

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH MINISTRY OF LOCAL GOVERNMENT, RURAL DEVELOPMENT AND CO-OPERATIVES

Local Government Engineering Department (LGED)

Agargaon, Sher-E-Bangla Nagar, Dhaka-1207

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"

Baniachong, Habiganj







CONTENTS

GLO	PSSARY	i
Abbr	eviation	ii
Back	ground	iii
1 1	Description of the Upazila	1
1.1	Geography and Demography	1
1.2	Education Features	1
1.3	Rural Road Communications	1
1.4	Agriculture, Food Production and Fisheries	1
1.5	Growth Centre and Hatbazar	1
2 1	Location of the Upazila	2
3 A	Approach & Methodology	3
3.1	Study Team Composition	3
3.2	Study Area	3
3.3	Database Review and Analysis	3
3.4	Prioritization Criteria of Sub-projects	4
3.5	Weightage Distribution for Prioritization	4
3.6	Mapping Hard-to-reach Villages & Population	5
3.7	Wrap Up Meeting	5
3.8	Validation Workshop	5
3.9	National Workshop	6
4 1	Description of Wetlands	7
4.1	Distribution of the Haors/ Wetlands	7
4.2	Haor/ Wetland Category	8
4.3	Bio-Ecological Characteristics	9
5 I	Rural Road Connectivity to the Villages	10
5.1	Summary of the Village Connectivity	10
5.2	Villages and their connectivity – Union level	10
5.3	Map of Hard-to-Reach Villages & Proposed Roads	20
6 (Consultation Meeting & Field Visit	21
6.1	Upazila Level Meeting	21
6.2	Visit to Case Study Union	21
7 1	Data Collection & Analysis	23
7.1	Proposed Riverine routes	23
7.2	•	
7	7.2.1 Proposed All Weather Routes:	
7	7.2.2 Proposed Submersible Routes:	
7	7.2.3 Proposed Roads for Hard-to-Reach Villages Having No ID:	
7	7.2.4 Priority for Road Development	
8 (Conclusion & Recommendations	27

Annexure - 1	28
Annexure - 2	30
List of Figures	
Figure 1: Upazila Location Map.	2
Figure 2: Prioritization indicators & their weightage values	5
Figure 3: Haor Distribution Map	7
Figure 4: Haor Category Map.	8
Figure 5: Bio Ecological Characteristics Map	9
Figure 6: Upazila Map	20
Figure 7: Upazila level Consultation Meeting	21
Figure 8: Condition of the visited road alignment at case study Union	22
List of Tables	
Table 1: Total villages in the Unions and their connectivity	10
Table 2: Union wise connected & Hard-to-Reach Villages and their population	
Table 3: Proposed riverine routes of the Upazila	
Table 4: Summary of the rural roads in the Upazila	23
Table 5: Proposed all weather roads in the Upazila	
Table 6: Proposed submersible roads in the Upazila	25
Table 8: Considered weightage values for the prioritization	25

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

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 strong social bond. Within a Mauza there could be more than one village.

Union Bangladesh has 3-tiers local government system: 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 mean in the Study the village pathway or access used for walking by commuters, in the most cases do not have gazetted or established or commonly used alignment, and to the most, passable by bi-cycle or motor bike. These village trails are not passable by motorized jeep or mini truck or emergency service vehicle or not even by any three wheelers.

Unpaved Roads have no pavement or surface material. They are usually the 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 which increases 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 disaster like flood and landslides in a sustainable way.

ABBREVIATION

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 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 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 election manifesto 2018 titled 'My Village-My Town'- Extension of Modern Civic Amenities in Every Villages. 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, 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 mandate of 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 implementation of 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 Minster of Local Government, Rural Development and Co-operatives.

Context of the Report

This report is a part of 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 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 lot of challenges. These regions are -Haor, Beel, Hills, Chars, Islands etc. The people residing in these regions has considerably low access to civic amenities compared to other villages of the country. Therefore, study and plan development of improvement of rural connectivity is one of the important assignments of the technical assistance project. The project undertook Upazila based special study on the villages of these geographically sensitive regions that are mentioned before.

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

1 DESCRIPTION OF THE UPAZILA

1.1 GEOGRAPHY AND DEMOGRAPHY

The geographical area of Baniachong Upazila is 482.26 sq.km. It has 15 Unions, 237 mouzas and 344 villages. Baniachong is 18 km far from District headquarters of Habiganj. It is partly covered by 9 major haors and there exists 6 rivers flowing over the Upazila, known as Puran Kushiara, Ratna, Shutki, Jhingri, Beramohona Yara & Shakha Borak. The total population of the Upazila is 3,32,530 of which 1,63,875 are male and 1,68,655 female, total number of households are 59,433 and average household size is 5.59 and density of population is 690 (as per population census 2011).

1.2 EDUCATION FEATURES

According to the information availed from relevant local government offices, there are 114 govt. primary, 41 registered primary, 3 non-government primary, 36 NGO schools & 5 kindergarten schools. On the other hand, Baniachong has 2 government high schools, 23 non-government high schools with 4 private colleges and 56 madrashas. The literacy rate for the Upazila is 34.7%.

1.3 RURAL ROAD COMMUNICATIONS

Bangladesh scored in the rural accessibility index at around 87 per cent among South Asian and some other Africa countries. Generally, the people of Bangladesh get all weather within 2 kilometers adjacent to their living places. But the feature of rural roads communications in Baniachong Upazila is contrasted. There are many villages, disconnected from the developed paved road network that brings huge sufferings for the people of the villages. The total rural road network of Baniachong is of 721.79 km, out of that 240.31 km is paved and 481.48 km earthen.

1.4 AGRICULTURE, FOOD PRODUCTION AND FISHERIES

Agriculture has a major importance for the economy of the people of Baniachong. There are 86,747 acres of arable land in the Upazila. In the fiscal year 2010-11 the Rice production was 2500 & 120120 metric tons for Aman & Boro seasons respectively. The Upazila also produced 144 metric tons of Potatoes in the same fiscal year 2010-11.

According to the BBS (2010-11) data Baniachong has 11,080 acres of haor/ pond/ dhighee/ other wetlands that produced 1,641 metric tons of fishes. There also exists 49 dairy farms & 51 poultry farms in the Upazila.

1.5 GROWTH CENTRE AND HATBAZAR

Growth Centre and Rural Hatbazr is one of the main centres of the rural economy. Hatbazar is like the heart for the development of the rural economy. Rural hatbazar plays a role in increasing production and creating employment impacting on the supply chain of agriculture and non-agriculture products. There are 20 hatbazars with 5 growth centers in the Upazila. The structural development of hatbazar and growth is pivotal to boosting up the rural economy. A details of the growth center & hatbazar of the Upazila has been attached in the <u>Annexure-1</u>.

2 LOCATION OF THE UPAZILA

Baniachong Upazila is in the North - Eastern part of the country under Habiganj District in Sylhet division. The location has been shown in the map. It is surrounded by Derai, Sulla and Ajmiriganj Upazilas on the north, Habiganj Sadar and Lakhai Upazilas on the south, Habiganj Sadar and Nabiganj Upazilas on the east, Ajmiriganj, Mithamain and Austagram Upazilas on the west. The Upazila is mostly flashflood zone in between Sylhet & Mymensingh Haor Basin. The hilly rivers coming down from the 'Garo, Khasi and Jaintia hills' in Meghalaya, India carry particularly high volumes of water during monsoon as they come from some of the rainiest places in the world, resulting flash flood at the foothills inside Bangladesh. Flood coming from uphill Meghalaya (where there is Cherrapunji, the wettest place on earth) during monsoon causes waterlogging within the haor basin for almost half the year. Flash floods induce severe impacts in both the built and the natural environment. The effects of flash floods can be catastrophic and show extensive diversity, ranging from damages in buildings and infrastructure to impacts on vegetation, human lives and livestock.

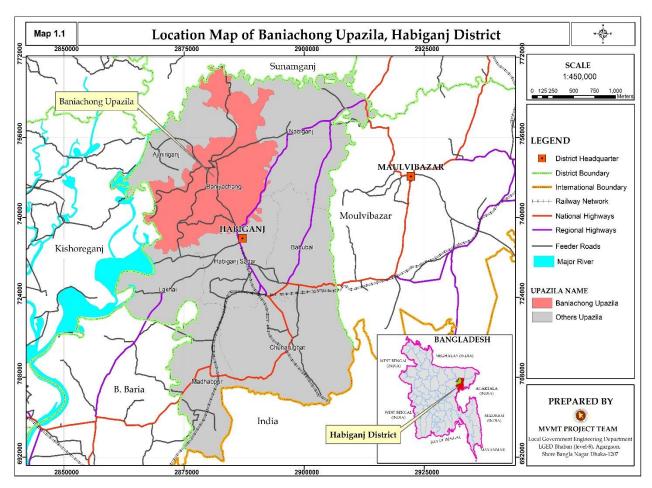


Figure 1: Upazila Location Map.

3 APPROACH & METHODOLOGY

3.1 STUDY TEAM COMPOSITION

A team consisting of Senior Rural Road Infrastructure Specialist, Associate Rural Infrastructure Specialist, Assistant Engineer engaged by 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. Participatory approach to review the database and identify priority transport infrastructure needs ('sub-projects') instrumental. At the stakeholder consultation meeting held in each District, the database was reviewed, priority needs identified and mapped working together with the LGI representatives and **LGED** technical **LGED** team. and LGI

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

representatives were surveyed each Upazila for collection of detailed observations and validations of the proposed priority needs.

3.2 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, PMO team conducted the study in 50 Upazilas of Haor areas and rest of the Upazilas of Haor, Beel, Char and Island areas are conducted by 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 in 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.

3.3 DATABASE REVIEW AND ANALYSIS

The Study applied both qualitative (e.g., focused group discussions and in-depth case study field work) and quantitative (structured and semi structured interviews) approach and methods in reviewing and conducting field work 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 field work were:

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

- * Review Hard-to-reach village database at the 'Stakeholder consultation meeting' participating by local government representatives such as 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, teacher, local farmer, trader, and student depending on the 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 MVMT project.
- Survey with GPS machine and Google apps in collecting Hard-to-reach village location, landmark, chainage at gaps, village road at section vulnerable to land erosion damage, narrow existing width or sharp slope location.

3.4 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 higher number of population and travel time get higher weightage;
- Priority is given to roads, ghats and collection points that will facilitate agricultural diversification, reduce transportation cost, ensure fair price and create farm and nonfarm employment and income;
- Priority is given to roads' development and inland waterways dredging that will enable year-round mobility of 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 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.

3.5 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 demand and local need are reflected in the prioritization which were

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

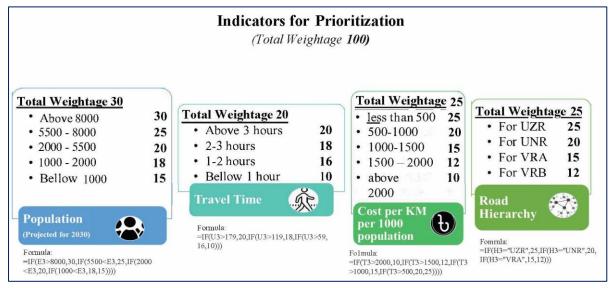


Figure 2: Prioritization indicators & their weightage values

3.6 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 Union Chairman and members who knows the sub-project and area the best. This was not in scale but approximation was reached by triangulation. Then digitized on screen using GIS, and 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.

3.7 WRAP UP MEETING

Wrap up the field work 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.

3.8 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. 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 staffs.

3.9 NATIONAL WORKSHOP

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

4.1 DISTRIBUTION OF THE HAORS/ WETLANDS

The Upazila has a large area of flash flood zone that covers almost 90% of its total area. The roads within the flood zone becomes inundated at monsoon, that requires an attention to take relevant measures during road construction and maintenance.

Distribution of Haors: Baniachong Upazila Maulvibazar Baniachong Kishoerganj India Brahmanbaria Legend Adapted from **Haor Master** Government of the People's Republic of Bangladesh International Boundary Plan, Bangladesh District Boundary Haor and Wet Bangladesh Haor and Wetland Development Board Upazila Boundary Land River Master Plan of Haor Area Development Haor Haor of Netrakona District **Board** 1:4000000

Figure 3: Haor Distribution Map

4.2 HAOR/ WETLAND CATEGORY

However, the Upazila is deeply flooded zone. Therefore, road or other infrastructure development in this Upazila has major environmental consequences.

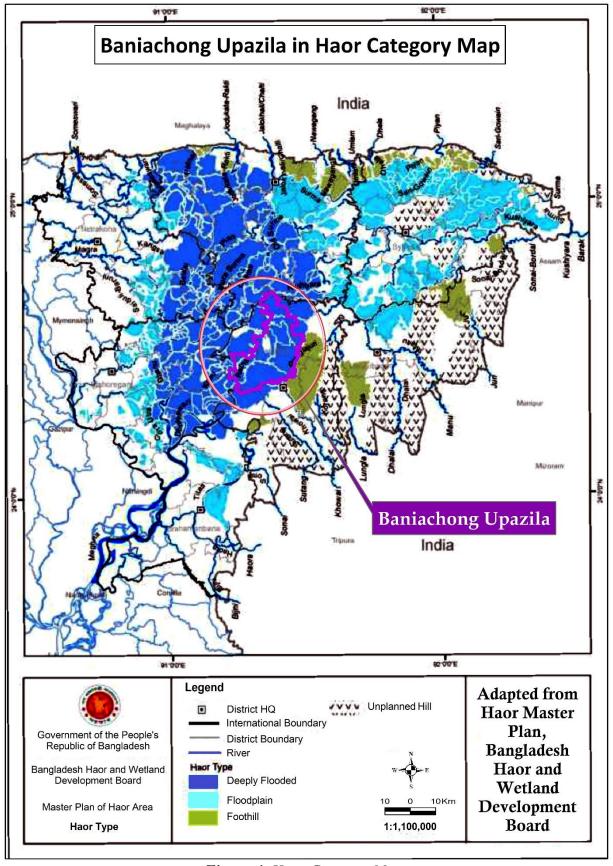


Figure 4: Haor Category Map.

4.3 BIO-ECOLOGICAL CHARACTERISTICS

The Bio-ecological characteristics map of the Upazila has been shown below. The map shows that it is completely haor basin. Therefore, adequate opening for the road and road structures should be maintained.

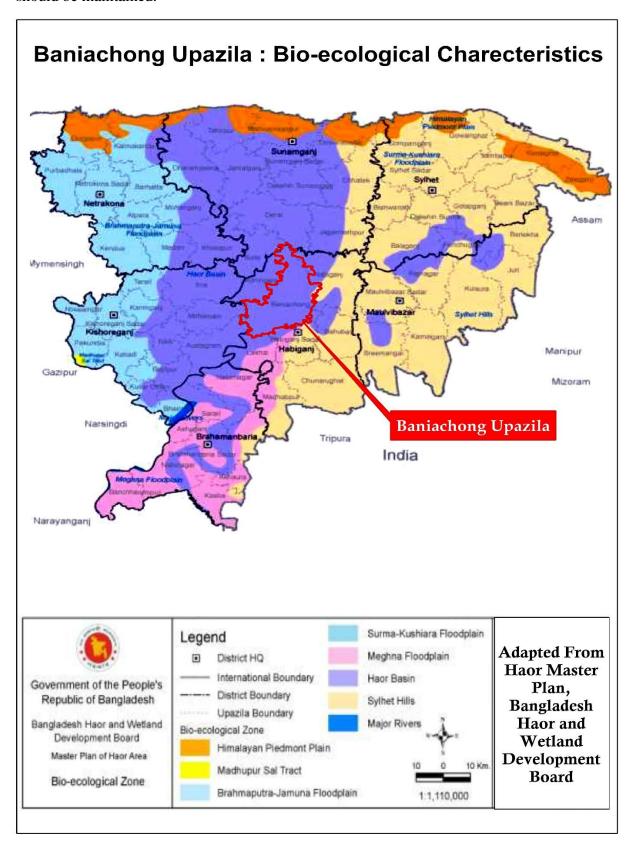


Figure 5: Bio Ecological Characteristics Map

5 RURAL ROAD CONNECTIVITY TO THE VILLAGES

5.1 SUMMARY OF THE VILLAGE CONNECTIVITY

Baniachong is an Upazila with major haors. The rural road communication is quite poor here. Out of 344 villages, 33 are disconnected from the developed paved road network that brings huge sufferings for the people of those villages. The total rural road network of Baniachong is of 721.79 km, out of that 240.31 km is paved and 481.48 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	Baraiuri	18	16	2
2	Dakshin Paschim Baniyachan	24	22	2
3	Dakshin Purba Baniyachang	23	23	0
4	Daulatpur	19	18	1
5	Kagapasha	20	17	3
6	Khagaura	34	32	2
7	Makrampur	26	22	4
8	Mandari	12	9	3
9	Muradpur	24	21	3
10	Pailarkandi	24	21	3
11	Pukhra	37	34	3
12	Sujatpur	15	11	4
13	Uttar Paschim Baniyachang	23	22	1
14	Uttar Purba Baniachang	45	43	2
	Total=	344	311	33

5.2 VILLAGES AND THEIR CONNECTIVITY – UNION LEVEL

The consultant arranged a meeting at Upazila conference room with and all the UP Chairmen & their secretaries. The team interviewed representative of each the Union and collected data about the HTRV.

Table 2: Union wise connected & Hard-to-Reach Villages and their population

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
(16)	1	Baktarpur	1169	Baraiuri Bada	2266
	2	Ballabhpur	1902	Kalinjura	1770
Baraiuri	3	Bara Ujirpur	422		
Ваг	4	Betkandi	951		
	5	Bodpur	154		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	6	Chianar (Chhota Ujirpur)	694		
	7	Daudpur	1688		
	8	Holdarpur	2807		
	9	Kadupur	3012		
	10	Kalaparila	1173		
	11	Madannurat	1587		
	12	Nasni	534		
	13	Noagaon	1668		
	14	Rajapur	245		
	15	Rokanpur	27		
	16	Shassham Sub Total=	378 18411		4037
<u> </u>	1	Aralia Para	331	Madartola	877
) (2					_
Dakshin Paschim Baniyachan (24)	2	Basia Para	1618	Tarashai	2577
uiyad	3	Bhatta Para	639		
Вап	4	Buruj Para	679		
nim	5	Chastagahar	0		
asch	6	Ganngong Bazar	0		
n P	7	Jatrapara	6101		
kshi	8	Jatrapasha	2415		
Da]	9	Kalika Para	681		
	10	Lamapara	944		
	11	Moharer Para	1416		
	12	Nirerhati	3520		
	13	Pathaniola	805		
	14	Prathamark	3429		
	15	Prathan Rekhi	0		
	16	Puran Kalika Para	0		
	17	Royber Para	0		
	18	Sagar Dighi Dakshin Par	687		
	19	Sagar Dighi Paschim Par	1597		
	20	Sagar Dighi Uttar Par	1691		
	21	Sharifkhani	3381		
	22	Tilak Ram Rayer Para	215		
		Sub Total=	30152		3453

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
(23)	1	Adamkhani	299		
) S 1	2	Banasar Spara	1690		
han	3	Bhagi	832		
yac	4	Chilla Panga	1467		
Dakshin Purba Baniyachang	5	Chowdhury Para	1164		
oa B	6	Desh Mukshya Para	1130		
Ţ.	7	Dhal Mohalla	1038		
in P	8	Duyakhani	2029		
kshi	9	Enathkhani	1798		
Da]	10	Jatu Karna Para	8337		
	11	Kalidas Tek	676		
	12	Madhukhali	357		
	13	Mahabat Khani	835		
	14	Makarampur	167		
	15	Miakhani	1491		
	16	Paragaon	1761		
	17	Puranbagh	502		
	18	Sagar Dighir Purbapar	1617		
	19	Tatari Mohalla	2298		
	20	Thakur Para	50		
	21	Thakurani Dighir Paschimpar	643		
	22	Thakurani Dighir Purbapar	364		
	23	Triker Mohalla	616		
		Sub Total=	31161		0
Daulatpur (19)	1	Altabpur	365	Paschim Daulatpur	7113
ıtbı	2	Ariaumugur	4314		
aula	3	Chandipur	1345		
ñ	4	Chauki Chak	1313		
	5	Damargaon	1457		
	6	Hilalnagar	1563		
	7	Ichhipur	764		
	8	Kabirpur	1270		
	9	Kadirganj Bazar	1644		
	10	Kalipur	331		
	11	Karcha	3324		
	12	Mashakuli Chak	1139		
	13	Noagaon	1303		
	14	Omarpur	582		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	15	Purba Daulatpur	3982		
	16	Ratanpur	259		
	17	Shakhaiti	612		
	18	Talghari	1927		
		Sub Total=	27494		7113
Kagapasha (20)	1	Baghata	2082	Bagi Bade (Dhanpur)	1522
asp	2	Batakandi	811	Maka	1439
gap	3	Chamakpur	3811	Makal Kandi	1638
Kag	4	Chandpur	1169		
	5	Damrpur	1709		
	6	Gazipur	2210		
	7	Gugarapur	771		
	8	Halimpur	1839		
	9	Haridharpur	914		
	10	Harni	1402		
	11	Isabpur	1559		
	12	Kagapashaa	2789		
	13	Muslimpur	387		
	14	Nazipur	770		
	15	Rajendrapur	393		
	16	Sarkandkrpur	1121		
	17	Uttar Ahmadpur	1224		
		Sub Total=	24962		4599
34)	1	Amirpor	196	Koranagar	304
$\overline{}$	2	Anwarpur	270	Rajpara	1932
Khagaura	3	Aralia	3443		
hag	4	Baktarpur	107		
¥	5	Bara Abda	619		
	6	Basantapur	535		
	7	Berishapur	113		
	8	Chhota Ujirpur	435		
	9	Daulatupr	764		
	10	Dhulia	1378		
	11	Dunai	4934		
	12	Ghatua	573		
	13	Haripur	990		
	14	Hossainpur	666		
	15	Jaganathpur	191		
	16	Jamalpur	48		
	17	Karcha	560		
	18	Kumarsana	49		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	19	Lama Ujirpur	201		
	20	Mathurapur	1313		
	21	Purba Khatwar	438		
	22	Rahatpur (Sadekpur)	1169		
	23	Ranbacha	364		
	24	Rangahati	441		
	25	Rokanpur (part)	574		
	26	Rupshapur	424		
	27	Saidpur	367		
	28	Sandanpur	1019		
	29	Sarangpur	532		
	30	Shibpur	253		
	31	Tajpur	807		
	32	Ujirpur	1939		
<u> </u>	1	Sub Total=	25711	D 1 1' 0	2235
(26	1	Barakandi Changar Ghan	867	Dakshin Sangar	6060
pur	2	Changar Ghop (Kashartola)	589	Kendua Bahea	662
.am]	3	Damodarpur	196	Noa Patharia	1734
Makrampur (26)	4	Hiala	2289	Noabad	1226
Z	5	Hialanitai	57		
	6	Kachuarabda	442		
	7	Kavilpur	949		
	8	Laklar Abda	511		
	9	Makrampur	2229		
	10	Mohanpur	276		
	11	Nathullapur	320		
	12	Nischintapur	1011		
	13	Nurpur	142		
	14	Patli Bade	804		
	15	Puran Patharia	2534		
	16	Radhapur	1003		
	17	Rajabad	459		
	18	Ratanpur	411		
	19	Sahapur	2004		
	20	Sultanpur	676		
	21	Talia	112		
	22	Terauthia	404		
		Sub Total=	18286		9682

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
12)	1	Agua	2513	Dunalpur	810
Mandari (12)	2	Jailpur	801	Mandari	3264
nda	3	Kanaipur	479	Tupijuri	1323
Man Man	4	Keorakandi	2269		
	5	Mirza Pur	194		
	6	Murda Kahara (Uttar Sang)	7556		
	7	Rajanagar	494		
	8	Sreerampur daulatpur	959		
	9	Sunampur	854		
		Sub Total=	16117		5398
2	1	Babanipur	721	Islampur	734
Ħ	2	Gandpur Pabade	913	Joy Keshshari	382
dp	3	Hasanpur	1426	Mardanpur	748
Muradpur (24)	4	Jalilpur (Kamargaon)	848		
	5	Kandipara	304		
	6	Lalpar	457		
	7	Makania	708		
	8	Mati Kata	836		
	9	Mirzapur	403		
	10	Mohamd Pur	262		
	11	Muradpur	2510		
	12	Nil Hasanpur	683		
	13	Nilhati	211		
	14	Paglashi	293		
	15	Pasharpur	709		
	16	Rahmatpur	801		
	17	Roypur	485		
	18	Santipur	579		
	19	Satamisati	539		
	20	Shahjalal Pur	362		
	21	Talabpur	396		10.51
		Sub Total=	14447	A.1 .	1864
(5)	1	Amirpur chargaon	250	Alamnajar	534
Pailarkandi (24)	3	Aradhanpur Bagtana	246 385	Bijaypur Hakimpur (Sreemangal Knd)	920 810
P	4	Baktapur	237	/	
	5	Basantapur	1160		
	6	Dangarkhola	285		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	7	Durgapur	4342		
	8	Farangitolla	552		
	9	Gagapur	163		
	10	Goalhati	1091		
	11	Goshainagar	202		
	12	Jagatpur	212		
	13	Kumri	603		
	14	Lal Rahmatpur	181		
	15	Munshisati	323		
	16	Najarpur	2715		
	17	Nilpur	393		
	18	Noahati	385		
	19	Pailarkandi	2935		
	20	Paschimhati	566		
	21	Sreemangal Kandi	851		
		Sub Total=	18078		2264
Pukhra (37)	1	Adamnagar	251	Daraya	842
ra (2	Alinagar	148	Daulatpur	1729
ıkh	3	Amirpur	492	Murarabda	803
Pı	4	Auwal Mahal	1168		
	5	Barakpur	475		
	6	Dhankura	1102		
	7	Dighalbagh	426		
	8	Fatepur	1289		
	9	Jamalpur	328		
	10	Janjania	221		
	11	Jhitka	795		
	12	Juranagar	407		
	13	Kabirpur	1654		
	14	Kakura	160		
	15	Katakhal	2317		
	16	Katuli	517		
	17	Kochpur	162		
	18	Krishana Nagar	1022		
	19	Maitpru	623		
	20	Manudpur Shibpur	386		
	21	Mashakuli	414		
	22	Meutail	282		
	23	Mohammadpur	513		
	24	Nagura	1082		
	25	Nagura Agri . Farm	121		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	26	Niamatpur	556		
	27	Pukhra	2304		
	28	Purba Jalilpur	143		
	29	Ramganj	1800		
	30	Rupapail	399		
	31	Sampur	1086		
	32	Sapairchak	181		
	33	Sikandarpur	1188		
	34	Uttar Sahapur	764		
		Sub Total=	24776		3374
15)	1	Bishnapur	96	Aoratail	2107
Sujatpur (15)	2	Dakshin Badarpur	1024	Kagella	378
atpı	3	Dattapur	246	Nawabad Jalilpur	1003
Suj	4	Durgapur	47	Sujatpur	1806
01	5	Gazipur	843		
	6	Ikram	4902		
	7	Jirat	937		
	8	Madhupur	246		
	9	Mehedipur	739		
	10	Pirijpur	5845		
	11	Purba Bajuka	940		
		Sub Total=	15865		5293
(23)	1	Adam Khani	540	Chand Para	0
nang	2	Ainat	0		
cha	3	Amirkhani	2321		
iiya	4	Archarja Para	0		
Вап	5	Bhatta Para	639		
Uttar Paschim Baniyach	6	Bhidda Bushan Para	1470		
Pas	7	Dhagrakona	927		
tar	8	Dukanitola	0		
Ut	9	Garib Hossan Mahalla	970		
	10	Khagchire	0		
	11	Khagsri	783		
	12	Kutub Khali	2675		
	13	Mohorer Para	1416		
	14	Nair Para	0		
	15	Pathantola	0		
	16	Raghu Chowdhury Para	2940		
	17	Rupa Rajkhar Para	820		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	18	Saidartola	0		
	19	Shaker Mahalla	838		
	20	Sharifkhani	4861		
	21	Tak Bajkhani	2098		
	22	Uttartup Khana	0		
		Sub Total=	23299		0
(45)	1	Acharjja Para	581	Jamalpur	942
) S	2	Akhan Mahalla	0	Nandipara	2421
har	3	Bagh	1260		
niac	4	Bara Nagar	513		
Ваі	5	Bawyal	267		
rba	6	Bhaduari	1023		
Pun	7	Chand Para	1711		
Uttar Purba Baniachang (45)	8	Chandpur	629		
Ut	9	Chaturanga Rayerpara	868		
	10	Chhaota Nagar	254		
	11	Dakshinpara	729		
	12	Darga Mahalla	530		
	13	Dargh Mohalla	784		
	14	Daspara	390		
	15	Dattapara	1511		
	16	Dewan Bagh	343		
	17	Dewan Dighir Purba Para	454		
	18	Dukanitola	1058		
	19	Fulbagh	0		
	20	Gharpar	0		
	21	Gup Mohalla	838		
	22	Hangumiar Para	591		
	23	Hazra Para	758		
	24	Janggala Tona	38		
	25	Kamalkhani	2112		
	26	Kazi Mallaha	0		
	27	Khagchire	857		
	28	Khandakar Mohalla	687		
	29	Labindupur	0		
	30	Majlish Mahalla	2971		
	31	Makerpur	0		
	32	Matervagh	0		
	33	Minat	1500		
	34	Mir Mahalla	0		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	35	Mir Mohalla	771		
	36	Nabipur	404		
	37	Nagrthana	406		
	38	Pathantola	730		
	39	Puran Tupkhana	636		
	40	Sangran Rayar Para	0		
	41	Tabalitola	733		
	42	Tupkhana	1280		
	43	Uttar Topkhana	1084		
		Sub Total=	29301		3363

5.3 MAP OF HARD-TO-REACH VILLAGES & PROPOSED ROADS

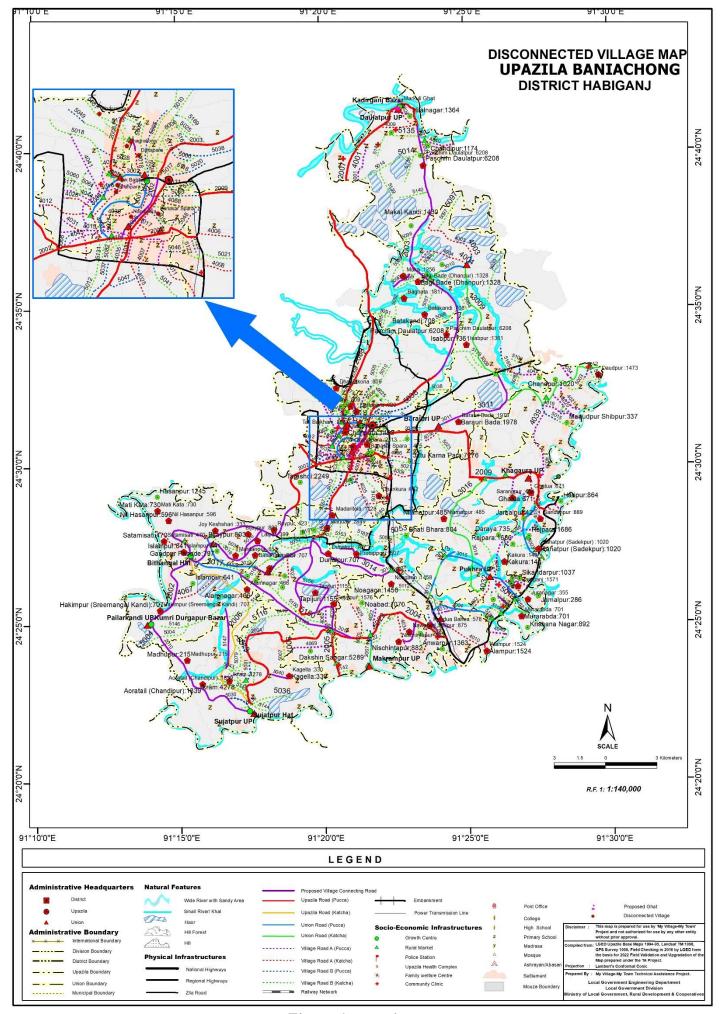


Figure 6: Upazila Map

6 CONSULTATION MEETING & FIELD VISIT

6.1 UPAZILA LEVEL MEETING

The consultant arranged a meeting at Upazila conference room with the support of the UE office, Baniachong that was participated by UNO, UE and all the UP Chairmen & their secretaries.



Figure 7: Upazila level Consultation Meeting

During the meeting, consultant team briefly discussed about the project and instructed the UP Chairmen and UE office for the database correction along with mapping procedure. The team worked on both the database and Upazila map and obtained the necessary outputs subsequently.

6.2 VISIT TO CASE STUDY UNION

The team visited 'Kagapasa', the case study Union in Baniachong Upazila, through the alignment "Baniachang Gc - Markuli Road. (Kadirgonj Gc)" having the Road ID: 636112003. The road was selected for the site visit considering the beneficiary population, educational institutes along the road and the recommendations of the UE Office as the road has a priority within the Union.

The consultant observed and collected necessary information for the study discussing inhabitants and UE office. Team recorded GPS data, interviewed road users and took photos of the alignment condition.



Figure 8: Condition of the visited road alignment at case study Union

The length of this road is 12.4 km, having 2.12km paved, 1.85 HBB and 10.59 km earthen. Since the road connects Makal Kandi village but it connects total kagapasa Union with the population of approx. 20000. People living here doesn't have any good road network with the Upazila HQ due to having unpaved road communication. During monsoon, the road becomes partially inundated. A bridge (180 m) is required at the very beginning of this road.

7 DATA COLLECTION & ANALYSIS

The consultant collected data from the field on hard to reach/ Hard-to-Reach Villages. Data were collected of those villages including population, road alignment information (*type*, *length*, *condition*), travel time, structure required on the alignment, potential riverine routes that can be used for multi-modal transport system etc. The data 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.

7.1 Proposed Riverine routes

As per actual field visit and data analysis from haor development board, Baniachong Upazila is a deep haor territory. Around 90% of the total area is floodplain zone. About 6 (six) rivers are flowing over the Upazila, known as Puran Kushiara, Ratna, Shutki, Jhingri, Beramohona Yara & Shakha Borak. According to the UE, Baniachong there exists two riverine routes that can be used as multi-modal transport system only during monsoon when the water depth is adequate for the navigation. Generally Small Boat, Engine Boat are used during this part of the year to transport community & commodity.

The name of the riverine routes & the associated streams with types of water vehicle are as follows:

Table 3: Proposed riverine routes of the Upazila

Sl. No	Name of the Riverine Route	Name of the Stream	Type of the Stream	Types of Water Vehicle	Need of excavation
1	Adarsha Bazar to Chamakpur, Holimpur Via Bogi	Gorer Khal, Kushiara River	Intermittent (April – Aug)	Small Boat, Engine Boat	Yes
2	Ratna Bazar to Kumri Durgapur (Abdullahpur)	Old Kushiara River	Intermittent (April – Aug)	Small Boat, Engine Boat	Yes

7.2 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 the road communication effective. Yet, 13 (thirteen) bridges are needed to fulfil the purpose.

Table 4: Summary of the rural roads in the Upazila

Total Road Length of	Paved Length	Unpaved	Length of unpaved roads of
the Upazila (KM)	(KM)	Length (KM)	Hard-to-Reach Villages (KM)
721.79	240.31	481.48	146.37

7.2.1 PROPOSED ALL WEATHER ROUTES:

There are 19 all weather 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 5: Proposed all weather roads in the Upazila

Sl.	Table 5: Proposea all w	Unpaved		
No	Road Name	Road ID	Road Condition	length (Km)
1	Baniachong GC-Sujatpur Road Via G/s,M/up & N-S sanggor	636112005	All Weather	10.001
2	Baniachong Gc - Kumri Durgapur Gc Via Jonab Ali Collage & bithangal Gc.	636112002	All Weather	22.88
3	Habiganj -Sujathput Road (Tupiajuri) -Bithangal Gc road via Augua, Mondari UP Office, Bijoypur.	636113017	All Weather	8.26
4	Kagapasa Bazar-Baraiuree up office Road.	636113011	All Weather	6.5
5	Baniachong Hobigonj R&H Road - Protappur Road Via Monduri Road.	636115108	All Weather	4
6	Kaorakandi high school — Ujinnahati via Topiajori primary school road.	636115156	All Weather	4
7	Grob hossain Pry.School to Chanpar pucca Rd.via purbo grorib Hossain mohilla mosjid Road	636115067	All Weather	0.38
8	Baniachong Hobigonj R&H Road - Anowerpur Village Road.	636115114	All Weather	0.62
9	Khagaura Pucca Road to Rajpara Village via Hospital	636115078	All Weather	0.77
10	Kalainjora Bazar point - Noagoan Edghah Road Via betkandi.	636115102	All Weather	1.395
11	daulatpur Mazer - daulotpur Khal Road.	636115107	All Weather	1.195
12	Noapatharia mosque to Puran patharia Moragrangarpar C/B road	636115026	All Weather	1.86
13	Pukra UP Office -Kandipara Village Road Via Darowa , Shatgram High School	636114049	All Weather	0.85
14	Khabilpur-Noabad road	636115009	All Weather	1.81
15	Ratna Bazar-Murad pur Up Office Road Via, Sunampur & Dulal pur	636113014	All Weather	8.15
16	Habigonj - Nabigonj R7 H Road (Balikhal) To Moroabda Village Road	636115073	All Weather	2
17	Uzirpur Khagaura Road - Rajpara Kuranagor Village Road	636115063	All Weather	0.986
18	Habigonj -Sujath pur Road - Kenduboha Village Via Nowapatharia	636115042	All Weather	2.2

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
19	Ekram GCCR Road To Kagalia VIllage Road	636115040	All Weather	2

7.2.2 Proposed Submersible Routes:

There are 9 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 6: Proposed submersible roads in the Upazila

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
1	Baniachang Gc-Markuli Road. (Kadirgonj Gc)	636112003	Submersible	18.48
2	Sujatpur Gc-Kumree Durgapur Gc Road Via Bajukha	636112010	Submersible	12.64
3	Noabad Nodir Mukh - Satamukha GCCR Road Via Hanif Khan High School	636114064	Submersible	4.5
4	Kagapasa-Harumi Road.	636114004	Submersible	8.46
5	Balia hati Chamakpur (Football filed) - Suta River Road.	636115090	Submersible	3
6	Bijoy Pur Village to Poilankandi Village Via Bithongal Baro Akhara	636115076	Submersible	4.5
7	Muradpur Bazar-Monduri up office	636113018	Submersible	6.5
8	Bithangoal Bazar -Rasul Pur Village Road Via Mati Kata	636114067	Submersible	1.8
9	Pailar kandi Ratna Bajar-Bosonto Pur via Ikram Bajar Road.	636115147	Submersible	6.63

7.2.3 Proposed Roads for Hard-to-Reach Villages Having No ID:

There are no roads proposed to connect the HTRV within the Upazila that have no ID yet.

7.2.4 PRIORITY FOR ROAD DEVELOPMENT

Considering resources constraint, benefited group of people, 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 7: 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 same score. At these cases, the minimum budget required for providing connectivity to thousand people- will get more priority compared to more budget required roads. The roads bearing ID will have the higher priority than the roads without ID.

8 CONCLUSION & RECOMMENDATIONS

- ➤ Baniachong Upazila is a Deeply Flooded zone that is located between *Sylhet & Mymensingh Haor Basin*. There are 6 (six) major rivers that dominate the ecosystem, transport system of the Upazila. That are Puran Kushiara, Ratna, Shutki, Jhingri, Beramohona Yara & Shakha Borak rivers. During monsoon, these rivers carry huge volume of flood water. Though the Upazila has a number of rivers, riverine transport is available in this Upazila. Small boats, Engine boats carrying agricultural products and passengers during monsoon.
- 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 33 Hard-to-Reach Villages. To develop rural connectivity, there are proposals for both the 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, the vulnerability is getting intense. The year 2022 has shown catastrophic flood that was not seen over the last 18years (*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 Upazila Baniachong in Habiganj District is highly recommended.

ANNEXURE - 1

DETAILS OF GROWTH CENTER & HATBAZAR

		ory	13	ory	ory				.=	Land	l Area (A	Acre)	T	Ţ
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)	Toha	Khas	Private	Lease/ Khas Collection BDT (2020)	Lease/ Khas Collection BDT (2019)
Uttar Purba Baniachang	Baniachang bazar	GC	Yes	General Market	Both	1	800	4.50	800	0.10	0.30	4.20	595000	5800
Uttar Paschim Baniyachang	5/6 #Bazar	НВ	Yes	General Market	Wholesale	1	75	1.91	75	0.00	1.91	0.10	480000	406000
Sujatpur	Ekram Bazar	НВ	Yes	General Market	Wholesale	1	56	0.87	56	0.35	0.35	0.87	468240	255300
Sujatpur	Sujatpur bazar	GC	Yes	General Market	Wholesale	1	83	0.46	83	0.22	0.22	0.46	47040	45200
Muradpur	Bithangal bazar	GC	Yes	General Market	Wholesale	1	0	0.00	0	0.83	0.83	0.00	16200	193120
Pailarkandi	Kumri durgapur bazar	GC	Yes	General Market	Wholesale	1	61	0.41	52	1.27	1.27	0.41	16200	110150
Uttar Paschim Baniyachang	Ardasha Bazar	НВ	Yes	General Market	Wholesale	1	125	0.63	125	0.15	0.63	0.30	13000	12900
Muradpur	Muradpur Bazar	НВ	Yes	General Market	Wholesale	1	0	0.00	0	0.07	0.07	0.00	6660	31520
Pukhra	Aliganj Bazar	НВ	Yes	General Market	Wholesale	1	4	0.02	4	0.14	0.34	18.00	5270	5270
Mandari	Uttar Sangar Bazar	НВ	No	General Market	Wholesale	1	63	0.45	65	1.27	0.00	0.20	3000	3000
Khagaura	Ujirpur Bazar	НВ	No	General Market	Wholesale	1	0	0.00	0	0.00	0.00	0.00	0	0
Dakshin Purba Baniyachang	Galingganj Bazar	НВ	No	General Market	Wholesale	1	0	0.00	0	0.00	0.00	0.00	0	0

		çory	1;	yory	jory		i		•=	Land	d Area (A	Acre)	T	Ħ	
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)	Toha	Khas	Private	Lease/ Khas Collection BDT (2020)	Lease/ Khas Collection BDT (2019)	
Daulatpur	Chak Bazar	НВ	No	General Market	Wholesale	1	0	0.00	0	0.00	0.35	0.10	0	0	
Kagapasha	Kagapaspasha Bazar	НВ	No	General Market	Wholesale	1	0	0.00	0	0.07	1.50	0.65	0	0	
Khagaura	Gunay Bazar	НВ	No	General Market	Wholesale	1	0	0.00	0	0.00	0.00	0.00	0	0	
Khagaura	Khagaura Bazar	НВ	No	General Market	Wholesale	1	0	0.00	0	0.00	0.00	0.00	0	0	
Subidpur	Ratna Bazar	НВ	No	General Market	Wholesale	1	0	0.00	0	0.00	0.00	0.00	0	0	
Uttar Paschim Baniyachang	Babur Bazar	НВ	No	General Market	Wholesale	1	0	0.00	0	0.00	0.00	0.00	0	0	
Baraiuri	Kalainjura Bazar	НВ	No	General Market	Wholesale	1	2	0.00	0	0.10	0.00	2.10	0	0	
Baraiuri	Kodupur Bazar	НВ	No	General Market	Wholesale	0	0	0.00	0	0.05	0.00	0.00	0	0	
Daulatpur	Kadirganj bazar	GC	No	General Market	Wholesale	1	0	0.00	0	0.00	0.00	0.00	0	0	
Kagapasha	Anada Bazar	НВ	No	General Market	Wholesale	1	15	0.15	15	0.00	0.15	1.00	0	0	
Khagaura	Ghatua Bazar	НВ	No	General Market	Wholesale	1	0	0.00	0	0.00	0.00	0.00	0	0	
Makrampur	Hiwala Bazar	НВ	No	General Market	Wholesale	1	0	0.00	0	0.00	0.00	0.00	0	0	
Pukhra	Balikhal Bazar	НВ	No	General Market	Wholesale	1	0	0.00	0	0.00	0.00	0.00	0	0	

PRIORITY LIST FOR ROAD DEVELOPMENT

PRIORITI LIST FOR ROAD DEVELOPMENT																								
Priority	Connecting Union	Connecting Village	Population 2021 (Based on BBS 2011)	Road Name	Road ID	Road Type	Road Type by Surface Condition	Total Road Length (10+11+12)	Paved length (km)	HBB Length (km)	Unpaved length (km)	HBB + Unpaved (11+12) in (km)	Approx. Cost of Road (lac)	Structure/ Gap (meter)	Cost of Structure (in Lac)	Total Cost (in lac) (Roads + Structures)	Population /KM (4÷13)	Tentative Budget/1000 Population (in lac)	Travel Time (in min)	Weightage for Population	Weightage for Travel Time	Weightage for Cost per 1000 Population	Weightage for Road Type	Total Weightage (21+22+23+24)
1	2	3	3 4 5		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	Doulatpur, Uttar Purbo Baniachong, Kagapasha	Paschim Daulatpur, Jamalpur, Makal Kandi	9693	Baniachang Gc-Markuli Road. (Kadirgonj Gc)	636112003	UZR	Submersible	25.503	5.873	1.15	18.48	19.63	3533.4		0	3533.4	494	365	277	30	20	25	25	100
2	Dakshim Paschim Baniachong, Makrampur, Mandari, Sujatpur	Madaritola, Dakshin Sangar, Mandari, Sujatpur	12006	Baniachong GC-Sujatpur Road Via G/s,M/up & N-S sanggor	636112005	UZR	All Weather	20.021	10.02	0	10.001	10.001	1200.12		0	1200.12	1201	100	150	30	18	25	25	98
3	Dakshim Paschim Baniachong, Uttar Purbo Baniachong, Pailarkandi, Muradpur	Tarashoi, Nandipara, Hasimpur, Joy Keshari	6189	Baniachong Gc - Kumri Durgapur Gc Via Jonab Ali Collage & bithangal Gc.	636112002	UZR	All Weather	27.8	4.87	0.05	22.88	22.93	2751.6		0	2751.6	270	445	343	25	20	25	25	95
4	Mandari	Mandari	3264	Habiganj -Sujathput Road (Tupiajuri) -Bithangal Gc road via Augua, Mondari UP Office, Bijoypur.	636113017	UNR	All Weather	11	2.74	0	8.26	8.26	991.2		0	991.2	395	304	124	20	18	25	20	83
5	Boroiuri	Baraiuri Bada	2266	Kagapasa Bazar-Baraiuree up office Road.	636113011	UNR	All Weather	13	6.5	0	6.5	6.5	780		0	780	349	344	98	20	16	25	20	81
6	Sujatpur	Aoratail	2107	Sujatpur Gc-Kumree Durgapur Gc Road Via Bajukha	636112010	UZR	Submersible	12.64	0	0	12.64	12.64	2275.2		0	2275.2	167	1080	190	20	20	15	25	80
7	Subidpur	Protappur	1833	Baniachong Hobigonj R&H Road - Protappur Road Via Monduri Road.	636115108	VRB	All Weather	4	0	0	4	4	480		0	480	458	262	60	18	16	25	12	71
8	Mandari	Tupijuri	1323	Kaorakandi high school –Ujinnahati via Topiajori primary school road.	636115156	VRB	All Weather	4	0	0	4	4	480		0	480	331	363	60	18	16	25	12	71
9	Sujatpur	Nawabad Jalilpur	1003	Noabad Nodir Mukh - Satamukha GCCR Road Via Hanif Khan High School	636114064	VRA	Submersible	4.5	0	0	4.5	4.5	810		0	810	223	808	68	18	16	20	15	69
10	Kagapasha	Bagi Bad	1522	Kagapasa-Harumi Road.	636114004	VRA	Submersible	8.46	0	0	8.46	8.46	1522.8		0	1522.8	180	1001	127	18	18	15	15	66
11	Uttar Paschim Baniachong	Chandpara	1375	Grob hossain Pry.School to Chanpar pucca Rd.via purbo grorib Hossain mohilla mosjid Road	636115067	VRB	All Weather	0.612	0.232	0	0.38	0.38	45.6		0	45.6	3618	33	6	18	10	25	12	65
12	Subidpur	Anowarpur	1719	Baniachong Hobigonj R&H Road - Anowerpur Village Road.	636115114	VRB	All Weather	1	0.15	0.23	0.62	0.85	102		0	102	2022	59	9	18	10	25	12	65
13	Khagaura	Rajpara	1932	Khagaura Pucca Road to Rajpara Village via Hospital	636115078	VRB	All Weather	1.252	0.202	0.28	0.77	1.05	126		0	126	1840	65	12	18	10	25	12	65
14	Boroiuri	Kalinjura	1770	Kalainjora Bazar point - Noagoan Edghah Road Via betkandi.	636115102	VRB	All Weather	1.5	0	0.105	1.395	1.5	180		0	180	1180	102	21	18	10	25	12	65
15	Pakura	Daulatpur	1729	daulatpur Mazer - daulotpur Khal Road.	636115107	VRB	All Weather	1.5	0	0.305	1.195	1.5	180		0	180	1153	104	18	18	10	25	12	65
16	Makrampur	Noa Patharia	1734	Noapatharia mosque to Puran patharia Moragrangarpar C/B road	636115026	VRB	All Weather	1.86	0	0	1.86	1.86	223.2		0	223.2	932	129	28	18	10	25	12	65
17	Pakura	Daraya	842	Pukra UP Office -Kandipara Village Road Via Darowa , Shatgram High School	636114049	VRA	All Weather	3.13	2.15	0.13	0.85	0.98	117.6		0	117.6	859	140	13	15	10	25	15	65
18	Makrampur	Noabad	1226	Khabilpur-Noabad road	636115009	VRB	All Weather	1.81	0	0	1.81	1.81	217.2		0	217.2	677	177	27	18	10	25	12	65
19	Kagapasha	Maka	1439	Balia hati Chamakpur (Football filed) - Suta River Road.	636115090	VRB	Submersible	3	0	0	3	3	540		0	540	480	375	45	18	10	25	12	65
20	Pailarkandi	Bijaypur	920	Bijoy Pur Village to Poilankandi Village Via Bithongal Baro Akhara	636115076	VRB	Submersible	4.5	0	0	4.5	4.5	810		0	810	204	880	68	15	16	20	12	63
21	Muradpur	Mardanpur	748	Muradpur Bazar-Monduri up office	636113018	UNR	Submersible	6.5	0	0	6.5	6.5	1170		0	1170	115	1564	98	15	16	12	20	63
22	Mandari	Dunalpur	810	Ratna Bazar-Murad pur Up Office Road Via , Sunampur & Dulal pur	636113014	UNR	All Weather	11.27	3.12	0	8.15	8.15	978	130	1170	2148	99	2652	122	15	18	10	20	63
23	Pakura	Murarabda	803	Habigonj - Nabigonj R7 H Road (Balikhal) To Moroabda Village Road	636115073	VRB	All Weather	2	0	0	2	2	240		0	240	402	299	30	15	10	25	12	62
24	Khagaura	Khura Nagar	304	Uzirpur Khagaura Road - Rajpara Kuranagor Village Road	636115063	VRB	All Weather	1.986	1	0	0.986	0.986	118.32		0	118.32	308	390	15	15	10	25	12	62
25	Makrampur	Kendua Bahea	662	Habigonj -Sujath pur Road -Kenduboha Village Via Nowapatharia	636115042	VRB	All Weather	3.2	1	0	2.2	2.2	264		0	264	301	399	33	15	10	25	12	62
26	Sujatpur	Kagella	378	Ekram GCCR Road To Kagalia VIllage Road	636115040	VRB	All Weather	2	0	0	2	2	240		0	240	189	635	30	15	10	20	12	57
27	Muradpur	Islampur	734	Bithangoal Bazar -Rasul Pur Village Road Via Mati Kata	636114067	VRA	Submersible	1.8	0	0	1.8	1.8	324	73	657	981	408	1336	27	15	10	15	15	55
28	Pailarkandi	Alamnagar	534	Pailar kandi Ratna Bajar-Bosonto Pur via Ikram Bajar Road.	636115147	VRB	Submersible	6.63	0	0	6.63	6.63	1193.4	80	720	1913.4	81	3584	99	15	16	10	12	53

^{***} 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 per1000 people= 25, Road Hierarchy= 25)