

Appendices

1 Member List of the Study Team

1.1 1st Site Survey (05/Aug/2010 – 03/Oct/2010)

	Position	Name	Organisation	Period
(1)	Leader	: Ryosuke NAKATA	Deputy Director, Economic Infrastructure Development Dept., JICA	5/Aug – 14/Aug
(2)	Project Coordinator	: Umi (KOJIMA) OBAYASHI	Program Officer, Urban and Regional Development Div I, Economic Infrastructure Development Dept., JICA	5/Aug – 14/Aug
(3)	Chief Consultant / Road Traffic Planner / Environmental and Social Consideration	: Junji YASUI	Chodai Co., Ltd	6/Aug – 12/Sep
(4)	Bridge Designer	: Mitsuhiro OHYAMA	Chodai Co., Ltd	5/Aug – 12/Sep
(5)	Natural Condition Survey I (Meteorology / Hydrology)	: Yasukazu KOBAYASHI	Oriental Consultants Co., Ltd. (Landtech Japan Co., Ltd.)	8/Aug – 6/Sep
(6)	Natural Condition Survey II (Topography / Geography)	: Takeshi MAEDA	Oriental Consultants Co., Ltd.	8/Aug – 16/Sep
(7)	Construction Planner, Procurement Planner / Cost Estimation	: Akira TAKAUE	Chodai Co., Ltd	16/Aug – 13/Sep
(8)	Study Team Coordinator / Natural Condition Survey Assistant	: Takashi MATSUO	Chodai Co., Ltd	25/Aug – 3/Oct

1.2 2nd Site Survey (Explanation of DBD) (8/Feb/2011 – 16/Feb/2011)

	Position	Name	Organisation	Period
(1)	Leader	: Takuya OTSUKA	Senior Representative, JICA Sri Lanka Office	8/Feb – 16/Feb
(2)	Project Coordinator	: Umi (KOJIMA) OBAYASHI	Program Officer, Urban and Regional Development Div I, Economic Infrastructure Development Dept., JICA	8/Feb – 16/Feb
(3)	Chief Consultant / Road Traffic Planner / Environmental and Social Consideration	: Junji YASUI	Chodai Co., Ltd	8/Feb – 16/Feb
(4)	Bridge Designer	: Mitsuhiro OHYAMA	Chodai Co., Ltd	8/Feb – 16/Feb

2 Study Schedule

2.1 1st Site Survey (05/Aug/2010 – 03/Oct/2010)

Schedule of the Preparatory Survey on the Project for the Construction of a Bridge across the Batticaloa Lagoon in Sri Lanka

No.	Date	Leader	Team Management	Chief Consultant / Road Traffic Planner / Environmental and Social Consideration	Bridge Designer	Survey (Condition Survey) (Microtopography / Hydrology)	Survey (Condition Survey) (Topography / Geology)	Construction Planning / Procurement Planner / Cost Estimation	Team Coordinator / Survey Condition Survey Assistant
0	JUL 30 Fri	Mr. Renuka NAKKATA	Mr. Umi (KURMA) HIRAYASHI	Mr. Jimp YASUDA	Mr. Masahito OHYAMA	Mr. Yasuhiro KIMURA (ASHI)	Mr. Tetsu MAEDA	Mr. Akira TAKAHASHI	Mr. Takashi MATSUO
0	AUG 5 Thu	Narita (1:30-Singapore/17:40 (SQ637) Singapore/22:35-Columbo/23:45(SQ468))						14:00~15:30(SST) 対地/社会調査	
1	6 Fri	AM: Meeting w/ JICA office, Courtesy call and Briefing of Inception Report to RDA★ PM: Meeting with ADB★ (Briefing and Confirmation of Situation)	Narita (1:30-Singapore/17:40 (SQ637) Singapore/22:35-Columbo/23:45(SQ468))						
2	7 Sat	Columbo → (Kandy) → Batticaloa (By Car)							
3	8 Sun	C.C. on and Discussion w/ RDA Regional Office★ in Batticaloa, Site Survey							
4	9 Mon	AM: Meeting w/ RDA Batticaloa, Meeting w/ GA office Batticaloa PM: Batticaloa → (National Road A11 → A6) → Colombo (By Car)							
5	10 Tue	(RDA★) Reporting of Site Survey, Discussion on MID							
6	11 Wed	(RDA★) Discussion on MID							
7	12 Thu	(RDA★) Discussion on MID							
8	13 Fri	(Mold★) RDA★: ERO★ Finalization and Signing of MID -Report to (Eo★) & JICA★ Office							
9	14 Sat	Columbo (1:00-Singapore/07:30 (SQ469) Singapore/09:45-Narita/17:35 (SQ72))							
10	15 Sun	★Appointments requested for official meeting							
11	16 Mon								
12	17 Tue								
13	18 Wed								
14	19 Thu								
15	20 Fri								
16	21 Sat								
17	22 Sun								
18	23 Mon								
19	24 Tue								
20	25 Wed								
21	26 Thu								
22	27 Fri								
23	28 Sat								
24	29 Sun								
25	30 Mon								

Schedule of the Preparatory Survey on the Project for the Construction of a Bridge across the Batticaloa Lagoon in Sri Lanka

No.	Date	総括 Leader	計画管理 Project Coordinator	業務主任 / 交通計画 / 環境社会配慮 Chief Consultant / Road Traffic Planner / Environmental and Social Consideration	橋梁設計 Bridge Designer	自然条件調査 I (気象 / 水文) Natural Condition Survey I (Meteorology / Hydrology)	自然条件調査 II (地形 / 地質) Natural Condition Survey II (Topography / Geography)	施工計画 / 環境 / 概算 Construction Plan / Environment Planner / Cost Estimation	業務調整 / 自然条件調査基礎 Study Team Coordinator / Natural Condition Survey Assistant
26	31 Tue	Mr. Renuka NAKATA	Ms. Uma (KORIMA) GRAYASHI	Mr. Junji YASHI	Mr. Mutsaers OFVAMA	Mr. Yasuhiro KOBAYASHI	Mr. Tetsuaki MATSUDA	Mr. Akira TAKALE	Mr. Tetsuaki MATSUDA
27	Sat			Data Collection / Data Analysis	Meeting w/ Local Companies Data Collection / Data Analysis	Data Collection / Data Analysis	Site Survey	Meeting w/ Local Companies Data Collection / Data Analysis	Meeting w/ Local Companies Data Collection / Data Analysis
28	1 Wed								
29	2 Thu								
30	3 Fri			Traffic Survey	Traffic Survey	Data Collection / Data Analysis	Site Survey / Traffic Survey	Traffic Survey	Traffic Survey
31	4 Sat			Batticaloa → (A11 → A6) → Colombo (By Car)	Traffic Survey	Batticaloa → (A11 → A6) → Colombo (By Car)	Site Survey / Traffic Survey	Batticaloa → (A11 → A6) → Colombo (By Car)	Traffic Survey
32	5 Sun			Document Arrangement	Traffic Survey	Document Arrangement	Site Survey / Traffic Survey	Meeting w/ Local Companies	Traffic Survey
33	6 Mon			AM: Meeting w/ CCD Colombo, PM: Data Collection / Data Analysis	Batticaloa → (A11 → A6) → Colombo (By Car)	CMB 01-00-SIN-07-30 (SQ469) SIN-09-40-NRT/17:35 (SQ12)	Site Survey	Data Collection / Data Analysis	Site Survey
34	7 Tue			AM: Meeting w/ JICA, PM: Data Collection / Data Analysis	AM: Meeting w/ JICA, PM: Data Collection / Data Analysis		Site Survey	Data Collection / Data Analysis	Site Survey
35	8 Wed			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
36	9 Thu			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
37	10 Fri			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
38	11 Sat			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
39	12 Sun			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
40	13 Mon			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
41	14 Tue			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
42	15 Wed			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
43	16 Thu			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
44	17 Fri			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
45	18 Sat			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
46	19 Sun			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
47	20 Mon			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
48	21 Tue			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
49	22 Wed			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
50	23 Thu			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
51	24 Fri			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
52	25 Sat			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
53	26 Sun			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
54	27 Mon			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey
55	28 Tue			AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis		Site Survey	AM: Meeting w/ RDA, PM: Data Collection / Data Analysis	Site Survey

Schedule of the Preparatory Survey on the Project for the Construction of a Bridge across the Batticaloa Lagoon in Sri Lanka

No.	Date		班級	計畫管理	業務主任/交通計畫/環境社會配慮	橋樑設計	自然條件調查 I (氣象/水文)	自然條件調查 II (地形/地質)	施工計畫・環境・估算	業務調整/自然條件調查補助
			Leader	Project Coordinator	Chief Consultant / Road Traffic Planner / Environmental and Social Consideration	Bridge Designer	Natural Condition Survey I (Meteorology / Hydrology)	Natural Condition Survey II (Topography / Geology)	Construction Planner, Procurement Planner, Cost Estimation	Study Team Coordinator / Natural Condition Survey Assistant
55	29	Wed	Mr. Renuka NAKATA	Ms. Umi (KIRITA) OHAYASHI	Mr. Junji YASUI	Mr. Mitsuhiko OHYAMA	Mr. Yuzakazu KOBAYASHI	Mr. Taisaku MATSUDA	Mr. Akira TAKAHARA	Mr. Taisaku MATSUDA
56	30	Thu								
57	01	Fri								
58	02	Sat								Data Collection / Data Analysis / Document Arrangement
59	03	Sun								Document Arrangement (CMH01/06-SIN07/30/SQ469) SIN/09-40-NR/17/35 (SQ12)

2.2 2nd Site Survey (Explanation of DBD) (8/Feb/2011 – 16/Feb/2011)

No.	担当業務		総括	計画管理	業務主任／交通計画／環境社会配慮	橋梁設計
	Position	Leader	Project Coordinator	Chief Consultant / Road Traffic Planner / Environmental and Social Consideration	Bridge Designer	
	Name	Mr. Takuya OTSUKA				Ms. Umi (KOJIMA) OBAYASHI
	8-Feb	Tue		11:30 NRT→18:00 SIN 22:50 SIN→00:05 CMB		
	9-Feb	Wed	PM: Meeting at JICA Sri Lanka Office	AM: Courtesy call to MoPH, Meeting w/ RDA PM: Meeting w/ RDA, Meeting at JICA Sri Lanka Office		
	10-Feb	Thu		Move to Batticaloa		
	11-Feb	Fri		AM: Discussion w/ RDA Batticaloa, Site Survey		
	12-Feb	Sat		AM: Courtesy Call to GA Office Batticaloa, Site Survey PM: Move to Colombo		
	13-Feb	Sun		Internal Meeting		
	14-Feb	Mon		Discussion on M/D with RDA, Finalization of M/D		
	15-Feb	Tue	Signing of M/D	AM: Signing of M/D PM: Courtesy Call & Report to EoJ		
	16-Feb	Wed		01:20 CMB→SIN 07:40 09:45 SIN→NRT 17:20		

3 List of Parties Concerned

Organization	Position / Occupation	Name
Ministry of Highways	Secretary	Mr. W. Karannagoda
Ministry of Ports and Highways	Secretary	Ms. Sujatha Cooray
	Additional Secretary	Mr. G.J.C. Gunthileke
Road Development Authority (RDA), Ministry of Ports and Highways	Director General	Mr. R.W. Ranjith Pemasiri
	Additional Director General	Mr. S. Meihanelan
	Assistant Secretary	Mr. S.S. Senya
	<Planning Division>	
	Director	Mr. H.M.K.G.G. Bandara
	Deputy Director	Ms. D.N. Siyambalapitiya
	Engineer/Planning	Mr. P.R.D. Fernando
	Engineer/Planning	Mr. K.P.H. Perera
	JICA Expert	Mr. Takaoki ICHIOKA
	<Engineering Services>	
	Director	Mr. D.K. Rohikascam Swarna
	Deputy Director	Mr. T.K.S.D. Jayakody
	Senior Design Engineer (Bridge Designs)	Mr. T. Vasanthakumar
	<ProjectDivision>	
	Director	Mr. M. Jhurailany
	Engineer	Mr. D. Mudannayak
	Engineer	Mr. R. Pktrdar
	<HighWayDivision>	
	Director	Mr. D.Goneson
	<Environmental Division>	
		Mr. Saranga Gajasinghe
	<Land Division>	
	Deputy Director	Mr. S.H.U. De Silva
Road Development Authority (RDA) Batticaloa, Ministry of Ports and Highways	Provincial Director	Mr. Y. Dharmaratnam
	Engineering Manager	Mr. M.T. Mohenathas
	Project Engineer	Mr. A.L. Abdul Hakeem
	Engineer	Mr. T. Ranjithumar
	Engineer	Mr. S. Uthayasankar
Department of National Planning	Director	Mr. Sepali Rupasinghe
Department of External Resources, Ministry of Finance and Planning	Director General	Mr. M P D U K Mapa Pathirana
	Director - Japan Section	Mr. D.C.W. Hapugoda
	Director - Japan Section	Ms. D.L.U. Peiris
Department of Resettlement	Vice Minister	Mr. Vinayagamoorathi Muralitharan
	Vice Chairman	Mr. R.J. Vithange
	Coordinator	Mr. P. Ravinthiran
Batticaloa Government Agent (GA) Office	Government Agent and District Secretary	Mr. Suntharam Arumainaya
	Vice District Secretary	Mr. K. Vimalanathan
	Secretary, Mannunai Section	Mr. V. Arularajah
	Secretary, Mannunai Section	Mr. K. Thanaplasundaram
	Police	Mr. P. Daanagche
Batticaloa Road Development Department (RDD)	Chief Engineer	Mr. S. Mahinthan

*Preparatory Survey Report (Outline Design Study)
on the Project for Construction of Manmunai Bridge
in the Democratic Socialist Republic of Sri Lanka*

Central Environmental Authority (CEA)	Environmental Assessment Division	Impact	Ms. Kanthi De Silva
Eastern University	Dean		Dr. C.G. Devadasan
Department of Fisheries and aquatic Resources Batticaloa	District Fisheries Inspector		Mr. S. Ganeshamodrtity
	District Fisheries Inspector		Mr. Jaex Rajkumar
	Marine Engineering Dept.		Mr. P. Darameswarar
Coast Conservation Department (CCD), Ministry of Fisheries and Aquatic Resources	Coast Conservation Department		Mr. Anil Premaratne
Asian Development Bank (ADB)	Transport Specialist, Sri Lanka Resident Mission		Mr. Aruna Nanayakkara
Embassy of Japan	Second Secretary		Mr. Katsuho HAYASHI
JICA Sri Lanka Office	Chief Representative		Mr. Akira SHIMURA
	Senior Representative		Mr. Takuya OTSUKA
	Representative		Mr. Masanari YANAGIUCHI
	Representative		Mr. Hiroyuki KAWAMOTO
	Road Specialist		Ms. Namal Ralapanawe

4 Minutes of Discussions

4.1 1st Site Survey (13/Aug/2010)

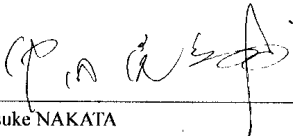
Minutes of Discussions
the Preparatory Survey (Outline Design Study)
on the Project for the Construction of the Bridge across the Batticaloa Lagoon
in the Democratic Socialist Republic of Sri Lanka


Based on the results of the Preparatory Survey in 2009 (hereinafter referred to as "Preparatory Survey"), the Government of Japan (hereinafter referred to as "GoJ") decided to conduct a Preparatory Survey (Outline Design Study) (hereinafter referred to as "the Study") on the Project for the Construction of the Bridge across the Batticaloa Lagoon (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

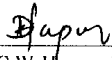
JICA sent to the Democratic Socialist Republic of Sri Lanka the Preparatory Survey (Outline Design Study) Team (hereinafter referred to as "the Team"), which is headed by Mr. Ryosuke NAKATA, Deputy Director General, Urban and Regional Development Group, Economic Infrastructure Development Department, JICA, and is scheduled to stay in the country from 5th August to 3rd October 2010.

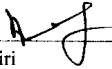
The Team held discussions with the officials concerned of the Government of the Democratic Socialist Republic of Sri Lanka (hereinafter referred to as "GoSL") and conducted a field survey at the survey area. As a result of discussions, both parties confirmed the main items described in the attached. The Team will proceed to further works and prepare the Outline Design Study Report.

Colombo, 13 August, 2010


Ryosuke NAKATA
Leader, Study Team
Japan International Cooperation Agency
Japan
(Witnessed by)


Admiral Wasantha Karanagoda
Secretary
Ministry of Highways
Democratic Socialist Republic of Sri Lanka


D.C.W. Hapugoda
Director-Japan Division
Department of External Resources
Ministry of Finance and Planning
Democratic Socialist Republic of Sri Lanka


R.W.R. Pemasiri
Chairman/Director General
Road Development Authority (RDA)
Democratic Socialist Republic of Sri Lanka

ATTACHMENT

1. Background

It is widely recognized that Road is one of the most important transportation modes in Sri Lanka. However, the longstanding civil war had prevented the construction of solid infrastructures, nor operating & maintaining such basis of the society in a proper way so that they could contribute to the lives of the people. The situation has been especially true in Batticaloa, in Eastern Sri Lanka, where the Lagoon, in addition to social reasons, physically discouraged the chances of constructing necessary infrastructure, and mobility of the residents and goods.

Facing the aforesaid situation, GoSL has requested GoJ, the construction of one bridge across the Batticaloa Lagoon, which would not only directly and quickly improve the living standard of the people but also could symbolize the resettlement of peace, and socio-economic reconstruction in eastern region.

During the Preparatory Survey, both sides had shared the understandings of contents of the requests, Grant Aid scheme by Japan, Environmental and Social Guideline by JICA, and the necessary arrangements from Sri Lanka in implementing the Project.

2. Objective of the Project

The objective of the Project is to facilitate interaction between both banks of Batticaloa Lagoon.

3. Objectives of the Survey

3-1 The core objective of the Survey is to draft the most appropriate outline design and cost estimation of the Project as Japanese Grant Aid.

3-2 The necessity and appropriateness of the Project will be also re-examined

3-3 Also importantly, the team will identify necessary arrangements for smooth implementation of the Project.

4. Project Component

4-1 Both sides confirmed that the project site shall be at Manmunai, as shown in Annex-1.

4-2 The Team explained that the Preparatory Survey concluded that the bridge width should be 7.5m in accordance with the Provincial road standard and the specification of access roads financed by ADB.

4-3 However, Road Development Authority, Ministry of Highways (hereinafter referred to as "RDA") responded that the bridge width should be further assessed based on the followings;

- a. RDA assured that upon the completion of Manmunai bridge, access roads connecting to Manmunai bridge shall be taken over by RDA as national road. Therefore, RDA strongly requested the bridge width should be in accordance with national road standard.
- b. RDA further explained that the access roads currently being rehabilitated in accordance with the provincial road standard could be further widened to the national road standard, possibly by using current ADB loan for "Eastern and North Central Provincial Road Project"
- c. RDA further explained, considering current traffic flow of surrounding bridges, the pedestrians, bicycles, auto-rikshaws, and automobiles share the same road. Therefore, saving sufficient room for non-automobiles is essential from the safety view point.

- d. RDA explained certain provincial roads, including bridges, can be constructed in accordance with national standard upon discussion between RDA and Provincial Authority. Therefore, the access road to Mannunai bridge can be upgraded with the national road standard, even before taken over by RDA.
- e. Team took note of the explanations by RDA and the configuration of bridge should be further analyzed and discussed during the Study.

5. Responsible and Implementing Organizations

- 5-1 The responsible agency is the Ministry of Highways (hereinafter referred to as "MoH"). The organization chart of the responsible ministry is shown in Annex-2.
- 5-2 The implementing organization is RDA. The organization chart of the implementing organization is shown in Annex-3.

6. Japan's Grant Aid Scheme

- 6-1 MoH understands the Japan's Grant Aid scheme explained by the Team, as described in Annex-4.
- 6-2 MoH will take the necessary measures, as described in Annex-5, for smooth implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

7. Schedule of the study

- 7-1 JICA consultant members of the Team will proceed to further surveys in Sri Lanka until October 3, 2010.
- 7-2 JICA will prepare the draft of the Outline Design Study Report (hereinafter referred to as "Draft Report") and dispatch a mission to Sri Lanka in order to explain its contents around January 2011.
- 7-3 When the contents of the Draft Report are accepted in principle by the GoSL, JICA will complete the final report and send it to the Government of Sri Lanka by February 2011.

8. Environmental and Social consideration

- 8-1 Both sides confirmed the Initial Environmental Evaluation (hereinafter referred to as "IEE"), which was conducted by RDA at Preparatory Study found out that there would be no significant environmental and social effects by the Project (categorized as "B"). Therefore, further Environmental Impact Assessment is not necessary.
- 8-2 However, RDA shall commence the necessary procedures to smoothly implement the Project, upon the identification of the detailed Project area at Draft Report mission by the Team scheduled in January 2011. These shall include the acquisition of land and involuntary relocations in accordance with the laws and regulations of Sri Lanka, if necessary as Annex 6. Any necessary measures, including issuing of clearance, and fulfillment of it, should be completed by GoSL at its own expenses, by each stage.
- 8-3 The Team explained that they will carefully draft outline design in order to minimize the negative environmental effect.
- 8-4 If proposed design by the Team requires further assessment on environmental and social impact, RDA and the Team scrutinize the appropriateness of such design and take necessary measures for mitigating negative impact on the environment.

9. Clearance of the unexploded ordinances (hereinafter referred to as “UXOs”) and the land mines

RDA explained the details of the undertakings done by GoSL for UXOs and the land mines as Annex 7.

10. Security Arrangement

RDA shall ensure the security of all concerned Japanese nationals working for the Project, if deemed necessary.

11. Inception Report

The Team explained the contents of Inception Report and RDA received it.

12. Other Relevant Issues

Both sides made reconfirmation of the followings signed at Minutes of Discussion on Preparatory Survey in April, 2009.

12-1 RDA explained to the Team that there is no duplication between requested contents of the Project and any other plans implemented by the other donors or GoSL.

12-2 RDA assured to coordinate all relevant authorities of GoSL to remove all the existing or temporary structures as well as possible relocation of affected person(s), if confirmed necessary in the Study, by securing sufficient budget for this purpose.

12-3 Necessary Arrangements should be taken from Sri Lanka for conducting survey, described in the Section Seven (7) in Inception Report

Annex 1 Project Site

Annex 2 Organization chart (MoH)

Annex 3 Organization chart (RDA)

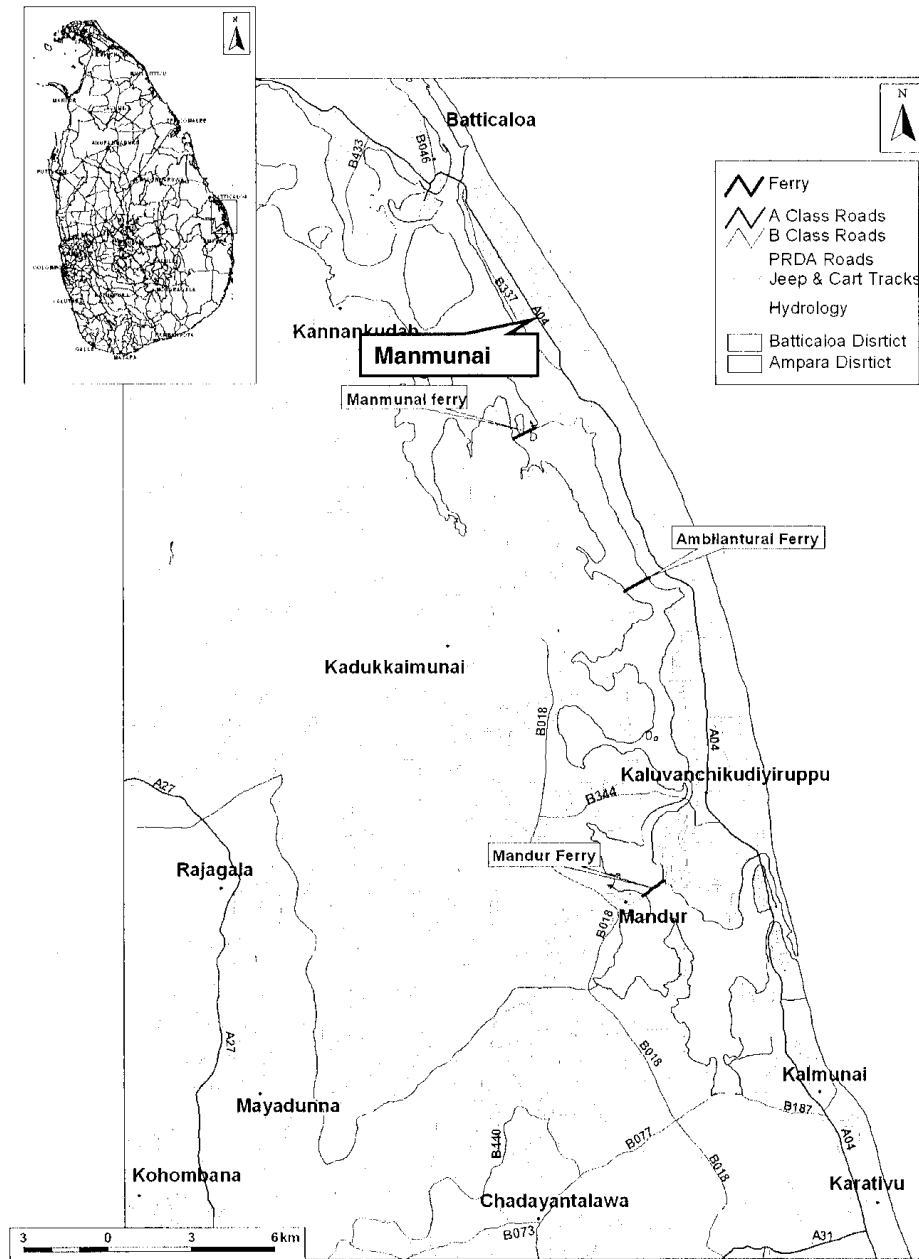
Annex 4 Japan's Grant Aid

Annex 5 Major Undertakings to be taken by Each Government

Annex 6 Measure proceedings for Environmental and Social consideration

Annex 7 “Clearance of Mines”

Project Site



Annex 1-1

[illegible]

P	PLANNING	ADG	ADDITIONAL DIRECTOR GENERAL	MAT.EE	MATERIAL ENGINEERS	INT.AUDR	INTERNAL AUDITOR
ES	ENGINEERING SERVICES	D.D	DEPUTY DIRECTOR	A.LO	ASSISTANT LEGAL OFFICER	S.EE	STAFF ENGINEER
ES	LANDS, ENVIRONMENTAL & SOCIAL	D.DD	DEPUTY DIRECTORS	A.LO	ASSISTANT LEGAL OFFICER	T	TRAINER
A	ADMINISTRATION	D	DEPUTY DIRECTOR	DCA	DRAWING OFFICE ASSISTANT	R.O	RECORD OFFICER
F	FINANCE	D	HIGHWAY DESIGN	T.O	TECHNICAL OFFICER	S.S.TF	SUPPORT STAFF
T	TRAINING	C.LO	CHIEF LEGAL OFFICER	S.O	STATISTICAL OFFICER		
NO	HIGHWAY DESIGN	P.DD	PROVINCIAL DIRECTORS	T.R.O	TRANSPORT OFFICER		
MMAC	MAINTENANCE MANAGEMENT & CONSTRUCTION	DDA	DEPUTY DIRECTOR INTERNAL AUDITOR	MEC.SU	MECHANICAL SUPERINTENDENT		
RAD	RESEARCH & DEVELOPMENT	C.EE	CHIEF ENGINEERS	PRO	PUBLIC RELATION OFFICER		
Legal	LEGAL	S.EE	SENIOR ENGINEERS	AO	ADMINISTRATIVE OFFICER		
M	MECHANICAL	C.EM	CHIEF ENGINEER MECHANICAL	ACCT	ACCOUNTANT		
Works	WORKS	S/A	SENIOR INTERNAL AUDITOR	P.SEC.	PERSONAL SECRETARY		
Pro.Mgt.	PROPERTY MANAGEMENT	S.AOCT	LEGAL OFFICER	SUR	SURVEYORS		
INT.AUD	INTERNAL AUDIT	LAO	LAND ACQUISITION OFFICER	P.MASST	PROGRESS MONITORING ASSISTANT		
		S.AOS	SENIOR ADMINISTRATIVE OFFICERS	A.A.	ADMINISTRATIVE ASSISTANT		
		P.EE	RESIDENT ENGINEERS	B.SEC	BOARD SECRETARY		
		D.EE	DESIGN ENGINEERS	CHE	CHEMIST		
		E.EE	EXECUTIVE ENGINEERS	ACT ASST	ACCOUNT ASSISTANT		
		EE	ENGINEERS	P.D	Project Director		

Annex 3-1

JAPAN'S GRANT AID

The Government of Japan (hereinafter referred to as "the GOJ") is implementing the organizational reforms to improve the quality of ODA operations, and as a part of this realignment, a new JICA law was entered into effect on October 1, 2008. Based on this law and the decision of the GOJ, JICA has become the executing agency of the Grant Aid for General Projects, for Fisheries and for Cultural Cooperation, etc.

The Grant Aid is non-reimbursable fund provided to a recipient country to procure the facilities, equipment and 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. The Grant Aid is not supplied through the donation of materials as such.

1. Grant Aid Procedures

The Japanese Grant Aid is supplied through following procedures :

- Preparatory Survey
 - The Survey conducted by JICA
- Appraisal & Approval
 - Appraisal by the GOJ and JICA, and Approval by the Japanese Cabinet
- Authority for Determining Implementation
 - The Notes exchanged between the GOJ and a recipient country
- Grant Agreement (hereinafter referred to as "the G/A")
 - Agreement concluded between JICA and a recipient country
- Implementation
 - Implementation of the Project on the basis of the G/A

2. Preparatory Survey

(1) Contents of the Survey

The aim of the preparatory Survey is to provide a basic document necessary for the appraisal of 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 country necessary for the implementation of the Project.
- Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme 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 a outline design of the Project.
- Estimation of costs of the Project.

Annex4-1

Annex 4

The contents of the original request by the recipient country are not necessarily approved in their initial form as the contents of the Grant Aid project. The Outline Design of the Project is confirmed based on the guidelines of the Japan's Grant Aid scheme.

JICA requests the Government of the recipient country to take whatever 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 organization of the recipient country which actually implements the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA employs (a) registered 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 appropriateness of the Project.

3. Japan's Grant Aid Scheme

(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 country to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Government of the recipient country to define the necessary articles to implement the Project, such as payment conditions, responsibilities of the Government of the recipient country, and procurement conditions.

(2) 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 country to continue to work on the Project's implementation after the E/N and G/A.

(3) Eligible source country

Under the Japanese Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased. When JICA and the Government of the recipient country or its designated authority deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm are limited to "Japanese nationals".

(4) Necessity of "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by JICA. This "Verification" is deemed necessary to

Annex4-2

Annex 4

fulfill accountability to Japanese taxpayers.

(5) Major undertakings to be taken by the Government of the Recipient Country

In the implementation of the Grant Aid Project, the recipient country is required to undertake such necessary measures as Annex.

(6) "Proper Use"

The Government of the recipient country is required to maintain and use properly and effectively the facilities constructed and the equipment purchased under the Grant Aid, to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Grant Aid.

(7) "Export and Re-export"

The products purchased under the Grant Aid should not be exported or re-exported from the recipient country.

(8) Banking Arrangements (B/A)

a) The Government of the recipient country or its designated authority should open an account under the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). JICA will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.

b) The payments will be made when payment requests are presented by the Bank to JICA under an Authorization to Pay (A/P) issued by the Government of the recipient country or its designated authority.

(9) Authorization to Pay (A/P)

The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions paid to the Bank.

(10) Social and Environmental Considerations

A recipient country must carefully consider social and environmental impacts by the Project and must comply with the environmental regulations of the recipient country and JICA socio-environmental guidelines.

Annex4-3

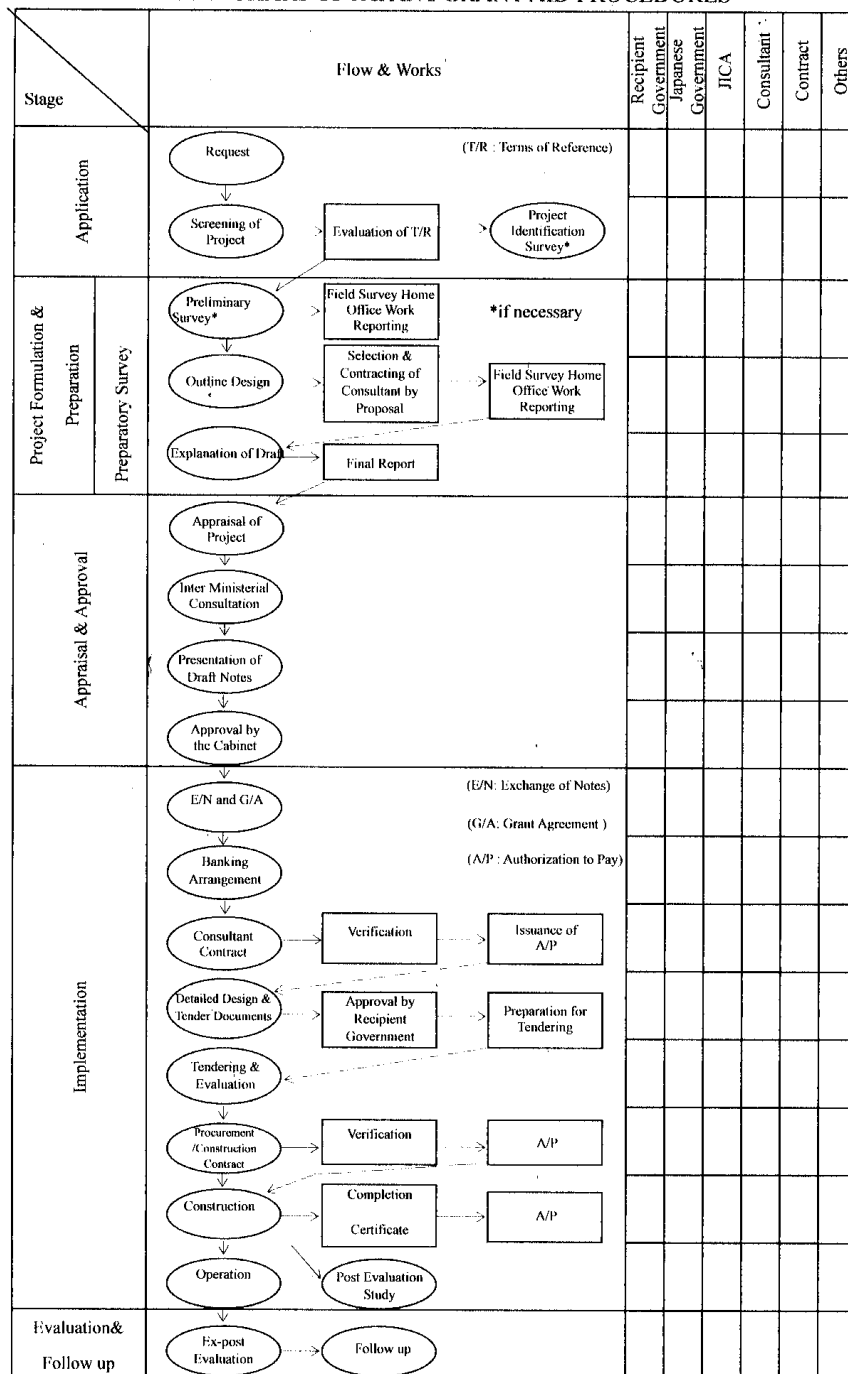
Major Undertakings to be taken by Each Government

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	to secure a lot of land necessary for the implementation of the Project and to clear the site;		●
2	To ensure prompt unloading and customs clearance of the products at ports of disembarkation in the		
	1) Marine (Air) transportation of the Products from Japan to the recipient country	●	
	2) Tax exemption and custom clearance of the Products at the port of disembarkation		●
	3) Internal transportation from the port of disembarkation to the project site	(●)	(●)
3	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the		●
4	To accord Japanese nationals 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 recipient country and stay therein for the performance of their work		●
5	To ensure that [the Facilities and the products]/[the Facilities]/ [the products] be maintained and used properly and effectively for the implementation of the Project		●
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project		●
7	To bear the following commissions paid to the Japanese bank for banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
8	To give due environmental and social consideration in the implementation of the Project.		●

(B/A : Banking Arrangement, A/P : Authorization to pay)

Annex 5

FLOW CHART OF JAPAN'S GRANT AID PROCEDURES



Measure Proceedings for Environmental and Social Consideration

Social Environment

Proceedings	by whom	to whom	Stage
Update of IEE Report and approval from CEA, if necessary	RDA/ESD	CEA	Soon after the identification of detailed project site
Draft Short Resettlement Plan	RDA	MLD, CEA	Soon after the identification of detailed project area and PAPs
Census and Social and Economic Study	RDA	MLD, CEA	In order to draft Short Resettlement Plan

Natural Environment

Proceedings	by whom	to whom	Stage
Baseline Survey (air/noise/water quality)	RDA	CEA	Before start of construction
Draft of Environmental Monitoring Plan (EMoP)	RDA	CEA	Before Baseline Survey
Management of industrial waste and waster water	RDA	Batticaloa Local Government	Before start of construction
Draft of Environmental Management Action Plan	RDA	CEA	Before Detailed Design
Monitoring and Necessary measurements to mitigate negative environmental effects	RDA	CEA	During construction

END

Annex 7

[illegible]

District Rehabilitation and Reconstruction Secretariat – Batticaloa

நீதிநீதி அமைதி நான் காப்பாற்றுவேன், உன்னை காப்பாற்றுவேன்

District Secretariat - Batticaloa

മലയാളം ഭാഷയിൽ
 മലയാളം പരിഭാഷണം
 Project Director } 065- 2223151

ഇഡാഗ നാർത്തകൻ }
 പ്രദേശ സമുദായം } 065 - 2224371
 General Office }

ഞായർ } : റ്റേഴ്സ് }
 ഫോൺ } 065- 2224371 ന.പ്രൊയിഡ് } pddrsbatti@yahoo.com
 ഫാക്സ് } ഇമെയിൽ }

மெய் எண்ம }
 மெய்ய எண். }
 My No. } 100/111/100/111/100/111

உமது எண்ண
 உமது இல.
 Your No.

தேதி
 திகதி
 Date

Eng.Y.Dharmaretnam
Provincial Director (East),
Road Development Authority,
Batticaloa.

Sub : Clearance of Mines

With reference to your letter No RDA/PD/EP/W-23, dated on 06.08.2010, I would like to inform you that the Manmunai Bridge at Manmunai Ferry Crossing areas are cleared and no mines, according to the UNDP mines clearance report.

Thank you,

M. Thayaparan,
Project Director (DRRS),
for Government Agent,
Kachcheri,
Batticaloa.

PROJECT DIRECTOR (DRRS)
MINISTRY OF ECONOMIC DEVELOPMENT
KECHICHEE, SASKATCHEWAN

தார்பீக வம்ஸர்ஹித் அபிவிருத்தி
பொருளாதார அபிவிருத்தி அமைச்சு
Ministry of Economic Development

Annex 7-1



Office of the Provincial Director (East) - RDA - Batticaloa

T.P.:065-2224443

Fax: 065-222479

E-mail: pdep@rda.gov.lk

For the Attention of Mr. Thayaparan,
Project Director.

My No: RDA/PD/EP/W-23,

06.08.2010.

Government Agent,
Kachcheri,
Batticaloa


Dear Sir,

Sub: - Mine Clearance Certificate.

I shall be very thankful if you will kindly issue the necessary Mine Clearing Certificates for the following projects enable us to commence the same.

1. Construction of Mannunai Bridge at Mannunai Ferry Crossing
2. Construction of Pannichchankerny Bridge (under five bridge construction) at Pannichenkerney

Yours faithfully,


Eng. Y. Dharmaretnam,
Provincial Director (East),
RDA/Batticaloa.

Provincial Director
Road Development Authority
No. 1, East, Batticaloa.

Pux

E:\Office\PD\mine.docx

Annex 7-2

RDA/P/FA/MB-JICA

22nd June 2010

Mr. S B Divaratne
Secretary to the Presidential Task Force for Resettlement
Development and Security of the Northern Province

Dear Mr. Divaratne

CONSTRUCTION OF A BRIDGE ACROSS BATTICALOA LAGOON AT MANMUNAI

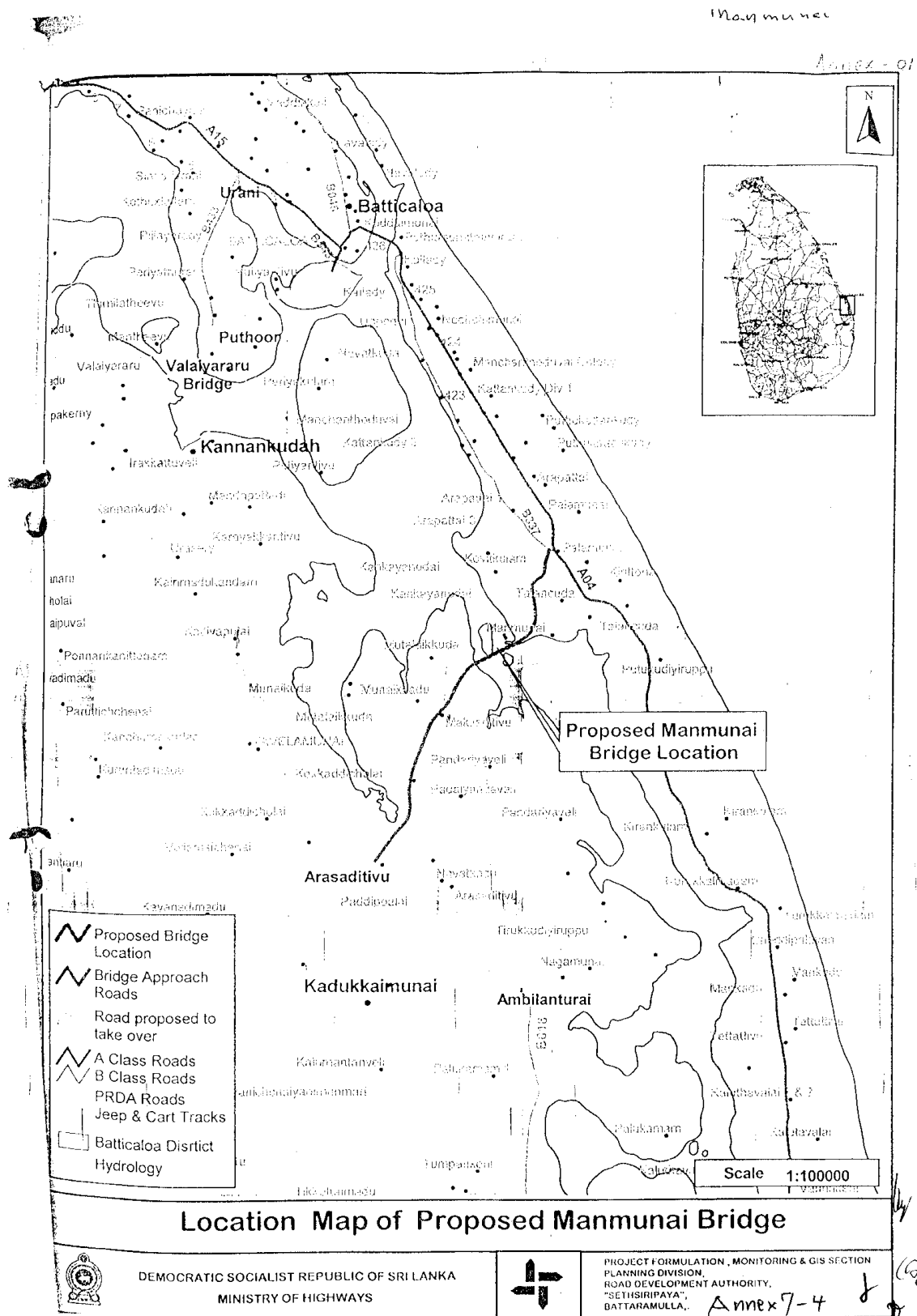
1. Ministry of Highways has made an application to Japan International Cooperation Agency (JICA) to obtain financial assistance to construct a bridge across Batticaloa Lagoon and they have selected the Manmunai route as the prospective location for the construction of a bridge.
2. JICA intends to dispatch a survey team for outline design in August 2010. Therefore, it is required to make sure that the respective area is free of land mines and unexploded ordinance (UXO) and to provide clearance certificate from the Government of Sri Lanka to JICA before the arrival of the survey team.
3. Therefore, please be good enough to issue us a certificate stating that the area concerned is free of UXO and land mines considering the urgency and the importance of the project. The location map of the proposed bridge is attached as Annex 1, and the area expected to be certified as free of land mines is marked in the Annex 2.
4. Your cooperation in this regard is highly appreciated.

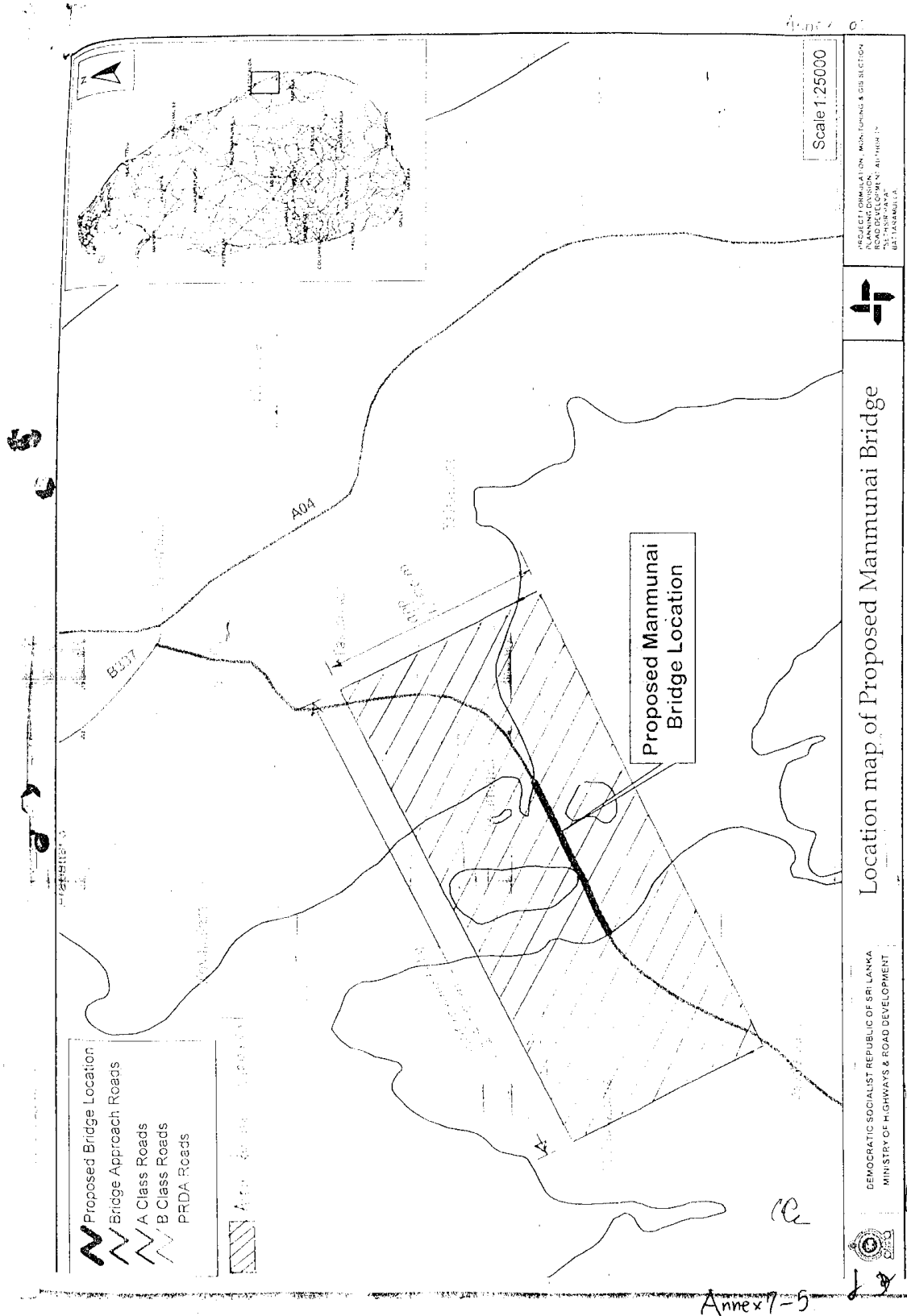
Thank you.

Yours faithfully,

Admiral (Rtd.) Wasantha Karannagoda
Secretary
Ministry of Highways

Annex 7-3





4.2 2nd Site Survey (Explanation of DBD) (15/Feb/2011)

**Minutes of Discussions
on Outline Design Study
on the Project for Construction of Mannunai Bridge
in the Democratic Socialist Republic of Sri Lanka
(Explanation of Draft Report)**

From August to October 2010, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Outline Design Study Team on the Project for Construction of Mannunai Bridge (hereinafter referred to as "the Project") to Democratic Socialist Republic of Sri Lanka (hereinafter referred to as "Sri Lanka"), and through discussions, field survey and technical examination of the results in Japan, JICA prepared a draft report of the Study.

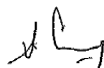
In order to explain and to consult with the concerned officials of the Government of Sri Lanka on the contents of the draft report, JICA sent to Sri Lanka the explanation of draft report team (hereinafter referred to as "the Team"), which is headed by Mr. Takuya OTSUKA, Senior Representative, JICA Sri Lanka Office, from February 8 to December 16, 2011.

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

Colombo, February 15, 2011



Takuya OTSUKA
Leader,
Outline Design Study Team,
Japan International Cooperation Agency (JICA)

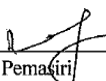


Sujatha Cooray,
Secretary,
Ministry of Ports and Highways,
Democratic Socialist Republic of Sri Lanka

(Witnessed by)



M.P.D.U.K. Mapa Pathirana
Director General,
Department of External Resources
Ministry of Finance and Planning
Democratic Socialist Republic of Sri Lanka



R.W.R. Pemasiri
Chairman/Director General,
Road Development Authority (RDA)
Democratic Socialist Republic of Sri Lanka

ATTACHMENT

1. Components of the Draft Report

Sri Lankan side agreed and accepted in principle the contents of the draft report of the Study explained by the Team. Main components of the project are described in clause 6 below.

2. Cost Estimation

The Team explained to Sri Lankan side the estimated project cost as attached in **Annex 1**. Both sides confirmed that this estimation was provisional and would be examined further by the Government of Japan for its cabinet approval. Furthermore, both sides confirmed that this project cost estimate is **confidential**, and should never be duplicated or disclosed to any third parties before the signing of all the agreement(s), contract(s) and effectuation for the Project.

3. Japan's Grant Aid Scheme

The Sri Lankan side reconfirmed the Japan's Grant Aid scheme and the necessary measures to be taken by the Sri Lankan side which had already explained by the Japanese side, and agreed by both sides in Annex 4 and 5 of Minutes of Discussion (M/D) on August 13, 2010 (hereinafter referred to as "The Previous M/D"). Major undertakings are described in clause 7 below.

4. Schedule of the study

JICA will complete the Final Report in English, in accordance with the confirmed items and send it to the Sri Lankan side around beginning of March, 2011.

5. Related Organizations

Sri Lankan side explained that the responsible organization has changed to "MINISTRY OF PORTS AND HIGHWAYS" due to the re-structuring of Sri Lankan Government. However, the organizational structure is the same as Annex 2 of the Previous M/D.

Sri Lankan side further explained that RDA is responsible for both Project implementation and operation and maintenance after the completion of the Project. This is because RDA has clear plan to take over the approach road and Manmunai bridge as National Road once bridge is completed.

6. Project Components.

The Team explained to Sri Lankan side the main components of the Project as **Annex 2**, and the both side reached full agreement for the contents.

7. Undertakings of the Sri Lankan side

The team explained the detailed undertakings to be borne by Sri Lankan side as **Annex 3**, including the matter already agreed by the both sides in the Previous M/D mentioned above.

Sri Lankan side confirmed to secure and allocate necessary budget and staff for smooth execution of those undertakings.

8. Other relevant issues

Sri Lankan side explained approval for smooth implementation of the Project would contribute to mitigate the effect of the floods in the region.

Annex

- 1 Project cost to be borne by Japan's Grant Aid
- 2 Project Components
- 3 Undertakings of the Sri Lankan Government

(This Page is closed due to the confidentiality.)

Annex 2

Main Project Components

Items	Contents
Bridge	
Bridge and Span Length	15m × 14 span =210m
bridge width	9.8m =1.2m side walk+3.7m*2(carriage way) +1.2m)
Gradient	3.2%, -3.2%
Crossfall	1/60
High Water Level	M.S.L +1.42m
Loading	
Live Load	HA Loading and HB-30 Loading (BS5400)
Seismic Load	None
Superstructure	Pre-tensioning PC Simply supported Slab bridge
Substructure	Pier : Pile Bent, Abutment : reversed. T-type
Foundation	Pile Foundation
Others	Installation of utilities are considered
Causeway	
Length	Western side:195m Eastern side:293m
Crossfall	2.5%
Design Standard	Road Standard R4, Design Speed 50km/h
Road Way Width	1.8 m (shoulder)+3.1m*2(carriage way)+1.8m (shoulder)

π. & n 9

J

Major Undertakings taken by Sri Lankan Government

No.	Items	Cost
1	To secure land necessary for the implementation of the Project and to clear the site;	-
2	To ensure prompt unloading and customs clearance of the products at ports of disembarkation in the recipient country and to assist internal transportation of the products; Tax exemption and custom clearance of the Products at the port of disembarkation	129M LKR
3	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the purchase of the products and the services be exempted	
4	To accord Japanese nationals 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 recipient country and stay therein for the performance of their work	-
5	To ensure that [the Facilities and the products]/[the Facilities]/ [the products] be maintained and used properly and effectively for the implementation of the Project	-
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	7.5M LKR
7	To bear the following commissions paid to the Japanese bank for banking services based upon the B/A 1)Advising commission of A/P 2)Payment commission	1.0M LKR
8	To give due environmental and social consideration in the implementation of the Project.	

(B/A : Banking Arrangement, A/P : Authorization to pay)

Environmental Consideration

No.	Items	Timing
9	RDA Submit <u>Basic Information Questionnaire</u> (BIQ) to Central Environment Agency, Ministry of Environment and Natural Resources	soon after DD is completed
10	RDA submit <u>Application for a Permit to Engage in a Development Activity</u> , to Coast Conservation Department	soon after DD is completed
11	RDA checks Environmental monitoring Plan which is submitted by contractor	After contract, with contractor
12	RDA confirms the possible effect of relocation of jetty for ferry at the west bank	before the start of construction works
13	RDA confirms that the contractor submit <u>Environmental Protection License</u> (EPL) to CEA	before the start of construction works
14	RDA establish Environmental Monitoring and Assessment Program (EMAP), and execute the Program during and after the Project	periodically

Security and Safety Consideration

No.	Items	Timing
15	Take necessary measures to control both land and water surface traffic	throughout construction
16	Sri Lankan side confirmed to secure the safety of the site such as; 1) Assignment of the necessary number of policemen at camp and construction yards in case any necessity arises. 2) Smooth and proper removal of the landmines and Uxos if any are found during the Project.	throughout project term

Others

No.	Items
17	Proper Operation and Maintenance after the completion of the Project by RDA

