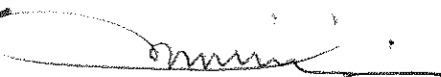


**RECORD OF DISCUSSION**  
**FOR**  
**THE PROJECT FOR THE PLANNING OF THE NADI RIVER**  
**FLOOD CONTROL STRUCTURES**  
**IN**  
**THE REPUBLIC OF FIJI**  
**AGREED UPON BETWEEN**  
**MINISTRY OF AGRICULTURE**  
**AND**  
**JAPAN INTERNATIONAL COOPERATION AGENCY**

Suva, 31/3 | 2014



Mr. Shumon YOSHIARA  
Resident Representative  
Fiji Office  
Japan International Cooperation  
Agency  
Japan



Mr. Ropate Ligairi  
Permanent Secretary  
Ministry of Agriculture  
The Republic of Fiji

Based on the minutes of meeting on the Detailed Planning Survey on the Project for the Planning of the Nadi River Flood Control Structures (hereinafter referred to as "the Project") signed on 7<sup>th</sup> February 2014 between Ministry of Agriculture (hereinafter referred to as "MOA") and the Japan International Cooperation Agency (hereinafter referred to as "JICA") held a series of discussions with MOA and relevant organizations to develop a detailed plan of the Project.

Both parties agreed to the details of the Project and the main points discussed as described in Appendix 1 and Appendix 2, respectively.

Both parties also agreed that MOA, the counterpart to JICA, will be responsible for the implementation of the Project in cooperation with JICA, coordinate with other relevant organizations and ensure that the self-reliant operation of the Project is sustained during and after the implementation period in order to contribute towards the social and economic development of the Republic of Fiji.

The Project will be implemented within the framework of the Colombo Plan Technical Cooperation Scheme and the Note Verbales exchanged on 21<sup>st</sup> July 2009 between the Government of Japan (hereinafter referred to as "GOJ") and the Government of Fiji (hereinafter referred to as "GOF").

Appendix 1: Project Description

Appendix 2: Main Point Discussed

Appendix 3: Minutes of Meetings on the Detailed Planning Survey

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## PROJECT DESCRIPTION

### I. BACKGROUND

The Republic of Fiji has the greatest economic scale among the islands states in the Pacific Ocean. Nadi Town, third largest city of Fiji with the population of around 45,000, is located in the west of Viti Levu Island. Nadi Town is the commercial and sightseeing center of Fiji, not only because of the traditional primary industry like sugar cane but also because of the prospering tourist business mainly in Denarau, which over 600 thousand tourists visit every year, and Nadi International Airport is in this town.

Nadi River Basin has suffered from inundation damage due to the frequent cyclones attacking in the rainy season (from November to April) and heavy rains. This damage exerts serious influence on the socio and economic development of this area. Under such conditions, JICA implemented the development survey, "The Study on Watershed Management and Flood Control for the Four Major Viti Levu Rivers in the Republic of Fiji Islands" in 1996 to 1998, and made the Master Plan concerning the flood control and watershed management of the Four Major Rivers (Rewa River, Sigatoka River, Ba River, Nadi River), whose basins cover 58% area of Viti Levu Island, and implemented Feasibility Study (F/S) for the flood control measures.

Nevertheless, no actual measures had been taken, and the gigantic floods happened in January 2009, January 2012, and March 2012 caused tremendous damage on Nadi Town and its suburbs. Especially in the flood of January 2012, and March 2012, most of Nadi Town, including the runways of the airport, was inundated and thereby caused the damage of 89 million US dollars.

In the development survey by JICA, the target scale of the flood control of Nadi River was 20-year return period for short term plan and 50-year return period for long term plan. Together with the economic development of the target area in these 16 years, land utilization and asset situation have greatly changed as well as the target flood, especially the target amount of rainfall and its spatial distribution, have drastically changed from the development survey by JICA. Therefore, it is necessary and important to make the Master Plan (M/P) for flood management that takes into consideration the actual recent flood damage situation.

Concerning above situation, GOF requested to GOJ to provide the technical cooperation on "The Project for the Planning of the Nadi River Flood Control Structures" in April 2012.

In response to the request, GOJ approved the implementation of the Project and JICA dispatched a detailed planning survey team to clarify the framework of the technical cooperation for the Project.

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## II. OUTLINE OF THE PROJECT

### 1. Title of the Project

The Project for the Planning of the Nadi River Flood Control Structures

### 2. Expected Goals which will be attained after the Project Completion

#### (1) Goal of the Proposed Plan

The Master Plan and the results of Feasibility Study will be approved by GOF.

#### (2) Goal which will be attained by utilizing the Proposed Plan

Flood damage in the Nadi River Basin will be mitigated.

### 3. Outputs

The outputs of the Project are as follows:

(1) The Master Plan of the flood management of the Nadi River Basin; and

(2) The Feasibility Study on urgent and/or priority project(s).

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### 4. Activities

The Project will be carried out in the following three (3) stages step-by-step together with technical transfer during the entire period:

Stage-1: To consolidate basic information/data;

Stage-2: To formulate a Master Plan of the flood management of the Nadi River Basin;

Stage-3: To conduct a Feasibility Study on urgent and/or priority project(s); and

Entire Period: To undertake Technical Transfer to relevant personnel of GOF through on-the-job training in the Project as well as seminars, workshops, and counterpart training.

#### Stage-1: Basic Study

1-1 Review of existing data, documents and information

1-2 Collection and arrangement of basic data and information

1-3 Evaluation of existing flood control plan and activity

1-4 River topography surveying (longitudinal, cross), beach topography surveying (bathymetry, shoreline)

1-5 Investigation of riverbed materials, sediment discharge

1-6 Investigation of beach profile change, current, sand drift, sea bed material

1-7 Investigation of flood damage, wave overtopping damage, coastal erosion damage

1-8 Rainfall analysis, study of rainfall return period

1-9 Preliminary run-off analysis and flood inundation analysis

1-10 Preliminary analysis of beach profile change

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- 1-11 Set of target return period
- 1-12 Investigation of river facilities and coastal facilities
- 1-13 Proposal of design criteria
- 1-14 Estimation of sediment transportation (sediment discharge, alongshore sediment transport)
- 1-15 Proposal of evaluation criteria for flood management plan
- 1-16 Preliminary study for flood management plan
- 1-17 Preliminary Environmental Examination for each option
- 1-18 Research and proposal for implementation of project / operation and maintenance management framework
- 1-19 Evaluation of Preliminary study for flood management plan
- 1-20 Supporting of public consultation

#### Stage-2: Master Plan Study

- 2-1 Collection and arrangement of additional data and information
- 2-2 Comparison of alternatives considering environmental and social considerations
- 2-3 Prediction and evaluation of major environmental and social impact items, and planning of mitigation measures and monitoring
- 2-4 Additional investigation of river facilities and coastal facilities
- 2-5 Run-off analysis and flood inundation analysis
- 2-6 River bed variation analysis
- 2-7 Beach profile change analysis
- 2-8 Geotechnical investigation
- 2-9 Preliminary design of proposed structural measures
- 2-10 Evaluation of existing non-structural measures
- 2-11 Evaluation and proposal of non-structural measures
- 2-12 Formulation of the Master Plan
- 2-13 Selection of priority project(s)
- 2-14 Pre-Environmental Impact Assessment based on selected priority project(s)
- 2-15 Assistance for making of initial resettlement plan
- 2-16 Supporting of public consultation
- 2-17 Proposal of project scope

#### Stage-3: Feasibility Study

- 3-1 Implementation of the Feasibility Study
- 3-2 Suggestions for improvement related to disaster risk reduction and disaster risk management

#### Entire Period: Technical Transfer

- 4-1 On-the-job Training through the Project
- 4-2 Technical seminars and workshops related to the Project
- 4-3 Related training courses in Japan for counterpart personnel

#### 5. Input

##### (1) Input by JICA

- (a) Dispatch of Mission (Assignment members are to be determined later)

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- Team Leader / Flood Management
- Water Resources Management
- Seacoast / Sediment Management
- Hydrological Analysis / Run-Off Analysis
- River Structures / Construction Planning
- Institutional, Financial Analysis
- Non-Structural Measures
- Environmental and Social Considerations
- Economic Analysis

Input other than indicated above will be determined through mutual consultations between JICA and MOA during the implementation of the Project, as necessary.

(2) Input by MOA

MOA will take necessary measures to provide the following at their own expense:

- (a) Services of MOA's counterpart personnel and administrative personnel as referred to in II-6;
- (b) Suitable office space with necessary equipment;
- (c) Information as well as support in obtaining medical service;
- (d) Credentials or identification cards; and
- (e) Available data (including maps and photographs) and information related to the Project.

6. Implementation Structure

The Project organization chart is given in the Annex 1. The roles and assignments of relevant organizations are as follows:

(1) Counterpart

- (a) Project Director  
Permanent Secretary of MOA will bear overall responsibility for the administration of the Project as the Project Director.
- (b) Project Manager  
Director of Land and Water Resources Management (LWRM) will be responsible for the managerial matters in the implementation of the Project as the Project Manager.
- (c) Counterpart Personnel  
Principal Agriculture Officer of LWRM  
Principal Engineer (Civil-River Engineer)  
Environmental Officer

(2) JICA Experts

The JICA experts will give necessary technical guidance, advice, and recommendations to MOA on any matters pertaining to the implementation of the Project.

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### (3) Joint Coordinating Committee

Joint Coordinating Committee (hereinafter referred to as "JCC") will be established in order to facilitate inter-organizational coordination. JCC will be held whenever it deems it necessary. A list of proposed members of JCC is shown in the Annex 2.

### 7. Project Site(s) and Beneficiaries

Project Sites: The Nadi River Basin and its coastal area

Beneficiaries: Residents of Nadi Town, persons engaged in commerce and industry in Nadi Town, and tourists

### 8. Duration

The Project will be carried out in accordance with the tentative schedule as attached in the Annex 3. The schedule is tentative and subject to be modified based on the agreement of both sides.

### 9. Reports

JICA will prepare and submit the following reports to MOA in English:

- (1) Twenty (20) copies of Inception Report at the commencement of the first work period in Fiji;
- (2) Twenty (20) copies of Progress Report at the time of about eleven (11) months after the commencement of the first work period in Fiji;
- (3) Twenty (20) copies of Interim Report at the time of seventeen (17) months after the commencement of the first work period in Fiji;
- (4) Twenty (20) copies of Draft Final Report at the end of the last work period in Fiji; and
- (5) Twenty (20) copies of Final Report within about one (1) month after the receipt of the comments on the Draft Final Report.

### 10. Environmental and Social Considerations

- (1) MOA agreed to abide by 'JICA Guidelines for Environmental and Social Considerations, April 2010' in order to ensure that appropriate considerations will be made for the environmental and social impacts of the Project.

#### (2) Environmental Checklist

The environmental and social considerations including major impacts and mitigation measures for the Project are summarized in the Environmental Checklist attached as Annex 4.

#### (3) Monitoring for Environmental and Social Considerations

Monitoring for environmental and social considerations will be conducted by MOA in accordance with the Monitoring Plan for the Project described in the

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Environmental Impact Assessment (EIA) Report and Resettlement Action Plan (RAP).

The results of monitoring will be provided to JICA by filling in the Monitoring Form attached as Annex 5.

### **III. UNDERTAKINGS OF MOA**

1. MOA will take necessary measures to:

- (1) Ensure that the technologies and knowledge acquired by the Fiji nationals as a result of Japanese technical cooperation contributes to the economic and social development of Fiji, and that the knowledge and experience acquired by the personnel of Fiji from technical training as well as the equipment provided by JICA will be utilized effectively in the implementation of the Project; and
- (2) Grant privileges, exemptions and benefits to members of the JICA missions referred to in II-5 (1) above, which are no less favorable than those granted to experts of third countries performing similar missions in Fiji under the Colombo Plan Technical Cooperation Scheme.

2. MOA will take necessary measures to:

- (1) Provide security-related information as well as measures to ensure the safety of members of the JICA missions;
- (2) Permit members of the JICA missions to enter, leave and sojourn in Fiji for the duration of their assignments therein and exempt them from foreign registration requirements and consular fees;
- (3) Exempt members of the JICA missions from taxes and any other charges on the equipment, machinery and other material necessary for the implementation of the Project;
- (4) Exempt members of the JICA missions from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to them and/or remitted to them from abroad for their services in connection with the implementation of the Project; and
- (5) Meet taxes and any other charges on the equipment, machinery and other material, referred to in II-5 above, necessary for the implementation of the Project.

3. MOA will bear claims, if any arises, against members of the JICA missions resulting from, occurring in the course of, or otherwise connected with, the discharge of their duties in the implementation of the Project, except when such claims arise from gross negligence or willful misconduct on the part of members of the JICA missions.





#### **IV. EVALUATION**

JICA will conduct the following evaluations and surveys to mainly verify sustainability and impact of the Project and draw lessons. MOA is required to provide necessary support for them.

1. Ex-post evaluation three (3) years after the project completion, in principle
2. Follow-up surveys on necessity basis

#### **V. PROMOTION OF PUBLIC SUPPORT**

For the purpose of promoting support for the Project, MOA will take appropriate measures to make the Project widely known to people of Fiji.

#### **VI. MUTUAL CONSULTATION**

JICA and MOA will consult each other whenever any major issues arise in the course of Project implementation.

#### **VII. AMENDMENTS**

The record of discussion may be amended by the minutes of meetings between JICA and MOA.

The minutes of meetings will be signed by authorized persons of each side who may be different from the signers of the record of discussions.

Annex 1: Project Organization Chart

Annex 2: A List of Proposed Members of Joint Coordination Committee (JCC)

Annex 3: Tentative Schedule of the Project

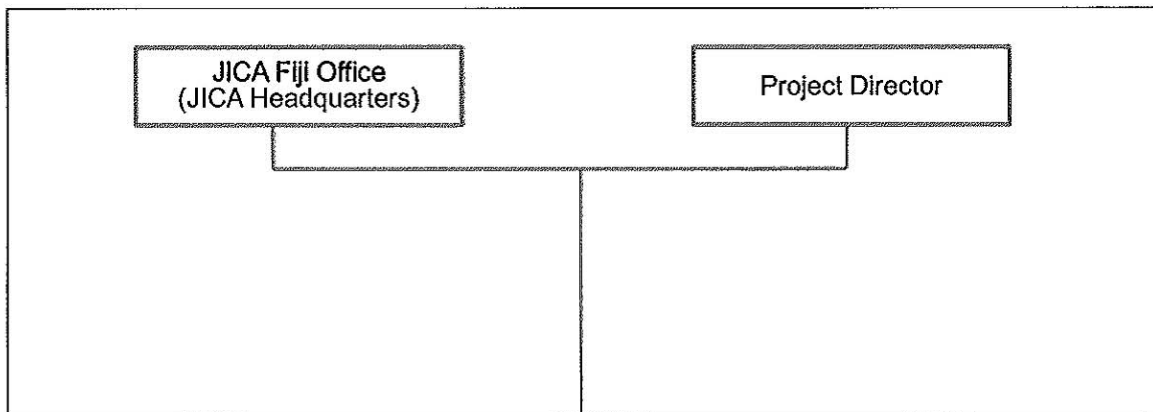
Annex 4: Environmental Checklist

Annex 5: Monitoring Form

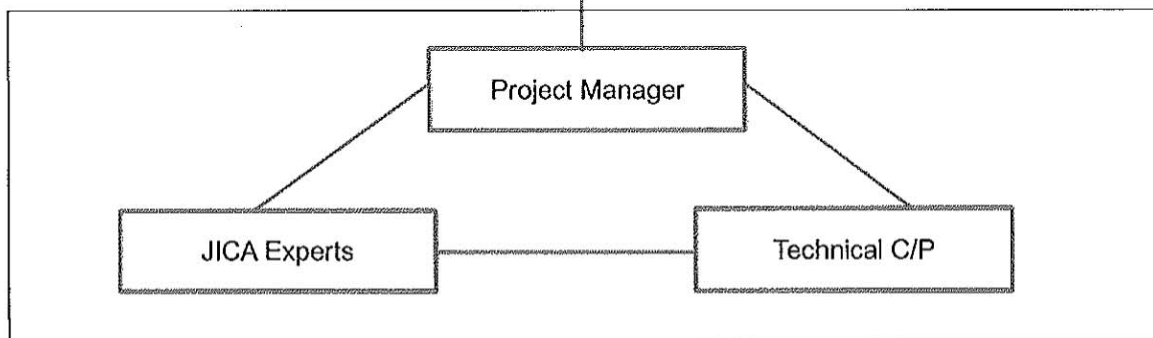


### PROJECT ORGANIZATION CHART

MANAGEMENT SIDE



PROJECT SIDE



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**A LIST OF PROPOSED MEMBERS OF  
JOINT COORDINATION COMMITTEE (JCC)**

1. Fiji Side

- Ministry of Agriculture (MOA)
  - Land and Water Resources Management (LWRM) Division
  - Land Resource Planning and Development (LRPD) Division
  - Dept. of Forestry (DOF)
  - Dept. of Fisheries (DOF)
- Ministry of Foreign Affairs and International Co-operation (MFA&IC)
  - International Cooperation Division
  - Protocol and Consular Division
- Ministry of Works, Transport and Public Utilities (MWTPU)
  - Dept. of Works (DOW)
  - Water Authority of Fiji (WAF)
  - Fiji Meteorological Services (FMS)
- Ministry of Local Government, Urban Development, Housing and Environment (MLGUDHE)
  - Dept. of Environment (DOE)
  - Dept. of Town and Country Planning (DOTCP)
  - Nadi Town Council (NTC)
- Ministry of Lands and Mineral Resources (MLMR)
  - Dept. of Lands (DOL)
- Ministry of Rural and Maritime Safety and Natural Disaster Management (MRMSNDM)
  - Commissioner Western Office (CWO)
  - District Office Nadi (DON)
  - National Disaster Management Office (NDMO)
- Ministry of Finance Strategic Planning, National Development and Statistics (MFSPNDS)
  - National Planning of Fiji (NPF)
- iTaukei Land Trust Board (TLTB)

2. Japanese Side

- JICA Fiji Office
- JICA Experts of the Project
- Other Personnel concerned to be proposed by JICA

3. Observer

- SPC/SOPAC
- Nadi Basin Catchment Committee (NBCC)



TENTATIVE SCHEDULE OF THE PROJECT

		Month																										
	Stage	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
Work	Basic Study	[Redacted]																										
	Master Plan Study	[Redacted]																										
	Feasibility Study	[Redacted]																										
Report	Ic/R										P/R								It/R									
											▲								▲					DF/R			F/R	
																												▲
		IC/R : Inception Report																										
		P/R : Progress Report																										
		IT/R : Interim Report																										
		DF/R : Draft Final Report																										
	F/R : Final Report																											

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## ENVIRONMENTAL CHECKLIST

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
1 Permits and Explanation	(1) EIA and Environmental Permits	(a) Have EIA reports been already prepared in official process?	(a)	(a)
		(b) Have EIA reports been approved by authorities of the host country's government?	(b)	(b)
		(c) Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied?	(c)	(c)
		(d) In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?	(d)	(d)
	(2) Explanation to the Local Stakeholders	(a) Have contents of the project and the potential impacts been adequately explained to the Local stakeholders based on appropriate procedures, including information disclosure? Is understanding obtained from the Local stakeholders?	(a)	(a)
		(b) Have the comment from the stakeholders (such as local residents) been reflected to the project design?	(b)	(b)
2 Pollution Control	(3) Examination of Alternatives	(a) Have alternative plans of the project been examined with social and environmental considerations?	(a)	(a)
	(1) Water Quality	(a) Is there a possibility that changes in river flow downstream (mainly water level drawdown) due to the project will cause areas that do not comply with the	(a)	(a)

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Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
		country's ambient water quality standards?		
	(2) Wastes	(a) In the case of that large volumes of excavated/dredged materials are generated, are the excavated/dredged materials properly treated and disposed of in accordance with the country's standards?	(a)	(a)
	(3) Subsidence	(a) Is there a possibility that the excavation of waterways will cause groundwater level drawdown or subsidence? Are adequate measures taken, if necessary?	(a)	(a)
3 Natural Environment	(1) Protected Areas	(a) Is the project site located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas?	(a)	(a)
	(2) Ecosystem	(a) Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., coral reefs, mangroves, or tidal flats)? (b) Does the project site encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions? (c) If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem? (d) Is there a possibility that hydrologic changes, such as reduction of the river flow, and seawater intrusion up the river will adversely affect downstream aquatic organisms,	(a) (b) (c) (d) (e)	(a) (b) (c) (d) (e)

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Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
		<p>animals, vegetation, and ecosystems?</p> <p>(e) Is there a possibility that the changes in water flows due to the project will adversely affect aquatic environments in the river? Are adequate measures taken to reduce the impacts on aquatic environments, such as aquatic organisms?</p>		
3 Natural Environment	(3) Hydrology	(a) Is there a possibility that hydrologic changes due to the project will adversely affect surface water and groundwater flows?	(a)	(a)
	(4) Topography and Geology	(a) Is there a possibility that excavation of rivers and channels will cause a large-scale alteration of the topographic features and geologic structures in the surrounding areas?	(a)	(a)
4 Social Environment	(1) Resettlement	<p>(a) Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement?</p> <p>(b) Is adequate explanation on compensation and resettlement assistance given to affected people prior to resettlement?</p> <p>(c) Is the resettlement plan, including compensation with full replacement costs, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement?</p> <p>(d) Is the compensations going to be paid prior to the</p>	<p>(a)</p> <p>(b)</p> <p>(c)</p> <p>(d)</p> <p>(e)</p> <p>(f)</p> <p>(g)</p> <p>(h)</p> <p>(i)</p>	<p>(a)</p> <p>(b)</p> <p>(c)</p> <p>(d)</p> <p>(e)</p> <p>(f)</p> <p>(g)</p> <p>(h)</p> <p>(i)</p>

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Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
		<p>resettlement?</p> <p>(e) Is the compensation policies prepared in document?</p> <p>(f) Does the resettlement plan pay particular attention to vulnerable groups or people, including women, children, elderly people below the poverty line, ethnic minorities, and indigenous peoples?</p> <p>(g) Are agreements with the affected people obtained prior to resettlement?</p> <p>(h) Is the organizational framework established to properly implement resettlement? Are the capacity and budget secured to implement the plan?</p> <p>(i) Are any plans developed to monitor the impacts of resettlement?</p> <p>(j) Is the grievance redress mechanism established?</p>	(i)	(i)
(2) Living and Livelihood		<p>(a) Is there a possibility that the project will adversely affect the living conditions of inhabitants? Are adequate measures considered to reduce the impacts, if necessary?</p> <p>(b) Is there a possibility that the amount of water (e.g., surface water, groundwater) used by the project will adversely affect the downstream fisheries and other water uses?</p> <p>(c) Is there a possibility that water-borne or water-related diseases (e.g., schistosomiasis, malaria, and filariasis) will be introduced?</p>	(a) (b) (c)	(a) (b) (c)



Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
	(3) Heritage	(a) Is there a possibility that the project will damage the local archeological, historical, cultural, and religious heritage? Are adequate measures considered to protect these sites in accordance with the country's laws?	(a)	(a)
	(4) Landscape	(a) Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken?	(a)	(a)
4 Social Environment	(5) Ethnic Minorities and Indigenous Peoples	(a) Are considerations given to reduce impacts on the culture and lifestyle of ethnic minorities and indigenous peoples? (b) Are all of the rights of ethnic minorities and indigenous peoples in relation to land and resources to be respected?	(a) (b)	(a) (b)
	(6) Working Conditions	(a) Is the project proponent not violating any laws and ordinances associated with the working conditions of the country which the project proponent should observe in the project? (b) Are tangible safety considerations in place for individuals involved in the project, such as the installation of safety equipment which prevents industrial accidents, and management of hazardous materials? (c) Are intangible measures being planned and implemented for individuals involved in the project, such as the establishment of a safety and health program, and safety training (including traffic safety and public health) for workers etc.? (d) Are appropriate measures taken to ensure that security guards involved in the project not to violate safety of other	(a) (b) (c) (d)	(a) (b) (c) (d)

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Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
		individuals involved, or local residents?		
5 Others	(1) Impacts during Construction	<p>(a) Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and wastes)?</p> <p>(b) If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce impacts?</p> <p>(c) If construction activities adversely affect the social environment, are adequate measures considered to reduce impacts?</p>	(a) (b) (c)	(a) (b) (c)
	(2) Monitoring	<p>(a) Does the proponent develop and implement monitoring program for the environmental items that are considered to have potential impacts?</p> <p>(b) What are the items, methods and frequencies of the monitoring program?</p> <p>(c) Does the proponent establish an adequate monitoring framework (organization, personnel, equipment, and adequate budget to sustain the monitoring framework)?</p> <p>(d) Are any regulatory requirements pertaining to the monitoring report system identified, such as the format and frequency of reports from the proponent to the regulatory authorities?</p>	(a) (b) (c) (d)	(a) (b) (c) (d)

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Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
6 Note	Reference to Checklist of Other Sectors	(a) Where necessary, pertinent items described in the Forestry checklist should also be checked.	(a)	(a)
	Note on Using Environmental Checklist	(a) If necessary, the impacts to transboundary or global issues should be confirmed (e.g., the project includes factors that may cause problems, such as transboundary waste treatment, acid rain, destruction of the ozone layer, or global warming).	(a)	(a)

- 1) Regarding the term "Country's Standards" mentioned in the above table, in the event that environmental standards in the country where the project is located diverge significantly from international standards, appropriate environmental considerations required to be made.  
In cases where local environmental regulations are yet to be established in some areas, considerations should be made based on comparisons with appropriate standards of other countries (including Japan's experience).
- 2) Environmental checklist provides general environmental items to be checked. It may be necessary to add or delete an item taking into account the characteristics of the project and the particular circumstances of the country and locality in which the project is located.

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### MONITORING FORM

-If environmental reviews indicate the need of monitoring by JICA, JICA undertakes monitoring for necessary items that are decided by environmental reviews. JICA undertakes monitoring based on regular reports including measured data submitted by the project proponent. When necessary, the project proponent should refer to the following monitoring form for submitting reports.

-When monitoring plans including monitoring items, frequencies and methods are decided, project phase or project life cycle (such as construction phase and operation phase) should be considered.

#### 1. Responses/Actions to Comments and Guidance from Government Authorities and the Public

Monitoring Item	Monitoring Results during Report Period
Ex.) Responses/Actions to Comments and Guidance from Government Authorities	

#### 2. Mitigation Measures

##### - Air Quality (Emission Gas / Ambient Air Quality)

Item	Unit	Measured Value (Mean)	Measured Value (Max.)	Country's Standards	Referred International Standards	Remarks (Measurement Point, Frequency, Method, etc.)
SO <sub>2</sub>						
NO <sub>2</sub>						
CO						
O <sub>3</sub>						
Soot and dust						
SPM						
Dust						

##### - Water Quality (Effluent/Wastewater/Ambient Water Quality)

Item	Unit	Measured Value (Mean)	Measured Value (Max.)	Country's Standards	Referred International Standards	Remarks (Measurement Point, Frequency, Method, etc.)
pH						

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SS (Suspended Solid)						
BOD/COD						
DO						
Total Nitrogen						
Total Phosphorus						
Heavy Metals						
Hydrocarbons / Mineral Oils						
Phenols						
Cyanide						
Temperature						

**- Waste**

Monitoring Item	Monitoring Results during Report Period

**- Noise / Vibration**

Item	Unit	Measured Value (Mean)	Measured Value (Max.)	Country's Standards	Referred International Standards	Remarks (Measurement Point, Frequency, Method, etc.)
Noise level						
Vibration level						

**- Odor**

Monitoring Item	Monitoring Results during Report Period

**3. Natural Environment**

**- Ecosystem**

Monitoring Item	Monitoring Results during Report Period
Ex.) Negative effects/Actions to Valuable species	

**4. Social Environment**

**- Resettlement**

Monitoring Item	Monitoring Results during Report Period

**- Living / Livelihood**

Monitoring Item	Monitoring Results during Report Period

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**MAIN POINTS DISCUSSED**

- (1) Both parties agreed that the Project is expected to contribute to adaptation to climate change.
- (2) Both parties confirmed the draft Terms of Reference (TOR) on environmental and social considerations studies as per Annex 6, which will be carried out in the Project.

Annex 6: Draft Terms of Reference (TOR) on environmental and social considerations studies

[END]



**DRAFT TERMS OF REFERENCE ON  
ENVIRONMENTAL AND SOCIAL CONSIDERATIONS STUDIES**

1. The study compares and analyzes alternative plans of each option based on a strategic environmental assessment (environmental assessment at PPP level which means an assessment that is implemented at the policy, planning and program levels, but not a project-level EIA). Specifically, comparative analysis of alternative plans of each option need to be conducted including likely environmental and social impacts after having carried out scoping process (clarify extremely important items on environmental and social impacts and its evaluation methods at the time of decision making such as policy, plan, and program levels).
2. After the Master Plan is formulated, scoping for the priority project which is selected through the comparative analysis of alternative plans of each option, is to be conducted (clarify items on environmental and social impacts). Specifically, items needed for conducting an environmental assessment for the selected priority projects are to be determined and the methods of baseline surveys and prediction to be decided.
3. Main items of the Study are as follows: (items (1) to (3) written below need to examine including environmental and social consideration aspects).
  - (1) Examination of objectives and goals on related policies and plans.
  - (2) Examination of alternative plans of each option in order to attain goals of the project under various conditions.
  - (3) Examination of policy and contents of plans (prediction of development, list of measurements and map showing the planned route and development area).
  - (4) Conduct of scoping (clarify extremely important items on environmental and social impacts and its evaluation methods at the time of decision making such as policy, plan, and program levels).
  - (5) Confirmation of existing environmental and social conditions of the proposed project area as a baseline data (land use, natural environment, culture and lifestyle of indigenous people and their communities, local economy and socio-cultural environment and others).
  - (6) Confirmation of legal framework and institution of recipient country on environmental and social considerations.
    - 1) Laws, regulations and standards related to environmental and social considerations (environmental impact assessment, resettlement, public participation, information disclosure and others).
    - 2) Gaps between the "JICA Guidelines for Environmental and Social Considerations, April 2010" and legal framework of the Republic of Fiji on environmental and social considerations.
    - 3) Outlines of relative agencies and institutions responsible for the implementation of the project.

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- (7) Prediction of the project's likely impacts.
- (8) Evaluation of the project's likely impacts and comparative analysis of alternatives at the PPP level including 'without project' option.
- (9) Examination of the mitigation measures (to be avoided, minimized and compensated).
- (10) Examination of the monitoring methods (monitoring items, frequencies and methods).
- (11) Preparation of scoping result for the priority project on items for environmental and social considerations (Alternatives which would be considered and the scope for important items on likely environmental and social impacts as well as draft prediction and evaluation methods).
- (12) Supporting of consultation local stakeholders (purpose of meeting, participants, content of meeting, and others).

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**Minutes of Meetings on the Detailed Planning Survey**

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