

**別添資料**



## **別添 1:調査団員リスト**



氏名	担当	所属
福田 義夫	総括	独立行政法人国際協力機構
野田 善久	業務主任/ 橋梁計画1	(株)建設技研インターナショナル
渡邊 正俊	副業務主任/ 橋梁計画2	(株)建設技研インターナショナル
高津 光	道路設計/ 交通量調査	(株)建設技研インターナショナル
谷山 恵一	橋梁設計	(株)建設技研インターナショナル(補強)
岩政 瞳	橋梁設計2	(株)建設技研インターナショナル
森下 甲子弘	河川計画・設計	(株)建設技研インターナショナル
幡野 貴之	環境社会配慮 (社会環境)	(株)建設技研インターナショナル
可児 圭子	環境社会配慮 (環境配慮)	国際航業(株)
西村 智博	自然条件調査 (地形・地質)	国際航業(株)
藤田 大介	自然条件調査 (気象・水理・水文)	(株)建設技研インターナショナル
緒方 博充	施工計画/ 調達事情/積算	(株)建設技研インターナショナル
七十刈 昭夫	河川構造物設計	(株)建設技研インターナショナル



## **別添 2: 調査工程**



1<sup>st</sup> Field Survey (First Team, From 12th Nov. 2017 to 22nd Dec. 2017)

Schedule		JICA	CONSULTANT						
DATE	DAY	Leader	Chief Consultant/ Bridge Planning1	Deputy Chief Consultant/ Bridge Planning2	Road Design	Construction Planning/ Procurement Plan/ Estimate			
DATE	DAY	Mr. Fukuda	Mr. Noda	Mr. Watanabe	Mr. Takatsu	Mr. Ogata			
2017									
12-Nov	Sun.	Travel (CX0501 & CX6901) NRT10:30-HKG-NADI 0810							
13-Nov	Mon.	Meeting (JICA) Meeting (Embassy)	Meeting (JICA) Meeting (Embassy)						
14-Nov	Tue	Travel (FJ0921 & NF0021) NADI 08:15-BNE-VLI 17:30							
15-Nov	Wed	Meeting (JICA)	Meeting (JICA)						
16-Nov	Thu	IC/R Explanation to PWD	IC/R Explanation to PWD						
17-Nov	Fri	Meeting on MD /PWD Signing of MD	Meeting on MD /PWD						
18-Nov	Sat	Travel (NF010) VLI 15:20-SYD 19:15	Site Inspection						
19-Nov	Sun	Travel (NH880) SYD 21:30-NHD05:50	Data Analysis and Documentation						
20-Nov	Mon		Subcon Procurement Site Survey						
21-Nov	Tue		Subcon Procurement Site Survey						
22-Nov	Wed		Subcon Procurement Site Survey						
23-Nov	Thu		Subcon Procurement Site Survey						
24-Nov	Fri		Subcon Procurement Site Survey						
25-Nov	Sat		Site Inspection						
26-Nov	Sun		Internal Meeting						
27-Nov	Mon		Data Analysis and Documentation						
28-Nov	Tue		Subcon Procurement Site Survey						
29-Nov	Wed		Subcon Procurement Site Survey						
30-Nov	Thu		Subcon Procurement Site Survey						
1-Dec	Fri		Subcon Procurement Site Survey				Travel (JL771) NRT18:55-SYD7:10	Road Planning and Documentation	Travel (JL771) NRT18:55-
2-Dec	Sat		Travel (NF 0010) VLI 15:20-SYD 22:20				Travel (NF11) SYD11:55-VLI15:10	Subcon Procurement Site Survey	Travel (NF11) SYD11:55-VLI15:10
3-Dec	Sun		Travel (CX0138, 0548) SDY2220-HKG-HND13:45				Internal Meeting	Internal Meeting	Internal Meeting
4-Dec	Mon						Internal Meeting	Internal Meeting	Internal Meeting
5-Dec	Tue						Preparation Work for Vibration Test	Preparation Work for Vibration Test	Subcon Procurement Site Survey
6-Dec	Wed						Vibrating Test on Existing Bridge	Vibrating Test on Existing Bridge	Subcon Procurement Site Survey
7-Dec	Thu						Data Collection	Travel (NF 0010) VLI 15:20-SYD 19:15	Subcon Procurement Site Survey
8-Dec	Fri						Data Analysis and Documentation	Travel (JL772) SDY9:15-NRT17:00	Subcon Procurement Site Survey
9-Dec	Sat						Data Analysis and Documentation		Subcon Procurement Site Survey
10-Dec	Sun						Internal Meeting		Internal Meeting
11-Dec	Mon			Internal Meeting		Internal Meeting			
12-Dec	Tue			Meeting with other project		Meeting with other project			
13-Dec	Wed			Procurement Condition Survey		Procurement Condition Survey			
14-Dec	Thu			Meeting with other project		Meeting with other project			
15-Dec	Fri			Preparation of Technical Note		Subcon Procurement Site Survey			
16-Dec	Sat			Preparation of Technical Note		Subcon Procurement Site Survey			
17-Dec	Sun			Internal Meeting		Internal Meeting			
18-Dec	Mon			Internal Meeting		Internal Meeting			
19-Dec	Tue			Preparation of Technical Note		Preparation of Technical Note			
20-Dec	Wed			Discussion with C/P about T/N		Discussion with C/P about T/N			
21-Dec	Thu	PWD: Public Works Department IC/R: Inception Report C/P: Counter Part T/N: Technical Notes		Discussion with C/P about T/N		Travel (NF 0010) VLI 15:20-SYD 19:15			
22-Dec	Fri			Travel (NF 0010) VLI 15:20-SYD 19:15	Travel (JL772) SDY9:15-NRT17:00	Travel (JL772) SDY9:15-NRT17:00			

1<sup>st</sup> Field Survey (Second Team, From 16th Jan. 2018 to 4th Feb. 2018)

Schedule		CONSULTANT				
		River Planning / Design	Natural Condition Survey (Geography, Geology)	Natural Condition Survey (Meteorology, Hydro-Hydraulic Analysis)	Design of River Structures	Technical Administrative Assistance
DATE	DAY	Mr. Morishita	Mr. Nishimura	Mr. Fujita	Mr. Shichijukari	Mr. Miura
2018						
16-Jan	Tue.	Travel (JL771) NRT18:55-SYD7:10	Travel (SB801) NRT12:30-NOU23:00	Travel (JL771) NRT18:55-SYD7:10	Travel (JL771) NRT18:55-SYD7:10	Travel (JL771) NRT18:55-SYD7:10
17-Jan	Wed	Travel (NF11) SYD11:55-VLI15:10	Travel (SB3230) NOU8:45-VLI10:20	Travel (NF11) SYD11:55-VLI15:10	Travel (NF11) SYD11:55-VLI15:10	Travel (NF11) SYD11:55-VLI15:10
18-Jan	Thu	Internal Meeting	Internal Meeting	Internal Meeting	Internal Meeting	Internal Meeting
19-Jan	Fri	Site Inspection	Site Inspection	Site Inspection	Site Inspection	Site Inspection
20-Jan	Sat	Site Inspection	Site Inspection	Site Inspection	Site Inspection	Site Inspection
21-Jan	Sun	Internal Meeting	Internal Meeting	Internal Meeting	Internal Meeting	Internal Meeting
22-Jan	Mon	Site Inspection	Site Inspection	Site Inspection	Site Inspection	Site Inspection
23-Jan	Tue	Meeting with C/P	Meeting with C/P	Meeting with C/P	Meeting with C/P	Meeting with C/P
24-Jan	Wed	Internal Meeting	Internal Meeting	Internal Meeting	Internal Meeting	Internal Meeting
25-Jan	Thu	Site Inspection	Site Inspection	Site Inspection	Site Inspection	Site Inspection
26-Jan	Fri	Meeting with C/P	Meeting with C/P	Meeting with C/P	Meeting with C/P	Meeting with C/P
27-Jan	Sat	Internal Meeting	Internal Meeting	Internal Meeting	Internal Meeting	Internal Meeting
28-Jan	Sun	Internal Meeting	Internal Meeting	Internal Meeting	Internal Meeting	Internal Meeting
29-Jan	Mon	Preparation of Technical Note	Travel(SB3231) VLI 16:15-NOU 17:50	Preparation of Technical Note	Travel(NF 0010) VLI 15:20-SDY 19:15	Preparation of Technical Note
30-Jan	Tue	Preparation of Technical Note	Travel(SB800) NOU01:00-NRT07:50	Preparation of Technical Note	Travel(JL772) SDY9:15-NRT17:00	Preparation of Technical Note
31-Jan	Wed	Preparation of Technical Note		Data Collection from Subcontractor		Data Collection from Subcontractor
1-Feb	Thu	Discussion with C/P about T/N		Discussion with C/P about T/N		Discussion with C/P about T/N
2-Feb	Fri	Discussion with C/P about T/N		Discussion with C/P about T/N		Discussion with C/P about T/N
3-Feb	Sat	Travel(NF 0010) VLI 15:20-SDY 19:15		Travel(NF 0010) VLI 15:20-SDY 19:15		Travel(NF 0010) VLI 15:20-SDY 19:15
4-Feb	Sun	Travel(JL772) SDY9:15-NRT17:00		Travel(JL772) SDY9:15-NRT17:00		Travel(JL772) SDY9:15-NRT17:00

2nd Field Survey (From 24th Apr. 2018 to 7th Jun. 2018)

Project: Project for the Disaster Reconstruction of Teouma Bridge

Day	Team Member				
	Mr. Fukuda Team Leader	Mr. Noda Chief Consultant / Bridge Planning 1	Mr. Morishita River Planning / Design	Mr. Taniyama Bridge Design	Mr. Ogata Construction Planning / Procurement / Cost Estimation
24 Apr (Tue)	Dep. Japan				
25 Apr (Wed)	Arr. Vanuatu				
26 Apr (Thu)	Discussion with MIPU of Explanation of 2nd Site Survey				
27 Apr (Fri)	Internal Meeting / Site Visit				
28 Apr (Sat)	Documentation				Dep. Japan
29 Apr (Sun)	Documentation				Arr. Vanuatu
30 Apr (Mon)	Site Survey				
01 May (Tue)	Site Survey				
02 May (Wed)	Site Survey		Survey for Procurement Circumstance of Construction Material		
03 May (Thu)	Site Survey				
04 May (Fri)	Internal Meeting				
05 May (Sat)	Documentation / Data Analysis				
06 May (Sun)	Documentation / Data Analysis		Dep. Vanuatu	Documentation	
07 May (Mon)	Site Visit		Data Collection for River Flooding Analysis	Arr. Japan	
08 May (Tue)	Documentation				
09 May (Wed)	Documentation				Site Survey (to Subcontractor, Quarry, Construction Material Supplier, Other Construction Site etc.)
10 May (Thu)	Dep. Japan	Move to FIJI			
11 May (Fri)	Explanation of the 2nd Survey to EOJ in FIJI and JICA FIJI Office				
12 May (Sat)	Arr. Vanuatu	Move to Vanuatu		Documentation	
13 May (Sun)	Site Visit / Documentation				Documentation
14 May (Mon)	Explanation and Discussion of the 2nd Survey with MIPU				Site Survey
15 May (Tue)	Explanation and Discussion of the 2nd Survey with JICA Vanuatu				
16 May (Wed)	Dep. Vanuatu	Discussion with MIPU about Tax Exemption, and Request for Relocation of Utility Line to UNELCO company		Discussion with MIPU about Tax Exemption	
17 May (Thu)	Arr. Japan				
18 May (Fri)					
19 May (Sat)	Internal Meeting				Internal Meeting
20 May (Sun)	Documentation				Documentation
21 May (Mon)	Interim Report to MIPU				Site Survey
22 May (Tue)	Documentation		River Flooding Analysis	Site Survey	
23 May (Wed)	Dep. Vanuatu			Site Survey	
24 May (Thu)	Arr. Japan			Dep. Vanuatu	
25 May (Fri)				Arr. Japan	
26 May (Sat)	Internal Meeting				
27 May (Sun)	Documentation				
28 May (Mon)					
29 May (Tue)					
30 May (Wed)					
31 May (Thu)					
01 Jun (Fri)					
02 Jun (Sat)	Documentation				
03 Jun (Sun)	Documentation				
04 Jun (Mon)	Report to MIPU				
05 Jun (Tue)	Report to JICA Vanuatu				
06 Jun (Wed)	Dep. Vanuatu				
07 Jun (Thu)	Arr. Japan				

MIPU : Ministry of Infrastructure and Public Utilities

EOJ : Embassy of Japan

JICA : Japan International Cooperation Agency

Project: Project for the Disaster Reconstruction of Teouma Bridge

Day	Ms. Kani	Mr. Nishimura	Mr. Hatano	Mr. Takatsu	Mr. Watanabe		
	Living Environment Consideration	Natural Condition Survey (Topography / Geotechnical)	Social Environment Consideration	Road Design / Traffic Survey	Deputy Chief Consultant/ Bridge Planning 2		
02 May (Wed)	Dep. Japan	Dep. Japan					
03 May (Thu)	Arr. Vanuatu	Arr. Vanuatu					
04 May (Fri)	Internal Meeting		Dep. Japan				
05 May (Sat)	Documentation / Data Analysis		Arr. Vanuatu				
06 May (Sun)	Documentation / Data Analysis						
07 May (Mon)	Site Visit						
08 May (Tue)	Site Survey (Landowners, Social Systems, Local Customs etc.)	Preparation for Geological Survey	Site Survey (Landowners, Social Systems, Local Customs etc.)				
09 May (Wed)							
10 May (Thu)							
11 May (Fri)							
12 May (Sat)	Documentation						
13 May (Sun)	Documentation			Dep. Japan			
14 May (Mon)	Site Survey (Landowners, Social Systems, Local Customs etc.)	Confirmation of Topographic Survey Results	Site Survey (Landowners, Social Systems, Local Customs etc.)	Arr. Vanuatu			
15 May (Tue)							
16 May (Wed)		Documentation		Preparation for Traffic Survey		Dep. Japan	
17 May (Thu)						Arr. Vanuatu	
18 May (Fri)						Site Visit	
19 May (Sat)	Internal Meeting						
20 May (Sun)	Documentation						
21 May (Mon)	Documentation	Documentation	Documentation	Implementation of Training for Traffic Survey and Axle Load Survey			
22 May (Tue)	Documentation	Documentation	Documentation				
23 May (Wed)	Consultation for the Project with MIPU, Stakeholders and Residents						
24 May (Thu)	Documentation	Documentation	Documentation	Preparation for Axle Load Survey			
25 May (Fri)	Assistant for Axle Load Survey		Documentation	Assistant for Axle Load Survey			
26 May (Sat)	Internal Meeting						
27 May (Sun)	Documentation						
28 May (Mon)	Documentation	Preparation and Management for Geological Survey	Site Survey (Landowners, Social Systems, Local Customs etc.)	Preparation for Traffic Survey			
29 May (Tue)	Documentation			Assistant for Traffic Survey (Weekday)			
30 May (Wed)	Dep. Vanuatu			Management of Geological Survey	Documentation		
31 May (Thu)	Arr. Japan					Dep. Vanuatu	Dep. Vanuatu
01 Jun (Fri)						Arr. Japan	Arr. Japan
02 Jun (Sat)			Documentation				
03 Jun (Sun)			Assistant for Traffic Survey (Holiday)				
04 Jun (Mon)			Report to MIPU				
05 Jun (Tue)			Report to JICA Vanuatu				
06 Jun (Wed)			Dep. Vanuatu				
07 Jun (Thu)			Arr. Japan				

MIPU : Ministry of Infrastructure and Public Utilities

EOJ : Embassy of Japan

JICA : Japan International Cooperation Agency

3<sup>rd</sup> Field Survey (From 19th Mar. 2019 to 3rd Apr. 2019)

No	Organization		JICA		Consultant		
	Name		Mr.FUKUDA	Ms.KUMAZAWA	Mr.NODA	Mr.MORISHITA	Mr.HATANO
	Date	Day	Team Leader	Project Coordination	Chief Consultant/Bridge Planning I	River Planning / Design	Environmental Consideration (Social Aspect)
1	19-Mar-19	Tue		Haneda(QF026) -	Haneda(QF026) -		Haneda(QF026) -
2	20-Mar-19	Wed		- Sydney(QF375) - 23:30 Port Vila	- Sydney(QF375) - 23:30 Port Vila		- Sydney(QF375) - 23:30 Port Vila
3	21-Mar-19	Thu		Meeting with JICA,MIPU	Meeting with JICA,MIPU	Narita(QF062) -	Meeting with MIPU
4	22-Mar-19	Fri		Meeting with MIPU	Meeting with MIPU	- Brisbane(QF377) - 16:15 Port Vila	Meeting with MIPU
5	23-Mar-19	Sat		Project site observation	Project site observation	Internal Meeting	
6	24-Mar-19	Sun	Haneda(QF026) -	Internal Meeting			
7	25-Mar-19	Mon	- Sydney(QF375) - 15:10 Port Vila	Meeting with MIPU	Meeting with MIPU		
8	26-Mar-19	Tue	Meeting with EOJ, JICA Office and MIPU				
9	27-Mar-19	Wed	Meeting with MIPU and Office of the Prime	Port Vila(QF376) 15:20 -Sidney(QF025) -	Meeting with MIPU		
10	28-Mar-19	Thu	Meeting with MIPU, ADB	- Haneda	Meeting with MIPU		
11	29-Mar-19	Fri	Meeting with MIPU and Signing of M/D, Reporting to EOJ and JICA		Meeting with MIPU and Signing of M/D, Reporting to EOJ and JICA		
12	30-Mar-19	Sat	Internal Work		Internal Meeting		
13	31-Mar-19	Sun	Port Vila(FJ266)12:30 - Suva		Port Vila(FJ266)12:30 - Suva	Internal Meeting	
14	1-Apr-19	Mon	Reporting to EOJ, JICA and FRA		Reporting to EOJ, JICA	Port Vila(QF376) 07:00 -Sidney(QF025) -	
15	2-Apr-19	Tue	Suva(FJ10)10:00 - Nadi(FJ351) - Narita		Nandi(QF102)16:35 -Sidney(QF025) -	- Haneda	
16	3-Apr-19	Wed			- Haneda		

- \* MIPU Ministry of Infrastructure and Public Utilities
- PWD Public Works Department
- EOJ Embassy of Japan
- JICA Japan International Cooperation Agency

4<sup>th</sup> Field Survey (From 25th Aug. 2019 to 3rd Sep. 2019)

No	Organization		JICA	Consultant	
	Name		Mr.FUKUDA	Mr.NODA	Mr.WATANABE
	Date	Day	Team Leader	Chief Consultant/ Bridge Planning 1	Deputy Chief Consultant/ Bridge Planning 2
1	25-Aug-19	Sun		Dep. Narita (FJ352) -	
2	26-Aug-19	Mon		Via Nadi (FJ263) - Arr. Port Vila	
3	27-Aug-19	Tue	Dep. Narita (QF62) -	Meeting with JICA	
4	28-Aug-19	Wed	Via Brisbane (QF377) - Arr. Port Vila	Meeting with PWD	
5	29-Aug-19	Thu	Preparation Work for Meeting with MIPU		
6	30-Aug-19	Fri	Meeting with MIPU		
7	31-Aug-19	Sat	Internal Work		
8	1-Sep-19	Sun	Dep. Port Vila (FJ266) - Arr. Suva		
9	2-Sep-19	Mon	Reporting to EOJ and JICA in Fiji		
10	3-Sep-19	Tue	Dep. Suva (FJ10) - Via Nadi (FJ351) - Arr. Narita	Dep. Suva to Nadi by car, Nadi (FJ351) - Arr. Narita	

- \* MIPU Ministry of Infrastructure and Public Utilities
- PWD Public Works Department
- EOJ Embassy of Japan
- JICA Japan International Cooperation Agency

## **別添 3: 主要面談者リスト**



○Major Interviewers

<b>1. MIPU (Ministry of Infrastructure and Public Utilities)</b>	
Mr. Harrison Luen	Director General
Mr. Sam Namuri	Acting Director General
Mr. Allen Faerua	Director, Department of Public Works
Mr. George Junior	Acting Director, Department of Public Works
Mr. Iatipu Andre	Acting Operation Manager, Department of Public Works
Ms. Uravo Nafuki	Senior Environmental and Social Officer, PWD
Mr. Jason Andrew	Senior Environmental and Social Officer, PWD
<b>2. Relevant Agencies</b>	
<b>ADB Project</b>	
Mr. David Spring	Project Manager
<b>Ministry of Lands and Natural Resources</b>	
Mr. Peter Pata	Land Officer, Department of Lands (DOL)
<b>Ministry of Climate Change Adaptation, Meteorology &amp; Geo-Hazards</b>	
Ms. Kate Mcpherson	Chief Environmental Officer, Department of Environmental Protection and Conservation (DEPC)
Ms. Norma Tor	Environmental Officer, DEPC
<b>Shefa Province</b>	
Mr. Zechariah Daniel	Secretary General, Shefa Provincial Government Council (SPGC)
Mr. Owen Joel Sisi	Officer, SPGC
<b>Embassy of Japan in the Republic of Fiji</b>	
Mr. Masahiro OMURA	Ambassador Extraordinary and Plenipotentiary of Japan
Mr. Tsuguyoshi HADA	Councillor
Mr. Koichi MIYOSHI	Councillor
Mr. Kotaro OHIRA	First Secretary
<b>Embassy of Japan in Vanuatu</b>	
Ms. Harumi KATSUMATA	Ambassador
<b>JICA Fiji Office</b>	
Ms. Yukari OHNO	Chief Representative
Mr. Shinya TAMIO	Senior Representative
Ms. Rina KURUMISAWA	Assistant Resident Representative
Mr. Shunichiro IKEDA	Assistant Resident Representative
Mr. Shin SUTO	Representative
<b>JICA VANUATU OFFICE</b>	
Mr. Toyoaki ITSUBO	Resident Representative (2017-2018)
Mr. Naoki TAKECHI	Resident Representative (2019-)
Ms. Yoko ASANO	Project Formulation Advisor (2017)
Mr. Katsuhiko OHARA	Project Formulation Advisor (2018-2019)

<b>3. Private Companies</b>	
UNELCO	
Mr. Toshihide YASUDA	Technical Manager
Mr. Frederic DEROUSSEAU	Project and Plan Manager
TOA Construction (Contractor of "Port Vila Lapetasi International Multi-Purpose Wharf Development Project")	
Mr. Shinji HATAZAWA	Project Manager
ECHO CORPORATION (Consultant of "Port Vila Lapetasi International Multi-Purpose Wharf Development Project")	
Mr. Sho TAKEDA	Senior Chief Engineer
Fletcher	
Mr. Tony Care	Manager, Vanuatu
Downer	
Mr. Peter Murr	Project Manager
Albert's Environmental Analytics	
Mr. Albert Williams	Principal Environmental Consultant
Oxfam Vanuatu	
Ms. Hannah Tamata	Gender Justice and Livelihoods Program Manager

## **別添 4: 討議議事録(M/D)**



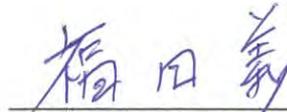
**Minutes of Discussions  
on the Preparatory Survey on the Project for  
the Disaster Restration of Teouma Bridge**

In response to the request from the Government of the Republic of Vanuatu (hereinafter referred to as "Vanuatu"), the Government of Japan decided to conduct a Preparatory Survey on the Project for the Disaster Restoration of Teouma Bridge (hereinafter referred to as "the Project"), and entrusted the Preparatory Survey to Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent the Preparatory Survey Team for the Outline Design (hereinafter referred to as "the Team") to Vanuatu, headed by Yoshio FUKUDA, Senior Assistant Director, Team 1, Transportaion and ICT Group, Infrastructure and Peacebuilding Department of JICA, from November 14 to 17, 2017.

The Team held a series of discussions with the officials concerned of the Government of Vanuatu and conducted a field survey in the Project area. In the course of the discussions, both sides have confirmed the main items described in the attached sheets. The Team will proceed to further works and prepare the Preparatory Survey Report.

Port Vila, November 14, 2017



Mr. Yoshio Fukuda

Leader

Preparatory Survey Team

Japan International Cooperation Agency



Sam Namuri

Acting Director General

Ministry of Infrastructure and Public  
Utilities

Republic of Vanuatu

## ATTACHEMENT

### 1. Objective of the Project

The objective of the Project is to restore the Teouma Bridge damaged by Cyclone Pam in 2015 for the purpose to contentiungly ensure the trunk road in Efate island, thereby contributing to the sustainable economic development of Vanuatu.

### 2. Title of the Preparatory Survey

Both sides confirmed the title of the Preparatory Survey as “the Preparatory Survey on the Project for the Disaster Restoration of Teouma Bridge”.

### 3. Project Site

Both sides confirmed that the site of the Project shown in Annex 1 and its surrounding area where road improevmt and river improvement works will be required for the objective of the Project.

### 4. Responsible authority for the Project

Both sides confirmed the authority responsible for the Project are as follows:  
The Ministry of Infrastructure and Public Utilities will be responsible for the Project (hereinafter referred to as “the Responsible authority”). The Responsible authority shall coordinate with all the relevant authorities to ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be managed by relevant authorities properly and on time. The organization charts are shown in Annex 2.

### 5. Items requested by the Government of Vanuatu

5-1. As a result of discussions, both sides confirmed that the items requested by the Government of Vanuatu are restoration works of Teouma Bridge including required road and river improvement.

5-2. JICA will assess the appropriateness of the above requested items through the survey and will report findings to the Government of Japan. The final components of the Project would be decided by the Government of Japan.

### 6. Japanese Grant Scheme

6-1. The Vanuatu side understands the Japanese Grant Scheme and its procedures as described in Annex 3, Annex 4 and Annex 5, and necessary measures to be taken by the Government of Vanuatu.



6-2. The Vanuatu side understands to take the necessary measures after signing of the Grant Agreement, as described in Annex 5, for smooth implementation of the Project, as a condition for the Japanese Grant to be implemented. The final and detailed contents of the Annex 5 will be worked out during the survey and shall be agreed no later than by the Explanation of the Draft Preparatory Survey Report.

The contents of Annex 5 will be used to determine the following:

- (1) The scope of the Project.
- (2) The timing of the Project implementation.
- (3) Timing and possibility of budget allocation.

The Annex 5 will finally be the Attachment to the Grant Agreement.

## 7. Schedule of the Survey

7-1. The Team will proceed with the tentative schedule incorporated in the Inception Report.

7-2. JICA will prepare a Interim Report in English and dispatch a mission to Vanuatu in order to explain and understand its contents around April or May, 2018.

7-3. JICA will implement Outline Design based on the above mentioned Interim Report reflecting comments made by Vanuatu side.

7-4. JICA will prepare a draft Preparatory Survey Report in English and dispatch a mission to Vanuatu in order to explain its contents around November ,2018.

7-5. If the contents of the draft Preparatory Survey Report is accepted in principle and the Undertakings are fully agreed by the Vanuatu side, JICA will complete the final report in English and send it to Vanuatu around April, 2018.

7-6. The above schedule is tentative and subject to change.

## 8. Environmental and Social Considerations

8-1. The Vanuatu side confirmed to give due environmental and social considerations during implementation of the Project, and after completion of the Project, in accordance with the JICA Guidelines for Environmental and Social Considerations (April, 2010).

8-2. The Project is categorized as B because the Project is not located in a sensitive area, nor has it sensitive characteristics, nor falls it into sensitive sectors under the Guidelines, and its potential adverse impacts on the environment are not likely to be significant. The Vanuatu side confirmed to conduct the necessary procedures concerning the environmental assessment (including stakeholder meetings, Environmental Impact Assessment(EIA) /Initial Environmental

Examination (IEE) and information disclosure, etc.) and make EIA/IEE report of the Project. The EIA/IEE approval shall be received from the responsible authorities and submitted to JICA by the date to be notified later.

- 8-3. For projects that will result in involuntary resettlement, the Vanuatu side confirmed to prepare a Resettlement Action Plan (RAP)/Abbreviated Resettlement Action Plan (ARAP) and make it available to the public. In addition, the Vanuatu side confirmed to provide the affected people with sufficient compensation and/or support in accordance with RAP/ARAP, in a timely manner.

## 9. Operation and Maintenance

- 9-1. The Vanuatu side explained that the maintenance works on the target bridge would be conducted by MIPU. The Vanuatu side will take every necessary action including securing enough budget and personnel for the operation and maintenance of the facilities implemented by the Project.
- 9-2. The Team explained to the Vanuatu side that overloaded trucks which exceed designed axle loads would cause early failure and shorter life. The Team also explained to the Vanuatu side that proper asset management will impact greatly on maintenance cost and lifespan.

## 10. Disclosure of Information

Both sides confirmed that the study results excluding the Project cost will be disclosed to the public after the completion of the Survey. All the study result including the Project cost will be disclosed to the public after the verification of all contracts for the Project by JICA are concluded.

## 11. Safety Measures

- 11-1. To avoid accidents on site during the implementation of the Project, the Vanuatu side agreed to cause the consultant and the contractor to enforce safety measures such as setting safety assurance to the site, providing information for security control to public, and deploying adequate security personnel, based on "The Guidance for the Management of Safety for Construction Works in Japanese ODA Projects" which has been published on JICA's URL below.

[http://www.jica.go.jp/activities/schemes/oda\\_safety/ku57pq00001nz4eu-att/guidance\\_en.pdf](http://www.jica.go.jp/activities/schemes/oda_safety/ku57pq00001nz4eu-att/guidance_en.pdf)

- 11-2. The Team recommended to the Vanuatu side to explain to the residents about the Project (necessity and significance, construction period, sites, impact etc.), so that consensus support can be obtained from them for the smooth implementation of



the Project.

## 12. Misconduct

If JICA receives information related to suspected corrupt or fraudulent practices in the implementation of the Project, MIPU and relevant organizations shall provide JICA with additional such information as JICA may reasonably request, including information related to any concerned official of the government and/or public organizations in Vanuatu.

MIPU and relevant organizations shall not, unfairly or unfavourably treat the person(s) and/or company which provided the information related to suspected corrupt or fraudulent practices in the implementation of the Project.

## 13. Other Relevant Issues

### 13-1. Provision of Survey Data

The Vanuatu side requested all survey data to be got in the survey like result of topographic survey, hydrological and hydraulic analysis, and etc., JICA replied all data will be transferred to the Vanuatu side.

### 13-2. Provision of Conveniences to the Team by the Vanuatu side

The Vanuatu side shall, at its own expenses, provide the Team with the items mentioned in Chapter 6 of the Inception Report in collaboration with other organizations concerned to the Project.

### 13-3. Works entrusted to local company

Some works in the survey as topographic survey, geological survey and etc., will be entrusted to local company. These works are very important for implementation of the Survey from the point of survey schedule. The Vanuatu side promised to support the Survey team when necessary.

### 13-4. Questionnaire

MIPU shall answer to the Questionnaire submitted by the Team in English with relevant documents by Jan. 19 2018.

Annex 1 Project Site

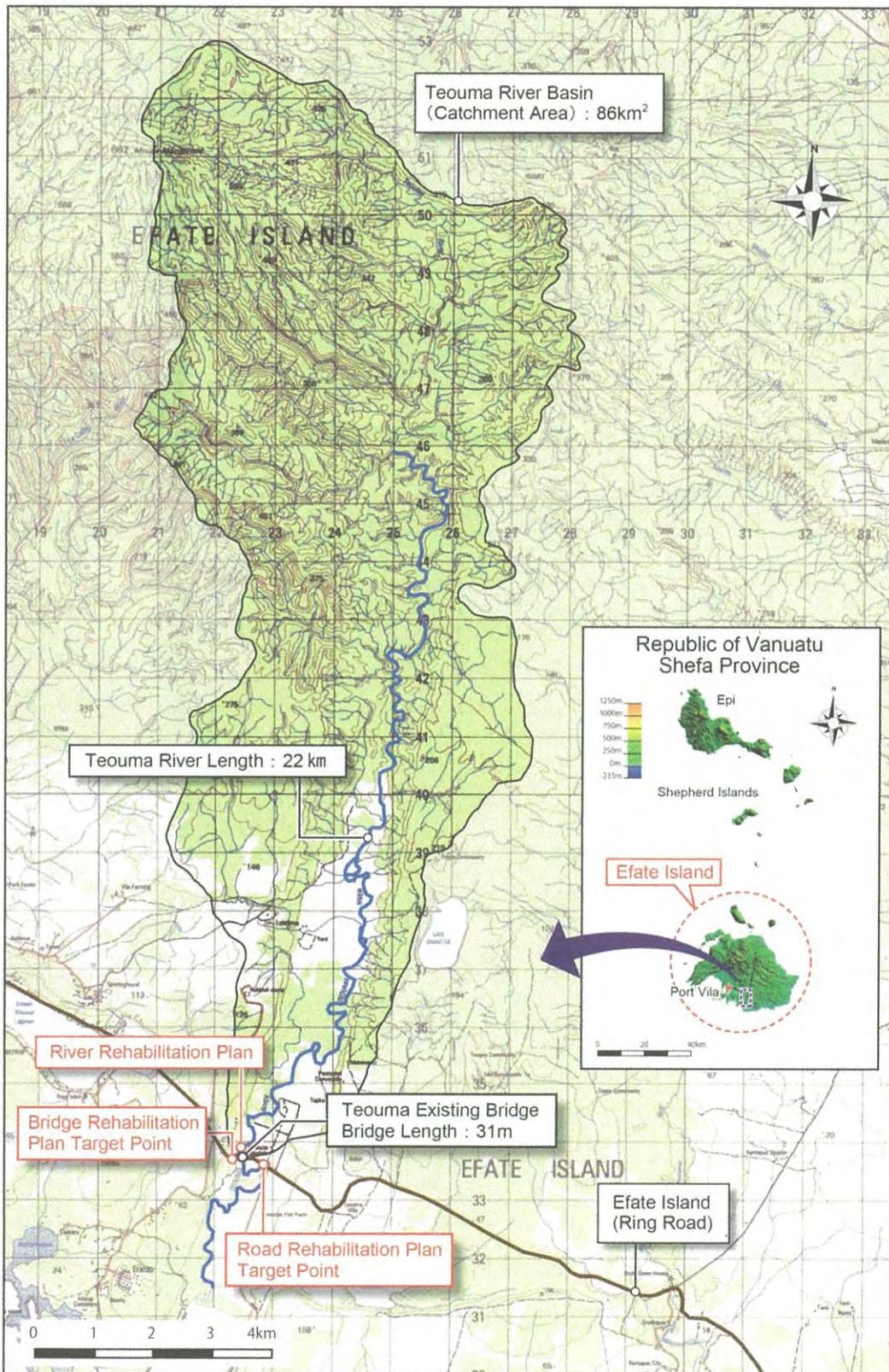
Annex 2 Organization Chart

Annex 3 Japanese Grant

Annex 4 Form of Project Monitoring Report

Annex 5 Example Form of Major Undertakings to be taken by Each Government

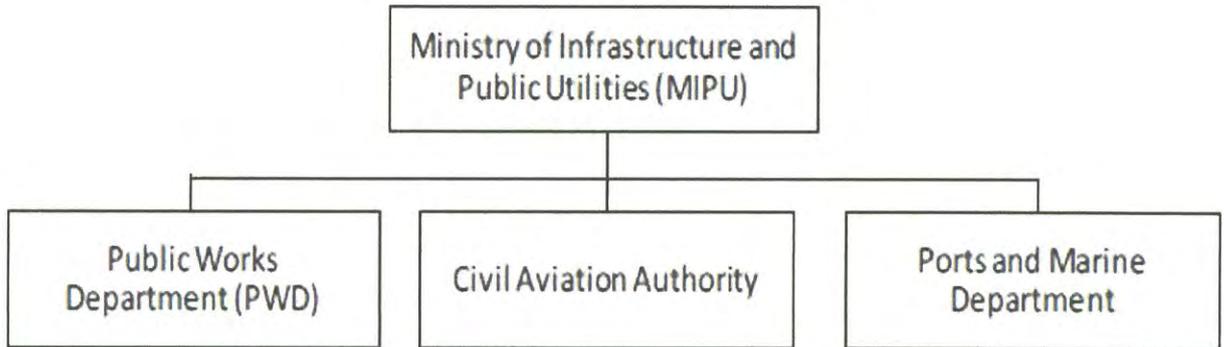




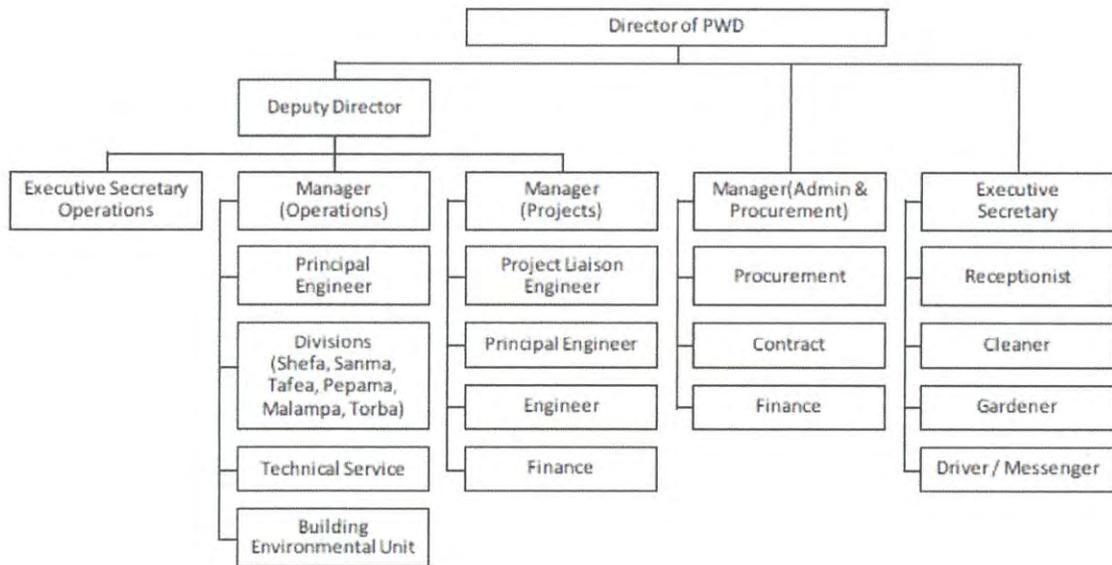
Project Site

*Jz*

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Organization Chart : Ministry of Infrastructure and Public Utilities



Organization Chart : Public Works Department

*J*

*Jsc*

## JAPANESE GRANT

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as “the Recipient”) to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as “Project Grants”).

### 1. Procedures of Project Grants

Project Grants are conducted through following procedures (See “PROCEDURES OF JAPANESE GRANT” for details):

(1) Preparation

- The Preparatory Survey (hereinafter referred to as “the Survey”) conducted by JICA

(2) Appraisal

-Appraisal by the government of Japan (hereinafter referred to as “GOJ”) and JICA, and  
Approval by the Japanese Cabinet

(3) Implementation

Exchange of Notes

-The Notes exchanged between the GOJ and the government of the Recipient

Grant Agreement (hereinafter referred to as “the G/A”)

-Agreement concluded between JICA and the Recipient

Banking Arrangement (hereinafter referred to as “the B/A”)

-Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as “the Bank”) to receive the grant

Construction works/procurement

-Implementation of the project (hereinafter referred to as “the Project”) on the basis of the  
G/A

(4) Ex-post Monitoring and Evaluation

-Monitoring and evaluation at post-implementation stage



## 2. Preparatory Survey

### (1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of relevant agencies of the Recipient necessary for the implementation of the Project.
- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

### (2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

### (3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.



### 3. Basic Principles of Project Grants

#### (1) Implementation Stage

##### 1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as “the E/N”) will be signed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the “General Terms and Conditions for Japanese Grant (January 2016).”

##### 2) Banking Arrangements (B/A) (See “Financial Flow of Japanese Grant (A/P Type)” for details)

- a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.
- b) The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

##### 3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA’s procurement guidelines as stipulated in the G/A.

##### 4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project’s implementation after the E/N and G/A.

##### 5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if

necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", in principle.

#### 6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICA in order to be verified as eligible for using the Japanese Grant.

#### 7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

#### 8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

#### 9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as followings:

- a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.
- b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

#### (2) Ex-post Monitoring and Evaluation Stage

1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.

2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

4) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.



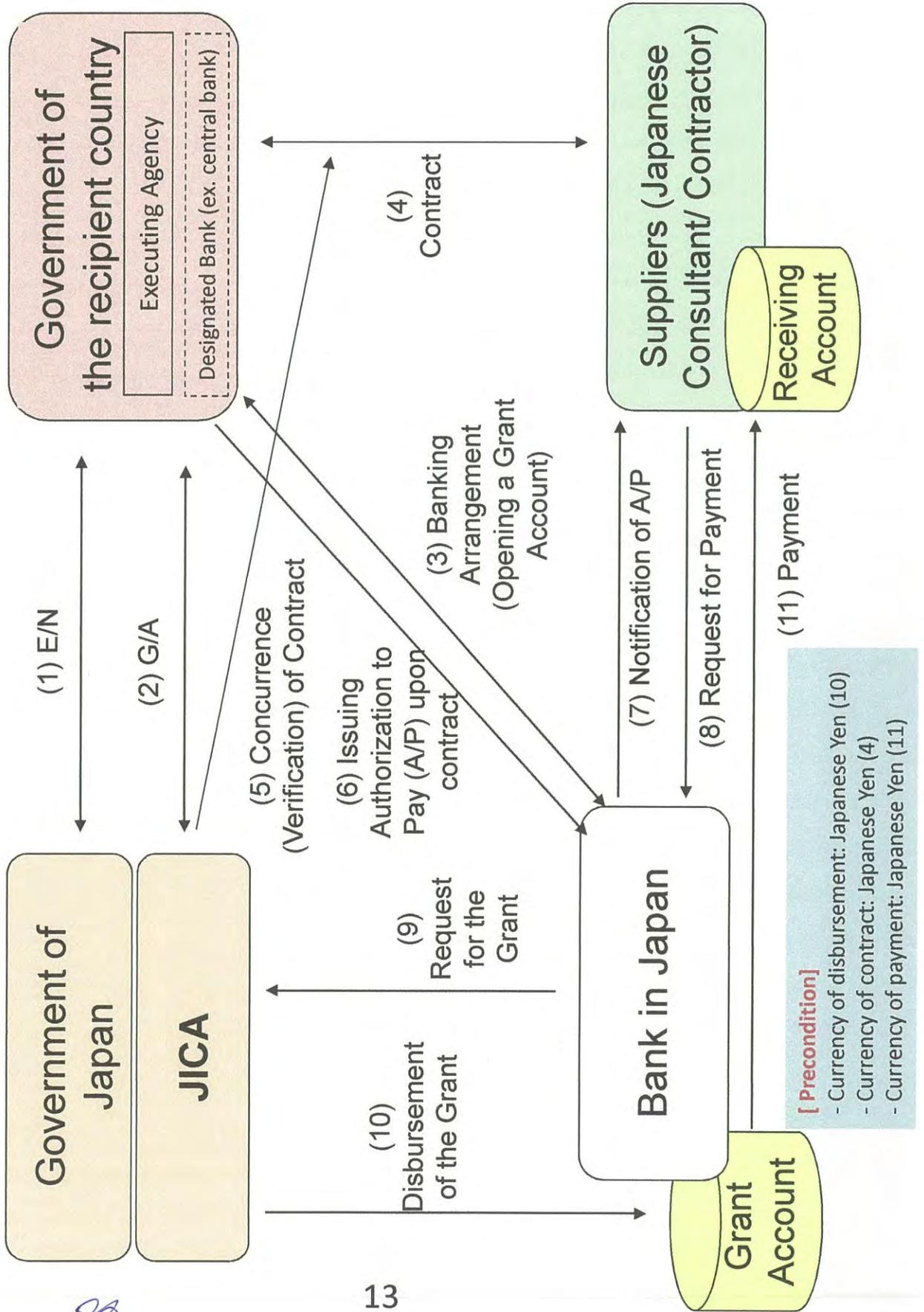
## PROCEDURES OF JAPANESE GRANT

Stage	Procedures	Remarks	Recipient Government	Japanese Government	JICA	Consultants	Contractors	Agent Bank
Official Request	Request for grants through diplomatic channel	Request shall be submitted before appraisal stage.	x	x				
1. Preparation	(1) Preparatory Survey Preparation of outline design and cost estimate		x		x	x		
2. Appraisal	(2) Preparatory Survey Explanation of draft outline design, including cost estimate, undertakings, etc.		x		x	x		
	(3) Agreement on conditions for implementation	Conditions will be explained with the draft notes (E/N) and Grant Agreement (G/A) which will be signed before approval by Japanese government.	x	x (E/N)	x (G/A)			
	(4) Approval by the Japanese cabinet			x				
3. Implementation	(5) Exchange of Notes (E/N)		x	x				
	(6) Signing of Grant Agreement (G/A)		x		x			
	(7) Banking Arrangement (B/A)	Need to be informed to JICA	x					x
	(8) Contracting with consultant and issuance of Authorization to Pay (A/P)	Concurrence by JICA is required	x			x		x
	(9) Detail design (D/D)		x			x		
	(10) Preparation of bidding documents	Concurrence by JICA is required	x			x		
	(11) Bidding	Concurrence by JICA is required	x			x	x	
	(12) Contracting with contractor/supplier and issuance of A/P	Concurrence by JICA is required	x				x	x
4. Ex-post monitoring & evaluation	(13) Construction works/procurement	Concurrence by JICA is required for major modification of design and amendment of contracts.	x			x	x	
	(14) Completion certificate		x			x	x	
4. Ex-post monitoring & evaluation	(15) Ex-post monitoring	To be implemented generally after 1, 3, 10 years of completion, subject to change	x		x			
	(16) Ex-post evaluation	To be implemented basically after 3 years of completion	x		x			

notes:

1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.
2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.

# Financial Flow of Japanese Grant (A/P Type)



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**Project Monitoring Report**  
**on**  
**Project Name**  
**Grant Agreement No. XXXXXXXX**  
 20XX, Month

**Organizational Information**

<b>Signer of the G/A (Recipient)</b>	Person in Charge (Designation) _____ Contacts _____ Address: _____ Phone/FAX: _____ Email: _____
<b>Executing Agency</b>	Person in Charge (Designation) _____ Contacts _____ Address: _____ Phone/FAX: _____ Email: _____
<b>Line Ministry</b>	Person in Charge (Designation) _____ Contacts _____ Address: _____ Phone/FAX: _____ Email: _____

**General Information:**

<b>Project Title</b>	
<b>E/N</b>	Signed date: Duration:
<b>G/A</b>	Signed date: Duration:
<b>Source of Finance</b>	Government of Japan: Not exceeding JPY _____ mil. Government of (_____): _____




**1: Project Description**

**1-1 Project Objective**

--

**1-2 Project Rationale**

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

--

**1-3 Indicators for measurement of "Effectiveness"**

Quantitative indicators to measure the attainment of project objectives		
Indicators	Original (Yr )	Target (Yr )
Qualitative indicators to measure the attainment of project objectives		

**2: Details of the Project**

**2-1 Location**

Components	Original <i>(proposed in the outline design)</i>	Actual
1.		

**2-2 Scope of the work**

Components	Original* <i>(proposed in the outline design)</i>	Actual*
1.		

Reasons for modification of scope (if any).

(PMR)
-------

**2-3 Implementation Schedule**

Items	Original		Actual
	<i>(proposed in the outline design)</i>	<i>(at the time of signing the Grant Agreement)</i>	

Reasons for any changes of the schedule, and their effects on the project (if any)

--

**2-4 Obligations by the Recipient**

**2-4-1 Progress of Specific Obligations**

See Attachment 2.

**2-4-2 Activities**

See Attachment 3.

**2-4-3 Report on RD**

See Attachment 11.

**2-5 Project Cost**

**2-5-1 Cost borne by the Grant(Confidential until the Bidding)**

Components			Cost (Million Yen)	
	Original <i>(proposed in the outline design)</i>	Actual <i>(in case of any modification)</i>	Original <sup>1,2)</sup> <i>(proposed in the outline design)</i>	Actual
	1.			
Total				

Note: 1) Date of estimation:  
 2) Exchange rate: 1 US Dollar = Yen

**2-5-2 Cost borne by the Recipient**

Components			Cost (1,000 Taka)	
	Original <i>(proposed in the outline design)</i>	Actual <i>(in case of any modification)</i>	Original <sup>1,2)</sup> <i>(proposed in the outline design)</i>	Actual
	1.			

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- Note: 1) Date of estimation:  
2) Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

(PMR)

**2-6 Executing Agency**

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

**Original** (at the time of outline design)

name:

role:

financial situation:

institutional and organizational arrangement (organogram):

human resources (number and ability of staff):

**Actual** (PMR)

**2-7 Environmental and Social Impacts**

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- The results of social monitoring based on in Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

**3: Operation and Maintenance (O&M)**

**3-1 Physical Arrangement**

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spareparts, etc.)

**Original** (at the time of outline design)

**Actual** (PMR)

**3-2 Budgetary Arrangement**

- Required O&M cost and actual budget allocation for O&M

**Original** (at the time of outline design)

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Actual (PMR)

**4: Potential Risks and Mitigation Measures**

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

**Assessment of Potential Risks** (at the time of outline design)

Potential Risks	Assessment
1. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
	Contingency Plan (if applicable):
2. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
	Contingency Plan (if applicable):
3. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:

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	Contingency Plan (if applicable):
<b>Actual Situation and Countermeasures</b>	
(PMR)	

**5: Evaluation and Monitoring Plan (after the work completion)**

**5-1 Overall evaluation**

Please describe your overall evaluation on the project.

**5-2 Lessons Learnt and Recommendations**

Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

**5-3 Monitoring Plan of the Indicators for Post-Evaluation**

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

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Attachment

1. Project Location Map
2. Specific obligations of the Recipient which will not be funded with the Grant
3. Monthly Report submitted by the Consultant
- Appendix - Photocopy of Contractor's Progress Report (if any)
  - Consultant Member List
  - Contractor's Main Staff List
4. Check list for the Contract (including Record of Amendment of the Contract/ Agreement and Schedule of Payment)
5. Environmental Monitoring Form / Social Monitoring Form
6. Monitoring sheet on price of specified materials (Quarterly)
7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final) only)
8. Pictures (by JPEG style by CD-R) (PMR (final) only)
9. Equipment List (PMR (final) only)
10. Drawing (PMR (final) only)
11. Report on RD (After project)

Remark : No. 6, 7 are attached in this document for reference.



Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

Items of Specified Materials	Initial Volume A	Initial Unit Price (¥) B	Initial total Price C=A×B	1% of Contract Price D	Condition of payment	
					Price (Decreased) E=C-D	Price (Increased) F=C+D
Item 1	●●t	●	●	●	●	●
Item 2	●●t	●	●			
Item 3						
Item 4						
Item 5						

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

Items of Specified Materials	1st month, 2015	2nd month, 2015	3rd month, 2015	4th	5th	6th
Item 1	●	●	●			
Item 2						
Item 3						
Item 4						
Item 5						

(3) Summary of Discussion with Contractor (if necessary)

*[Handwritten signature]*

Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)  
 (Actual Expenditure by Construction and Equipment each)

	Domestic Procurement (Recipient Country) A	Foreign Procurement (Japan) B	Foreign Procurement (Third Countries) C	Total D
Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Direct Construction Cost	(A/D%)	(B/D%)	(C/D%)	
others	(A/D%)	(B/D%)	(C/D%)	
Equipment Cost	(A/D%)	(B/D%)	(C/D%)	
Design and Supervision Cost	(A/D%)	(B/D%)	(C/D%)	
Total	(A/D%)	(B/D%)	(C/D%)	

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(Example)  
Major Undertakings to be taken by the Government of Vanuatu

**1. Specific obligations of the Government of Vanuatu which will not be funded with the Grant**

(1) Before the Tender

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To open bank account (B/A)	within 1 month after the signing of the G/A	MIPU		
2	To issue A/P to a bank in Japan (the Agent Bank) for the payment to the consultant	within 1 month after the signing of the contract	MIPU		
3	To approve EIA(Conditions of approval should be fulfilled, if any) and secure the necessary budget for implementation.	within 1 month after the signing of the G/A	MIPU		
4	To secure Project site and temporary yard.	before start of the construction	MIPU		
5	To remove and relocate the following facilities. 1) Removal of existing fence and gate 2) Cutting trees at the project site	before start of the construction	MIPU		
7	To construct gates and fences to be necessary for	before start of the construction	MIPU		
9	To submit Project Monitoring Report (with the result of Detail Design)	before preparation of bidding documents	MIPU		

(B/A: Banking Arrangement, A/P: Authorization to pay, N/A: Not Applicable)



( 2 ) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To issue A/P to a bank in Japan (the Agent Bank) for the payment to the Supplier(s)	within 1 month after the signing of the contract(s)	MOF		
2	To bear the following commissions to a bank in Japan for the banking services based upon the B/A				
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	MOF		
	2) Payment commission for A/P	every payment	MOF		
3	to ensure prompt unloading and customs clearance at ports of disembarkation in recipient country and to assist the Supplier(s) with internal transportation therein	during the Project	MIPU		
4	To accord Japanese nationals and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	MIPU		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted/ be borne by its designated authority without using the Grant	during the Project	MIPU		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	MIPU		
7	To submit Project Monitoring Report	every month	MIPU		
	1) To submit Project Monitoring Report (final)	within one month after signing of Certificate of Completion for the works under the contract(s)	MIPU		
8	To submit a report concerning completion of the Project	within six months after completion of the Project	MIPU		
9	To construct access roads	3 months before completion of the construction	MIPU		
	1) Outside the site				
10	To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Project outside the site(s)				
	1) Electricity The distributing line to the site	before start of the construction	MIPU		
	2) Water Supply The city water distribution main to the site	6 months before completion of the construction	MIPU		
	3) Drainage The city drainage main ( for storm, sewer and others ) to the site	6 months before completion of the construction	MIPU		

	4) Furniture and Equipment General furniture	1 month before completion of the construction	MIPU		
11	To take necessary measure for safety construction - traffic control - rope off	during the construction	MIPU		
12	To implement EMP and EMoP	during the construction	MIPU		
13	To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	during the construction	MIPU		
14	To implement RAP (livelihood restoration program, if needed)	for a period based on livelihood restoration program	MIPU		
15	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report - Period of the monitoring may be extended if affected persons' livelihoods are not sufficiently restored. Extension of the monitoring will be decided based on agreement between MIPU and JICA.	- until the end of livelihood restoration program (In case that livelihood restoration program is provided) - for two years after land acquisition and resettlement complete (In case that livelihood restoration program is not provided)	MIPU		

### (3) After the Project

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To implement EMP and EMoP	for a period based on EMP and EMoP	MIPU		
2	To submit results of environmental monitoring to JICA, by using the monitoring form, semiannually - The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between MIPU and JICA.	for three years after the Project	MIPU		
3	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure 3) Routine check/Periodic inspection	After completion of the construction	MIPU		

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2. Other obligations of the Government of Vanuatu funded with the Grant

NO	Items	Deadline	Amount (Million Japanese Yen)*
1	To construct bridge and		/
2	To implement detailed design, bidding support and construction supervision (Consulting Service)		
Total			XXX

\*The Amount is provisional. This is subject to the approval of the Government of Japan.



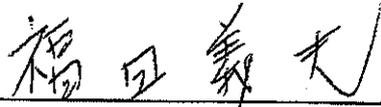

**Minutes of Discussions  
on the Preparatory Survey on the Project for  
the Disaster Restoration of Teouma Bridge**

In response to the request from the Government of the Republic of Vanuatu (hereinafter referred to as "Vanuatu"), the Government of Japan decided to conduct a Preparatory Survey on the Project for the Disaster Restoration of Teouma Bridge (hereinafter referred to as "the Project"), and entrusted the Preparatory Survey to Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent the Preparatory Survey Team for the second work of the Outline Design (hereinafter referred to as "the Team") to Vanuatu, headed by Yoshio FUKUDA, Senior Assistant Director, Team 1, Transportation and ICT Group, Infrastructure and Peacebuilding Department of JICA, from April 25 to June 6, 2018 followed by the first work in Vanuatu implemented during November 2017 to February 2018.

The Team held a series of discussions with the officials concerned of the Government of Vanuatu and conducted some field works in the Project area. In the course of the discussions, both sides have confirmed the main items described in the attached sheets. The Team will proceed to further works and prepare the Preparatory Survey Report.

Port Vila, May 15, 2018

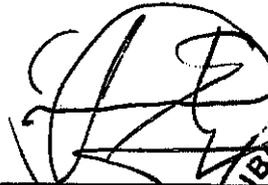


Mr. Yoshio Fukuda

Leader

Preparatory Survey Team

Japan International Cooperation Agency



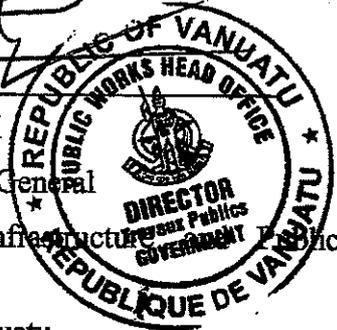
Mr. Sam Nauri

Acting Director General

Ministry of Infrastructure

Utilities

Republic of Vanuatu



## Attachment

### 1. Interim Report

The Team prepared and explained for the Ministry of Infrastructure and Public Utilities (MIPU) the Interim Report which the Team compiled the results of the 1<sup>st</sup> work in Vanuatu and 2<sup>nd</sup> work in Japan. The Report include the design policy of the Project as flood disaster countermeasure, bridge design and planning, seismic design, river improvement works and road planning of approach part of the bridge. Both sides discussed on the Interim Report and the MIPU agreed to the design policy presented by the Team. Technical points of the Project will be confirmed with the technical note which will be signed by the MIPU and the chief consultant. The Team will continue the remaining works in Vanuatu and the 3<sup>rd</sup> work in Japan for the outline design of the Project.

### 2. Land issues including acquisition

Both sides confirmed land issues are very critical in the Project. The MIPU agreed to do full supports of offering information of land properties and procedures of land acquisition to the Team.

### 3. Support to survey

3-1 Some survey works as geological survey, environmental survey and social survey are entrusted to sub-contractors. Successful works of these surveys are crucial points for keeping the survey schedule and quality of the survey. The MIPU promised necessary support to the said sub-contractors if necessary, like in the case of entering to Vanuatu from outside.

3-2 The MIPU promised supports to the meeting for local people to be scheduled in the survey and to collection of information regarding to tax exemption in the Project.

### 4. Schedule of the Survey

JICA will prepare a draft Preparatory Survey Report in English and dispatch a mission to Vanuatu in order to explain its contents around November ,2018.

End

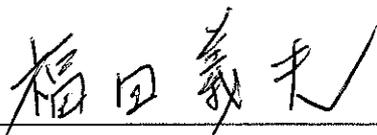


**Minutes of Discussions**  
**on the Preparatory Survey for the Project for**  
**the Disaster Restoration of Teouma Bridge**  
**(Explanation on Draft Preparatory Survey Report)**

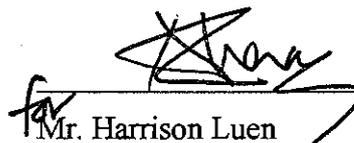
With reference to the minutes of discussions signed between Ministry of Infrastructure and Public Utilities (hereinafter referred to as "MIPU") and the Japan International Cooperation Agency (hereinafter referred to as "JICA") each on November 14, 2017 and on May 15, 2018 and in response to the request from the Government of the Republic of Vanuatu (hereinafter referred to as "Vanuatu") dated June 13, 2017. JICA dispatched the Preparatory Survey Team (hereinafter referred to as "the Team") for the explanation of Draft Preparatory Survey Report (hereinafter referred to as "the Draft Report") for the Project for Restoration of Teouma Bridge (hereinafter referred to as "the Project").

As a result of the discussions, both sides agreed on the main items described in the attached sheets.

Port Vila, March 29, 2019



Mr. Yoshio FUKUDA  
Leader, Preparatory Survey Team  
Japan International Cooperation  
Agency  
Japan



Mr. Harrison Luen  
Director General  
Ministry of Infrastructure and  
Public Utilities  
Republic of Vanuatu

## ATTACHEMENT

### 1. Contents of the Draft Report

After the explanation of the contents of the Draft Final Report by the Team, the Vanuatu side agreed to its contents except pathway.

- (1) The Vanuatu side registered its deepest concern on the absence of a specified protected pedestrian pathway in the design of the bridge. The current design does not have a pathway with barriers. This poses an immediate safety hazard for pedestrians. As the bridge is the only connection between both sides of the river, and with a significant number of children crossing the bridge daily without adult supervision, the absence of a barrier would be detrimental to the safety of pedestrians. It is strongly advised to include a durable pedestrian pathway with barriers clearly demarcating the pathway from the vehicle lanes.
- (2) The Team explained that the cross section of the bridge is planned based on both results of the Minutes of Discussions dated on May 15, 2018 and the Technical Note on May 22, 2018 with consent by the Vanuatu side referring to the Interim Report submitted in May 2018. The cross section was planned considering of around 150 - 300 of pedestrian number par day observed at the Bridge site in the Study. But from the point necessary for more safety, the Team reconsidered the cross section of 0.75 m mounted-up pathway, 0.25m shoulder, and 3.0 m carriage way on each side.
- (3) The Vanuatu side replied now the government officials are strongly requested more positive and proactive intervention on donor's projects in difference from the previous year. And they agreed to this proposed plan and told that the Vanuatu side will construct the pathway at both approach roads of the bridge at future's necessary timing.
- (4) The Team told them to take back this request to officials concerned of the Project in Japanese side.

### 2. Cost estimate

Both sides confirmed that the cost estimate including the contingency in Annex 1 explained by the Team is provisional and will be examined further by the Government of Japan for its approval. The contingency would cover the additional cost against natural disaster, unexpected natural conditions, etc.

### 3. Confidentiality of the cost estimate and technical specifications

Both sides confirmed that the cost estimate and technical specifications of the Project



should never be disclosed to any third parties until all the contracts under the Project are concluded.

4. Procedures and Basic Principles of Japanese Grant as described in Annex 2 shall be applied to the Project. In addition, the Vanuatu side agreed to take necessary measures according to the procedures.

Public Works Department (hereinafter referred to as PWD) / MIPU shall coordinate with all the relevant authorities, particularly Ministry of Finance, Vanuatu Project Management Unit and Department of Strategic Policy Planning and Cooperation to ensure a smooth implementation of the Project and ensure that the undertakings for the Project shall be taken care by relevant authorities properly and on time.

5. Timeline for the project implementation

The Team explained to the Vanuatu side that the expected timeline for the Project implementation is as attached in Annex 3.

6. Expected outcomes and indicators

Both sides agreed that key indicators for expected outcomes are as follows which might be changed based on further consideration in the Final Report. The Vanuatu side will be responsible for the achievement of agreed key indicators targeted in year 2025 and shall monitor the progress based on those indicators.

[Quantitative indicators]

Index	Base Figure (Actual figures of 2018)	Target Figure (2025) (3 years after completion)
Days of road shut down due to flood	2~3 days / 3 years	0
Daily number of passing vehicles	2,980	3,600
Annual Number of Passengers Passing through the Bridge (person)	755,000	905,000
Annual Volume of Cargo Passing through the Bridge (t)	60,000	72,000

[Qualitative indicators]

- Vulnerability against natural disaster in this area is relieved.
- The safety in the bridge utilization is ensured by the improvement of the loading capacity and the width of the bridge.

- The river channel is stabilized by the provision of revetment, the risk of river bank erosion is eliminated during flood, and the living environment of the neighborhood is improved.

## 7. Undertakings of the Project

Both sides confirmed the undertakings of the Project as described in Annex 4. With regard to exemption of customs duties, internal taxes and other fiscal levies as stipulated in (2) No.5 of Annex 4. Both sides confirmed that such customs duties, internal taxes and other fiscal levies, which shall be clarified in the bid documents by MIPU during the implementation stage of the Project.

The Vanuatu side assured to take the necessary measures and coordination including allocation of the necessary budget which are preconditions of implementation of the Project. It is further agreed that the costs are indicative, i.e. at Outline Design level. More accurate costs will be calculated as the Detailed Design stage.

Both sides also confirmed that the Annex 4 will be as an attachment of G/A.

(1) Both side confirmed items requisite for Grant Agreement as follows:

- To approve IEE/EIA and necessary budget (Annex 4 1.(1) 1, and
- To approve Abbreviated Resettlement Action Plan (Annex 4 1. (1) 4).

(2) Both side confirmed items requisite for the notice of the bidding documents as follows:

- To open Bank Account (Annex 4 1.(1) 2),
- To issue the Authorization to Pay (Annex 4 1.(1) 3),
- To secure budget, land acquisition, resettlement and compensation (Annex 4 1.(1) 5),
- To implement social monitoring and submit results (Annex 4 1.(1) 6),
- To secure and clear necessary lands (Annex 4 1.(1) 7),
- To obtain the planning, zoning, building permit (Annex 4 1.(1) 8) , and
- To clear, level and reclaim the sites (Annex 4 1. (1) 9).

(3) With regard to exemption of customs duties, PWD/MIPU will submit the master list of imported materials and equipment prepared by the contractor to CIR (Customs and Inland Revenue) through DSPPAC (Department of Strategic Policy Planning and Aid Coordination), and receives the approval for tax exemption.

(4) With regard to VAT (Value Added Tax), PWD/MIPU and DSPPAC supports to ensure that CIR provides tax exemption.

(5) Removal or relocation of overhead and underground electric line and poles




described in Annex 4 is undertaken by PWD/MIPU before the start of the construction.

8. Monitoring during the implementation

The Project will be monitored by the Executing Agency and reported to JICA by using the form of Project Monitoring Report (PMR) attached as Annex 5. The timing of submission of the PMR is described in Annex 3.

9. Project completion

Both sides confirmed that the project completes when all the facilities constructed and equipment procured by the grant are in operation. The completion of the Project will be reported to JICA promptly, but in any event not later than six months after completion of the Project.

10. Ex-Post Evaluation

JICA will conduct ex-post evaluation after three (3) years from the project completion, in principle, with respect to five evaluation criteria (Relevance, Effectiveness, Efficiency, Impact, and Sustainability). The result of the evaluation will be publicized. The Vanuatu side is required to provide necessary support for the data collection.

11. Items and measures to be considered for the smooth implementation of the Project

Both sides confirmed the items and measures to be considered for the smooth implementation of the Project as follows:

- Provision and ground temporary construction yard and stock yard,
- Provision of borrow pit and quarry site,
- Provision of disposal site,
- Land transfer,
- Relocation of overhead and underground electric line and pole,
- Environment process,
- Tax exemption and refund, and
- Acquisition of various permission for the construction.

12. Schedule of the Study

JICA will finalize the Preparatory Survey Report based on the confirmed items. The report will be sent to the Vanuatu side around June 2019.



### 13. Environmental and Social Considerations

#### 13-1 General Issues

##### 13-1-1 Environmental Guidelines and Environmental Category

The Team explained that ‘JICA Guidelines for Environmental and Social Considerations (April 2010)’ (hereinafter referred to as “the Guidelines”) is applicable for the Project. The Project is categorized as B because the Project is not considered as a large-scale road and bridge project, is not located in a sensitive area, and has none of the sensitive characteristics under the Guidelines, it is not likely to have significant adverse impact on the environment.

##### 13-1-2 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 6. Both sides confirmed that in case of major modification of the content of the Environmental Checklist, the Vanuatu side shall submit the modified version to JICA in a timely manner.

#### 13-2 Environmental Issues

##### 13-2-1 Environmental Impact Assessment (EIA)

Both sides confirmed the EIA report will be approved by the Department of Environmental Protection and Conservation (DEPC) by June 2019.

##### 13-2-2 Environmental Management Plan and Environmental Monitoring Plan

Both sides confirmed Environmental Management Plan (EMP) and Environmental Monitoring Plan (EMoP) of the Project is as Annex 7, respectively. Both side agreed that environmental mitigation measures and monitoring shall be conducted based on the EMP and the EMoP, which may be updated during the detailed design stage.

#### 13-3 Social Issues

##### 13-3-1 Land Acquisition and Resettlement

Both sides confirmed the 1.2ha of land would be acquired, and the 1.0 ha of land would be leased and 1 household would be relocated due to the implementation of the Project. The process for land acquisition and resettlement should forward following to Abbreviated Resettlement Action Plan to be prepared by PWD/MIPU and the Team.

#### 13-4 Environmental and Social Monitoring



#### 13-4-1 Environmental Monitoring

Both sides agreed that the Vanuatu side will submit results of environmental monitoring to JICA by using the monitoring form attached as Annex 8. The timing of submission of the monitoring form is described in Annex 3.

#### 13-4-2 Information Disclosure of Monitoring Results

Both sides confirmed that the Vanuatu side will disclose results of environmental and social monitoring to local stakeholders through their website.

The Vanuatu side agreed JICA will disclose results of environmental and social monitoring submitted by the Vanuatu side as the monitoring forms attached as Annex 8 on its website.

### 14. Other Relevant Issues

#### 14-1. Disclosure of Information

Both sides confirmed that the Preparatory Survey Report from which project cost is excluded will be disclosed to the public after completion of the Preparatory Survey.

The comprehensive report including the project cost will be disclosed to the public after all the contracts under the Project are concluded.

#### 14-2. Measure against Over-loaded Vehicle

The Team repeated that overloaded trucks which exceed designed axle loads would cause early failure and shorter life and requested that the Vanuatu side will take proper measure for this issue.

#### 14-3. Safety Measure

To avoid accidents on site during the implementation of the Project, the Vanuatu side agreed to cause the consultant and the contractor and to enforce safety measures such as setting safety assurance to the site, providing information for security control to public, and deploying adequate security personnel, based on "The Guidance for the Management of Safety for Construction Works in Japanese ODA Projects" which has been published on JICA's URL below.

[https://www.jica.go.jp/english/our\\_work/types\\_of\\_assistance/c8h0vm00008zx0m8-att/guidance\\_en.pdf](https://www.jica.go.jp/english/our_work/types_of_assistance/c8h0vm00008zx0m8-att/guidance_en.pdf)

Annex 1 Project Cost Estimation

Annex 2 Japanese Grant

Annex 3 Project Implementation Schedule

Annex 4 Major Undertakings to be taken by the Government of Vanuatu

Annex 5 Project Monitoring Report (template)

Annex 6 Environmental Check List

Annex 7 Environmental Management Plan / Environmental Monitoring Plan

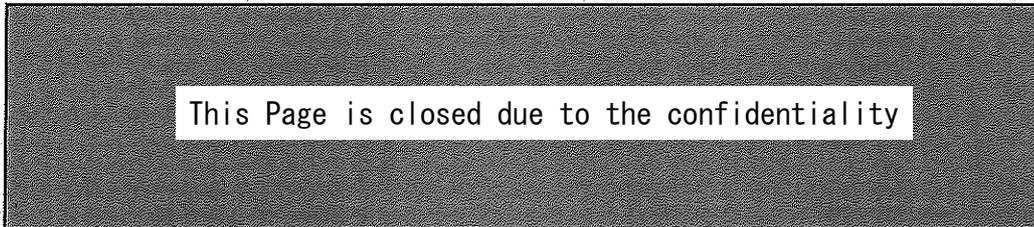
Annex 8 Environmental and Social Monitoring Form



Project Cost Estimation

CONFIDENTIAL

(1) Cost Borne by the Government of Japan



(2) Cost Borne by the Government of the Republic of Vanuatu

Total initial cost : USD 0.710 million

- Bank Charges : USD 0.032 million
- Temporary Yard (Rental etc.) : USD 0.017 million
- Relocations of aerial and underground power cables : USD 0.163 million
- Land acquisition, compensation : USD 0.287 million
- Restoration of aerial and underground power cables : USD 0.199 million
- Annual Maintenance Cost for Bridge : USD 0.012

(3) Cost Estimation Condition

- Estimated date : May 2018
- Exchange rates : USD 1.00=JPY108.12
- Others : The project is carried out based on the Japanese Government's Grant Aid Scheme. The above cost estimate does not assure the ceiling cost on the E/N and will be reviewed by the Government of Japan before signing of the E/N between the two Governments.



## JAPANESE GRANT

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as “the Recipient”) to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as “Project Grants”).

### 1. Procedures of Project Grants

Project Grants are conducted through following procedures (See “PROCEDURES OF JAPANESE GRANT” for details):

#### (1) Preparation

- The Preparatory Survey (hereinafter referred to as “the Survey”) conducted by JICA

#### (2) Appraisal

- Appraisal by the government of Japan (hereinafter referred to as “GOJ”) and JICA, and Approval by the Japanese Cabinet

#### (3) Implementation

##### Exchange of Notes

- The Notes exchanged between the GOJ and the government of the Recipient

##### Grant Agreement (hereinafter referred to as “the G/A”)

- Agreement concluded between JICA and the Recipient

##### Banking Arrangement (hereinafter referred to as “the B/A”)

- Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as “the Bank”) to receive the grant

##### Construction works/procurement

- Implementation of the project (hereinafter referred to as “the Project”) on the basis of the G/A

#### (4) Ex-post Monitoring and Evaluation

- Monitoring and evaluation at post-implementation stage

### 2. Preparatory Survey

#### (1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of

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relevant agencies of the Recipient necessary for the implementation of the Project.

- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

## (2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

## (3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

## 3. Basic Principles of Project Grants

### (1) Implementation Stage

#### 1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as “the E/N”) will be signed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the “General Terms and Conditions for Japanese Grant (January 2016).”

#### 2) Banking Arrangements (B/A) (See “Financial Flow of Japanese Grant (A/P Type)” for details)

a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.

b) The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

### 3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

### 4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

### 5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", in principle.

### 6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICA in order to be verified as eligible for using the Japanese Grant.

### 7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

### 8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

### 9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as



followings:

- a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.
- b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

- 1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.
- 2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

4) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.

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## PROCEDURES OF JAPANESE GRANT

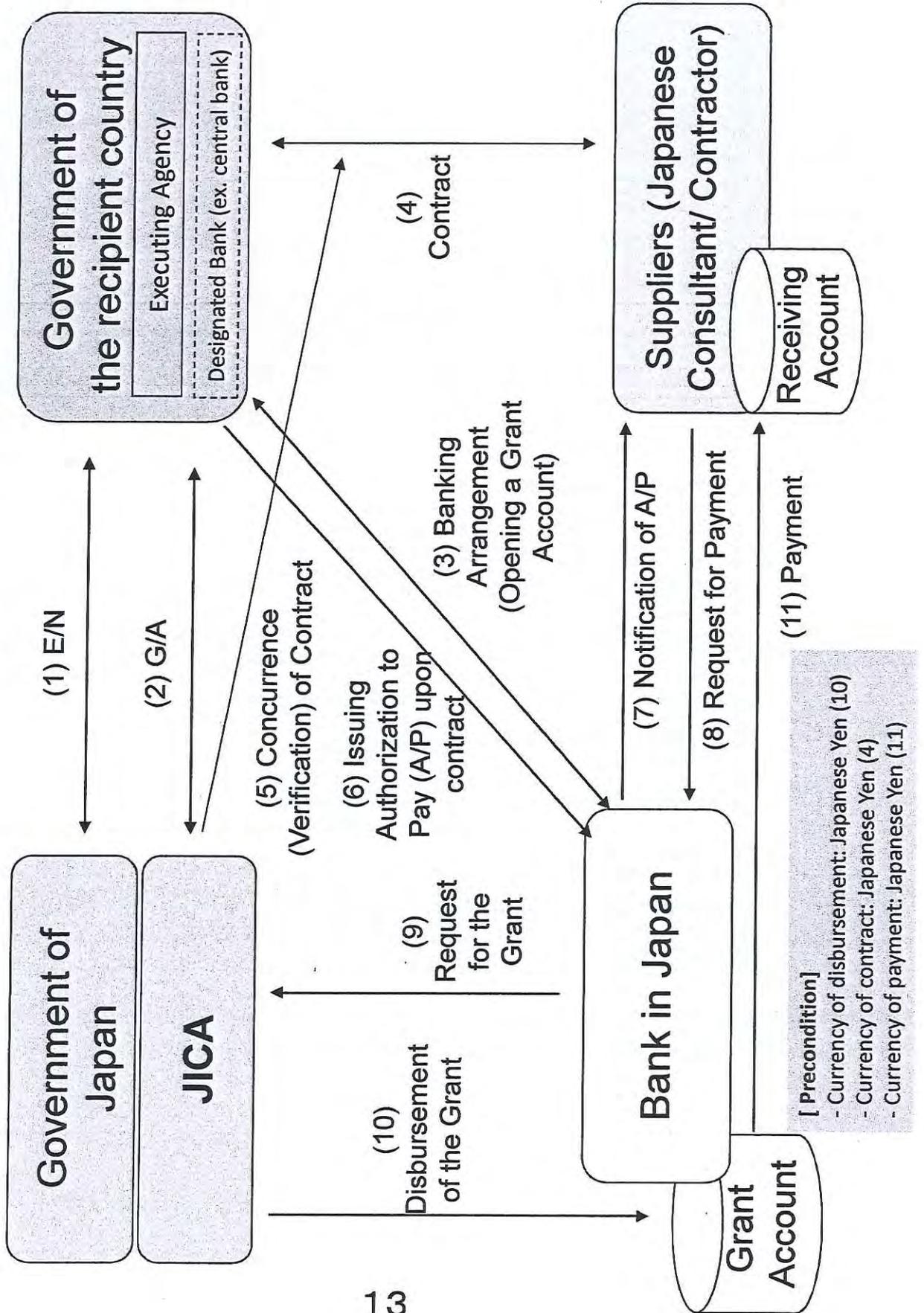
Stage	Procedures	Remarks	Recipient Government	Japanese Government	JICA	Consultants	Contractors	Agent Bank
Official Request	Request for grants through diplomatic channel	Request shall be submitted before appraisal stage.	x	x				
1. Preparation	(1) Preparatory Survey Preparation of outline design and cost estimate		x		x	x		
2. Appraisal	(2) Preparatory Survey Explanation of draft outline design, including cost estimate, undertakings, etc.		x		x	x		
	(3) Agreement on conditions for implementation	Conditions will be explained with the draft notes (E/N) and Grant Agreement (G/A) which will be signed before approval by Japanese government.	x	x (E/N)	x (G/A)			
	(4) Approval by the Japanese cabinet			x				
3. Implementation	(5) Exchange of Notes (E/N)		x	x				
	(6) Signing of Grant Agreement (G/A)		x		x			
	(7) Banking Arrangement (B/A)	Need to be informed to JICA	x					x
	(8) Contracting with consultant and issuance of Authorization to Pay (A/P)	Concurrence by JICA is required	x			x		x
	(9) Detail design (D/D)		x			x		
	(10) Preparation of bidding documents	Concurrence by JICA is required	x			x		
	(11) Bidding	Concurrence by JICA is required	x			x	x	
	(12) Contracting with contractor/supplier and issuance of A/P	Concurrence by JICA is required	x				x	x
	(13) Construction works/procurement	Concurrence by JICA is required for major modification of design and amendment of contracts.	x			x	x	
4. Ex-post monitoring & evaluation	(14) Completion certificate		x			x	x	
	(15) Ex-post monitoring	To be implemented generally after 1, 3, 10 years of completion, subject to change	x		x			
	(16) Ex-post evaluation	To be implemented basically after 3 years of completion	x		x			

notes:

1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.
2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.



# Financial Flow of Japanese Grant (A/P Type)



*[Handwritten mark]*



### Project Implementation Schedule

Item		Months of DD/TA																							
		1	2	3	4	5	6	7																	
Detail Design and Tender Assistance Stage	Detailed design /Preparation of tender document	Field Survey Work in Japan																							
	Approval of detail design /approval of tender document	●																							
	PQ/Tender/Evaluation	T/N																							
	Construction contract agreement	V/C																							
Item		Months of Construction																							
Construction 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
		<ul style="list-style-type: none"> <li>Construction</li> <li>• Period : 24 Months</li> <li>• Type of work :                      Clearing and Detour Road                      Bridge Construction                      River Improvement Work                      Approach Road Work                      Clean up</li> </ul>																							
Construction, Hand over		Preparation/Procurement Detour Road Construction Bridge Construction River Improvement Work Approach Road Construction Removal of Detour Road Cleanup/hand over																							

Legend T/N : Tender Notice

V/C : Verification of Contract

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## Major Undertakings to be taken by the Government of Vanuatu

**1. Specific obligations of the Government of Vanuatu which will not be funded with the Grant****(1) Before the Bidding**

No.	Items	Deadline	In charge	Cost (US\$)	Ref.
1	To approve IEE/EIA (Conditions of approval should be fulfilled, if any) and secure the necessary budget for implementation of countermeasures obligated in the IEE/EIA.	before signing of the G/A	DEPC	1,000	
2	To open Bank Account (Banking Arrangement (B/A))	within 1 month after signing of the G/A	MOF/RBV		
3	To issue the Authorization to Pay (A/P) to a bank in Japan (the Agent Bank) for the payment to the Consultant	within 1 month after signing of the contract with the consultant	MOF/RBV	3,000	
4	To approve Abbreviated Resettlement Action Plan	before signing of the G/A	PWD/MIPU		
5	To secure the necessary budget and implement land acquisition and resettlement (including preparation of resettlement sites), and compensation with full replacement cost in accordance with RAP	before notice of the bidding document(s)	PWD/MIPU	287,000	
6	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	till land acquisition and resettlement complete	PWD/MIPU		
7	To secure and clear the following lands 1) right of way for the Project 2) temporary construction yard and stock yard near the Project area 3) diversion route for the existing road 4) borrow pit and disposal site near the Project area	before notice of the bidding document(s)	PWD/MIPU and related agencies	17,000	
8	To obtain the planning, zoning, building permit	before notice of the bidding document(s)	PWD/MIPU and related agencies		
9	To clear, level and reclaim the sites, which will be confirmed in the draft final report (All costs for relocation of utilities such as power lines, communication lines and demolition of obstacles such as fence etc. are included)	before notice of the bidding document(s)	PWD/MIPU and related agencies	361,800	
10	To submit Project Monitoring Report (with the result of Detailed Design (DD))	before preparation of bidding document(s)	PWD/MIPU		

Note : DEPC - Department of Environmental Protection and Conservation

MOF - Ministry of Finance

RBV - Reserve Bank of Vanuatu

PWD - Public Works Department

MIPU - Ministry of Infrastructure and Public Utilities

DSPPACC – Department of Strategic Policy Planning and Aid Coordination

CIR – Customs and Inland Revenue

MOL – Ministry of Land



## (2) During the Project Implementation

No.	Items	Deadline	In charge	Cost (US\$)	Ref.
1	To issue A/P(s) to the Agent Bank in Japan for the payment(s) to the Supplier(s)	within 1 month after signing of the contract(s)	MOF/RBV		
2	To bear the following commissions to the Agent Bank in Japan for the banking services based upon the B/A	during the Project	MOF/RBV	32,300	
	1) Advising commission of A/P	within 1 month after signing of the contract(s)	MOF/RBV		
	2) Payment commission for A/P	every payment	MOF/RBV		
3	To ensure prompt customs clearance and to assist the Supplier(s) with internal transportation in the country of the Recipient	During the Project	DSPPAC/CIR and related agencies		
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	PWD/MIPU		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted	during the Project	DSPPAC/CIR		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	PWD/MIPU		
7	1) To submit Project Monitoring Report	every month	PWD/MIPU		
	2) To submit Project Monitoring Report (Final)	within one month after signing of Certificate of Completion of the Work under the contract(s)	PWD/MIPU		
8	To submit a report concerning completion of the Project	within six months after completion of the Project	PWD/MIPU		
9	To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Project outside the site(s)				
	1) Electricity The distributing line to the temporary site	before start of the construction	PWD/MIPU and related agencies		
	2) Water Supply The city water distribution main to the temporary site	before start of the construction	PWD/MIPU and related agencies		
	3) Primary Electric Power Source Primary electrical power source up to the distribution boards. (Approx. 8 sources are required)		PWD/MIPU		

No.	Items	Deadline	In charge	Cost (US\$)	Ref.
10	To take necessary measure for safety construction - traffic control - public notifications - Securing safety for personnel involved in the Project	during the construction	PWD/MIPU and related agencies		
11	To implement Environmental Management Plan (EMP) and Environmental Monitoring Plan (EMoP)	during the construction	PWD/MIPU		
12	To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	during the construction	PWD/MIPU		
13	To implement RAP (livelihood restoration program, if needed)	for a period based on livelihood restoration program	MOL, PWD and related agencies		
14	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report - Period of the monitoring may be extended if affected persons' livelihoods are not sufficiently restored. Extension of the monitoring will be decided based on agreement between MIPU and JICA.	until the end of livelihood restoration program (In case that livelihood restoration program is provided)	PWD/MIPU		

*Yes*



## (3) After the Project

No.	Items	Deadline	In charge	Cost	Ref.
1	To implement EMP and EMoP	for a period based on EMP and EMoP	PWD /MIPU		
2	To submit results of environmental monitoring to JICA, by using the monitoring form, semi-annually - The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between MIPU and JICA.	for three years after the Project	PWD /MIPU		
4	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance of structure 3) Routine check/Periodic inspection	After completion of the construction	DWD /MIPU	12,000 (Annual)	

## 2. Other obligations of the Government of Vanuatu funded with the Grant

No.	Items	Deadline	Amount (Million Japanese Yen)*
1	To construct bridge, river embankment and approach road including the following transportation 1) Marine(Air ) transportation of the products from Japan to the recipient country 2) Internal transportation from the port disembarkation to the project site	during the construction	
2	To implement detailed design, tender support and construction supervision(Consulting Service )		
3	Contingencies		
	Total		

\*The Amount is provisional. This is subject to the approval of the Government of Japan. This page is closed due to the confidentiality.

<p><b><u>Project Monitoring Report</u></b>  <b>on</b>  <b><u>Project Name</u></b>  <b>Grant Agreement No. <u>XXXXXXXX</u></b>  <b>20XX, Month</b></p>
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### Organizational Information

<b>Signer of the G/A (Recipient)</b>	<p>_____          Person in Charge (Designation)</p> <p>Contacts      _____                            Address:                            Phone/FAX:                            Email:</p>
<b>Executing Agency</b>	<p>_____          Person in Charge (Designation)</p> <p>Contacts      _____                            Address:                            Phone/FAX:                            Email:</p>
<b>Line Ministry</b>	<p>_____          Person in Charge (Designation)</p> <p>Contacts      _____                            Address:                            Phone/FAX:                            Email:</p>

### General Information:

<b>Project Title</b>	
<b>E/N</b>	Signed date: Duration:
<b>G/A</b>	Signed date: Duration:
<b>Source of Finance</b>	Government of Japan: Not exceeding JPY _____ mil. Government of (_____): _____

<b>1: Project Description</b>	
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**1-1 Project Objective**

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**1-2 Project Rationale**

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

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**1-3 Indicators for measurement of "Effectiveness"**

Quantitative indicators to measure the attainment of project objectives		
Indicators	Original (Yr )	Target (Yr )
Qualitative indicators to measure the attainment of project objectives		

<b>2: Details of the Project</b>
----------------------------------

**2-1 Location**

Components	Original <i>(proposed in the outline design)</i>	Actual
1.		

**2-2 Scope of the work**

Components	Original* <i>(proposed in the outline design)</i>	Actual*
1.		

Reasons for modification of scope (if any).

(PMR)
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**2-3 Implementation Schedule**

Items	Original		Actual
	<i>(proposed in the outline design)</i>	<i>(at the time of signing the Grant Agreement)</i>	

Reasons for any changes of the schedule, and their effects on the project (if any)

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**2-4 Obligations by the Recipient**

**2-4-1 Progress of Specific Obligations**

See Attachment 2.

**2-4-2 Activities**

See Attachment 3.

**2-4-3 Report on RD**

See Attachment 11.

**2-5 Project Cost**

**2-5-1 Cost borne by the Grant (Confidential until the Bidding)**

Components			Cost (Million Yen)	
	Original <i>(proposed in the outline design)</i>	Actual <i>(in case of any modification)</i>	Original <sup>1)2)</sup> <i>(proposed in the outline design)</i>	Actual
	1.			
	Total			

Note: 1) Date of estimation:

2) Exchange rate: 1 US Dollar = Yen

**2-5-2 Cost borne by the Recipient**

Components			Cost (1,000 Taka)	
	Original <i>(proposed in the outline design)</i>	Actual <i>(in case of any modification)</i>	Original <sup>1)2)</sup> <i>(proposed in the outline design)</i>	Actual
	1.			

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- Note: 1) Date of estimation:  
2) Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

(PMR)

**2-6 Executing Agency**

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

<p><i>Original (at the time of outline design)</i>  name:  role:  financial situation:  institutional and organizational arrangement (organogram):  human resources (number and ability of staff):</p>
<p><i>Actual (PMR)</i></p>

**2-7 Environmental and Social Impacts**

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- The results of social monitoring based on in Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

**3: Operation and Maintenance (O&M)**

**3-1 Physical Arrangement**

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spareparts, etc.)

<p><i>Original (at the time of outline design)</i></p>
<p><i>Actual (PMR)</i></p>

**3-2 Budgetary Arrangement**

- Required O&M cost and actual budget allocation for O&M

<p><i>Original (at the time of outline design)</i></p>
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*[Handwritten mark]*

*[Handwritten mark]*

Actual (PMR)

#### 4: Potential Risks and Mitigation Measures

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

##### Assessment of Potential Risks (at the time of outline design)

Potential Risks	Assessment
1. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
	Contingency Plan (if applicable):
2. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
	Contingency Plan (if applicable):
3. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:

21



	Contingency Plan (if applicable):
<b>Actual Situation and Countermeasures</b>	
(PMR)	

**5: Evaluation and Monitoring Plan (after the work completion)**

**5-1 Overall evaluation**

Please describe your overall evaluation on the project.

**5-2 Lessons Learnt and Recommendations**

Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

**5-3 Monitoring Plan of the Indicators for Post-Evaluation**

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

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*A*

Attachment

1. Project Location Map
  2. Specific obligations of the Recipient which will not be funded with the Grant
  3. Monthly Report submitted by the Consultant
- Appendix - Photocopy of Contractor's Progress Report (if any)
- Consultant Member List
  - Contractor's Main Staff List
4. Check list for the Contract (including Record of Amendment of the Contract/Agreement and Schedule of Payment)
  5. Environmental Monitoring Form / Social Monitoring Form
  6. Monitoring sheet on price of specified materials (Quarterly)
  7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final) only)
  8. Pictures (by JPEG style by CD-R) (PMR (final) only)
  9. Equipment List (PMR (final) only)
  10. Drawing (PMR (final) only)
  11. Report on RD (After project)

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Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

Items of Specified Materials	Initial Volume A	Initial Unit Price (¥) B	Initial total Price C=A×B	% of Contract Price D	Condition of payment Price (Decreased) E=C-D	Condition of payment Price (Increased) F=C+D
Item 1	●●t	●	●●	●	●	●
Item 2	●●t	●	●●	●	●	●
Item 3						
Item 4						
Item 5						

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

Items of Specified Materials	1st month, 2015	2nd month, 2015	3rd month, 2015	4th	5th	6th
Item 1	●	●	●			
Item 2						
Item 3						
Item 4						
Item 5						

(3) Summary of Discussion with Contractor (if necessary)



Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)  
 (Actual Expenditure by Construction and Equipment each)

	Domestic Procurement (Recipient Country) A	Foreign Procurement (Japan) B	Foreign Procurement (Third Countries) C	Total D
Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Direct Construction Cost	(A/D%)	(B/D%)	(C/D%)	
others	(A/D%)	(B/D%)	(C/D%)	
Equipment Cost	(A/D%)	(B/D%)	(C/D%)	
Design and Supervision Cost	(A/D%)	(B/D%)	(C/D%)	
Total	(A/D%)	(B/D%)	(C/D%)	

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The Project for the Disaster Restoration of Teouma Bridge in Vanuatu

Environmental Checklist: 12. Bridges + 7. Roads + 11. River and Sand Erosion Control

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	Corresponding Category (base sheet: 12. Bridges)
1 Permits and Explanation	(1) EIA and Environmental Permits	(a) Have EIA reports been already prepared in official process? (b) Have EIA reports been approved by authorities of the host country's government? (c) Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied? (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?	(a) N (b) N (c) N (d) N	(a) PWD submitted the application for EIA in April, 2018, and DEPC issued ToR in June, 2018. (b) EIA report will be submitted for the review by DEPC in April, 2018. (c) Nothing special. (d) Necessary permits are identified at the time of the EIA survey, and these permits will be got before the start of the construction work	
	(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? (b) Have the comment from the stakeholders (such as local residents) been reflected to the project design?	(a) Y (b) Y	(a) At the time of the data collection survey, a consultation meeting with local stakeholders was organized. During the scoping stage, two consultation meetings were organized and two more meetings were organized before the baseline survey started and after draft EIA report was prepared. (from May to December, 2018) (b) Comments from the consultation meetings were reflected into the plan of the EIA survey and the project plan.	
2 Pollution Control	(3) Examination of Alternatives	(a) Have alternative plans of the project been examined with social and environmental considerations?	(a) Y	(a) The alternatives of bridge designs, river improvement, and road alignment were examined, with social and environmental considerations.	
	(1) Air Quality	(a) Is there a possibility that air pollutants emitted from the project related sources, such as vehicles traffic will affect ambient air quality? Does ambient air quality comply with the country's air quality standards? Are any mitigating measures taken? (b) If air quality already exceed country's standards near the route, is there a possibility that the project will make air pollution worse?	(a) Y/N (b) Y/N	(a) Dust caused by construction work is one of the main pollutants, but watering and covering of soils with sheets could mitigate it. Emission gas from vehicles would also cause air pollution, but the number and total working hours of heavy vehicles and machines are limited and the air quality level will not exceed the standards. (b) The current air quality level is good.	



### Environmental Checklist: 12. Bridges + 7. Roads + 11. River and Sand Erosion Control

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	Corresponding Category (base sheet: 12. Bridges)
2 Pollution Control	(2) Water Quality	(a) Is there a possibility that soil runoff from the bare lands resulting from earthmoving activities, such as cutting and filling will cause water quality degradation in downstream water areas?  (b) Is there a possibility that the project will contaminate water sources, such as well water?	(a) Y/N (b) N	(a) Necessary measures such as soil compaction and enforcement, are taken and there will be no soil erosion from cutting slopes and embankment, so water quality in lower reach of the river won't be worsened after the construction work  (b) There are no excavation works which dig a deep hole to reach to the underground water vein or damages to water in a well.	
		(b) Is there a possibility that surface runoff from roads will contaminate water sources, such as groundwater?  (c) Do effluents from various facilities, such as parking areas/service areas comply with the country's effluent standards and ambient water quality standards? Is there a possibility that the effluents will cause areas not to comply with the country's ambient water quality standards?	(a) N (b) N	(b) Since no underground water sources are identified inside/near the construction site, there is no risk of ground water contamination.  (c) No facilities such as parking and service areas are planned to be constructed.	7. Roads
	(3) Noise and Vibration	(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 country's ambient water quality standards?  (a) Do noise and vibrations from the vehicle and train traffic comply with the country's standards?  (b) Do low frequency sound from the vehicle and train traffic comply with the country's standards?	(a) N (b) N	(a) The project will not change the volume of water flow.  (a) There are no noise level standards in Vanuatu. The noise level will not exceed the Japanese standards. (b) There are no standards and regulations of low-frequency wave, but there is little generation of low-frequency wave caused by traffic vehicles.	
		(a) Are wastes generated from the project facilities, such as parking areas/service areas, properly treated and disposed of in accordance with the country's regulations?  (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) N (a) Y	(a) These kinds of facilities will not be constructed and no waste will be generated.  (a) Construction waste, such as excavated soil and concrete debris, will be reused as much as possible, if they are not contaminated by chemicals and others. The rest of the waste will be disposed of at the existing disposal site approved by DEPC.	7. Roads  11. River and Sand Erosion Control

**Environmental Checklist: 12. Bridges + 7. Roads + 11. River and Sand Erosion Control**

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	Corresponding Category (base sheet: 12. Bridges)
2 Pollution Control	(5) Ground 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) N	(a) The area of the excavation work for the pier construction is limited and this will not affect the ground subsidence.	11. River and Sand Erosion Control
	(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) N	(a) No protected areas are identified inside and around the project area	
3 Natural Environment	(2) Ecosystem	(a) Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., coral reefs, mangroves, or tidal flats)?	(a) N	(a) No important habitats are identified inside and around the project area.	
		(b) Does the project site encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions?	(b) N	(b) ditto	
		(c) If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem?	(c) Y	(c) No serious impact is expected but necessary measures, such as conserving top soil and protecting animals/birds during the site-clearance, will be taken.	
		(d) Are adequate protection measures taken to prevent impacts, such as disruption of migration routes, habitat fragmentation, and traffic accident of wildlife and livestock?	(d) Y	(d) The ring road is used as a route for livestock such as cattle to move to/from the grazing land. During the construction work, necessary measures such as notice/warning to attract attentions are taken.	
		(e) Is there a possibility that installation of bridges and access roads will cause impacts, such as destruction of forest, poaching, desertification, reduction in wetland areas, and disturbance of ecosystems due to introduction of exotic (non-native invasive) species and pests? Are adequate measures for preventing such impacts considered?	(e) N	(e) Since the project aims at replacing the old bridge with the new one, not constructing a new bridge, the project is not expected to disturb the native eco-system at the project site.	
(3) Hydrology	(a) Is there a possibility that hydrologic changes due to the installation of structures will adversely affect surface water and groundwater flows?	(a) N	(a) Under the project, the river improvement work will be implemented along with the replacement of the old bridge with the new one, as a part of disaster prevention measures. This would improve the river flow but change the river channel downstream a little bit. Proper land use such as restriction of houses near the river is promoted.	7. Roads 11. River and Sand Erosion Control	



**Environmental Checklist: 12. Bridges + 7. Roads + 11. River and Sand Erosion Control**

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	Corresponding Category (base sheet: 12. Bridges)
3 Natural Environment	(4) Topography and Geology	<p>(a) Is there any soft ground on the route that may cause slope failures or landslides? Are adequate measures considered to prevent slope failures or landslides, where needed?</p> <p>(b) Is there a possibility that civil works, such as cutting and filling will cause slope failures or landslides? Are adequate measures considered to prevent slope failures or landslides?</p> <p>(c) Is there a possibility that soil runoff will result from cut and fill areas, waste soil disposal sites, and borrow sites? Are adequate measures taken to prevent soil runoff?</p>	<p>(a) N (b) Y (c) N</p>	<p>(a) There will be a risk of landslide at the installation parts of the bridge at the both sides of the river, but the area is very limited and countermeasures such as soil compaction and enforcement can prevent landslide.</p> <p>(b) During the river bank protection work, excavated soil could run-off into the river. Necessary measures such as earth-retaining fence and guard net will be taken.</p> <p>(c) Installation of retaining wall at the river bank and flood control measures at the bridge attaching part could prevent soil from running off into the river from the construction area.</p>	
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 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, the 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>(a) One household needs to be resettled for the construction of the detour, but there is a relocation site near.</p> <p>(b) Consultation meetings were organized in order to explain all the stakeholders about the project, survey method, and compensation systems, and PAHs agreed with the project and compensation policy and methods.</p> <p>(c) Compensation policy and plan is established under the RAP</p> <p>(d) Compensation payment will be arranged before the start of the construction work.</p> <p>(e) Targets of compensation, eligibility criteria and the contents of compensation will be shown in the Entitle Matrix</p> <p>(f) Considerations will be paid for vulnerable groups.</p> <p>(g) Agreements with the affected people will be obtained and compensation will be paid prior to resettlement.</p> <p>(h) The RAP, which was prepared according to the Vanuatu laws and JIC guideline/WB OP 4.12, proposes the resettlement implementation system and necessary budget.</p> <p>(i) The RAP shows the monitoring plan.</p>	



**Environmental Checklist: 12. Bridges + 7. Roads + 11. River and Sand Erosion Control**

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	Corresponding Category (base sheet: 12. Bridges)
4	Social Environment	<p>(i) Are any plans developed to monitor the impacts of resettlement?</p> <p>(j) Is the grievance redress mechanism established?</p>		<p>(i) The grievance redress mechanism is proposed and will be established. Necessary cost for grievance redress mechanism is also calculated and presented in the RAP."</p>	
	(2) Living and Livelihood	<p>(a) Where bridges and access roads are newly installed, is there a possibility that the project will affect the existing means of transportation and the associated workers? Is there a possibility that the project will cause significant impacts, such as extensive alteration of existing land uses, changes in sources of livelihood, or unemployment? Are adequate measures considered for preventing these impacts?</p> <p>(b) Is there any possibility that the project will adversely affect the living conditions of the inhabitants other than the target population? Are adequate measures considered to reduce the impacts, if necessary?</p> <p>(c) Is there any possibility that diseases, including infectious diseases, such as HIV will be brought due to immigration of workers associated with the project? Are adequate considerations given to public health, if necessary?</p> <p>(d) Is there any possibility that the project will adversely affect road traffic in the surrounding areas (e.g., increase of traffic congestion and traffic accidents)?</p> <p>(e) Is there any possibility that project will impede the movement of inhabitants?</p> <p>(f) Is there any possibility that bridges will cause a sun shading and radio interference?</p>	<p>(a) N (b) N (c) N (d) N (e) N (f) N</p>	<p>(a) The location of the bridge and access road will be the same as the existing one and there will be little impact on existing means of transportation and associated workers</p> <p>(b) The construction of the new bridge could secure normal traffic even at the disasters, and the project has no adverse effect on their living conditions.</p> <p>(c) Workers will be employed locally and no immigrants will be expected.</p> <p>(d) The traffic congestions will be generated temporarily during the construction work, but once the construction work finishes, the traffic flow will be back to normal.</p> <p>(e) The movement of inhabitants would be better with the new bridge and improved access road</p> <p>(f) The grinder height is elevated from 6.8m to 8.9m, but no houses are located very near from the bridge and problems such as sun shading or radio interference are not expected.</p>	
	(3) Heritage	<p>(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?</p>	(a) N	(a) No such facilities are identified in the project area.	



**Environmental Checklist: 12. Bridges + 7. Roads + 11. River and Sand Erosion Control**

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	Corresponding Category (base sheet: 12. Bridges)
4 Social Environment	(4) Landscape	<p>(a) Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken?</p> <p>(a) Are considerations given to reduce impacts on the culture and lifestyle of ethnic minorities and indigenous peoples?</p> <p>(b) Are all of the rights of ethnic minorities and indigenous peoples in relation to land and resources respected?</p>	(a) N  (a) Y (b) Y	<p>(a) There are no places which landscapes needed to be protected inside the project area.</p> <p>(a) Ethnic minorities and indigenous peoples are not confirmed in the Project area, but consideration will be given to local culture and life style.</p> <p>(b) For the acquisition of customary land, considerations will be given to related rights.</p>	
	(5) Ethnic Minorities and Indigenous Peoples	<p>(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?</p> <p>(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?</p> <p>(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.?</p> <p>(d) Are appropriate measures taken to ensure that security guards involved in the project not to violate safety of other individuals involved, or local residents?</p>	(a) Y (b) Y (c) Y (d) Y	<p>(a) Securing of working condition is implemented according to the related Vanuatu laws and international rules such as OHSAS.</p> <p>(b) Measures are taken to oblige workers to wear safety boots and helmets and to manage waste properly, in order to prevent accidents during the construction work</p> <p>(c) The safety and sanitation plan will be planned and regular safety education will be implemented in order to strengthen safety</p> <p>(d) Security guards, who are provided with training of health and safety, are assigned and measures are taken such as installation of fence and signboards in order to prevent accidents and troubles involving local residents near the construction site.</p>	
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) Y (b) Y (c) Y	<p>(a) Based on the baseline survey, the impacts of the project were to be evaluated and mitigation measures are planned.</p> <p>(b) ditto</p> <p>(c) ditto</p>	



**Environmental Checklist: 12. Bridges + 7. Roads + 11. River and Sand Erosion Control**

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	Corresponding Category (base sheet: 12. Bridges)
5 Others	(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>	<p>(a) Y (b) Y (c) Y (d) Y</p>	<p>(a) The environmental monitoring plan is prepared for target items that are considered to have potential impacts, and will be implemented.</p> <p>(b) The monitoring items, feasible monitoring methods and frequency will be decided in consultation with the environmental authorities, referring to monitoring plans of similar projects.</p> <p>(c) The monitoring system is established through the EIA survey</p> <p>(d) The reporting system is established through the EIA survey.</p>	
6 Note	Reference to Checklist of Other Sectors	<p>(a) Where necessary, pertinent items described in the Roads, Railways and Forestry Projects checklist should also be checked (e.g., projects including large areas of deforestation).</p> <p>(b) Where necessary, pertinent items described in the Power Transmission and Distribution Lines checklist should also be checked (e.g., projects including installation of power transmission lines and/or electric distribution facilities).</p>	<p>(a) N/Y (b) N</p>	<p>(a) Large scale logging is not included in the project components, since low trees and weeds are main vegetation along the road side and riverbank.</p> <p>(b) The construction of transmission-transformation facility and power distribution station is not included in the project components.</p>	
	Note on Using Environmental Checklist	<p>(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).</p>	<p>(a) N</p>	<p>(a) The project does not have possibility of significant adverse impacts on environment.</p>	

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 are 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.



**The Project for the Disaster Restoration of Teouma Bridge in Vanuatu  
Environmental Management Plan/ Environmental Monitoring Plan**

Environmental items	Monitoring item	Parameter /Indicator	Location	Frequency	Responsible	Estimated Budget
<b>Pre-construction and site mobilization phase</b>						
Land expropriation, compensation payment and other support	Compensation for land and structure lost	Number of structures expropriated Area of land expropriated	Project area	Once before construction	PWD	RAP monitoring
	Complaints resolutions	GRM log book	Project area		DOL	RAP monitoring
Ecosystem	Site clearance activities	Approval of cutting trees Record of site clearance Records of waste disposal (Bouffa)				
Air pollution/ noise & vibrations	Equipment and automobiles with less emission gas and noise	Number of Automobiles with certification on site		As appropriate	Contractor	No cost applicable to monitor.
Soil erosion	Source of construction materials such as soil and stones	Permit of quarry		once		No cost
<b>Construction phase</b>						
Accident and incident	Complaint (in general such as noise, traffic jam, and accidents)	Records of complaints	Project area		Contractor PWD	Construction cost
Air Pollution	Equipment and automobiles in good shape	Regular inspection and maintenance (daily check sheet)	Project area	Daily	Contractor	No cost applicable to monitor.
	Air quality	Level of dust: observed by contractor Observed by community (community survey)	Project area	Daily  Quarterly	Contractor	Construction cost  USD 2,000
	Mitigation measures such as spraying of water, washing tires, covering loaded materials	Records on water spray/ washing	Project area	Daily	Contractor	Construction cost
Water pollution	Surface water quality	temperature, pH, EC (by portable water quality meter) oil & grease (observation)	Upper site/ lower site of the river	Weekly	Contractor	US\$ 2,000
	Mitigation measures	Records of mitigation activities	Project area	Daily	Contractor	Construction cost
Noise and vibrations	Restriction of noise/vibration emitting activities to working hours.	Noise level by portable noise meter Observed by community (community survey)	Project area	At the time of earth works  Quarterly	Contractor	US\$ 1,000  (Along with air pollution)
Soil pollution	Check prevention measures of oil contamination	Prevention measures are done or not (based on daily check sheet)	Project area	Monthly	Contractor	Construction cost
Soil erosion	Check the conditions of river bank	Conditions (Record of conditions)	Project area	Monthly	Contractor	Construction cost
Waste	Management of excavated soil, concrete debris and others	Proper storage nor not (waste management check sheet) Reuse (waste management check list)	Project area	Monthly	Contractor	Construction cost
	Management of general waste	Records of waste disposal	Project area	Monthly	Contractor	Construction cost

Environmental items	Monitoring item	Parameter /Indicator	Location	Frequency	Responsible	Estimated Budget
Bottom sediment/ Ecosystem	Mitigation measures	Mitigation measures are done or not (Records of mitigation measures)	Project area	Monthly	Contractor	Construction cost
Work conditions	Occupational Safety and Health plan	Availability of OHS Plan	Project area	Monthly	Contractor	Construction cost
	Meetings and trainings	Number of meetings and trainings				
	Safety goods for workers	Number of workers with safety gear				
	Noise and vibrations	(from noise and vibrations)		(from noise and vibrations)		
	Occurrence of accidents and injuries	Records of accident and injuries	Project area	Monthly		
Accident/ Traffic congestions	Traffic management Plan	Availability of TMP	Project area	Monthly	Contractor	Construction cost
	Implementation of TMP	Availability of guard, signboard, and so on (activity records)	Project area	Monthly	Contractor	Construction cost
Water use	Mitigation measures of water quality	(from water pollution)				Construction cost
	Conditions of place to fetch water	Observation by the Contractor Observed by community (community survey)	Project area	Monthly  Quarterly	Contractor community	Construction cost  (along with air pollution)
Local economy	Local economy (sales, employment, and so on)	Observed by community (community survey)	Communities near the project area	Quarterly		(along with air pollution)
<b>Operation phase</b>						
Accident	Number of accident Prevention measures			Monthly	PWD	Operational cost
Hydrology/ Soil Erosion	River channel downstream			One a year	PWD	Operational cost
	<b>Total cost for monitoring</b>					<b>USD 5,000</b>



## The Project for the Disaster Restoration of Teouma Bridge in Vanuatu Environmental and Social Monitoring Form

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

Monitoring Item	Monitoring Results during Report Period
Number and contents of formal comments made by the public	
Number and contents of responses from Government agencies	

### 2. Pollution

#### 1) Air Quality

Item	Unit	Situations of Dust Based on the observation	Measurement Point	Frequency
Dust	-	1. good 2. Acceptable level 3. bad	Construction site	Daily

#### 2) Surface Water Quality

Item	Unit	Down-stream	Main point	Up-stream	Country Standards	Standards for Contract	Referred National Standards	Frequency
pH	-				-	6.5-9.5	WHO Guideline	weekly
Temperature	degree				-	<3		
Turbidity	NTU				-	≤2	standards for tap water in japan	
DO	mg/l				-	≥7.5	rivers categorized as AA, which water can be used as drinking water with simple filtering method in Japan	
Oil & grease	Yes/No				-	observed		

#### Result of the baseline survey and standards

Analysis	Sample 1	Sample 2	Sample 3	Unit	Standard
pH	8.03	8.01	8.27		>6.5 & < 9.5 (NF T 90-008)
Turbidity	2.74	1.98	0.5	NTU	(≤2 standards for tap water in japan)
Conductivity	455	462	457	μS/cm	

Source: Baseline survey (JICA study)

#### 3) Noise and Vibrations

Item	Unit	Measured Value (mean)	Measured Value (Max)	Country Standards	Standards for Contract	Referred International Standards	Measurement Point	Frequency
Noise LAeq	dB(A)					70 (Japan)	Construction site/edge of the construction area (near houses)	Monthly
Vibrations	dB(A)					75 (Japan)	Construction site/edge of the construction area (near houses)	Monthly

#### Ambient noise standards in Japan

Area/Time Zone	Daytime (6:00-22:00)	Night (20:00-6:00)
Residential area	55 dB or less	45 dB or less
Commercial area	70 dB or less	60 dB or less
Residential area along the main road with 2 or more than 2 lanes each way	60 dB or less	55 dB or less
Commercial area along the main road with 2 or more than 2 lanes each way	65 dB or less	60 dB or less

#### Result of the baseline survey

No	Area	Time During Day (hours)	Limits, dB(a)
1.			
2.			

#### 4) Waste (Construction waste)

Date: Item: Waste Management Mark: "✓" if management is done as required

Location	Kind of waste	Volume of waste (m3)	Final disposal or reuse	Stored at designated place	Waste separation	Remark

## 5) Mitigation measures

Date: Mark: "✓" if mitigation measure is done

No	Item	Monitoring Site	Mitigation measure is done or not Conditions of facilities	Remarks
1	Check the conditions of vehicles (dust control)			
2	Watering (dust control)			
3	Covering truck load with a sheet (dust control)			
4	Using oil pan (water/soil pollution prevention)			
5	Temporary cofferdam			
6	Sedimentation pond/drainage			

## 3. Natural Environment

## 1) Biota and ecosystems

Item	Monitoring Results during Report Period	Measures to be Taken	Frequency
Clearance activities (visual inspection)			Weekly
Management of top soil (visual inspection)			Weekly

## 2) Hydrological Situation

Item	Monitoring Results during Report Period	Measures to be Taken	Frequency
Impact of construction work on steep slope (visual inspection)	Soil erosion		Weekly

**4. Social Environment**

1) Land acquisition  
 Pre-Construction phase  
 Resettlement, Land expropriation, and compensation for assets and crops (monthly report)

Item	Planned Total	Unit	2020.1		2020.2		2020.3		Qty	%	Qty	%	Expected completion date	Responsible organization
			Qty	%	Qty	%	Qty	%						
1.Update PAPs list and Final Asset Valuation														
1-1 Identification of final PAHs	6	HH												DOL
	101	Business												
1-2 Announcement to Affected people	2	Time												
1-3 Inventory survey and final cost estimation for expropriation	1	Time												
1-4 Consultation meeting times	4	Time												
1-5 Agreement signed by PAHs	6	HH												
	101	Business												
2. Progress of resettlement														
2-1 Resettlement of household		HH												
3. Progress of land acquisition														
3-1 Permanent land acquisition Customary land	8,438	m2												DOL
3-2 Permanent land acquisition Leased farm land	4,143	m2												
3-3 Temporary land acquisition Customary land	10,936	m2												
4.Progress of compensation in cash														
4-1 Structure	6	structure												DOL
4-2 Crop/trees	6	HH												
4-3 Compensation for loss of business	101	business												
5. Complain and Grievance Redress N/A Cases		Case												
5-1 Solved cases		Case												
5-2 Unsolved cases		Case												





**During Construction  
Safety management**  
Date:

No	Item	Result	Remarks
1	Number of meetings organized since the previous monitoring		
2	Safety gear distribution (%)		
3	Keep records of accidents and injuries properly (Yes/No)		
4	Installation of fences, assignment of guards (Yes/No)		

**Record of Accidents**

No	Date	Details of accidents	Solution / Result / Any actions to be taken

**4) Other checklist**

Date:

Mark: "✓" if mitigation measure is done

No	Item	Monitoring Site "	Mitigation measure is done or not	Remarks
1	Communities get the information on the construction schedule			
2	Communities know get the information of traffic management			
3	Installation of signboard			
4				

**5) Record of Complains**

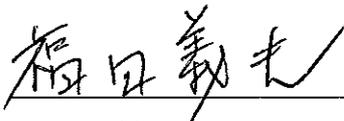
No	Date	Complains	Solution / Result / Any actions to be taken

**Minutes of Discussions**  
**on the Preparatory Survey for the Project for**  
**the Disaster Restoration of Teouma Bridge**  
**(Explanation on Draft Preparatory Survey Report)**

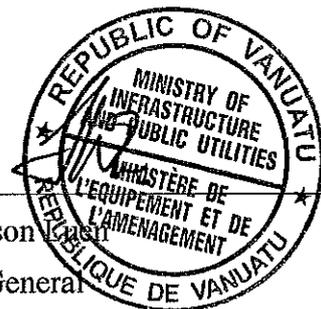
In response to the request from the Government of the Republic of Vanuatu (hereinafter referred to as " Vanuatu ") dated on June 13, 2017 and with reference to the minutes of discussions signed between Ministry of Infrastructure and Public Utilities(hereinafter referred to as "MIPU") and the Japan International Cooperation Agency (hereinafter referred to as "JICA") each on November 14, 2017, on May 15, 2018, and on March 29, 2019, JICA dispatched the Preparatory Survey Team (hereinafter referred to as "the Team") for the explanation of Draft Preparatory Survey Report (hereinafter referred to as "the Draft Report") for the Project for Restoration of Teouma Bridge (hereinafter referred to as "the Project").

As a result of the discussions, both sides agreed on the main items described in the attached sheets.

Port Vila, Aug. 30, 2019



Mr. Yoshio FUKUDA  
Leader, Preparatory Survey Team  
Japan International Cooperation  
Agency  
Japan



Mr. Harrison  
Director General  
Ministry of Infrastructure and  
Public Utilities  
Republic of Vanuatu

## ATTACHEMENT

### 1. Contents of the Draft Report

After the explanation of the contents of the Draft Final Report by the Team, the Vanuatu side agreed to its contents.

During the discussions, the Vanuatu side requested the dismantling works of the existing bridge truss should be carefully implemented in consideration of its reuse, and the Team took note.

### 2. Cost estimate

Both sides confirmed that the cost estimate including the contingency in Annex 1 explained by the Team is provisional and will be examined further by the Government of Japan for its approval. The contingency would cover the additional cost against natural disaster, unexpected natural conditions, etc.

### 3. Confidentiality of the cost estimate and technical specifications

Both sides confirmed that the cost estimate and technical specifications of the Project should never be disclosed to any third parties until all the contracts under the Project are concluded.

### 4. Japanese Grant

Procedures and Basic Principles of Japanese Grant as described in Annex 2 shall be applied to the Project. In addition, the Vanuatu side agreed to take necessary measures according to the procedures.

Public Works Department (hereinafter referred to as PWD) / MIPU shall coordinate with all the relevant authorities, particularly Ministry of Finance, Vanuatu Project Management Unit and Department of Strategic Policy Planning and Cooperation to ensure a smooth implementation of the Project and ensure that the undertakings for the Project shall be taken care by relevant authorities properly and on time.

### 5. Timeline for the project implementation

The Team explained to the Vanuatu side that the expected timeline for the Project implementation is as attached in Annex 3.

### 6. Expected outcomes and indicators

Both sides agreed that key indicators for expected outcomes are as follows which

might be changed based on further consideration in the Final Report. The Vanuatu side will be responsible for the achievement of agreed key indicators targeted in year 2025 and shall monitor the progress based on those indicators.

[Quantitative indicators]

Index	Base Figure (Actual figures of 2018)	Target Figure (2025) (3 years after completion)
Days of road shut down due to flood	2~3 days / 3 years	0
Daily number of passing vehicles	2,980	3,600
Annual Number of Passengers Passing through the Bridge (person)	755,000	905,000
Annual Volume of Cargo Passing through the Bridge (t)	60,000	72,000

[Qualitative indicators]

- Vulnerability against natural disaster in this area is relieved.
- The safety in the bridge utilization is ensured by the improvement of the loading capacity and the width of the bridge.
- The river channel is stabilized by the provision of revetment, the risk of river bank erosion is eliminated during flood, and the living environment of the neighborhood is improved.

7. Undertakings of the Project

Both sides confirmed the undertakings of the Project as described in Annex 4, with regard to exemption of customs duties, internal taxes and other fiscal levies as stipulated in 4.1.(2) 5 of Annex 4. And also the both sides confirmed that such customs duties, internal taxes and other fiscal levies shall be clarified in the bid documents by MIPU during the implementation stage of the Project.

The Vanuatu side assured to take the necessary measures and coordination including allocation of the necessary budget which are preconditions of implementation of the Project. It is further agreed that the costs are indicative, i.e. at Outline Design level. More accurate costs will be calculated as the Detailed Design stage.

Both sides also confirmed that the Annex 4 will be as an attachment of G/A.

- (1) Both side confirmed items requisite for Grant Agreement as follows:
  - To approve IEE/EIA and necessary budget (Annex 4 1.(1) 1, and
  - To approve Abbreviated Resettlement Action Plan (Annex 4 1. (1) 4.
- (2) Both side confirmed items requisite for the notice of the bidding documents as follows:
  - To open Bank Account (Annex 4 1.(1) 2,
  - To issue the Authorization to Pay (Annex 4 1.(1) 3,
  - To secure budget, land acquisition, resettlement and compensation (Annex 4 1.(1) 5,
  - To implement social monitoring and submit results (Annex 4 1.(1) 6,
  - To secure and clear necessary lands (Annex 4 1.(1) 7,
  - To obtain the planning, zoning, building permit (Annex 4 1.(1) 8 , and
  - To clear, level and reclaim the sites (Annex 4 1. (1) 9.
- (3) With regard to exemption of customs duties, PWD/MIPU will submit the master list of imported materials and equipment prepared by the contractor to CIR (Customs and Inland Revenue) through DSPPAC (Department of Strategic Policy Planning and Aid Coordination), and receives the approval for tax exemption.
- (4) With regard to VAT (Value Added Tax), PWD/MIPU and DSPPAC supports to ensure that CIR provides tax exemption.
- (5) Removal or relocation of overhead and underground electric line and poles described in Annex 4 is undertaken by PWD/MIPU before the start of the construction.

8. Monitoring during the implementation

The Project will be monitored by the Executing Agency and reported to JICA by using the form of Project Monitoring Report (PMR) attached as Annex 5. The timing of submission of the PMR is described in Annex 4.

9. Project completion

Both sides confirmed that the project completes when all the facilities constructed and equipment procured by the grant are in operation. The completion of the Project will be reported to JICA promptly, but in any event not later than six months after completion of the Project.

## 10. Ex-Post Evaluation

JICA will conduct ex-post evaluation after three (3) years from the project completion, in principle, with respect to five evaluation criteria (Relevance, Effectiveness, Efficiency, Impact, and Sustainability). The result of the evaluation will be publicized. The Vanuatu side is required to provide necessary support for the data collection.

## 11. Items and measures to be considered for the smooth implementation of the Project

Both sides confirmed the items and measures to be considered for the smooth implementation of the Project as follows:

- Provision and ground temporary construction yard and stock yard,
- Provision of borrow pit and quarry site,
- Provision of disposal site,
- Land transfer,
- Relocation of overhead and underground electric line and pole,
- Environment process,
- Tax exemption and refund, and
- Acquisition of various permission for the construction.

## 12. Schedule of the Study

JICA will finalize the Preparatory Survey Report based on the confirmed items. The report will be sent to the Vanuatu side around December 2019.

## 13. Environmental and Social Considerations

### 13-1 General Issues

#### 13-1-1 Environmental Guidelines and Environmental Category

The Team explained that 'JICA Guidelines for Environmental and Social Considerations (April 2010)' (hereinafter referred to as "the Guidelines") is applicable for the Project. The Project is categorized as B because the Project is not considered as a large-scale road and bridge project, is not located in a sensitive area, and has none of the sensitive characteristics under the Guidelines, it is not likely to have significant adverse impact on the environment.

#### 13-1-2 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 6. Both sides confirmed that in case of major modification of the content of

the Environmental Checklist, the Vanuatu side shall submit the modified version to JICA in a timely manner.

### 13-2 Environmental Issues

#### 13-2-1 Environmental Impact Assessment (EIA)

Both sides confirmed the EIA report will be approved by the Department of Environmental Protection and Conservation (DEPC) by December 2019.

#### 13-2-2 Environmental Management Plan and Environmental Monitoring Plan

Both sides confirmed Environmental Management Plan (EMP) and Environmental Monitoring Plan (EMoP) of the Project is as Annex 7, respectively. Both side agreed that environmental mitigation measures and monitoring shall be conducted based on the EMP and the EMoP, which may be updated during the detailed design stage.

### 13-3 Social Issues

#### 13-3-1 Land Acquisition and Resettlement

Both sides confirmed the 1.2ha of land would be acquired, and the 1.0 ha of land would be leased and 1 household would be relocated due to the implementation of the Project. The process for land acquisition and resettlement should forward following Abbreviated Resettlement Action Plan to be prepared by PWD/MIPU and the Team.

### 13-4 Environmental and Social Monitoring

#### 13-4-1 Environmental Monitoring

Both sides agreed that the Vanuatu side will submit results of environmental monitoring to JICA by using the monitoring form attached as Annex 8. The timing of submission of the monitoring form is described in Annex 4.

#### 13-4-2 Information Disclosure of Monitoring Results

Both sides confirmed that the Vanuatu side will disclose results of environmental and social monitoring to local stakeholders through their website.

The Vanuatu side agreed JICA will disclose results of environmental and social monitoring submitted by the Vanuatu side as the monitoring forms attached as Annex 8 on its website.

### 14. Other Relevant Issues

#### 14-1. Disclosure of Information

Both sides confirmed that the Preparatory Survey Report from which project cost is excluded will be disclosed to the public after completion of the Preparatory Survey.

The comprehensive report including the project cost will be disclosed to the public after all the contracts under the Project are concluded.

#### 14-2. Measure against Over-loaded Vehicle

The Team repeated that overloaded trucks which exceed designed axle loads would cause early failure and shorter life and requested that the Vanuatu side will take proper measure for this issue.

#### 14-3. Safety Measure

To avoid accidents on site during the implementation of the Project, the Vanuatu side agreed to cause the consultant and the contractor to enforce safety measures such as setting safety assurance to the site, providing information for security control to public, and deploying adequate security personnel, based on” “The Guidance for the Management of Safety for Construction Works in Japanese ODA Projects” which has been published on JICA’s URL below.

[https://www.jica.go.jp/english/our\\_work/types\\_of\\_assistance/c8h0vm00008zx0m8-att/guidance\\_en.pdf](https://www.jica.go.jp/english/our_work/types_of_assistance/c8h0vm00008zx0m8-att/guidance_en.pdf)

#### 14-4. River Management

The Team explained that river management after this Project by the Vanuatu side for Teouma River would be important according to progress of future development in river basin since such development might affect the flow of Teouma river, and the Vanuatu side took note.

Annex 1 Project Cost Estimation

Annex 2 Japanese Grant

Annex 3 Project Implementation Schedule

Annex 4 Major Undertakings to be taken by the Government of Vanuatu

Annex 5 Project Monitoring Report (template)

Annex 6 Environmental Check List

Annex 7 Environmental Management Plan / Environmental Monitoring Plan

Annex 8 Environmental and Social Monitoring Form

Project Cost Estimation

CONFIDENTIAL

(1) Cost Borne by the Government of Japan

This Page is closed due to the confidentiality

(2) Cost Borne by the Government of the Republic of Vanuatu

Total initial cost : USD 0.682 million

- Bank Charges : USD 0.032 million
- Temporary Yard (Rental etc.) : USD 0.018 million
- Land acquisition, compensation : USD 0.233 million
- Entitlement Allowance : US\$ 0.007 million
- Compensation of structures, Trees and Crops : US\$ 0008
- Relocations of aerial and underground power cables : USD 0.372 million
- Annual Maintenance Cost for Bridge : USD 0.012

(3) Cost Estimation Condition

- Estimated date : May 2018
- Exchange rates : USD 1.00=JPY108.12
- Others : The project is carried out based on the Japanese Government's Grant Aid Scheme. The above cost estimate does not assure the ceiling cost on the E/N and will be reviewed by the Government of Japan before signing of the E/N between the two Governments.



## JAPANESE GRANT

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as "the Recipient") to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as "Project Grants").

### 1. Procedures of Project Grants

Project Grants are conducted through following procedures (See "PROCEDURES OF JAPANESE GRANT" for details):

(1) Preparation

- The Preparatory Survey (hereinafter referred to as "the Survey") conducted by JICA

(2) Appraisal

- Appraisal by the government of Japan (hereinafter referred to as "GOJ") and JICA, and Approval by the Japanese Cabinet

(3) Implementation

Exchange of Notes

- The Notes exchanged between the GOJ and the government of the Recipient

Grant Agreement (hereinafter referred to as "the G/A")

- Agreement concluded between JICA and the Recipient

Banking Arrangement (hereinafter referred to as "the B/A")

- Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as "the Bank") to receive the grant

Construction works/procurement

- Implementation of the project (hereinafter referred to as "the Project") on the basis of the G/A

(4) Ex-post Monitoring and Evaluation

- Monitoring and evaluation at post-implementation stage

### 2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of

relevant agencies of the Recipient necessary for the implementation of the Project.

- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

## (2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

## (3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

### 3. Basic Principles of Project Grants

#### (1) Implementation Stage

##### 1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as "the E/N") will be signed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the "General Terms and Conditions for Japanese Grant (January 2016)."

##### 2) Banking Arrangements (B/A) (See "Financial Flow of Japanese Grant (A/P Type)" for details)



a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.

b) The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

### 3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

### 4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

### 5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", in principle.

### 6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICA in order to be verified as eligible for using the Japanese Grant.

### 7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

### 8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

### 9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as



followings:

- a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.
- b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

- 1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.
- 2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

4) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.



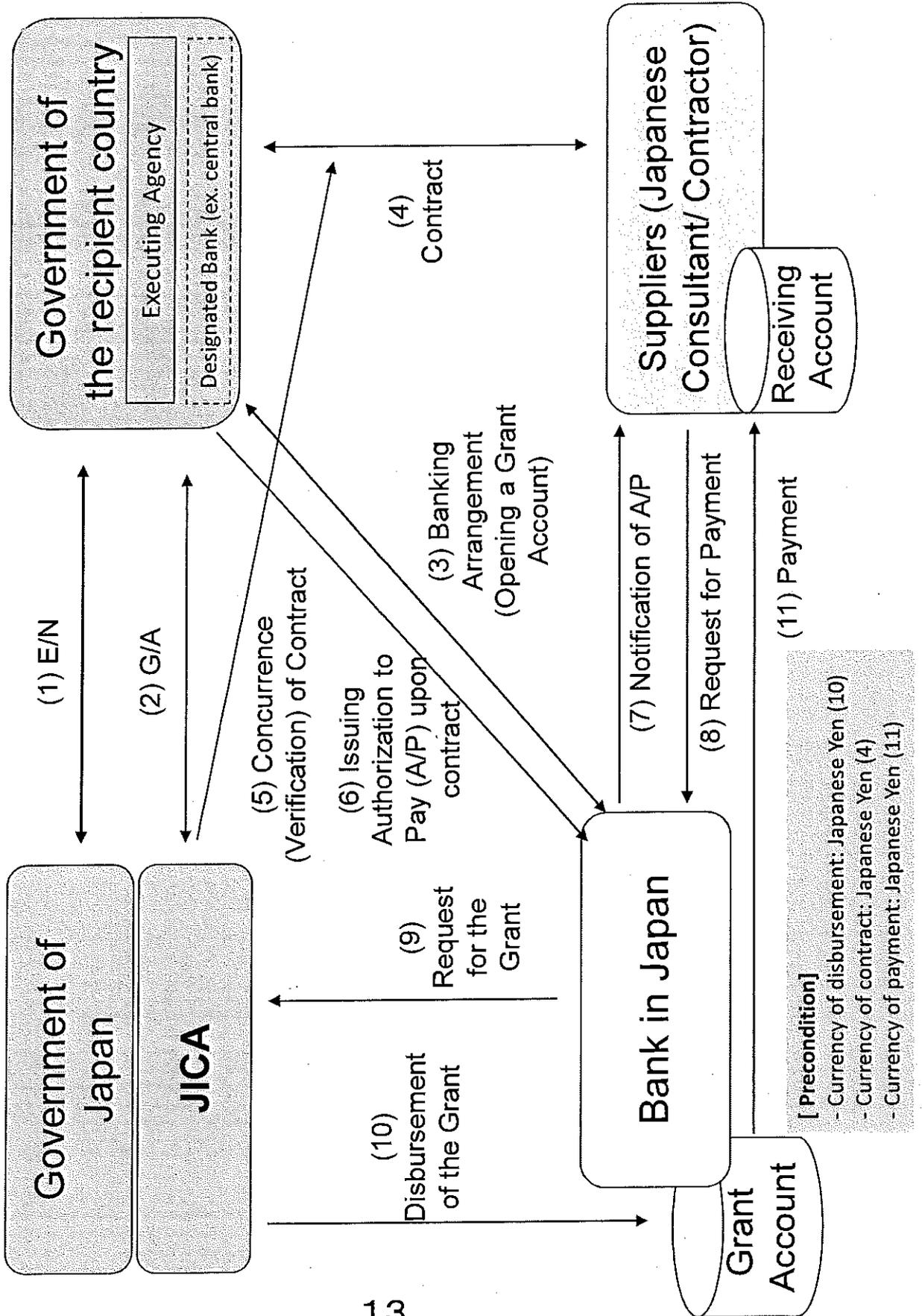
## PROCEDURES OF JAPANESE GRANT

Stage	Procedures	Remarks	Recipient Government	Japanese Government	JICA	Consultants	Contractors	Agent Bank
Official Request	Request for grants through diplomatic channel	Request shall be submitted before appraisal stage.	x	x				
1. Preparation	(1) Preparatory Survey Preparation of outline design and cost estimate		x		x	x		
	(2) Preparatory Survey Explanation of draft outline design, including cost estimate, undertakings, etc.		x		x	x		
2. Appraisal	(3) Agreement on conditions for implementation	Conditions will be explained with the draft notes (E/N) and Grant Agreement (G/A) which will be signed before approval by Japanese government.	x	x (E/N)	x (G/A)			
	(4) Approval by the Japanese cabinet			x				
3. Implementation	(5) Exchange of Notes (E/N)		x	x				
	(6) Signing of Grant Agreement (G/A)		x		x			
	(7) Banking Arrangement (B/A)	Need to be informed to JICA	x					x
	(8) Contracting with consultant and issuance of Authorization to Pay (A/P)	Concurrence by JICA is required	x			x		x
	(9) Detail design (D/D)		x			x		
	(10) Preparation of bidding documents	Concurrence by JICA is required	x			x		
	(11) Bidding	Concurrence by JICA is required	x			x	x	
	(12) Contracting with contractor/supplier and issuance of A/P	Concurrence by JICA is required	x				x	x
4. Ex-post monitoring & evaluation	(13) Construction works/procurement	Concurrence by JICA is required for major modification of design and amendment of contracts.	x			x	x	
	(14) Completion certificate		x			x	x	
	(15) Ex-post monitoring	To be implemented generally after 1, 3, 10 years of completion, subject to change	x		x			
	(16) Ex-post evaluation	To be implemented basically after 3 years of completion	x		x			

notes:

1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.
2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.

# Financial Flow of Japanese Grant (A/P Type)



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Project Implementation Schedule

Item		Months of DD/TA							Months of Construction																									
		1	2	3	4	5	6	7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Detail Design and Tender Assistance Stage	Detailed design /Preparation of tender document	Field Survey																																
	Approval of detail design /approval of tender document	Work in Japan																																
	PO/Tender/Evaluation	●							T/N																									
	Construction contract agreement	●							V/C																									
Item																																		
Construction Stage	Construction								Preparation/Procurement																									
	Construction, Hand over								Construction																									
									Dejour/Road Construction Dejour/Road Construction Bridge Construction River Improvement Work Approach Road Removal of Detour Road River Improvement Work Clean up/hand over																									

Legend T/N : Tender Notice

V/C : Verification of Contract

## Major Undertakings to be taken by the Government of Vanuatu

**1. Specific obligations of the Government of Vanuatu which will not be funded with the Grant**

## (1) Before the Bidding

No.	Items	Deadline	In charge	Cost (US\$)	Ref.
1	To approve IEE/EIA (Conditions of approval should be fulfilled, if any) and secure the necessary budget for implementation of countermeasures obligated in the IEE/EIA.	before signing of the G/A	DEPC	1,000	
2	To open Bank Account (Banking Arrangement (B/A))	within 1 month after signing of the G/A	MOF/RBV		
3	To issue the Authorization to Pay (A/P) to a bank in Japan (the Agent Bank) for the payment to the Consultant	within 1 month after signing of the contract with the consultant	MOF/RBV	3,000	
4	To approve Abbreviated Resettlement Action Plan	before signing of the G/A	PWD/MIPU		
5	To secure the necessary budget and implement land acquisition and resettlement (including preparation of resettlement sites), and compensation with full replacement cost in accordance with RAP	before notice of the bidding document(s)	PWD/MIPU	237,800	
6	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	till land acquisition and resettlement complete	PWD/MIPU		
7	To secure and clear the following lands 1) right of way for the Project 2) temporary construction yard and stock yard near the Project area 3) diversion route for the existing road 4) borrow pit and disposal site near the Project area	before notice of the bidding document(s)	PWD/MIPU and related agencies	29,000	
8	To obtain the planning, zoning, building permit	before notice of the bidding document(s)	PWD/MIPU and related agencies		
9	To clear, level and reclaim the sites, which will be confirmed in the draft final report (All costs for relocation of utilities such as power lines, communication lines and demolition of obstacles such as fence etc. are included)	before notice of the bidding document(s)	PWD/MIPU and related agencies	372,000	
10	To submit Project Monitoring Report (with the result of Detailed Design (DD))	before preparation of bidding document(s)	PWD/MIPU		

Note : DEPC - Department of Environmental Protection and Conservation

MOF - Ministry of Finance

RBV - Reserve Bank of Vanuatu

PWD - Public Works Department

MIPU - Ministry of Infrastructure and Public Utilities

DSPPACC – Department of Strategic Policy Planning and Aid Coordination

CIR – Customs and Inland Revenue

MOL – Ministry of Land

## (2) During the Project Implementation

No.	Items	Deadline	In charge	Cost (US\$)	Ref.
1	To issue A/P(s) to the Agent Bank in Japan for the payment(s) to the Supplier(s)	within 1 month after signing of the contract(s)	MOF/RBV		
2	To bear the following commissions to the Agent Bank in Japan for the banking services based upon the B/A	during the Project	MOF/RBV	32,300	
	1) Advising commission of A/P	within 1 month after signing of the contract(s)	MOF/RBV		
	2) Payment commission for A/P	every payment	MOF/RBV		
3	To ensure prompt customs clearance and to assist the Supplier(s) with internal transportation in the country of the Recipient	During the Project	DSPPAC/CIR and related agencies		
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	PWD/MIPU		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted	during the Project	DSPPAC/CIR		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	PWD/MIPU		
7	1) To submit Project Monitoring Report	every month	PWD/MIPU		
	2) To submit Project Monitoring Report (Final)	within one month after signing of Certificate of Completion of the Work under the contract(s)	PWD/MIPU		
8	To submit a report concerning completion of the Project	within six months after completion of the Project	PWD/MIPU		
9	To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Project outside the site(s)				
	1) Electricity The distributing line to the temporary site	before start of the construction	PWD/MIPU and related agencies		
	2) Water Supply The city water distribution main to the temporary site	before start of the construction	PWD/MIPU and related agencies		
	3) Primary Electric Power Source Primary electrical power source up to the distribution boards. (Approx. 8 sources are required)		PWD/MIPU		

No.	Items	Deadline	In charge	Cost (US\$)	Ref.
10	To take necessary measure for safety construction - traffic control - public notifications - Securing safety for personnel involved in the Project	during the construction	PWD/MIPU and related agencies		
11	To implement Environmental Management Plan (EMP) and Environmental Monitoring Plan (EMoP)	during the construction	PWD/MIPU		
12	To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	during the construction	PWD/MIPU		
13	To implement RAP (livelihood restoration program, if needed)	for a period based on livelihood restoration program	MOL, PWD and related agencies		
14	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report - Period of the monitoring may be extended if affected persons' livelihoods are not sufficiently restored. Extension of the monitoring will be decided based on agreement between MIPU and JICA.	until the end of livelihood restoration program (In case that livelihood restoration program is provided)	PWD/MIPU		

## (3) After the Project

No.	Items	Deadline	In charge	Cost	Ref.
1	To implement EMP and EMoP	for a period based on EMP and EMoP	PWD /MIPU		
2	To submit results of environmental monitoring to JICA, by using the monitoring form, semi-annually - The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between MIPU and JICA.	for three years after the Project	PWD /MIPU		
4	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance of structure 3) Routine check/Periodic inspection	After completion of the construction	DWD /MIPU	12,000 (Annual)	

## 2. Other obligations of the Government of Vanuatu funded with the Grant

No.	Items	Deadline	Amount (Million Japanese Yen)*
1	To construct bridge, river embankment and approach road including the following transportation 1) Marine(Air ) transportation of the products from Japan to the recipient country 2) Internal transportation from the port disembarkation to the project site	during the construction	
2	To implement detailed design, tender support and construction supervision(Consulting Service )		
3	Contingencies		
	Total		

\*The Amount is provisional. This is subject to the approval of the Government of Japan. This page is closed due to the confidentiality.

**Project Monitoring Report**  
**on**  
**Project Name**  
**Grant Agreement No. XXXXXXXX**  
 20XX, Month

**Organizational Information**

<b>Signer of the G/A (Recipient)</b>	Person in Charge (Designation) _____ Contacts _____ Address: _____ Phone/FAX: _____ Email: _____
<b>Executing Agency</b>	Person in Charge (Designation) _____ Contacts _____ Address: _____ Phone/FAX: _____ Email: _____
<b>Line Ministry</b>	Person in Charge (Designation) _____ Contacts _____ Address: _____ Phone/FAX: _____ Email: _____

**General Information:**

<b>Project Title</b>	
<b>E/N</b>	Signed date: Duration:
<b>G/A</b>	Signed date: Duration:
<b>Source of Finance</b>	Government of Japan: Not exceeding JPY _____ mil. Government of (_____): _____

## 1: Project Description

### 1-1 Project Objective

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### 1-2 Project Rationale

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

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### 1-3 Indicators for measurement of "Effectiveness"

Quantitative indicators to measure the attainment of project objectives		
Indicators	Original (Yr )	Target (Yr )
Qualitative indicators to measure the attainment of project objectives		

## 2: Details of the Project

### 2-1 Location

Components	Original <i>(proposed in the outline design)</i>	Actual
1.		

### 2-2 Scope of the work

Components	Original* <i>(proposed in the outline design)</i>	Actual*
1.		

Reasons for modification of scope (if any).

(PMR)

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**2-3 Implementation Schedule**

Items	Original		Actual
	<i>(proposed in the outline design)</i>	<i>(at the time of signing the Grant Agreement)</i>	

Reasons for any changes of the schedule, and their effects on the project (if any)

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**2-4 Obligations by the Recipient**

**2-4-1 Progress of Specific Obligations**

See Attachment 2.

**2-4-2 Activities**

See Attachment 3.

**2-4-3 Report on RD**

See Attachment 11.

**2-5 Project Cost**

**2-5-1 Cost borne by the Grant(Confidential until the Bidding)**

Components			Cost (Million Yen)	
	Original <i>(proposed in the outline design)</i>	Actual <i>(in case of any modification)</i>	Original <sup>1),2)</sup> <i>(proposed in the outline design)</i>	Actual
1.				
Total				

Note: 1) Date of estimation:

2) Exchange rate: 1 US Dollar = Yen

**2-5-2 Cost borne by the Recipient**

Components			Cost (1,000 Taka)	
	Original <i>(proposed in the outline design)</i>	Actual <i>(in case of any modification)</i>	Original <sup>1),2)</sup> <i>(proposed in the outline design)</i>	Actual
1.				

- Note: 1) Date of estimation:  
 2) Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

(PMR)

**2-6 Executing Agency**

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

**Original** (at the time of outline design)  
 name:  
 role:  
 financial situation:  
 institutional and organizational arrangement (organogram):  
 human resources (number and ability of staff):

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**Actual** (PMR)

**2-7 Environmental and Social Impacts**

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- The results of social monitoring based on in Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

**3: Operation and Maintenance (O&M)**

**3-1 Physical Arrangement**

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spareparts, etc.)

**Original** (at the time of outline design)

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**Actual** (PMR)

**3-2 Budgetary Arrangement**

- Required O&M cost and actual budget allocation for O&M

**Original** (at the time of outline design)

Actual (PMR)

#### 4: Potential Risks and Mitigation Measures

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

##### Assessment of Potential Risks (at the time of outline design)

Potential Risks	Assessment
1. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
2. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
3. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:

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	Contingency Plan (if applicable):
<b>Actual Situation and Countermeasures</b>	
(PMR)	

## 5: Evaluation and Monitoring Plan (after the work completion)

### 5-1 Overall evaluation

Please describe your overall evaluation on the project.

### 5-2 Lessons Learnt and Recommendations

Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

### 5-3 Monitoring Plan of the Indicators for Post-Evaluation

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

✓

✓

## Attachment

1. Project Location Map
  2. Specific obligations of the Recipient which will not be funded with the Grant
  3. Monthly Report submitted by the Consultant
- Appendix - Photocopy of Contractor's Progress Report (if any)
- Consultant Member List
  - Contractor's Main Staff List
4. Check list for the Contract (including Record of Amendment of the Contract/Agreement and Schedule of Payment)
  5. Environmental Monitoring Form / Social Monitoring Form
  6. Monitoring sheet on price of specified materials (Quarterly)
  7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final) only)
  8. Pictures (by JPEG style by CD-R) (PMR (final) only)
  9. Equipment List (PMR (final) only)
  10. Drawing (PMR (final) only)
  11. Report on RD (After project)



Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

Items of Specified Materials		Initial Volume A	Initial Unit Price (¥) B	Initial total Price C=A×B	1% of Contract Price D	Condition of payment Price (Decreased) E=C-D	Price (Increased) F=C+D
1	Item 1	●●t	●	●	●	●	●
2	Item 2	●●t	●	●	●		
3	Item 3						
4	Item 4						
5	Item 5						

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

Items of Specified Materials		1st month, 2015	2nd month, 2015	3rd month, 2015	4th	5th	6th
1	Item 1	●	●	●			
2	Item 2						
3	Item 3						
4	Item 4						
5	Item 5						

(3) Summary of Discussion with Contractor (if necessary)

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Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)  
 (Actual Expenditure by Construction and Equipment each)

	Domestic Procurement (Recipient Country) A	Foreign Procurement (Japan) B	Foreign Procurement (Third Countries) C	Total D
Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Direct Construction	(A/D%)	(B/D%)	(C/D%)	
Cost others	(A/D%)	(B/D%)	(C/D%)	
Equipment Cost	(A/D%)	(B/D%)	(C/D%)	
Design and Supervision Cost	(A/D%)	(B/D%)	(C/D%)	
Total	(A/D%)	(B/D%)	(C/D%)	

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The Project for the Disaster Restoration of Teouma Bridge in Vanuatu

Environmental Checklist: 12. Bridges + 7. Roads + 11. River and Sand Erosion Control

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	Corresponding Category (base sheet: 12. Bridges)
1 Permits and Explanation	(1) EIA and Environmental Permits	(a) Have EIA reports been already prepared in official process? (b) Have EIA reports been approved by authorities of the host country's government? (c) Have EIA reports been unconditionally approved? if conditions are imposed on the approval of EIA reports, are the conditions satisfied? (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?	(a) N (b) N (c) N (d) N	(a) PWD submitted the application for EIA in April, 2018, and DEPC issued ToR in June, 2018. (b) EIA report will be submitted for the review by DEPC in April, 2018. (c) Nothing special. (d) Necessary permits are identified at the time of the EIA survey, and these permits will be got before the start of the construction work	
	(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? (b) Have the comment from the stakeholders (such as local residents) been reflected to the project design?	(a) Y (b) Y	(a) At the time of the data collection survey, a consultation meeting with local stakeholders was organized. During the scoping stage, two consultation meetings were organized and two more meetings were organized before the baseline survey started and after draft EIA report was prepared. (from May to December, 2018) (b) Comments from the consultation meetings were reflected into the plan of the EIA survey and the project plan.	
	(3) Examination of Alternatives	(a) Have alternative plans of the project been examined with social and environmental considerations?	(a) Y	(a) The alternatives of bridge designs, river improvement, and road alignment were examined, with social and environmental considerations.	
2 Pollution Control	(1) Air Quality	(a) Is there a possibility that air pollutants emitted from the project related sources, such as vehicles traffic will affect ambient air quality? Does ambient air quality comply with the country's air quality standards? Are any mitigating measures taken? (b) If air quality already exceed country's standards near the route, is there a possibility that the project will make air pollution worse?	(a) Y/N (b) Y/N	(a) Dust caused by construction work is one of the main pollutants, but watering and covering of soils with sheets could mitigate it. Emission gas from vehicles would also cause air pollution, but the number and total working hours of heavy vehicles and machines are limited and the air quality level will not exceed the standards. (b) The current air quality level is good.	

## Environmental Checklist: 12. Bridges + 7. Roads + 11. River and Sand Erosion Control

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	Corresponding Category (base sheet: 12. Bridges)
2 Pollution Control	(2) Water Quality	(a) Is there a possibility that soil runoff from the bare lands resulting from earthmoving activities, such as cutting and filling will cause water quality degradation in downstream water areas?	(a) Y/N	(a) Necessary measures such as soil compaction and enforcement, are taken and there will be no soil erosion from cutting slopes and embankment, so water quality in lower reach of the river won't be worsened after the construction work	7. Roads
		(b) Is there a possibility that the project will contaminate water sources, such as well water?	(b) N	(b) There are no excavation works which dig a deep hole to reach to the underground water vein or damages to water in a well.	
	(3) Noise and Vibration	(b) Is there a possibility that surface runoff from roads will contaminate water sources, such as groundwater?	(a) N (b) N	(b) Since no underground water sources are identified inside/near the construction site, there is no risk of ground water contamination. (c) No facilities such as parking and service areas are planned to be constructed.	
		(a) Do noise and vibrations from the vehicle and train traffic comply with the country's standards? (b) Do low frequency sound from the vehicle and train traffic comply with the country's standards?	(a) N (b) N	(a) The project will not change the volume of water flow. (a) There are no noise level standards in Vanuatu. The noise level will not exceed the Japanese standards. (b) There are no standards and regulations of low-frequency wave, but there is little generation of low-frequency wave caused by traffic vehicles.	
(4) Waste	(a) Are wastes generated from the project facilities, such as parking areas/service areas, properly treated and disposed of in accordance with the country's regulations?	(a) N	(a) These kinds of facilities will not be constructed and no waste will be generated.	7. Roads	
	(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) Y	(a) Construction waste, such as excavated soil and concrete debris, will be reused as much as possible, if they are not contaminated by chemicals and others. The rest of the waste will be disposed of at the existing disposal site approved by DEPC.	11. River and Sand Erosion Control	

**Environmental Checklist: 12. Bridges + 7. Roads + 11. River and Sand Erosion Control**

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	Corresponding Category (base sheet: 12. Bridges)
2 Pollution Control	(5) Ground 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) 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) N	(a) The area of the excavation work for the pier construction is limited and this will not affect the ground subsidence.	11. River and Sand Erosion Control
3 Natural Environment	(1) Protected Areas	(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) Are adequate protection measures taken to prevent impacts, such as disruption of migration routes, habitat fragmentation, and traffic accident of wildlife and livestock? (e) Is there a possibility that installation of bridges and access roads will cause impacts, such as destruction of forest, poaching, desertification, reduction in wetland areas, and disturbance of ecosystems due to introduction of exotic (non-native invasive) species and pests? Are adequate measures for preventing such impacts considered?	(a) N (b) N (c) Y (d) Y (e) N	(a) No protected areas are identified inside and around the project area.	
	(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) Are adequate protection measures taken to prevent impacts, such as disruption of migration routes, habitat fragmentation, and traffic accident of wildlife and livestock? (e) Is there a possibility that installation of bridges and access roads will cause impacts, such as destruction of forest, poaching, desertification, reduction in wetland areas, and disturbance of ecosystems due to introduction of exotic (non-native invasive) species and pests? Are adequate measures for preventing such impacts considered?	(a) N (b) N (c) Y (d) Y (e) N	(a) No important habitats are identified inside and around the project area. (b) ditto (c) No serious impact is expected but necessary measures, such as conserving top soil and protecting animals/birds during the site-clearance, will be taken. (d) The ring road is used as a route for livestock such as cattle to move to/from the grazing land. During the construction work, necessary measures such as notice/warning to attract attentions are taken. (e) Since the project aims at replacing the old bridge with the new one, not constructing a new bridge, the project is not expected to disturb the native eco-system at the project site.	
	(3) Hydrology	(a) Is there a possibility that hydrologic changes due to the installation of structures will adversely affect surface water and groundwater flows?	(a) N	(a) Under the project, the river improvement work will be implemented along with the replacement of the old bridge with the new one, as a part of disaster prevention measures. This would improve the river flow but change the river channel downstream a little bit. Proper land use such as restriction of houses near the	7. Roads 11. River and Sand Erosion Control

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**Environmental Checklist: 12. Bridges + 7. Roads + 11. River and Sand Erosion Control**

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	Corresponding Category (base sheet: 12. Bridges)
3 Natural Environment	(4) Topography and Geology	<p>(a) Is there any soft ground on the route that may cause slope failures or landslides? Are adequate measures considered to prevent slope failures or landslides, where needed?</p> <p>(b) Is there a possibility that civil works, such as cutting and filling will cause slope failures or landslides? Are adequate measures considered to prevent slope failures or landslides?</p> <p>(c) Is there a possibility that soil runoff will result from cut and fill areas, waste soil disposal sites, and borrow sites? Are adequate measures taken to prevent soil runoff?</p>	(a) N (b) Y (c) N	<p>river is promoted.</p> <p>(a) There will be a risk of landslide at the installation parts of the bridge at the both sides of the river, but the area is very limited and countermeasures such as soil compaction and enforcement can prevent landslide.</p> <p>(b) During the river bank protection work, excavated soil could run-off into the river. Necessary measures such as earth-retaining fence and guard net will be taken.</p> <p>(c) Installation of retaining wall at the river bank and flood control measures at the bridge attaching part could prevent soil from running off into the river from the construction area.</p>	
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 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, the 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</p>		<p>(a) One household needs to be resettled for the construction of the detour, but there is a relocation site near.</p> <p>(b) Consultation meetings were organized in order to explain all the stakeholders about the project, survey method, and compensation systems, and PAHs agreed with the project and compensation policy and methods.</p> <p>(c) Compensation policy and plan is established under the RAP</p> <p>(d) Compensation payment will be arranged before the start of the construction work.</p> <p>(e) Targets of compensation, eligibility criteria and the contents of compensation will be shown in the Entitle Matrix</p> <p>(f) Considerations will be paid for vulnerable groups.</p> <p>(g) Agreements with the affected people will be obtained and compensation will be paid prior to resettlement.</p> <p>(h) The RAP, which was prepared according to the Vanuatu laws and JIC guideline/WB OP 4.12, proposes the resettlement implementation system and necessary budget.</p>	

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**Environmental Checklist: 12. Bridges + 7. Roads + 11. River and Sand Erosion Control**

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	Corresponding Category (base sheet: 12. Bridges)
		<p>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>		<p>(i) The RAP shows the monitoring plan.</p> <p>(j) The grievance redress mechanism is proposed and will be established. Necessary cost for grievance redress mechanism is also calculated and presented in the RAP."</p>	
4 Social Environment	(2) Living and Livelihood	<p>(a) Where bridges and access roads are newly installed, is there a possibility that the project will affect the existing means of transportation and the associated workers? Is there a possibility that the project will cause significant impacts, such as extensive alteration of existing land uses, changes in sources of livelihood, or unemployment? Are adequate measures considered for preventing these impacts?</p> <p>(b) Is there any possibility that the project will adversely affect the living conditions of the inhabitants other than the target population? Are adequate measures considered to reduce the impacts, if necessary?</p> <p>(c) Is there any possibility that diseases, including infectious diseases, such as HIV will be brought due to immigration of workers associated with the project? Are adequate considerations given to public health, if necessary?</p> <p>(d) Is there any possibility that the project will adversely affect road traffic in the surrounding areas (e.g., increase of traffic congestion and traffic accidents)?</p> <p>(e) Is there any possibility that project will impede the movement of inhabitants?</p> <p>(f) Is there any possibility that bridges will cause a sun shading and radio interference?</p>	(a) N (b) N (c) N (d) N (e) N (f) N	<p>(a) The location of the bridge and access road will be the same as the existing one and there will be little impact on existing means of transportation and associated workers</p> <p>(b) The construction of the new bridge could secure normal traffic even at the disasters, and the project has no adverse effect on their living conditions.</p> <p>(c) Workers will be employed locally and no immigrants will be expected.</p> <p>(d) The traffic congestions will be generated temporarily during the construction work, but once the construction work finishes, the traffic flow will be back to normal.</p> <p>(e) The movement of inhabitants would be better with the new bridge and improved access road</p> <p>(f) The grinder height is elevated from 6.8m to 8.9m, but no houses are located very near from the bridge and problems such as sun shading or radio interference are not expected.</p>	
	(3) Heritage	<p>(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</p>	(a) N	(a) No such facilities are identified in the project area.	

**Environmental Checklist: 12. Bridges + 7. Roads + 11. River and Sand Erosion Control**

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	Corresponding Category (base sheet: 12. Bridges)
4 Social Environment		the country's laws?			
	(4) Landscape	(a) Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken?	(a) N	(a) There are no places which landscapes needed to be protected inside the project area.	
	(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 respected?	(a) Y (b) Y	(a) Ethnic minorities and indigenous peoples are not confirmed in the Project area, but consideration will be given to local culture and life style. (b) For the acquisition of customary land, considerations will be given to related rights.	
5 Others	(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 individuals involved, or local residents?	(a) Y (b) Y (c) Y (d) Y	(a) Securing of working condition is implemented according to the related Vanuatu laws and international rules such as OHSAS. (b) Measures are taken to oblige workers to wear safety boots and helmets and to manage waste properly, in order to prevent accidents during the construction work (c) The safety and sanitation plan will be planned and regular safety education will be implemented in order to strengthen safety (d) Security guards, who are provided with training of health and safety, are assigned and measures are taken such as installation of fence and signboards in order to prevent accidents and troubles involving local residents near the construction site.	
	(1) Impacts during Construction	(a) Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and wastes)? (b) If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce impacts? (c) If construction activities adversely affect the social environment, are adequate measures considered to	(a) Y (b) Y (c) Y	(a) Based on the baseline survey, the impacts of the project were be evaluated and mitigation measures are planned. (b) ditto (c) ditto	

**Environmental Checklist: 12. Bridges + 7. Roads + 11. River and Sand Erosion Control**

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	Corresponding Category (base sheet: 12. Bridges)
5 Others	(2) Monitoring	<p>reduce impacts?</p> <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>	<p>(a) Y</p> <p>(b) Y</p> <p>(c) Y</p> <p>(d) Y</p>	<p>(a) The environmental monitoring plan is prepared for target items that are considered to have potential impacts, and will be implemented.</p> <p>(b) The monitoring items, feasible monitoring methods and frequency will be decided in consultation with the environmental authorities, referring to monitoring plans of similar projects.</p> <p>(c) The monitoring system is established through the EIA survey</p> <p>(d) The reporting system is established through the EIA survey.</p>	
6 Note	Reference to Checklist of Other Sectors	<p>(a) Where necessary, pertinent items described in the Roads, Railways and Forestry Projects checklist should also be checked (e.g., projects including large areas of deforestation).</p> <p>(b) Where necessary, pertinent items described in the Power Transmission and Distribution Lines checklist should also be checked (e.g., projects including installation of power transmission lines and/or electric distribution facilities).</p> <p>(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).</p>	<p>(a) N/Y</p> <p>(b) N</p>	<p>(a) Large scale logging is not included in the project components, since low trees and weeds are main vegetation along the road side and riverbank.</p> <p>(b) The construction of transmission-transformation facility and power distribution station is not included in the project components.</p>	
	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) N	(a) The project does not have possibility of significant adverse impacts on environment.	

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 are 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.

**The Project for the Disaster Restoration of Teouma Bridge in Vanuatu  
Environmental Management Plan/ Environmental Monitoring Plan**

Environmental items	Monitoring item	Parameter /Indicator	Location	Frequency	Responsible	Budget
<b>Pre-construction and site mobilization phase</b>						
Land expropriation, compensation payment and other support	Compensation for land and structure lost	Number of structures expropriated Area of land expropriated	Project area	Once before construction	PWD	RAP monitoring
	Complaints resolutions	GRM log book	Project area		DOL	RAP monitoring
Ecosystem	Site clearance activities	Approval of cutting trees Record of site clearance Records of waste disposal (Bouffa)				
Air pollution/ noise & vibrations	Equipment and automobiles with less emission gas and noise	Number of Automobiles with certification on site		As appropriate	Contractor	No cost applicable to monitor.
Soil erosion	Source of construction materials such as soil and stones	Permit of quarry		once		No cost
<b>Construction phase</b>						
Accident and incident	Complaint (in general such as noise, traffic jam, and accidents)	Records of complaints	Project area		Contractor PWD	Construction cost
Air Pollution	Equipment and automobiles in good shape	Regular inspection and maintenance (daily check sheet)	Project area	Daily	Contractor	No cost applicable to monitor.
	Air quality	Level of dust: observed by contractor Observed by community (community survey)	Project area	Daily  Quarterly	Contractor	Construction cost  USD 2,000
	Mitigation measures such as spraying of water, washing tires, covering loaded materials	Records on water spray/ washing	Project area	Daily	Contractor	Construction cost
Water pollution	Surface water quality	temperature, pH, EC (by portable water quality meter) oil & grease (observation)	Upper site/ lower site of the river	Weekly	Contractor	US\$ 2,000
	Mitigation measures	Records of mitigation activities	Project area	Daily	Contractor	Construction cost

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Environmental items	Monitoring item	Parameter /Indicator	Location	Frequency	Responsible	Budget
Noise and vibrations	Restriction of noise/vibration emitting activities to working hours.	Noise level by portable noise meter Observed by community (community survey)	Project area	At the time of earth works  Quarterly	Contractor	US\$ 1,000  (Along with air pollution)
Soil pollution	Check prevention measures of oil contamination	Prevention measures are done or not (based on daily check sheet)	Project area	Monthly	Contractor	Construction cost
Soil erosion	Check the conditions of river bank	Conditions (Record of conditions)	Project area	Monthly	Contractor	Construction cost
Waste	Management of excavated soil, concrete debris and others	Proper storage nor not (waste management check sheet) Reuse (waste management check list)	Project area	Monthly	Contractor	Construction cost
	Management of general waste	Records of waste disposal	Project area	Monthly	Contractor	Construction cost
Bottom sediment/ Ecosystem	Mitigation measures	Mitigation measures are done or not (Records of mitigation measures)	Project area	Monthly	Contractor	Construction cost
Work conditions	Occupational Safety and Health plan	Availability of OHS Plan		Monthly	Contractor	Construction cost
	Meetings and trainings	Number of meetings and trainings				
	Safety goods for workers	Number of workers with safety gear				
	Noise and vibrations	(from noise and vibrations)				
	Occurrence of accidents and injuries	Records of accident and injuries	Project area	Monthly		
Accident/ Traffic congestions	Traffic management Plan	Availability of TMP	Project area	Monthly	Contractor	Construction cost
	Implementation of TMP	Availability of guard, signboard, and so on (activity records)	Project area	Monthly	Contractor	Construction cost
Water use	Mitigation measures of water quality	(from water pollution)				Construction cost

Environmental items	Monitoring item	Parameter /Indicator	Location	Frequency	Responsible	Budget
	Conditions of place to fetch water	Observation by the Contractor Observed by community (community survey)	Project area	Monthly Quarterly	Contractor or community	Construction cost (along with air pollution)
Local economy	Local economy (sales, employment, and so on)	Observed by community (community survey)	Communities near the project area	Quarterly		(along with air pollution)
Operation phase						
Accident	Number of accident Prevention measures			Monthly	PWD	Operational cost
Hydrology/ Soil Erosion	River channel downstream			One a year	PWD	Operational cost
	<b>Total cost for monitoring</b>					<b>USD 5,000</b>

## The Project for the Disaster Restoration of Teouma Bridge in Vanuatu Environmental and Social Monitoring Form

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

Monitoring Item	Monitoring Results during Report Period
Number and contents of formal comments made by the public	
Number and contents of responses from Government agencies	

### 2. Pollution

#### 1) Air Quality

Item	Unit	Situations of Dust Based on the observation	Measurement Point	Frequency
Dust	-	1. good 2. Acceptable level 3. bad	Construction site	Daily

#### 2) Surface Water Quality

Item	Unit	Down-stream	Main point	Up-stream	Country Standards	Standards for Contract	Referred National Standards	Frequency
pH	-				-	6.5-9.5	WHO Guideline	weekly
Temperature	degree				-	<3		
Turbidity	NTU				-	≤2	standards for tap water in japan	
DO	mg/l				-	≥7.5	rivers categorized as AA, which water can be used as drinking water with simple filtering method in Japan	
Oil & grease	Yes/No				-	observed		

#### Result of the baseline survey and standards

Analysis	Sample 1	Sample 2	Sample 3	Unit	Standard
pH	8.03	8.01	8.27		>6.5 & <9.5 (NF T 90-008)
Turbidity	2.74	1.98	0.5	NTU	(≤2 standards for tap water in japan)
Conductivity	455	462	457	μS/cm	

Source: Baseline survey (JICA study)

#### 3) Noise and Vibrations

Item	Unit	Measured Value (mean)	Measured Value (Max)	Country Standards	Standards for Contract	Referred International Standards	Measurement Point	Frequency
Noise LAeq	dB(A)					70 (Japan)	Construction site/edge of the construction area (near houses)	Monthly
Vibrations	dB(A)					75 (Japan)	Construction site/edge of the construction area (near houses)	Monthly

#### Ambient noise standards in Japan

Area/Time Zone	Daytime (6:00-22:00)	Night (20:00-6:00)
Residential area	55 dB or less	45 dB or less
Commercial area	70 dB or less	60 dB or less
Residential area along the main road with 2 or more than 2 lanes each way	60 dB or less	55 dB or less
Commercial area along the main road with 2 or more than 2 lanes each way	65 dB or less	60 dB or less

#### Result of the baseline survey

No	Area	Time During Day (hours)	Limits, dB(a)
1.			
2.			

#### 4) Waste (Construction waste)

Date:                      Item: Waste Management                      Mark: "✓" if management is done as required

Location	Kind of waste	Volume of waste (m3)	Final disposal or reuse	Stored at designated place	Waste separation	Remark

## 5) Mitigation measures

Date:                      Mark: "✓" if mitigation measure is done

No	Item	Monitoring Site	Mitigation measure is done or not Conditions of facilities	Remarks
1	Check the conditions of vehicles (dust control)			
2	Watering (dust control)			
3	Covering truck load with a sheet (dust control)			
4	Using oil pan (water/soil pollution prevention)			
5	Temporary cofferdam			
6	Sedimentation pond/drainage			

## 3. Natural Environment

## 1) Biota and ecosystems

Item	Monitoring Results during Report Period	Measures to be Taken	Frequency
Clearance activities (visual inspection)			Weekly
Management of top soil (visual inspection)			Weekly

## 2) Hydrological Situation

Item	Monitoring Results during Report Period	Measures to be Taken	Frequency
Impact of construction work on steep slope (visual inspection)	Soil erosion		Weekly




**4. Social Environment**

1) Land acquisition  
 Pre-Construction phase  
 Resettlement, Land expropriation, and compensation for assets and crops (monthly report)

Item	Planned Total	Unit	2020.1		2020.2		2020.3		Expected completion date	Responsible organization
			Qty	%	Qty	%	Qty	%		
1.Update PAPs list and Final Asset Valuation										DOL
1-1 Identification of final PAHs*	8	HH								
	148	Business								
1-2 Announcement to Affected people	2	Time								
1-3 Inventory survey and final cost estimation for expropriation	1	Time								
1-4 Consultation meeting times	4	Time								
1-5 Agreement signed by PAHs*	8	HH								
	148	Business								
2. Progress of resettlement										
2-1 Resettlement of household		HH								
3. Progress of land acquisition										DOL
3-1 Permanent land acquisition Customary land	8,438	m2								
3-2 Permanent land acquisition Leased farm land	4,123	m2								
3-3 Temporary land acquisition Customary land	10,936	m2								
4.Progress of compensation in cash										DOL
4-1 Structure	6	structure								
4-2 Crop/trees	6	HH								
4-3 Compensation for loss of business	101	business								
5. Complain and Grievance Redress N/A Cases		Case								
5-1 Solved cases		Case								
5-2 Unsolved cases		Case								

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**Record of Complain and Grievance Management**

No	Date	Complain and Grievance from PAPs	Solution / Result / Any actions to be taken

**Consultation meetings**

No	Date	Sector	Nos of Participants	Key agenda and result of discussion

**During Construction**

No monitoring (No resettlement is needed)

**2) Livelihood**

**Before Construction**

Item	Monitoring Results during Report Period	Measures to be Taken	Frequency
Priority in Employment			Monthly
Other employment			Monthly

**3) Safety Management (Health and Occupational Safety)**

**Safety management plan**

**Pre-construction phase**

Date	Safety management plan is prepared and submitted	Approved by the Consultant

**Training programs**

No	Date	Training	Agenda	Participant
1				
2				

During Construction  
Safety management

Date:

No	item	Result	Remarks
1	Number of meetings organized since the previous monitoring		
2	Safety gear distribution (%)		
3	Keep records of accidents and injuries properly (Yes/No)		
4	Installation of fences, assignment of guards (Yes/No)		

Record of Accidents

No	Date	Details of accidents	Solution / Result / Any actions to be taken

4) Other checklist

Date:

Mark: "✓" if mitigation measure is done

No	item	Monitoring Site **	Mitigation measure is done or not	Remarks
1	Communities get the information on the construction schedule			
2	Communities know get the information of traffic management			
3	Installation of signboard			
4				

5) Record of Complains

No	Date	Complains	Solution / Result / Any actions to be taken