

2-2-4 Implementation Plan

2-2-4-1 Implementation Policy

The following are the basic conditions for implementing this project:

- The project, if approved, will be implemented in accordance with the provisions of Japan's Grant Aid Program after the signing of the Exchange of Notes between the Governments of Japan and the People's Republic of Bangladesh.
- The Roads and Highways Department (RHD), Ministry of Communication is the responsible agency for implementing the project.
- The detailed design, tender and construction supervision of the project will be undertaken by a Japanese consulting firm in accordance with a contract between the RHD and the consultant.
- The procurement of steel materials for superstructure and erection tools will be undertaken by the successful Japanese tenderer in awarding the contract with the RHD.
- The Government of Bangladesh shall construct the designated project bridges with the materials within two years from the date of handing-over thereof.
- The Soft Component shall not be included in the Project (LGRD agreed). The technical assistant for substructure design and the OJT (On the Job Training) for superstructure erection were conducted at both Projects Phase-1 and Phase-2. LGRD has acquired the technique need for portable steel bridge construction.

2-2-4-2 Implementation Conditions

(1) Storage of Materials

The materials will be transported to Chittagong International Port. After unloading and customs clearance, the materials will be transported inland to the Gazipur Stockyard of LGRD handed over to the Government of Bangladesh. The materials will be temporarily stored therein until they are delivered to individual construction sites according to the construction schedule.

Cares to be given in storage of the materials are as follows:

- Members of girder should be placed, keeping packed, on the concrete supports at least 15cm above the ground.
- Members should not be piled exceeding 2.5 meter in height from the ground.

(2) Girder Erection

Referring to the achievement of the past 2 Projects (Phase 1 & 2), all staging method and draw erection method with semi-staging are applied taking their advantage that the erection can be done mainly by man power without special equipment nor highly skilled technique. Application of both methods are as follows:

All staging method: Where approach road is curved and/or insufficient space for assembly is secured.

Draw erection method with semi-staging:

Where water is deep or in case of multi-span bridge.

Side view of the both methods are shown in Figure 2.2.4-1 & 2.2.4-2. The both methods are applied mostly in dry season because of the difficulty in assembling and disassembling of the staging at deep water.

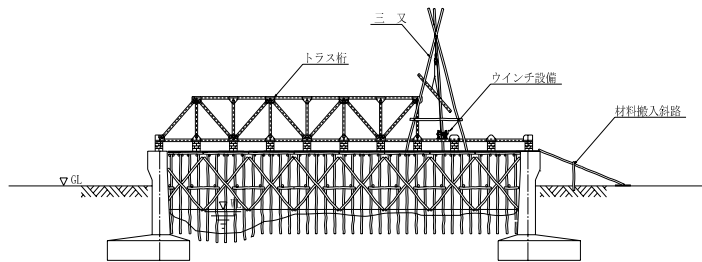


Figure 2.2.4-1 All Staging Method

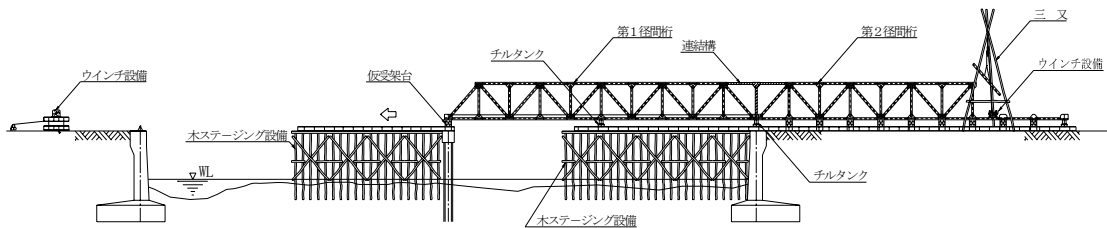


Figure 2.2.4-2 Draw Erection Method with Semi-Staging

Erection period is as follows;

Single	Span Bridge	:	Approx.	28
2	Span Bridge	:	Approx.	50
3	Span Bridge	:	Approx.	70
4	Span Bridge	:	Approx.	90
5	Span Bridge	:	Approx.	110
6	Span Bridge	:	Approx	130

2-2-4-3 Scope of Works

The undertakings of both governments, Japan and Bangladesh are as shown in Table 2.2.4-1.

Table 2.2.4-1 Undertakings of Both Governments

Item	Undertaken by		Remarks	
	Japan	Bangladesh		
Detailed Design	Superstructure Design	○	—	
	Substructure Design	—	○	
	Related Works Design	—	○	Approach road, revetment, etc.
	Girder Erection Plan	—	○	
Procurement and Transportation of Materials and Tools	Fabrication of Steel Materials for Superstructure	○	—	
	Marine Transportation	○	—	
	Tax Exemption and Customs Clearance		○	
	Inland Transportation	○	—	
Preparatory Works	Securing of Lands for Construction	—	○	Right-of-way, stockyard, assembly yard, etc.
	Demolition of Existing Bridges	—	○	
Construction	Construction of Substructure	—	○	
	Erection of Girder	—	○	
	Construction of Related Works	—	○	Approach road, revetment, etc.

2-2-4-4 Consultant Supervision

A Japanese consulting firm will enter into a contract with the RHD and based thereon, provide the following services:

(1) Detailed Design

- Detailed design of superstructure
- Preparation of drawings and specifications
- Preparation of procurement plan of steel materials for superstructure
- Preparation of tender documents

(2) Assistance in Tendering

- Tender publication
- Tendering
- Tender evaluation
- Contract facilitation

(3) Procurement Supervision

- Inspection of shop assembly of the steel bridges
- Attendance at the pre-shipment inspection by the authorized third party
- Handover of the materials and tools

2-2-4-5 Quality Control Plan

The steel materials for superstructure shall be fabricated by the factories authorized with ISO 9001. The Consultant shall confirm the Quality Control performed by the Bridge Fabrication. The Consultant will carry out the shop assembly inspection and attend the pre-shipment inspection and confirm the quality and quantities.

2-2-4-6 Procurement Plan

With due regard to the availability of materials in Bangladesh, the cost, the quality assurance and fabrication period, the steel materials for superstructure will be procured in Japan.

2-2-4-7 Implementation Schedule

The project is planned to be implemented in three phases. The bridges under each phase are as follows:

- Phase-1 : 36 bridges with a total length of 1,680m
- Phase-2 : 30 bridges with a total length of 1,675m
- Phase-3 : 26 bridges with a total length of 1,500m

The implementation schedule for undertakings of Japanese side is shown in Table 2.2.4-2.

Table 2.2.4-2 Implementation Schedule

Work Item		Month	1	2	3	4	5	6	7	8	
Phase-1	Detailed Design		■ (Work in Bangladesh)	■ (Work in Japan)	■ (Work in Bangladesh)						
										(Total 2.5 months)	
Phase-1	Procurement		■ (Fabrication, Procurement)								
								■ (Marine Transportation)	■ (Handover)	■	
										(Total 8.0 months)	
Phase-2	Detailed Design		■ (Work in Bangladesh)	■ (Work in Japan)	■ (Work in Bangladesh)						
										(Total 2.5 months)	
Phase-2	Procurement		■ (Fabrication, Procurement)								
								■ (Marine Transportation)	■ (Handover)	■	
										(Total 8.0 months)	
Phase-3	Detailed Design		■ (Work in Bangladesh)	■ (Work in Japan)	■ (Work in Bangladesh)						
										(Total 2.5 months)	
Phase-3	Procurement		■ (Fabrication, Procurement)								
								■ (Marine Transportation)	■ (Handover)	■	
										(Total 8.0 months)	

2-3 Obligations of the Government of Bangladesh

The following measures should be taken by the Government of Bangladesh on condition that the Grant Aid by the Government of Japan is extended to the Project:

- ① To provide data and information necessary for the Project.
- ② To relocate existing facilities such as houses, power poles, power cable, and water pipes, etc.
- ③ To design and construct the substructures, river bank protection and approach roads, etc.
- ④ To bear commissions to the bank in Japan for its banking services based upon the Banking Arrangement, namely the advising commission of the “Authorization to Pay” and payment commission.
- ⑤ To ensure prompt unloading, tax exemption, customs clearance at the port of disembarkation in Bangladesh.
- ⑥ To erect the superstructure of portable steel bridges.
- ⑦ To accord Japanese nationals, whose services may be required in connection with the supply of the products and the services under the verified contract, such activities as may be necessary for their entry into Bangladesh and stay therein for the performance of their work.
- ⑧ To provide necessary permission, licenses and other authorizations for implementing the Project.
- ⑨ To maintain and use properly and effectively the facilities constructed under the Project.
- ⑩ To bear all the expenses, other than those covered by the Japan’s grant aid, necessary for the Project.

The project cost born by the Government of Bangladesh is estimated in Chapter 2-5.

2-4 Project Operation Plan

Operation and Maintenance Plan

After completion of the Project Bridges, operation and maintenance (Rehabilitation of the road, revetment and clearing the road and bridges) is carried out periodically and intensively by the LGED Upazila Office during dry season (November~April).

2-5 Project Cost

2-5-1 Rough Estimate of the Project Cost

The total project cost is estimated at 4,012 Million Yen. The costs to be borne by both governments, Japan and Bangladesh based on the scope of works for both governments as previously stated and respective details are estimated as follows, on the conditions shown in (3) below.

This cost estimate is provisional and would be further examined by the Government of Japan for the approval of the Grant.

(1) Cost Borne by Japanese Government

Total Cost : approximately 1,971.4 Million Yen

Unit: Million Yen

Item		Phase 1	Phase 2	Phase 2	Total
Procurement Cost	Steel Materials for Superstructure	655.2	664.8	578.2	1,898.2
Consultancy Service		24.4	24.4	24.4	73.2
Total		679.6	689.2	602.6	1,971.4

(2) Cost Borne by Bangladesh Government

Total Cost : approximately 1,187 Million Taka (equivalent to 2,041 Million Yen)

Unit : Million Taka, (Million Yen)

Item	Phase 1	Phase 2	Phase 3	Total
1) Bridge Construction * ¹	149 (256)	123 (212)	110 (189)	382 (657)
2) Custom Duty, Import Tax and VAT	278 (478)	282 (485)	245 (421)	805 (1,384)
Total	427 (734)	405 (697)	355 (610)	1,187 (2,041)

Note: *¹) Inland Transportation Cost from the stock yard to the sites is included.

(3) Conditions in Cost Estimate

- 1) Time of Cost Estimate: May, 2005
- 2) Exchange Rate: 1US\$=¥105.25, 1Tk=¥1.71
- 3) Implementation Period: This project implemented in three phase as shown in the implementation schedule.
- 4) Others: This Project is implemented in accordance with system of Japan's Grant Aid.

2-5-2 Rough Estimate of Maintenance and Operation Cost

LGED's Upazila Offices have jurisdiction on the Bridges after the completion and operate and maintain the Project Bridges. Superstructure of the Bridge is so durable and zinc hot dip galvanized for long lasting rust prevention that it is deemed maintenance free except the deck.

Maintenance operation is executed periodically and intensively during dry season (November to April).

Maintenance consists of inspection and clearing of the Bridge, rehabilitation of approach road (repairing of damaged paving and slope), revetment repair and etc. Maintenance item and cost is shown in Table 2.5.2-1.

Annual cost for the Bridge maintenance is estimated about 2.5 million Taka, it is only 0.12% of the maintenance budget of LGED in 2004.

Table 2.5.2-1 Maintenance Operation Cost

Item	Cost for One Time (Taka)	Description		Project Bridge	Annual Cost (Taka)
		Time/Year	Timing		
Inspect/Cleaning	1,000	2	After/Before Monsoon Season	92	184,000
Rehabilitation	25,000	1	After Monsoon Season	92	2,300,000
Total					2,484,000

2-6 Other Relevant Issues

To smoothly implement the Project and fully realize and sustain the effect of the Project, the Government of Bangladesh shall take following into consideration.

- If site configuration is changed by the shifting and/or meandering of river stream caused by the periodic flood in the monsoon season, the location, length, spanning and etc. may be changed or revised.
- If it is difficult to allocate the budget to the Project due to the unforeseeable condition such as economic crisis in Bangladesh, the Project shall be re-planned accordingly.

CHAPTER 3

PROJECT EVALUATION AND RECOMMENDATIONS

Chapter 3 Project Evaluation and Recommendations

3-1 Project Effect

This Project aims to provide adequate transport means for passage of people and transportation of local products and subsistence goods by constructing 92 bridges on Upazila and Union roads in 17 districts highly evaluated in the master plan study using the steel portable bridge materials to be provided under this Project.

Direct beneficiaries of the Project are the population residing in the 17 districts, amounting to about 3.0 million.

Major effects of the Project are as follows:

(1) Direct Effects

- ① By constructing bridges, transport means will be secured at 88 gaps.
- ② By re-constructing bridges, safe and stable year-round passage will be ensured at 4 bridges that car cannot go through due to the damages caused by floods.

(2) In-direct Effects

- ① Provision of Safe and Stable Transport Means
The problem of the existing bridges such as absence of bridges, impassability for vehicles, serving only for pedestrians, insufficient loading capacity, etc. will be solved and safe and stable transport means will be secured.
- ② Increase of Transport Capacity
Transport Capacity will be remarkably increased since large vehicle can pass.
- ③ Savings in Transport Cost and Time
Transport Cost will be reduced resulting from improvement of transport and time efficiency since large vehicle can pass.
- ④ Expansion of the area where vehicle is passable and reachable
The zone where vehicle is passable and reachable will be expanded 1,190km² in area with new bridges to be constructed.
- ⑤ Improvement of inhabitant's Convenience
Daily life of inhabitants in commuting, attending school, shopping, going to hospital,

visiting mosque and etc. will be improved by providing year-round safe and stable means for passage.

3-2 Recommendations

To realize and sustain the effects of the project at a maximum, the matter to be undertaken by the Government of Bangladesh are as follows;

- To construct bridge substructure, approach road and river bank protection etc. without delay.
- To change and modify bridge planning to accommodate the change of site configuration such as the movement of river stream caused by floods.
- To improve the connection road and other bridges on the same routes.
- To carry out the maintenance and repair works as necessary to keep the roads and bridges in good condition and prolong their serviceable lives.
- To secure the budget for the above.

APPENDICES

APPENDIX 1

MEMBER LIST OF THE STUDY TEAM

APPENDIX – 1 MEMBER LIST OF THE STUDY TEAM

1) First Field Study in the People’s Republic of Bangladesh

Mr. Noriaki NAGATOMO	Leader	Additional Resident Representative JICA Bangladesh Office
Mr. Kootarou NISHIGATA	Project Coordinator	Traffic Infrastructure Team, Project Management Group II
Mr. Kazuyuki HIRAOKA	Chief Consultant/ Road Traffic Planner	Katahira & Engineers International
Mr. Kunihiko SAWANO	Road Traffic Planner/ Bridge Planning Engineer 1	Katahira & Engineers International
Mr. Shigeru MATSUI	Bridge Planning Engineer 2	Katahira & Engineers International
Mr. Shigeki KOEDA	Bridge Planning Engineer 3	Katahira & Engineers International
Mr. Shigeru TAKARA	Natural Condition Survey Engineer (Hydrology)	Katahira & Engineers International
Mr. Masao AIZAWA	Natural Condition Survey Engineer (Geography)	Katahira & Engineers International

2) Second Field Study in the People’s Republic of Bangladesh

Mr. Kazuyuki HIRAOKA	Chief Consultant/ Road Traffic Planner	Katahira & Engineers International
Mr. Kunihiko SAWANO	Road Traffic Planner/ Bridge Planning Engineer 1	Katahira & Engineers International
Mr. Shigeru MATSUI	Bridge Planning Engineer 2	Katahira & Engineers International
Mr. Keiichi MURAKAMI	Construction Planner/ Cost Estimator	Katahira & Engineers International

3) Explanation of Final Report

Mr. Akio ARAI	Leader	Resident Representative JICA Bangladesh Office
Mr. Kazuyuki HIRAOKA	Chief Consultant/ Road Traffic Planner	Katahira & Engineers International
Mr. Shigeru MATSUI	Bridge Planning Engineer 2	Katahira & Engineers International
Mr. Shigeki KOEDA	Bridge Planning Engineer 3	Katahira & Engineers International

APPENDIX 2

STUDY SCHEDULE

APPENDIX - 2 STUDY SCHEDULE

1) First Field Survey (January 7, 2005 to March 12, 2005)

No.	Date		Activities							
			Mr. Nagatomo	Mr. Nishigata	Mr. Hiraoka	Mr. Sawano	Mr. Koeda	Mr. Matsui	Mr. Takara	Mr. Aizawa
1	Jan. 7	Fri		Tokyo→Singapore		Tokyo→Bangkok				
2	Jan. 8	Sat		Singapore→Dhaka		Bangkok→Dhaka				
3	Jan. 9	Sun	Courtesy call and Discussion with JICA, Embassy of Japan and LGRD							
4	Jan. 10	Mon	Explain IC/R to ERD, LGED							
5	Jan. 11	Tue	Discussion with LGED							
6	Jan. 12	Wed	Signing of M/D	Signing of Minutes of Discussion, Site Survey					Tokyo→Bangkok	
7	Jan. 13	Thu	Meeting with JBIC, Report to Embassy of Japan						Bangkok→Dhaka	
8	Jan. 14	Fri		Dhaka→Tokyo	Data Collection and Analysis				Preparation for Study	
9	Jan. 15	Sat			Site Survey				Site Survey	
10	Jan. 16	Sun			Site Survey				Site Survey	
11	Jan. 17	Mon			Site Survey			Tokyo→Bangkok	Site Survey	
12	Jan. 18	Tue			Site Survey			Bangkok→Dhaka	Site Survey	
13	Jan. 19	Wed			Site Survey			Data Analysis	Site Survey	
14	Jan. 20	Thu			Data Analysis					
15	Jan. 21	Fri			Data Analysis					
16	Jan. 22	Sat			Data Analysis					
17	Jan. 23	Sun			Site Survey					
18	Jan. 24	Mon			Data Analysis					
19	Jan. 25	Tue			Site Survey					
20	Jan. 26	Wed			Site Survey					
21	Jan. 27	Thu			Site Survey					
22	Jan. 28	Fri			Site Survey					
23	Jan. 29	Sat			Data Analysis					
24	Jan. 30	Sun			Data Analysis					
25	Jan. 31	Mon			Data Analysis					
26	Feb. 1	Tue			Site Survey					
27	Feb. 2	Wed			Site Survey					
28	Feb. 3	Thu			Data Analysis					
29	Feb. 4	Fri			Site Survey					
30	Feb. 5	Sat			Data Analysis					
31	Feb. 6	Sun			Dhaka→Bangkok	Data Analysis				Tokyo→Bangkok
32	Feb. 7	Mon			Bangkok→Tokyo	Data Analysis	Site Survey			Bangkok→Dhaka
33	Feb. 8	Tue				Data Analysis	Site Survey			
34	Feb. 9	Wed				Data Analysis	Site Survey			
35	Feb. 10	Thu				Data Analysis	Site Survey			
36	Feb. 11	Fri				Data Analysis				
37	Feb. 12	Sat				Data Analysis				
38	Feb. 13	Sun				Report to JICA, Embassy and LGED				
39	Feb. 14	Mon				Dhaka→Bangkok	Data Analysis			
40	Feb. 15	Tue				Bangkok→Tokyo	Data Analysis			
41	Feb. 16	Wed					Site Survey	Data Analysis	Site Survey	
42	Feb. 17	Thu					Site Survey	Data Analysis	Site Survey	
43	Feb. 18	Fri					Data Analysis			
44	Feb. 19	Sat					Site Survey	Data Analysis		
45	Feb. 20	Sun					Site Survey	Data Analysis		
46	Feb. 21	Mon					Site Survey	Data Analysis		
47	Feb. 22	Tue					Site Survey	Data Analysis	Site Survey	
48	Feb. 23	Wed					Site Survey	Data Analysis	Site Survey	
49	Feb. 24	Thu					Site Survey	Data Analysis	Site Survey	
50	Feb. 25	Fri					Data Analysis			
51	Feb. 26	Sat					Site Survey	Data Analysis	Site Survey	
52	Feb. 27	Sun					Site Survey	Data Analysis	Site Survey	
53	Feb. 28	Mon					Site Survey	Data Analysis		
54	Mar. 1	Tue					Data Analysis			
55	Mar. 2	Wed					Data Analysis			
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57	Mar. 4	Fri					Data Analysis			
58	Mar. 5	Sat					Data Analysis			
59	Mar. 6	Sun					Data Analysis			
60	Mar. 7	Mon					Data Analysis			
61	Mar. 8	Tue					Data Analysis			
62	Mar. 9	Wed					Data Analysis			
63	Mar. 10	Thu					Data Analysis			
64	Mar. 11	Fri					Dhaka→Bangkok			
65	Mar. 12	Sat					Bangkok→Tokyo			

2) Second Field Survey (April 8, 2005 to May 1, 2005)

No.	Date		Activities			
			Mr. Hiraoka	Mr. Sawano	Mr. Matsui	Mr. Murakami
1	Apr. 8	Fri	Tokyo→Bangkok			
2	Apr. 9	Sat	Bangkok→Dhaka			
3	Apr. 10	Sun	Discussion with JICA			
4	Apr. 11	Mon	Discussion with LGED			
5	Apr. 12	Tue	Data Analysis			
6	Apr. 13	Wed	Data Analysis			
7	Apr. 14	Thu	Data Analysis			
8	Apr. 15	Fri	Data Analysis			
9	Apr. 16	Sat	Discussion with LGED			
10	Apr. 17	Sun	Data Analysis			
11	Apr. 18	Mon	Site Survey			
12	Apr. 19	Tue	Data Analysis			
13	Apr. 20	Wed	Data Analysis			
14	Apr. 21	Thu	Site Survey			
15	Apr. 22	Fri	Data Analysis			
16	Apr. 23	Sat	Discussion with LGED		Data Analysis	
17	Apr. 24	Sun	Data Analysis			
18	Apr. 25	Mon	Data Analysis			
19	Apr. 26	Tue	Data Analysis			
20	Apr. 27	Wed	Report to JICA, Embassy and LGED			
21	Apr. 28	Thu	Data Analysis			
22	Apr. 29	Fri	Data Analysis			
23	Apr. 30	Sat	Data Analysis			
24	May 1	Sun	Dhaka→Bangkok			
25	May 2	Mon	Bangkok→Tokyo			

3) Explanation of Draft Report

No.	Date		Activities			
			Mr. Arai/ Ms. Bushimata	Mr. Hiraoka	Mr. Matsui	Mr. Kobayashi
1	May 30	Mon	Tokyo→Bangkok			
2	May 31	Tue	Bangkok→Dhaka			
			Meeting with JICA			
3	June 1	Wed	Explanation of DF/R with ERD			
			Explanation of DF/R with ERD			
4	June 2	Thu	Discussion with LGED			
			Meeting with JICA			
5	June 3	Fri	Internal Meeting			
			Data Preparation			
6	June 4	Sat	Data Preparation			
			Discussion with LGED			
7	June 5	Sun	Signing of M/D with ERD/LGED			
			Meeting with JICA			
8	June 6	Mon	Report to Embassy			
			Dhaka→Bangkok			
9	June 7	Tue	Bangkok→Tokyo			

APPENDIX 3

**LIST OF PARTIES CONCERNED
IN THE RECIPIENT COUNTRY**

APPENDIX - 3 LIST OF PARTIES CONCERNED IN THE PEOPLE'S REPUBLIC OF BANGLADESH

Ministry of Finance

M. Emdadul Haque Deputy Secretary, Economic Relation Division

Ministry of LGRD & Co-operative

M. Sharful Alam Director General, Local Government Division

Mohammad Jahirul Islam Deputy Chief, Local Government Division

Syed Namunul Alay Senior Asst. Chief, Local Government Division

Local Government Engineering Department

Md. Shahidul Hassan Chief Engineer, Head Quarter

Sarojkumar Sarker Additional Chief Engineer, Head Quarter

Md. Anwarul Hoque Project Director, Head Quarter

Syed Mahbubur Rahman Executive Engineer, Dhaka

Md. Mosleh Uddin Executive Engineer, Narayanganj

Md. Abdur Rashid Khan Executive Engineer, Munshiganj

Md. Abdul Hye Executive Engineer, Manikganj

Md. Awlad Hossain Executive Engineer, Rajbari

Md. Abdul Quddus Mandal Executive Engineer, Gopalganj

Nur Mohammad Executive Engineer, Faridpur

Md. Safiqul Islam Akand Executive Engineer, Comilla

Md. Aatur Rahman Khan Executive Engineer, B'Baria

Md. Nasir Aziz Executive Engineer, Chandpur

Faruque Ahmed Executive Engineer, Feni

Md. Abdul Kader Executive Engineer, Noakhali

Jzbed Karim Executive Engineer, Laxmipur

Md. Golam Kibria Executive Engineer, Natore

Kazi Khursed Hasan Executive Engineer, Sirajganj

KH. Ali Nur Executive Engineer, Pabna

Md. Anisur Rahman Sarder Executive Engineer, Bogra

APPENDIX 4

MINUTES OF DISCUSSIONS

APPENDIX - 4 MINUTES OF DISCUSSIONS

MINUTES OF DISCUSSIONS ON THE BASIC DESIGN STUDY ON THE PROJECT FOR PROVISION OF PORTABLE STEEL BRIDGES ON UPAZILA AND UNION ROADS IN THE PEOPLE'S REPUBLIC OF BANGLADESH

In response to a request from the Government of the People's Republic of Bangladesh (hereinafter referred to as "Bangladesh"), the Government of Japan decided to conduct a Basic Design Study on the Project for Provision of Portable Steel Bridges on Upazila and Union Roads (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Bangladesh the Basic Design Study Team (hereinafter referred to as "the Team"), which is headed by Noriaki Nagatomo, Additional Resident Representative, JICA Bangladesh Office, and is scheduled to stay in the country from January 8th to March 11th, 2005.

The Team held discussions with the officials concerned of the Government of Bangladesh and conducted a field survey at the study area.

In the course of discussions and field survey, both parties confirmed the main items described on the attached sheets. The Team will proceed to further works and prepare the Basic Design Study Report.

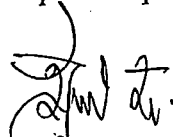
Dhaka, January 12, 2005

永友 紀幸

Noriaki Nagatomo
Leader
Basic Design Study Team
Japan International Cooperation Agency

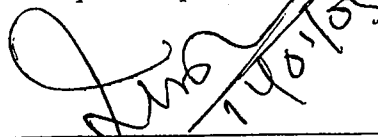


Md. Emdadul Haque
Deputy Secretary
Economic Relations Division
Ministry of Finance
the People's Republic of Bangladesh



12/01/05

Dr. Mohammad Jahirul Islam
Deputy Chief
Local Government Division
Ministry of LGRD & Co-operatives
the People's Republic of Bangladesh



14/01/05

Md. Anwarul Hoque
Project Director
Local Government Engineering Department
the People's Republic of Bangladesh

ATTACHMENT

1. Title of the Project

Both sides agree that the title of the project was changed from “the Project for Provision of Portable Steel Bridge on Feeder and Rural Roads” to “the Project for Provision of Portable Steel Bridges on Upazila and Union Roads”.

2. Objective of the Project

The objective of the Project is to improve the road communication in rural area through supplement of the steel materials of superstructures necessary for construction of the road bridges.

3. Responsible and Implementing Organization

3-1. The Responsible Organization is Local Government Division (LGD), Ministry of Local Government Rural Development and Co-operatives (MoLGRD&C).

3-2. The Implementing Agency is Local Government Engineering Department (LGED).

3-3. The organization chart of LGED is shown in ANNEX-1.

4. Project sites

The sites of the Project are located in 17 districts in Bangladesh as shown in ANNEX-2. However, the final sites of the Project will be decided after further studies in Japan.

5. Items requested by the Government of Bangladesh

After discussions with the Team, the steel materials of superstructure for 147 bridges were requested by Bangladesh side, which were necessary for construction of bridges listed in ANNEX-3, however, the bridges already constructed/ under construction/ committed to be constructed shall be excluded from the scope of the Study.

And Bangladesh side proposed the additional request of the steel materials for bridges listed in ANNEX-4 and also show criteria/ reasons of selecting these bridges.

JICA will assess the appropriateness of the request and will recommend to the Government of Japan for approval.

6. Japan's Grant Aid Scheme

6-1. Bangladesh side understands the Japan's Grant Aid Scheme explained by the Team, as described in ANNEX-5.

6-2. Bangladesh side will take the necessary measures, as described in Annex-6, for smooth implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

7. Schedule of the Study

7-1. The consultants will proceed to further studies in Bangladesh until March 11, 2005.

7-2. JICA will dispatch a mission for the second field survey in April, 2005.

7-3. Based on the first and second field survey, JICA will prepare the draft report in English and dispatch a mission in order to explain its contents in May, 2005.

7-4. When the contents of the report is accepted in principle by the Government of Bangladesh, JICA will complete the final report and send it to the Government of Bangladesh by August, 2005.

8. Other relevant issues

8-1. The Government of Bangladesh shall secure the land for stock yard of materials by the end of June, 2005.

8-2. Bangladesh side requested and both sides agreed that the internal transportation of procured steel materials to the stock yard would be included in the scope of the Project

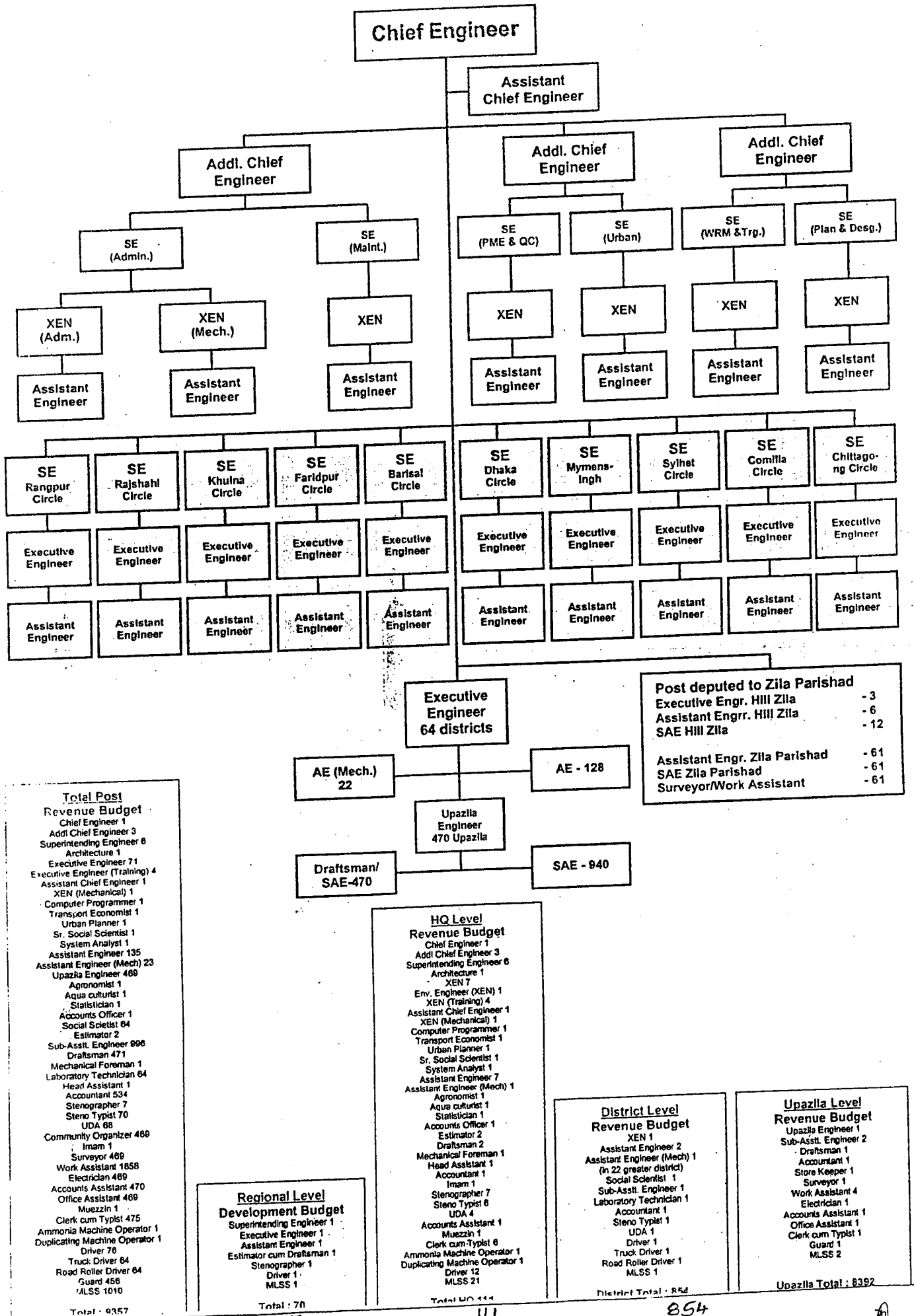
8-3. In the case that the Project is implemented, the Government of Bangladesh shall secure the budget for design work of substructure and construction of all bridges and connecting road, and complete the construction of all bridges in 2 years from the date of the handover of materials.

8-4. Bangladesh side explained that the procedures, necessary for approval of PCP (Project Concept Paper), had already started and hopefully would be completed by June, 2005. And the Team requested that PCP should be approved by the end of June, 2005.



Organization Chart of LGED

Annex-1



9357

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A4-4

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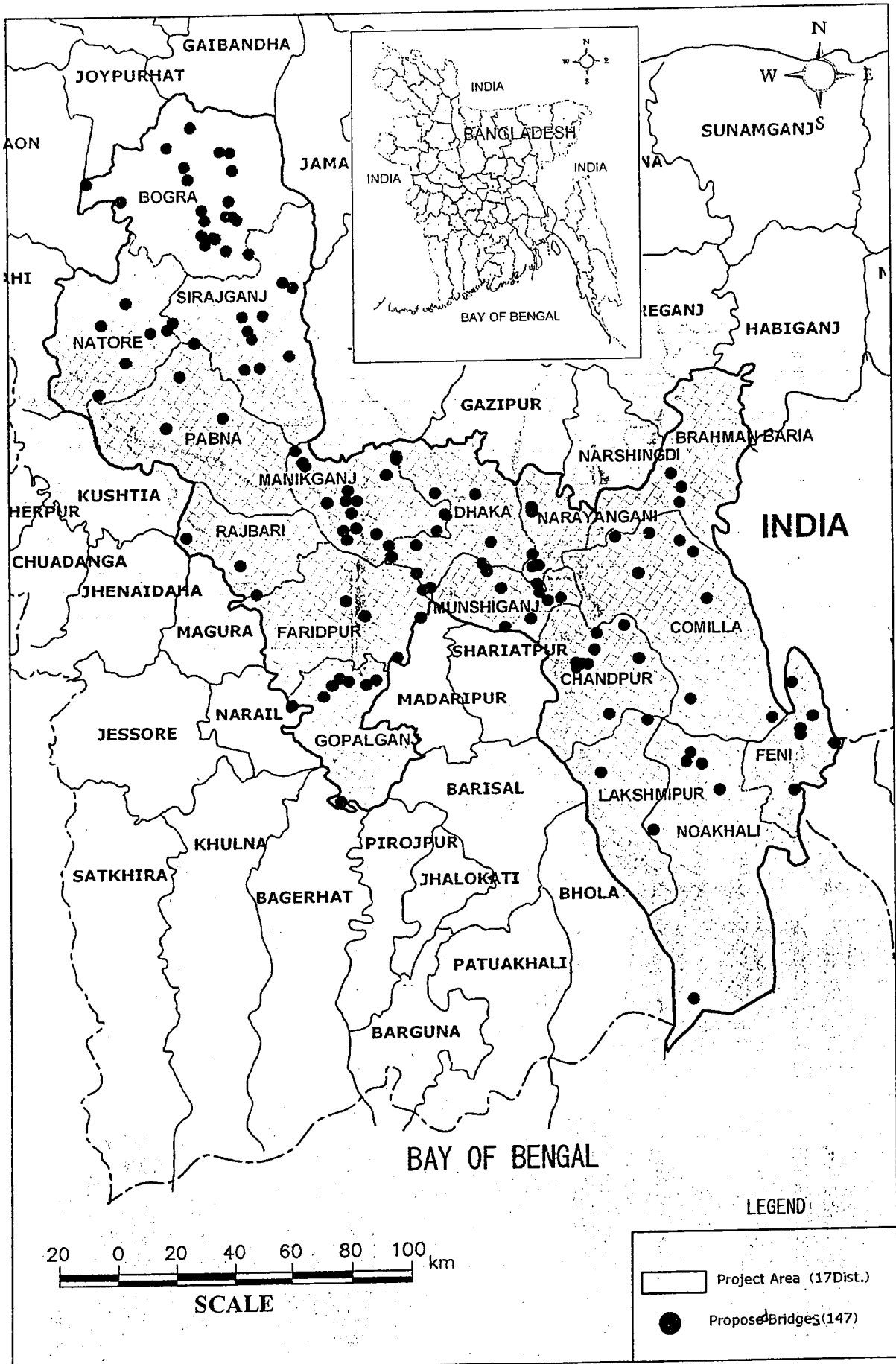
854

Upazila Total: 8392

District Total: 854

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Location Map of Project Site



List of Requested Bridges

District	Number of bridges	Bridge Codes in the Master Plan (2002)
Dhaka	13	01-01-02, 01-02-01, 01-02-06, 01-02-07, 01-03-01, 01-03-02, 01-04-02, 01-04-03, 01-04-07, 01-04-08, 01-05-01, 01-06-03, 01-06-N1
Narayangonj	7	03-01-N1, 03-01-N2, 03-03-01, 03-03-02, 03-03-03, 03-03-04, 03-04-01
Munshiganj	10	04-01-N5, 04-02-02, 04-02-03, 04-02-N1, 04-02-N5, 04-05-02, 04-05-N1, 04-05-N2, 04-05-N3, 04-06-01
Manikganj	17	05-01-01, 05-01-05, 05-03-06, 05-03-N1, 05-04-04, 05-04-05, 05-04-06, 05-04-07, 05-05-01, 05-05-N2, 05-05-N5, 05-05-N6, 05-06-02, 05-06-N1, 05-06-N2, 05-06-N4, 05-06-N6
Rajbari	3	11-02-02, 11-02-N1, 11-03-01,
Gopalganj	8	12-02-N1, 12-02-N2, 12-03-02, 12-03-03, 12-03-06, 12-03-N1, 12-03-N2, 12-04-N1
Faridpur	4	16-01-N2, 16-06-01, 16-07-02, 16-07-N1
Comilla	9	19-02-09, 19-03-12, 19-04-05, 19-04-06, 19-05-03, 19-05-06, 19-07-02, 19-08-01, 19-10-02
B. Baria	2	20-05-01, 20-05-05
Chandpur	9	21-01-N1, 21-01-N2, 21-01-N3, 21-01-N4, 21-03-04, 21-03-05, 21-04-N1, 21-04-N4, 21-05-02
Feni	6	22-02-10, 22-03-01, 22-04-01, 22-05-05, 22-05-06, 22-05-07
Noakhali	7	23-01-06, 23-02-02, 23-02-04, 23-02-05, 23-02-06, 23-02-10, 23-05-01
Laxmipur	2	24-02-01, 24-03-01
Natore	5	52-02-01, 52-03-01, 2-03-N1, 52-04-02, 52-05-01
Sirajganji	22	55-01-02, 55-01-03, 55-01-N1, 55-01-N2, 55-02-01, 55-02-02, 55-04-02, 55-06-01, 55-06-02, 55-06-03, 55-07-02, 55-07-04, 55-07-06, 55-07-07, 55-07-08, 55-07-09, 55-07-10, 55-07-12, 55-07-13, 55-07-N2, 55-07-N3, 55-08-01
Pabna	3	56-02-10, 56-03-01, 56-08-N1
Bogra	20	57-01-02, 57-01-04, 57-01-06, 57-01-N1, 57-01-N2, 57-02-N3, 57-02-N4, 57-02-N5, 57-03-N2, 57-03-N3, 57-05-01, 57-05-04, 57-07-01, 57-07-N2, 57-07-N3, 57-07-N4, 57-07-N6, 57-08-N2, 57-09-02, 57-10-01

Total 147

List of Additional Bridges Proposed to be included under PSB on Upazila and Union Road.

District: B. Baria

Sl No.	Upazila	Name/Location	Bridge Length (m)	Span Arrangement (m)	Remarks
1.	Bancharampur	Bridge on Joynagar to Jibanganj Road over Titas River.	90.	15+3x20+15	Connects GC/ Market/ School/UP/College

District: Munshiganj

Sl No.	Upazila	Name/Location	Bridge Length (m)	Span Arrangement (m)	Remarks
1.	Shirajdhikhan	Bridge on Khalpar to Chitrakot Road over Isamoti River at Kamalpur.	95	15+4x20	Connects GC/ Market/ School/UP/College
2.	Shirajdhikhan	Bridge on Khalpar to Chitrakot Road over Isamoti River at Razanagar Ghat.	95	15+4x20	Connects GC/ Market/ School/UP/College
3.	Sreenagar	Bridge on Baraikhali Hat Road near West side of Matbarbari at Baraikhali Village.	35	10+15+10	Connects GC/ Market/ School/UP/College

District: Pabna

Sl No	Upazila	Name/Location	Bridge Length (m)	Span Arrangement (m)	Remarks
1.	Sadar	Bridge on Bajitpur to Chandpur via Chorghospur Road over the Beta River.	100	5x20	Connects GC/ Market/ School/UP/College
2.	Chatmohor	Bridge on Chatmohar to Haripur Road via Dhulauri over Mora Boral River Near Haripur U.P.	80	2x15+20+2x15	Connects GC/ Market/ School/UP/College
3.	Faridpur	Bridge on BL Bari to Purindapur Road over Gumani River at Haria Bari Ghat.	150	6x25	Connects GC/ Market/ School/UP/College
4.	Faridpur	Bridge on Faridpur to Allahabad Road over the Boral River at Shishutola Ghat.	90	15+3x20+15	Connects GC/ Market/ School/UP/College
5.	Shathia	Bridge on Chalkmodhupur to Khidirgram Road over Chalkmodhupur BWDB Khal near Chalkmodhupur Reg. Primary School.	75	3x25	Connects GC/ Market/ School/UP/College

District: Faridpur

Sl No	Upazila	Name/Location	Bridge Length (m)	Span Arrangement (m)	Remarks
1.	Sadar	Bridge on Bilnalia tp Loskorkandi Primary Scool Road over Bilshokonia Khal.	25	25	Connects GC/ Market/ School/UP/College
2.	Sadar	Bridge on Ishan Gopalpur to Ambikarpara Road over Bhuboneswar River.	65	20+25+20	Connects GC/ Market/ School/UP/College
3.	Sadar	Bridge on Gopalpur to Char Chandpur Road over Chandpur Khal.	35	10+15+10	Connects GC/ Market/ School/UP/College
4.	Sadar	Bridge on Maskandi RHD to Norosingdia over village Road.	30	30	Connects GC/ Market/ School/UP/College
5.	Boalmari	Bridge on Joypasha to surjok Bazar Road over Joypasha Khal near Bandapasha Primary School.	50	15+20+15	Connects GC/ Market/ School/UP/College
6.	Charvadra son	Bridge on Charvadrason to Haziganj Road via Moulavirchar Bazar over Shorbondia.	70	20+2x25	Connects GC/ Market/ School/UP/College
7.	Sadarpur	Bridge on Katakhal to Karirhat Road over Bhubeneshor River.	80	2x15+20+2x15	Connects GC/ Market/ School/UP/College

District: Narayanganj

Sl No	Upazila	Name/Location	Bridge Length (m)	Span Arrangement (m)	Remarks
1.	Sadar	Bridge on Volayel RHD-GCCR Road via Nabinagar Jute mill over Mojumder Canal.	30	30	Connects GC/ Market/ School/UP/College
2.	Araihagar	Bridge on Road from Khakunda UP. Biahnondi UP over Dayakanda River.	90	2x15+20+2x15	Connects GC/ Market/ School/UP/College
3.	Araihagar	Bridge on Jaunguli Bazar-Shantia Bazar Road on Jaunguli Khal.	80	2x15+20+2x15	Connects GC/ Market/ School/UP/College

District: Comilla

Sl No	Upazila	Name/Location	Bridge Length (m)	Span Arrangement (m)	Remarks
1.	Brahnanpara	Bridge on Chanda Bazar to Charadrari Road over Shalda River.	50	15+20+15	Connects GC/ Market/ School/UP/College
2.	Chowddog ram	Bridge on Protabpur to Dorbes Bazar Road over Dhakatia River.	45	3x15	Connects GC/ Market/ School/UP/College
3.	Debidar	Bridge on Khalilpur to Shibpur Newmarket Road.	150	6x25	Connects GC/ Market/ School/UP/College
4.	Homna	Bridge on Kararkandi to Kalmina to Ganiarchar Bazar Road over Titas River.	80	2x15+20+2x15	Connects GC/ Market/ School/UP/College

District: Feni

Sl No	Upazila	Name/Location	Bridge Length (m)	Span Arrangment (m)	Remarks
1.	Sadar	Bridge on Laxmipur Panua Ghat Road over Sutsuti Dhanagazi Khal..	20	20	Connects GC/ Market/ School/UP/College
2.	Sadar	Bridge on Kachua to Panuaghat Road over Katchua Khal.	25	25	Connects GC/ Market/ School/UP/College
3.	Sadar	Bridge on Darmapur to Mohazer Colony Road over Kumra Chara Khal.	20	20	Connects GC/ Market/ School/UP/College
4.	Porshuram	Bridge on Kamua to Jamua Road over Chilonia River.	40	10+20+10	Connects GC/ Market/ School/UP/College
5.	Porshuram	Bridge on East Shaheb Nagar to West Shaheb Nagar – Subar Bazar Road over Chilonia River.	50	15+20+15	Connects GC/ Market/ School/UP/College
6.	Porshuram	Bridge on Subar Bazar to Moheshpuskurini Road over Chilonia River.	60	20+20+20	Connects GC/ Market/ School/UP/College

District: Manikganj

Sl No	Upazila	Name/Location	Bridge Length (m)	Span Arrangment (m)	Remarks
1.	Daulatpur	Bridge on Daulatpur-Jafarganj Road.	100	5x20	Connects GC/ Market/ School/UP/College
2.	Daulatpur	Bridge on Daulatpur Upazila H/Q-Abudanga Riverghat Road..	90	15+3x20+15	Connects GC/ Market/ School/UP/College
3.	Daulatpur	Bridge on Narchi-Shamganj Road at Borojola.	50	15+20+15	Connects GC/ Market/ School/UP/College
4	Daulatpur	Bridge on Narchi-Shamganj Road at Khalsi Bazar..	60	3x20	Connects GC/ Market/ School/UP/College

District: Laxmipur

Sl No.	Upazila	Name/Location	Bridge Length (m)	Span Arrangment (m)	Remarks
1.	Sadar	Bridge on Uttar Chanrapur to Dakhin Chanrapur Road over Rahamatkhali Khal..	40	10+20+10	Connects GC/ Market/ School/UP/College

JAPAN'S GRANT AID

The Grant Aid Scheme provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles 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

Japan's Grant Aid Scheme is executed through the following procedures.

Application	(Request made by the recipient country)
Study	(Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by the Cabinet)
Determination of	(The Note exchanged between the Governments of Japan and recipient
Implementation	country)

Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study) using (a) Japanese consulting firm(s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Scheme, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes (E/N) signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

2. Basic Design Study

(1) Contents of the study

The aim of the Basic Design Study (hereafter referred to as "the Study") conducted by JICA on a requested project (hereafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation.
- Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.
- Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- Preparation of a basic design of the Project.
- Estimation of costs of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of the Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure 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 in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Study, JICA uses (a) registered consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA. The consultant firm(s) used for the Study is(are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency.

3. Japan's Grant Aid Scheme

(1) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

(2) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and final payment to them must be completed. However, in case of delays in delivery, installation or construction due to unforeseen factors such as ~~national~~ natural disaster, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

(3) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased. When the two Governments 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, consulting, constructing and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

(4) Necessity of "Verification"

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

(5) Undertakings required of 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 the following:

- a) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the Project,
- b) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,
- c) To secure buildings prior to the procurement in case the installation of the equipment,
- d) To ensure all the expenses and prompt excursion for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid,
- e) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts,
- f) To accord Japanese nationals, whose services may be required in connection with the supply of the products and services under the Verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

(6) "Proper Use"

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

(7) "Re-export"

The products purchased under the Grant Aid should not be 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 in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan 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 the Government of Japan 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 to the Bank.

(end)



Major Undertaking to be taken by Each Government

NO	Items	To be covered by Grant Aid	To be covered by Recipient side
1	To bear the following commissions to a bank of Japan for the banking services based upon the B/A		
	1) Advising commission of A/P		•
	2) Payment commission		•
2	To ensure prompt unloading and customs clearance at the port of disembarkation in recipient country		
	1) Marine(Air) transportation of the products from Japan to the recipient country	•	
	2) Tax exemption and customs clearance of the products at the port of disembarkation		•
	3) Internal transportation from the port of disembarkation to the project site	(•)	(•)
3	To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		•
4	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contract		•
5	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid		•
6	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for construction of the facilities as well as for the transportation and installation of the equipment		•

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





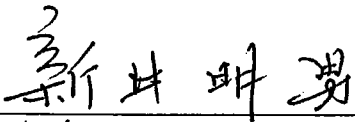

MINUTES OF DISCUSSIONS
ON BASIC DESIGN STUDY ON THE PROJECT
FOR PROVISION OF PORTABLE STEEL BRIDGES ON UPAZILA AND UNION ROADS
IN THE PEOPLE'S REPUBLIC OF BANGLADESH
(EXPLANATION ON DRAFT REPORT)

In January 2005, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Basic Design Study Team on the Project for Provision of Portable Steel Bridges on Upazila and Union Roads (hereinafter referred to as "the Project") to the People's Republic of Bangladesh (hereinafter referred to as "Bangladesh"), and through discussion, 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 Bangladesh side on the contents of the draft report, JICA sent to Bangladesh the Draft Report Explanation Team (hereinafter referred to as "the Team"), which is headed by Akio Arai, Resident Representative, JICA Bangladesh Office, from May 31 to June 6, 2005.

As a result of discussions, both parties confirmed the main items described on the attached sheets.

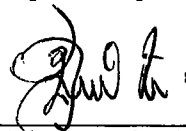
Dhaka, June 5, 2005



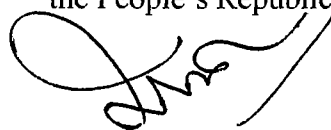
Akio Arai
Leader
Draft Report Explanation Team
Japan International Cooperation Agency



M. Emdadul Haque
Deputy Secretary
Economic Relations Division
Ministry of Finance
the People's Republic of Bangladesh



Dr. Mohammad Jahirul Islam
Deputy Chief
Local Government Division
Ministry of LGRD & Co-operatives
the People's Republic of Bangladesh



Md. Anwarul Hoque
Project Director
Local Government Engineering Department
the People's Republic of Bangladesh

ATTACHMENT

1. Contents of the Draft Report

The Government of Bangladesh agreed and accepted in principle the contents of the draft report explained by the Team.

2. Japan's Grant Aid scheme

The Bangladesh side understands the Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Bangladesh as explained by the Team and described in Annex- 5 and Annex- 6 of the Minutes of Discussions signed by both parties on January 12, 2005.

3. Schedule of the Study

JICA will complete the final report in accordance with the confirmed item and send it to the Government of Bangladesh by the end of August, 2005.

4. Other relevant issues

4-1. In the case that the Project is implemented, the Government of Bangladesh shall;

- 1) secure the land for stock yard of materials by the end of June, 2005,
- 2) secure the budget for design work of substructure and construction of substructure of all bridges and connecting road, and
- 3) complete the construction of all bridges in 2 years from the date of the handover of materials.

4-2. Bangladesh side explained that the procedures, necessary for approval of DPP (Development Project Paper), had been already started and would be completed by June, 2005. And the copy of such approval shall be sent to JICA Bangladesh Office (with a copy to the consultant of the Project) on or before the end of June, 2005, enabling JICA headquarter to present it to the relevant authorities prior to the cabinet approval in Japan.



APPENDIX 5

COST ESTIMATION BORNE BY THE RECIPIENT COUNTRY

COST ESTIMATE BORNE BY THE PEOPLE'S REPUBLIC OF BANGLADESH

Structure		Unit Price	Unit	Phase 1 (47 Brides)		Phase 2 (29 ridges)		Total (76Bridges)	
				Quantity	Amount	Quantity	Amount	Quantity	Amount
Sub-Structure	Single-lane Abutment	1,730,000	Nos.	80	138,400,000	58	100,340,000	138	238,740,000
	Bouble-lane Abutment	2,860,000	Nos.	14	40,040,000	-	-	14	40,040,000
	Single-lane Pier	1,190,000	Nos.	4	4,760,000	12	14,280,000	16	19,040,000
	Bouble-lane Pier	1,790,000	Nos.	1	1,790,000	-	-	1	1,790,000
Sub-total				(184,990,000)	(114,620,000)	(299,610,000)
Super-Structure	Erection of Bridges	8,500	Ton	1,158	9,843,000	802	6,817,000	1,960	16,660,000
	Concrete Slab	4,500	m ²	1,324	5,958,000	-	-	1,324	5,958,000
	Sub-total			(15,801,000)	(6,817,000)	(22,618,000)
Others	Approach Road	10,000	m	1,880	18,800,000	1,160	11,600,000	3,040	30,400,000
	River Bank Protecton	1,530	m ²	12,960	19,828,800	8,935	13,670,550	21,895	33,499,350
	Sub-total			(38,628,800)	(25,270,550)	(63,899,350)
Total (Taka)					240,000,000		146,000,000		386,000,000

(2) Custom Duty and Other Levies		(Unit : Taka)	
		Phase 1	Phase 2
Custom Duty and Other Levies		Total	
Total (Taka)		162,000,000	104,000,000
		266,000,000	

(3) Total Cost		(Unit : Taka)	
		Phase 1	Phase 2
Total Cost		Total	
Total (Taka)		402,000,000	250,000,000
		652,000,000	

APPENDIX 6

OTHER RELEVANT DATA

(If applicable)

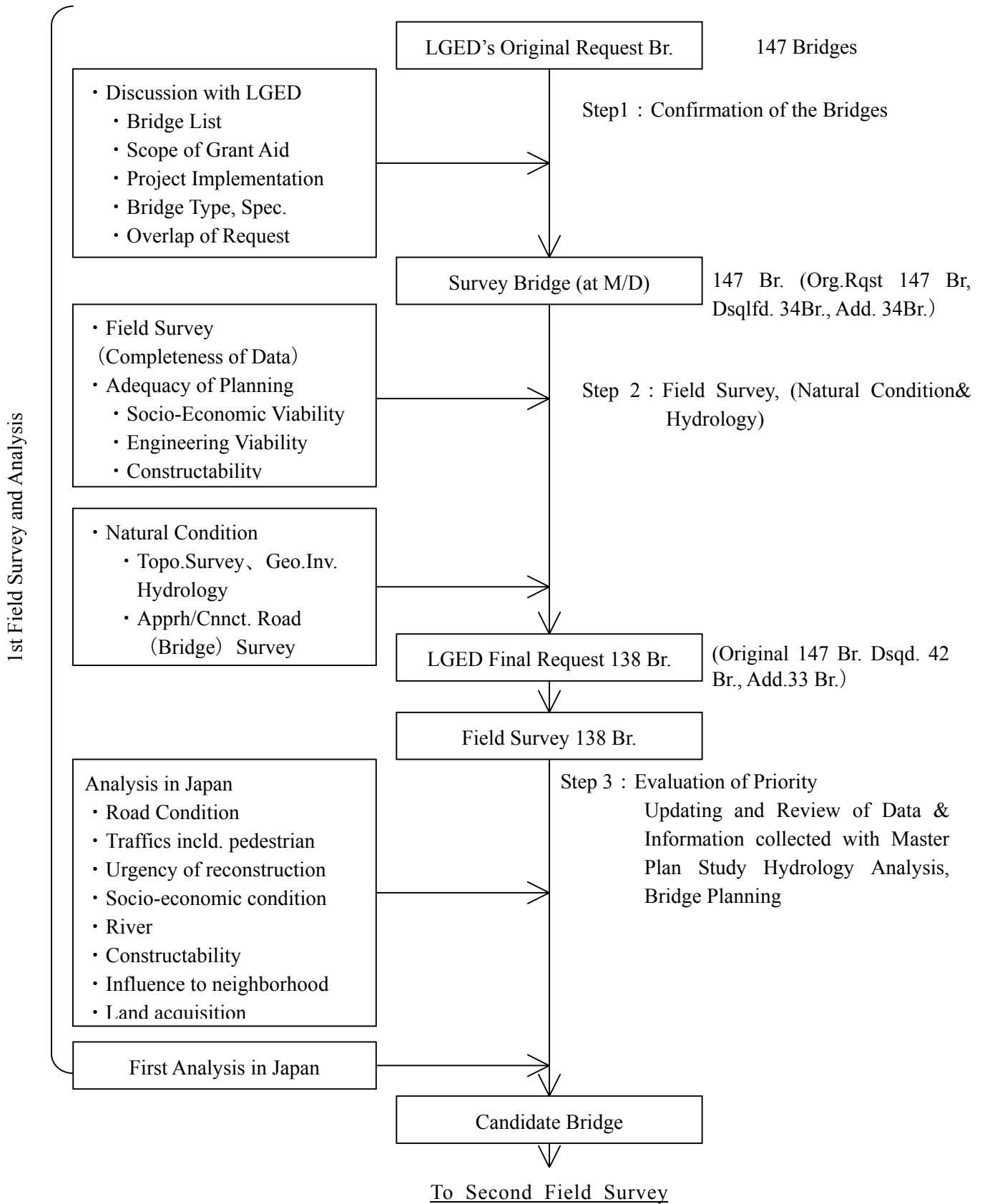


Figure Selection Flow of the Candidate Bridge(1/2)

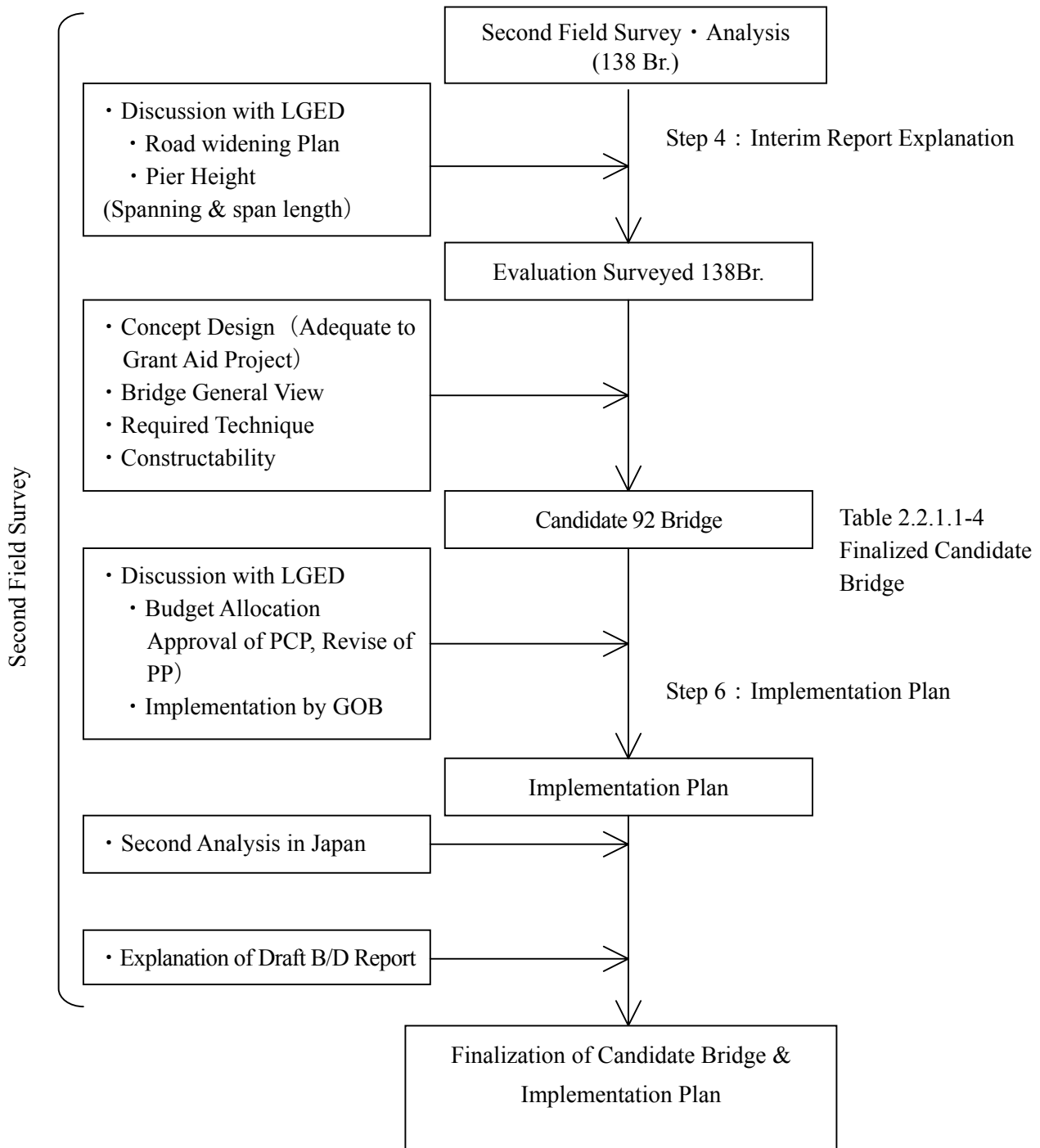


Figure Selection Flow of the Candidate Bridge (2/2)

Table Evaluation of the Socio-economic Viability,
Engineering Viability and the Adequacy of Planning

① Socio-economic Viability

- The candidate bridge is located on the road connecting farm and market. The execution of the Project promote small-scale processing industries (a tree, bamboo product and textile) and agriculture around the bridge, specially cultivation such as rice, rapeseed, vegetables and jute.
- The direct/indirect beneficiaries are 17 districts, 42.7 million people at 32,766 km² area.
- Taking account of the magnitude of the Project (numbers and locations of bridges etc.), the Project helps not only rural economy growth but also it contributes to the development of the socio-economy of Bangladesh.

② Engineering Viability

- The bridge to be built at the crossing where a bridge was washed away due to the flood has great needs and importance, and promotes activities of the rural economy.
- The bridge to be built at the crossing where bamboo bridge is being utilized has high needs, and it will stabilize social life activities, and promote the economic activities of the circumference area.
- The bridge to be built at the crossing where bridge is not existed and traffic is interrupted during flood, has high effect to activate rural economic activities, improve the life level and increase income of the rural people.

③ Adequacy of Planning

- The development of the economic activities of the area might be expected with taking the bottleneck clear.
- The Project is strongly requested to implement urgently.
- The beneficial of the Project are local people and its numbers is large.
- The safe and uninterrupted transport infrastructure improve the life level and contributes to increase the income of the local people.

Selection Flow from LGED's original request bridges (147 bridges) to the candidate bridges (92 bridges) is shown in the Figure.



Figure Hydrological Regions

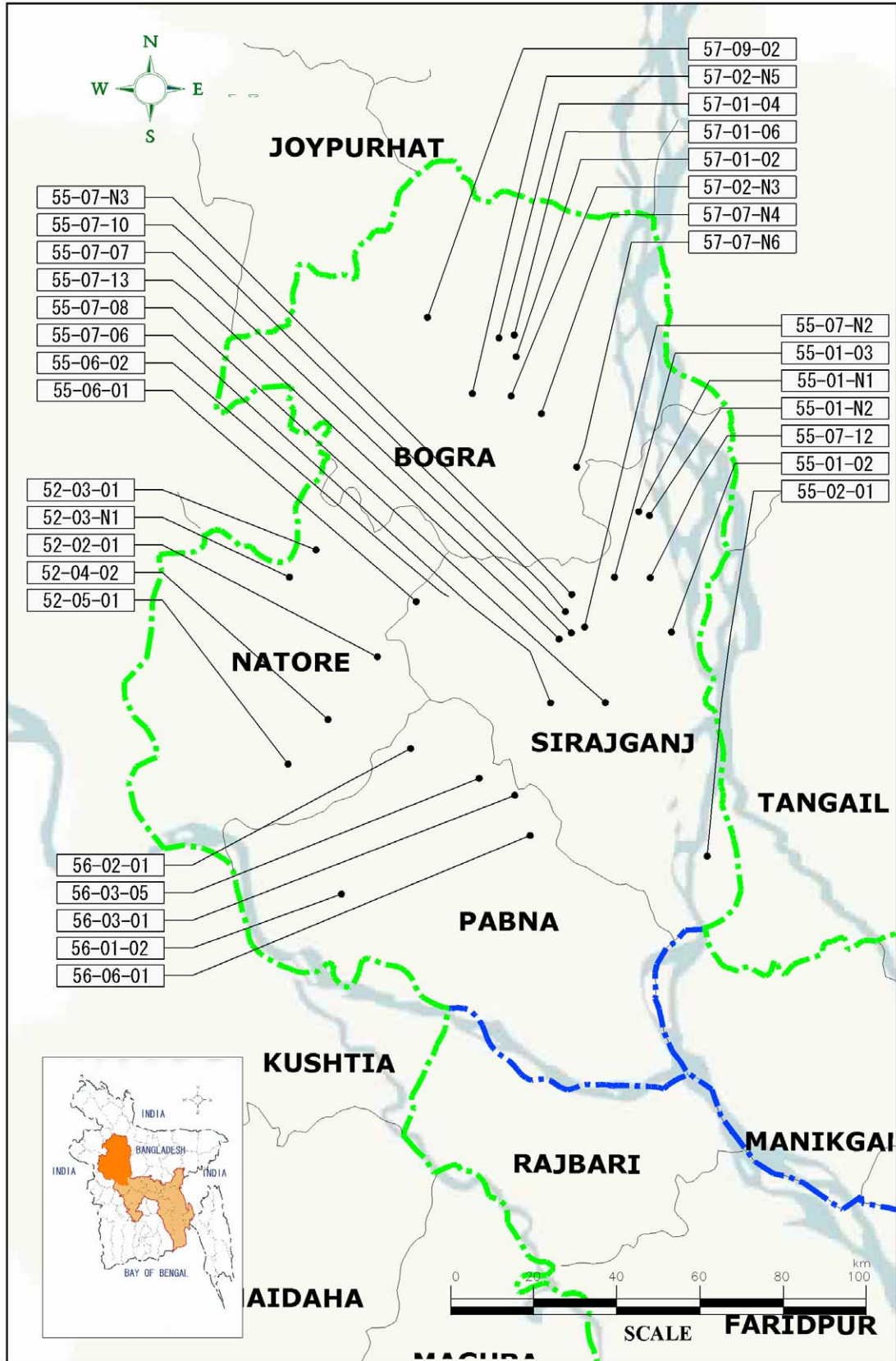


Figure Northwest Hydrological Region

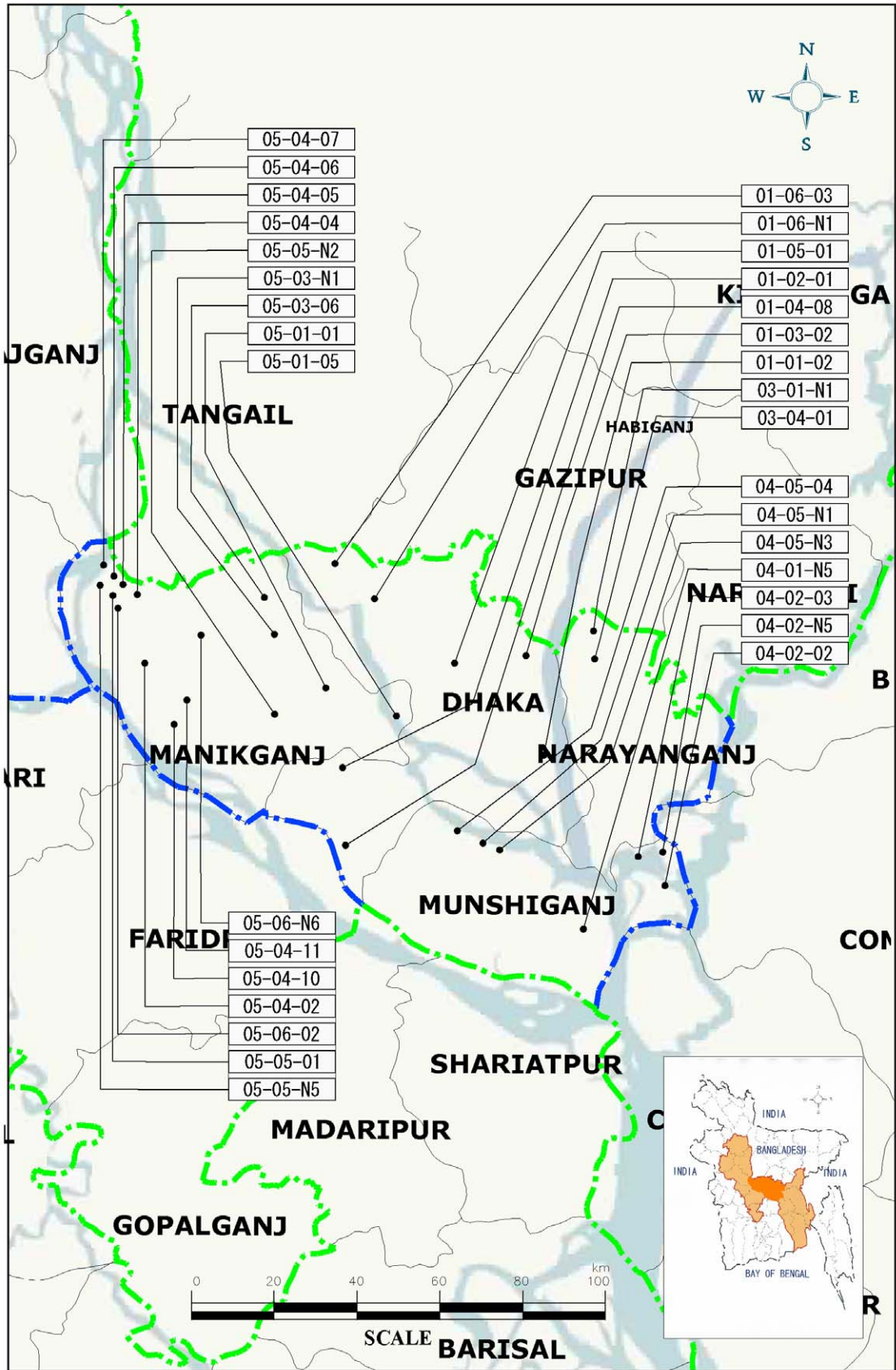


Figure North Central Hydrological Region

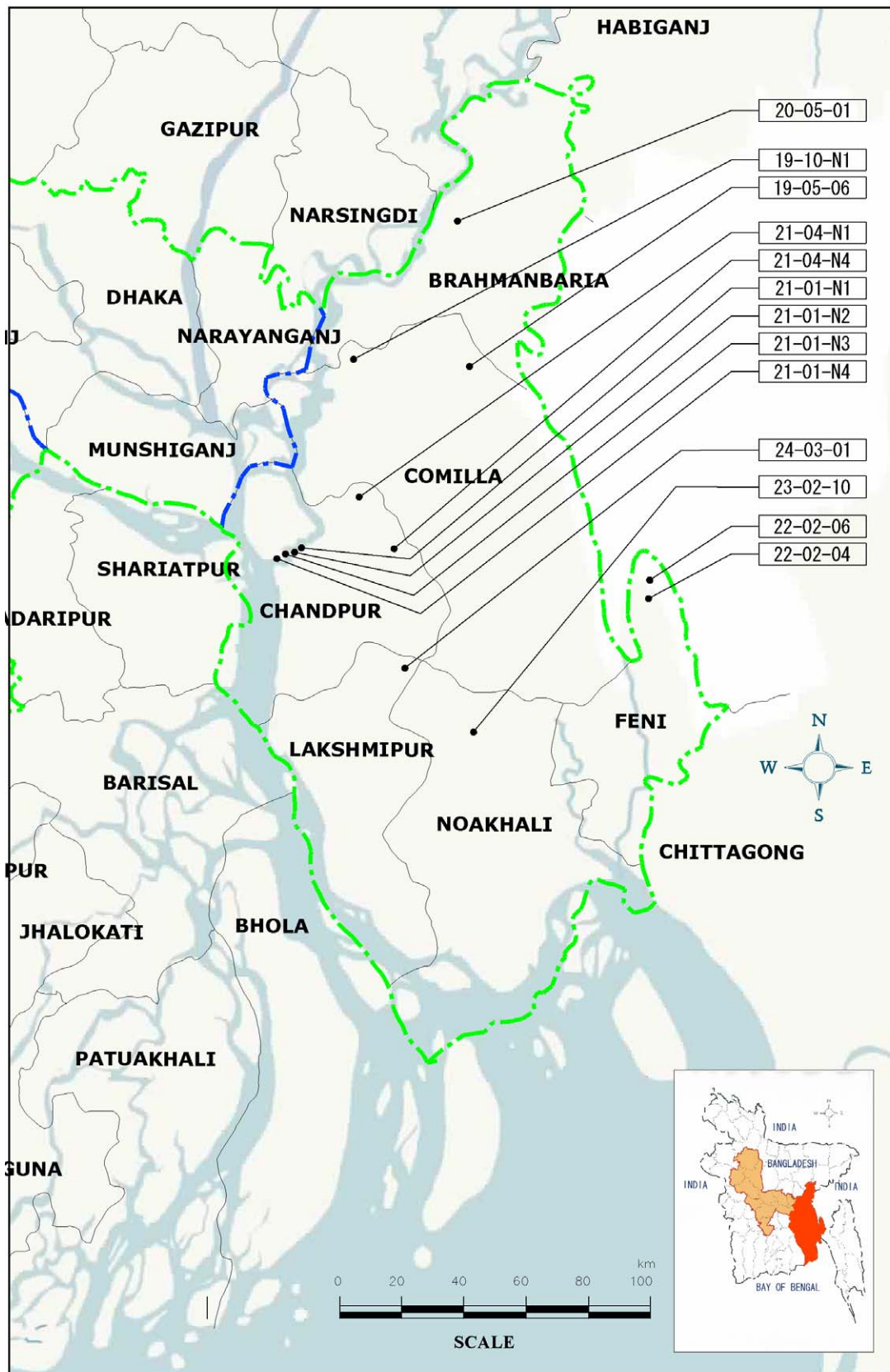


Figure Southeast Hydrological Region

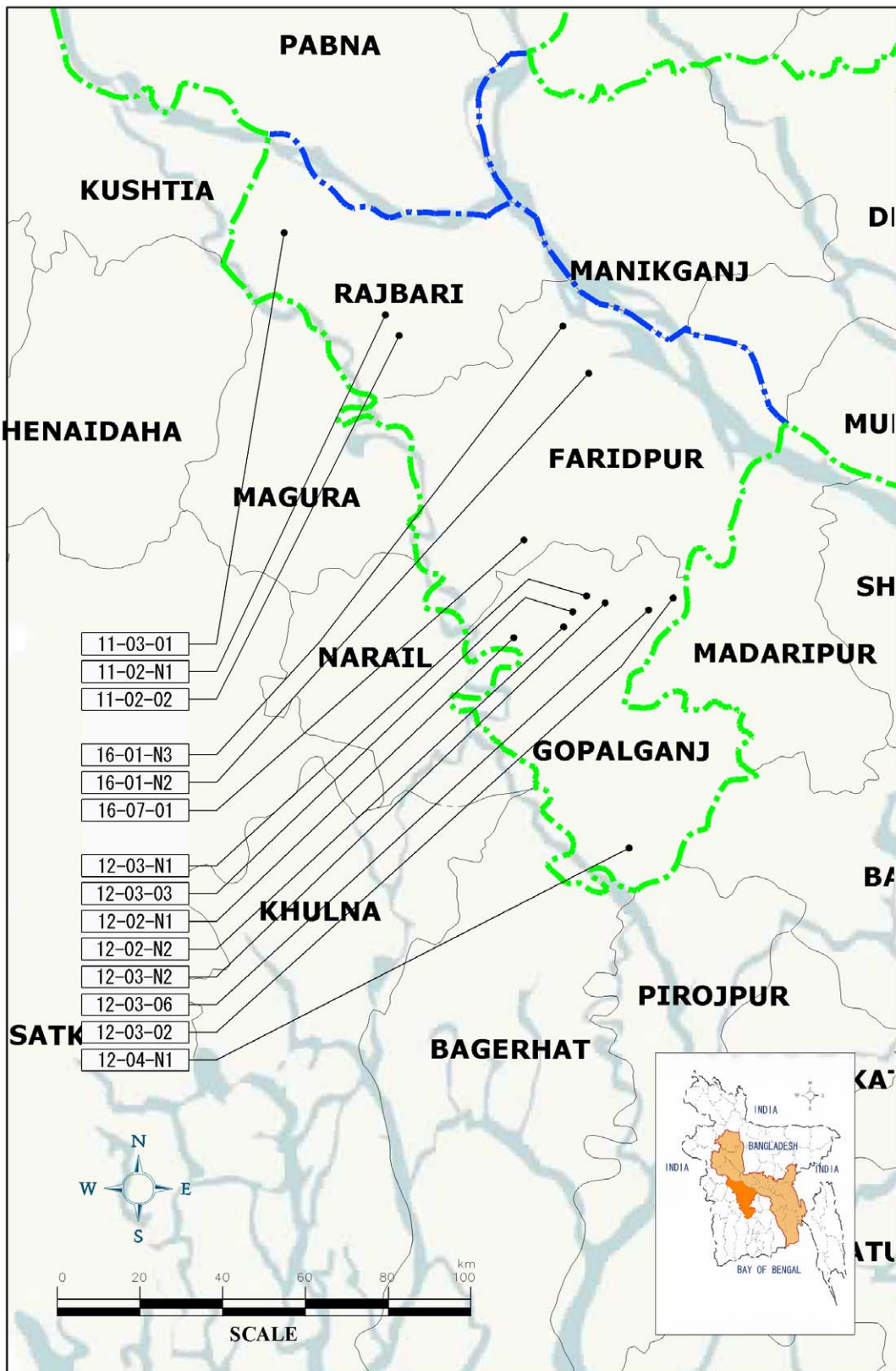


Figure Southwest Hydrological Region

APPENDIX 6-3 BRIDGE SITE SURVEY DATA

Bridge Site Survey Data - 1
Zila : Dhaka

Name of Upazila	Keraniganj	Nawabganj			Uttara		Dohar	Savar	Dhamrai		
Serial Number	1	2	3	4	5	6	7	8	9	10	
Bridge Code	01-01-02	01-02-01	01-02-06	01-02-07	01-03-01	01-03-02	01-04-08	01-05-01	01-06-03	01-06-N1	
Bridge Name/Location	Bridge on Kholamura Bazar - Goalkhali Bazar via Nawabcher, Joail, Bhangabari, Zoacher Hijla and Agrakhola our Karimkhali	Bridge on Nawabganj - Charigram via Chandrokhola, Balukhandanda Road.	Bridge on Kartikpur - Barrah - Dohair - Kaishakhali Bandh - Kuthuri - Shikaripara - Bandura - Majhirkanda	Bridge on Daudpur - Panjiprohi - Bakter Nagar road over Isamoti River.	Bridge on Mainartek - Godaraghat Road.	Bridge on Kaethkura - Khilkhet road over Chinoti Khal at Uttar Khan UP.	Bridge on Joypara Gc - Maghichar Bazar - Kutubpur - Debinagar - Kulchhari - Kazirchar RHD Road.	Bridge on Nikrail - Chakulia Road at Bonogaon UP.	Bridge on Mohishasi - Sreepur Road over Banshi River.	Bridge on Joypura Bazar to Royail UP office road over Gaji Khali Khal at Jalsing.	
Status	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	
Road ID	326383042	326622013	326622010	326624170	326733005	326733097	326182008	326723001	326142021	326143020	
Road Class	Union	Upazila	Upazila	Village-A	Union	Union	Upazila	Union	Upazila	Union	
Chainage (km)	1+500	2+100	9+800	2+000	2+000	2+100	0+500	6+600	1+660	2+500	
Condition of Existing Bridge	Existing or not	Not Existing	Not Existing	Not Existing	Not Existing	Not Existing	Existing	Not Existing	Not Existing	Not Existing	
	Bridge Length (m)						54.00				
	Bridge Width (m)						0.80				
	Carriageway Width (m)						0.70				
	Superstructure Type						Bamboo				
	Abutment Type						-				
	Pier Type						Wooden				
	Usage of Bridge						Pedestrians Only				
	Condition						Weak				
	Present Navigation Clearance Height (m)						-				
River Condition	Bank to Bank Width (m)	30.00	30.00	80.00	73.00	120.00	65.00	60.00	30.00	35.00	45.00
	Highest Flood Water Width (m)	40.00	35.00	85.00	80.00	120.00	75.00	70.00	50.00	45.00	55.00
	Highest Flood Water Depth (m)	5.50	5.00	8.00	8.00	7.50	5.00	6.50	4.00	3.50	5.00
	Normal Flood Water Width (m)	38.00	30.00	80.00	70.00	120.00	60.00	60.00	30.00	33.00	52.00
	Normal Flood Water depth (m)	4.50	4.00	6.50	6.50	6.00	4.00	5.00	3.00	2.50	4.00
	Dry Season Water Width (m)	15.00	0.00	60.00	40.00	60.00	50.00	0.00	0.00	0.00	0.00
	Dry Season Water Depth (m)	1.00	0.00	1.00	1.00	2.00	0.25	0.00	0.00	0.00	0.00
	Dry Season Water Depth at Pier (m)	0.00	0.00	7.60	1.40	2.20	1.10	0.20	0.00	0.00	0.60
	Tidal Fluctuation (m)	0.30	No	No	No	0.30	0.30	No	No	No	No
	Water Velocity	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Slow	Slow	Medium
	Angle of Bridge to Stream (deg)	90	90	90	90	90	90	90	90	90	90
	Ferry Services	No	No	Yes	Yes	No	No	No	No	No	No
	Required Navigation Clearance Height (m)	1.50	1.00	1.50	1.50	3.00	2.00	2.00	0.50	1.00	1.00
	Type of River Traffic	No	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat, Launch	Engine Boat, Country Boat, Launch	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat
	Condition of Bank	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound
Condition of Riverbed	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	
Approach Road	Total Road Width (m)	4.30	2.67	3.66	3.66	4.00	4.00	3.66	3.66	6.50	4.90
	Carriageway Width (m)	3.66	2.67	3.66	3.66	3.66	3.66	2.20	3.66	4.90	3.66
	Embankment Height (m)	1.50	1.50	3.25	3.25	1.50	1.50	1.00	1.50	2.50	2.00
	Surface Type	WBM	Earthen	Earthen	Earthen	HBB/Earthen	HBB/Earthen	HBB/Earthen	Earthen	HBB	HBB
	Surface Condition	Good	Bad	Good	Good	Bad	Bad	Bad	Bad	Bad	Good
	Alternative Route (km)	No	No	No	No	No	No	No	No	No	No

Bridge Site Survey Data - 2
Zila : Dhaka

Name of Upazila		Keraniganj	Nawabganj			Uttara		Dohar	Savar	Dhamrai		
Serial Number		1	2	3	4	5	6	7	8	9	10	
Influence Area	Population (thousand)	25	15	20	18	20	10	20	20	13	15	
	Main Industry	Agriculture, Textile	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture, Textile	Agriculture	Agriculture	Agriculture	
	Major Agricultural Product	Rice, Jute	Rice, Jute	Rice, Jute	Rice, Jute	Rice, Wheat, Jute	Rice, Wheat, Jute	Rice, Jute	Rice, Wheat, Jute	Rice, Jute, Wheat, Veg.	Rice, Wheat, Jute, Veg.	
	Number of Public Facilities	School	15	3	4	4	6	6	7	4	9	11
		Clinic	10	1	0	1	2	2	2	1	1	2
		Bazar	4	2	2	2	2	2	3	2	3	4
		Mosque	20	4	6	6	12	10	12	4	6	15
		Gov't Office	4	1	4	2	2	2	2	2	4	4
Others		5	5	4	5	12	10	5	2	5	5	
Total		58	16	20	20	36	32	31	15	28	41	
Traffic Volume	Passenger Car	15	5	5	5	25	25	50	50	10	20	
	Pickup/Truck	0	0	0	0	200	0	25	200	20	10	
	Bus	0	0	0	0	50	0	0	0	10	3	
	Motorcycle	30	5	5	10	100	20	50	20	25	10	
	Rickshaw	150	25	150	150	200	150	200	75	250	200	
	Autorickshaw	15	20	10	10	100	75	50	10	20	25	
	Bullock Cart	0	5	10	15	0	0	5	15	5	5	
	Pedestrian	3000	2000	3000	3000	2000	1200	3000	1000	700	1000	
Bridge Site Condition	Landuse	Residence	Farm	Farm, Residence	Farm, Residence	Farm	Farm	Residence	Farm	Farm	Farm	
	Topography	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	
Environmental Issue	Necessity of Realignment of	No	No	No	No	No	No	No	No	No	No	
	Necessary Land to be Additionally Acquired	No	No	No	No	No	No	No	No	No	No	
	Number of Houses to be Relocated	No	No	No	No	No	No	No	No	No	No	
	Other Obstruction to be Relocated	No	No	No	No	No	No	No	No	No	No	
Proposed Bridge	Bridge Length (m)	30	30	75	75	100	75	60	30	30	60	
	Span Arrangement	1x30m	1x30m	3x25m	2x15m+25m+20m	4x25m	3x25m	3x20m	1x30m	1x30m	3x20m	
	Abutment Height (m)	4.00	4.00	5.00	5.00	7.00	4.00	4.50	4.00	3.50	4.50	
	Pier Height (m)	-	-	7.00	7.00	8.00	6.00	7.00	-	5.50	7.00	
Engineering Evaluation	Road Class	13	20	20	7	13	13	20	13	20	13	
	Existing Bridge	40	40	40	40	40	40	40	40	40	40	
	Approach Road	30	0	0	0	20	20	20	0	20	30	
	Alternative Route	10	10	10	10	10	10	10	10	10	10	
	Total Engineering Score	93	70	70	57	83	83	90	63	90	93	
Socioeconomic Evaluation	Beneficiaries	25	15	18	16	14	9	18	20	13	14	
	Traffic Demand	11	3	8	9	14	13	18	20	19	14	
	Pedestrian Demand	20	20	18	18	14	11	18	10	7	9	
	Public Facilities	30	16	18	18	21	27	27	15	28	27	
	Bridge Length Factor from Socioeconomic Score	f=1.0	f=1.0	f=0.9	f=0.9	f=0.7	f=0.9	f=0.9	f=1.0	f=1.0	f=0.9	
Overall Evaluation	A	A	X2	X2	X2	A	A	A	A	A		
Implementation Schedule	Phase-1	Phase-3	Excluded (Water Depth at Pier>1.2m) X2	Excluded (Water Depth at Pier>1.2m) X2	Excluded (Water Depth at Pier>1.2m) X2	Phase-2	Phase-1	Phase-3	Phase-1	Phase-2		
Remarks	- Approach road in length 50m is required on both sides. - The river is curved (apx 100m radius) at the location of the proposed bridge. - Bridge to connect Kholamura Bazar , Afir Bazar , Naya Bazar school and college , Galkhali Bazar , Bhangabari , Dhaka-Dohar RHD road.	- Approach road in length 35m is required on both sides. - Bridge to connect Bangla Bazar , Shikaripara Union Parish and Bazar , Solla UP office , Patiljap primary school and Upazila Headquarter.	- Approach road in length 10m is required on both sides. - The surrounding area is densely populated. - Bridge to connect Shikaripara Union Parish , Daudpur Bazar , Bandura Bazar , Barawakhali growth center , Joykrishnapur UP office and Upazila Headquarter.	- Approach road in length 30m is required on one side. - Bridge to connect Daudpur Bazar , Barawakhali Bazar Gc , UP office , Joykrishnapur Union , Dhulsura Bazar , Bandura-Barawakhali Upazila road and Upazila Headquarter.	- Both sides riverbank which area is agricultural land are submerged in flood water depth 1.50m. - Approach road of 300m length on one side and 200m length on other side are required. - Bridge to connect Kaliganj Upazila , Dhaka bypass road , Uttara Thana and Dhaka-Mymenringh highway.	- Both sides riverbank which area is agricultural land are submerged in flood water depth 1.50m. - Approach road of 300m length on one side and 200m length on other side are required. - Bridge to connect Dumni Union , Uttar Khan Union , Uttara Thana and Dhaka flood prolecha embankment.	- Approach road in length 50m is required on both sides. - Bridge to connect Bilashpur and Mahmudpur Union Parashid , Padma Ferryghat , UP with Upazila Headquarter.	- Approach area is completely submerged in flood water width approximately 300m in rainy season. - Bridge length of 30m as earlier proposed by LGED may be considered. - Bridge to connect Birulia Union , Sadullapur Bazar , Dhaka-Ashulia highway and Dhaka-Aricha National highway.	- In approach road length 30m & 25m are needed. - Surrounding area is cultivate agricultural land. - Bridge to connect Banga Bazar , high schools , primary school , Ballia Bazar , Kashura Bazar , Upazila road and Dhaka-Aricha National highway.	- In approach road length 30m is needed on both sides. - Surrounding area is cultivate agricultural land. - Bridge to connect Royall UP office , Jalsing high school , college & Bazar , Joypura Bazar and Dhaka-Aricha National highway.		

Bridge Site Survey Data - 1
Zila : Narayanganj

Name of Upazila		Sadar		Araihazar		Rupganj
Serial Number	1	2	3	4	5	
Bridge Code	03-01-N1	03-01-N3	03-02-04	03-02-06	03-04-01	
Bridge Name/Location	Bridge on Simrail Paper Mill Road over DND canal at Simrail.	Bridge on Volayel RHD-GCCR Road via Nabinagar Jute Mill over Mujumder Khal.	Bridge on Road from Khakunda UP - Bishnondi UP over Dayakanda River.	Bridge on Jaunguli Bazar - Shanti Bazar Road on Jaunguli Khal.	Bridge on Majina - Nawra Road on Nimartak Khal.	
Status	Original Request	Additional Request	Additional Request	Additional Request	Original Request	
Road ID	367583038	367585167	367022004	367023045	367683041	
Road Class	Union	Village-B	Upazila	Union	Union	
Chainage (km)	0+000	0+800	1+020	0+200	3+400	
Condition of Existing Bridge	Existing or not	Existing	Existing	Not Existing	Not Existing	Not Existing
	Bridge Length (m)	48.00	20.00			
	Bridge Width (m)	1.20	1.50			
	Carriageway Width (m)	1.20	1.50			
	Superstructure Type	RC Slab, Steel Frame	Bamboo			
	Abutment Type	-	-			
	Pier Type	RC Pile-bent	-			
	Usage of Bridge	Pedestrians Only	Pedestrians Only			
	Condition	Fair	Weak			
	Present Navigation Clearance Height (m)	1.00	0.60			
	River Condition	Bank to Bank Width (m)	50.00	30.00	90.00	78.00
Highest Flood Water Width (m)		48.00	32.00	Overtopped	Overtopped	Overtopped
Highest Flood Water Depth (m)		5.00	5.50	6.00	7.00	7.50
Normal Flood Water Width (m)		40.00	32.00	90.00	80.00	35.00
Normal Flood Water depth (m)		4.00	5.00	5.00	5.00	6.00
Dry Season Water Width (m)		25.00	10.00	20.00	20.00	5.00
Dry Season Water Depth (m)		2.00	0.75	0.60	1.00	0.30
Dry Season Water Depth at Pier (m)		1.20	0.00	1.40	1.10	0.60
Tidal Fluctuation (m)		No	0.30	0.30	0.20	0.30
Water Velocity		Slow	Slow	Medium	Medium	Slow
Angle of Bridge to Stream (deg)		90	90	90	90	90
Ferry Services		No	No	Yes	Yes	Yes
Required Navigation Clearance Height (m)		-	1.00	2.20	2.00	2.00
Type of River Traffic		No	Engine Boat, Country Boat	Country Boat	Country Boat	Country Boat
Condition of Bank		Sound	Sound	Sound	Sound	Sound
Condition of Riverbed		Sound	Sound	Sound	Scoured	Sound
Approach Road	Total Road Width (m)	7.30	4.00	7.50	4.25	3.66
	Carriageway Width (m)	6.50	3.50	6.50	3.66	3.00
	Embankment Height (m)	4.00	3.00	1.50	0.50	4.00
	Surface Type	BC	Earthen	Earthen	BC	HBB
	Surface Condition	Good	Bad	Bad	Bad	Bad
	Alternative Route (km)	No	No	No	No	4.00

Bridge Site Survey Data - 2
Zila : Narayanganj

Name of Upazila		Sadar		Araihazar		Rupganj	
Serial Number		1	2	3	4	5	
Influence Area	Population (thousand)	17	20	15	12	20	
	Main Industry	Agriculture, Textile, Paper Mill, Milk Mill	Agriculture, Textile, Dying Mill, Paper Mill, Knit Mill	Agriculture, Textile	Agriculture, Textile	Agriculture, Textile	
	Major Agricultural Product	Rice, Veg.	Rice, Veg.	Rice, Jute, Wheat, Veg.	Rice, Jute, Wheat, Veg.	Rice, Jute, Wheat, Veg.	
	Number of Public Facilities	School	6	2	3	5	11
		Clinic	4	1	1	2	1
		Bazar	4	3	2	4	5
		Mosque	8	8	6	7	15
		Gov't Office	8	4	2	1	8
Others		12	12	6	4	10	
Total	42	30	20	23	50		
Traffic Volume	Passenger Car	100	5	15	20	20	
	Pickup/Truck	15	20	20	20	25	
	Bus	10	5	10	8	0	
	Motorcycle	30	20	50	50	10	
	Rickshaw	150	150	100	100	150	
	Autorickshaw	30	50	50	30	10	
	Bullock Cart	0	0	0	0	1	
	Pedestrian	2000	1000	1000	1000	1500	
Bridge Site Condition	Landuse	Residence, Market	Residence	Farm	Farm	Farm	
	Topography	Flat	Flat	Flat	Flat	Flat	
	Necessity of Realignment of Approach Road	No	No	No	No	No	
Environmental Issue	Necessary Land to be Additionally Acquired (sq.m)	No	No	No	No	No	
	Number of Houses to be Relocated	No	No	No	No	No	
	Other Obstruction to be Relocated	No	No	No	No	No	
Proposed Bridge	Bridge Length (m)	45	30	100	95	40	
	Span Arrangement	3x15m	1x30m	4x25m	20m+3x25m	15m+25m	
	Abutment Height (m)	4.00	4.00	5.00	5.50	7.00	
	Pier Height (m)	7.00	-	7.00	7.50	8.00	
Engineering Evaluation	Road Class	13	0	20	13	13	
	Existing Bridge	40	40	40	40	40	
	Approach Road	30	0	0	20	20	
	Alternative Route	10	10	10	10	5	
	Total Engineering Score	93	50	70	83	78	
Socioeconomic Evaluation	Beneficiaries	15	20	11	8	18	
	Traffic Demand	18	14	10	10	12	
	Pedestrian Demand	18	10	7	7	14	
	Public Facilities	27	30	14	16	27	
	Bridge Length Factor	f=0.9	f=1.0	f=0.7	f=0.7	f=0.9	
	Total Socioeconomic Score	78	74	42	41	71	
Overall Evaluation	A	B	X2	B	A		
Implementation Schedule	Phase-1	Excluded (Priority B)	Excluded (Water Depth at	Excluded (Priority B)	Phase-2		
Remarks	Bridge to connect Demra-Narayanganj Rd.(National Highway) and Mukti-Sharani Demra Border Road (V.R.A) crossing DND Irrigation Main Canal.			- Shantibazar is an important GC stands on the bank of the Jangalia Khal. - Access Road (400m) to be rehabilitated.	Surrounding area is cultivated agricultural land. Very essential for village people.		

Bridge Site Survey Data - 1
Zila : Munshiganj

Name of Upazila	Sadar	Gazaria				Sreenagar	Sirajdikhan					
Serial Number	1	2	3	4	5	6	7	8	9	10	11	
Bridge Code	04-01-N5	04-02-02	04-02-03	04-02-N1	04-02-N5	04-04-01	04-05-02	04-05-03	04-05-04	04-05-N1	04-05-N3	
Bridge Name/Location	Bridge over Rajat Rekha Khal on Anandapur to Noyadha Road.	Bridge over Upazila Headquarter to Imampur UP Via Baghaikanji over Joistotala	Bridge on Kazipara to Hossaindi Gc Road over Nozipur Khal.	Bridge on Miregao to Bhatirchar National Highway Road over Bhatirchar Khal.	Bridge on Kazipara-Hossaindi Gc Road over Nazirchar Khal at Nozipur.	Bridge on Baraikhali Hat Road near West side of Baraikhali Village.	Bridge on Nimtala Bus Stand to Shakhernaga r GC Road over Isamoti river at Kamalpur.	Bridge on Khalpar to Chittrakot Road over Isamoti River at Kamalpur.	Bridge on Khalpar to Chittrakot Road over Isamoti River at Razanagar Ghat.	Bridge on Kuchiamura to Sirajdikhan Road over Ghoramara Khal.	Bridge on Kuchiamura to Sirajdikhan Road over Patharghata Khal.	
Status	Original Request	Original Request	Original Request	Original Request	Original Request	Additional Request	Original Request	Additional Request	Additional Request	Original Request	Original Request	
Road ID	359563011	359243012	359242003	359244027	359242003	359054001	359742001	359743035	359743035	359742007	359742007	
Road Class	Union	Union	Upazila	Village-A	Upazila	Village-A	Upazila	Union	Union	Upazila	Upazila	
Chainage (km)	3+000	5+500	3+650	0+550	3+250	2+200	7+970	2+500	0+000	0+900	1+200	
Condition of Existing Bridge	Existing or not	Not Existing	Existing	Not Existing	Not Existing	Existing	Not Existing	Not Existing	Not Existing	Not Existing	Not Existing	
	Bridge Length (m)		10.00			26.00						
	Bridge Width (m)		3.15			1.60						
	Carriageway Width (m)		3.05			1.30						
	Superstructure Type		RC			Timber						
	Abutment Type		RC			Timber						
	Pier Type		-			Timber						
	Usage of Bridge		Light Vehicles Only			Pedestrians Only						
	Condition		Collapsed			Weak						
Present Navigation Clearance Height (m)		-			-							
River Condition	Bank to Bank Width (m)	50.00	30.00	30.00	45.00	27.00	28.00	105.00	105.00	100.00	35.00	25.00
	Highest Flood Water Width (m)	55.00	40.00	30.00	60.00	30.00	40.00	130.00	120.00	100.00	40.00	30.00
	Highest Flood Water Depth (m)	5.00	6.50	5.00	5.00	6.00	5.50	7.50	12.50	6.00	5.00	4.50
	Normal Flood Water Width (m)	53.00	30.00	25.00	50.00	10.00	35.00	120.00	100.00	100.00	25.00	25.00
	Normal Flood Water depth (m)	4.00	5.00	4.00	4.00	5.00	4.50	6.50	11.50	5.00	4.00	3.50
	Dry Season Water Width (m)	10.00	0.00	5.00	20.00	5.00	10.00	40.00	80.00	60.00	10.00	0.00
	Dry Season Water Depth (m)	0.50	0.00	1.00	1.20	0.00	0.50	1.20	11.00	1.00	1.00	0.00
	Dry Season Water Depth at Pier (m)	0.60	0.00	0.00	0.50	0.00	0.00	2.60	7.10	0.70	0.00	0.00
	Tidal Fluctuation (m)	0.20	0.20	0.30	0.30	No	No	No	0.33	No	No	No
	Water Velocity	Fast	Slow	Medium	Slow	Medium	Slow	Medium	Medium	Medium	Slow	Slow
	Angle of Bridge to Stream (deg)	90	90	90	90	90	90	90	90	90	90	90
	Ferry Services	No	No	No	No	No	No	Yes	Yes	No	No	No
	Required Navigation Clearance Height (m)	1.50	0.60	0.60	1.50	0.60	1.50	2.00	2.00	1.50	1.00	1.00
	Type of River Traffic	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat
Condition of Bank	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	
Condition of Riverbed	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	
Approach Road	Total Road Width (m)	3.66	3.66	4.00	4.00	4.00	3.66	5.20	4.20	3.66	3.66	3.66
	Carriageway Width (m)	3.66	3.66	4.00	4.00	4.00	3.66	3.66	4.20	3.66	3.66	3.66
	Embankment Height (m)	1.00	2.00	2.00	2.00	2.00	1.00	3.00	2.00	2.00	1.50	2.00
	Surface Type	Earthen	Earthen	Earthen	Earthen	Earthen	Earthen	BC	Earthen	Earthen	Earthen	Earthen
	Surface Condition	Bad	Bad	Good	Bad	Bad	Bad	Good	Good	Good	Good	Good
	Alternative Route (km)	No	No	No	No	No	No	No	No	No	No	No

Bridge Site Survey Data - 2
Zila : Munshiganj

Name of Upazila		Sadar	Gazaria				Sreenagar	Srajdikhan					
Serial Number		1	2	3	4	5	6	7	8	9	10	11	
Influence Area	Population (thousand)	12	12	10	15	10	12	50	30	55	15	20	
	Main Industry	Agriculture, Cold Storage	Agriculture, Spinning Mill	Agriculture, Spinning Mill	Agriculture, Spinning Mill	Agriculture, Spinning Mill	Agriculture, Cold Storage	Agriculture, Textile, Cold Storage	Agriculture	Agriculture	Agriculture	Agriculture	
	Major Agricultural Product	Rice, Jute, Potato, Veg.	Rice, Jute, Veg.	Rice, Wheat, Jute, Veg.	Rice, Wheat, Veg.	Rice, Wheat, Jute, Veg.	Rice, Jute, Veg.	Rice, Wheat, Jute, Veg.	Rice, Wheat, Jute, Veg.	Rice, Wheat, Jute, Veg.	Rice, Wheat, Jute, Veg.	Rice, Wheat, Jute, Veg.	
	Number of Public Facilities	School	8	8	7	5	3	3	14	8	20	7	8
		Clinic	0	2	1	2	1	1	4	3	5	2	2
		Bazar	2	4	2	3	2	2	5	4	4	4	4
		Mosque	8	7	4	6	4	10	45	10	35	15	15
		Govt Office	3	0	2	3	2	2	5	2	2	2	2
Others		2	1	4	6	4	1	4	3	10	10	10	
Total		23	22	20	25	18	19	77	30	76	40	41	
Traffic Volume	Passenger Car	20	20	30	30	30	20	20	30	10	25	25	
	Pickup/Truck	25	25	20	20	20	0	30	0	20	50	50	
	Bus	12	0	0	0	0	0	100	0	10	10	5	
	Motorcycle	60	20	20	25	25	60	50	20	30	50	50	
	Rickshaw	150	150	150	200	150	150	200	200	200	200	200	
	Autorickshaw	70	20	50	50	50	30	100	100	100	50	50	
	Bullock Cart	0	0	0	0	0	0	0	0	0	0	0	
	Pedestrian	1500	1000	2000	2000	2000	1100	3000	2000	2000	2000	2000	
Bridge Site Condition	Landuse	Farm	Farm	Farm	Farm	Farm	Farm	Residence	Farm	Farm	Farm	Farm	
	Topography	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	
Environmental Issue	Necessity of Realignment of	No	No	No	No	No	No	No	No	No	No	No	
	Necessary Land to be Additionally Acquired	No	No	No	No	No	No	No	No	No	No	No	
	Number of Houses to be Relocated	No	No	No	No	No	No	No	No	No	No	No	
	Other Obstruction to be Relocated	No	No	No	No	No	No	No	No	No	No	No	
Proposed Bridge	Bridge Length (m)	60	35	30	50	30	25	100	105	105	30	30	
	Span Arrangement	3x20m	10m+25m	1x30m	15m+20m+15m	1x30m	1x25m	4x25m	2x20m+25m+2x20m	2x20m+25m+2x20m	1x30m	1x30m	
	Abutment Height (m)	4.50	4.50	4.00	4.00	4.50	4.50	6.00	7.00	4.00	4.25	3.75	
	Pier Height (m)	6.50	-	-	6.00	-	6.50	9.00	12.00	7.00	-	-	
Engineering Evaluation	Road Class	13	13	20	7	20	7	20	13	13	20	20	
	Existing Bridge	40	40	40	40	40	40	40	40	40	40	40	
	Approach Road	0	0	0	0	0	0	30	0	0	0	0	
	Alternative Route	10	10	10	10	10	10	10	10	10	10	10	
	Total Engineering Score	63	63	70	57	70	57	100	63	63	70	70	
Socioeconomic Evaluation	Beneficiaries	11	11	10	14	10	12	21	21	21	15	20	
	Traffic Demand	18	13	16	17	16	14	14	13	14	20	20	
	Pedestrian Demand	14	9	20	18	20	11	14	14	14	20	20	
	Public Facilities	21	20	20	23	16	19	21	21	21	30	30	
	Bridge Length Factor for Socioeconomic Score	f=0.9	f=0.9	f=1.0	f=0.9	f=1.0	f=1.0	f=0.7	f=0.7	f=0.7	f=1.0	f=1.0	
Total Socioeconomic Score	64	53	66	72	62	56	70	69	70	85	90		
Overall Evaluation	A	A	A	B	A	B	X2	X2	A	A	A		
Implementation Schedule	Phase-3	Phase-3	Phase-2	Excluded (Priority B)	Phase-2	Excluded (Priority B)	Excluded (Water Depth at Pier>1.2m)	Excluded (Water Depth at Pier>1.2m)	Phase-2	Phase-1	Phase-1		
Remarks	Bridge to connect Bangla Bazar Union, Chitulla growth Center, Pura Bazar, Dhigirpar-Muktarpur RHD road, Upazila Headquarter and Tongi Bazar Upazila also.	Bridge to connect Imampur Union (UP office), Rasulpur growth center, Upazila Headquarter, RHD road etc.	Bridge to connect Hossaindi growth Center, Dhaka-Chittagong National Highway with Upazila Headquarter.	Bridge to connect Bhatirchar Bazar, Dhaka-Chittagong National Highway, Tengarchar Union and Upazila Headquarter.	Bridge to connect Hossaindi growth Center, Dhaka-Chittagong National Highway with Upazila Headquarter.	Bridge to connect Baraikhali Union Parish, Shibrampur Hat, Madankhali high school, Baraikhali growth Center and high school, two primary schools, family welfare center.	- 15m & 50m approach road is required. - Bridge to connect Shakhernagar Union Parish, Dhaka-Nawabganj-Dohar Highway. Baraikhali growth Center, two high schools, primary schools, one hospital, Dhaka-Mawa Highway, Nawabganj and Dohar Upazila.	Bridge to connect Rajanagar Union, Chitratkot Union Parish, Dhaka-Nawabganj-Dohar Highway. Rajanagar Bazar, Dhaka-Mawa Highway, Nawabganj and Dohar Upazila also.	Bridge to connect Rajanagar and Chitratkot Union, two high schools and primary schools, Rajanagar Bazar, Dhaka-Mawa Highway, Nawabganj and Dohar Upazila also.	Bridge to connect Kuchlamara Bazar, Dhaka-Mawa Highway, Patharghata Bazar, Latabdi UP & Srajdikham Upazila Headquarter.	Bridge to connect Kuchlamara Bazar, Basha Union, Patharghata Bazar, Dhaka-Mawa highway UP & Upazila Headquarter.		

Bridge Site Survey Data - 1
Zila : Manikganj (1/2)

Name of Upazila		Singhair		Saturia		Doulatpur					
Serial Number	1	2	3	4	5	6	7	8	9	10	
Bridge Code	05-01-01	05-01-05	05-03-06	05-03-N1	05-04-02	05-04-03	05-04-04	05-04-05	05-04-06	05-04-07	
Bridge Name/Location	Bridge on Dalla FRA - Chandhar Bazar Road.	Bridge on Maniknagar GC - Sirajpur GC Road.	Bridge on Kakdhapara - Goarpara Road on old Dhateshwari River.	Bridge on Dulla RHD - Mokdimpara Guccagram Road.	Bridge on Daulatpur - Jafarganj Road.	Bridge on Daulatpur Upazila H/Q - Abudanga Riverghat Road.	Bridge on Daulatpur - Bachamara Road at Jointa.	Bridge on Daulatpur - Bachamara Road at Jointa.	Bridge on Daulatpur - Bachamara Road at Bonna.	Bridge on Daulatpur - Bachamara Road at Bonna.	
Status	Original Request	Original Request	Original Request	Original Request	Additional Request	Additional Request	Original Request	Original Request	Original Request	Original Request	
Road ID	356823025	356822005	356703005	356703037	356102005	356102005	356102002	356102002	356102002	356102002	
Road Class	Union	Upazila	Union	Union	Upazila	Upazila	Upazila	Upazila	Upazila	Upazila	
Chainage (km)	0+600	2+400	4+200	0+950	8+440	0+456	2+650	3+089	3+352	3+913	
Condition of Existing Bridge	Existing or not	Not Existing	Existing	Not Existing	Existing	Not Existing	Not Existing	Not Existing	Not Existing	Not Existing	
	Bridge Length (m)		6.00		8.00						
	Bridge Width (m)		3.66		3.00						
	Carriageway Width (m)		3.40		3.00						
	Superstructure Type		RC		RC						
	Abutment Type		Masonry		Masonry						
	Pier Type		-		-						
	Usage of Bridge		Unusable		Unusable						
	Condition		Collapsed		Collapsed						
	Present Navigation Clearance Height (m)		-		-						
River Condition	Bank to Bank Width (m)	55.00	60.00	55.00	25.00	90.00	86.00	46.00	30.00	46.00	41.00
	Highest Flood Water Width (m)	60.00	70.00	86.00	40.00	130.00	100.00	70.00	40.00	60.00	60.00
	Highest Flood Water Depth (m)	6.00	6.00	5.00	4.00	6.50	7.00	4.00	4.00	4.00	4.50
	Normal Flood Water Width (m)	55.00	60.00	70.00	35.00	100.00	90.00	60.00	25.00	56.00	40.00
	Normal Flood Water depth (m)	5.00	4.00	3.50	3.00	5.50	6.00	3.00	2.50	3.00	3.25
	Dry Season Water Width (m)	0.00	0.00	25.00	0.00	45.00	40.00	0.00	0.00	0.00	0.00
	Dry Season Water Depth (m)	0.00	0.00	0.50	0.00	2.00	2.80	0.00	0.00	0.00	0.00
	Dry Season Water Depth at Pier (m)	0.00	0.70	1.20	0.00	1.20	0.20	0.00	0.00	0.00	0.40
	Tidal Fluctuation (m)	No	No	No	No	No	No	No	No	No	No
	Water Velocity	Medium	Medium	Medium	Medium	Medium	Fast	Medium	Medium	Medium	Fast
	Angle of Bridge to Stream (deg)	60	70	70	70	70	90	90	90	90	80
	Ferry Services	No	No	No	No	No	No	No	No	No	No
	Required Navigation Clearance Height (m)	2.00	1.50	1.00	1.00	2.00	3.25	1.00	1.00	1.00	1.50
	Type of River Traffic	Country Boat	Engine Boat, Country Boat	Country Boat	Country Boat	Country Boat	Engine Boat, Country Boat	Country Boat	Country Boat	Country Boat	Country Boat
	Condition of Bank	Sound	Eroded	Sound	Eroded	Sound	Eroded	Eroded	Sound	Sound	Eroded
Condition of Riverbed	Sound	Scoured	Sound	Scoured	Sound	Sound	Scoured	Sound	Sound	Scoured	
Approach Road	Total Road Width (m)	4.88	7.32	4.88	4.88	7.32	7.32	7.32	7.32	7.32	
	Carriageway Width (m)	3.05	3.66	3.05	3.05	3.66	3.66	3.66	3.66	3.66	
	Embankment Height (m)	2.40	2.65	2.50	2.00	2.50	2.50	2.00	2.00	2.50	
	Surface Type	Earthen	BC/WBM	Earthen	Earthen	Earthen	Earthen	Earthen	Earthen	Earthen	
	Surface Condition	Good	Good	Bad	Good	Fair	Good	Good	Good	Good	
	Alternative Route (km)	No	No	No	No	No	No	No	No	No	

Bridge Site Survey Data - 2
Zila : Manikganj (1/2)

Name of Upazila		Singhair		Saturia		Doulatpur						
Serial Number		1	2	3	4	5	6	7	8	9	10	
Influence Area	Population (thousand)	33	85	50	40	50	50	50	40	50	50	
	Main Industry	Agriculture	Agriculture, Saw Mill, Rice Mill	Agriculture	Agriculture	Agriculture, Flour Mill, Oil Mill, Rice Mill	Agriculture, Commercial	Agriculture	Agriculture	Agriculture	Agriculture	
	Major Agricultural Product	Rice, S.Cane, Wheat, Mustard, Jute	Rice, Jute, Wheat, Veg., Mustard	Rice, Jute, Wheat, S.Cane, Veg., Tobacco, Mustard	Rice, Jute, Veg., S.Cane, Mustard	Rice, Wheat, Jute, Mustard, Nut, Veg.	Rice, Jute, Fruits, Veg., S.Cane, Mustard, Nut	Rice, Jute, Veg., S.Cane, Mustard, Nut	Rice, Jute, Veg., S.Cane, Mustard, Nut, Wheat	Rice, Veg., S.Cane, Wheat, Mustard, Nut	Rice, Jute, Fruits, Veg., S.Cane, Mustard, Nut, Wheat	
	Number of Public Facilities	School	10	12	10	8	6	5	6	6	6	6
		Clinic	2	3	3	3	2	1	1	1	1	1
		Bazar	4	5	4	5	4	2	2	2	2	2
		Mosque	8	17	12	7	10	4	4	4	6	6
		Gov't Office	1	3	3	1	2	1	1	1	1	1
Others		3	5	5	3	7	3	3	3	3	3	
Total	28	45	37	27	31	16	17	17	19	19		
Traffic Volume	Passenger Car	40	26	20	10	15	25	10	10	10	10	
	Pickup/Truck	300	30	30	15	10	15	20	20	20	20	
	Bus	20	20	20	0	2	0	2	2	2	2	
	Motorcycle	400	200	300	150	150	100	200	200	200	200	
	Rickshaw	300	400	200	100	200	150	250	250	250	250	
	Autorickshaw	50	100	25	20	50	10	60	60	60	100	
	Bullock Cart	0	0	0	0	5	20	20	20	20	20	
	Pedestrian	2000	1200	2000	5000	685	1000	700	700	700	800	
Bridge Site Condition	Landuse	Farm	Farm, Residence	Farm, Residence	Farm, Residence	Residence	Residence, Farm	Farm, Meadow	Farm	Residence, Farm	Residence, Farm	
	Topography	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	
Environmental Issue	Necessity of Realignment of Approach Road	Yes	No	No	No	No	Yes	No	No	No	No	
	Necessary Land to be Additionally Acquired (sq.m)	No	No	No	No	No	5000	No	No	No	No	
	Number of Houses to be Relocated	No	No	No	No	No	No	No	No	No	No	
Proposed Bridge	Other Obstruction to be Relocated	No	No	No	No	No	No	No	No	No	No	
	Bridge Length (m)	55	60	65	30	115	125	50	30	50	40	
	Span Arrangement	15m+2x20m	3x20m	20m+25m+20m	1x30m	20m+3x25m+20m	5x25m	15m+20m+15m	1x30m	15m+20m+15m	15m+25m	
	Abutment Height (m)	4.00	4.50	4.00	5.00	5.00	6.00	4.00	3.50	3.50	4.00	
Engineering Evaluation	Pier Height (m)	8.00	7.50	6.00	-	8.50	10.50	5.00	-	5.00	6.00	
	Road Class	13	20	13	13	20	20	20	20	20	20	
	Existing Bridge	40	40	40	40	40	40	40	40	40	40	
	Approach Road	0	30	0	0	0	0	0	0	0	0	
	Alternative Route	10	10	10	10	10	10	10	10	10	10	
Socioeconomic Evaluation	Total Engineering Score	63	100	63	63	70	70	70	70	70	70	
	Beneficiaries	27	27	27	30	21	21	27	30	27	27	
	Traffic Demand	18	18	18	16	14	13	18	20	18	18	
	Pedestrian Demand	18	11	18	20	5	7	6	7	6	7	
	Public Facilities	25	27	27	27	21	11	15	17	17	17	
	Bridge Length Factor	f=0.9	f=0.9	f=0.9	f=1.0	f=0.7	f=0.7	f=0.9	f=1.0	f=0.9	f=0.9	
Total Socioeconomic Score	88	83	90	93	61	52	66	74	68	69		
Overall Evaluation	A	A	A	A	A	B	A	A	A	A		
Implementation Schedule	Phase-2	Phase-1	Phase-1	Phase-1	Phase-3	Excluded (Priority B)	Phase-2	Phase-2	Phase-3	Phase-3		
Remarks	- Bridge located on the riverbank of the Dhalishn River 500m in width. - Existing RC bridge closed 50m in distance at the 1st approach.	- Existing bridge was fully damaged due to scoring during flood in 1998. - Bridge located on the riverbank of the Dhalishn River 400m in width.	- A gap observed along access road but it has been planed by the local fund. - Southern approach road should be extended 60m in length.	Existing bridge was fully damaged due to scoring during flood in 1998.	Observed marks of scoring at the both riverbanks.	- Observed marks of heavy scoring at the southern riverbank. - Passing big engine boats from Padma Rive to Dhaka during rainy season. - Needed land acquisition for realignment at the 2nd approach road about 5000 sq.m (500m x 10m) in area.	After completion, the bridge will establish direct connection from Doulatpur Upazila H/Q to the Amtali Hat, Bachamara GCR.	On the same road w/ bridge code 05-04-04	On the same road w/ bridge code 05-04-04	On the same road w/ bridge code 05-04-04		

Bridge Site Survey Data - 1
Zila : Manikganj (2/2)

Name of Upazila		Doulatpur		Horirampur			Gheor			
Serial Number	11	12	13	14	15	16	17	18	19	
Bridge Code	05-04-10	05-04-11	05-05-01	05-05-N2	05-05-N5	05-06-02	05-06-N2	05-06-N4	05-06-N6	
Bridge Name/Location	Bridge on Narchi - Shamganj Road at Khalsi Bazar.	Bridge on Narchi - Samganj Road at Borojola.	Bridge on Intajpur - Basta Road.	Bridge on Andharmanik to Nayarhat Road near Nayarhat GC over Kokorhati Khal.	Bridge on Bhadiakhola - Machain Bazar Road over Jogotbar Khal.	Bridge on Baratia - Uthuli Road over Goaljan Khal.	Bridge on Baniajuri - Kallahat Road over Gangdubi River.	Bridge on Gheor - Tille via Singjura Bazar Road over Kaliganga River.	Bridge on Pecherkanda Bazar - Singiuri/Char binapara Road over old Dhaleshari	
Status	Additional Request	Additional Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	
Road ID	356102003	356102003	356283025	356282002	356283009	356223004	356223009	356223007	356223014	
Road Class	Upazila	Upazila	Union	Upazila	Union	Union	Union	Union	Union	
Chainage (km)	5+250	6+520	3+750	7+780	0+920	2+370	4+580	4+910	0+050	
Condition of Existing Bridge	Existing or not	Not Existing	Not Existing	Existing	Not Existing	Not Existing	Not Existing	Not Existing	Not Existing	
	Bridge Length (m)			15.00						
	Bridge Width (m)			1.00						
	Carriageway Width (m)			0.80						
	Superstructure Type			Bamboo						
	Abutment Type			Bamboo						
	Pier Type			Bamboo						
	Usage of Bridge			Pedestrians Only						
	Condition			Weak						
Present Navigation Clearance Height (m)			0.50							
River Condition	Bank to Bank Width (m)	80.00	40.00	70.00	50.00	15.00	20.00	55.00	325.00	70.00
	Highest Flood Water Width (m)	78.00	56.00	70.00	35.00	30.00	50.00	65.00	400.00	85.00
	Highest Flood Water Depth (m)	6.20	6.70	5.00	5.00	5.00	4.00	5.00	8.00	6.00
	Normal Flood Water Width (m)	60.00	38.00	50.00	30.00	10.00	30.00	50.00	300.00	70.00
	Normal Flood Water depth (m)	5.60	3.50	2.50	4.00	1.00	3.00	3.50	4.00	3.50
	Dry Season Water Width (m)	30.00	0.00	6.00	0.00	0.00	0.00	30.00	0.00	10.00
	Dry Season Water Depth (m)	2.60	0.00	0.30	0.00	0.00	0.00	1.20	0.00	0.20
	Dry Season Water Depth at Pier (m)	1.20	0.00	0.80	0.00	0.00	0.00	2.30	0.00	0.00
	Tidal Fluctuation (m)	No	No	No	No	No	No	No	No	No
	Water Velocity	Medium	Medium	Medium	Slow	Medium	Slow	Medium	Medium	Fast
	Angle of Bridge to Stream (deg)	90	80	90	90	90	70	80	90	75
	Ferry Services	No	No	No	No	No	No	No	No	No
	Required Navigation Clearance Height (m)	1.50	1.00	1.00	1.50	1.00	1.50	1.50	1.50	2.00
Type of River Traffic	Country Boat	Country Boat	Engine Boat	Country Boat	Country Boat	Country Boat	Country Boat	Country Boat	Country Boat	
Condition of Bank	Sound	Sound	Sound	Sound	Eroded	Sound	Sound	Sound	Sound	
Condition of Riverbed	Sound	Scoured	Sound	Sound	Sound	Sound	Sound	Sound	Sound	
Approach Road	Total Road Width (m)	7.32	7.32	4.88	7.32	4.88	4.88	4.88	4.88	4.88
	Carriageway Width (m)	3.66	3.66	3.05	3.66	3.05	3.05	3.05	3.05	3.05
	Embankment Height (m)	2.50	2.15	2.50	3.00	3.50	1.50	2.50	2.00	2.00
	Surface Type	BC/Earthen	BC/Earthen	Earthen	Earthen	Earthen	Earthen	Earthen	Earthen	Earthen
	Surface Condition	Good	Fair	Bad	Fair	Bad	Bad	Bad	Bad	Good
Alternative Route (km)	No	No	No	No	No	No	No	No	No	

Bridge Site Survey Data - 2

Zila : Manikganj (2/2)

Name of Upazila		Doulatpur		Horirampur			Gheor				
Serial Number		11	12	13	14	15	16	17	18	19	
Influence Area	Population (thousand)	80	80	40	70	40	50	80	70	85	
	Main Industry	Agriculture, Handicraft, Oil Mill	Agriculture, Handicraft	Agriculture, Commercial, Rice Mill, Saw Mill	Agriculture, Handicraft	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	
	Major Agricultural Product	Rice, Jute, Veg., Mustard, Nut	Rice, Wheat, Veg., Mustard, Nut	Rice, Jute, S.Cane, Mustard, Veg.	Rice, Wheat, Jute, Veg., S.Cane, Mustard	Rice, Jute, Veg., S.Cane, Mustard	Rice, Jute, S.Cane, Mustard, Wheat, Veg.	Rice, Jute, Fruits, Veg., S.Cane, Mustard	Rice, Jute, Veg., S.Cane, Mustard	Rice, Jute, Veg., S.Cane, Mustard, Wheat, Lemon	
	Number of Public Facilities	School	6	8	5	8	7	6	10	12	7
		Clinic	2	1	2	2	3	1	3	3	3
		Bazar	2	2	2	3	3	2	3	3	3
		Mosque	6	5	6	10	7	2	6	6	5
		Govt Office	1	1	2	2	2	1	2	4	5
Others		3	3	4	8	6	2	7	5	5	
Total	20	20	21	33	28	14	31	33	28		
Traffic Volume	Passenger Car	15	15	7	15	12	40	35	50	40	
	Pickup/Truck	10	20	10	10	11	30	26	30	40	
	Bus	6	6	0	0	0	25	6	2	10	
	Motorcycle	200	200	100	200	200	150	100	200	300	
	Rickshaw	300	300	200	125	200	200	100	200	300	
	Autorickshaw	50	50	25	6	13	25	10	60	80	
	Bullock Cart	20	20	0	0	0	50	0	80	20	
	Pedestrian	800	880	1800	1200	1500	1500	1200	6000	8000	
Bridge Site Condition	Landuse	Residence, Farm	Residence, Farm	Farm, Market Area	Residence, Market	Residence	Residence	Meadow, Residence	Meadow, Residence	Residence, Farm	
	Topography	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	
Environmental Issue	Necessity of Realignment of Approach Road	No	No	No	Yes	Yes	No	No	No	No	
	Necessary Land to be Additionally Acquired (sq.m)	No	No	No	400	400	No	No	No	No	
	Number of Houses to be Relocated	No	No	No	No	No	No	2	No	No	
Proposed Bridge	Other Obstruction to be Relocated	2 Shops	No	2 Shops	30 Trees	6 Trees	No	1 Tree	No	No	
	Bridge Length (m)	80	40	50	40	20	25	60	270	90	
	Span Arrangement	2x15m +2x25m	15m+25m	15m+20m +15m	15m+25m	1x20m	1x25m	3x20m	20m +10x25m	20m+2x25m +20m	
	Abutment Height (m)	5.00	4.00	4.00	4.00	3.00	4.50	4.50	5.00	5.00	
Engineering Evaluation	Pier Height (m)	8.00	8.00	6.00	6.50	-	-	6.50	9.50	8.00	
	Road Class	20	20	13	20	13	13	13	13	13	
	Existing Bridge	40	40	40	40	40	40	40	40	40	
	Approach Road	30	30	0	0	0	0	0	0	0	
	Alternative Route	10	10	10	10	10	10	10	10	10	
Total Engineering Score	100	100	63	70	63	63	63	63	63		
Socioeconomic Evaluation	Beneficiaries	21	27	27	27	30	30	27	15	21	
	Traffic Demand	14	18	16	17	20	20	15	10	14	
	Pedestrian Demand	6	6	16	11	15	15	11	10	14	
	Public Facilities	14	18	19	27	28	14	27	15	20	
	Bridge Length Factor	f=0.7	f=0.9	f=0.9	f=0.9	f=1.0	f=1.0	f=0.9	f=0.5	f=0.7	
	Total Socioeconomic Score	55	69	78	82	93	79	80	51	69	
Overall Evaluation	A	A	A	A	A	A	X2	X1	A		
Implementation Schedule	Phase-1	Phase-1	Phase-3	Phase-2	Phase-1	Phase-2	Excluded (Water Depth at Pier>1.2m)	Excluded (Bridge Length>150m)	Phase-3		
Remarks			- Needed relocation of 7 small tin shops. - Bridge closed T-intersection at the 2nd approach.	Needed land acquisition for realignment at the 1st approach road about 400 sq.m (40m x 10m) in area.	- Original bridge alignment is very close the Tsamuti River so bridge should be sited 5-10m in distance. - Needed add land acquisition at the both approach road about 400 sq.m (20m x 10m x 2) in area.	The proposed bridge will connect Dhaka - Aricha highway to Jabra UP, Gheor UP, Jabra hat.	- The 1st approach road is very narrow between Private land and channel. - Needed add land acquisition of approach road about 400 sq.m (80m x 5m) in area.	- Required bridge length (80m) is too small compared w/distance of each main bank 325m in width, the Kalganga River. - A gap which is 200m in length is observed on access road but it has been to the other fund already.			

Bridge Site Survey Data - 1
Zila : Rajbari

Name of Upazila		Baliakandi		Pangsha
Serial Number		1	2	3
Bridge Code		11-02-02	11-02-N1	11-03-01
Bridge Name/Location		Bridge on Khalkula - Magchmi Ferryghat Road over Chandana River.	Bridge on Thakur Nowapara to Rajdharpur Road over Chandana river at Sonapur.	Bridge on Machpara (Gopalpur RHD) to Bonogram Hat Road over Sirajpur Haor near
Status		Original Request	Original Request	Original Request
Road ID		382073015	382072011	382733014
Road Class		Union	Upazila	Union
Chainage (km)		3+250	0+940	5+530
Condition of Existing Bridge	Existing or not	Existing	Existing	Not Existing
	Bridge Length (m)	30.00	48.00	
	Bridge Width (m)	0.20	0.20	
	Carriageway Width (m)	0.20	0.20	
	Superstructure Type	Bamboo	Bamboo	
	Abutment Type	Bamboo	Bamboo	
	Pier Type	Bamboo	Bamboo	
	Usage of Bridge	Pedestrians Only	Pedestrians Only	
	Condition	Weak	Weak	
	Present Navigation Clearance Height (m)	2.10	3.00	
River Condition	Bank to Bank Width (m)	46.00	54.00	127.00
	Highest Flood Water Width (m)	55.00	58.00	127.00
	Highest Flood Water Depth (m)	6.10	5.80	5.80
	Normal Flood Water Width (m)	48.00	43.00	35.00
	Normal Flood Water depth (m)	3.20	3.40	3.60
	Dry Season Water Width (m)	10.00	17.00	20.00
	Dry Season Water Depth (m)	0.80	0.40	0.80
	Dry Season Water Depth at Pier (m)	0.60	0.80	0.60
	Tidal Fluctuation (m)	No	No	No
	Water Velocity	Fast	Medium	Medium
	Angle of Bridge to Stream (deg)	90	90	90
	Ferry Services	No	No	No
	Required Navigation Clearance Height (m)	1.80	1.00	0.80
	Type of River Traffic	Country Boat	Country Boat	Country Boat
	Condition of Bank	Sound	Sound	Sound
Condition of Riverbed	Sound	Sound	Sound	
Approach Road	Total Road Width (m)	5.50	7.32	5.50
	Carriageway Width (m)	3.65	3.67	3.67
	Embankment Height (m)	2.14	2.15	4.10
	Surface Type	Earthen	Earthen	BC
	Surface Condition	Good	Good	Good
	Alternative Route (km)	No	No	No

Bridge Site Survey Data - 2
Zila : Rajbari

Name of Upazila		Baliakandi		Pangsha	
Serial Number		1	2	3	
Influence Area	Population (thousand)	20	35	25	
	Main Industry	Agriculture	Agriculture	Agriculture	
	Major Agricultural Product	Rice, Jute, Veg., S.Cane, Ginger	Rice, Wheat, Jute, S.Cane, Ginger	Rice, Wheat, S.Cane, Jute, Veg.	
	Number of Public Facilities	School	11	16	9
		Clinic	5	2	0
		Bazar	3	4	3
		Mosque	8	10	10
		Gov't Office	9	3	3
Others		2	0	0	
Total	38	35	25		
Traffic Volume	Passenger Car	20	150	10	
	Pickup/Truck	10	80	20	
	Bus	0	30	5	
	Motorcycle	25	200	70	
	Rickshaw	150	150	150	
	Autorickshaw	12	20	40	
	Bullock Cart	20	50	50	
	Pedestrian	2500	5000	5000	
Bridge Site Condition	Landuse	Farm	Farm	Farm	
	Topography	Flat	Flat	Flat	
	Necessity of Realignment of Approach Road	No	No	No	
Environmental Issue	Necessary Land to be Additionally Acquired (sq.m)	No	No	No	
	Number of Houses to be Relocated	No	No	No	
Proposed Bridge	Other Obstruction to be Relocated	No	No	No	
	Bridge Length (m)	50	50	105	
	Span Arrangement	15m+20m+15m	15m+20m+15m	3x20m+25m+20m	
	Abutment Height (m)	4.40	5.00	4.50	
	Pier Height (m)	7.00	7.00	9.10	
Engineering Evaluation	Road Class	13	20	13	
	Existing Bridge	40	40	40	
	Approach Road	0	0	30	
	Alternative Route	10	10	10	
	Total Engineering Score	63	70	93	
Socioeconomic Evaluation	Beneficiaries	18	27	18	
	Traffic Demand	12	18	13	
	Pedestrian Demand	18	18	14	
	Public Facilities	27	27	18	
	Bridge Length Factor	f=0.9	f=0.9	f=0.7	
Total Socioeconomic Score	75	90	63		
Overall Evaluation	A	A	A		
Implementation Schedule	Phase-3	Phase-1	Phase-2		
Remarks		80m bank protection work is required along the east bank at the meeting point of Sonapur Khal.	The South bank of the river is almost vertical, so bank protection work may be required.		

Bridge Site Survey Data - 1
Zila : Gopalganj

Name of Upazila		Kasiani		Muksedpur				Tongipara
Serial Number	1	2	3	4	5	6	7	8
Bridge Code	12-02-N1	12-02-N2	12-03-02	12-03-03	12-03-06	12-03-N1	12-03-N2	12-04-N1
Bridge Name/Location	Bridge on Bhatiapara to Tagarbandh Road over Barasia River near Bhatiapara GC.	Bridge on Kumaria to Dighorghati Road near Kumaria Bazar over Kumar River.	Bridge on Kotrakandi to Jolirpar Road at West Lokondor Bazar.	Bridge on Bhatra to Sreepur Takerhat Road near Sreepur Bazar at bazar Asrayan	Bridge on Bonogram to Bamondanga Road over Krisnapur Khal.	Bridge on Khanderpara to Baliakandi Road near Khandarpara GC.	Bridge on Khanderpara to Baliakandi Road over Tangrokota to Ujani Khal at Khorot	Bridge on Thanaparishod to Malikermath Road over Sreeramkandi Khal.
Status	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request
Road ID	345432001	345434009	345583020	345584005	345582011	345583008	345583008	345913011
Road Class	Upazila	Village-A	Union	Village-A	Upazila	Union	Union	Union
Chainage (km)	0+000	0+000	2+360	2+830	7+900	0+000	2+050	7+550
Condition of Existing Bridge	Existing or not	Existing	Not Existing	Existing	Existing	Existing	Existing	Existing
	Bridge Length (m)	43.00		49.00	43.00	44.00	32.00	35.00
	Bridge Width (m)	0.20		0.20	0.20	0.20	0.20	0.20
	Carriageway Width (m)	0.20		0.20	0.20	0.20	0.20	0.20
	Superstructure Type	Bamboo		Bamboo	Bamboo	Bamboo	Bamboo	Bamboo
	Abutment Type	Bamboo		Bamboo	Bamboo	Bamboo	Bamboo	Bamboo
	Pier Type	Bamboo		Bamboo	Bamboo	Bamboo	Bamboo	Bamboo
	Usage of Bridge	Pedestrians Only		Pedestrians Only	Pedestrians Only	Pedestrians Only	Pedestrians Only	Pedestrians Only
	Condition	Weak		Weak	Weak	Weak	Weak	Weak
Present Navigation Clearance Height (m)	2.80		1.30	1.80	-	1.90	-	5.30
River Condition	Bank to Bank Width (m)	52.00	58.00	55.00	46.00	44.00	34.00	35.00
	Highest Flood Water Width (m)	58.00	60.00	53.00	55.00	43.00	48.00	58.00
	Highest Flood Water Depth (m)	6.20	6.30	5.70	5.30	5.29	4.95	8.40
	Normal Flood Water Width (m)	49.00	45.00	51.00	53.00	42.00	32.00	58.00
	Normal Flood Water depth (m)	3.60	3.90	3.80	3.80	3.60	2.80	6.85
	Dry Season Water Width (m)	18.00	22.00	30.00	42.00	20.00	10.00	13.00
	Dry Season Water Depth (m)	2.25	1.75	0.70	0.90	0.90	0.30	0.95
	Dry Season Water Depth at Pier (m)	1.20	1.00	0.50	0.80	1.10	0.20	1.10
	Tidal Fluctuation (m)	1.25	1.00	0.80	0.25	0.90	No	0.45
	Water Velocity	Medium	Fast	Fast	Medium	Medium	Medium	Medium
	Angle of Bridge to Stream (deg)	90	90	90	90	90	90	90
	Ferry Services	No	No	No	No	No	No	No
	Required Navigation Clearance Height (m)	2.50	2.75	3.00	1.75	3.00	1.50	1.50
	Type of River Traffic	Big Cargo Engine Boat	Big Cargo Engine Boat, Country Boat	Engine Boat	Country Boat	Engine Boat	Engine Boat	Country Boat
Condition of Bank	Sound	Sound	Sound	Sound	Weak	Sound	Sound	
Condition of Riverbed	Sound	Sound	Sound	Sound	Sound	Sound	Sound	
Approach Road	Total Road Width (m)	7.32	7.33	4.30	3.66	3.90	3.66	5.38
	Carriageway Width (m)	3.66	3.66	3.95	3.66	3.90	3.66	3.29
	Embankment Height (m)	3.40	3.40	2.85	2.90	1.90	2.80	2.98
	Surface Type	BC/Earthen	BC/Earthen	Earthen	HBB/Earthen	Earthen	BC/Earthen	Earthen
	Surface Condition	Good	Good	Good	Good	Fair	Good	Good
	Alternative Route (km)	No	No	No	No	No	No	No

Bridge Site Survey Data - 2
Zila : Gopalganj

Name of Upazila		Kasiani			Muksedpur				Tongipara	
Serial Number		1	2	3	4	5	6	7	8	
Influence Area	Population (thousand)	40	40	25	35	30	40	35	35	
	Main Industry	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	
	Major Agricultural Product	Rice, Jute, S.Cane	Rice, Jute, Pulse, Tobacco, Mustard	Rice, Jute, Pulse, Wheat, Mustard	Rice, Jute, Pulse, Mustard	Rice, Jute, Pulse	Rice, Jute, Pulse, Mustard, Wheat	Rice, Jute, Pulse, Mustard	Rice, Jute, S.Cane, Mustard	
	Number of Public Facilities	School	12	17	15	10	24	15	20	8
		Clinic	2	4	1	1	2	2	2	2
		Bazar	5	5	4	5	5	4	4	8
		Mosque	10	20	15	20	15	8	15	20
		Gov't Office	3	1	0	1	1	1	2	4
		Others	2	4	4	2	3	2	4	4
Total		34	51	39	39	50	32	47	46	
Traffic Volume	Passenger Car	10	10	4	5	3	10	7	10	
	Pickup/Truck	25	15	4	12	8	20	20	20	
	Bus	20	0	0	4	0	0	0	4	
	Motorcycle	80	70	30	30	40	50	40	40	
	Rickshaw	200	180	150	140	200	200	300	135	
	Autorickshaw	15	15	35	25	30	15	30	12	
	Bullock Cart	0	0	0	8	0	0	0	0	
	Pedestrian	5000	2000	1500	1200	3000	6000	6000	1500	
Bridge Site Condition	Landuse	Residence, Commercial	Farm, Commercial	Farm	Farm	Farm	Farm	Farm	Residence	
	Topography	Flat	Flat	Flat	Flat	Flat	Flat	Swampy	Flat	
	Necessity of Realignment of Approach Road	No	Yes	No	No	No	No	Yes	No	
Environmental Issue	Necessary Land to be Additionally Acquired (sq.m)	No	2160	No	No	No	No	No	No	
	Number of Houses to be Relocated	No	2	No	No	No	No	No	No	
	Other Obstruction to be Relocated	No	No	No	No	No	No	No	No	
Proposed Bridge	Bridge Length (m)	50	55	55	50	50	40	40	25	
	Span Arrangement	15m+20m+15m	15m+2x20m	15m+2x20m	15m+20m+15m	15m+20m+15m	15m+25m	15m+25m	1x25m	
	Abutment Height (m)	5.80	6.00	6.10	4.00	3.90	6.30	6.20	1.80	
	Pier Height (m)	9.00	8.80	8.70	7.30	8.30	8.00	9.50	-	
Engineering Evaluation	Road Class	20	7	13	7	20	13	13	13	
	Existing Bridge	40	40	40	40	40	40	40	40	
	Approach Road	30	30	0	30	0	30	0	30	
	Alternative Route	10	10	10	10	10	10	10	10	
	Total Engineering Score	100	87	63	87	70	93	63	93	
Socioeconomic Evaluation	Beneficiaries	27	27	23	27	27	27	27	30	
	Traffic Demand	18	14	10	11	13	15	18	13	
	Pedestrian Demand	18	18	14	11	18	18	18	15	
	Public Facilities	27	27	27	27	27	27	27	30	
	Bridge Length Factor	f=0.9	f=0.9	f=0.9	f=0.9	f=0.9	f=0.9	f=0.9	f=1.0	
	Total Socioeconomic Score	90	86	74	76	85	87	90	88	
Overall Evaluation	A	A	A	A	A	A	A	A		
Implementation Schedule	Phase-1	Phase-2	Phase-3	Phase-2	Phase-2	Phase-1	Phase-3	Phase-1		
Remarks	At Bhatlapara end BC road, other end is earthen.	Land acquisition of 100mx12m will be required at Dighorghati end.	This is not duplicate of Sl. No. 13 as earlier mentioned. Have included in the list.		Earlier, the bridge was deleted. Now included in the list.			The existing bridge is fully damaged.		

Bridge Site Survey Data - 1
Zila : Faridpur

Name of Upazila	Sadar					Boalmari	Charvadrason	Bangha	Sadarpur	
Serial Number	1	2	3	4	5	6	7	8	9	
Bridge Code	16-01-N1	16-01-N2	16-01-N3	16-01-N4	16-01-N7	16-02-05	16-05-02	16-06-01	16-07-01	
Bridge Name/Location	Bridge on Bilnalia to Loskorkandi Primary School Road over Bilshokonia Khal.	Bridge on Char Komlapur Bridge to Bakunda GC Road over Branch Canal of Kumar River	Bridge on Ishan Gopalpur to Ambikarpara Road over Bhoboneswar River.	Bridge on Gopalpur to Char Chandpur Road over Chandpur Khal.	Bridge on Maskandi RHD to Norosingdia over Village Road.	Bridge on Joypasha to Surjok Bazar Road over Joypasha Khal near Bandapasha Primary School.	Bridge on Charvadrason to Haziganj Road via Moulavirchar Bazar over Shorbondia.	Bridge on Kala Mredha GC to Dolkhundi Road over Kala Mredha Khal.	Bridge on Katakhalia to Karirhat Road over Bhubeneshor River.	
Status	Additional Request	Original Request	Additional Request	Additional Request	Additional Request	Additional Request	Additional Request	Original Request	Additional Request	
Road ID	329475029	329473031	329473015	329474002	329475055	329183014	329215026	329104014	329842010	
Road Class	Village-B	Union	Union	Village-A	Village-B	Union	Village-B	Village-A	Upazila	
Chainage (km)	0+450	3+050	0+500	0+500	0+850	4+200	0+200	0+000	0+000	
Condition of Existing Bridge	Existing or not	Existing	Existing	Existing	Existing	Existing	Existing	Not Existing	Existing	Existing
	Bridge Length (m)	23.50	23.00	23.00	23.50	3.00	29.00		22.00	78.00
	Bridge Width (m)	0.20	0.20	0.20	1.80	1.50	0.20		1.00	0.20
	Carriageway Width (m)	0.20	0.20	0.20	1.80	1.50	0.20		1.00	0.20
	Superstructure Type	Bamboo	Bamboo	Bamboo	Bamboo	Bamboo	Bamboo		Bamboo	Bamboo
	Abutment Type	Bamboo	Bamboo	Bamboo	Bamboo	-	Bamboo		Bamboo	Bamboo
	Pier Type	Bamboo	Bamboo	Bamboo	Bamboo	-	Bamboo		Bamboo	Bamboo
	Usage of Bridge	Pedestrians Only	Pedestrians Only	Pedestrians Only	Pedestrians, Motorcycles, Rickshaws	Pedestrians, Motorcycles, Rickshaws	Pedestrians Only		Pedestrians Only	Pedestrians Only
	Condition	Weak	Weak	Weak	Weak	Weak	Weak		Weak	Weak
	Present Navigation Clearance Height (m)	1.40	1.70	-	-	-	1.50		-	-
River Condition	Bank to Bank Width (m)	24.00	24.00	80.00	36.00	32.00	50.00	69.00	25.00	133.00
	Highest Flood Water Width (m)	28.00	26.00	70.00	40.00	38.00	64.00	63.00	21.00	85.00
	Highest Flood Water Depth (m)	3.90	4.90	3.80	3.90	4.10	4.80	3.50	3.90	2.80
	Normal Flood Water Width (m)	21.00	22.00	68.00	35.00	27.00	49.00	57.00	20.00	63.00
	Normal Flood Water depth (m)	2.30	3.20	2.50	2.90	2.40	3.70	2.08	2.60	1.30
	Dry Season Water Width (m)	8.00	8.00	23.00	20.00	8.00	19.00	68.00	0.00	15.00
	Dry Season Water Depth (m)	0.30	0.30	0.60	0.30	0.30	0.80	0.00	0.00	0.50
	Dry Season Water Depth at Pier (m)	0.00	0.00	0.00	0.00	0.00	1.20	5.90	0.00	0.40
	Tidal Fluctuation (m)	No	No	No	No	No	0.2	No	No	No
	Water Velocity	Medium	Medium	Medium	Medium	Slow	Fast	Slow	Fast	Slow
	Angle of Bridge to Stream (deg)	90	90	90	90	90	90	90	90	90
	Ferry Services	No	No	No	No	No	No	No	No	No
	Required Navigation Clearance Height (m)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.20	1.80
	Type of River Traffic	Country Boat	Country Boat	Country Boat	Country Boat	Country Boat	Engine Boat, Country Boat	Small Country Boat	Country Boat	Country Boat
	Condition of Bank	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound
Condition of Riverbed	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	
Approach Road	Total Road Width (m)	3.05	4.62	3.66	3.66	2.50	3.50	7.32	3.66	7.32
	Carriageway Width (m)	3.05	4.62	3.66	3.00	2.50	3.50	5.66	3.05	5.48
	Embankment Height (m)	1.20	1.80	3.20	2.80	1.10	1.60	1.90	1.80	1.20
	Surface Type	Earthen	BC/Earthen	Earthen	Earthen	Earthen	Earthen	Earthen	Earthen	BC
	Surface Condition	Good	Good	Good	Good	Good	Good	Good	Good	Good
	Alternative Route (km)	No	No	No	No	4.00	0.50	No	No	No

Bridge Site Survey Data - 2
Zila : Faridpur

Name of Upazila		Sadar					Boalmari	Charvadrason	Bangha	Sadarpur	
Serial Number		1	2	3	4	5	6	7	8	9	
Influence Area	Population (thousand)	15	30	30	40	25	30	15	25	35	
	Main Industry	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture, Commercial	Agriculture	
	Major Agricultural Product	Rice, Wheat, Onion, Garlic	Rice, Jute, Onion, Pulse, S.Cane, Wheat, Mustard	Rice, Jute, S.Cane, Veg.	Rice, Jute, Veg., Mustard	Rice, Jute, S.Cane, Pulse, Onion	Rice, Wheat, Jute, Pulse, Onion, Mustard	Rice, Wheat, Jute, Onion, Garlic	Rice, Wheat, Jute, Onion, Pulse	Rice, Jute, Wheat, Onion, Garlic, Veg.	
	Number of Public Facilities	School	7	14	6	10	8	8	4	8	5
		Clinic	2	1	2	2	1	2	1	2	1
		Bazar	2	2	4	4	5	3	2	5	6
		Mosque	8	20	8	15	12	8	10	20	20
		Gov't Office	0	2	3	0	0	3	1	0	0
Others		4	4	2	0	2	3	2	4	3	
Total	23	43	25	31	28	27	20	39	35		
Traffic Volume	Passenger Car	3	7	3	15	6	5	2	12	8	
	Pickup/Truck	5	20	15	30	10	15	8	15	15	
	Bus	0	0	0	5	2	0	0	0	0	
	Motorcycle	20	25	50	40	25	80	40	50	40	
	Rickshaw	60	150	200	180	175	130	100	125	160	
	Autorickshaw	20	30	25	30	12	20	10	30	20	
	Bullock Cart	10	20	2	8	5	15	4	0	3	
	Pedestrian	1500	2000	1500	1500	1200	1700	1500	1800	1500	
Bridge Site Condition	Landuse	Farm	Farm	Farm	Farm	Farm	Farm	Farm	Residence, Commercial	Farm	
	Topography	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	
	Necessity of Realignment of Approach Road	No	No	No	No	No	No	Yes	No	No	
Environmental Issue	Necessary Land to be Additionally Acquired (sq.m)	No	No	No	No	No	No	No	90	756	
	Number of Houses to be Relocated	No	No	No	No	No	No	No	No	No	
	Other Obstruction to be Relocated	No	No	No	No	6 Trees	3 Shops	No	1 Electric Pole, 8 Trees	No	
Proposed Bridge	Bridge Length (m)	40	35	60	30	30	40	75	25	75	
	Span Arrangement	15m+25m	10m+25m	3x20m	1x30m	1x30m	15m+25m	3x25m	1x25m	3x25m	
	Abutment Height (m)	3.60	3.50	3.20	3.50	2.70	3.20	3.10	3.10	3.30	
	Pier Height (m)	-	-	4.80	4.70	-	6.80	4.40	-	4.60	
Engineering Evaluation	Road Class	0	13	13	7	0	13	0	7	20	
	Existing Bridge	40	40	40	40	40	40	40	40	40	
	Approach Road	0	30	0	0	0	0	0	0	30	
	Alternative Route	10	10	10	10	5	0	10	10	10	
	Total Engineering Score	50	93	63	57	45	53	50	57	100	
Socioeconomic Evaluation	Beneficiaries	14	27	27	30	25	27	14	25	27	
	Traffic Demand	6	13	14	18	13	13	8	13	12	
	Pedestrian Demand	14	18	14	15	12	15	14	18	14	
	Public Facilities	21	27	23	30	28	24	18	30	27	
	Bridge Length Factor	f=0.9	f=0.9	f=0.9	f=1.0	f=1.0	f=0.9	f=0.9	f=1.0	f=0.9	
	Total Socioeconomic Score	55	85	78	93	78	79	54	86	80	
Overall Evaluation	B	A	A	B	C	B	X2	B	A		
Implementation Schedule	Excluded (Priority B)	Phase-2	Phase-3	Excluded (Priority B)	Excluded (Priority C)	Excluded (Priority B)	Excluded (Water Depth at Pier>1.2m)	Excluded (Priority B)	Phase-1		
Remarks					Now the river is dead due to construction of sluice gate, there is no flow in the river.						

Bridge Site Survey Data - 1
Zila : Comilla

Name of Upazila		Brahmanpara	Muradnagar	Chowddogram	Debidar	Homna
Serial Number		1	2	3	4	5
Bridge Code		19-04-07	19-05-06	19-06-03	19-09-N1	19-10-N1
Bridge Name/Location		Bridge on Chanda Bazar to Charadrari Road over Shalda River.	Bridge on Chapitala to Moheshpur Road over Buri River.	Bridge on Protabpur to Dorbes Bazar Road over Dhakatia River.	Bridge on Khalipur to Shibpur Newmarket Road.	Bridge on Kararkandi to Kalmina to Ganiarchar to Ramkrishnapur Bazar Road over Titas River.
Status		Additional Request	Original Request	Additional Request	Additional Request	Additional Request
Road ID		419154016	419813011	419313034	419403018	419543022
Road Class		Village-A	Union	Union	Union	Union
Chainage (km)		2+460	3+900	6+700	0+000	4+500
Condition of Existing Bridge	Existing or not	Not Existing	Not Existing	Existing	Not Existing	Not Existing
	Bridge Length (m)			10.20		
	Bridge Width (m)			4.05		
	Carriageway Width (m)			3.67		
	Superstructure Type			RC		
	Abutment Type			Masonry		
	Pier Type			-		
	Usage of Bridge			All Vehicles		
	Condition			Collapsed		
	Present Navigation Clearance Height (m)			0.60		
River Condition	Bank to Bank Width (m)	52.00	30.00	47.00	98.00	111.00
	Highest Flood Water Width (m)	57.00	33.00	49.00	250.00	100.00
	Highest Flood Water Depth (m)	6.20	6.00	7.40	12.00	7.00
	Normal Flood Water Width (m)	33.00	25.00	50.00	120.00	85.00
	Normal Flood Water depth (m)	4.75	4.50	6.50	10.00	5.50
	Dry Season Water Width (m)	20.00	16.00	20.00	60.00	60.00
	Dry Season Water Depth (m)	1.20	1.00	3.50	3.00	1.10
	Dry Season Water Depth at Pier (m)	1.20	0.00	0.00	2.10	0.70
	Tidal Fluctuation (m)	No	No	No	No	0.6
	Water Velocity	Fast	Medium	Fast	Fast	Medium
	Angle of Bridge to Stream (deg)	90	90	90	120	90
	Ferry Services	No	No	No	Yes	Yes
	Required Navigation Clearance Height (m)	2.00	1.50	1.20	1.20	2.00
	Type of River Traffic	Engine Boat, Country Boat	Engine Boat, Country Boat	Country Boat	Country Boat, Launch	Engine Boat, Country Boat
Condition of Bank	Eroded	Sound	Sound	Heavily Eroded	Sound	
Condition of Riverbed	Sound	Sound	Scoured	Scoured	Sound	
Approach Road	Total Road Width (m)	3.66	3.50	4.50	4.00	4.88
	Carriageway Width (m)	3.05	3.00	3.05	3.00	3.67
	Embankment Height (m)	1.80	3.00	2.00	6.50	2.50
	Surface Type	Earthen	BC/Earthen	BC/Earthen	Earthen	Earthen
	Surface Condition	Bad	Fair	Good	Bad	Good
	Alternative Route (km)	No	No	No	No	No

Bridge Site Survey Data - 2
Zila : Comilla

Name of Upazila		Brahmanpara	Muradnagar	Chowddogram	Debidar	Homna	
Serial Number		1	2	3	4	5	
Influence Area	Population (thousand)	30	35	40	80	25	
	Main Industry	Agriculture	Fishery, Agriculture	Fishery, Agriculture	Agriculture	Agriculture	
	Major Agricultural Product	Rice, Jute, Veg.	Rice, Jute, Veg.	Rice, Jute, Veg., S.Cane	Rice, Veg.	Rice, Jute, Veg.	
	Number of Public Facilities	School	10	14	6	5	8
		Clinic	4	2	2	2	2
		Bazar	7	4	3	2	5
		Mosque	18	15	7	10	15
		Gov't Office	2	4	2	1	2
Others		10	3	1	2	5	
Total		51	42	21	22	37	
Traffic Volume	Passenger Car	20	10	20	10	5	
	Pickup/Truck	25	26	10	17	10	
	Bus	25	30	30	20	10	
	Motorcycle	70	80	50	100	25	
	Rickshaw	350	250	250	250	150	
	Autorickshaw	75	55	100	60	50	
	Bullock Cart	0	0	0	0	0	
	Pedestrian	5500	2400	4000	4000	500	
Bridge Site Condition	Landuse	Farm	Farm	Farm	Waste Land	Swamp	
	Topography	Flat	Flat	Flat	Flat	Flat	
Environmental Issue	Necessity of Realignment of Approach Road	No	No	No	No	No	
	Necessary Land to be Additionally Acquired (sq.m)	No	No	No	No	No	
	Number of Houses to be Relocated	No	No	No	No	No	
	Other Obstruction to be Relocated	No	No	2 Trees	No	No	
Proposed Bridge	Bridge Length (m)	40	30	25	105	90	
	Span Arrangement	15m+25m	1x30m	1x25m	15m+3x25m+15m	20m+2x25m+20m	
	Abutment Height (m)	4.50	6.80	4.00	6.80	6.00	
	Pier Height (m)	7.00	-	6.00	8.00	7.50	
Engineering Evaluation	Road Class	7	13	13	13	13	
	Existing Bridge	40	40	0	40	40	
	Approach Road	0	30	30	0	0	
	Alternative Route	10	10	10	10	10	
	Total Engineering Score	57	93	53	63	63	
Socioeconomic Evaluation	Beneficiaries	27	30	30	21	18	
	Traffic Demand	18	20	20	14	10	
	Pedestrian Demand	18	20	20	14	4	
	Public Facilities	27	30	21	15	21	
	Bridge Length Factor	f=0.9	f=1.0	f=1.0	f=0.7	f=0.7	
	Total Socioeconomic Score	90	100	91	64	53	
Overall Evaluation	B	A	B	X2	A		
Implementation Schedule	Excluded (Priority B)	Phase-1	Excluded (Priority B)	Excluded (Water Depth at Pier>1.2m)	Phase-2		
Remarks	Bridge to connect four Union of two Upazila of two District and also connect two connect growth center.	Bridge to connect Comilla-Sylhet regional highway , Companiganj-Naleinegar RHD road.	Bridge to connect Dorbes Bazar , Mia Bazar , Dhaka-Chittagong Highway	Bridge to connect Khalilpur Bazar , UP office , Pirganj Gc , School , Health Center , Asrayan project , Comilla-Sylhet National Highway & Upazila Headquarter.	Bridge to connect Ramkrishnapur Bazar , Dulalpur-Ranchandrapur Gc road and also Ganiarchar Bazar , Dulalpur Bazar , Asadpur Bazar.		

Bridge Site Survey Data - 1
Zila : B-Baria

Name of Upazila		Bancharampur	Nabirnagar
Serial Number		1	2
Bridge Code		20-04-N3	20-05-01
Bridge Name/Location		Bridge on Joynagar to Jibanganj Road over Titas River.	Bridge on Mohalla Launch Ghat to Moresh Road over Bi-Khali Chander Khat
Status		Additional Request	Original Request
Road ID		412043009	412852002
Road Class		Union	Upazila
Chainage (km)		9+313	2+363
Condition of Existing Bridge	Existing or not	Not Existing	Not Existing
	Bridge Length (m)		
	Bridge Width (m)		
	Carriageway Width (m)		
	Superstructure Type		
	Abutment Type		
	Pier Type		
	Usage of Bridge		
	Condition		
	Present Navigation Clearance Height (m)		
River Condition	Bank to Bank Width (m)	85.00	60.00
	Highest Flood Water Width (m)	125.00	75.00
	Highest Flood Water Depth (m)	8.50	6.00
	Normal Flood Water Width (m)	90.00	60.00
	Normal Flood Water depth (m)	7.00	5.50
	Dry Season Water Width (m)	35.00	35.00
	Dry Season Water Depth (m)	2.00	1.25
	Dry Season Water Depth at Pier (m)	1.60	1.20
	Tidal Fluctuation (m)	No	No
	Water Velocity	Medium	Medium
	Angle of Bridge to Stream (deg)	90	90
	Ferry Services	Yes	No
	Required Navigation Clearance Height (m)	2.00	1.50
	Type of River Traffic	Country Boat	Country Boat
	Condition of Bank	Sound	Sound
Condition of Riverbed	Sound	Sound	
Approach Road	Total Road Width (m)	4.27	4.87
	Carriageway Width (m)	3.05	3.66
	Embankment Height (m)	2.50	2.25
	Surface Type	BC/WBM/HBB	HBB/Earthen
	Surface Condition	Good	Bad
	Alternative Route (km)	No	No

Bridge Site Survey Data - 2
Zila : B-Baria

Name of Upazila		Bancharampur	Nabirnagar	
Serial Number		1	2	
Influence Area	Population (thousand)	18	22	
	Main Industry	Agriculture	Agriculture	
	Major Agricultural Product	Rice, Wheat, Jute	Rice, Wheat	
	Number of Public Facilities	School	5	4
		Clinic	2	2
		Bazar	2	5
		Mosque	6	4
		Gov't Office	1	2
Others		6	2	
Total	22	19		
Traffic Volume	Passenger Car	15	25	
	Pickup/Truck	20	20	
	Bus	8	5	
	Motorcycle	25	15	
	Rickshaw	160	40	
	Autorickshaw	15	12	
	Bullock Cart	0	30	
	Pedestrian	1500	2500	
Bridge Site Condition	Landuse	Farm	Farm	
	Topography	Flat	Flat	
	Necessity of Realignment of Approach Road	No	No	
Environmental Issue	Necessary Land to be Additionally Acquired (sq.m)	No	No	
	Number of Houses to be Relocated	No	No	
	Other Obstruction to be Relocated	No	No	
Proposed Bridge	Bridge Length (m)	90	75	
	Span Arrangement	20m+2x25m+20m	3x25m	
	Abutment Height (m)	6.50	5.50	
	Pier Height (m)	8.00	7.00	
Engineering Evaluation	Road Class	13	20	
	Existing Bridge	40	40	
	Approach Road	30	20	
	Alternative Route	10	10	
	Total Engineering Score	93	90	
Socioeconomic Evaluation	Beneficiaries	13	20	
	Traffic Demand	10	9	
	Pedestrian Demand	11	18	
	Public Facilities	15	17	
	Bridge Length Factor	f=0.7	f=0.9	
Total Socioeconomic Score	49	64		
Overall Evaluation		X2	A	
Implementation Schedule		Excluded (Water Depth at Pier>1.2m)	Phase-1	
Remarks		Bridge to connect Jibonganj Gc. NabinagarUpazila, BisnurampurBazar & BancharampurUpazila Headquarter.	Bridge to connect B.Baria District Headquarter , Bitghar growth center , Upazila Road (Mohesh Road) , Mohalla Launchghat and Mearkota growth center.	

Bridge Site Survey Data - 1
Zila : Chandpur

Name of Upazila	Sadar				Kachua		Faridganj	
Serial Number	1	2	3	4	5	6	7	
Bridge Code	21-01-N1	21-01-N2	21-01-N3	21-01-N4	21-04-N1	21-04-N4	21-05-02	
Bridge Name/Location	Bridge on Kanudasdi to Bardia Road.	Bridge on Kanudasdi to Bardia Road.	Bridge on Kanudasdi to Bardia Road.	Bridge on Kanudasdi to Bardia Road.	Bridge on Batapukuria to Nindapur Road over Betera Khal.	Bridge on Thana Complex to Chandpur Road at Kalo Chowgram.	Bridge on Gazipur to Harina Road on Dakatia River.	
Status	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	
Road ID	413013002	413013002	413013002	413013002	413584003	413583023	413453014	
Road Class	Union	Union	Union	Union	Village-A	Union	Union	
Chainage (km)	0+520	1+670	2+591	3+531	6+680	4+470	0+000	
Condition of Existing Bridge	Existing or not	Existing	Not Existing	Not Existing	Not Existing	Not Existing	Existing	Not Existing
	Bridge Length (m)	16.00					16.00	
	Bridge Width (m)	1.90					2.00	
	Carriageway Width (m)	1.45					2.00	
	Superstructure Type	Bamboo/Timber					Timber	
	Abutment Type	-					-	
	Pier Type	Temporary RC Column					-	
	Usage of Bridge	Pedestrians Only					Pedestrians Only	
	Condition	Collapsed					Weak	
	Present Navigation Clearance Height (m)	-					-	
River Condition	Bank to Bank Width (m)	16.00	31.50	30.00	35.00	21.00	16.00	120.00
	Highest Flood Water Width (m)	20.00	30.00	36.00	35.00	30.00	20.00	126.00
	Highest Flood Water Depth (m)	4.50	6.20	4.00	7.00	5.00	5.00	7.50
	Normal Flood Water Width (m)	16.00	24.00	20.00	25.00	25.00	16.00	126.00
	Normal Flood Water depth (m)	3.80	5.00	2.50	6.00	4.50	4.00	5.00
	Dry Season Water Width (m)	8.00	20.00	16.00	10.00	10.00	10.00	80.00
	Dry Season Water Depth (m)	0.20	1.20	1.00	0.60	0.20	0.00	5.00
	Dry Season Water Depth at Pier (m)	0.00	0.00	0.00	0.00	0.00	0.00	3.80
	Tidal Fluctuation (m)	1.00	1.00	0.60	0.60	0.30	No	No
	Water Velocity	Medium	Medium	Medium	Medium	Medium	Medium	Slow
	Angle of Bridge to Stream (deg)	90	90	120	90	90	90	90
	Ferry Services	No	No	No	No	No	No	Yes
	Required Navigation Clearance Height (m)	1.20	1.60	1.00	0.60	1.00	1.00	1.80
	Type of River Traffic	Country Boat	Engine Boat, Country Boat	Country Boat	Country Boat	Engine Boat, Country Boat	Country Boat	Engine Boat, Country Boat
Condition of Bank	Sound	Sound	Sound	Sound	Sound	Sound	Sound	
Condition of Riverbed	Sound	Sound	Sound	Sound	Sound	Scoured (downstream)	Sound	
Approach Road	Total Road Width (m)	3.20	2.67	3.20	3.20	4.88	4.00	4.88
	Carriageway Width (m)	2.67	2.40	2.67	2.67	2.60	2.67	3.05
	Embankment Height (m)	3.00	2.50	2.00	2.00	2.50	2.50	1.80
	Surface Type	Earthen	Earthen	Earthen	Earthen	BC/WBM/Earthen	Earthen	BC/Earthen
	Surface Condition	Fair	Bad	Fair	Fair	Good	Bad	Good
	Alternative Route (km)	No	No	No	No	No	No	No

Bridge Site Survey Data - 2
Zila : Chandpur

Name of Upazila		Sadar				Kachua		Faridganj	
Serial Number		1	2	3	4	5	6	7	
Influence Area	Population (thousand)	22	30	22	22	20	30	50	
	Main Industry	Agriculture, Fishery	Agriculture, Fishery	Agriculture, Fishery	Agriculture, Fishery	Agriculture, Fishery	Agriculture, Fishery	Agriculture, Fishery	
	Major Agricultural Product	Rice, Jute, Veg.	Rice, Jute, Veg.	Rice, Jute, Veg.	Rice, Jute, Veg.	Rice, Jute, Veg.	Rice, Jute, Veg.	Rice, Jute, S.Cane,	
	Number of Public Facilities	School	8	8	6	6	7	8	30
		Clinic	2	2	1	1	1	1	3
		Bazar	6	6	3	3	4	3	10
		Mosque	12	15	13	13	18	18	30
		Gov't Office	2	2	2	2	2	1	3
Others		6	8	10	10	6	7	5	
Total		36	41	35	35	38	38	81	
Traffic Volume	Passenger Car	5	5	5	5	10	15	20	
	Pickup/Truck	15	15	15	15	30	30	40	
	Bus	20	20	20	0	30	25	40	
	Motorcycle	80	80	80	70	60	65	100	
	Rickshaw	250	250	250	120	300	200	300	
	Autorickshaw	40	40	40	25	45	45	75	
	Bullock Cart	0	0	0	0	0	0	0	
	Pedestrian	3000	3000	3000	2500	5500	4500	5000	
Bridge Site Condition	Landuse	Farm	Farm	Farm	Farm	Farm	Farm	Farm	
	Topography	Flat	Flat	Flat	Flat	Flat	Flat	Flat	
	Necessity of Realignment of Approach Road	No	Yes	No	No	No	No	No	
Environmental Issue	Necessary Land to be Additionally Acquired (sq.m)	No	No	No	No	No	No	No	
	Number of Houses to be Relocated	No	No	No	No	No	No	No	
	Other Obstruction to be Relocated	No	No	No	No	10 Shops	No	2 Shops	
Proposed Bridge	Bridge Length (m)	25	20	30	20	25	20	125	
	Span Arrangement	1x25m	1x20m	1x30m	1x20m	1x25m	1x20m	5x25m	
	Abutment Height (m)	4.80	6.50	4.50	4.50	4.50	4.50	6.00	
	Pier Height (m)	-	-	-	-	-	-	8.00	
Engineering Evaluation	Road Class	13	13	13	13	7	13	13	
	Existing Bridge	40	40	40	40	40	40	40	
	Approach Road	0	0	0	0	30	0	30	
	Alternative Route	10	10	10	10	10	10	10	
	Total Engineering Score	63	63	63	63	87	63	93	
Socioeconomic Evaluation	Beneficiaries	22	30	22	22	20	30	21	
	Traffic Demand	20	20	20	13	20	20	14	
	Pedestrian Demand	20	20	20	20	20	20	14	
	Public Facilities	30	30	30	30	30	30	21	
	Bridge Length Factor	f=1.0	f=1.0	f=1.0	f=1.0	f=1.0	f=1.0	f=0.7	
	Total Socioeconomic Score	92	100	92	85	90	100	70	
Overall Evaluation	A	A	A	A	A	A	X2		
Implementation Schedule	Phase-2	Phase-2	Phase-3	Phase-3	Phase-1	Phase-1	Excluded (Water Depth at Pier>1.2m)		
Remarks	Bridge to connect Baburhat-Motiale-Pannal regional highway, Kanudi Launchghat & Bazar.	- Land acquisition (20mx10m) will be required for realignment of approach shown on site plan. The previous road ID No. was wrong. The corrected road ID No. is 413013002. - On the same road w/ bridge code 21-01-N1	On the same road w/ bridge code 21-01-N1	On the same road w/ bridge code 21-01-N1	Bridge to connect Naysagan & Naryampur Gc, Kachua-Gouripur regional road.	Bridge to connect Rahmanagar & Ragunathpur Gc, Gouripur-Ramganj regional road.	Bridge to connect Faridganj-Chandpur Gc, Gazipur-Gollac road, Chandpur-Ragipur RHD road & Dhanua Bazar.		

Bridge Site Survey Data - 1
Zila : Feni

Name of Upazila		Sadar			Fulgaji	Porshuram		Chagalnaiya	
Serial Number	1	2	3	4	5	6	7	8	
Bridge Code	22-01-01	22-01-03	22-01-07	22-02-01	22-02-04	22-02-06	22-05-06	22-05-07	
Bridge Name/Location	Bridge on Laxmipur Panua Ghat Road over Sutsuti Dhanagazi Khal.	Bridge on Kachua to Panuaghat Road over Katchua Kha.	Bridge on Damapur to Mohazer Colony Road over Kumra Chara Khal.	Bridge on Kamua to Jamua Road over Chilonia River.	Bridge on East Shaheb Nagar to West Shaheb Nagar - Subar Bazar Road over Chilonia River	Bridge on Subar Bazar to Moheshpuskur ini Road over Chilonia River.	Bridge on South Satara DC Road up to Union Connecting Road on Mohuri River.	Bridge on Mohamaya School Road over Muhuri Khal.	
Status	Additional Request	Additional Request	Additional Request	Additional Request	Additional Request	Additional Request	Original Request	Original Request	
Road ID	430295083	430295086	430295029	430954036	430514002	430513004	430144032	430144002	
Road Class	Village-B	Village-B	Village-B	Village-A	Village-A	Union	Village-A	Village-A	
Chainage (km)	2+500	0+800	1+500	1+050	2+400	1+450	1+500	1+720	
Condition of Existing Bridge	Existing or not	Existing	Not Existing	Existing	Existing	Not Existing	Not Existing	Not Existing	
	Bridge Length (m)	12.00		15.00	35.00				
	Bridge Width (m)	1.40		2.10	2.10				
	Carriageway Width (m)	1.10		2.00	2.10				
	Superstructure Type	Bamboo/Timber		Timber	Timber				
	Abutment Type	-		-	-				
	Pier Type	Bamboo Pile		Wooden	Bamboo Pile				
	Usage of Bridge	Pedestrians Only		Pedestrians Only	Pedestrians Only				
	Condition	Collapsed		Weak	Collapsed				
Present Navigation Clearance Height (m)	-		-	-					
River Condition	Bank to Bank Width (m)	19.00	20.00	20.00	46.00	60.00	53.00	70.00	90.00
	Highest Flood Water Width (m)	25.00	30.00	30.00	45.00	60.00	60.00	90.00	120.00
	Highest Flood Water Depth (m)	4.50	4.50	4.00	6.50	4.20	4.20	6.00	7.00
	Normal Flood Water Width (m)	19.00	19.00	20.00	35.00	45.00	50.00	70.00	90.00
	Normal Flood Water depth (m)	3.20	3.50	2.50	5.00	3.50	3.00	5.50	5.20
	Dry Season Water Width (m)	15.00	14.00	7.00	20.00	25.00	35.00	50.00	60.00
	Dry Season Water Depth (m)	1.20	1.00	0.60	2.50	1.00	1.00	3.20	3.50
	Dry Season Water Depth at Pier (m)	0.00	0.00	0.00	1.70	0.00	0.00	2.00	2.80
	Tidal Fluctuation (m)	No	No	No	No	No	No	No	No
	Water Velocity	Medium	Medium	Fast	Fast	Fast	Fast	Medium	Fast
	Angle of Bridge to Stream (deg)	90	90	90	90	90	90	90	90
	Ferry Services	No	No	No	No	No	No	Yes	Yes
	Required Navigation Clearance Height (m)	-	-	-	-	-	-	1.50	1.50
	Type of River Traffic	Country Boat	No	No	No	No	No	Engine Boat, Country Boat	Engine Boat
	Condition of Bank	Sound	Sound	Sound	Eroded	Eroded	Eroded	Eroded	Sound
Condition of Riverbed	Sound	Sound	Sound	Scoured	Scoured	Scoured	Scoured	Sound	
Approach Road	Total Road Width (m)	4.00	2.70	3.05	3.50	4.00	4.00	4.67	4.88
	Carriageway Width (m)	3.05	2.40	2.67	2.60	3.05	3.40	3.05	3.05
	Embankment Height (m)	2.50	2.30	1.50	2.20	2.20	4.00	2.50	2.50
	Surface Type	Earthen	Earthen	Earthen	BC/Earthen	BC/Earthen	BC/Earthen	BC/HBB	HBB
	Surface Condition	Fair	Bad	Fair	Good	Good	Fair	Good	Good
	Alternative Route (km)	No	No	No	No	No	No	No	No

Bridge Site Survey Data - 2
Zila : Feni

Name of Upazila		Sadar			Fulgaji	Porshuram		Chagalnaiya		
Serial Number		1	2	3	4	5	6	7	8	
Influence Area	Population (thousand)	40	20	50	15	20	15	25	30	
	Main Industry	Agriculture, Fishery	Agriculture, Fishery	Agriculture, Fishery, Forestry	Agriculture, Forestry	Agriculture, Fishery	Agriculture, Fishery, Forestry	Agriculture, Forestry	Agriculture	
	Major Agricultural Product	Rice, Veg.	Rice, Veg.	Rice, Veg.	Rice, Veg., S.Cane, Bamboo	Rice, Veg., S.Cane	Rice, Jute, Veg., S.Cane	Rice, Veg., S.Cane, Bamboo	Rice, Wheat, Veg., S.Cane	
	Number of Public Facilities	School	15	7	8	6	6	6	7	14
		Clinic	1	1	1	1	1	1	1	2
		Bazar	3	4	4	3	4	4	4	5
		Mosque	40	12	30	30	20	15	12	30
		Gov't Office	2	2	1	2	2	2	2	3
Others		5	4	5	6	6	6	8	4	
Total	66	30	49	48	39	34	34	58		
Traffic Volume	Passenger Car	20	15	20	10	20	15	10	20	
	Pickup/Truck	45	35	30	50	35	45	45	45	
	Bus	40	25	40	30	30	20	35	40	
	Motorcycle	70	70	80	70	60	75	75	80	
	Rickshaw	300	150	350	250	250	200	350	350	
	Autorickshaw	120	70	100	100	100	70	100	100	
	Bullock Cart	0	0	0	0	20	35	10	0	
	Pedestrian	6000	5000	6500	6000	3500	3500	4000	4500	
Bridge Site Condition	Landuse	Farm	Farm	Farm	Farm	Farm	Farm	Farm	Farm	
	Topography	Flat	Flat	Hilly	Hilly	Flat	Hilly	Flat	Flat	
	Necessity of Realignment of Approach Road	No	No	No	No	No	No	No	Yes	
Environmental Issue	Necessary Land to be Additionally Acquired (sq.m)	No	No	No	No	No	No	No	No	
	Number of Houses to be Relocated	No	No	No	No	No	No	No	No	
	Other Obstruction to be Relocated	4 Trees	No	2 Trees	No	No	No	No	No	
Proposed Bridge	Bridge Length (m)	20	20	20	40	60	50	80	65	
	Span Arrangement	1x20m	1x20m	1x20m	15m+25m	3x20m	15m+20m+15m	4x20m	20m+25m+20m	
	Abutment Height (m)	5.00	4.60	3.50	4.00	3.00	5.00	4.50	4.50	
	Pier Height (m)	-	-	-	8.00	6.50	6.80	8.50	8.50	
Engineering Evaluation	Road Class	0	0	0	7	7	13	7	7	
	Existing Bridge	40	40	40	40	40	40	40	40	
	Approach Road	0	0	0	30	30	30	30	30	
	Alternative Route	10	10	10	10	10	10	10	10	
	Total Engineering Score	50	50	50	87	87	93	87	87	
Socioeconomic Evaluation	Beneficiaries	30	20	30	14	18	14	18	27	
	Traffic Demand	20	20	20	18	18	18	14	18	
	Pedestrian Demand	20	20	20	18	18	18	14	18	
	Public Facilities	30	30	30	27	27	27	21	27	
	Bridge Length Factor	f=1.0	f=1.0	f=1.0	f=0.9	f=0.9	f=0.9	f=0.7	f=0.9	
	Total Socioeconomic Score	100	90	100	77	81	77	67	90	
Overall Evaluation	B	B	B	X2	A	A	X2	X2		
Implementation Schedule	Excluded (Priority B)	Excluded (Priority B)	Excluded (Priority B)	Excluded (Water Depth at Pier>1.2m)	Phase-2	Phase-1	Excluded (Water Depth at Pier>1.2m)	Excluded (Water Depth at Pier>1.2m)		
Remarks	Bridge to connect Dayaleli Bazar , Phanuaghat , Chhagalnaiya Upazila , Feni Sadar Upazila Headquarter. Laskarhat Gc and Schools , Madras etc.	Bridge to connect Bhuyanhat , Phanuaghat , Laskarhat Gc , UP Complex RHD Road , Schools , Madras Community Clinic etc.	Bridge to connect Dharmapur Union , Mohazer Colony , RHD Road and Dhaka-Chittagong National Highway.	Bridge to connect Jambura Bazar , Chilonia Bazar , Schools , Madaras Kamua , Munshirhat Bazar , Feni-Pourshuram RHD Road.	Bridge to connect Pourshuram-Subar Bazar-Rajeshpur-Montala-Fulgaji Upazila Road , Upazila Headquarter, Pourshuram Gc.	Bridge to connect Jayantanagar BOP Camp , Schools , Subar Bazar , Upazila Headquarter & Gc.	Bridge to connect Reju mia Bazar , Bangla Bazar , Mohamaya Bazar , Mirza Bazar , Chagalnaiya-Pourshuram RHD Road & Upazila Headquarter.	Bridge to connect Reju mia Bazar , Pathannagar UP , Mohamaya UP , Pourshuram-Chagalnaiya RHD Road & Upazila Headquarter.		

Bridge Site Survey Data - 1
Zila : Noakhali

Name of Upazila		Begumganj				
Serial Number	1	2	3	4	5	
Bridge Code	23-02-02	23-02-04	23-02-05	23-02-06	23-02-10	
Bridge Name/Location	Bridge on Batua to Fazilpur Road over Chowmuhani - Laxmipur Khal.	Bridge on Amanatpur to Tofader Road over Chowmuhani - Laxmipur Khal.	Bridge on Amanullahpur UP to Abirampur Road Miahjan Thikadar Road over Chowmuhani -	Bridge on Mujahidpur to Pourmbibi Road over Noakhali Khal.	Bridge on Khandurbag to Amishapara Road over Sonapur Khal.	
Status	Original Request	Original Request	Original Request	Original Request	Original Request	
Road ID	475074055	475074032	475073017	475073017	475074087	
Road Class	Village-A	Village-A	Union	Union	Village-A	
Chainage (km)	0+000	0+600	0+000	2+500	6+000	
Condition of Existing Bridge	Existing or not	Not Existing	Existing	Not Existing	Not Existing	
	Bridge Length (m)		50.00			
	Bridge Width (m)		1.00			
	Carriageway Width (m)		1.00			
	Superstructure Type		Timber			
	Abutment Type		-			
	Pier Type		Wooden			
	Usage of Bridge		Pedestrians Only			
	Condition		Weak			
	Present Navigation Clearance Height (m)		-			
River Condition	Bank to Bank Width (m)	41.00	50.00	35.00	53.00	20.00
	Highest Flood Water Width (m)	40.00	60.00	40.00	65.00	25.00
	Highest Flood Water Depth (m)	7.00	5.60	7.00	6.10	3.50
	Normal Flood Water Width (m)	35.00	50.00	30.00	45.00	15.00
	Normal Flood Water depth (m)	5.20	5.00	6.00	5.50	3.00
	Dry Season Water Width (m)	20.00	30.00	25.00	35.00	10.00
	Dry Season Water Depth (m)	2.00	1.20	2.50	0.80	1.20
	Dry Season Water Depth at Pier (m)	1.60	1.40	1.70	1.80	0.00
	Tidal Fluctuation (m)	No	0.60	0.60	No	No
	Water Velocity	Medium	Medium	Medium	Slow	Slow
	Angle of Bridge to Stream (deg)	90	90	90	90	90
	Ferry Services	No	No	No	Yes	No
	Required Navigation Clearance Height (m)	-	-	-	0.60	-
	Type of River Traffic	Country Boat	No	No	Country Boat	No
	Condition of Bank	Sound	Sound	Sound	Sound	Sound
Condition of Riverbed	Sound	Sound	Sound	Sound	Sound	
Approach Road	Total Road Width (m)	3.66	3.50	3.66	3.67	3.00
	Carriageway Width (m)	3.00	3.00	2.40	3.05	2.40
	Embankment Height (m)	2.20	2.00	2.20	2.00	1.50
	Surface Type	BC/Earthen	HBB/Earthen	Earthen	HBB/Earthen	HBB/Earthen
	Surface Condition	Fair	Fair	Fair	Fair	Fair
	Alternative Route (km)	No	No	No	No	No

Bridge Site Survey Data - 2
Zila : Noakhali

Name of Upazila		Begumganj					
Serial Number		1	2	3	4	5	
Influence Area	Population (thousand)	50	30	40	35	15	
	Main Industry	Agriculture, Fishery	Agriculture, Fishery	Agriculture, Fishery	Agriculture, Fishery	Agriculture, Fishery	
	Major Agricultural Product	Rice, S.Cane, Veg.	Rice, Veg.	Rice, Veg.	Rice, S.Cane, Veg.	Rice, Veg.	
	Number of Public Facilities	School	20	17	15	5	12
		Clinic	2	2	2	3	5
		Bazar	5	4	4	4	4
		Mosque	60	45	40	50	45
		Gov't Office	5	3	2	3	4
Others		10	10	10	10	10	
Total		102	81	73	75	80	
Traffic Volume	Passenger Car	20	20	20	20	20	
	Pickup/Truck	35	45	45	45	45	
	Bus	40	40	40	40	40	
	Motorcycle	80	80	80	120	78	
	Rickshaw	400	350	250	400	400	
	Autorickshaw	110	110	110	120	100	
	Bullock Cart	0	0	0	0	0	
	Pedestrian	7000	5500	5000	5600	3500	
Bridge Site Condition	Landuse	Farm	Farm	Farm	Farm	Farm	
	Topography	Flat	Flat	Flat	Flat	Flat	
	Necessity of Realignment of Approach Road	No	No	No	No	No	
Environmental Issue	Necessary Land to be Additionally Acquired (sq.m)	No	No	No	No	No	
	Number of Houses to be Relocated	No	No	No	No	No	
	Other Obstruction to be Relocated	No	3 Trees	20 Shops, 1 Tree	No	2 Trees	
Proposed Bridge	Bridge Length (m)	40	45	40	50	20	
	Span Arrangement	15m+25m	3x15m	15m+25m	15m+20m+15m	1x20m	
	Abutment Height (m)	4.00	2.80	3.00	3.00	3.00	
	Pier Height (m)	7	6.00	7.00	7.00	-	
Engineering Evaluation	Road Class	7	7	13	13	7	
	Existing Bridge	40	40	40	40	40	
	Approach Road	30	30	0	30	30	
	Alternative Route	10	10	10	10	10	
	Total Engineering Score	87	87	63	93	87	
Socioeconomic Evaluation	Beneficiaries	27	27	27	27	15	
	Traffic Demand	18	18	18	18	20	
	Pedestrian Demand	18	18	18	18	20	
	Public Facilities	27	27	27	27	30	
	Bridge Length Factor	f=0.9	f=0.9	f=0.9	f=0.9	f=1.0	
Total Socioeconomic Score	90	90	90	90	85		
Overall Evaluation	X2	X2	X2	X2	A		
Implementation Schedule	Excluded (Water Depth at Pier>1.2m)	Excluded (Water Depth at Pier>1.2m)	Excluded (Water Depth at Pier>1.2m)	Excluded (Water Depth at Pier>1.2m)	Phase-1		
Remarks	- There is a bamboo shakoo at presesent over the location. - Bridge to connect four Union , Jistoli , Amanullabpur Gopalpur & Amishapan UP and also Dhaka-Roypur Highway.	- 3 nos trees shall have to be removed. - Bridge to connect Amin Bazar , Schools , Madrash , Mirwarish UP , Chowmohani Pourashava , Dhaka-Raipur National Higeway.	- The previous road ID was wrong. The corrected road ID is 475073017. 20 nos shops on both sides adjacent to the bridge shall have to be relocated and one tree is to be removed. - Bridge to connect Amanallahpur & Amishamapara UP , Abirpara , Amin Bazar , Dhaka-Raypur Highway and also Upazila Headquarter.	- The previous road ID no. was wrong. The corrected road ID is 475073017. - Bridge to connect Bashurhat Bazar , Munshirhat , Telepukurpar UP & Bazar , Eklaspur Bazar , Feni-Noakhali National Highway.	- 2 nos trees shall have to be removed. - Bridge to connect Amishapar Bazar , Gopalpur UP and Dhaka-Raypur National Highway.		

Bridge Site Survey Data - 1
Zila : Laxmipur

Name of Upazila		Sadar	Raipur	Ramganj
Serial Number		1	2	3
Bridge Code		24-01-02	24-02-01	24-03-01
Bridge Name/Location		Bridge on Uttar Chanrapur to Dakhin Chanrapur Road over Rahamatkhali Khal.	Bridge on Charkachica to Kazirchar Mitali Bazar Road over Dead Dakatia River.	Bridge on Noapara Hotatia - Domnadi - Paniala Road over Noagaon - Paniala Khal.
Status		Additional Request	Original Request	Original Request
Road ID		451435062	451583028	451653025
Road Class		Village-B	Union	Union
Chainage (km)		2+500	0+120	5+640
Condition of Existing Bridge	Existing or not	Not Existing	Not Existing	Existing
	Bridge Length (m)			14.00
	Bridge Width (m)			2.60
	Carriageway Width (m)			2.00
	Superstructure Type			RC
	Abutment Type			RC
	Pier Type			RC
	Usage of Bridge			Light Vehicles Only
	Condition			Weak
	Present Navigation Clearance Height (m)			-
River Condition	Bank to Bank Width (m)	37.50	80.00	20.00
	Highest Flood Water Width (m)	50.00	100.00	25.00
	Highest Flood Water Depth (m)	5.80	7.50	3.00
	Normal Flood Water Width (m)	35.00	70.00	20.00
	Normal Flood Water depth (m)	4.80	6.50	2.50
	Dry Season Water Width (m)	30.00	50.00	10.00
	Dry Season Water Depth (m)	1.40	4.00	0.20
	Dry Season Water Depth at Pier (m)	1.50	4.50	0.00
	Tidal Fluctuation (m)	1.00	1.00	No
	Water Velocity	Fast	Medium	Medium
	Angle of Bridge to Stream (deg)	90	90	90
	Ferry Services	No	No	No
	Required Navigation Clearance Height (m)	0.60	2.00	0.50
	Type of River Traffic	Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat
	Condition of Bank	Eroded	Sound	Sound
Condition of Riverbed	Scoured	Sound	Sound	
Approach Road	Total Road Width (m)	3.05	2.90	2.80
	Carriageway Width (m)	2.40	2.40	2.00
	Embankment Height (m)	2.00	2.50	2.20
	Surface Type	Earthen	Earthen	BC/Earthen
	Surface Condition	Fair	Fair	Fair
	Alternative Route (km)	No	No	No

Bridge Site Survey Data - 2
Zila : Laxmipur

Name of Upazila		Sadar	Raipur	Ramganj	
Serial Number		1	2	3	
Influence Area	Population (thousand)	35	40	20	
	Main Industry	Agriculture, Fishery	Agriculture, Fishery	Agriculture	
	Major Agricultural Product	Rice, Jute, Veg.	Rice, Veg.	Rice, Jute, Veg.	
	Number of Public Facilities	School	10	18	7
		Clinic	1	6	1
		Bazar	6	8	2
		Mosque	40	10	8
		Gov't Office	6	6	2
Others		6	8	4	
Total	69	56	24		
Traffic Volume	Passenger Car	20	10	20	
	Pickup/Truck	45	30	25	
	Bus	35	30	30	
	Motorcycle	80	80	75	
	Rickshaw	400	300	250	
	Autorickshaw	120	100	100	
	Bullock Cart	0	35	0	
	Pedestrian	5000	3500	4500	
Bridge Site Condition	Landuse	Farm	Farm	Farm	
	Topography	Flat	Flat	Flat	
	Necessity of Realignment of Approach Road	No	No	No	
Environmental Issue	Necessary Land to be Additionally Acquired (sq.m)	No	No	No	
	Number of Houses to be Relocated	No	No	No	
	Other Obstruction to be Relocated	1 Tree	No	5 Trees	
Proposed Bridge	Bridge Length (m)	40	130	20	
	Span Arrangement	15m+25m	15m+4x25m+15m	1x20m	
	Abutment Height (m)	4.00	4.60	3.00	
	Pier Height (m)	6.20	7.50	-	
Engineering Evaluation	Road Class	0	13	13	
	Existing Bridge	40	40	40	
	Approach Road	0	0	30	
	Alternative Route	10	10	10	
	Total Engineering Score	50	63	93	
Socioeconomic Evaluation	Beneficiaries	27	15	20	
	Traffic Demand	18	10	20	
	Pedestrian Demand	18	10	20	
	Public Facilities	27	15	24	
	Bridge Length Factor	f=0.9	f=0.5	f=1.0	
	Total Socioeconomic Score	90	50	84	
Overall Evaluation		X2	X2	A	
Implementation Schedule		Excluded (Water Depth at Pier>1.2m)	Excluded (Water Depth at Pier>1.2m)	Phase-1	
Remarks		- 150m approach road is required reconstruction. - Bridge on connect Bhutanhat , Digolihat , Bashurhat , Dasherhat Gc , Hazirpara Bazar , Charchamita Bazar , Chowpauh Bazar , Dattapara Dazar , Laxmipur-Raipur RHD Road & Dishicr Headquarter.	Bridge to connect Baburhat , Janata Bazar , Bashabari Bazar , Mollarhat Gc Mitali Bazar , Raypur Gc , Raypur-Haiderganj Upazila Road , Milkvitta Factory an Upazila Headquarter.	Bridge to connect Noagaon Bazar , Kanchapur , Hottalia Bazar , Shorshoy Bazar , Farioganj Upazila , Paniola Bazar , Shahrash Upazila , Dashgoria-Paniola LGED Road & Upazila Headquarter.	

Bridge Site Survey Data - 1
Zila : Natore

Name of Upazila		Gurudashpur	Singra		Baraigram	Lalpur
Serial Number		1	2	3	4	5
Bridge Code		52-02-01	52-03-01	52-03-N1	52-04-02	52-05-01
Bridge Name/Location		Bridge on Gurudaspur to Par Gurudaspur Road over Nandakuza River.	Bridge on Singra Bus Stand Komal UP Baliaban Ghat Road near Patkol Ghat.	Bridge on Bandar Amtali to Chowmohani Hat Road at Majgati Ghat over Godai	Bridge on Koyan RHD to Loxmikol Bazar over Mora Boral River.	Bridge on Kadamcilam Hat to Kadamcilam UP Road over Khalisadanga River.
Status		Original Request	Original Request	Original Request	Original Request	Original Request
Road ID		169414054	169912004	169913025	169153001	169443004
Road Class		Village-A	Upazila	Union	Union	Union
Chainage (km)		0+350	2+850	3+400	8+250	2+250
Condition of Existing Bridge	Existing or not	Existing	Not Existing	Existing	Not Existing	Existing
	Bridge Length (m)	63.00		38.00		53.00
	Bridge Width (m)	1.50		1.50		0.20
	Carriageway Width (m)	1.20		1.30		0.20
	Superstructure Type	Bamboo		Bamboo		Bamboo
	Abutment Type	Bamboo		Bamboo		Bamboo
	Pier Type	Bamboo		Bamboo		Bamboo
	Usage of Bridge	Pedestrians Only		Pedestrians, R.Van		Pedestrians Only
	Condition	Weak		Weak		Weak
	Present Navigation Clearance Height (m)	-		1.60		1.80
River Condition	Bank to Bank Width (m)	108.00	100.00	45.00	50.00	69.00
	Highest Flood Water Width (m)	105.00	100.00	50.00	55.00	65.00
	Highest Flood Water Depth (m)	8.50	7.40	4.50	4.10	6.80
	Normal Flood Water Width (m)	95.00	90.00	44.00	52.00	40.00
	Normal Flood Water depth (m)	5.00	3.80	2.30	2.80	4.50
	Dry Season Water Width (m)	60.00	25.00	21.00	40.00	29.00
	Dry Season Water Depth (m)	2.00	0.45	0.50	1.10	1.20
	Dry Season Water Depth at Pier (m)	0.90	0.00	0.30	1.00	1.20
	Tidal Fluctuation (m)	No	No	No	No	No
	Water Velocity	Fast	Fast	Medium	Medium	Fast
	Angle of Bridge to Stream (deg)	90	90	90	90	90
	Ferry Services	No	No	No	No	No
	Required Navigation Clearance Height (m)	2.50	1.50	1.00	1.00	1.50
	Type of River Traffic	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat
	Condition of Bank	Sound	Sound	Sound	Sound	Sound
Condition of Riverbed	Sound	Sound	Sound	Sound	Sound	
Approach Road	Total Road Width (m)	4.60	4.66	4.66	4.50	5.10
	Carriageway Width (m)	3.60	3.60	3.60	3.60	3.60
	Embankment Height (m)	0.90	4.80	1.20	1.90	1.00
	Surface Type	BFS	WBM/HBB/Earthen	BC/Earthen	WBM/Earthen	WBM
	Surface Condition	Good	Good	Good	Good	Good
	Alternative Route (km)	No	No	No	No	No

Bridge Site Survey Data - 2

Zila : Natore

Name of Upazila		Gurudashpur	Singra		Baraigram	Lalpur	
Serial Number		1	2	3	4	5	
Influence Area	Population (thousand)	40	85	65	50	50	
	Main Industry	Agriculture, Commercial	Agriculture	Agriculture	Agriculture, Fishery	Agriculture	
	Major Agricultural Product	Rice, Wheat, Jute, Veg.	Rice, Wheat, Jute	Rice, Jute, S.Cane, Veg.	Rice, Jute, S.Cane, Veg.	Rice, Fruit, Jute, Veg., Mustard	
	Number of Public Facilities	School	25	15	15	22	12
		Clinic	8	5	6	2	2
		Bazar	4	4	16	10	3
		Mosque	25	35	80	27	25
		Gov't Office	12	4	6	2	8
		Others	6	8	3	3	4
Total		80	71	126	66	54	
Traffic Volume	Passenger Car	15	50	75	110	100	
	Pickup/Truck	20	45	110	130	140	
	Bus	6	8	50	10	20	
	Motorcycle	50	175	150	190	200	
	Rickshaw	210	300	250	240	250	
	Autorickshaw	50	115	40	190	200	
	Bullock Cart	15	28	30	12	15	
	Pedestrian	5000	6500	6000	7000	6000	
Bridge Site Condition	Landuse	Residence	Farm	Farm	Farm	Farm, Residence	
	Topography	Flat	Flat	Flat	Flat	Flat	
	Necessity of Realignment of Approach Road	Yes	No	No	No	No	
Environmental Issue	Necessary Land to be Additionally Acquired (sq.m)	300	No	No	No	1200	
	Number of Houses to be Relocated	9	No	No	No	1	
	Other Obstruction to be Relocated	80 Trees	No	No	No	10 Tress	
Proposed Bridge	Bridge Length (m)	105	90	45	35	65	
	Span Arrangement	2x20m+25m+2x20m	20m+2x25m+20m	3x15m	10m+25m	20m+25m+20m	
	Abutment Height (m)	5.60	6.60	4.00	4.60	4.30	
	Pier Height (m)	11.00	9.00	6.30	5.10	8.30	
Engineering Evaluation	Road Class	7	20	13	13	13	
	Existing Bridge	40	40	40	40	40	
	Approach Road	30	30	30	30	30	
	Alternative Route	10	10	10	10	10	
	Total Engineering Score	87	100	93	93	93	
Socioeconomic Evaluation	Beneficiaries	21	21	27	27	27	
	Traffic Demand	14	14	18	18	18	
	Pedestrian Demand	14	14	18	18	18	
	Public Faciilities	21	21	27	27	27	
	Bridge Length Factor	f=0.7	f=0.7	f=0.9	f=0.9	f=0.9	
Total Socioeconomic Score	70	70	90	90	90		
Overall Evaluation	A	A	A	A	A		
Implementation Schedule	Phase-3	Phase-3	Phase-1	Phase-2	Phase-1		
Remarks	South approach of the bridge is located in Gurudashpur Pourashava. This end require additional land acquisition and relocation of 8 (eight) semi pucca & kacha hut and removal of trees. North end approach require relocation of 1 (one) hut.	High embankment with pipe culvert was washed out to form the present Gap.		- The river is closed and water width have been narrowed due to construction of cross dam. So, smaller bridge length than the bank to bank width has been recommended. - LGED PLANS : the existing dam (embankment) to change open channel (bridge). / the regulation (water gate) is installed at 4.5 km downstream side from	Land acquisition will be required on south approach.		

Bridge Site Survey Data - 1
Zila : Sirajganj (1/2)

Name of Upazila	Sirajganj Sadar				Chowhali	Tarash			Ullapara		
Serial Number	1	2	3	4	5	6	7	8	9	10	
Bridge Code	55-01-02	55-01-03	55-01-N1	55-01-N2	55-02-01	55-06-01	55-06-02	55-06-03	55-07-02	55-07-04	
Bridge Name/Location	Bridge on Panchasaratia RHD to Randunibari Bazar Road.	Bridge on Sirajganj - Bogra - Alampur Road over Daibanga Khal.	Bridge on Pipulbari to Bhatpeary Hat Road at Aminpur Village.	Bridge on Pipulbaria RHD to Bhatpeary Hat Road at Degreepara over Isamati River.	Bridge on Thana Sadar to Patrail Road over Khaspukuria Khal at Khaspukuria.	Bridge on Tarash to Kundail Road over Nimaichara Khal.	Bridge on Tarash to Kundail Road over Kushabari Khal.	Bridge on Tarash Naogaon FRB Road over Naogaon River.	Bridge on Boalia RHD to Chowbilahat Road over Jhobjubia River.	Bridge on Barahor UP Office to Dhunchi Ghat Road over Dhunchi Khal.	
Status	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	
Road ID	188783066	188783004	188783003	188783003	188272002	188893003	188893003	188892002	188943074	188943036	
Road Class	Union	Union	Union	Union	Upazila	Union	Union	Upazila	Union	Union	
Chainage (km)	2+010	1+070	2+500	3+700	6+250	6+550	9+700	10+330	1+120	4+700	
Condition of Existing Bridge	Existing or not	Not Existing	Not Existing	Not Existing	Not Existing	Not Existing	Not Existing	Not Existing	Not Existing	Not Existing	
	Bridge Length (m)										
	Bridge Width (m)										
	Carriageway Width (m)										
	Superstructure Type										
	Abutment Type										
	Pier Type										
	Usage of Bridge										
	Condition										
	Present Navigation Clearance Height (m)										
River Condition	Bank to Bank Width (m)	80.00	30.00	48.00	40.00	35.00	36.00	30.00	50.00	100.00	300.00
	Highest Flood Water Width (m)	65.00	30.00	42.00	50.00	73.00	70.00	95.00	70.00	45.00	300.00
	Highest Flood Water Depth (m)	5.50	4.60	4.50	5.50	3.00	7.00	4.00	7.00	4.50	4.50
	Normal Flood Water Width (m)	60.00	15.00	40.00	20.00	60.00	20.00	60.00	40.00	16.00	290.00
	Normal Flood Water depth (m)	3.00	2.30	1.25	0.75	1.50	1.50	2.00	5.65	1.50	1.30
	Dry Season Water Width (m)	30.00	0.00	0.00	0.00	0.00	0.00	0.00	18.00	0.00	0.00
	Dry Season Water Depth (m)	0.50	0.00	0.00	0.00	0.00	0.00	0.00	1.75	0.00	0.00
	Dry Season Water Depth at Pier (m)	1.00	0.00	0.70	0.00	0.00	0.00	0.00	2.90	0.20	0.00
	Tidal Fluctuation (m)	No	No	No	No	No	No	No	No	No	No
	Water Velocity	Medium	Slow	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
	Angle of Bridge to Stream (deg)	90	90	90	70	70	70	90	90	70	90
	Ferry Services	No	No	No	No	No	No	No	No	No	No
	Required Navigation Clearance Height (m)	2.00	-	1.00	1.50	1.50	1.50	1.00	2.00	1.50	1.50
	Type of River Traffic	Country Boat	No	Country Boat	Country Boat	Country Boat	Country Boat	Country Boat	Country Boat	Country Boat	Country Boat
	Condition of Bank	Sound	Sound	Eroded	Eroded	Sound	Sound	Sound	Sound	Eroded	Sound
Condition of Riverbed	Sound	Sound	Scoured	Scoured	Sound	Sound	Sound	Sound	Sound	Sound	
Approach Road	Total Road Width (m)	4.88	4.88	4.88	4.88	4.80	4.88	4.88	7.32	3.66	4.90
	Carriageway Width (m)	3.05	3.05	3.05	3.05	3.66	3.65	3.05	3.70	2.88	3.05
	Embankment Height (m)	1.50	2.00	1.20	1.50	2.40	1.20	3.00	2.45	1.50	2.50
	Surface Type	Earthen	Earthen	BC/WBM/Earthen	BC/WBM/Earthen	Earthen	Earthen	Earthen	BC/HBB	Earthen	Earthen
	Surface Condition	Fair	Bad	Good	Good	Good	Fair	Fair	Good	Bad	Fair
	Alternative Route (km)	No	No	No	No	No	No	No	No	No	No

Bridge Site Survey Data - 2
Zila : Sirajganj (1/2)

Name of Upazilla		Sirajganj Sadar				Chowhall	Tarash			Ullapara		
Serial Number		1	2	3	4	5	6	7	8	9	10	
Influence Area	Population (thousand)	80	10	85	90	35	25	40	60	10	30	
	Main Industry	Agriculture, Handicraft	Agriculture	Agriculture	Agriculture	Agriculture, Handicraft	Agriculture	Agriculture	Agriculture	Agriculture, Husking Mill-18	Agriculture, Husking Mill-10	
	Major Agricultural Product	Rice, Wheat, Jute, Veg., Mustard	Rice, Wheat, Jute, Veg., Mustard	Rice, Wheat, Jute, Veg., S.Cane, Mustard	Rice, Wheat, Jute, Veg., S.Cane, Mustard	Rice, Jute, S.Cane, Nut, Onion, Mustard	Rice, Wheat, Veg., Mustard, Corn, Water Melon	Rice, Wheat, Jute, Veg., Mustard, Water Melon	Rice, Wheat, Jute, Veg., Mustard	Rice, Wheat, Jute, Veg.	Rice, Wheat, S.Cane, Veg.	
	Number of Public Facilities	School	20	4	15	15	25	15	18	30	8	5
		Clinic	4	4	7	5	4	4	4	7	2	3
		Bazar	7	3	4	4	5	5	3	15	3	2
		Mosque	15	10	20	20	15	10	16	40	10	30
		Gov't Office	5	2	5	4	2	4	4	14	2	6
Others		4	6	5	5	3	3	4	18	0	7	
Total	55	29	56	53	54	41	49	124	25	53		
Traffic Volume	Passenger Car	8	3	10	6	3	4	4	4	5	8	
	Pickup/Truck	20	5	15	10	11	20	15	15	5	15	
	Bus	4	0	2	2	0	3	3	5	0	2	
	Motorcycle	100	100	150	180	100	75	100	150	30	100	
	Rickshaw	450	200	400	400	500	220	205	200	150	250	
	Autorickshaw	10	2	100	100	50	4	6	10	5	30	
	Bullock Cart	0	0	0	0	4	50	45	6	2	3	
	Pedestrian	2000	1000	2000	1800	3000	2000	1500	4000	1200	4000	
Bridge Site Condition	Landuse	Farm	Farm	Farm	Farm	Farm	Farm	Farm	Farm, Market	Farm	Farm	
	Topography	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	
	Necessity of Realignment of Approach Road	No	No	No	No	No	No	No	No	Yes	No	
Environmental Issue	Necessary Land to be Additionally Acquired (sq.m)	No	No	No	No	No	No	No	No	No	No	
	Number of Houses to be Relocated	3	No	No	No	No	No	No	No	No	No	
	Other Obstruction to be Relocated	No	No	No	1 Shop	4 Shops, 1 Tree	No	No	7 Shpos	No	No	
Proposed Bridge	Bridge Length (m)	80	25	50	45	25	65	60	60	40	300	
	Span Arrangement	4x20m	1x25m	15m+20m+15m	3x15m	1x25m	20m+25m+20m	3x20m	3x20m	15m+25m	12x25m	
	Abutment Height (m)	4.50	4.50	3.10	3.60	3.80	4.50	4.80	5.00	3.50	5.50	
	Pier Height (m)	7.50	-	5.50	7.20	-	8.50	5.00	9.00	6.00	6.00	
Engineering Evaluation	Road Class	13	13	13	13	20	13	13	20	13	13	
	Existing Bridge	40	40	40	40	40	40	40	40	40	40	
	Approach Road	0	0	30	30	0	0	0	30	0	0	
	Alternative Route	10	10	10	10	10	10	10	10	10	10	
	Total Engineering Score	63	63	93	93	70	63	63	63	100	63	63
Socioeconomic Evaluation	Beneficiaries	21	10	27	27	30	23	27	27	9	15	
	Traffic Demand	14	16	18	18	20	18	18	18	9	10	
	Pedestrian Demand	14	10	18	16	20	18	14	18	11	10	
	Public Facilities	21	29	27	27	30	27	27	27	23	15	
	Bridge Length Factor	f=0.7	f=1.0	f=0.9	f=0.9	f=1.0	f=0.9	f=0.9	f=0.9	f=0.9	f=0.9	f=0.5
	Total Socioeconomic Score	70	65	90	88	100	86	86	86	90	52	50
Overall Evaluation	A	A	A	A	A	A	A	A	X2	B	X1	
Implementation Schedule	Phase-3	Phase-3	Phase-1	Phase-1	Phase-1	Phase-2	Phase-2	Phase-2	Excluded (Water Depth at Pier>1.2m)	Excluded (Priority B)	Excluded (Bridge Length>150m)	
Remarks	Both approach road should be extended 35m each in length.	- Bridge located on over small Channel catchment area. - Bridge is very close to T-intersection about 5m in distance.	Road embankment washed out by flood in 2004.	- Road embankment washed out by flood in 2004. - Two electric posts line should be relocated.	River bed raised about 1.5m in height by sedimentation during flood in 2004.		Observed insufficient embankment of the both approach road.	- Needed relocation of 7 small tin shops. - Bridge closed T-intersection/market about 20m in distance at the 1st approach.	Affected one residence/ land at the 1st approach, so bridge should be made angle.	Required bridge length (60m) is too small compared w/ distance of each main bank 300m in width.		

Bridge Site Survey Data - 1
Zila : Sirajganj (2/2)

Name of Upazila		Ullapara									Kazipur
Serial Number	11	12	13	14	15	16	17	18	19	20	
Bridge Code	55-07-06	55-07-07	55-07-08	55-07-09	55-07-10	55-07-12	55-07-13	55-07-N2	55-07-N3	55-08-01	
Bridge Name/Location	Bridge on Pukurpar to Koyra Hat Road over Koyra Khal.	Bridge on Boalia Bazar to Olipur Hat Road over Muktahar River.	Bridge on Ullapara to Kaliganj FRB Road over Baroia Khal.	Bridge on Boalia GC to Angaru Hat Road over Telkupi Khal (Jhabjobia Khal).	Bridge on Raninagar to Amdanga Road over Sarasmati River.	Bridge on Solop Station Hat to Ghatina Ghat Road over Shajahanpur Canal.	Bridge on Boalia RHD to Chowbila Hat Road over Jhabjobia River.	Bridge on Raninagar RHD to Amdanga Road over Amdanga Khal.	Bridge on Panchila RHD to Hatikamrul UP Office Road over Sarasmati River.	Bridge on Sonamukhi to Hazrahati via Vanudanga Road over Isamati River.	
Status	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	
Road ID	188943006	188943060	188943059	188943074	188943038	188943063	188943024	188943038	188943009	188503022	
Road Class	Union	Union	Union	Union	Union	Union	Union	Union	Union	Union	
Chainage (km)	6+000	2+300	0+650	2+150	3+050	2+900	3+950	4+040	3+200	3+350	
Condition of Existing Bridge	Existing or not	Existing	Not Existing	Not Existing	Not Existing	Not Existing	Not Existing	Not Existing	Not Existing	Not Existing	
	Bridge Length (m)	53.00									
	Bridge Width (m)	1.50									
	Carriageway Width (m)	1.30									
	Superstructure Type	Timber									
	Abutment Type	-									
	Pier Type	Bamboo									
	Usage of Bridge	Pedestrians, Light Vehicles									
	Condition	Damaged									
Present Navigation Clearance Height (m)	1.50										
River Condition	Bank to Bank Width (m)	55.00	62.00	61.00	60.00	39.00	25.00	48.00	42.00	55.00	100.00
	Highest Flood Water Width (m)	75.00	75.00	70.00	85.00	50.00	30.00	56.00	60.00	60.00	120.00
	Highest Flood Water Depth (m)	7.00	5.50	5.50	7.00	7.50	5.00	7.50	4.50	5.50	10.80
	Normal Flood Water Width (m)	25.00	40.00	40.00	29.00	40.00	6.00	40.00	25.00	20.00	90.00
	Normal Flood Water depth (m)	4.80	2.50	3.00	4.25	3.30	4.00	4.50	3.50	2.50	8.20
	Dry Season Water Width (m)	12.00	0.00	0.00	0.00	0.00	0.00	15.00	0.00	0.00	50.00
	Dry Season Water Depth (m)	0.50	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	5.50
	Dry Season Water Depth at Pier (m)	0.40	0.00	0.30	1.10	0.70	0.00	0.90	0.00	0.00	7.40
	Tidal Fluctuation (m)	No	No	No	No	No	No	No	No	No	No
	Water Velocity	Medium	Medium	Medium	Medium	Slow	Medium	Medium	Medium	Medium	Medium
	Angle of Bridge to Stream (deg)	80	90	70	80	90	90	75	80	80	90
	Ferry Services	No	No	No	No	No	No	No	No	No	Yes
	Required Navigation Clearance Height (m)	2.00	1.50	2.00	1.50	2.00	2.00	2.00	2.00	1.50	2.00
	Type of River Traffic	Engine Boat	Country Boat	Country Boat	Country Boat	Big Engine Boat	Big Engine Boat	Big Engine Boat	Country Boat	Country Boat	Country Boat
Condition of Bank	Sound	Sound	Sound	Sound	Eroded	Sound	Sound	Sound	Sound	Eroded	
Condition of Riverbed	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	
Approach Road	Total Road Width (m)	4.90	3.66	7.32	3.66	4.87	4.90	4.90	4.90	3.66	4.88
	Carriageway Width (m)	3.66	2.88	3.66	2.88	3.66	3.66	3.66	3.66	2.88	3.05
	Embankment Height (m)	2.00	1.20	1.50	1.30	1.70	1.30	2.00	1.40	1.00	1.30
	Surface Type	BC/Earthen	Earthen	Earthen	Earthen	Earthen	Earthen	BC/Earthen	Earthen	Earthen	BC/WBM/Earthen
	Surface Condition	Good	Good	Bad	Good	Fair	Good	Bad	Good	Good	Good
Alternative Route (km)	No	No	No	No	No	No	No	No	No	No	

Bridge Site Survey Data - 2
Zila : Sirajganj (2/2)

Name of Upazila		Ullapara									Kazipur	
Serial Number		11	12	13	14	15	16	17	18	19	20	
Influence Area	Population (thousand)	15	30	30	10	20	15	20	35	25	100	
	Main Industry	Agriculture, Husking Mill-8 nos, Saw Mill-5 nos	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture, Husking Mill-20 nos	Agriculture	Agriculture, Husking Mill-6 nos	Agriculture
	Major Agricultural Product	Rice, Wheat, S.Cane, Veg., Jute	Rice, Wheat, S.Cane, Veg.	Rice, Wheat, Jute, Veg., S.Cane, Mustard	Rice, Wheat, Jute, Veg.	Rice, Wheat, Jute, Veg., S.Cane	Rice, Wheat, Jute, Veg.	Rice, Wheat, Jute, Veg.	Rice, Wheat, Jute, S.Cane	Rice, Wheat, Jute, Veg.	Rice, Wheat, Jute, Veg., S.Cane, Bhutta, Mustard	
	Number of Public Facilities	School	11	15	20	9	10	10	16	10	10	20
		Clinic	1	2	7	1	2	0	8	2	2	6
		Bazar	3	5	7	3	4	5	5	0	1	8
		Mosque	6	20	20	10	30	10	15	3	20	25
		Gov't Office	2	0	20	2	0	5	2	2	3	5
Others		6	3	6	0	0	6	7	0	0	7	
Total	29	45	80	25	46	36	53	17	36	71		
Traffic Volume	Passenger Car	10	8	20	5	15	40	6	10	30	15	
	Pickup/Truck	30	10	30	5	20	50	20	20	25	12	
	Bus	20	0	10	0	1	30	4	5	4	10	
	Motorcycle	300	150	180	30	125	200	30	130	60	150	
	Rickshaw	250	225	200	150	200	180	200	200	200	550	
	Autorickshaw	20	5	10	10	10	10	5	5	10	10	
	Bullock Cart	0	3	4	0	0	4	0	4	0	0	
	Pedestrian	5000	2500	7000	1200	2500	2500	2000	3000	3000	3500	
Bridge Site Condition	Landuse	Farm, Market	Farm	Farm	Farm	Farm	Farm	Farm	Farm	Farm, Market	Farm, Market	
	Topography	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	
Environmental Issue	Necessity of Realignment of Approach Road	Yes	Yes	No	No	No	No	No	No	No	No	
	Necessary Land to be Additionally Acquired	No	No	No	No	No	No	No	No	No	No	
	Number of Houses to be Relocated	No	No	No	No	No	No	No	No	No	No	
Proposed Bridge	Bridge Length (m)	60	75	65	65	60	25	65	40	50	125	
	Span Arrangement	3x20m	3x25m	20m+25m+20m	20m+25m+20m	3x20m	1x25m	20m+25m+20m	15m+25m	15m+20m+15m	5x25m	
	Abutment Height (m)	4.50	4.25	3.90	4.50	4.00	3.50	5.60	3.75	5.00	5.50	
	Pier Height (m)	9.00	7.00	7.50	8.50	9.50	-	9.50	6.00	7.50	12.80	
Engineering Evaluation	Road Class	13	13	13	13	13	13	13	13	13	13	
	Existing Bridge	40	40	40	40	40	40	40	40	40	40	
	Approach Road	30	0	0	0	0	0	20	0	0	30	
	Alternative Route	10	10	10	10	10	10	10	10	10	10	
	Total Engineering Score	93	63	63	63	63	63	83	63	63	93	
Socioeconomic Evaluation	Beneficiaries	14	27	27	9	18	15	18	27	23	21	
	Traffic Demand	18	18	18	9	18	20	13	18	17	14	
	Pedestrian Demand	18	18	18	11	18	20	18	18	18	14	
	Public Facilities	26	27	27	23	27	30	27	15	27	21	
	Bridge Length Factor	f=0.9	f=0.9	f=0.9	f=0.9	f=0.9	f=1.0	f=0.9	f=0.9	f=0.9	f=0.7	
Total Socioeconomic Score	76	90	90	52	81	85	76	78	85	70		
Overall Evaluation	A	A	A	B	A	A	A	A	A	A	X2	
Implementation Schedule	Phase-1	Phase-2	Phase-2	Excluded (Priority B)	Phase-3	Phase-2	Phase-1	Phase-3	Phase-3	Phase-3	Excluded (Water Depth at Pier>1.2m)	
Remarks	Bridge closed market/ T-intersection at the 1st approach about 25m in distance.		Angle of existing bridge is too small (about 60 deg.) , so it should be made 70-75 deg. Due to adopted shorter bridge length.			- Under construction of the 1st approach road. - Bridge closed w/ Koratoa River which is 300m in width.	Bridge closed T-intersection/ existing RC bridge at the 1st approach about 20m in distance.		Bridge closed T-intersection/ market at the 2nd approach about 20m in distance which is along National Highway (under RHD).	Bridge closed market at the 2nd approach about 30m in distance.		

Bridge Site Survey Data - 1
Zila : Pabna

Name of Upazila		Sadar	Chatmohar	Faridpur		Sathia
Serial Number		1	2	3	4	5
Bridge Code		56-01-02	56-02-01	56-03-01	56-03-05	56-06-01
Bridge Name/Location		Bridge on Bajitpur to Chandpur via Chorghospur Road over the Betra River.	Bridge on Chatmohar to Haripur Road via Dhulauri over Mora Boral River near Haripur	Bridge on B-Nagar to Damra Hat Road over Ruknai River at Mridha Para Ferry Ghat.	Bridge on Faridpur to Allahabad Road over the Boral River at Shishutola Ghat.	Bridge on Chalkmodhupur to Khidirgram Road over Chalkmodhupur BWDB Khal near Chalkmodupur
Status		Additional Request	Additional Request	Original Request	Additional Request	Additional Request
Road ID		176552028	176223017	176332001	176332005	176723078
Road Class		Upazila	Union	Upazila	Upazila	Union
Chainage (km)		3+000	6+895	1+350	2+500	3+150
Condition of Existing Bridge	Existing or not	Not Existing	Existing	Existing	Existing	Not Existing
	Bridge Length (m)		33.00	83.00	37.00	
	Bridge Width (m)		2.10	2.10	0.20	
	Carriageway Width (m)		1.60	1.80	0.20	
	Superstructure Type		Bamboo	Bamboo	Bamboo	
	Abutment Type		Bamboo	Bamboo	Bamboo	
	Pier Type		Bamboo	Bamboo	Bamboo	
	Usage of Bridge		Pedestrians, R.Van	Pedestrians Only	Pedestrians Only	
	Condition		Weak	Damaged	Weak	
	Present Navigation Clearance Height (m)		1.70	1.70	1.00	
River Condition	Bank to Bank Width (m)	150.00	77	83.00	86.00	89.00
	Highest Flood Water Width (m)	110.00	82.00	80.00	100.00	80.00
	Highest Flood Water Depth (m)	5.30	3.18	10.40	13.90	6.20
	Normal Flood Water Width (m)	62.00	70.00	70.00	80.00	58.00
	Normal Flood Water depth (m)	2.10	2.10	8.40	11.70	3.80
	Dry Season Water Width (m)	25.00	18.00	40.00	37.00	42.00
	Dry Season Water Depth (m)	0.30	0.30	1.20	1.20	0.80
	Dry Season Water Depth at Pier (m)	0.00	0.60	1.20	0.90	0.00
	Tidal Fluctuation (m)	No	No	No	No	No
	Water Velocity	Medium	Slow	Slow	Fast	Medium
	Angle of Bridge to Stream (deg)	90	90	90	90	90
	Ferry Services	No	No	No	No	No
	Required Navigation Clearance Height (m)	2.00	1.50	1.00	1.00	1.50
	Type of River Traffic	Engine Boat, Country Boat	Engine Boat, Country Boat	Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat
	Condition of Bank	Sound	Sound	Sound	Sound	Sound
Condition of Riverbed	Sound	Sound	Sound	Sound	Sound	
Approach Road	Total Road Width (m)	4.00	4.80	5.30	4.20	3.50
	Carriageway Width (m)	4.00	3.66	3.66	4.20	3.50
	Embankment Height (m)	3.90	0.90	2.15	1.30	3.80
	Surface Type	BC/Earthen	BC	BC/HBB/Earthen	Earthen	Earthen
	Surface Condition	Good	Good	Good	Good	Good
	Alternative Route (km)	No	6.00	No	No	No

Bridge Site Survey Data - 2
Zila : Pabna

Name of Upazila		Sadar	Chatmohar	Faridpur		Sathia	
Serial Number		1	2	3	4	5	
Influence Area	Population (thousand)	40	50	40	45	30	
	Main Industry	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	
	Major Agricultural Product	Rice, Veg., S.Cane	Rice, Wheat, Veg., S.Cane	Rice, Wheat, M.Sheed, S.Cane, Onion	Rice, Pulse, M.Sheed, Onion, Mustard	Rice, S.Cane, Veg., Onion	
	Number of Public Facilities	School	12	8	15	25	20
		Clinic	12	1	8	7	2
		Bazar	7	4	3	4	3
		Mosque	25	80	20	20	30
		Govt Office	2	3	15	8	2
Others		3	3	6	2	4	
Total	61	99	67	66	61		
Traffic Volume	Passenger Car	15	10	25	9	15	
	Pickup/Truck	60	25	20	20	20	
	Bus	15	2	10	2	0	
	Motorcycle	70	80	55	45	70	
	Rickshaw	200	250	250	175	300	
	Autorickshaw	25	40	50	40	100	
	Bullock Cart	50	15	0	8	10	
	Pedestrian	5000	2000	4000	6000	6000	
Bridge Site Condition	Landuse	Farm	Residence	Farm	Farm	Farm	
	Topography	Flat	Flat	Flat	Flat	Flat	
	Necessity of Realignment of Approach Road	No	No	No	No	Yes	
Environmental Issue	Necessary Land to be Additionally Acquired (sq.m)	No	No	No	No	3000	
	Number of Houses to be Relocated	No	No	No	No	10	
	Other Obstruction to be Relocated	No	4 Wooden Box Shop, 8 Trees, 1 Electric	No	No	150 Trees	
Proposed Bridge	Bridge Length (m)	100	65	75	90	75	
	Span Arrangement	4x25m	20m+25m+20m	3x25m	20m+2x25m+20m	3x25m	
	Abutment Height (m)	4.50	3.50	4.70	6.50	3.40	
	Pier Height (m)	7.60	4.50	10.00	15.00	8.40	
Engineering Evaluation	Road Class	20	13	20	20	13	
	Existing Bridge	40	40	40	40	40	
	Approach Road	30	30	30	0	0	
	Alternative Route	10	5	10	10	10	
	Total Engineering Score	100	88	100	70	63	
Socioeconomic Evaluation	Beneficiaries	21	27	27	21	27	
	Traffic Demand	14	18	18	12	18	
	Pedestrian Demand	14	18	18	14	18	
	Public Facilities	21	27	27	21	27	
	Bridge Length Factor	f=0.7	f=0.9	f=0.9	f=0.7	f=0.9	
	Total Socioeconomic Score	70	90	90	68	90	
Overall Evaluation	A	A	A	A	A		
Implementation Schedule	Phase-2	Phase-1	Phase-1	Phase-3	Phase-3		
Remarks		It is a dead river and there is no flow.		This bridge located only 1m U/S of bridge 56-03-04.	Land acquisition will be required to connect the bridge to the approach road at the north side.		

Bridge Site Survey Data - 1
Zila : Bogra

Name of Upazila	Shajahanpur		Sadar	Sherpur			Gabtali		Sonatola		Dhunot		Dhupchachia	
Serial Number	1	2	3	4	5	6	7	8	9	10	11	12	13	
Bridge Code	57-01-02	57-01-04	57-01-06	57-02-N3	57-02-N4	57-02-N5	57-03-N2	57-03-N3	57-05-01	57-05-04	57-07-N4	57-07-N6	57-09-02	
Bridge Name/Location	Bridge on Dublagari Hat - Rongila Ghat Road at Rongila Ghat over Mohishaban	Bridge on Beerbari Hat to Ardia Bazar Road over Burivita Khal.	Bridge on Azizul Haq College - Sothibari Hat Road over Karotoa River.	Bridge on Ulipur - Zhanjor Road at Sholagari.	Bridge on Ulipur - Zhanjor Road.	Bridge on Garidaho Highway - Korotoa Bannighat Road over Korotoa River.	Bridge on Nepaltoil UP Office - Sukanpukur Road over Shukdoha River at Fazlurdoho.	Bridge on Toronihat - Kalaihatta Road over Vomradaha Khal.	Bridge on Koromja - Shukhanpukur Road over Bagdah Khal.	Bridge on Dulurchar Road over Sukda Khal.	Bridge on Math Para FRA - Jhanjor Ghat Road over Dublagari Khal.	Bridge on Bishwahari Gacha FRB - Dighalkandi Hat Road over Foringhata	Bridge on Panchpir - Talora - Aitafnagar Road over Nagor River.	
Status	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	Original Request	
Road ID	110962014	110963017	110204106	1.11E+08	1.11E+08	110883046	110404036	110404093	110952002	1.1E+08	110273024	110273055	110332011	
Road Class	Upazila	Union	Village-A	Upazila	Upazila	Union	Village-A	Village-A	Upazila	Village-A	Union	Union	Upazila	
Chainage (km)	7+250	10+250	0+350	5+750	6+150	0+420	2+950	3+750	0+500	0+000	0+500	0+880	5+000	
Condition of Existing Bridge	Existing or not	Existing	Existing	Not Existing	Not Existing	Not Existing	Existing	Existing	Existing	Existing	Not Existing	Existing	Existing	Not Existing
	Bridge Length (m)	27.00	23.00				19.00	34.00	42.00	70.00		16.00	32.00	
	Bridge Width (m)	0.20	1.50				0.20	0.20	1.40	2.00		1.50	1.20	
	Carriageway Width (m)	0.20	1.50				0.20	0.20	1.30	1.80		1.20	1.00	
	Superstructure Type	Bamboo	Bamboo				Bamboo	Bamboo	Bamboo	Bamboo		Bamboo	Bamboo	
	Abutment Type	-	-				-	-	Bamboo	-		-	-	
	Pier Type	-	-				-	-	-	-		-	-	
	Usage of Bridge	Pedestrians Only	Pedestrians, Motorcycles				Pedestrians Only	Pedestrians Only	Pedestrians, Motorcycles	Pedestrians, Motorcycles, Rickshaws		Pedestrians, Motorcycles	Pedestrians, Motorcycles	
	Condition	Weak	Weak				Weak	Weak	Weak	Weak		Weak	Weak	
	Present Navigation Clearance Height (m)	-	-				-	-	0.70	-		-	-	
River Condition	Bank to Bank Width (m)	75.00	92.00	70.00	54.00	42.00	78.00	63.00	70.00	75.00	60.00	55.00	75.00	68.00
	Highest Flood Water Width (m)	65.00	70.00	80.00	50.00	42.00	110.00	65.00	95.00	80.00	75.00	60.00	76.00	75.00
	Highest Flood Water Depth (m)	7.00	7.20	6.00	4.50	5.50	6.00	6.50	5.50	7.50	6.00	5.50	5.30	5.50
	Normal Flood Water Width (m)	45.00	50.00	35.00	10.00	30.00	50.00	50.00	70.00	40.00	40.00	46.00	50.00	10.00
	Normal Flood Water depth (m)	3.25	3.30	2.75	2.50	2.50	3.00	3.75	2.50	5.00	4.50	3.60	3.00	2.50
	Dry Season Water Width (m)	23.00	14.00	18.00	5.00	30.00	30.00	47.00	41.00	42.00	0.00	16.00	20.00	0.00
	Dry Season Water Depth (m)	1.00	1.00	1.00	0.40	1.00	1.00	2.30	1.00	1.30	0.00	0.90	0.50	0.00
	Dry Season Water Depth at Pier (m)	0.90	0.80	0.70	0.70	3.00	0.30	2.80	0.60	1.80	0.30	0.60	1.20	0.50
	Tidal Fluctuation (m)	No	No	No	No	No	No	No	No	No	No	No	No	No
	Water Velocity	Fast	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Slow	Slow	Slow	Medium
	Angle of Bridge to Stream (deg)	90	90	90	90	90	90	90	90	90	90	90	90	90
	Ferry Services	No	No	No	No	No	No	No	No	No	No	No	No	No
	Required Navigation Clearance Height (m)	1.25	1.00	1.50	1.00	1.00	2.50	1.00	2.00	1.00	1.00	2.00	2.00	2.00
	Type of River Traffic	Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat	Engine Boat, Country Boat
	Condition of Bank	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound
Condition of Riverbed	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	
Approach Road	Total Road Width (m)	4.60	3.50	4.60	6.10	6.10	4.30	4.66	4.90	4.60	4.00	4.50	3.50	3.50
	Carriageway Width (m)	2.66	2.66	3.60	3.66	3.66	3.05	3.00	3.00	4.00	3.66	2.70	2.66	3.00
	Embankment Height (m)	1.75	1.75	1.50	2.27	2.25	1.00	1.25	1.00	1.75	3.00	2.50	2.00	2.00
	Surface Type	BC/HBB/Earthen	BC/HBB/Earthen	BC/Earthen	Earthen	Earthen	BC/Earthen	Earthen	Earthen	Earthen	Earthen	Earthen	Earthen	Earthen
	Surface Condition	Good	Good	Good	Good	Good	Good	Bad	Good	Good	Good	Good	Good	Fair
	Alternative Route (km)	No	No	2.00	No	No	No	No	No	No	No	No	No	No

Bridge Site Survey Data - 2

Zila : Bogra

Name of Upazila		Shajahanpur		Sadar	Sherpur			Gabtali		Sonatola		Dhunot		Dhupchachia	
Serial Number		1	2	3	4	5	6	7	8	9	10	11	12	13	
Influence Area	Population (thousand)	35	70	50	80	80	50	25	50	60	35	50	40	40	
	Main Industry	Agriculture	Agriculture	Agriculture, Fishery, Manufacturing	Agriculture	Agriculture	Agriculture, Fishery, Husking Mill-8 nos	Agriculture, Husking Mill-4 nos	Agriculture, Husking Mill-20 nos	Agriculture, Husking Mill	Agriculture	Agriculture, Husking Mill-3 nos	Agriculture, Husking Mill-6 nos	Agriculture, Husking Mill-50 nos, Silver Factory-6 nos	
	Major Agricultural Product	Rice, Wheat, Jute, Veg., Banana, Green Chilli	Rice, Wheat, Jute, Veg., Bhutta	Rice, Wheat, Jute, Veg., Banana	Rice, Wheat, Jute, Veg., Bhutta	Rice, Wheat, Jute, Veg., Bhutta	Rice, Wheat, Jute, Veg., Bhutta	Rice, Wheat, Jute, Veg., Potato	Rice, Wheat, Jute, Veg., Green Chilli, Banana	Rice, Wheat, Jute, Bhutta, Veg.	Rice, Veg., Wheat, Maize	Rice, Wheat, Jute, Veg., Bhutta	Rice, Wheat, Jute, Veg., Bhutta, S.Cane	Rice, Wheat, Jute, Veg.	
	Number of Public Facilities	School	15	12	15	16	16	25	10	8	20	28	8	10	20
		Clinic	2	3	4	5	5	3	4	2	10	7	1	2	5
		Bazar	10	10	4	15	15	3	4	4	10	4	5	6	7
		Mosque	25	25	35	35	35	20	20	20	35	50	15	20	20
		Gov't Office	3	1	6	15	15	4	4	2	7	8	3	5	8
Others		4	5	5	5	5	5	5	4	5	4	5	5	5	
Total		59	56	69	91	91	60	47	40	87	101	37	48	65	
Traffic Volume	Passenger Car	4	5	15	30	30	10	10	4	20	15	5	8	20	
	Pickup/Truck	20	15	35	120	120	30	20	15	40	30	30	25	70	
	Bus	2	6	0	18	18	0	2	0	5	6	4	4	6	
	Motorcycle	100	100	210	200	200	180	150	150	150	120	150	70	250	
	Rickshaw	150	250	250	300	300	200	210	200	250	220	200	150	500	
	Autorickshaw	20	70	120	250	250	30	30	50	50	50	40	30	175	
	Bullock Cart	3	0	0	12	12	3	0	0	10	0	0	0	0	
	Pedestrian	5000	7000	7000	7500	7500	6000	3500	4000	7000	5000	5000	4000	5000	
Bridge Site Condition	Landuse	Farm	Farm	Farm	Farm	Farm	Farm	Farm	Farm	Farm	Farm	Farm	Farm	Farm	
	Topography	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	
	Necessity of Realignment of	No	No	No	No	No	No	No	No	No	No	No	No	No	
Environmental Issue	Necessary Land to be Additionally Acquired	260	250	No	No	No	No	No	No	No	No	120	No	4000	
	Number of Houses to be Relocated	No	No	No	No	No	No	No	No	No	No	3	No	No	
	Other Obstruction to be Relocated	No	No	No	No	No	No	No	No	No	No	No	No	No	
Proposed Bridge	Bridge Length (m)	65	60	60	50	40	105	60	75	75	50	50	80	65	
	Span Arrangement	20m+25m+20m	3x20m	3x20m	15m+20m+15m	15m+25m	2x20m+25m+2x20m	3x20m	3x25m	3x25m	15m+20m+15m	15m+20m+15m	15m+2x25m+15m	20m+25m+20m	
	Abutment Height (m)	3.80	3.75	3.90	4.50	4.50	4.50	4.50	4.00	5.50	4.50	5.00	4.00	4.00	
	Pier Height (m)	8.50	8.45	7.50	6.50	7.00	7.00	7.50	7.00	10.00	8.50	8.50	8.50	7.00	
Engineering Evaluation	Road Class	20	13	7	20	20	13	7	7	20	7	13	13	20	
	Existing Bridge	40	40	40	40	40	40	40	40	40	40	40	40	40	
	Approach Road	30	30	30	0	0	30	0	0	0	0	0	0	0	
	Alternative Route	10	10	0	10	10	10	10	10	10	10	10	10	10	
	Total Engineering Score	100	93	77	70	70	93	57	57	70	57	63	63	70	
Socioeconomic Evaluation	Beneficiaries	27	27	27	27	27	21	23	27	27	27	27	21	27	
	Traffic Demand	15	18	18	18	18	14	18	18	18	18	18	11	18	
	Pedestrian Demand	18	18	18	18	18	14	18	18	18	18	18	14	18	
	Public Facilities	27	27	27	27	27	21	27	27	27	27	27	21	27	
	Bridge Length Factor	f=0.9	f=0.9	f=0.9	f=0.9	f=0.9	f=0.7	f=0.9	f=0.9	f=0.9	f=0.9	f=0.9	f=0.7	f=0.9	
	Total Socioeconomic Score	87	90	90	90	90	70	86	90	90	90	90	67	90	
Overall Evaluation	A	A	A	A	X2	A	X2	B	X2	B	A	A	A		
Implementation Schedule	Phase-1	Phase-1	Phase-1	Phase-2	Excluded (Water Depth at Pier>1.2m)	Phase-2	Excluded (Water Depth at Pier>1.2m)	Excluded (Priority B)	Excluded (Water Depth at Pier>1.2m)	Excluded (Priority B)	Phase-3	Phase-3	Phase-2		
Remarks			Construction of access road is in progress.				Road rehabilitation on (80m + 130m = 210m) is required.								

APPENDIX 7

REFERENCES

APPENDIX – 7 References

No.	Title	Style	Original • Copy	Issued by	Year
1	Upazila Map (16-Upazila in Noakhali, Feni and Laxmipur)	Map	Copy	LGED	2004
2	District Map	Map	Copy	LGED	2004
3	JAHAN ATLAS	Map	Original	Jahan Printing & Color Process Ltd.	2004
4	JBIC Project Site Location Map (8-District)	Report	Copy	LGED	2004
5	River Water Level Data at the Observatories	Electronic Data or Computer Data	Copy	BWDB	2004
6	Report for Flood Damaged Roads, Culverts and Ferries (Flood 2004)	Report	Copy	RHD	2004
7	2002 Statistical Yearbook of Bangladesh 23 RD EDITION	Report	Original	Bangladesh Bureau of Statistics, MOP	2004
8	Population Census 2001, National Report (Provisional)	Report	Original	Bangladesh Bureau of Statistics, MOP	2004
9	Annual Development Programme 2004-2005	Report	Original	Planning Commission of Bangladesh	2004
10	Function of Local Government Engineering Department	Report	Original	LGED	2002
11	Bridge Structural Standard Drawings	Drawing	Copy	LGED	2001-2005
12					
13					
14					
15					
16					
17					