



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”

**Kulaura, Moulvibazar**



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DATA EXPERTS  
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July, 2022



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## GLOSSARY

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**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

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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

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### 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 Minister 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 **Kulaura** Upazila of **Moulvibazar** District.



# 1 DESCRIPTION OF THE UPAZILA

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## 1.1 GEOGRAPHY AND DEMOGRAPHY

The geographical area of Kulaura Upazila is 545.73 square kilometers and has 13 Unions, 128 mouza and 451 villages. The Upazila is 64 km away from District headquarters of Moulvibazar. Kulaura is partly covered by a major haor i.e., *Hakaluki Haor* and there exists 2 rivers flowing over the Upazila, Manu & Fanai. The total population of the Upazila is 3,60,195 of which 1,75,832 are male and 1,84,363 female, total number of households are 66,465 and average household size is 5.41 with a population density of 660 (as per population census 2011).

## 1.2 EDUCATION FEATURES

According to the information of the relevant local government offices there are 130 government primary, 51 registered primary, 14 non-government primary, 164 NGO and 48 kindergarten schools in the Upazila. There also exists, 36 non-government secondary schools, 4 school & college (operates jointly), 4 non-government colleges, and 46 madrasahs in the Upazila. The students who attend these educational institutes from remote areas face difficulty to reach school because of poor road communications especially in the rainy season. The literacy rate for the Upazila is 51.9% as per BBS 2011.

## 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 Kulaura Upazila is contrasted. Out of 469 villages 182 are disconnected from the developed paved road network that brings huge sufferings for the people of the villages. The total rural road network of Kulaura is 1135.68 km and out of that, 381.01 km is paved and 754.67 km earthen.

## 1.4 AGRICULTURE, FOOD PRODUCTION AND FISHERIES

Agriculture has a major influence to the people of Kulaura. There are 65,758 acres of arable land in the Upazila. In the fiscal year 2010-11 the Rice production was 17082, 50959 & 82463 metric tons for Aus, Aman & Boro seasons respectively. The Upazila also produced 7039 metric tons of Potato and 1204 metric tons of Sugarcane in the same fiscal year 2010-11.

According to the BBS (2010-11) data Kulaura has 37,851 acres of haor, pond & dhighee that produced 1,500 metric tons of fishes. There also exists 214 poultry & 19 dairy farms. The agricultural products are adequate to meet the demand of the Upazila and surpluses are sold to outside of Kulaura.

## 1.5 GROWTH CENTRE AND HATBAZAR

Growth Centre and Rural Hatbazar 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 36 hatbazar and 4 growth centres 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 [Annexure-I](#).

## 2 LOCATION OF THE UPAZILA

Kulaura Upazila is in the North - Eastern part of the country under Moulvibazar District in Sylhet division. The location has been shown in the map. The Upazila is adjacent to the Indian border with Assam state. It is located within the floodplain zone of Sylhet Haor Basin. The Upazila possesses a certain portion of the '*Hakaluki Haor*', the largest freshwater wetland in Bangladesh.that is actually a lowland under Kushiya River Basin. There exists two river that dominates the ecosystem of the Upazila, known as Manu & Fanai. The river Manu is a trans-boundary river, rises in the mountains of Tripura, India. After its initial rapid passage through mountainous terrain, it slows and meanders during its course. It joins the Kushiya River at Manumukh in the District of Moulvibazar. The river carries particularly high volumes of water during monsoon causes flashflood and waterlogging within the haor basin for almost half the year. During monsoon, all the scattered beels are united as one large lake, or haor, making *Hakaluki Haor*. Flash floods induce severe impacts in both the built and the natural environment. The effects of floods can be catastrophic and show extensive diversity, ranging from damages in buildings and infrastructure to impacts on vegetation, human lives and livestock.

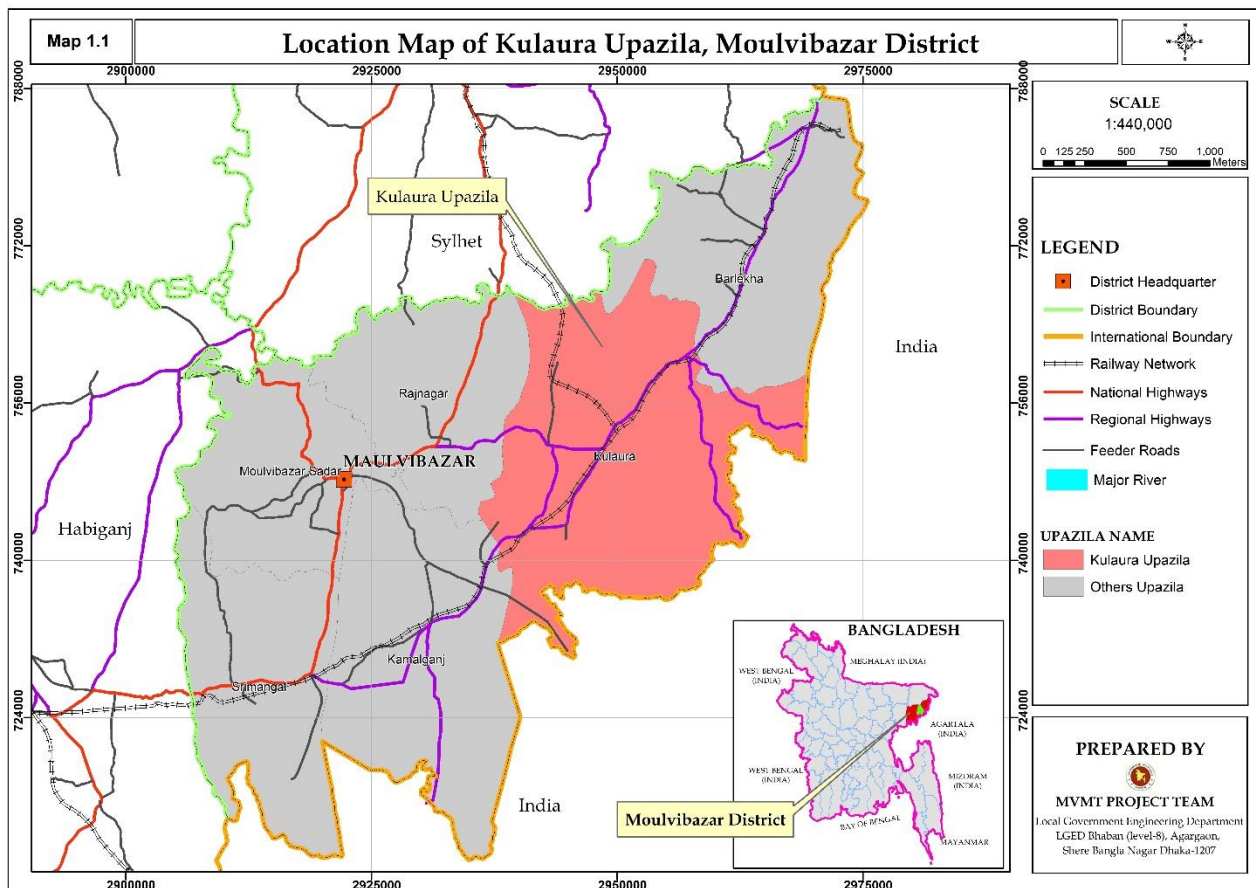


Figure 1: Upazila Location Map.

## 3 APPROACH & METHODOLOGY

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### 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') was 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 team. LGED and LGI representatives were surveyed each Upazila for 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

### 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 non-farm 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.

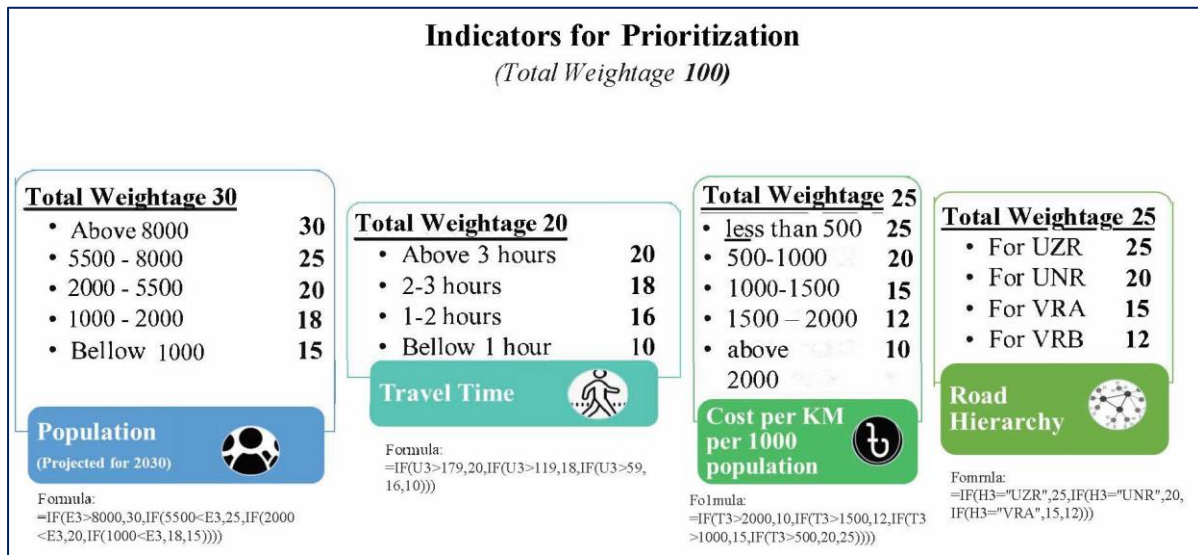


Figure 2: Prioritization indicators & their weightage values

### 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 DESCRIPTION OF WETLANDS

### 4.1 DISTRIBUTION OF THE HAORS/ WETLANDS

The Upazila has a large portion of floodplain zone that covers almost 10% 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.

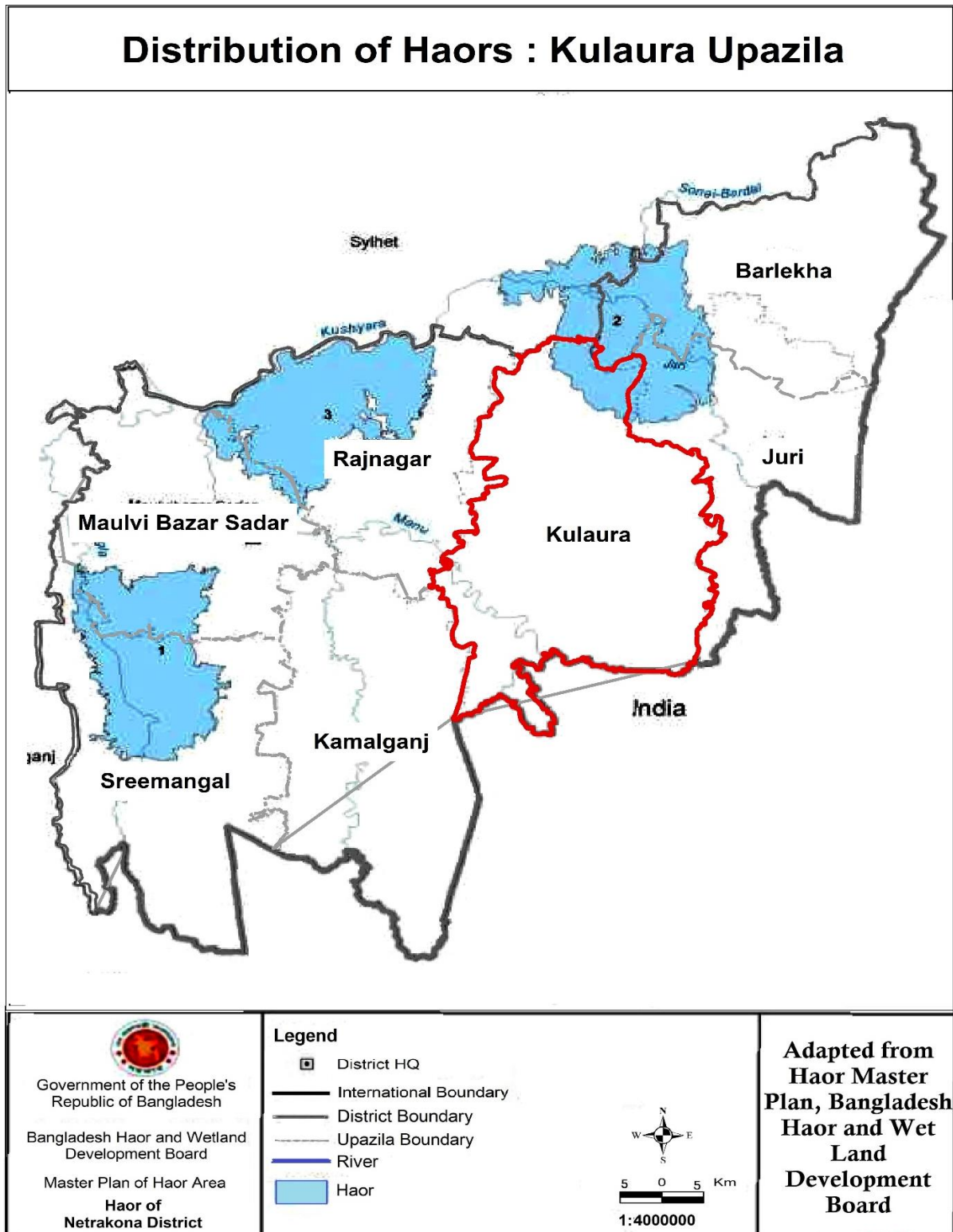


Figure 3: Haor Distribution Map

## 4.2 HAOR/ WETLAND CATEGORY

However, the Upazila is deeply flooded zone. Therefore, road or other infrastructure development in this Upazila has no major environmental consequences.

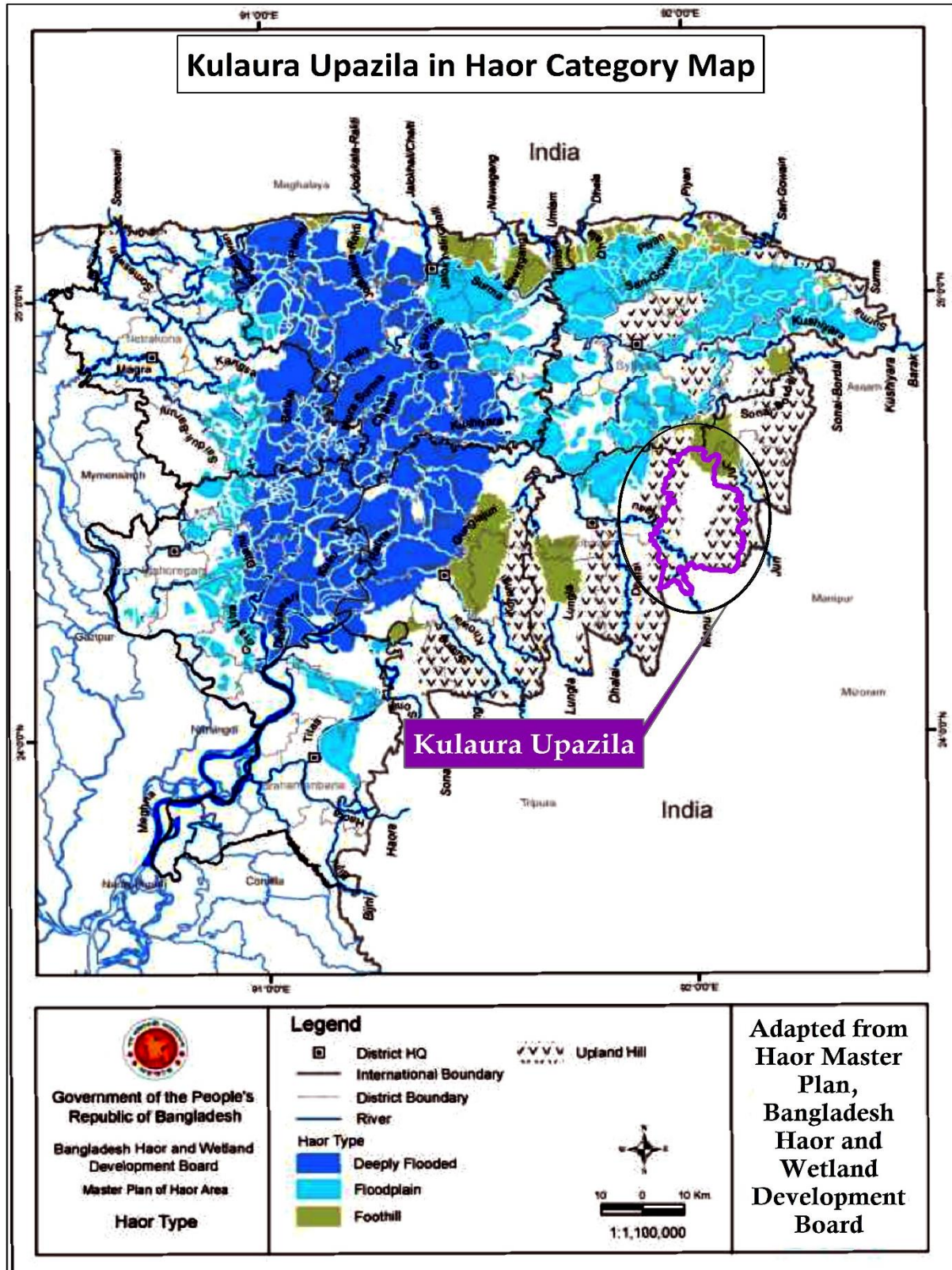


Figure 4: Haor Category Map.

### 4.3 BIO-ECOLOGICAL CHARACTERISTICS

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

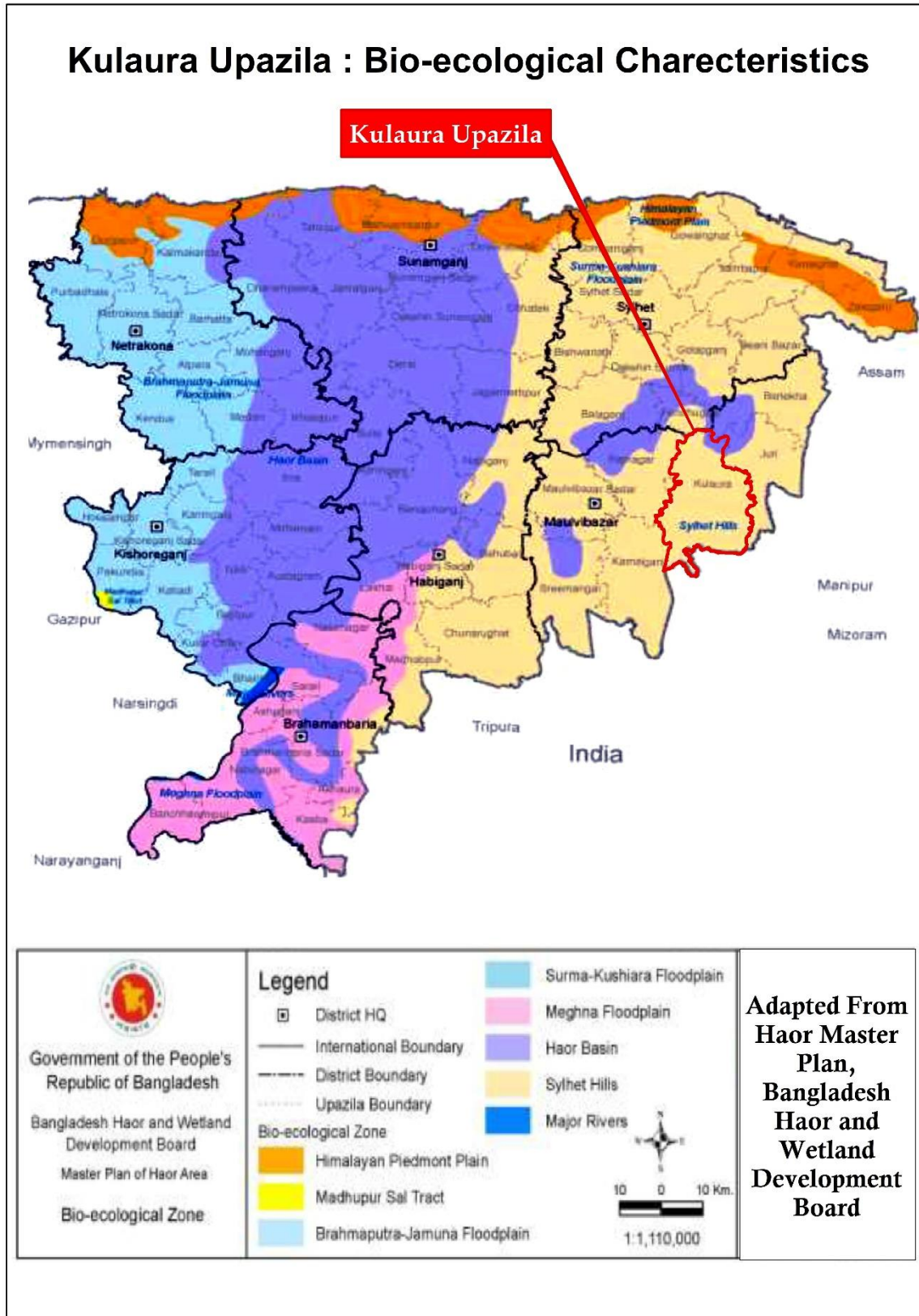


Figure 5: Bio Ecological Characteristics Map

## 5 RURAL ROAD CONNECTIVITY TO THE VILLAGES

### 5.1 SUMMARY OF THE VILLAGE CONNECTIVITY

Kulaura is an Upazila with major haors. The rural road communication is quite poor here. Out of 451 villages 57 villages are disconnected from the developed paved road network that brings huge sufferings for the people of the villages. The total rural road network of Kulaura is 1135.68 km and out of that, 381.01 km is paved and 754.67 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	Baramchal	46	44	2
2	Bhakshimail	19	16	3
3	Bhatera	26	19	7
4	Brahman Bazar	40	35	5
5	Hajipur	44	40	4
6	Joychandi	34	33	1
7	Kadirpur	27	26	1
8	Karmadha	53	45	8
9	Kulaura	24	23	1
10	Prithempasha	39	36	3
11	Routhgaon	29	21	8
12	Sharifpur	25	17	8
13	Tilagaon	45	39	6
<b>Total =</b>		<b>451</b>	<b>394</b>	<b>57</b>

### 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)
Baramchal (46)	1	Akimpur	1071	Itakhola (Part)	603
	2	Akramnagar	723	Karaitala	319
	3	Alinagar	2192		
	4	Amchari Punji	133		
	5	Bhutiura	163		
	6	Birimipur	242		
	7	Chandrakhola	258		
	8	Dakshin Rauthgaon (Lamapara)	217		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)	
	9	Dakshin Rauthgaon Fakir Para	258			
	10	Dakshin Rauthgaon Ujanpara	308			
	11	Dholipara	207			
	12	Haripur	317			
	13	Ichhlachhara Panpunji	297			
	14	Islamabad	1069			
	15	Islamabad Dakshin	316			
	16	Jalalpur	72			
	17	Kaliarghar	304			
	18	Khadimpara	903			
	19	Konagaon	222			
	20	Kumedpur	0			
	21	Lamapara	235			
	22	Madhabpur	624			
	23	Mazipara	317			
	24	Mohlal	143			
	25	Morujpur	210			
	26	Musehpur	118			
	27	Nandanagar	756			
	28	Nandannagar Uttar	119			
	29	Nandannagar Uttar(Lamapara)	152			
	30	Nandannagar(Mission)	131			
	31	Osmanpur	838			
	32	Paschim Singur	630			
	33	Pathanpara	86			
	34	Purba Singur	429			
	35	Rafinagar	377			
	36	Rautgaon uttar	974			
	37	Sing Gurpanpunji	251			
	38	Singor	311			
	39	Singur Grazing	879			
	40	Sirajnagar T.e.	479			
	41	Station	103			
	42	Tikra	0			
	43	Ujanpara	843			
	44	Uttar Bagh	630			
	<b>Sub Total=</b>			<b>18906</b>		<b>921</b>

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
Bhakshimail (19)	1	Bade Bhakshimail	3202	Bhakshimail	4996
	2	Bade Bhakshimail	662	Chilarkandi	981
	3	Baradal	1174	Jalalpur	526
	4	Chhakapan	1087		
	5	Gaurkaran	1005		
	6	Jabda	1507		
	7	Khalesar	930		
	8	Khanehath	1003		
	9	Korbanpur	1384		
	10	Madangauri	920		
	11	Maheshgauri	1169		
	12	Mirsankar	2137		
	13	Muktajipur	1325		
	14	Nabipur	118		
	15	Shadipur	3097		
	16	Shasharkandi	1298		
			<b>Sub Total=</b>	<b>22018</b>	
Bhatera (26)	1	Baramchal T.g.	2544	Bara Mataka	257
	2	Bhabanipur	676	Baragaon	482
	3	Bhatera Hills R.f.	0	Hosenpur	520
	4	Bherufuri	441	Jagatpur	746
	5	Dakshinbagh	943	Khamaura	560
	6	Dulkapar	445	Sahamir	319
	7	Islam Nagar	1951	Singhanad	998
	8	Kalimabad	732		
	9	Kalimabad (part)	1240		
	10	Khar Para	1064		
	11	Khatgaon	266		
	12	Krishnapur	957		
	13	Maijgaon	2005		
	14	Marabhuian	803		
	15	Pukuria	11		
	16	Rabarbagan	182		
	17	Radhanagar	760		
	18	Sreepur	1058		
	19	Tulapur	544		
		<b>Sub Total=</b>	<b>16622</b>		<b>3882</b>
Brahman Bazar (40)	1	Adampur	464	Dakshin Para	412
	2	Ainachhara Punji	37	Maulvigaon	503
	3	Areepur	738	Nabinagar	1200
	4	Basudebpur	131	Nasirabad	945
	5	Brahmanbazar	530	Sherpur	422

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)	
	6	Chakergram	1723			
	7	Dakshin Hingaljia	2077			
	8	Daudpur	1014			
	9	Gazipur	1313			
	10	Gobindapur	879			
	11	Gurabhui	3696			
	12	Halichhara	980			
	13	Harinagar	244			
	14	Helapur	815			
	15	Hingajia T.e.	2470			
	16	Islampur	37			
	17	Kanopattri	283			
	18	Khumia	542			
	19	Konagaon	437			
	20	Lamapara	760			
	21	Luauni T.e.	1271			
	22	Madhya Hingaljia	1501			
	23	Mirzapur	1909			
	24	Moka Bil	64			
	25	Monaharpur	300			
	26	Nachni	860			
	27	Noagaon	219			
	28	Palakona	344			
	29	Pashchim Jalalabad	941			
	30	Purba Jalalabad	820			
	31	Rajapur	582			
	32	Satra	776			
	33	Tatura	80			
	34	Tilagaon	558			
	35	Uttar Hingaljia	1479			
			<b>Sub Total=</b>	<b>30873</b>		<b>3482</b>
	Hajipur (44)	1	Balia	724	Daudpur	634
		2	Bangaon	0	Ismailpur	702
		3	Bara Kharbari	99	Madanagar	583
		4	Baraigaon	492	Sukhonbai	1177
5		Basree	226			
6		Bhuigaon	2140			
7		Chak Ranchap	501			
8		Chandgaon	1204			
9		Chwsala	368			
10		Dakshim Pabai	823			

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)	
	11	Dakshin Baraigaon	826			
	12	Fulpur	139			
	13	Gazipur (Jalalpur)	229			
	14	Gopalpur	261			
	15	Hajipur	2514			
	16	Hari Chak	479			
	17	Hashimpur	1035			
	18	Kachumulirpar	2997			
	19	Katairpar	379			
	20	Katarkona	2218			
	21	Kaukapun	1954			
	22	Kaukapun Dargah	0			
	23	Keolakandi	1519			
	24	Madhabpur	927			
	25	Mandira	296			
	26	Manu Bazar	152			
	27	Mirergaon	442			
	28	Mitra Gaon	89			
	29	Mozampur	2140			
	30	Nayagaon	104			
	31	Pabai	1880			
	32	Paikpara	694			
	33	Rajanpur	872			
	34	Rampur	344			
	35	Ranchak	1471			
	36	Sadanpur	356			
	37	Sultanpur	214			
	38	Tukli	351			
	39	Urpibhag 1	62			
	40	Uttar Palki	458			
			<b>Sub Total=</b>	<b>31979</b>		<b>3096</b>
	Joychandi (34)	1	Abu Talebpur	591	Noakhalipara	401
		2	Begamanpur	858		
		3	Bijaya T.e.	879		
		4	Bithang Jalai	706		
		5	Clevedon T.e.	2322		
		6	Dakshin Dildarpur	962		
		7	Dakshin Giasnagar	1540		
		8	Danapur	1117		
		9	Dildarpur T.e.	1142		
10		Durgapur	816			



Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)	
	11	Gaurisalkar	1591			
	12	Gazipur	1305			
	13	Ghagtiea	1353			
	14	Gogali Chhara	818			
	15	Hariharpur	423			
	16	Janki Jalie	765			
	17	Jaychandi	981			
	18	Kamer Kandhi	2129			
	19	Kuta Goan	577			
	20	Layarhigh	584			
	21	Marina T.e	1575			
	22	Mir Bakspur	365			
	23	Mirsankar	1575			
	24	Mithupur	285			
	25	Panchpir Jalai	1905			
	26	Purondhorpur	129			
	27	Pusainagar	1650			
	28	Rajapur	250			
	29	Ram Pasha	736			
	30	Rangirkul	2255			
	31	Roy Gram	332			
	32	Uttar Giasnagar	754			
	33	Uttar Kulaura	2241			
			<b>Sub Total=</b>	<b>35515</b>		<b>401</b>
	<b>Kadirpur (27)</b>	1	Alipur	85	Chunghar	2711
		2	Antali	681		
		3	Chatalgaon	799		
		4	Chhakapan	1769		
		5	Faridpur	883		
		6	Gobindapur	657		
		7	Gopinathpur	123		
		8	Guptagram	1243		
		9	Hashimpur	323		
10		Husenpur	1624			
11		Kadipur	929			
12		Kadirpur	580			
13		Kaki Char	799			
14		Kawla Rashi	1569			
15		Kiatala	635			
16		Lakshmipur	650			
17		Maintaim	408			

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	18	Mansur	5376		
	19	Nagamatpur	266		
	20	Ningiray	183		
	21	Noagaon	181		
	22	Rafinagar	393		
	23	Sultan Pur	280		
	24	Tilakpur	262		
	25	Uchail	267		
	26	Uttar Kawla	1133		
			<b>Sub Total=</b>	<b>22095</b>	
Karmadha (53)	1	Amuli Punji	147	Bad Pasha	3055
	2	Asgarabad T.g.	297	Dighalkandi	1968
	3	Babnia	996	Fdatikuli	1041
	4	Bahattia	572	Icha Chhara Punji	235
	5	Barua Kandi	62	Murai Chhara Basti	877
	6	Begun Chhara	84	Murai Chhara T.e.	804
	7	Beri	351	Purba Fdatikuli	1941
	8	Bhandarigaon	173	Purba Tatruli	2320
	9	Chalta Chara Punji	212		
	10	Doalgram	849		
	11	Gutumpur	361		
	12	Hasinpur	2428		
	13	Hasnabad	597		
	14	Ichi Punji (High Hill)	140		
	15	Jhamai Punji	33		
	16	Kaliti T.e.	2454		
	17	Karmoda	2541		
	18	Katabari Punji	31		
	19	Kukijuri Punji	233		
	20	Lakshmipur T.e.	341		
	21	Lamba chhara Punji	30		
	22	Luthi Belkuma	579		
	23	Luthijuri Punji	192		
	24	Mahishmara	640		
	25	Mansura Basti	302		
	26	Mansura Punji	396		
	27	Mansurpur	2341		
	28	Murai Chhara Punji	400		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	29	Nagatila Punji	104		
	30	Naldari	1925		
	31	Numchhara	1469		
	32	Nuna	595		
	33	Pattai	1172		
	34	Purba Karmoda	1827		
	35	Puti Chhara Punji	448		
	36	Pwala Chhara Punji	163		
	37	Raja Nagar	198		
	38	Rangi Chhara Basti	196		
	39	Rangi Chhara T.e.	1585		
	40	Ranynagar	101		
	41	Shynanpan Punji	38		
	42	Sona Shhara Punji	304		
	43	Tatroli	3254		
	44	Ugar Chhara Punji	91		
	45	Yeorinagar	344		
		<b>Sub Total=</b>	<b>31593</b>		<b>12241</b>
Kulaura (24)	1	Bagajura	231	Balisree	604
	2	Bangaon-1	524		
	3	Bangaon-2	791		
	4	Bara Kapan	1083		
	5	Dasher Mahal	221		
	6	Gazipur	1036		
	7	Gazipur T.e.	4409		
	8	Gutguti	906		
	9	Haripur	314		
	10	Hasan Pur	260		
	11	Jhimai T. E.	1243		
	12	Jhimai T. E.	1243		
	13	Karergram	1354		
	14	Lakshmipur	952		
	15	Minar Mahal	681		
	16	Mirgaon	63		
	17	Nazirer Chak	459		
	18	Pratabi	1654		
	19	Purander Pur	53		
	20	Rehana T.E.	317		
	21	Said Pur	148		
	22	Shankarpur	479		
	23	Sreepur	204		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	<b>Sub Total=</b>		<b>18626</b>		<b>604</b>
<b>Prithempasha (39)</b>	1	Alinagar	1870	Amuli	678
	2	Bakher Nagar	238	Luta Bil	291
	3	Barabari	683	Sujapur	252
	4	Daulatpur	760		
	5	Deogaon	691		
	6	Dhalia	458		
	7	Dhamul Part	426		
	8	Dhamuli	1640		
	9	Dhatgaon	563		
	10	Gajbhag	772		
	11	Ganipur	581		
	12	Gankia	3891		
	13	Hashanpur	386		
	14	Itahari	1013		
	15	Kanai Tikr	1249		
	16	Kanikiyari	912		
	17	Karaigaon	449		
	18	Khargaon	624		
	19	Kolirkona -1	191		
	20	Kolirkona -2	494		
	21	Mudipur	589		
	22	Nandirgaon	1110		
	23	Prithinpasha 1	666		
	24	Prithinpasha 2	3702		
	25	Pursai	679		
	26	Rajapur	241		
	27	Rajnagar 1	1836		
	28	Rajnagar 2	1729		
	29	Salikha	435		
	30	Sanman	1252		
	31	Shad Pasha	512		
	32	Sikiria	693		
	33	Sultanpur	1782		
	34	Sydol Bazar	37		
	35	Tokigaon	551		
	36	Yusuf Sadar	983		
	<b>Sub Total=</b>		<b>34688</b>		<b>1221</b>
<b>Routhgaon (29)</b>	1	Abdulpur	828	Abda	305
	2	Bagajura	259	Bangaon	165
	3	Baimbasu	268	Lalpur	612
	4	Barabari	131	Nartan	1672

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)	
	5	Barnapur	103	Palgram	1865	
	6	Batuthgram	1151	Sutarkandi	154	
	7	Bhabanipur	1217	Tilashijura	795	
	8	Ekidattapur	866	Rajardighi	351	
	9	Hadbarua	213			
	10	Hasampur	328			
	11	Kabiraji	974			
	12	Kalijuri	357			
	13	Kawla	3350			
	14	Minar Mahal	124			
	15	Mishajuri	809			
	16	Monraj	3317			
	17	Mukundapur	1595			
	18	Najatpur	117			
	19	Raut Gaon	1712			
	20	Rostampur	172			
	21	Sreerampur	152			
	<b>Sub Total=</b>			<b>18043</b>		<b>5918</b>
	Sharifpur (25)	1	44 Patta	865	Chandpur	1056
		2	Baghjar	137	Haripur	635
		3	Baghjur	805	Khidirpur	802
4		Chaplapur T.e	3102	Madanagar	333	
5		Chariarghat	194	Nischintapur	1056	
6		Dattagram	961	Palki Chhara	1161	
7		Daudpur	0	Sharifpur	1671	
8		Interghat	631	Itkhola, Terakhola	1753	
9		Kalaroyer Char	550			
10		Mangaon	1717			
11		Manoharpur	1083			
12		Purbabhag	1374			
13		Sangramsi	2302			
14		Sanjabpur	1345			
15		Shanjarpur	2546			
16		Telibil	1845			
17		Tilakpur T.e	1824			
<b>Sub Total=</b>			<b>21281</b>		<b>8467</b>	
Tilagaon (45)	1	Amanipur	1498	Baidya Shasan	1188	
	2	Ashroygram	1778	Balishindi	558	
	3	Bade Shalan	74	Kazir Gram	474	
	4	Bagrihal	2604	Langla T.e.	4863	
	5	Balakandi	61	Naya Patan	30	

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)	
	6	Balia	481	Tadra Pasha T.e.	2059	
	7	Balihara	54			
	8	Bijli	3025			
	9	Chak Shalan	294			
	10	Chandpur	830			
	11	Dari Tajpur	1336			
	12	Dudlalpur	174			
	13	Gondarpur	385			
	14	Jadhabpur	47			
	15	Jalalpur	68			
	16	Kamalpur	771			
	17	Khonda Kargram	188			
	18	Laharajpur	1405			
	19	Lalpur	2211			
	20	Miar Para	942			
	21	Mirpur	489			
	22	Mohibnagar	1988			
	23	Mubarakpur	440			
	24	Naimpur	632			
	25	Pallakandi	665			
	26	Pallakndi	375			
	27	Paschim Hajipur	0			
	28	Paschim Hajipur	1810			
	29	Purigram	62			
	30	Salamatpur	222			
	31	Salamatpur (Part 2)	247			
	32	Shahajadpur	146			
	33	Shahpur	297			
	34	Shalan	360			
	35	Shanorabaj	329			
	36	Sujapur	635			
	37	Tajpur	321			
	38	Tilagaon	14			
	39	Yusufpur	221			
			<b>Sub Total=</b>	<b>27478</b>		<b>9172</b>

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

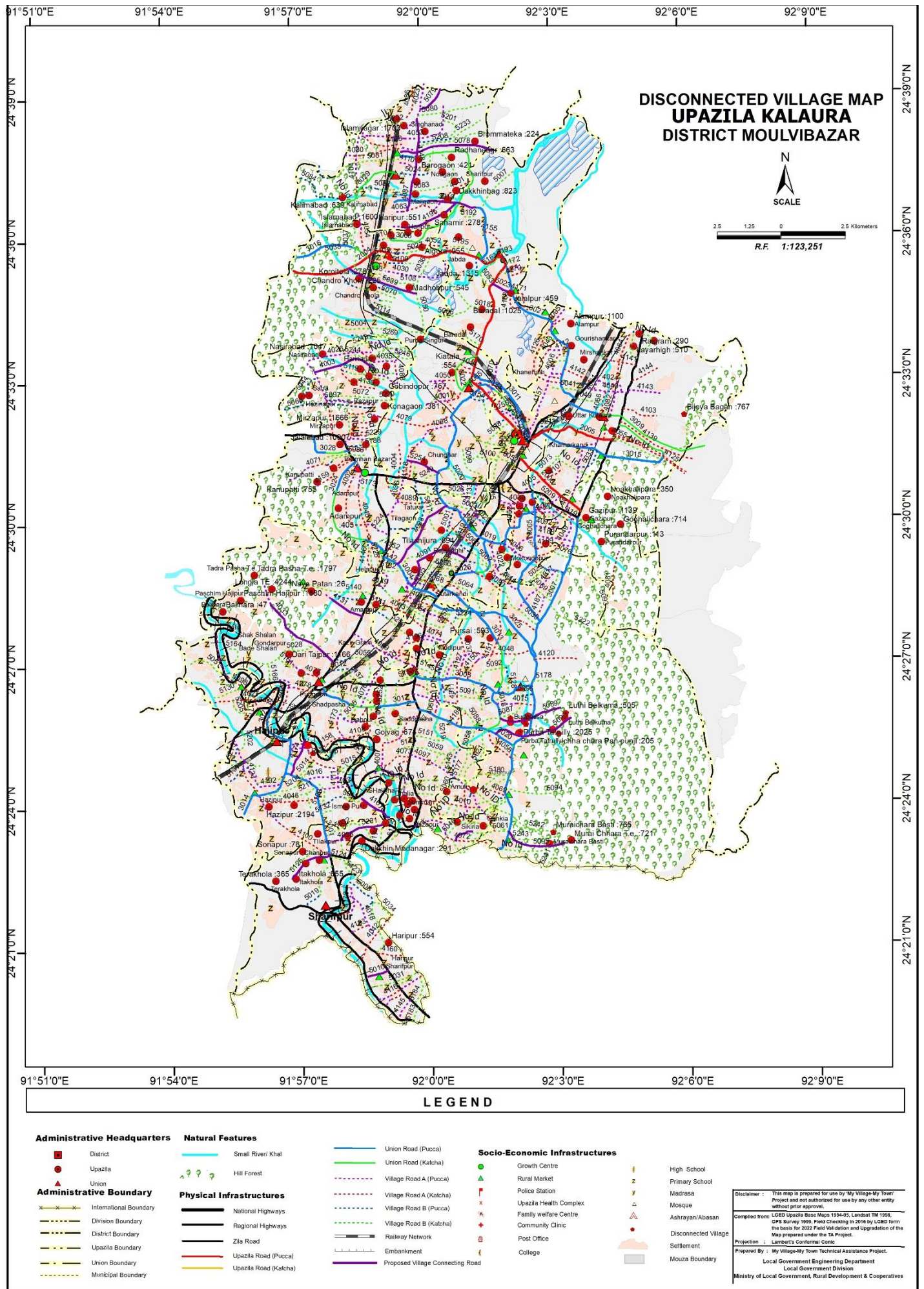


Figure 6: Upazila Map

## 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, Kulaura 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 ‘Bakhshimail’, the case study Union in Kulaura Upazila, through the alignment of “Chilerkandi - Kanohat Rd. Via Karera Bardhal” having the Road ID: 658655018. 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.



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

The length of this road is 3.01 km, totally earthen. The road connects a village of the Union named Chilarkandi having the total population of approx. 1000. People living here doesn't have any good road network with the Upazila HQ due to having unpaved road communication. There exists, one madrasa two Primary Schools. 1 college and 1 high school.

## 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:6*) 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

Kulaura Upazila is not deep haor zone. There are 2 (two) major rivers that dominate the ecosystem of the Upazila. That are Sonai & Juri rivers. During monsoon, these rivers carry huge volume of flood water. Though the Upazila has a number of rivers, riverine transport is not available in this Upazila.

### 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.

*Table 3: 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)
1135.68	381.01	754.67	94.03

#### 7.2.1 PROPOSED ALL WEATHER ROUTES:

There are 34 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 4: Proposed all weather roads in the Upazila*

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
1	Dighalkandi-Fatikully-Katabari road.	658655089	All Weather	4.1
2	Nayabazar-Gudamghat Road	658654033	All Weather	6.22
3	Haripur-Krishnapur-Shingnad Road	658654087	All Weather	5.5
4	Doudpur Bazar - Alipur Via Madanagar road	658654161	All Weather	4.5
5	Brahman Bazar-Fenchugonj Road to Purbomuki Horepur- Rahamaina Bazar Road via Shamir, Kamaura gram	658654195	All Weather	4
6	Tatriully-Icha charra-Belkuma Punji Road	658655090	All Weather	6

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
7	Bhatera-Shingnad Road to Hakaloki haor via Badegaon	658655079	All weather	4
8	Bhukshimail Dakhil Madrasha-Jalalpur Rd.	658655023	All Weather	3.1
9	Brahmambazar-Shamshernagar Road to Bodhashashon-Lonla Road	658654131	All Weather	5.6
10	Brahmanbazar Fenchugonj Rd.- Nasirabad sirajnagar Rd.	658654003	All Weather	1.9
11	Palgram Naya Mosjid -Sutarkandi - Amjup Hasimpur road	658654181	All Weather	1.32
12	Kulaura-Rabirbazar Road to Northan-Rajardighi via Tilashijura	658654091	All Weather	2.98
13	Hingagia-Lalpur Road to suterkandi road	658654093	All Weather	1.5
14	Sharifpur-Haripur Road	658655010	All Weather	0.6
15	Muraicharra Tea garden-Aeolacharra Road	658655095	All Weather	2
16	Palkicharra to Chatlapur Road	658655125	All Weather	3
17	Chunghar-Ningri Pucca Road(Kosim house) to Pekurbazar-Chowdhari Bazar Road	658655254	All Weather	1.05
18	Nirchintopur GPS to Madanagar via Sundar house Road	658655231	All Weather	1.75
19	Kanihati High School - Monu Gazipur Govt.Pry.School Road	658654174	All Weather	1.4
20	Bindarani Dighi - Amuli Gojbag road	658655186	All Weather	1.7
21	Itakhala Banda Alishaha Mazar to Andichara-Itachara road	658655039	All Weather	2.05
22	Barakapon-Sankerpur Road	658654062	All Weather	2.15
23	Nawabgonj UP Office (Rasolgonj bazar)- Batera via Berkuri	658653010	All Weather	2.45
24	Brammonbazar-Fenchugonj Road to Station-Radhanagar-Hakaloki haor	658655078	All Weather	4.1
25	Pallakandi-Baleshinde Road	658655141	All Weather	3
26	Chilerkandi-Kanohat Rd. Via Karera Bardhal	658655018	All Weather	3.01
27	Protabi Mazar to Balichiri Shankor Pur Road	658655214	All Weather	2.5
28	Moulvigaon-Sirajnagar	658655048	All Weather	2.55
29	Brammon bazar-Fenchugonj Road to Haripur-Shahmir Road.	658654063	All Weather	3
30	Bijoya Gazipur Road - Kamarkandi Goughtia Via Noakhali Para	No ID	All Weather	1

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
31	Shreepue Madrasha Bazar - Fanai River Koti Chara Road	No ID	All Weather	3
32	Alinagar BOP - Muraichara Road	No ID	All Weather	3

### 7.2.2 PROPOSED SUBMERSIBLE ROUTES:

There are no proposed submersible routes to connect the HTRV within the Upazila.

### 7.2.3 PROPOSED ROADS FOR HARD-TO-REACH VILLAGES HAVING NO ID:

There are 3 roads proposed to connect the HTRV within the Upazila that have no ID yet. The road name, ID and the length of the unpaved part are as bellow;

*Table 5: Proposed roads for Hard-to-Reach Villages having No ID*

Sl. No	Road Name	Road ID	Unpaved length (Km)
1	Bijoya Gazipur Road - Kamarkandi Goughtia Via Noakhali Para	No ID	1
2	Shreepue Madrasha Bazar - Fanai River Koti Chara Road	No ID	3
3	Alinagar BOP - Muraichara Road	No ID	3

### 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 6: Considered weightage values for the prioritization*

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

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

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- Part of Kulaura Upazila is foothill and part of it is upland hill areas. The Upazila is partly covered by a major haor i.e., *Hakaluki Haor* and 2 (two) major rivers dominate the ecosystem of the Upazila. That are Sonai & Juri rivers. During monsoon, these rivers carry huge volume of flood water. Though the Upazila has a number of rivers, riverine transport is not available in this Upazila.
- 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 57 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 Kulaura in Moulvibazar 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		
Baramchal	Fulertal bazar	GC	Yes	General Market	Wholesale	1	1	0.01	70	0.12	0.37	0.00	52260	55560
Bhakshimail	Monsurgonj bazar	HB	Yes	General Market	Wholesale	1	6	0.00	5	0.12	0.36	0.00	106000	123500
Bhakshimail	Rosulgongj bazar	HB	Yes	General Market	Wholesale	1	0	0.00	10	0.24	0.73	0.00	43600	45000
Bhakshimail	Nababgonj bazar	HB	Yes	General Market	Wholesale	1	0	0.00	30	0.31	0.93	0.00	0	0
Bhakshimail	Ghater bazar	HB	Yes	General Market	Wholesale	1	0	0.02	12	0.01	0.02	0.00	0	0
Bhakshimail	Islamgonj bazar	HB	Yes	General Market	Wholesale	1	0	0.00	2	0.05	0.14	0.00	0	0
Bhatera	Bhatera bazar	HB	Yes	General Market	Wholesale	1	0	0.00	40	0.09	0.27	0.00	18000	15100
Bhatera	Bhatera station bazar	HB	Yes	General Market	Wholesale	1	0	0.00	100	0.00	0.00	0.00	0	0
Bramhan Bazar	Brahman bazar	GC	Yes	General Market	Wholesale	2	0	0.00	120	0.86	2.58	0.00	1305678 9	9700600
Bramhan Bazar	Sreepur bazar	HB	Yes	General Market	Wholesale	1	6	0.02	30	0.14	0.41	0.00	0	10500
Bramhan Bazar	Hing gazia bazar	HB	Yes	General Market	Wholesale	1	0	0.00	15	0.15	0.45	0.00	0	0
Hajipur	Kotarkuna bazar	HB	Yes	General Market	Wholesale	1	0	0.00	30	0.32	0.95	0.00	101000	72000
Hajipur	Pirer bazar	HB	Yes	General Market	Wholesale	1	0	0.00	15	0.15	0.44	0.00	82100	0
Hajipur	Kuokapun bazar	HB	Yes	General Market	Wholesale	1	0	0.00	8	0.10	0.29	0.00	0	0
Hajipur	Monu bazar	HB	Yes	General Market	Wholesale	1	0	0.00	20	0.09	0.26	0.00	0	0

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		
Joychandi	Bejoya bazar	HB	Yes	General Market	Wholesale	1	0	0.00	15	0.00	0.00	0.00	0	0
Joychandi	Marina bazar	HB	Yes	General Market	Wholesale	1	0	0.00	0	0.00	0.00	0.00	0	0
Kadirpur	Chhakapon bazar	HB	Yes	General Market	Wholesale	1	0	0.00	40	0.07	0.20	0.00	52100	40000
Kadirpur	Pakur bazar	HB	Yes	General Market	Wholesale	1	14	0.07	30	0.07	0.22	0.00	0	0
Karmadha	Garoder bazar	HB	Yes	General Market	Wholesale	1	0	0.00	15	0.00	0.00	0.00	0	0
Karmadha	Murai charra bazar	HB	Yes	General Market	Wholesale	1	0	0.00	80	0.00	0.00	0.00	0	0
Karmadha	Rangicharra bazar	HB	Yes	General Market	Wholesale	1	0	0.00	80	0.00	0.00	0.00	0	0
Karmadha	Chameli bazar	HB	Yes	General Market	Wholesale	1	0	0.00	5	0.00	0.00	0.00	0	0
Karmadha	Pattra bazar	HB	Yes	General Market	Wholesale	1	0	0.00	2	0.00	0.00	0.00	0	0
Karmadha	Tuthbari bazar	HB	Yes	General Market	Wholesale	1	0	0.00	4	0.00	0.00	0.00	0	0
Kulaura	Jonata bazar	HB	Yes	General Market	Wholesale	1	0	0.00	15	0.03	0.10	0.00	0	0
Kulaura	Gajipur buss stand bazar	HB	Yes	General Market	Wholesale	1	0	0.00	2	0.00	0.00	0.00	0	0
Kulaura	Kulaura bazar	GC	No	General Market	Wholesale	1	0	0.00	150	0.00	0.00	0.00	0	0
Kulaura	Gazipur bazar	HB	Yes	General Market	Wholesale	1	0	0.00	30	1.13	3.40	0.00	0	0
Kulaura	Badshagonj bazar	HB	Yes	General Market	Wholesale	1	0	0.00	150	0.00	0.00	0.00	0	0
Prithempasha	Sydal bazar	HB	Yes	General Market	Wholesale	1	0	0.00	4	0.34	1.02	0.00	0	2000
Prithempasha	Rabir bazar	GC	Yes	General Market	Wholesale	2	38	0.06	122	0.39	1.18	0.00	5210000	4800000
Prithempasha	Brindaranir dighirpar bazar	HB	Yes	General Market	Wholesale	1	0	0.00	4	0.12	0.37	0.00	0	0

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		
Routhgaon	Chowdhury bazar	HB	Yes	General Market	Wholesale	1	0	0.00	40	0.22	0.66	0.00	62500	35700
Routhgaon	Pirer bazar	HB	Yes	General Market	Wholesale	1	0	0.00	10	0.03	0.09	0.00	0	0
Sharifpur	Hajiganj amtola	HB	Yes	General Market	Wholesale	1	5	0.02	20	0.04	0.11	0.00	77550	59700
Sharifpur	Nasirganj bazar	HB	Yes	General Market	Wholesale	1	8	0.04	50	0.25	0.75	0.00	533000	360000
Tilagaon	Noya bazar	HB	Yes	General Market	Wholesale	1	0	0.00	40	0.00	0.00	0.00	0	0
Tilagaon	Thaler bazar	HB	Yes	General Market	Wholesale	1	0	0.00	5	0.00	0.00	0.00	0	0
Tilagaon	Tilagaon	HB	Yes	General Market	Wholesale	1	0	0.00	60	0.00	0.00	0.00	0	0



**ANNEXURE - 2**

**PRIORITY LIST FOR ROAD DEVELOPMENT**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
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	Karmadha	Budpassa, Digalkandi, Fdatikuli, Purba Fdatikuli	8005	Dighalkandi-Fatikully-Katabari road.	658655089	VRB	All Weather	4.1			4.1	4.1	492	15	135	627	1953	78	62	30	16	25	12	83
2	Tilagaon	Langla T.e., Tadra Pasha T.e.	6922	Nayabazar-Gudamghat Road	658654033	VRA	All Weather	6.22			6.22	6.22	746.4	60	540	1286.4	1113	186	93	25	16	25	15	81
3	Bhatera	Barogaon, Jagatpur, Shinhonad	2226	Haripur-Krishnapur-Shingnad Road	658654087	VRA	All Weather	11	5.5		5.5	5.5	660		0	660	405	296	83	20	16	25	15	76
4	Hajipur	Madanagar, Alipur, Daud pur, Sukhonbai	3105	Doudpur Bazar - Alipur Via Madanagar road	658654161	VRA	All Weather	4.5			4.5	4.5	540	45	405	945	690	304	68	20	16	25	15	76
5	Bhatera	Haripur, Khamaura, Shamir	2025	Brahman Bazar-Fenchugonj Road to Purbomuki Horepur- Rahaimana Bazar Road via Shamir, Kamaura gram	658654195	VRA	All Weather	4			4	4	480	50	450	930	506	459	60	20	16	25	15	76
6	Karmadha	Purba Tatrully, Icha Charra Panpunji, Belkuma Panpunji, Nursery Panpunji, Belua Panpunji	4583	Tatriully-Icha charra-Belkuma Punji Road	658655090	VRB	All Weather	6			6	6	720	60	540	1260	764	275	90	20	16	25	12	73
7	Bhatera	Hosenpur, Jagatpur, Singhanad	2235	Bhatera-Shingnad Road to Hakaloki haor via Badegaon	658655079	VRB	All weather	4			4	4	480	40	360	840	559	376	60	20	16	25	12	73
8	Bhakshimail	Bhakshimail, Jalalpur	5521	Bhukshimail Dakhil Madrasha-Jalalpur Rd.	658655023	VRB	All Weather	3.1			3.1	3.1	372	32	288	660	1781	120	47	25	10	25	12	72
9	Tilagaon	Naya Patan,Kazir Gram, Balishindi, Baidya Shasan	2250	Brahmambazar-Shamshernagar Road to Bodhashashon-Lonla Road	658654131	VRA	All Weather	5.6			5.6	5.6	672	60	540	1212	402	539	84	20	16	20	15	71
10	Brahman Bazar	Dakkhin Para, Nasirabad, Nabinagar	2557	Brahmanbazar Fenchugonj Rd.-Nasirabad sirajnagar Rd.	658654003	VRA	All Weather	1.9			1.9	1.9	228		0	228	1346	89	29	20	10	25	15	70
11	Routhgoan	Palugram, Sutarkandi	2019	Palgram Naya Masjid -Sutarkandi - Amjup Hasimpur road	658654181	VRA	All Weather	1.32			1.32	1.32	158.4	13	117	275.4	1529	136	20	20	10	25	15	70
12	Routhgoan	Nartan, Tillashijura, Rajardighi	2817	Kulaura-Rabirbazar Road to Northan-Rajardighi via Tilashijura	658654091	VRA	All Weather	2.98			2.98	2.98	357.6	29	261	618.6	945	220	45	20	10	25	15	70
13	Routhgoan	Lalpur, Bangaon, Sutarkandi, Abda	1235	Hingagia-Lalpur Road to suterkandi road	658654093	VRA	All Weather	1.5			1.5	1.5	180	25	225	405	823	328	23	18	10	25	15	68
14	Sharifpur	Khidirpur, Sharifpur, Haripur	3107.3069	Sharifpur-Haripur Road	658655010	VRB	All Weather	0.6			0.6	0.6	72	6	54	126	5179	41	9	20	10	25	12	67
15	Karmadha	Muraichara Basti, Prithempasha, Muraichara Tea Estate	2827	Muraicharra Tea garden-Aeolacharra Road	658655095	VRB	All Weather	2			2	2	240	20	180	420	1413	149	30	20	10	25	12	67
16	Sharifpur	Chandpur, Palki Chhara, Itkhola, Terakhola	3970	Palkicharra to Chatlapur Road	658655125	VRB	All Weather	3			3	3	360	30	270	630	1323	159	45	20	10	25	12	67
17	Kadirpur	Chunghar	2711	Chunghar-Ningri Pucca Road(Kosim house) to Pekurbazar-Chowdhari Bazar Road	658655254	VRB	All Weather	1.05			1.05	1.05	126	50	450	576	2582	212	16	20	10	25	12	67
18	Sharifpur	Dakkhin Madanagar, Nischintapur	1390	Nirchintopur GPS to Madanagar via Sundar house Road	658655231	VRB	All Weather	1.75			1.75	1.75	210	18	162	372	794	268	26	18	10	25	12	65
19	Hajipur	Ismailpur	702	Kanihati High School - Monu Gazipur Govt.Pry.School Road	658654174	VRA	All Weather	1.4			1.4	1.4	168	14	126	294	502	419	21	15	10	25	15	65
20	Prithempasha	Amuli, Suzapur	930	Bindarani Dighi - Amuli Gojbag road	658655186	VRB	All Weather	1.7			1.7	1.7	204	17	153	357	547	384	26	15	10	25	12	62
21	Baramchal	Koroitolu, Purba Itakhola, Itakhola	921	Itakhala Banda Alishaha Mazar to Andichara-Itachara road	658655039	VRB	All Weather	2.05			2.05	2.05	246	20	180	426	449	462	31	15	10	25	12	62
22		Sankarpur, Borkapon	802	Barakapon-Sankerpur Road	658654062	VRA	All Weather	2.15			2.15	2.15	258	21	189	447	373	557	32	15	10	20	15	60
23	Bhatera	Khamaura	560	Nawabgonj UP Office (Rasolgonj bazar)- Batera via Berkuri	658653010	UNR	All Weather	5.65	1.95	1.25	2.45	3.7	444	25	225	669	151	1194	37	15	10	15	20	60
24	Bhatera	Brommateka, Barogaon	739	Brammonbazar-Fenchugonj Road to Station-Radhanagar-Hakaloki haor	658655078	VRB	All Weather	4.1			4.1	4.1	492	41	369	861	180	1165	62	15	16	15	12	58
25	Tilagaon	Balishindi	558	Pallakandi-Baleshinde Road	658655141	VRB	All Weather	3			3	3	360		0	360	186	645	45	15	10	20	12	57
26	Bhakshimail	Chilarkandi	981	Chilarkandi-Kanohat Rd. Via Karera Bardhal	658655018	VRB	All Weather	3.01			3.01	3.01	361.2	50	450	811.2	326	827	45	15	10	20	12	57
27	Kulaura Sadar	Balichiri	604	Protabi Mazar to Balichiri Shankor Pur Road	658655214	VRB	All Weather	2.5			2.5	2.5	300	25	225	525	242	869	38	15	10	20	12	57
28	Brahman Bazar	Moulavi Gaon	503	Moulvigaon-Sirajnagar	658655048	VRB	All Weather	2.55			2.55	2.55	306	20	180	486	197	966	38	15	10	20	12	57
29	Bhatera	Sahamir	319	Brammon bazar-Fenchugonj Road to Haripur-Shahmir Road.	658654063	VRA	All Weather	3.5	0.5		3	3	360	30	270	630	106	1978	45	15	10	12	15	52
30	Joychandi	Noakhalipara	401	Bijoya Gazipur Road - Kamarkandi Goughtia Via Noakhali Para	No ID	VRB	All Weather	1			1	1	120	10	90	210	401	524	15	15	10	20	12	57
31	Brahman Bazar	Shreepur	422	Shreepue Madrasha Bazar - Fanai River Koti Chara Road	No ID	VRB	All Weather	3			3	3	360	30	270	630	141	1494	45	15	10	15	12	52
32	Prithempasha	Luta Bil	291	Alinagar BOP - Muraichara Road	No ID	VRB	All Weather	3			3	3	360	30	270	630	97	2165	45	15	10	10	12	47

\*\*\* 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)