



GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
MINISTRY OF LOCAL GOVERNMENT, RURAL DEVELOPMENT AND CO-OPERATIVES
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Final Report on Study-03
‘My Village -My Town’ Technical Assistance Project
“Feasibility Study for Rural Connectivity including Multi-Modal Transport
System in Char and Haor Areas”
Lakhai Upazila, Habiganj



March, 2023

Lakhai Upazila, Habiganj

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GLOSSARY

Hard-to-reach Villages mean in the Study those villages that are not connected by any paved road with the respective Upazila HQ and/or Union Parishad, and to the nearest economic activity hub and social service centres. The following explanations are important for the concept of hard-to-reach villages.

- In haor areas, Villages connected with submersible roads dry season and connected with Riverine/haor routes in the monsoon season have been considered accessible and excluded from hard-to-reach villages.
- Within Upazila, Villages that need a bridge to connect have not been considered hard-to-reach villages.
- In the case of island Upazilas, villages that are accessible with paved roads from Upazila HQ have been considered accessible and excluded from hard-to-reach villages.
- In the case of villages that are connected with HBB (Herring-Bone-Bond) or Brick flat soling routes have been considered hard-to-reach villages

Mauza Mauza is normally the geographical expression of a unit of landmass for revenue settlement and revenue collection, whereas, the village is a human settlement within a Mauza with a strong social bond. Within a Mauza there could be more than one village.

Union Bangladesh has 3-tiers local government systems: District, Upazila, and Union. Union is the lowest level of local government below Upazila Parishad

Upazila Sub-district; the third level of government administration below division and district.

Hat Synonym of Bazar or market

Walking Trail means in the Study the village pathway or access used for walking by commuters, in most cases does not have gazetted or established or commonly used alignment, and to the most, passable by bicycle or motorbike. These village trails are not passable by motorized jeeps or mini trucks or emergency service vehicles or not even any three-wheelers.

Unpaved Roads have no pavement or surface material. They are usually earthen roads.

Vulnerability is the human dimension of risk that is defined as conditions determined by physical, social, economic, environmental, political, cultural, and institutional factors or processes that increase the likelihood of an individual or a community to the impacts of shocks and hazards.

Climate-Resilience is expressed as the ability of a community to resist, absorb, adapt to and recover better from the impacts of disasters like floods and landslides in a sustainable way.

ABBREVIATIONS

ADB	– Asian Development Bank
BBS	– Bangladesh Bureau of Statistics
BC	– Bitumen Carpeting
DatEx	– Data Expert (Pvt.) Limited
DECL	– Delight Engineers and Construction Ltd.
DoE	– Department of Environment
DPHE	– Department of Public Health Engineering
DPP	– Development Project Proposal
FGD	– Focus Group Discussion
GIS	– Geographic Information System
GOB	– Government of Bangladesh
HBB	– Herring-Bone-Bond
HQ	– Headquarter
HTRV	– Hard-to-Reach Village
JV	– Joint Venture
KII	– Key Informant Interview
LGD	– Local Government Division
LGED	– Local Government Engineering Department
LGI	– Local Government Institute
MVMT	– My Village My Town
NGO	– Non-Government Organization
PD	– Project Director
PMO	– Project Management Office
RCC	– Reinforced Concrete
RHD	– Roads & Highways Department
SDGs	– Sustainable Development Goals
TA	– Technical Assistance Project
UE	– Upazila Engineer
UNDP	– United Nations Development Programme
UNO	– Upazila Nirbahi Officer
UNR	– Union Road
UP	– Union Parishad
UPZ	– Upazila Road
VRA	– Village Road A
VRB	– Village Road B

BACKGROUND

Context of the Project

The Government of Bangladesh made massive plans to ensure equitable development around the country. Under this development philosophy, the GoB requirements are to reduce the rural-urban divide to foster developmental benefits for all citizens. As part of this, the government declared an election manifesto on the eve of the national parliament election 2018 uniting the theme **Bangladesh on the March Towards Prosperity** aiming at transforming Bangladesh into a developed nation by 2041. Under this, villages have been considered the basic unit of prosperity for building a developed nation.

This firm commitment was declared following the light of the philosophy of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman to build ‘Sonar Bangla’ (Golden Bangla) through inclusiveness, balanced, and development for all.

Following the philosophy of the Father of the Nation, the government declared its election manifesto 2018 titled ‘My Village-My Town’- Extension of Modern Civic Amenities in Every village. The Local Government Division under the Ministry of Local Government, Rural Development and Cooperatives has prepared a comprehensive work plan to make this election commitment a reality. The Local Government Division with its two agencies, the Local Government Engineering Department (LGED) and Department of Public Health Engineering (DPHE) has undertaken a technical assistance project named ‘My Village-My Town’- Technical Assistance Project. Under this project, 36 studies and 30 guidelines are being developed on eight thematic components related to the mandate of the Local Government Division. The eight thematic components are Rural Communications, Growth Centre and Hat Bazar, Rural Water Supply and Sanitation, Rural Waste Management, Community Space and Recreation Facilities, Upazila Masterplan, Rural Housing and Capacity building of Upazila and Union Parishad. Besides this, a coordination framework is being developed among the other ministries involved in the implementation of the My Village-My Town election manifesto. It is notable to mention that a coordination committee has been formed comprising 21 ministries to implement the program in a coordinated way under the leadership of the Minister of Local Government, Rural Development, and Co-operatives.

Context of the Report

This report is a part of the study of the component ‘Rural Connectivity’. Rural connectivity is the basic of all amenities in the villages. Rural connectivity works as the conduit that can supply a number of bare necessities such as access to the market, health, education, employment etc. In general, Bangladesh has remarkable progress in rural connectivity. Instead of this, a number of regions of the country are geographically sensitive where rural connectivity is not easy and has a lot of challenges. These regions are -Haor, Beel, Hills, Chars, islands etc. The people residing in these regions have considerably low access to civic amenities compared to other villages of the country. Therefore, the study and plan development of improvement of rural connectivity is one of the important assignments of the technical assistance project. The project undertook an Upazila-based special study on the villages of these geographically sensitive regions that are mentioned before.

This report contains the rural connectivity status and priority plan of the **Lakhai** Upazila of **Habiganj** District.

1 DESCRIPTION OF THE UPAZILA

1.1 GEOGRAPHY AND DEMOGRAPHY

The geographical area of Lakhai Upazila is 196.54 square kilometers and has 6 unions, 70 mauzas, and 65 villages. The Upazila is 17km away from the district headquarters of Habiganj. Lakhai is partly covered by 3 haors/ wetlands and there exist 7(seven) rivers flowing over the Upazila. The total population of Upazila is 148811 of which 70714 are male and 78095 females, the total number of households are 27759 and the average household size is 5.36 with a population density of 757 (as per population census 2011).

1.2 EDUCATION FEATURES

According to the information of the relevant local government offices, there are 51 government & 19 non-government primary schools in the Upazila. On the other hand, Lakhai has 09 non-government with no government high schools, 1 private college, and 2 madrasahs. The literacy rate for the Upazila is 33.7% as per BBS 2011.

1.3 RURAL ROAD COMMUNICATIONS

Bangladesh scored in the rural accessibility index at around 87 percent among South Asian and some other African countries. Generally, the people of Bangladesh get all-weather within 2 kilometers adjacent to their living places. But the feature of rural road communications in Lakhai Upazila is contrasted. There are many villages, disconnected from the developed paved road network that brings huge suffering for the people of the villages. The total rural road network of Lakhai is 249.98 km and out of which, 85.80 km are paved and 164.17 km earthen.

1.4 AGRICULTURE, FOOD PRODUCTION, AND FISHERIES

Though the aggregate (coarse sand, stone chips & stone) business is the main source of income for the inhabitants, agriculture too has major importance for the economy of the people of Lakhai. There are 35066 acres of arable land in Upazila. In the fiscal year 2010-11, the Rice production was 407, 11316 & 43599 metric tons for Aus, Aman & Boro seasons respectively. The Upazila also produced 43 metric tons of Wheat, 505 metric tons of Potato, and 10 metric tons of Oil seed in the same fiscal year 2010-11. A notable quantity of vegetables is also produced here in this Upazila.

According to the BBS (2011) data, Lakhai has 359 Acre of haor, pond & dighee that produced 1015 metric tons of fish. There also exist 48 poultry & 38 dairy farms.

All the agricultural products are adequate to meet the demand of the Upazila and surpluses are sold outside of Lakhai.

1.5 GROWTH CENTRE AND HATBAZAR

Growth Centre and Rural Hatbazar are one of the main centers of the rural economy. Hatbazar is like the heart of the development of the rural economy. Rural Hatbazar plays a role in increasing production and creating employment impacting the supply chain of agriculture and non-agriculture products. There are 14 Hatbazar and 3 growth centers in Upazila. The structural development of Hatbazar and its growth is pivotal to boosting the rural economy. Details of the growth center & hatbazar of the Upazila have been attached in [Annexure-1](#).

2 LOCATION OF THE UPAZILA

Lakhai Upazila of Habiganj district in the North-Eastern part of the country. The location has been shown on the map. The Upazila is situated at the foothill of the Indian border and causes flash floods during monsoon coming from uphill Meghalaya where is Cherrapunji, the wettest place on earth, resulting in waterlogging within the haor basin. Flash floods induce severe impacts on both the built and the natural environment. The effects of flash floods can be catastrophic and show extensive diversity, ranging from damages to buildings and infrastructure to impacts on vegetation, human lives, and livestock.

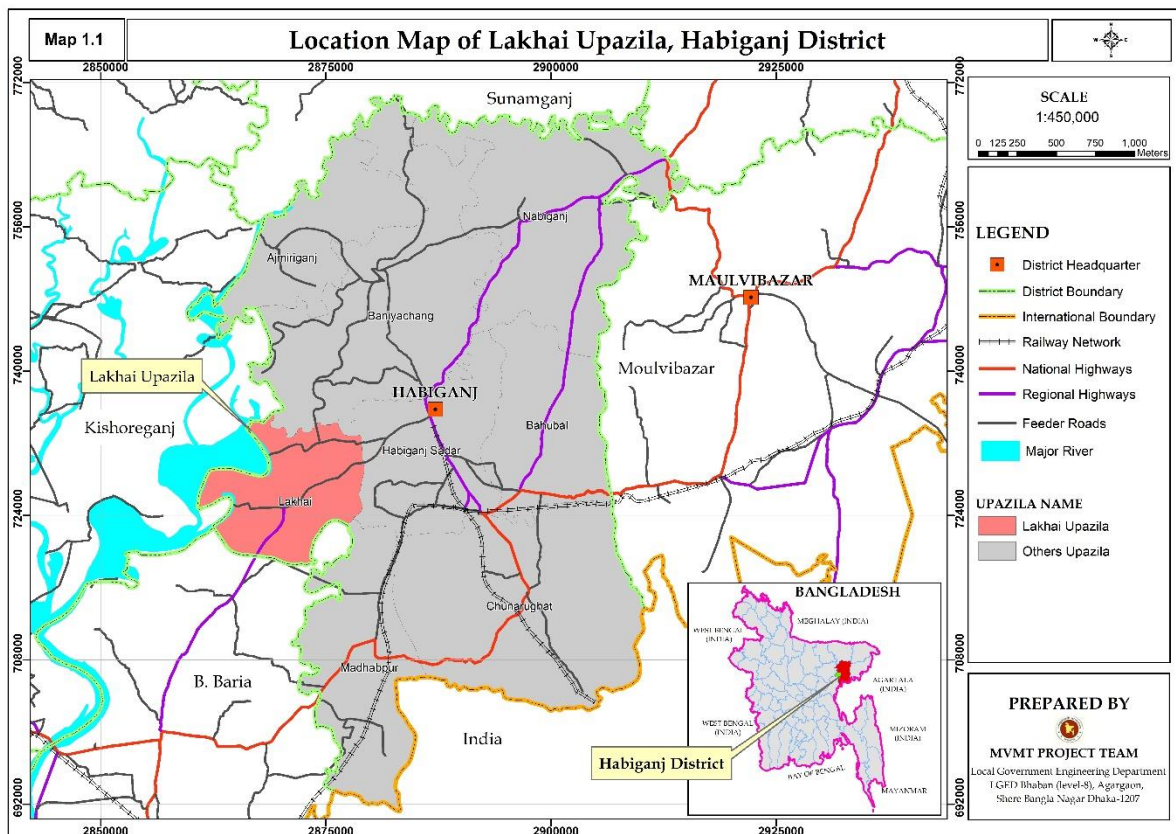


Figure 1: Upazila Location Map

3 APPROACH & METHODOLOGY

2.1 STUDY TEAM COMPOSITION

A team consisting of Senior Rural Road Infrastructure Specialist, Associate Rural Infrastructure Specialist, and Assistant Engineer engaged by the Project Management Office (PMO) conducted the study. On the other hand, A team consisting of Deputy Team Leader cum Rural Infrastructure Engineer, Junior GIS expert, and Junior Engineer engaged by consulting firm (datEx & DECL JV) conducted the study. A participatory approach to review the database and identify priority transport infrastructure needs (‘sub-projects) was instrumental. At the stakeholder consultation meeting held in each district, the database was reviewed, and priority needs were identified and mapped working together with the LGI representatives and LGED technical team. LGED and LGI representatives surveyed each Upazila for the collection of detailed observations and validations of the proposed priority needs.

Stakeholder Consultation Meeting

- Hard-to-reach Village Database and database of sub-projects reviewed
- Prioritization of sub-projects for each Upazila with LGI and LGED representatives
- Hard-to-reach villages and priority sub-projects mapped in the LGED GIS Map

2.2 STUDY AREA

The study was conducted in 72 Upazilas of haor areas, 3 Upazilas of Beel areas, 8 Upazilas of Char areas, and 4 Upazilas of Island areas during the period from December 2021 to June 2022. Apart from this, the PMO team conducted the study in 50 Upazilas of Haor areas, and the rest of the Upazilas of Haor, Beel, Char, and Island areas are conducted by the consulting firm team. The Upazila technical staff of LGED supported in organizing stakeholder consultation meetings and in database review and mapping the Hard-to-reach villages and population during this study period. They also supported the field work and authentication check by visits to the sub-projects in their respective Upazila and looking at the feasibility of some proposed sub-projects from technical, social, and environmental perspectives.

2.3 DATABASE REVIEW AND ANALYSIS

The study applied both qualitative (e.g., focused group discussions and in-depth case study fieldwork) and quantitative (structured and semi-structured interviews) approaches and methods in reviewing and conducting fieldwork in all the haor areas to understand the need and impact of rural accessibility in remote village contexts. The most applied methods in the reviewing and conducting fieldwork were:

- Key Informants Interview (KII)
- Focus Group Discussion (FGD)
- Case Study for authentication check and individual sub-project feasibility study.

- ❖ Review the Hard-to-reach village database at the ‘Stakeholder consultation meeting’ participated by local government representatives such as the UP chairman and members, Upazila chairman, vice-chairman, and UNO.
- ❖ FGD and KII were conducted using a checklist. Composition in the FGD included local community people: male and female, teachers, local farmers, traders, and students depending on availability.
- ❖ KIIs of Union Chairman, Upazila chairman, UNO male and female, and teacher depending on availability.
- ❖ Authentication and feasibility check by visits to the sub-projects reviewed and listed for the 40 selected case study unions under the MVMT project.
- ❖ Survey with GPS machine and Google apps in collecting Hard-to-reach village locations, landmarks, chainage at gaps, village road at sections vulnerable to land erosion damage, narrow existing width or sharp slope location.

2.4 PRIORITIZATION CRITERIA OF SUB-PROJECTS

Prepare a priority list of sub-projects by Upazilas that includes gazette ID roads and non-gazette roads (No ID) with attributes like name and number of villages and population. The criteria used in the prioritization are described below.

- Population, travel time needed from the remotest villages to the Upazila HQ, road type, and cost per km per 1000 population are the indicators weighted giving a value in a formula.
- Priority is given to single connection with no alternative transport road and multi-modal transport route to connecting the villages with Upazila HQ and Union Parishad, growth centre and important markets and social service centres; villages with a higher population and travel time get higher weightage;
- Priority is given to roads, ghats, and collection points that will facilitate agricultural diversification, reduce transportation costs, ensure a fair price and create a farm and non-farm employment and income;
- Priority is given to roads development and inland waterways dredging that will enable year-round mobility of the general public and villagers, in particular, health workers, teachers and students, and tourists to facilitate tourism development, quality education, and better health service in the district and region;
- Special priority is given to sub-projects of roads, Riverine routes/inland waterways that will mainstream deprived communities living in the hard-to-reach villages;
- Identified sub-projects with more cost-effectiveness than others using per km per 1000 population cost for each sub-project;
- Every sub-project(s) is to be climate-resilient, sustainable, and cost-effective.

2.5 WEIGHTAGE DISTRIBUTION FOR PRIORITIZATION

The approaches and methodologies of the Study for reviewing database and prioritization are synthesized in the diagrams below, noting that the proposed sub-projects of roads in the databases are prioritized based on weightage calculated on the set criteria (as shown in the diagram). People’s demands and local needs are reflected in the prioritization which was

determined by the Study, working together with LGI representatives and LGED field-level technical staff at the stakeholder consultation meetings held in each Upazila.

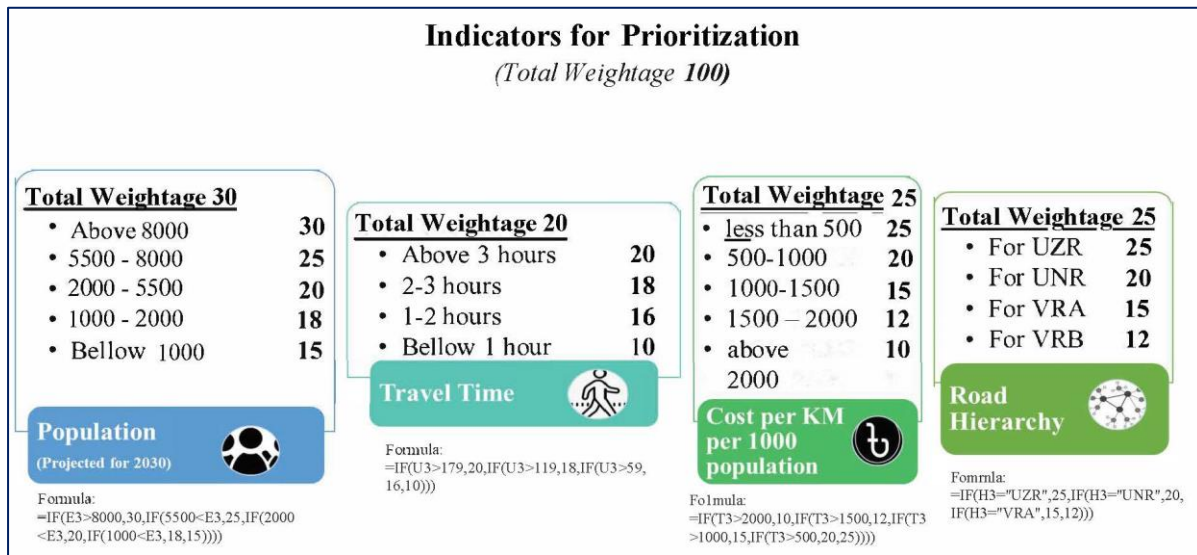


Figure 2: Prioritization indicators & their weightage values

2.6 MAPPING HARD-TO-REACH VILLAGES & POPULATION

- With the active support of LGED technical staff, first, draw every priority listed MVMT roads and Hard-to-reach villages on the LGED GIS map in presence of the union Chairman and members who know the sub-project and are the best. This was not in scale but approximation was reached by triangulation. Then digitized on screen using GIS, validate with Google map, and checked with data and information on important features and points collected using GPS during field visits.
- There were challenges in deciding on starting node and/or zero chainage of the non-gazette (No ID) road because not all non-gazette sub-projects were visited and surveyed by the Study team.

2.7 WRAP UP MEETING

Wrap up the fieldwork progress at each district holding a meeting chaired by the Executive Engineer, LGED, and participated by all Upazila engineers of the respective district. On completion of the fieldwork, this was conducted to share issues and updates to the district Executive Engineer for feedback and action, as necessary.

2.8 VALIDATION WORKSHOP

On completion of data analysis and drafting of the database and mapping, the Study outputs were shared with the respective districts and Upazilas for final review. The later validation workshop was held at the respective district on the Draft Report to share and validate the findings. This was participated by the LGED Division, District and Upazila officials, and technical staff.

2.9 NATIONAL WORKSHOP

The Draft Report is finalized, incorporating comments received from the validation workshop, LGED head office staff, and the PMO office. A National Level workshop was held at LGED HQ for sharing and disseminating the results of the Study.

4 DESCRIPTION OF WETLANDS

3.1 DISTRIBUTION OF THE HAORS/ WETLANDS

The Upazila has a large portion of flash flood zone that covers almost half of its land area. The roads within the flood zone become inundated during monsoon, which requires attention to take relevant measures during road construction and maintenance.

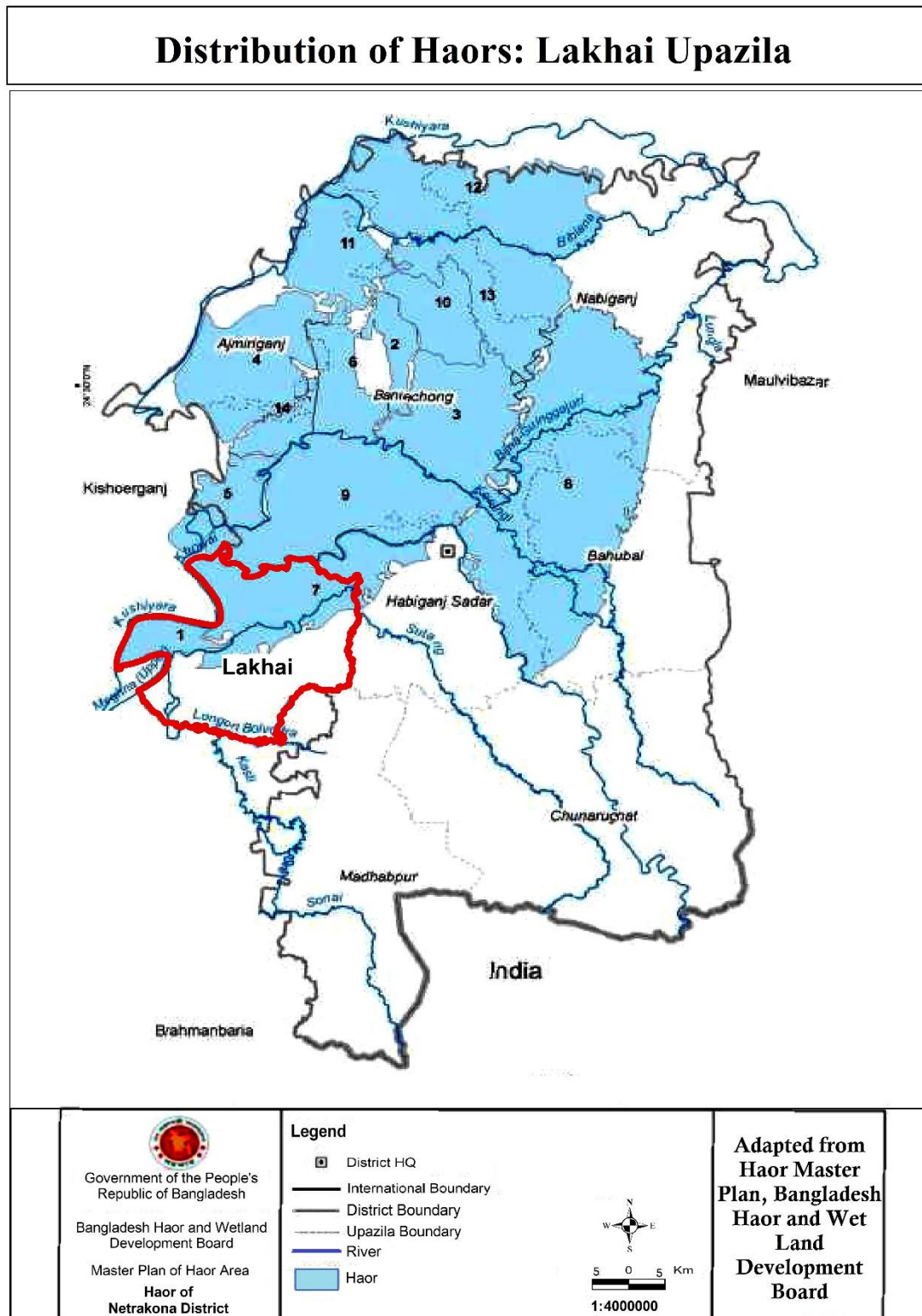


Figure 3: Haor Distribution Map

3.2 HAOR/ WETLAND CATEGORY

However, in the south of the Upazila, it is Foot Hill and most of the Upazila is within deeply floodplain range. Therefore, road or other infrastructure development in this Upazila does not have any major environmental consequences.

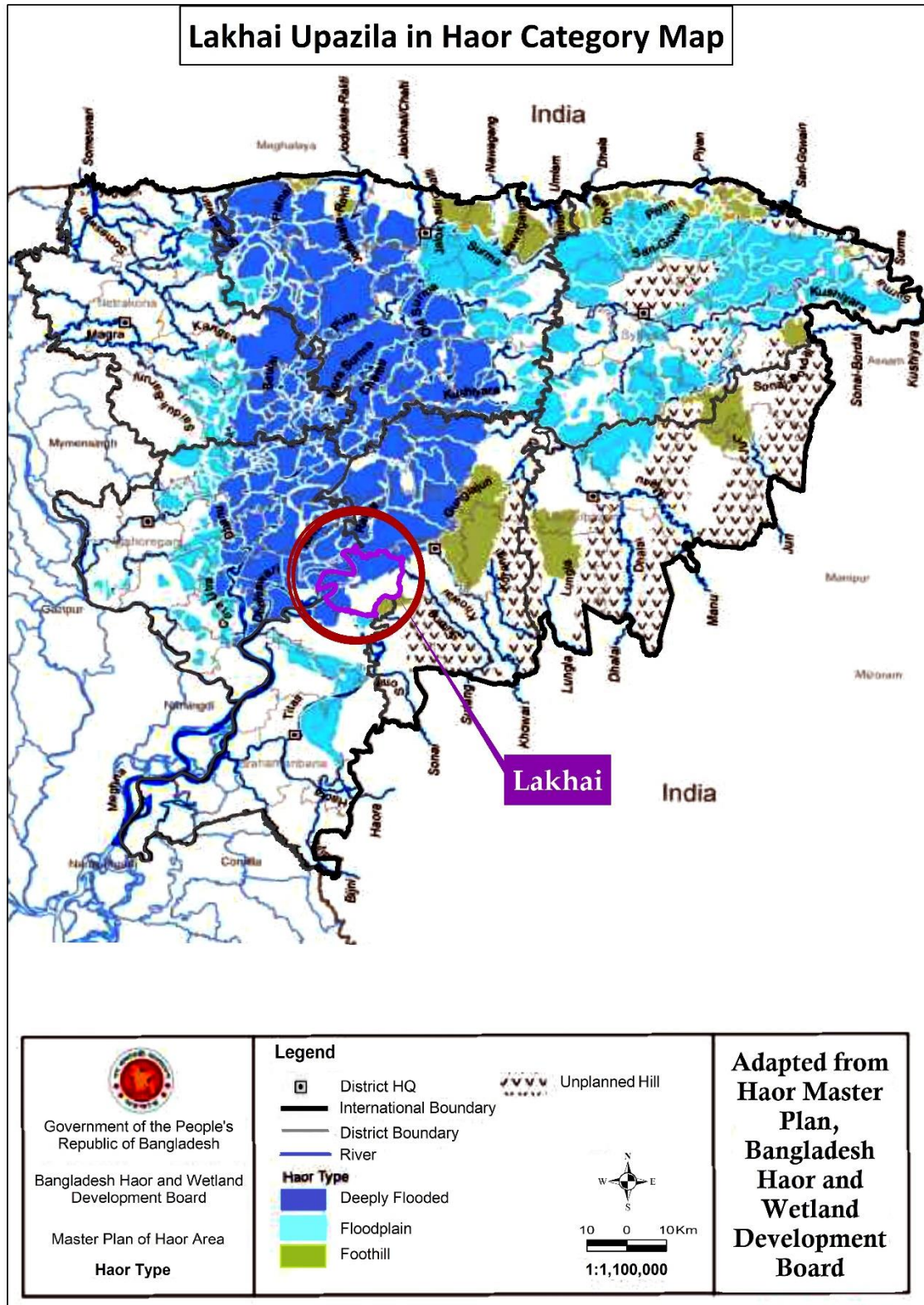


Figure 4: Haor Category Map.

3.3 BIO-ECOLOGICAL CHARACTERISTICS

The Bio-ecological characteristics map of the Upazila has been shown below. The map shows that it is mostly haor basin & is partially a part of Meghna floodplain. Therefore, adequate openings for the road and road structures should be maintained.

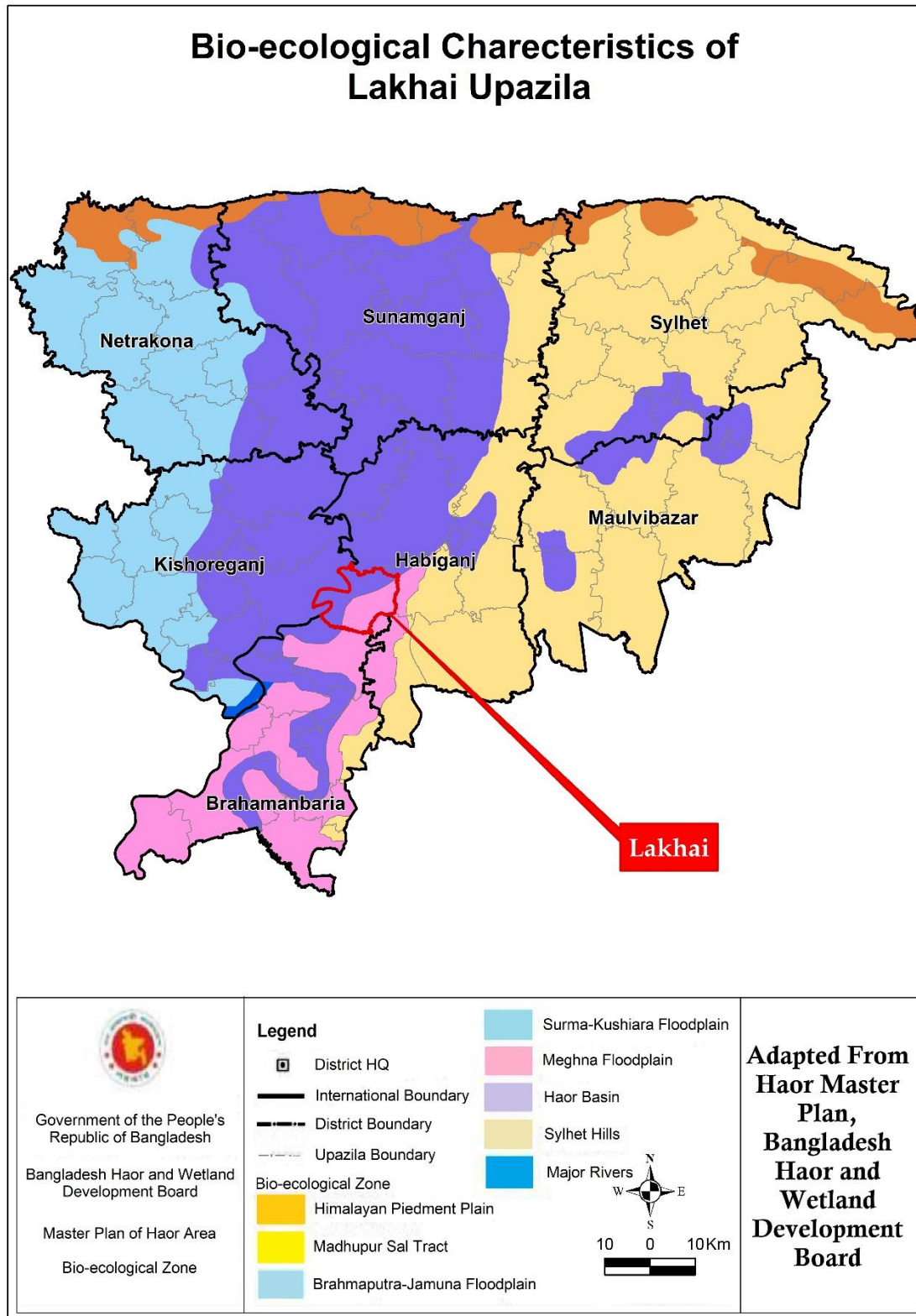


Figure 5: Bio Ecological Characteristics Map

5 RURAL ROAD CONNECTIVITY TO THE VILLAGES

4.1 SUMMARY OF THE VILLAGE CONNECTIVITY

The feature of rural road communications in Lakhai Upazila is contrasted. Out of 65 villages, only 15 villages are disconnected from the developed paved road network which brings huge suffering for the people of those village. The total rural road network of Lakhai is 249.98 km and out of which, 85.80 km are paved and 164.17 km earthen.

Table 1: Total villages in the unions and their connectivity

SL No	Union	No of Villages	Connected Villages	Hard-to-Reach Villages
1	Bamai	4	2	2
2	Bulla	22	20	2
3	Karab	9	6	3
4	Lakhai	14	11	3
5	Murakari	16	11	5
Total		65	50	15

6 DATA COLLECTION & ANALYSIS

The consultant team collected data from the field on Hard-to-Reach Villages. Data were collected from those villages including population, road alignment information (*type, length, condition*), travel time, a structure required on the alignment, potential Riverine routes that can be used for a multi-modal transport system etc. The data were then analyzed, categorized, and finally used to obtain a priority list along with a map (*Figure:5*) showing prioritized roads and Hard-to-Reach Villages. The proposed Riverine & road connectivity by the UE office have been discussed in this section.

5.1 PROPOSED ROADWAY FOR HARD-TO-REACH VILLAGES:

At present, roads are the most dominant mode of transportation. Most of the structures were built on the rivers to make road communication effective.

Table 2: Summary of the rural roads in the Upazila

Total Road Length of the Upazila (KM)	Paved Length (KM)	Unpaved Length (KM)	Length of unpaved roads of Hard-to-Reach Villages (KM)
249.98	85.80	164.17	38.06

5.1.1 PROPOSED SUBMERSIBLE ROUTES:

There are 15 submersible roads proposed to connect the HTRV within the Upazila. The road name, ID, road condition, and the length of the unpaved roads are as bellow;

Table 3: Proposed all-weather roads in the Upazila

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
1	Martuj Ali Bridge (R&H) - Sutag River.	636685047	Submersible	1.40
2	Tegoria BC Road - Shuneshor.	636685049	Submersible	1.80
3	Murakari Uttar Village - SantosPur Road.	636685055	Submersible	1.65
4	Bulla UP office-Moriuak Fandauk road via shinghagram	636683001	Submersible	7.32
5	Satauk Community Clinic to Kanai River via Satauk bazar.	636684010	Submersible	2.20
6	Bulla-Shinghagram Road to Suneswar Via Borohati Moktab.	636685041	Submersible	1.50
7	Vadikara Foundauk BC Road (Mashadia) - Deyan Bari.	636685050	Submersible	0.70
8	Lokra Madna Road (Bhabani pur) - Faridpur Via Katia.	636685059	Submersible	5.00
9	Lakhai bazar-Kamalpur Village.	636685031	Submersible	1.05

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
10	Madna Bazar - Faridpur Via Mirpur Moksedpur	636685072	Submersible	3.00
11	Suneshor Village - Moubari GPS	636685078	Submersible	1.00
12	Maintail D.C Road-Harinakona Road.	636684003	Submersible	4.19
13	Shibpur-Gintakanda road	636685025	Submersible	1.75
14	GCCR Road - Mamudpur.	636685057	Submersible	2.50
15	Shimulm Bari Bridge - Agapur Primary School	636685061	Submersible	3.00

5.1.2

Considering resources constraint, benefited a group of people, the time required to travel & road hierarchy, a priority list has been developed ([Annexure- 2](#)) for the HTRV (Hard to Reach Villages). The priority score has been determined according to following

Table 4: Considered weightage values for the prioritization

Criteria	Weightage
Population	30
Travel Time	20
Cost per 1000 Population	25
Road Type	25
Total=	100

It has been observed that there are a number of roads that bear the same score. In these cases, the minimum budget required for providing connectivity to thousands of people- will get more priority compared to more budget-required roads. The roads bearing ID will have higher priority than the roads without ID.

7 CONCLUSION & RECOMMENDATIONS

- Lakhai Upazila is located under Sylhet Hills & is partially a part of Himalayan Piedmont Plain. The other areas are under Haor Basin. Lakhai is partly covered by 3 haors/ wetlands and there exist 7(seven) rivers flowing over the Upazila that dominate the ecosystem, and transport system of the Upazila. During monsoons, these Rivers carry a huge volume of flood water
- As the Upazila is heavily flooded during monsoon, rural roads and structures are highly vulnerable in this Upazila.
- The Upazila has a total number of 15 Hard-to-Reach Villages. To develop rural connectivity, there are proposals for both all-weather and submersible roads. This report contains a list of roads with their priority. The priority has been determined based on Population, Travel Time, Cost per KM/1000 people & Road Hierarchy.
- This Upazila is highly vulnerable to disasters. Due to climate change, vulnerability is getting intense. The year 2022 has shown catastrophic flood that was not seen over the last 18 years (*last in 2004 similar to 1998 & 1988*). Therefore, it is highly recommended to study the road alignments before going for investment.
- Case-by-case design of roads in this Upazila considering different aspects such as exposure to floods, erosion etc. is highly recommended. A special study regarding the road and structure design of the Lakhai Upazila in Habiganj district is highly recommended.

ANNEXURE - 1

DETAILS OF GROWTH CENTER & HATBAZAR

Union	Market Name	Market Category (GC=Growth Center, HB=Hat Bazar)	Market Listed? (Yes/No)	Market Category (General/Special/Collection center)	Market Category (Wholesale/Retail/both)	Hat Day	Chandina Viti (Number)	Chandina Viti (Land)	Chandina Viti (Shop)	Land Area (Acre)			Lease/ Khas Collection BDT (2020)	Lease/ Khas Collection BDT (2019)
										Toha	Khas	Private		
Bulla	BULLA BAZAR	GC	Yes	General Market	Both	7	7	0.04	7	0.00	1.27	5.07	2111000	1140500
Bamai	Bamai Cattle Bazar	HB	Yes	Special Market	Both	1	0	0.00	0	0.00	0.87	0.00	2019786	2097786
Lakhai	Lakhai bazar	GC	Yes	General Market	Both	7	0	0.00	0	0.00	0.25	6.00	150000	136000
Bulla	Madna bazar (h.q)	GC	Yes	General Market	Both	7	0	0.00	0	0.00	0.28	2.70	58120	7200
Bamai	Bamai Bazar	HB	No	General Market	Both	7	0	0.00	0	0.00	0.00	1.50	0	0
Bamai	Bhdikara Jelkhana bazar	HB	No	General Market	Wholesale	7	0	0.00	0	0.00	0.00	0.10	0	0
Bamai	Kalauk Bazar	HB	No	General Market	Wholesale	7	0	0.00	0	0.00	0.00	0.60	0	0
Bamai	Katiara Bazar	HB	No	General Market	Both	7	0	0.00	0	0.00	0.00	0.00	0	0
Karab	Karab Nuton Bazar	HB	No	General Market	Wholesale	7	0	0.00	0	0.00	0.14	0.14	0	0
Karab	Karab Vekitaka Bazar	HB	No	General Market	Wholesale	7	0	0.00	0	0.00	0.00	0.50	0	0
Lakhai	Krisnopur Bazar	HB	No	General Market	Wholesale	7	0	0.00	0	0.00	0.00	0.05	0	0
Lakhai	Sibpur Bazar	HB	No	General Market	Wholesale	7	0	0.00	0	0.00	0.00	0.10	0	0
Murakari	Muriauk Bazar	HB	No	General Market	Wholesale	7	0	0.00	0	0.00	0.00	0.05	0	0
Murakari	Tegurua Bazar	HB	No	General Market	Wholesale	7	0	0.00	0	0.00	0.00	0.05	0	0
Muriauk	Fulbaria Bazar	HB	No	General Market	Wholesale	7	0	0.00	0	0.00	0.00	0.00	0	0
Muriauk	Murakari Bazar	HB	No	General Market	Both	7	0	0.00	0	0.00	0.00	2.00	0	0
Muriauk	Zirunda Bazar	HB	No	General Market	Wholesale	7	0	0.00	0	0.00	0.00	0.00	0	0

ANNEXURE - 2

PRIORITY LIST FOR ROAD DEVELOPMENT

SL No	Upazila	Connecting Union	Connecting Village	Village Population BBS 2011	Population 2021 (Based on BBS 2011)	Road Name	Road ID	Road Type	Road Type by Surface Condition	Total Road Length	Paved length (Km)	HBB Length (km)	Unpaved length (Km)	Total Road Length to be Developed	HBB + Unpaved in (km)	Approx. Cost of Road (Lac)	Structure/ Gap (Meter)	Cost of Structure (in Lac)	Total Cost (in lac) (Roads + Structures)	Population /KM	Tentative Budget/1000 Population (in lac)	Travel Time (in min)	Weightage for Population	Weightage for Travel Time	Weightage for Cost per 1000 Pop	Weightage for Road Hierarchy	Total Weightage	Priority
1	Lakhai	Bamai	Badikara	9936	11384	Martuj Ali Bridge (R&H) - Sutag River.	636685047	VRB	Submersible	1.40	0.00	0.00	1.40	1.40	1.40	252.00	0.00	0.00	252.00	8132	22.14	21.00	30	10	25	12	77	
2	Lakhai	Karab	Singhagram	7774	8907	Tegoria BC Road - Shuneshor.	636685049	VRB	Submersible	1.80	0.00	0.00	1.80	1.80	1.80	324.00	0.00	0.00	324.00	4948	36.38	27.00	30	10	25	12	77	
3	Lakhai	Murakari	Murakari	11246	12885	Murakari Uttar Village - SantosPur Road.	636685055	VRB	Submersible	1.65	0.00	0.00	1.65	1.65	1.65	297.00	0.00	0.00	297.00	7809	23.05	24.75	30	10	25	12	77	
4	Lakhai	Bamai	Guripur	2083	2387	Bulla UP office-Moriuak Fandauk road via shinghagram	636683001	UNR	Submersible	7.90	0.58	0.00	7.32	7.90	7.32	1317.60	100.00	900.00	2217.60	326	929.18	109.80	20	16	20	20	76	
5	Lakhai	Muriauk	Satauk	3307	3789	Satauk Community Clinic to Kanai River via Satauk bazar.	636684010	VRA	Submersible	2.20	0.00	0.00	2.20	2.20	2.20	396.00	0.00	0.00	396.00	1722	104.51	33.00	20	10	25	12	67	
6	Lakhai	Muriauk	Suneshwar	2275	2607	Bulla-Shinghagram Road to Suneswar Via Borohati Moktab.	636685041	VRB	Submersible	1.50	0.00	0.00	1.50	1.50	1.50	270.00	0.00	0.00	270.00	1738	103.58	22.50	20	10	25	12	67	
7	Lakhai	Muriauk	Masadia	2226	2550	Vadikara Foundauk BC Road (Mashadia) - Deyan Bari.	636685050	VRB	Submersible	0.70	0.00	0.00	0.70	0.70	0.70	126.00	0.00	0.00	126.00	3644	49.40	10.50	20	10	25	12	67	
9	Lakhai	Bulla	Katia	1002	1148	Lokra Madna Road (Bhabani pur) - Faridpur Via Katia.	636685059	VRB	Submersible	5.00	0.00	0.00	5.00	5.00	5.00	900.00	0.00	0.00	900.00	230	783.94	75.00	18	16	20	12	66	
9	Lakhai	Lakhai	Kamalpur	1525	1747	Lakhai bazar-Kamalpur Village.	636685031	VRB	Submersible	1.05	0.00	0.00	1.05	1.05	1.05	189.00	0.00	0.00	189.00	1664	108.17	15.75	18	10	25	12	65	
10	Lakhai	Bulla	Faridpur	1096	1256	Madna Bazar - Faridpur Via Mirpur Moksedpur	636685072	VRB	Submersible	3.00	0.00	0.00	3.00	3.00	3.00	540.00	1.00	9.00	549.00	419	437.19	45.00	18	10	25	12	65	
11	Lakhai	Muriauk	Maubari	1067	1223	Suneshor Village - Moubari GPS	636685078	VRB	Submersible	1.00	0.00	0.00	1.00	1.00	1.00	180.00	0.00	0.00	180.00	1223	147.24	15.00	18	10	25	12	65	
12	Lakhai	Karab	Harinakona	758	868	Maintail D.C Road-Harinakona Road.	636684003	VRA	Submersible	6.03	1.84	0.00	4.19	6.03	4.19	754.20	0.00	0.00	754.20	207	868.41	62.85	15	16	20	12	63	
13	Lakhai	Lakhai	Gadainagar	435	498	Shibpur-Gintakanda road	636685025	VRB	Submersible	1.75	0.00	0.00	1.75	1.75	1.75	315.00	0.00	0.00	315.00	285	632.01	26.25	15	10	20	12	57	
14	Lakhai	Lakhai	Mamudpur	733	840	GCCR Road - Mamudpur.	636685057	VRB	Submersible	2.50	0.00	0.00	2.50	2.50	2.50	450.00	0.00	0.00	450.00	336	535.81	37.50	15	10	20	12	57	
15	Lakhai	Karab	Agapur	693	794	Shimulm Bari Bridge - Agapur Primary School	636685061	VRB	Submersible	3.00	0.00	0.00	3.00	3.00	3.00	540.00	0.00	0.00	540.00	265	680.09	45.00	15	10	20	12	57	

*** Cost for Roads & Structures; (All Weather Rd= 120 lac/km, Submersible= 180 lac/km, Structure= 9 lac/m)
 *** Weightage Values; (Population = 30, Travel Time= 20, Cost per KM/1000 people= 25, Road Hierarchy= 25)