy and budget of DOE. 4. The survey report in current situations of SWIM and evaluation report on 3R project 5. National strategy on 3R 6. By-law on 3R		1. Awareness is not spoiled by opening new landfills mainly in Western division. 2. SWM policy of other municipalities mainly in Western division is not dramatically changed. 3. Market situation of recyclable products is not dramatically changed.
t, 0, ω, 4, ω	Outputs Solid Waste Management Plans focusing on 3R are developed respectively in Lautoka City and Nadi Town respectively. Lautoka City and Nadi Town obtain the capacity for proper Solid Waste Management (SWM) through the implementation of Pilot projects. Lautoka City and Nadi Town obtain the capacity for 3R promotion activities at whole area of Lautoka City and Nadi Town. Awareness of residents in Lautoka City and Nadi Town is raised through implementation of environmental education activities on 3R promotion. 3R model for Fiji is developed and recommended.	<ol> <li>Solid Waste Management Plan</li> <li>Evaluation reports on Pilot Projects</li> <li>The improved area of Lautoka landfill by the pilot project is operated as planned.</li> <li>XX% of households in Lautoka city and Nadi town participate seminars and/or trainings on 3R.</li> <li>XX% of households in Lautoka city and Nadi town conduct 3R.</li> <li>At least one segregation station is established per XX households.</li> <li>Reports on 3R promotion project</li> <li>Awareness of XX% of households in Lautoka city and Nadi town is improved.</li> <li>Guideline, manuals, etc. are developed.</li> <li>Seminars to present the guideline manuals are conducted to more than half of other municipalities which conduct waste collection.</li> </ol>	1. Solid Waste Management Plans 2-1 The survey report on current situations of SWM and the pilot project evaluation report 3. The evaluation report on 3R promotion 4. The survey report on current situations of SWM and the evaluation report on 3R promotion 5-1 Guidelines, manuals, etc. 5-3 Report on the seminars		1. Counterpart personnel keep working in the field of SWM. 2. Political disorder does not occur in Fiji.





Anthritine		
	Inputs	
	Japanese side	ı
1-2 Conduct a field survey on Lautoka city Vunato Landfill site (Lautoka Landfill).	a) Personnel	
1-3 Trace the current waste flow from generation to final disposal and identify	t	
issues to be addressed.	nanagement	
14 Develop frameworks of SWM.	and Lautoka city council and Na	
1-5 Build a consensus on the frameworks of SWM among stakeholders.		
	aste education and b)	
1-7 Finalize SWM plans.	awareness raising - (	
2-1 Conduct a community survey.	<ol><li>Capacity assessment c) Machinery, equipment and</li></ol>	
2-2 Select pilot areas on the basis of the community survey.	Financial, institutional and materials	
2-3 Develop a pilot project plan on 3R.	organizational aspects d) Administrational and	
2-4 Develop a pilot project plan on a partial improvement of Lautoka Landfill.	planning. operational cost	_
2-5 Conduct trainings, on the jop trainings, etc. for the staff of Lautoka city council	ruction and operation of e)	
and Nadi town council to implement the pilot projects.	sanitary landfill) - Provision of necessary data	
2-6 Complete the Environmental Impact Assessment (EIA) process required for	Collection and transportation	
the pilot project on a partial improvement of Lautoka Landfill.	<u></u>	
2-7 Conduct the pilot project on 3R at pilot areas.	consideration	
2-8 Conduct the pilot project on a partial improvement of laurokal andfill	10 Project coordinator	
2-9 Review and evaluate the pilot projects		
3-1 Develop a 3R promotion action plan at whole area of Pautoka city and Nadi	b) Counterpart training .	Drocondition
town		
O County	machinery, equipment	
3-2 Conduct trainings, on the job trainings, etc. for the start of Lautoka city council	Illateriais	
and lyadi town council to implement 3rt promotion.		
3-3 Implement 3R promotion.		
3-4 Review and evaluate 3R promotion.		
4-1 Review on environmental educational tools/programmes in Fiji, Japan and		
other countries.		
4-2 Develop effective educational tools/programmes.		
4-3 Conduct trainings, on the job trainings, etc. for the groups & personnel		-
concerned on 3R promotion in Lautoka and Nadi.		
4-4 Introduce the educational tools/programmes in the pilot project areas.		
4-5 Evaluate the educational tools/programmes.		
4-6 Improve the educational tools/programmes.		
4-7 Implement activities to raise awareness through using the educational		
tools/programmes in Lautoka city and Nadi town.		
5-1 Review all the process & results of the activities for 3R promotion by the project		
and extract findings.		
5-2 Develop draff guidelines, manuals on 3R model for Fiji, etc. for its promotion.		_
5-3 Finalize the guidelines, manuals, etc.		
5-4 Conduct seminars to present other municipalities the guidelines and manuals.		





# MINUTES OF MEETING FOR THE FOURTH JOINT COORDINATING COMMITTEE ON WASTE MINIMIZATION AND RECYCLING PROMOTION PROJECT IN THE REPUBLIC OF THE FIJI ISLANDS

Lautoka, 21 October 2009

Mr. Epeli NASOME Project Director

Director,

Department of Environment,
Ministry of Local Government and Urban
Development & Housing and Environment

Mr. Junji ANAI -Chief Advisor, JICA Expert Team, Kokusai Kogyo Co., Ltd.

Mr. Sakaraia SERAU Co-Project Manager Head of Health Department, Nadi Town Council

Mr. Shalend Prem SINGH Co-Project Manager Senior Health inspector, Health

Department, Lautoka City Council

Witnessed by:

Mr. Nariaki MIKUNI

Deputy Resident Representative, Japan International Cooperation Agency

(JICA) Fiji Office

# Fourth Joint Coordinating Committee on the Project 21 October 2009 - Chamber of Lautoka City Council

- 1. Meeting started at 8:30 a.m.
- 2. Attendants list of the meeting are given in Appendix 1
- 3. Opening of the meeting

Mr. Gyneshwar RAO, acting Director Health and Environmental Service of Lautoka City Council (LCC), welcomed both the Special Administrators, JICA Suva office, Ministry of Education, both counterparts, the JICA Expert Team (JET) and other staff from each council, and declared the 4<sup>th</sup> Joint Coordinating Committee (hereinafter, JCC) meeting open.

Mr. Epili Nasome, Director Department of Environment, acted as chair and made an opening speech to comment on the importance of solid waste management in Fiji and the Waste Minimization and Recycling Promotion Project in the Republic of the Fiji Islands (hereinafter, the project). Then Mr. RAO read the conclusion of the 3<sup>rd</sup> JCC meeting.

### 4. Agreement and Confirmation -

The Chief Advisor, Mr. Junji Anai, JICA Expert Team (hereinafter, JET), presented the overall progress of the project, and Mr. Shalend Prem SINGH reported the progress of the Pilot Project of 3R Promotion, partial improvement of Vunato disposal site and extension plan of 3R promotion confirmed in workshop 2 for Lautoka City. Next, Mr. Sakaraia SERAU reported the progress of the 3R Pilot Project and extension plan of 3R promotion of Nadi Town. All the attendants agreed and confirmed the following items:

### (1) Progress of the Project

JCC approved the progress of the Project explained by JET. Therefore, Mr. Nasome asked whether the participation rate for the recyclables collection activity of the residents in the pilot project site was satisfactory or not. Mr. Anai responded that the ordinally people did not want to separate and keep recyclables in their premises, so these rates are not so inadequate. It will take time to change minds and habits.

Mr. Nasome suggested that we should target school children, rather than adults, as they are in a learning stage. Mr. XX, education officer, said we should not only target children, but also adults so they can lead by example. Also Mr. XX proposed

that his office or Ministry of Education is willing to cooperate if something can be done to promote educational activities to collaborate with the project activities.

## (2) Expansion Plan of 3R Promotion

JCC understands the expansion plan of 3R promotion in Lautoka and Nadi presented respectively and recognized the necessity of inputs as bellow for the future project activities.

- Material Recovery Facility (MRF) and equipment for sorting and storing recyclables and green waste and compost of vegetable waste from market for the both councils.
- Multi-purpose truck and shredder for collection service for Nadi Town Council (NTC).

Mr. Tamio pointed out a contradiction between the PDM and the extension plan of 3R promotion. He explained, although the PDM mentioned clearly "Lautoka City and Nadi Town obtain capacity for 3R promotion activities in the whole area of Lautoka City and Nadi Town" by the end of the JICA's cooperation term which is the end of March 2012, but the extension plan targeted to achieve 3R promotion in the whole area by the end of 2017 which will be started in 2012.

Mr. Shalend SINGH explained we would be able to do an awareness raising activities and launch the final extension stage in the three months from January to March 2012, just before the end of the project.

# (3) Development of MRF at Wailoaloa in NTC

According to the recognition of necessity of the MRF, as mentioned above, members of JCC acknowledged that whether the MRF would be developed timely or not was a critical issue for realizing the Master Plan. Therefore, JCC requested DOE to support NTC for the development of the MRF at Wailoaloa.

(4) Necessity of Landfill equipment in Vunato disposal site

JCC understood the present situation that a continuous landfill operation was difficult due to the frequent breakdown of the old bulldozer (property of LCC) in Vunato disposal site. Therefore, JCC recognized necessity of such equipment in good condition.

(5) Change of the Co-Project Manager of LCC

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JCC accepted the change of Co-Project Manager of LCC from Mr. Rajendra PRATAP to Mr. Shalend Prem SINGH.

(6) Country Focused Training Course "3R Promotion" in Japan Mr. Anai explained the contents of the Country Focused Training Course "3R Promotion" to be held from 15<sup>th</sup> to 27<sup>th</sup> November in Japan and introduced the five nominated counterparts (one from DOE, two from LCC and 2 from NTC).

JCC accepted to dispatch the five counterparts introduced.

### 5. Conclusion

JCC approved the progress of the Project from June to October, 2009 reported in the meeting. After the meeting, all of the JCC members visited the sites where the 3R pilot projects are being carried out, Vunato disposal site and the candidate MRF site in Wailoaloa, Nadi, and reconfirmed the matters discussed in the meeting.

### 6. Closing of the meeting

Mr. Josefa VUCAGO, Special Administrator of LCC, wrapped up the meeting. And Mr. Nariaki MIKUNI, Deputy Resident Representative of JICA Fiji Office, closed the meeting.

Meeting closed at 12:00 p.m.

### 7. Site Visit

Site visits to Vunato disposal site and Field forty in Lautoka, and Matavolivoli and Wailoaloa in Nadi were organized by both LCC and NTC for the JCC members.

Lastly, Mr. Aisea TUIDRAKI, Special Administrator of NTC, closed the site visit for the 4<sup>th</sup> JCC at Wailoaloa candidate site.

Appendix 1: List of Attendants

Appendix 2: Progress Report (1)

Appendix 3: Extension Plan of 3R Promotion in Lautoka

Appendix 4: Extension Plan of 3R Promotion in Nadi

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List of Attendants Appendix 1:

Ministry of Local Government and Urban Development & Housing and Environment

Mr. Epeli Nasome

Director of Environment, DOE

Ms. Laisani Lewanavanua

Temporary Environment Officer, DOE

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Ministry of Health, Central Board of Health (BOH)

Mrs. Unaisi Bera

Senior Health Inspector, Central

Board of Health

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Ministry of Education

Mr. Hari Krishna

Education Officer

Lautoka City Council (LCC)

Special Administrator LCC Mr. Josefa Vucago

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Acting Director Health Services

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Mr. Shalend P Singh

Acting Senior Health Inspector LCC Co Project Manager

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Mr. Rouhit Karan Singh

Acting Senior Health Inspector LCC

Mr. Wally Atalifo

Health Inspector, LCC

Mr. Jeremaia Marawa

Health Inspector, LCC

Mr. Mithun Prasad

Trainee Health Inspector

Nadi Town Council (NTC)

Mr. Aisea Tuidraki

Administrator (Nadi Special

Sigatoka Town Council)

Mr. Sakaraia Serau

Acting CEO Nadi Town Council, Co -

Project Manager

Acting Director Health Services, Nadi

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Town Council

JICA Volunteer

Mr. Rajeshwar Raj

Ms. Premila Chandra

Health Inspector NTC

Ms. Yumi Yoshidomi

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/ Solid Waste

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Consideration/Capacity Assessment

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Mr. Shinya Tamio

Assistant Resident Representative

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Mr. Nariaki Mikuni

JICA office

### MINUTES OF MEETING

### FOR

### THE FIFTH JOINT COORDINATING COMMITTEE

### ON

## WASTE MINIMIZATION AND RECYCLING PROMOTION PROJECT

### IN

### THE REPUBLIC OF THE FIJI ISLANDS

Suva, 10 March 2010

OHNE

Ms. Maraia UBITAU

Deputy Secretary,

Ministry of Local Government and Urban

Development & Housing and Environment

Mr. Junji ANAI

Chief Advisor,

Japanese Expert Team,

Kokusai Kogyo Co., Ltd.

Mr. Jope DAVETANIVALU

Project Manager

Acting Director,

Department of Environment,

Ministry of Local Government and Urban

Development & Housing and Environment

Mr. Shalend Prem SINGH

Co-Project Manager

Atcing Senior Health Inspector,

Health Department, Lautoka City

Council

Witnessed by:

Mr. Sakaraia SERAU

Co-Project Manager

Head of Health Department,

Nadi Town Council

Mr. Nariaki MIKUNI

Deputy Resident Representative,

Japan International Cooperation Agency

(JICA) Fiji Office

### Fifth Joint Coordinating Committee on the Project

10 March 2010 - JICA Fiji Office Conference Room, Suva, Fiji

- 1. Meeting started at 10:00 a.m.
- 2. Attendants list of the meeting is given in Appendix 1
- 3. Opening of the meeting

All the participants introduced themselves. Subsequently, a welcome address was given by Mrs. Maraia Ubitau, Acting Permanent Secretary for Local Government, Urban Development, Housing and Environment and acted as chair and declared the meeting open.

At the beginning, the chairman briefed the minutes of meeting of the 4<sup>th</sup> JCC meeting and all the participants confirmed it.

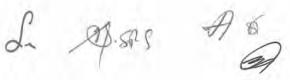
### 4. Agreement and Confirmation

The Chief Advisor, Mr. Junji Anai, Japanese Expert Team (hereinafter, JET), presented the progress of the project conducted from October 2009 until the middle of March 2010. Subsequently, Mr. Shalend Prem SINGH, who is the co-project manager from Lautoka City Council, and Mr. Sakaraia Serau, who is also the co-project manager from Nadi Town Council, presented their progress on the Project and the Master Plan of Solid Waste Management (SWM M/P) for each council respectively. And Mr. Anai proposed modification of the second Project Design Matrix (PDM). All the attendants agreed and confirmed the following matters explained in the abovementioned presentation:

### (1) Progress of the Project

Mr. Anai explained that the progress of the project as of the middle of March 2010 was almost on schedule except implementation of the OJT for operation and maintenance of Lautoka landfill due to cyclone Mick, which struck Lautoka on 14<sup>th</sup> December 2009, but all the facilities planned were already completed so that LCC would be able to commence landfill operation in the developed area.

The JCC acknowledged that the activities carried out by the Counterparts and JET from the last JCC meeting to the middle of March 2020.



### (2) Solid Waste Management Master Plan

The JCC approved the SWM M/P plans of Lautoka City and Nadi Town and confirmed that the 3R activities to be conducted in the Project would follow the SWM M/Ps.

Mr. Mikuni asked for the financial evidence to fulfill the plan stipulated in the SWM M/P.

Mr. Shalend Prem SINGH and Mr. Sakaraia Serau answered that the SWM M/Ps for Lautoka and Nadi were approved by all the stakeholder in the Seminar held on 24<sup>th</sup> and 26<sup>th</sup> of February, respectively. And both Special Administrators approved and endorsed the SWM M/Ps. Further, the councils have already allocated council budget for 3R promotion of F\$50,000 for year 2010 in Lautoka and F\$45,000 in Nadi, respectively.

Mr. Yoshida requested that the Action Plan, which will be developed based on the SWM M/P, could include OHS (Occupational Health and Safety) point of view since its importance was recognized through the joint workshop activities with ILO (International Labour Organization).

In order to achieve project objective together with LCC and NTC, Mrs. Unaisi Bera requested LCC to take into consideration the specific circumstances of NTC when LCC discusses about the proper landfill operation system.

### (3) Plan of Operation for the third year Project

JET proposed the separate collection of recyclables in commercial areas in Lautoka City and Nadi Town as an additional Pilot Project in the third year of the Project, because the collection system was different from that in residential areas.

The JCC approved to conduct this additional Pilot Project in the third year.

### (4) Preparation to implement activities for Output 5

JET explained that the involvement of the DOE in the activities concerning Output 5 must increase and requested the DOE to prepare for implementation of the third year of the Project. JET also requested to the C/P of Lautoka and Nadi to support DOE.

Co-project managers from Lautoka and Nadi gave their willing consent and expressed willingness to cooperate with DOE towards achieving outputs.

Mr. Jope Davetanivalu mentioned that he regarded the review of "National Waste Management Strategy" to be conducted by the DOE as one of the Project activities

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and planned to hold a workshop inviting all municipalities, local authorities and other stakeholders in Lautoka in May or June 2010.

Mr. Tamio said that Output 5 would be important for the expansion phase and the leading actor must be the DOE with close collaboration with the Ministry of Health (Central Board of Health). Therefore, the DOE was requested to present their plan and expected activities to be done in the Project at the next JCC meeting.

### (5) Modification of PDM<sub>2</sub>

The JCC understood the reasons for modification of the PDM<sub>2</sub> (appendix 2) and approved as proposed by the JET as PDM<sub>3</sub> shown as appendix 3.

### 5. Others

### (1) Tax exemption for procurement of equipment needed for the Project

Mr. Tamio informed that JICA and the Ministry of Finance (MOF) keep discussing about the refund system that JICA would pay VAT of the equipment to be procured for the Project and MOF would refund it. Once it is confirmed, this system would be applied for further donation.

Also, Mr. Tamio requested JICA would need assistance of the counterpart organizations to issue the letter to MOF for payment of VAT when the system was confirmed.

All the counterparts agreed to assist JICA.

### (2) Absence of the Project Director

Mr. Tamio mentioned the absence of the Project Director due to the retirement of Mr. Epeli Nasome, who was the Director of the Department of Environment.

The JCC confirmed that this subject would be concluded in the next JCC meeting.

### (3) Mid-term evaluation of the Project

Mr. Yoshida, who is an officer of JICA headquarter explained that JICA will dispatch the mission of mid-term evaluation of the Project in the late May and requested cooperation for smooth implementation to the counterparts.

All the counterparts expressed their willingness to cooperate for the mission.

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#### (4) 6<sup>th</sup> JCC

Mr. Yoshida also requested the JCC to organize the JCC meeting just after the mid-term evaluation.

All the members of the JCC agreed to hold the next JCC meeting in late May when the mid-term evaluation would be completed.

#### 6. Conclusion

The JCC made the following conclusions:

- The JCC approved the Progress report (3) of the Project explaining the activities conducted from October 2009 to the middle of March 2010.
- The JCC approved the plan of operation for the third year of the Project including implementation of the separate collection of recyclables in commercial areas as a Pilot Project in Lautoka City and Nadi Town.
- The JCC approved the PDM version 3
- The JCC recognized that the necessity of a multi-purpose truck (MPT) proposed to be input for the 3R promotion in Nadi in the third year of the Project.
- All the counterparts promised to request the Ministry of Finance to make a VAT refund to JICA when the equipment would be procured for the Project.

Lastly, the JCC confirmed that the next JCC meeting would be held after the mid-term evaluation which would be carried out in late May 2010.

#### 7. Closing of the meeting

Chairman Mr. Gyneshwar RAO closed the meeting.

Meeting closed at 12:45 p.m.

Appendix 1: List of Attendants

Appendix 2: Reasons for modifications and proposed indicators

Appendix 3: Project Design Matrix version 3 (PDM<sub>3</sub>)

Appendix 4: Project Design Matrix version 2 (PDM<sub>2</sub>)

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#### Appendix 1: List of Attendants

Ministry of Local Government and Urban Development & Housing and Environment

Mrs. Maraia Ubitau Acting Permanent Secretary for Local

Government, Urban Development,

Housing and Environment

Mr. Jope Davetanivalu Project Manager of the Project

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Mrs. Luisa Sigawale Senior Education Officer, MOE

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Mr. Shiva Rajan Acting C.E.O. L.C.C

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LCC

Mr. Shalend P Singh Co-Project Manager of the Project Shalendsingh75@yahoo.com

Acting Senior Health Inspector, LCC

Nadi Town Council (NTC)

Mr. Aisea Tuidraki Special Administrator (Nadi/Sigatoka

Town Council)

Mr. Sakaraia Serau Co-Project Manager of the Project serau 7@vahoo.com

Acting C.E.O., N.T.C

Mrs. Nafiza Ali Assistant Health Inspector, NTC Fiza3300@yahoo.com.au

JICA Expert Team (JET)

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Mr. Fumiaki Saso Project Formulation Advisor Saso.Fumiaki@jica.go.jp

(Environment)

Mr. Minoru Tamura Project Formulation Advisor Tamura. Minoru@jica.go.jp

(Environment)

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Appendix 2 Reasons for modifications and proposed indicators (PDM <sub>2</sub> to PDM <sub>3</sub> )	3	
	PNM	5113
	4	2
	/PDM.	21112
	indicators	- Indicator
	ronnead	DOC CO
	and r	3
	modifications	TI CALLO CALLO CALLO
Appendix 2	Reasons for	1000000
	Annendix 2	1 VIDILIONAL

Project purpose  Casacho of 8f (Reduce, Reases Recycle/Return) of Department of Environment (DOE), Lauroke City and Nation indicators  Total recycle rate** to the MSW concernation and the months of the municipalities in Fig.  SWM M/Ps one.  Disposal rate** to the MSW generation amount in Lauroke City and Nation Town will be 142-78, and 20.4% respectively by the smooth in Lauroke City and Nation Town will be respectively from 2008's by the end of his Project.  Disposal rate** to the MSW generation control in the months of the municipalities in Fig.  Which provide waste collection service  SWM MyPs one.  Disposal rate** to the MSW generation control in the MSW generation and the manicipalities in Fig.  Which provide waste collection service  SWM MyPs one.  Disposal rate** to the MSW generation control in the MSW generation and the municipalities in Fig.  SWM MyPs one.  Disposal rate** to the MSW generation and the crosses by the end of the Project.  Disposal rate in Fig.  SWM MyPs one.  Disposal rate in City and Nation Town Will decrease by 2.2% and 11.5% and 12.5% and 11.5% and 1			C DIMO	2
Project purpose  Project purpose  Project purpose  Project purpose  Project purpose  Project purpose  1. Total recycle rate** to the MSW  Generation amount in Lautoke City and Naci Town will be 14.4% and 16.7% and 16.7% and 16.7% and 20.4% respectively by the end of the Project.  2. Disposal rate** to the MSW generation amount in Lautoke City and Naci Town will be 14.4% and 11.5% respectively from 2008's by the end of the Project.  3. DOE holds seminars to explain the Project.  3. DOE holds seminars to explain the Project.  3. DoL holds seminars to explain the Project.  4. No change than half of the municipalities in Figh.  5. Doutput 1  Solid Waste Management Plans focusing on 3R are developed respectively in Lautoka City and Naci Town obtain the capacity for proper SWM through the implementation of the Pilot Project.  6. Dutput 2  Solid Waste Management plan is though the add Town respectively from 2008's by the end of the Project.  7. Daylor holds seminars to explain the expectively from 2008's by the end of the Project.  8. Disposal rate* (MSW) generation and maintenance of the file of the MSW generation and maintenance of the file file separated.  9. Disposal rate* (MSW) generation is the MSW generation of the Pilot Project.  1. Total recycle rate for the Municipal Town of the Project.  2. Disposal rate* (MSW) generation and maintenance of the file in the Project.  3. The Project.  4. No change waste collection service.  9. No change by the name from SWM Plan to S	Reasons for	modification	Proposed Indicators	Notes / Means of Verification
1. Total recycle rate** to the MSW separation amount in Lautokac City and Medi Town will be 14.4% and 16.7% and 16.	ycle/Return) of Department of E	Invironment (DOE), Lac	toka City and Nadi Town is increased through	developing a 3R model for Fiji.
Disposal rate*** to the MSW generation amount in Lautoka City and Nadi Town will decrease by 2.2% and 11.5% respectively from 2008's by the end of the Project.  DOE holds seminars to explain the respectively from 2008's by the end of the municipalities in Fiji which provide waste collection service.  Introduct City and Nadi Town obtain the capacity for proper SWM through the implementation of landfill sites are prepared.  Lautoka City and Nadi Town Andi Town And	MSW $\rightleftharpoons$ To adjust the nunsity and SWM M/P's one. 16.7% oject.	nerical targets to the	<ol> <li>Total recycle rate<sup>1</sup> to the Municipal Solid Waste (MSW) generation amount in Lautoka City and Nadi Town will be 19.7% and 20.4% respectively by the end of the Project.</li> </ol>	Increase of capacity on 3Rs must be proved by the results of activities.  *1: Total recycle rate:  The rate of
DOE holds seminars to explain the guidelines and manuals targeting more than half of the municipalities in Fijj which provide waste collection service.  utput 1  Solid Waste Management Plans focusing on 3R are developed respectively in Lautoka City and Solid Waste Management plan is cestablished  stablished  unify the name from SWM Plan to SWM Master Plan because LCC and NTC have already used "Master Plan".  utput 2  uutoka City and Nadi Town obtain the capacity for proper SWM through the implementation prepared.  Lautoka City and Nadi Town obtain the capacity for proper SWM through the implementation prepared.  Lautoka City and Nadi Town obtain the capacity for proper SWM through the implementation of landfill sites are just by LCC.  Lautoka City and Nadi Town obtain the capacity for proper SWM through the implementation accumulate knowledge and experience prepared.  to have already used "Master Plan".  however, landfill improvement is done just by LCC.  Lautoka City and Nadi Town obtain the capacity for proper SWM through the implementation are disposal site through the pilot project.	The same of the sa	rical targets to the	A CONTRACTOR OF STREET	the sum total of recycled amount of household, business, public area, and green waste to the waste generation amount of MSW.
Solid Waste Management Plans focusing on 3R are developed respectively in Lautoka City a stablished  Solid Waste Management plan is established established  unify the name from SWM Plan to SWM Master Plan because LCC and NTC have already used "Master Plan".  uthout 2  uutoka City and Nadi Town obtain the capacity for proper SWM through the implementation prepared.  Lautoka City and Nadi Town Plan because LCC and NTC have already used "Master Plan".  have already used "Master Pl			1.7	amount to the MSW generation amount. Disposal rate in LCC and NTC in 2008 are estimated as 72.3% and 86.1% respectively.
Solid Waste Management plan is established established  unify the name from SWM Plan to SWM Master Plan because LCC and NTC have already used "Master Plan".  utbut 2  uutoka City and Nadi Town obtain the capacity for proper SWM through the implementation prepared.  Lautoka City and Nadi Town Appeared.  Lautoka City and Nadi Town cacumulate knowledge and experience operation and maintenance of the final disposal site through the pilot project.	sing on 3R are developed respe	ectively in Lautoka City	and Nadi Town respectively	
uutoka City and Nadi Town obtain the capacity for proper SWM through the implementation of 1 Plan of pilot 3R projects and partial improvement of landfill sites are prepared.  Lautoka City and Nadi Town (⇒ 3R project will be done by both councils, 1. instruction of landfill sites are basically different accumulate knowledge and experience to implement 3R promotion as well as activities should be separated.	llan is 🕁 To avoid confusing unify the name fror Master Plan becau have already used	, the Project should n SWM Plan to SWM se LCC and NTC "Master Plan".	Solid Waste Management Master Plan is established.	⇔ SWM M/P
Plan of pilot 3R projects and partial improvement of landfill sites are prepared.  Lautoka City and Nadi Town to implement 3R promotion as well as operation and maintenance of the final disposal site through the pilot project.	ne capacity for proper SWM thro	ugh the implementation	of the Pilot Project	
Lautoka City and Nadi Town collaboration accumulate knowledge and experience to implement 3R promotion as well as operation and maintenance of the final disposal site through the pilot project.		done by both councils, mprovement is done	<ol> <li>Plan of 3R pilot projects are developed.</li> <li>Plan of partial improvement of landfill sites is developed.</li> </ol>	Plan of 3R pilot project     Plan of partial improvement of Lautoka landfill site
site through the pilot project.	Superior School	e partial improvement re basically different he indicator for these separated.	3. Lautoka City and Nadi Town accumulate knowledge and experience to implement 3R promotion through the pilot project.  4. Lautoka City and Nadi Town accumulate knowledge and experience of operation and maintenance of the final disposal site through the pilot project.	c> Although NTC does not have a final disposal site, it is involved in the final disposal management for the Vunato disposal site in Lautoka.  3. Progress report  4. Progress report
Output 3 Lautoka City and Nadi Town obtain the capacity for 3R promotion activities at whole area of Lautoka City and Nadi Town.	ne capacity for 3R promotion act	fivities at whole area of	Lautoka City and Nadi Town.	
1,760	tion is & "Develop" is a "prepare".	clearer word than	Action Plan for 3R promotion is developed.	1. Action plan for 3R promotion

	PD	PDM2	PDM3	MS
	Original indicators	Reasons for modification	Proposed Indicators	Notes / Means of Verification
Ni Ni	Lautoka City and Nadi Town conduct Action Plan for 3R promotion appropriately.	ಳ "Appropriately" should be defined.	2. Lautoka City and Nadi Town conduct Action Plan for 3R promotion as scheduled.	2. Progress report
က်	Capability for 3R promotion of the staff of Lautoka City and Nadi Town improved.	"Capacity is improved" is not clear. Action Plan is developed, but it should be amended based on the project activities accordingly to the progress. Through this amendment process, C/P's capacity must be increased.	<ol> <li>Revised Action Plan for 3R promotion is developed.</li> </ol>	3. Revised Action Plan for 3R promotion
3 3	Output 4 Awareness of residents in Lautoka City and N	ladi Town is raised through implementation of	Output 4 Awareness of residents in Lautoka City and Nadi Town is raised through implementation of environmental education activities on 3R promotion.	otion.
	More than half of households in LCC and NTC will participate in the community meeting for 3R promotion by the end of the Project.	th is verified that the community based expansion approach is not effective through the Pilot Project. Number of households participated to the 3R promotion which will be counted, is more practical indicator.	More than half of households in LCC expansion approach is not effective community meeting for 3R promotion households participate and of the Project.  More than half of households in LCC expansion approach is not effective community meeting for 3R promotion which will be counted, is more practical indicator.	Progress report
2	Recycle rate of the households in LCC and NTC will be 2.9% and 1.5% respectively by the end of the Project.	<ul> <li>t is difficult to measure the recycling rate of households because the collection will be done not only in residential areas but also commercial areas.</li> </ul>	2. Home composters are installed as scheduled in the Action plan	2. Progress report
3 5	Output 5 3R model for Fiji is developed and recommended.	nded.		
15	1. Guideline and manuals are developed   □ No change	⇔ No change	1. Guideline and manuals are developed	1. Guideline, manuals

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# Appendix 3: Project Design Matrix Version 3 (PDM<sub>3</sub>)

October 2008 – March 2012(3.5 years), Target Area: Lautoka City and Nadi Town
The staff of the Department of Environment, the staff of Lautoka City and Nadi Town Councils and their residents Waste Minimization and Recycling Promotion Project Farget Group: Project Title: Duration:

Draft PDM Version 3

management policy is still municipalities mainly in Western division is not recyclable products is not Policy and budget for 3R secured keep working in the field Political disorder does by opening new landfills Western Awareness is not spoiled of other Important Assumptions dramatically changed. dramatically changed. situation promotion is not occur in Fiji. SWM policy in line with 3R Counterpart within DOE. of SWM. division. Market National mainly + ÷ 4 ai oi e Interview with officials in charge of SWM in the from situation: Public Opinion Survey (POS), recyclables Plan of partial improvement 3.1 Action plan for 3R promotion3.2 Progress report Survey on Solid Waste (SWM) recyclers, weighbridge data) Plan of 3R Pilot Project Means of Verification of Lautoka landfill site Reports on seminar report SWM Master Plan Weighbridge data Progress report 2.4 Progress report municipalities. Management amount, 2.1 2.3 d e experience to implement 3R promotion through the pilot Lautoka City and Nadi Town accumulate knowledge and Other municipalities mainly in Western Division introduce the DOE holds seminars to explain the guidelines and manuals Lautoka City and Nadi Town conduct Action Plan for 3R generation amount in Lautoka City and Nadi Town will be targeting more than half of the municipalities in Fiji which Lautoka City and Nadi Town accumulate knowledge and Total recycle rate v to the Municipal Solid Waste (MSW) Disposal ratev to the MSW generation amount in Lautoka City and Nadi Town will decrease by 4.4% and 17.1% experience of operation and maintenance of the final Plan of partial improvement of landfill sites is developed. 9.7% and 20.4% respectively by the end of the Project. Solid Waste Management Master Plan is established. respectively from 2008's" by the end of the Project. Objective Verifiable Indicators Action Plan for 3R promotion is developed. Plans of 3R pilot projects are developed. disposal site through the pilot project. provide waste collection services. 3R model for Fiji. project. 2.2 2.3 3.1 2.4 + 3 <u>.</u>2 Lautoka City and Nadi Town obtain the capacity Nadi Town is increased through developing 3R Lautoka City and Nadi Town obtain the capacity Recycle/Return) of Department of Environment Nadi Town is raised through implementation of progressed in Fiji, mainly in Western Division. focusing on 3R are developed respectively in Reuse, Recycle/Return) for proper Solid Waste Management (SWM) through the implementation of Pilot projects. Awareness of residents in Lautoka City and for 3R promotion activities at whole area of Lautoka City and Nadi Town respectively. Solid Waste Management Master Plans Capacity of 3R (Reduce, Reuse, Narrative Summary Lautoka City and Nadi Town. (DOE), Lautoka City and Project Purpose 3R (Reduce, Overall Goal model for Fill. 4 is 8

So she if

5-1 Guideline, manuals

3.3 Revised Action Plan for 3R

4.1 Progress report4.2 Progress report

Home composters are installed as scheduled in the Action

Guideline and manuals are developed

5-1

Rate of public participation of separate collection for

Revised Action Plan for 3R promotion is developed.

promotion as scheduled.

3.3

and

developed

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for

promotion. 3R model

5

recommended.

environmental education activities on 3R

4.2

recyclables within the target residential area exceeds 30%.

promotion

City Vunato Landfill site (Lautoka Landfill). generation to final disposal and identify irks of SWM among stakeholders.	a) Personnel 1. Chief advisor 2. Solid waste management 3. Waste minimization and recycling 4. Solid waste education and awareness raising	Fiji side  a) Personnel  - Assign necessary number of counterpart personnel at Lautoka City Council and Nadi Town Town Council  b) Office space and facilities  - Office space and facilities		
<ul> <li>2-1 Conduct a community survey.</li> <li>2-2 Select pilot areas on the basis of the community survey.</li> <li>2-3 Develop a pilot project plan on 3R.</li> <li>2-4 Conduct trainings, on the job trainings, etc. for the staff of Lautoka City Council and Nadi Town Council to implement the pilot projects.</li> <li>2-5 Conduct the pilot project on 3R at pilot areas.</li> <li>2-6 Develop a pilot project plan on the partial improvement of Lautoka Landfill.</li> <li>2-7 Complete the Environmental Impact Assessment (EIA) process required for the pilot project on the partial improvement of Lautoka Landfill.</li> <li>2-8 Conduct the pilot project on the partial improvement of Lautoka Landfill.</li> <li>2-9 Review and evaluate the pilot projects.</li> <li>2-10 Conduct OJT for operation and maintenance of Lautoka landfill.</li> </ul>	Capacity assessment     Financial, institutional and     organizational aspects     Final disposal (planning,     construction of sanitary     landfill)     Collection and     transportation     Environmental and social     consideration     Project coordinator	c) Machinery, equipment and materials d) Administrational and operational cost e) Others - Provision of necessary data, information, etc.		
<ul> <li>3-1 Develop a 3R promotion action plan for the whole area of Lautoka City and Nadi Town.</li> <li>3-2 Conduct trainings, on the job trainings, etc. for the staff of Lautoka City council and Nadi Town council to implement 3R promotion.</li> <li>3-3 Implement 3R promotion.</li> <li>3-4 Review and evaluate 3R promotion.</li> <li>4-1 Review on environmental educational tools/programmes in Fiji, Japan and other countries.</li> <li>4-2 Develop effective educational tools/programmes.</li> <li>4-3 Conduct trainings, on the job trainings, etc. for the groups &amp; personnel concerned on 3R promotion in Lautoka and Nadi Town.</li> <li>4-4 Introduce the educational tools/programmes in the pilot project areas.</li> <li>4-5 Evaluate the educational tools/programmes.</li> <li>4-6 Improve the educational tools/programmes.</li> <li>4-6 Improve the educational tools/programmes.</li> <li>4-7 Implement activities to raise awareness through using the educational tools/programmes in Lautoka City and Nadi Town.</li> <li>5-1 Review all the process &amp; results of the activities for 3R promotion by the project and extract findings.</li> <li>5-2 Develop draft guidelines, manuals on 3R model for Fiji, etc. for its promotion.</li> <li>5-3 Finalize the guidelines, manuals, etc.</li> </ul>	b) Counterpart training c) Machinery, equipment and materials		Precondition	

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Appendix 4: Project Design Matrix Version 2 (PDM<sub>2</sub>)

Project Title: Waste Minimization and Recycling Promotion Project

Duration: October 2008 – March 2012(3.5 years), Target Area: Lautoka City and Nadi Town

Target Group: The staff of the Department of Environment, the staff of Lautoka City and Nadi Town Councils and their residents

126 21	Narrative Summary	Narrative Summary Objective Verifiable Indicators M	eans of Verification	Important Assumptions
<b>(0</b> % :≡	Overall Goal 3R (Reduce, Reuse, Recycle/Return) is progressed in Fiji, mainly in Western Division.	2. Other municipalities mainly in Western Division introduce the 3R model for Fiji.	2. Interview with officials in charge of SWM in the municipalities.	National waste management policy is still in line with 3R.
<b>ā</b> ඊăžē	Project Purpose Capacity of 3R (Reduce, Reuse, Recycle/Return) of Department of Environment (DOE), Lautoka City and Nadi Town is increased through developing 3R model for Fiji.	<ol> <li>Total recycle rate<sup>vii</sup> to the Municipal Solid Waste (MSW) generation amount in Lautoka City and Nadi Town will be 14.4% and 16.7% respectively by the end of the Project.</li> <li>Disposal rateviii to the MSW generation amount in Lautoka City and Nadi Town will decrease by 2.2% and 11.5% respectively from 2008's by the end of the Project.</li> <li>DOE holds seminars to explain the guidelines and manuals targeting more than half of the municipalities in Fiji which provide waste collection service.</li> </ol>	4. Survey on Solid Waste Management (SWM) situations: Pblic Opinion Survey (POS), Recyclables amount, report from recyclers, weighbridge data)  5. Weighbridge data  6. Reports on seminar	Awareness is not spoiled by opening new landfills mainly in Western division.     SWM policy of other municipalities mainly in Western division is not dramatically changed.     Market situation of recyclable products is not dramatically changed.     Policy and budget for 3R promotion is secured within DOE.
6. 5. 6. 7. 9. 10. 10. 3. 10. 10. 3.	Outputs  Solid Waste Management Plans focusing on 3R are developed respectively in Lautoka City and Nadi Town respectively.  Lautoka City and Nadi Town obtain the capacity for proper Solid Waste Management (SWM) through the implementation of Pilot projects.  Lautoka City and Nadi Town obtain the capacity for 3R promotion activities at whole area of Lautoka City and Nadi Town.  Awareness of residents in Lautoka City and Nadi Town is raised through implementation of environmental education activities on 3R promotion.  3R model for Fiji is developed and recommended.	<ol> <li>Solid Waste Management plan is established.</li> <li>Plan of pilot 3R projects and partial improvement of landfill sites are prepared.</li> <li>Lautoka City and Nadi Town accumulate knowledge and experiences to implement 3R promotion as well as operation and maintenance of the final disposal site through the pilot project.</li> <li>Action Plan for 3R promotion is prepared.</li> <li>Action Plan for 3R promotion is prepared.</li> <li>Capability for 3R promotion of the staff of Lautoka City and Nadi Town improved.</li> <li>More than half of households in Lautoka City and Nadi Town will participate in the community meeting for 3R promotion by the end of the Project.</li> <li>Recycle rate<sup>k</sup> of the households in Lautoka City and Nadi Town will be 2.9% and 1.5% respectively by the end of the Project.</li> </ol>	1. SWM plan 2.1 Plan of Pilot Project Plan of 3RPP Plan of 3RPP Plan of ARPP Plan of ARPP Plan of ARPP Assessment 3.1 Action plan for 3R promotion activities 3.3 Report on 3R promotion activities 4.5 Report on Capacity Assessment Assessment 4.1 Report on community meetings collected by community collection activities	Counterpart personnel keep working in the field of SWM.      Political disorder does not occur in Fiji.







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1 o Committee comment at the comment of Child	ndu	
1.0 Sulvey tile culletti status ol SVVIVI.	Janese side Fiji s	
1-9 Conduct a field survey on Lautoka City Vunato Landfill site (Lautoka	rsonnel f)	
Landfill).	Chief advisor     Assign necessary number of	
1-10 Trace the current waste flow from generation to final disposal and	2. Solid waste management counterpart personnel	at
dentií	and Lautoka City Council	and
	recycling Nadi Town Town Council	
1-12 Build a consensus on the frameworks of SWM among stakeholders.	4. Solid waste education and q\ Office space and facilities	
1-13 Develop draft SWM plans based on the frameworks of SWM.	5	
1-14 Finalize SWM plans.	Capacity assessment h) Machinery, equipment	and
2-1 Conduct a community survey.	al and materials	
2-2 Select pilot areas on the basis of the community survey.	i) Administrational	and
2-3 Develop a pilot project plan on 3B.	nning. , operational cost	
2-4 Conduct trainings, on the iob trainings, etc. for the staff of Lautoka City	ction and operation i)	
Council and Nadi Town Council to implement the nilot projects	**	
2-5 Conduct the pilot project on 3B at pilot areas	Collection and transportation	7
2-6 Develor a nilor project plan on a natial improvement of Lautoka Landfill		
2.7 Complete the Environmental Impact Assessment (FIA) process required for	consideration	
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the pliot project on a partial improverient of Lautoka Landilli.	iu. Prujeci coordinator	
2-8 Conduct the pilot project on a partial improvement of Lautoka Landfill.		
2-9 Review and evaluate the pilot projects.	e) Counterpart training	
2-10 Conduct OJT for operation and maintenance of Lautoka landfill	f) Machinery, equipment and	
3-1 Develop a 3R promotion action plan at whole area of Lautoka City and Nadi		Precondition
Town.		
3-2 Conduct trainings, on the job trainings, etc. for the staff of Lautoka City		
council and Nadi Town council to implement 3R promotion.		
3-3 Implement 3R promotion.		
3-4 Review and evaluate 3R promotion.		
4-1 Review on environmental educational tools/programmes in Fill. Japan and		
other countries.		
4-2 Develop effective educational tools/programmes.		
4-3 Conduct trainings, on the job trainings, etc. for the groups & personnel		
concerned on 3R promotion in Lautoka and Nadi Town.		
4-4 Introduce the educational tools/programmes in the pilot project areas.		
4-5 Evaluate the educational tools/programmes.		
4-6 Improve the educational tools/programmes.		
4-7 Implement activities to raise awareness through using the educational		
tools/programmes in Lautoka City and Nadi Town.		
5-1 Review all the process & results of the activities for 3R promotion by the		**************************************
project and extract findings.		
5-2 Develop draft guidelines, manuals on 3R model for Fiji, etc. for its promotion.		
5-3 Finalize the guidelines, manuals, etc.		
5-4 Conduct seminars to present other municipalities the guidelines and		
manuals.		

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Total recycle rate: A rate of the sum total of recycled amount of household waste, business waste, public area waste and green waste to the waste generation amount of MSW

A rate of disposal amount to the MSW generation amount. Disposal rate in Lautoka City and NTC in 2008 are estimated as 72.8% and ü Disposal rate:

86.1% respectively.

The baseline survey was conducted by the Japanese Expert Team in 2008.

IV Total recycle rate: A rate of the sum total of recycled amount of household waste, business waste, public area waste and green waste to the waste

generation amount of MSW

A rate of disposal amount to the MSW generation amount. Disposal rate in Lautoka City and NTC in 2008 are estimated as 72.8% and v Disposal rate:

86.1% respectively.

The baseline survey was conducted by Japanese Expert Team in 2008.

A rate of the sum total of recycled amount of household waste, business waste, public area waste and green waste to the waste generation amount of MSW vii Total recycle rate:

A rate of disposal amount to the MSW generation amount. Disposal rate in Lautoka City and NTC in 2008 are estimated as 72.8% and 86.1% respectively. viii Disposal rate:

A rate of recycled waste amount of household to the generation amount of MSW 1X Recycle rate of households:

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#### MINUTES OF MEETING

#### FOR

#### THE SIXTH JOINT COORDINATING COMMITTEE

#### ON

#### WASTE MINIMIZATION AND RECYCLING PROMOTION PROJECT

#### IN

#### THE REPUBLIC OF THE FIJI ISLANDS

Suva, 4 June 2010

Mrs. Maraia UBITAU

Acting Permanent Secretary,

Ministry of Local Government and Urban Development & Housing and Environment

Mr. Junji ANAI

Chief Advisor,

ЛСА Expert Team,

Kokusai Kogyo Co., Ltd.

Mr. Shalend Prem SINGH

Senior Health Inspector, Health

Department, Lautoka City Council

Co-Project Manager

Mr. Aminiasi<sup>®</sup>QAREQARE

Project Manager

Acting Principal Environment Officer,

Department of Environment,

Ministry of Local Government and Urban Development & Housing and Environment

Witnessed by:

Mr. Sakaraia SERAU

Co-Project Manager

Acting C.E.O.

Nadi Town Council

Mr. Juichiro SASAK

Resident Representative,

Japan International Cooperation Agency

(JICA) Fiji Office

#### Sixth Joint Coordinating Committee on the Project

04 June 2010 - JICA Fiji Office Conference Room, Suva, Fiji

- 1. Meeting started at 9:30 a.m.
- 2. Attendants list of the meeting is given in Appendix 1
- 3. Opening of the meeting

All the participants introduced themselves. Subsequently, a welcome address was given by Mrs. Maraia Ubitau, Acting Permanent Secretary for Ministry of Local Government, Urban Development, Housing and Environment and acted as chairperson and declared the meeting open.

At the beginning, the chairperson briefed the minutes of meeting of the 5<sup>th</sup> JCC meeting and all the participants confirmed it.

#### 4. Agreement and Confirmation

#### (1) Mid-term Review Report

The Joint Mid-term Review Team (headed by Mr. Shiro Amano) presented the results of the Mid-term Review (attached as Appendix 2) to the JCC meeting. The JCC members approved its contents.

#### (2) Modification of PDM<sub>3</sub>

The JCC members understood the necessity for modification of the PDM<sub>3</sub> and approved as proposed by the Joint Mid-term Review Team as PDM<sub>4</sub> shown as Appendix 3.

#### (3) Third year's Activities of the Project

The JCC members acknowledged the third year's activities planned by JET, LCC, NTC and DOE and accepted these plans.

Mr. Junji Anai, chief advisor of the Project, presented the plan of operation and work flow of the Project (attached as Appendix 4, 5) to the JCC meeting. The JCC approved its contents.

Mr. Sasaki pointed out that Private Public Partnership and collaboration with Ministry of Education are essential to secure sustainability of 3R activities.

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#### 5. Others

(1) Presentation from Mr. Nishikawa

Mr. Nishikawa presented the 3R activities in Shibushi city and conveyed his advice to JCC members based on his observation during his stay in Fiji.

#### (2) Change of Personnel

The former project manager of Mr. Jope Davetanivalu has been replaced by Mr. Aminiasi Qareqare. Mr. Jope Davetanivalu is now appointed as the Project Director.

#### 6. Conclusion

The JCC made the following conclusions:

- The JCC acknowledged the minute of meeting on Mid-term review had been signed among the counterparts.
- The JCC approved the plans of third year's activities presented by the counterparts.
- Lastly, the JCC confirmed that the next JCC meeting would be held in Western division for discussing necessity of MRF.

#### 7. Presentation of 3R Video

3R promotion video was viewed by the JCC members.

#### 8. Closing of the meeting

Chairperson closed the meeting at 13:00 p.m.



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#### Appendix 1: List of Attendants

Ministry of Local Government and Urban Development & Housing and Environment

Mrs. Maraia Ubitau

Acting Permanent Secretary,

Ministry of Local Government, Urban

Development, Housing and Environment

Mr. Aminiasi Qaregare

Project Manager Acting Principal Environment Officer,

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Ms. Laisani Lewanayanua

Environment Officer, DOE

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nt.gov.fi

Ms. Senivasa Waqaraimasi

Senior Environment Officer, Western

Division, DOE

Ministry of Health, Central Board of Health (BOH)

Mrs. Unaisi Bera

Senior Health Inspector, Central Board Una.bera@health.gov.fj

of Health

DOE

Embassy of Japan

Mr. Yukihiro Tsujimura

Second Secretary

Lautoka City Council (LCC)

Mr. Shiva Rajan

C.E.O. LCC

Mr. Gyneshwar Rao

Director, Health Department, LCC

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Mr. Shalend P Singh

Co-Project Manager

Shalendsingh75@yahoo.com

Senior Health Inspector, LCC

Nadi Town Council (NTC)

Mr. Aisca Tuidraki

Special Administrator (Lautoka City

Council / Nadi Town Council / Sigatoka

Town Council)

Mr. Sakaraia Serau

Co-Project Manager

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Acting C.E.O., NTC

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NTC

JICA Expert Team (JET)

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Chicf Advisor/Solid Waste Management

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Mr. Koji Kusunoki

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Mid-term Review Team

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Mr. Junichi Nishikawa

Project Formulated Advisor

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(Environment), Micronesia Office, JICA

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Project Officer, Environmental Management Group, Global Env. Dep., **JICA** 

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Specialist, Institutional Development Project Analysis, International Mamiya, shinobu@nifty.com

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Mr. Juichiro Sasaki Resident Representative

Mr. Shinya Tamio Assistant Resident Representative <u>Tamio.Shinya@jica.go.jp</u>
Mr. Minoru Tamura Project Formulation Advisor <u>Tamura.Minoru@jica.go.jp</u>

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# MINUTES OF MEETINGS BETWEEN

#### THE JAPANESE MID-TERM REVIEW TEAM

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# THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE REPUBLIC OF THE FIJI ISLANDS

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# JAPANESE TECHNIAL COOPERATION PROJECT FOR WASTE MINIMIZATION AND RECYCLING PROMOTION PROJECT

The Japanese Mid-term Review Team (hereinafter referred to as "the Japanese Team"), organized by Japan International Cooperation Agency (hereinafter referred to as "JICA"), headed by Mr. Shiro Amano, visited the Republic of the Fiji Islands from May 18 to June 3, 2010, for the purpose of conducting the joint Mid-term Review on Waste Minimization and Recycling Promotion Project (hereinafter referred to as "the Project") on the basis of the Record of Discussions signed on July 25, 2008.

The Joint Mid-term Review Team (hereinafter referred to as "the Team"), which consists of members from Department of Environment, Ministry of Local Government and Urban Development & Housing and Environment (hereinafter referred to as "DOE"), Lautoka City Council (hereinafter referred to as "LCC") and Nadi Town Council (hereinafter referred to as "NTC").

After intensive study and analysis of the activities and achievements of the Project, the Team agreed upon the Joint Mid-term Review Report attached hereto.

Suva, 3 June, 2010

Mr. Shiro Amano

Leader

Japanese Mid-Term Review Team
Japan International Cooperation

Agency (JICA)

Mr. Jope Davetanivalu

Acting Director

Department of Environment,
Ministry of Local Government
and Urban Development &
Housing and Environment

Attachment

Joint Mid-term Review Report

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# THE JOINT MID-TERM REVIEW REPORT ON WASTE MINIMIZATION AND RECYCLING PROMOTION PROJECT IN THE REPUBLIC OF THE FIJI ISLANDS

Suva, June 3, 2010

Joint Mid-Term Review Team





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- 6. List of Equipment provided by the Japanese side
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#### MINUTES OF MEETING

#### FOR

#### THE SEVENTH JOINT COORDINATING COMMITTEE

ON

#### WASTE MINIMIZATION AND RECYCLING PROMOTION PROJECT

IN

#### THE REPUBLIC OF THE FIJI ISLANDS

Suva, 21 October 2010

Mr. Jope DAVETANIVALU

Project Director

Director, Department of Environment,

Ministry of Local Government and Urban

Development & Housing and Environment

Mr. Junji ANAI

Chief Advisor,

JICA Expert Team,

Kokusai Kogyo Co., Ltd.

Mr. Aminiasi QAREQARE

Project Manager

Acting Principal Environment Officer,

Department of Environment,

Ministry of Local Government and Urban

Development & Housing and Environment

Mr. Shalend Prem SINGH

Co-Project Manager

Senior Health Inspector, Health

Department, Lautoka City Council

Witnessed by:

Ms. Premila CHANDRA

Acting Director, Health Department

Nadi Town Council

Mr. Juichiro SASAKI

Resident Representative,

Japan International Cooperation Agency

(JICA) Fiji Office

#### Seventh Joint Coordinating Committee on the Project

21 October 2010 - JICA Fiji Office Conference Room, Suva, Fiji

- 1. Meeting started at 10:00 a.m.
- 2. Attendants list of the meeting is given in Appendix 1
- 3. Opening of the meeting

An opening address was given by Mr. Jope Davetanivalu, who acted as chairperson and declared the meeting open. Subsequently, all of the participants introduced themselves. At the beginning, the chairperson briefed the minutes of meeting of the 6<sup>th</sup> JCC meeting and all the participants confirmed it.

#### 4. Agreement and Confirmation

The Chief Advisor, Mr. Junji Anai, JICA Expert Team (hereinafter, JET); Mr. Shalend P. Singh, Co-project manager of LCC; Ms. Premila Chandra, Acting Director of Health NTC; and Ms. Senivasa Waqaraimasi, Senior Environment Officer, Western Division DOE, presented the progress of the project respectively. All the attendants agreed to and confirmed the following items:

#### (1) 3R Guideline and 3R Promotion Manual

- Basic concept on 3R Guideline and 3R Promotion Manual as mentioned below was presented by DOE.
  - 3R Guideline is a national policy on waste minimization through 3Rs considering the experience obtained in the Project.
  - 3R Promotion Manual is guidance for implementing 3Rs based on the lessons learnt from the 3R activities conducted in Lautoka and Nadi in the Project.
  - Target user of 3R Promotion Manual is the staff of 13 municipal councils.
- SA of LCC suggested that the workshop targeting 13 municipalities must be very important to share the knowledge and experiences obtained from the Project. Director of DOE requested to work together with Central Board of Health (CBH) for the workshop. JCC members agreed with this suggestion and request.
- JET proposed to hold the three-days workshop for 3R Guideline and 3R Promotion Manual in February 2011 and requested DOE to bear the transportation and accommodation cost. DOE responded they would give due consideration to bear the cost requested.

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- (2) Modification of the indicators of PDM<sub>4</sub>
  - Regarding the modification of the recycling rate based on the weighbridge data
    explained by JET, Mr. Sasaki suggested that the proposed modification of
    indicators of project purpose in PDM<sub>4</sub> should be examined properly
    considering the final review which would be conducted in the middle of the
    next year. Mr. Anai responded that JET would continue analysis and discussion
    with the counterpart, and make modifications when needed.
- (3) National Solid Waste Management (NSWM) Strategy and Action Plan
  - Mr. Anai requested DOE to confirm the date of workshop for the NSWM strategy and action plan. DOE promised to inform when date was confirmed.

#### Others

#### (1) Change of Personnel

Mrs. Premila Chandra, acting director of health department, NTC, reported that the former co-project manager of NTC, Mr. Sakaraia Serau had been replaced by Mr. Rajeshwar RAJ. Members of the JCC approved this replacement.

(2) Director of DOE announced that the BSP Bank was willing to be a sponsor or partner for environmental awareness so that the Project should make use of this opportunity.

#### 6. Conclusion

The JCC made the following conclusions:

- The progress of the Project from April to September 2011 and the plan of activities of the Project from October 2010 to March 2011 were accepted by the JCC.
- DOE and JET will hold the workshop on 3R Guideline and 3R Promotion Manual in February 2011 in collaboration with Central Board of Health (CBH).
- The date of joint weekly meeting (JWM) will be fixed on Wednesday of the 1<sup>st</sup> and 3<sup>rd</sup> weeks at 10 am.

#### 7. Closing of the meeting

Chairperson closed the meeting at 12:45 p.m.

Appendix 1: List of Attendants

Appendix 2: Progress Report (4)

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#### Appendix 1: List of Attendants

Ministry of Local Government and Urban Development & Housing and Environment

Mr. Jope Davetanivalu

Project Director

Director of DOE

Mr. Aminiasi Qaregare

Project Manager

Aminiasi.qareqare@environment.

Acting Principal Environment Officer, gov.fi

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Ms. Lusiana Ralogaivau

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Division, DOE

Ministry of Health, Central Board of Health (BOH)

Mrs. Unaisi Bera

Senior Health Inspector, Central Board

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of Health

**Embassy of Japan** 

Mr. Takato Maki

First Secretary, Economic Cooperation

Takato.maki@mofa.go.jp

Lautoka City Council (LCC)

Mr. Praveen Bala

Special Administrator, LCC

Mr. Gyneshwar Rao

Acting C.E.O. LCC

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Mr. Rouhit Karan Signh

Acting Director, Health Department,

LCC

Mr. Shalend P Singh

Co-Project Manager

Shalendsingh75@yahoo.com

Senior Health Inspector, LCC

Nadi Town Council (NTC)

Mr. Terrence O'Neill

C.E.O, NTC

Mrs. Premila Chandra

Acting Director, Health Department,

chandrapremila@hotmail.com

NTC

JICA Expert Team (JET)

Mr. Junji Anai

Chief Advisor/Solid Waste Management

anai.junji@gmail.com

Mr. Koji Kusunoki

Waste Minimization/recycling[2]

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Ms. Keiko Kani

Waste Education

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Ms. Yurie Kawabata

**3R Promotion** 

Yurie Kawabata@kkc.co.jp

JICA Fiji Office (JFO)

Mr. Juichiro Sasaki

Resident Representative

Mr. Yohei Hashimoto

Assistant Resident Representative

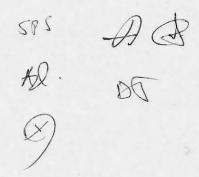
Hashimoto. Yohei@jica.go.jp

Ms. Nila Prasad

Local staff of JICA Fiji Office

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#### Appendix 2 Progress Report (4)



# MINUTES OF MEETING THE EIGHTH JOINT COORDINATING COMMITTEE

#### WASTE MINIMIZATION AND RECYCLING PROMOTION PROJECT

IN

#### THE REPUBLIC OF THE FIJI ISLANDS

Suva, 3rd March 2011

11 S HAY SUL

Mr. Jope Davetanivalu

Project Director

Director, Department of Environment, Ministry of Local Government and Urban Development & Housing and Environment

Mr. Junji ANAI Chief Advisor,

JICA Expert Team,

Kokusai Kogyo Co., Ltd.

Mr. Aminiasi QAREQARE

Project Manager

Acting Principal Environment Officer,

Department of Environment,

Ministry of Local Government and Urban Development & Housing and Environment

Mr. Shalend Prem SINGH

Co-Project Manager

Senior Health Inspector, Health Department, Lautoka City Council

Witnessed by:

Mrs. Premila Chandra

Acting Director

Health Inspector

Nadi Town Council

Mr. Juichiro SASAKI

Resident Representative,

Japan International Cooperation Agency

(JICA) Fiji Office

#### **Eighth Joint Coordinating Committee on the Project**

3<sup>rd</sup> March 2011 - JICA Fiji Office Conference Room, Suva, Fiji

- 1. Meeting started at 10:00 a.m.
- 2. Attendants list of the meeting is given in Appendix 1
- 3. Opening of the meeting

All the participants introduced themselves. Subsequently, a welcome address was given by Mrs. Unaisi Bera, Senior Health Inspector of Central Board of Health, Ministry of Health and acting chairperson, who declared the meeting open.

At the beginning, the chairperson briefed the minutes of meeting of the 7<sup>th</sup> JCC meeting and all the participants confirmed it.

#### 4. Agreement and Confirmation

Mr. Junji Anai, Chief Advisor of JICA Expert Team (hereinafter, JET), explained the overall progress of the Project. Mr. Shalend P. Singh, Co-project manager of LCC, Ms. Premila Chandra, Acting Director of Health Department, NTC and Ms. Laisani Lewanavanua, Environment Officer of DOE presented the progress of the project had been conducted in the period from the end of October 2010 to the end of February 2011 respectively. Subsequently, Mr. Anai explained the plan of operation of the Project in the forth year. All the attendants agreed and confirmed the following items:

#### (1) Progress of the Project

 All the participants recognized that the activities reported by JET, LCC, NTC and DOE were conducted appropriately and achieved the targets expected.

#### (2) 3R guideline and 3R promotion manual

- Mrs. Bera, the chairperson, agreed that the legal system should be developed for 3R promotion in order to change the behavior attitudes of people. She also suggested that the existing legal documents such as garbage-laws which have been developed by most municipalities and Rural Local Authorities (RLA), should be reviewed and amended.
- Mr. Hashimoto from the JICA Fiji Office requested DOE to take the initiative to make concrete plans to prepare the legal system by securing necessary manpower and budget. Mr. Aminiasi of DOE requested JET or J-PRISM to

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assist in this field. Mr. Anai of JET refused this request as it is out of the scope of the Project. Mr. Sasaki said that J-PRISM could provide some examples from other countries as references.

#### (3) Clean Schools Program

- Ms. Chandra of NTC requested MOE to support Clean Schools Program for 2011 in terms of school administration.
- Ms. Nair from MOE committed it would not be necessary for each council staff to register to visit schools for monitoring.

#### 5. Others

#### (1) Suggestion to the Project

Mr. Tuidraki, SA of Nadi Town Council suggested all the progress reported by LCC and NTC should be shared with the Cabinet.

Mr. Sasaki, resident representative of JICA Fiji Office, said that separate collection of recyclables would need a long-term strategy while home composting would need a short-term one.

#### 6. Conclusion

The JCC made the following conclusions:

- The progress of the Project conducted by LCC, NTC and DOE from October 2010 to February 2011 were accepted by the JCC.
- The plan of operation for the forth year Project were accepted by the JCC.
- DOE and JET will hold the seminar on 3R guideline and 3R promotion manual in October 2011.

#### 7. Closing of the meeting

Chairperson closed the meeting at 12:45 p.m.

Appendix 1: List of Attendants
Appendix 2: Progress Report (5)



#### Appendix 1: List of Attendants

Ministry of Local Government and Urban Development & Housing and Environment

Mr. Aminiasi Qareqare Project Manager <u>Aminiasi.qareqare@environment.</u>

Acting Principal Environment Officer, gov.fi

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Ms. Lusiana Ralogaivau Senior Environment Officer, DOE <u>Lusiana.ralogaivau@govnet.gov.fi</u>

Ms. Laisani Lewanavanua Environment Officer, DOE <u>Laisani.lewanavanua@govnet.gov</u>

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Ministry of Health, Central Board of Health (BOH)

Mrs. Unaisi Bera Senior Health Inspector, Central Board <u>Una.bera@health.gov.fi</u>

of Health

Ministry of Education

Ms. Prabha Nair MOE (CDU) nairprabha@hotmail.com

Lautoka City Council (LCC)

Mr. Shiva Rajan Acting C.E.O. LCC

Mr. Gyneshwar Rao Director, Health Department, LCC gyneshwarrao@yahoo.com

Mr. Shalend P Singh Co-Project Manager shalendsingh75@yahoo.com

Senior Health Inspector, LCC

Nadi Town Council (NTC)

Mr. Aisea Tuidraki Special Administrator, NTC

Mrs. Premila Chandra Acting Director, Health Department, <a href="mailto:chandrapremila@hotmail.com">chandrapremila@hotmail.com</a>

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JICA Expert Team (JET)

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JICA Fiji Office (JFO)

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Mr. Yohei Hashimoto Assistant Resident Representative <u>Hashimoto.Yohei@jica.go.jp</u>

Mr. Minoru Tamura Project Formulation Advisor Tamura.Minoru@jica.go.jp

(Environment)

Nila Psasad JICA local staff

JOCV in Suva City Council

Mr. Masaharu Nakagawa JICA Volunteer in Suva

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#### Appendix 2 Progress Report (4)

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#### MINUTES OF MEETING

FOR

#### THE NINETH JOINT COORDINATING COMMITTEE

ON

#### WASTE MINIMIZATION AND RECYCLING PROMOTION PROJECT

IN

#### THE REPUBLIC OF THE FIJI ISLANDS

Suva, 17 November 2011

Mr. Jope Davetanivalu

Project Director

Director, Department of Environment.

Ministry of Local Government and Urban

Development & Housing and Environment

Mr. Junji ANAI

Chief Advisor,

JICA Expert Team,

Kokusai Kogyo Co., Ltd.

Mr. Shalend Prem SINGH

Senior Health Inspector, Health

Department, Lautoka City Council

Co-Project Manager

40 Mr. Aminiasi QAREQARE

Project Manager

Principal Environment Officer,

Department of Environment,

Ministry of Local Government and Urban

Development & Housing and Environment

Witnessed by:

Mr. Rajeshwar Raj

Co-Project Manager

Acting Senior Health Inspector

Nadi Town Council

w Mr. Juichiro SASAKI

Resident Representative.

Japan International Cooperation Agency

(JICA) Fiji Office

#### Ninth Joint Coordinating Committee Meeting on the Project

17 November 2011 - JICA Fiji Office Conference Room, Suva, Fiji

- 1. Meeting started at 9:30 a.m.
- 2. Attendants list of the meeting is given in Appendix 1
- 3. Opening of the meeting

Mr. Jope Davetanivalu, Department of Environment as chairperson and opened the ninth Joint Coordinating Committee (hereinafter, JCC) by welcoming all of the participants.

#### 4. Agreement and Confirmation

#### (1) Terminal Evaluation Report

The Joint Terminal Evaluation Team (headed by Mr. Shiro Amano) presented the results of the Terminal Evaluation Report (attached as Appendix 2) to the JCC members. The JCC members approved its contents.

#### (2) Modification of PDM4

The JET proposed the necessity of amendment of the indicators of Project Purpose as the actual generation amounts of Green Waste generated from households in Lautoka and Nadi in 2008 were over-estimated. The JCC members understood the necessity for modification of the PDM<sub>4</sub>, and all participants approved PDM<sub>5</sub> shown as Appendix 3,

#### (3) Plans of sustaining 3R Promotion by CPs

The JCC members accepted the activities done from March 2011 until the end of October 2011 (refer the progress report (6) as attached as Appendix 4) and the plan of sustaining 3R promotion presented by LCC, NTC and DOF and accepted these plans.

#### 5. Others

 Solid Waste Management Master Plan (SWM M/P) for LCC and NTC will be revised by the end of the Project. Budget allocation is needed for the implementation of SWM M/Ps. In order to secure necessary budget allocation



for 3R Promotion and outcomes of the project like SWM M/P, 3R guideline and 3R Promotion manuals, will be presented in the next local government forum which will be held in December 2011. DoE will also submit 3R guideline and other outcomes to the cabinet.

- LCC Vunato Landfill management should be improved. Consultation for tipping fee among LCC and NTC will be continued.
  - It is recommended that NTC would construct a MRF for market waste composting.

#### 6. Conclusion

The JCC made the following conclusions:

- . The JCC acknowledged the minute of meeting on Terminal Evaluation Report had been signed among the counterparts.
- The JCC approved the plans of continuity of 3R promotion

#### 7. Closing of the meeting

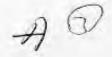
Chairperson closed the meeting at 13:00 p.m.

List of Attendants Appendix 1:

Minute of Meeting on the Terminal Evaluation Report Appendix 2:

Appendix 3: Project Design Matrix version 5 (PDM<sub>5</sub>)

Appendix 4: Progress Report (6)





#### Appendix 1: List of Attendants

Ministry of Local Government and Urban Development & Housing and Environment

Mr. Jope Davetanivalu

Director, Department of Environment

(DoE)

Ministry of Local Government, Urban Development, Housing and Environment

Ms. Luisani Lewanayanua

Environment Officer, DOE

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Mr. Ralulu Ciriki Yasawa.

Department of Local Government

Ministry of Health, Central Board of Health (BOH)

Mrs. Unaisi Bera

Senior Health Inspector, Central Board

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of Health

Lautoka City Council (LCC)

Mr. Jone Nakauvadra

C.E.O. LCC

Mr. Shalend P Singh

Co-Project Manager

Shalendsingh75@yahoo.com

Senior Health Inspector, LCC

Nadi Town Council (NTC)

Mr. Aisea Tuidraki

Special Administrator (Lautoka City

Council / Nadi Town Council / Sigatoka

Town Council)

Mr. Rajeshwar Raj

Co-Project Manager

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NTC

JICA Expert Team (JET)

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3R Premotion/Project Coordinator

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Mr. Shun Nesaki

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Project Vormulated

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Management Group, Global Env. Dep., JICA

Ms. Shinohu Mamiya

Specialist, Institutional Development

and Project Analysis, International

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Mr. Yohei Hashimoto

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Mr. Masahiro Ito

Project

Formulation Advisor

Advisor

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(Environment)

# Appendix 2

#### MINUTES OF MEETINGS BETWEEN

#### THE JAPANESE TERMINAL EVALUATION TEAM

AND

## THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE REPUBLIC OF FLIT

ON

#### JAPANESE TECHNIAL COOPERATION PROJECT FOR WASTE MINIMIZATION AND RECYCLING PROMOTION PROJECT

The Japanese Terminal Evaluation Team (hereinafter referred to as "the Japanese Team"), organized by Japan International Cooperation Agency (hereinafter referred to as "JICA"), headed by Mr. Yutaka Fukase, visited the Republic of Fiji (hereinafter referred to as "Fiji") from November 1 to November 19, 2011, for the purpose of conducting the Joint Terminal Evaluation on Waste Minimization and Recycling Promotion Project (hereinafter referred to as "the Project") on the basis of the Record of Discussions signed on July 25, 2008.

During its stay in Fiji, the Team visited the Project area, exchanged views and opinions with stakeholders on the Project.

After intensive study and analysis of the activities and achievements of the Project, both parties agreed upon the matters referred to in the attached Joint Terminal Evaluation Report.

Suva, 16 November, 2011

Mr. Yufaka Fukase

Leader

Japanese Terminal Evaluation Team Japan International Cooperation

Agency (JICA) Mr. Jope Davetanivalu

Director

Department of Environment, Ministry of Local Government, Urban Development, Housing

and Environment

Attachment I

List of C/Ps participated in the discussion for the Joint Terminal Evaluation

Attachment II

Joint Terminal Evaluation Report

List of C/Ps participated in the discussion for the Joint Terminal Evaluation

	Name	Position	Affiliation
1	Ms. Senivasa Waqairamasi	Senior Environment Officer	Department of Environment, Ministry of Local Government, Urban Development, Housing and Environment
2	Ms. Laisani Lewanavanua	Environment Officer	Department of Environment, Ministry of Local Government, Urban Development, Housing and Environment
3	Mr. Gyneshwar Rao	Director	Lautoka City Council
4	Mr. Shalend Prem Singh	Senior Health Inspector (Co-Project Manager)	Lautoka City Council
5	Mr. Rouhit Karan Singh	Health Manager	Lautoka City Council
6	Mrs. Premila Chandra	Senior Assistant Health Inspector	Nadi Town Council
7	Mr. Rajeshwar Raj	Acting Senior Health Inspector (Co-Project Manager)	Nadi Town Council
8	Ms. Nafiza Ali	Assistant Health Inspector	Nadi Town Council
9	Mr. Junji Anal	JICA Expert, Chief Advisor/Solid Waste Management	Kokusai Kogyo Co., Ltd.
10	Ms. Yurie Kawabata	IICA Expert, 3R Promotion/Project Coordinator	Kokusai Kogyo Co., Ltd.



#### ATTACHMENT II

#### THE JOINT TERMINAL EVALUATION REPORT

ON

#### WASTE MINIMIZATION AND RECYCLING PROMOTION PROJECT

IN

THE REPUBLIC OF FIJI

November 16, 2011

Joint Terminal Evaluation Team





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#### MINUTES OF MEETING

#### FOR

#### THE TENTH JOINT COORDINATING COMMITTEE

ON

#### WASTE MINIMIZATION AND RECYCLING PROMOTION PROJECT

#### IN

#### THE REPUBLIC OF THE FIJI ISLANDS

Lautoka, 28 February 2012

Mr. Jope Davetanivalu

Project Director

Director, Department of Environment, Ministry of Local Government and Urban Development & Housing and Environment Mr. Junji ANAI Chief Advisor,

JICA Expert Team,

Kokusai Kogyo Co., Ltd.

Mr. Aminiasi QAREQARE

Project Manager

Principal Environment Officer,

Department of Environment,

Ministry of Local Government and Urban Development & Housing and Environment Mr Shalend Prem SINGH

€o-Project Manager

Senior Health Inspector, Health Department, Lautoka City Council

Witnessed by:

Mr. Rajeshwar RAJ

Co-Project Manager

Assistant Health Inspector

Nadi Town Council

Mr. Yutaka FUKASE

Deputy Resident Representative,

Japan International Cooperation Agency

(JICA) Fiji Office

#### Tenth Joint Coordinating Committee Meeting on the Project

28 February 2012 – Lautoka City Council Chamber Room, Lautoka, Fiji

- 1. Meeting started at 09:50 a.m.
- Attendants list of the meeting is given in Appendix 1
- 3. Opening of the meeting

Mr. Jope Davetanivalu, Department of Environment as chairperson and opened the tenth Joint Coordinating Committee (hereinafter, JCC) by welcoming all of the participants.

#### 4. Agreement and Confirmation

#### 4.1 Waste Minimization and Recycling Promotion Project

The Chief Advisor, Mr. Junji Anai, JICA Expert Team (hereinafter, JET), presented the outline of the completion report of the Project and Mr. Shalend Singh, co-project manager from LCC, and Ms. Premila Chandra, Assistant Senior Health Inspector of NTC, presented the outline of the revised Solid Waste Management (SWM) master plan of LCC and NTC respectively. Completion report (draft final) and revised SWM master plans had been discussed between the Japan and Fiji sides (both sides). All the attendees agreed and confirmed the following items:

#### (1) Achievement of the Outputs

#### a) Output 1

All attendees acknowledged that SWM of LCC and NTC in 2011 had been improved compare with the 2008 and the SWM Master Plan was revised based on the experience of the 3R activities conducted by both councils.

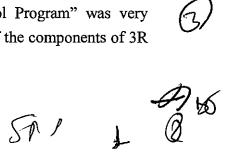
#### b) Output 2

All attendees recognized that all the pilot projects had been carried out successfully.

#### c) Output 3

All attendees acknowledged that 3R activities consisting home composting, market waste composting, green waste recycling, separate collection of recyclables had been launched and expanding in their jurisdiction. In addition to those activities, all attendees agreed that "Clean School Program" was very important to foster the next generation and put it as one of the components of 3R activities to be continued.





#### d) Output 4

All attendees recognized that the public awareness in LCC and NTC had been raised and requested the national government to disseminate educational activities by using the materials developed through this Project.

#### e) Output 5

All attendees agreed the 3R model had been established in LCC and NTC not only for whole Fiji but also the countries in the South Pacific and requested LCC and NTC to make effort to be a leading local authority.

All attendees acknowledged that 3R Guideline developed in this Project would be National 3R Policy of Fiji and the 3R promotion manual would be used as a guidance of 3R activities and the both would be submitted to the cabinet to be authorized by DOE in March 2012. Inter-Ministry working party meeting will be also held to follow-up the proposed Recycling Decree.

#### (2) Achievement of Project purpose

All attendees agreed that capacity of 3Rs of DOE, LCC and NTC have increased. Especially, LCC and NTC had enough capacity of 3Rs. However, DOE was requested to enhance its institutional capacity to manage 3R promotion comprehensively.

#### (3) Overall Goal

All attendees recognized that the Project has successfully achieved the Project purpose and expected that the effects generated by this Project should be succeeded to the J-PRISM.

#### 5. Comments and Suggestions

- NTC presented the revised Solid Waste Management Plan, and proposed to revise Waste Fee as the current fee is insufficient to cover necessary cost of SWM. Mr. Manasa Rayasidamu of CBH suggested submitting the plan to the CBH meeting which will be held in March 2012.
- Mr. Hashimoto of JICA Fiji Office asked DoE about the function of Inter-Ministry Working Party. Ms. Laisani of DoE explained that the Party has been established and is expected to oversee the implementation of the National Solid Waste Management Strategy (2011-2014), including 3R. The next party meeting will be held in March 2012. 3R guideline, which is called National 3R Policy, will be also discussed in the meeting. Mr. Hashimoto requested DoE to send an invitation to JICA Fiji Office for attendance of the meeting as an observer. DoE agreed.







#### 6. Conclusion

The JCC made the following conclusions:

- The JCC confirmed that all activities had been planned were conducted completely and agreed all the outputs were achieved and approved the draft completion report of the Waste Minimization and Recycling Promotion Project as attached in annex 2.
- The JCC approved the revised SWM Master Plan for Lautoka City Council and Nadi Town Council as attached in annex 3 and 4 and requested both Councils to secure an implementation of it.

#### 7. Closing of the meeting

Chairperson closed the meeting at 12:35 p.m.

Appendix 1: List of Attendants

Appendix 2: Draft Completion Report of the Project

Appendix 3: Master Plan of Solid Waste Management for LCC Appendix 4: Master Plan of Solid Waste Management for NTC

#### Appendix 1: List of Attendants

Ministry of Local Government and Urban Development & Housing and Environment

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Mr. Josese Rakuita Director, Department of Local Josese.rakuita@govnet.gov.fj

Government

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Mr. Manasa Rayasidanu Senior Health Inspector, Central Board <u>mrayasidamu@gmail.com</u>

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Mr. Praveen Bala SA Lautoka Mr. Jone Nakauvadra C.E.O. LCC

Mr. Rouhit Singh Acting Director, Department of Health, rouhit2003@yahoo.com

LCC

Mr. Shalend P Singh Co-Project Manager Shalendsingh75@yahoo.com

Senior Health Inspector, LCC

Nadi Town Council (NTC)

Mr. Nemia Tagi C.E.O, NTC

Mr. Sakaraia Serau Senior Health Inspector serau 7@yahoo.com

Mrs. Premila Chandra Health Inspector chandrapremila@hotmail.com
Mr. Rajeshwar Raj Co-Project Manager Health@naditowncouncil.com.fj

Acting Director, Health Department

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Ms Nafiza Ali

Ba Town Council (BTC)

Mr. Dip Narayan Senior Health Inspector

Sigatoka Town Council (STC) & Tavua Town Council (TTC)

Mr. Anand Pillaiy C.E.O. STC

JICA Expert Team (JET)

Mr. Junji Anai Chief Advisor/Solid Waste Management anai.junji@gmail.com

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Ms. Yurie Kawabata 3R Promotion/Project Coordinator yurie1105tong@gmail.com

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STO BOY

J-PRISM

Mr. Hiromichi Kano Project Coordinator, Project kano.hiromichi@gmail.com

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J-PRISM

JICA Fiji Office (JFO)

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Mr. Yohei Hashimoto Assistant Resident Representative <u>Hashimoto.Yohei@jica.go.jp</u>

3) - 25 50 \$ Japan International Cooperation Agency (JICA)
The Republic of Fiji

#### Waste Minimization and Recycling Promotion Project

In

The Republic of Fiji

**Project Completion Report** 

(Draft)

February 2012

Kokusai Kogyo Co., Ltd.

**EX** Corporation

# SOLID WASTE MANAGEMENT (SWM) MASTER PLAN

### Revised version

February 2012

LAUTOKA CITY COUNCIL

# Solid Waste Management Master Plan

Revised version

February 2012

**Nadi Town Council**