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"

Musksudpur, Gopalganj

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Delight Engineers & Consultants Ltd.

July, 2022

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GLOSSARY

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

1 DESCRIPTION OF THE UPAZILA

1.1 GEOGRAPHY AND DEMOGRAPHY

The geographical area of Muksudpur Upazila is 308.36 sq.km. It has 16 Unions, 206 mouzas and 255 villages. Muksudpur is 50 km away from the District headquarters of Gopalganj. The total population of the Upazila is 2,89,406 of which 1,40,956 are male and 1,48,450 female. Total number of households is 61,807 and average household size is 4.65 with a population density of 939/sq.km (as per population census 2011).

1.2 EDUCATION FEATURES

According to the information availed from relevant local government offices, there are 128 govt. primary, 61 registered primary, 2 non-government primary, 7 kindergarten & 9 NGO schools. On the other hand, Muksudpur has 43 non-government high schools, 3 school & college (operating jointly), with 4 privet colleges, and a total 149 madrashas. The literacy rate for the Upazila is 52.5%.

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 Muksudpur 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 Muksudpur is 1120.27 km, out of which 605.06 km paved and 515.21 km earthen.

1.4 AGRICULTURE, FOOD PRODUCTION AND FISHERIES

Agriculture has a major economic importance for the people of Muksudpur. Although the economy of the Upazila is based on agriculture and remittance, different sort of businesses has expanded in Muksudpur Upazila due to having a good road communication with other Districts including the capital Dhaka.

There are 56655 acres of arable land in the Upazila. Out of total 230494 holdings of the District, 67.88 holdings are farms that produce varieties of crops namely local and HYV paddy, sugarcane, wheat, vegetables, spices, jute, pulses, and other minor cereals. The economy of Gopalganj is predominantly agricultural. In the fiscal year 2010-11 the Rice production was 42, 14617 & 63807 metric tons for Aus, Aman & Boro seasons respectively. The Upazila also produced 7785 metric tons of Wheat, 19102 metric tons of Jute, 3875 metric tons of Sugarcane, 1015 metric tons of Masur, 1216 metric tons of Khesari, 4111 metric tons of Onion, 2674 metric tons of Potatos and 1345 metric tons of Oilseed in the same fiscal year 2010-11. Various fruits like mango, banana, jackfruit, guava, coconut etc. are grown in the District. Almost all kinds of vegetables are cultivated particularly; bitter guard (karala), pumpkin (misti kumra), potato and brinjal are abundantly grown.

According to the BBS (2010-11) data Muksudpur has 113 poultry & 8 dairy farms. Pisciculture and rearing of livestock and poultry adds an additional income to the rural households. Fish of different varieties abounds in the District. Moreover, varieties of fish are caught from rivers,

tributary channels, even from paddy field during the rainy season. According to the BBS (2010-11), Muksudpur has 13,637Acres of bill, pond & dhighee. That produced 3,072 metric tons of fishes.

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

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 24 hatbazars with 5 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-1***.

2 LOCATION OF THE UPAZILA

Muksudpur Upazila of Gopalganj District is South-Western part of the country under Dhaka division. The location has been shown in the map. It is bounded by Saltha, Nagarkanda and Bhanga Upazilas on the north, Gopalganj Sadar and Kashiani Upazilas on the south, Bhanga and Rajoir Upazilas on the east, Kashiani and Boalmari Upazilas on the west. The Upazila is located within *Padma River Basin*, downstream to the Daulatdia – Paturia, the estuary of the two major trans-boundary rivers, *Ganga (Padma) & Brahmaputra (Jamuna)*. The Ganges River rises in the western Himalayas in the Indian state of Uttarakhand. It flows south and east through the Gangetic plain of North India, receiving the right-bank tributary, the Yamuna, which also rises in the western Indian Himalayas, and several left-bank tributaries from Nepal that account for the bulk of its flow. The river, Brahmaputra flows through Tibet (mountains), India (Arunachal Pradesh & Assam), and Bangladesh and is the 9th largest river in the world by discharge. Both the river *Ganga (Padma) & Brahmaputra (Jamuna)* meets at Daulatdia – Paturia estuary, known as Padma and flow towards the downstream, *Bay of Bengal*. The river Padma is prone to catastrophic flooding in the summer & monsoon (March – October) when it receives enormous water from the Himalayan snow melts along with the heavy rainfall in the upstream. The river and its distributary streams overflow as the flood water exceeds their carrying capacity and inundates the depressed areas along the banks i.e., *Padma River Basin*, as well as the Upazila Muksudpur. The effects of flooding can be devastating and cause significant damage to crops and households, serious bank erosion with consequent loss of structures, land, and loss of many lives and livestock.
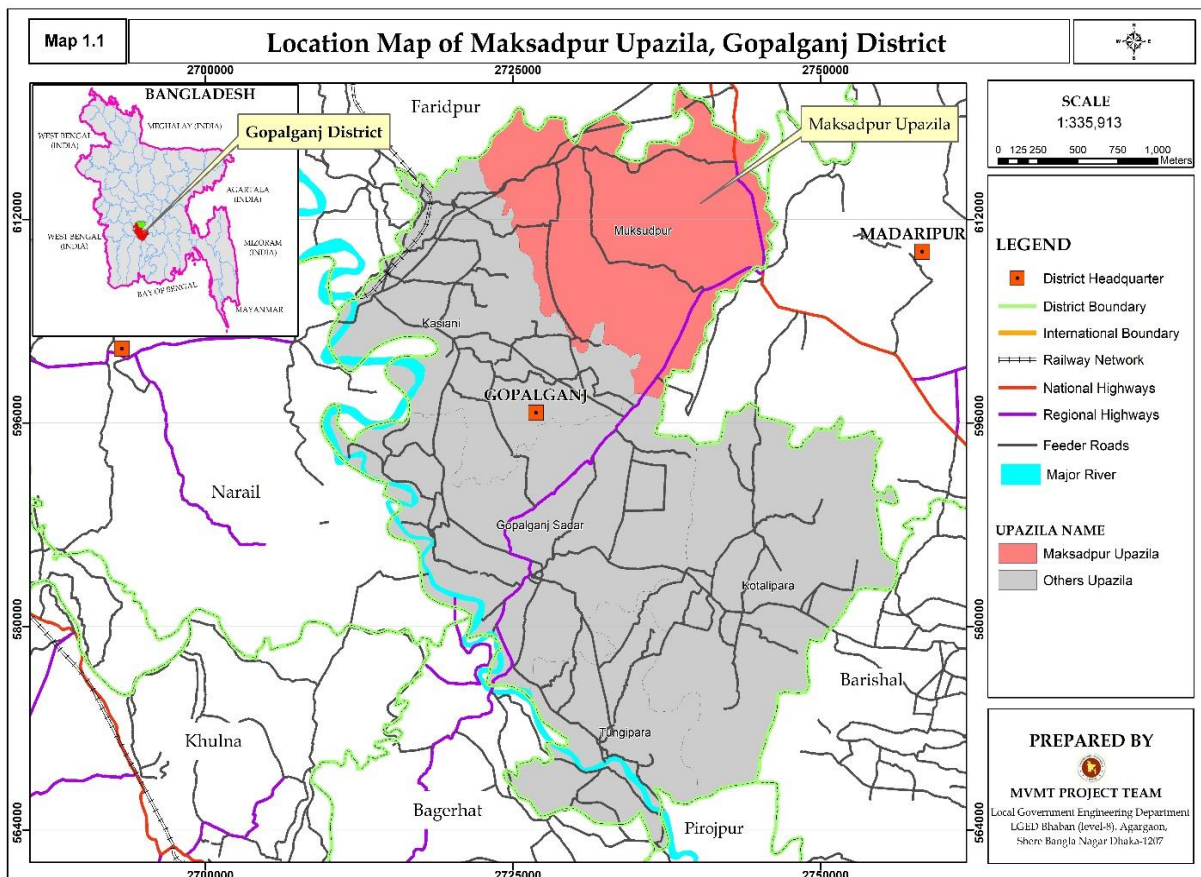
Figure 1: Upazila Location Map.

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') 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.
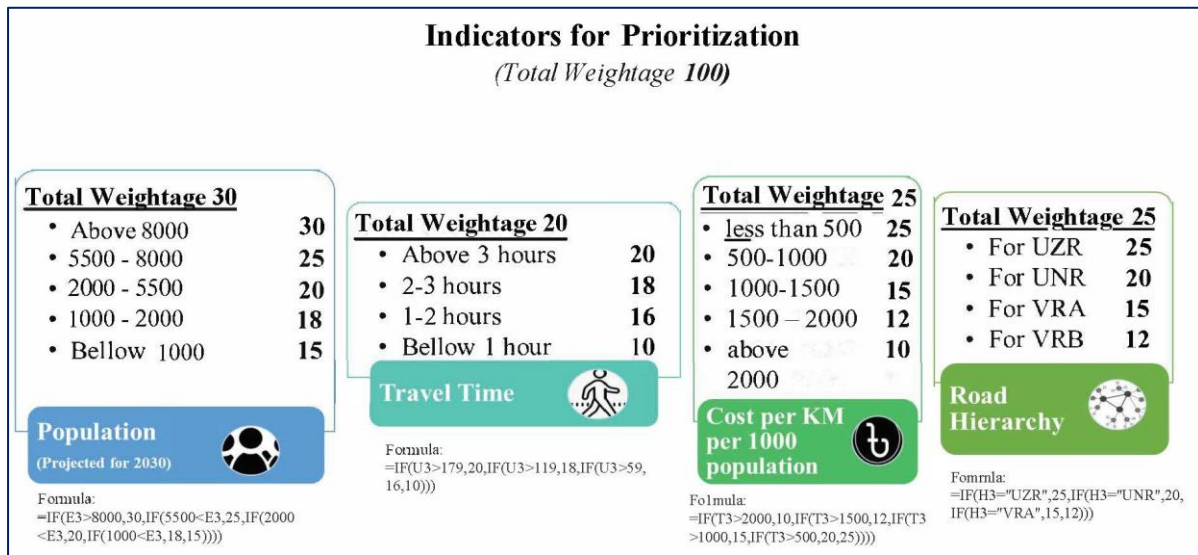
Figure 2: Prioritization indicators & their weightage values

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 RURAL ROAD CONNECTIVITY TO THE VILLAGES

4.1 SUMMARY OF THE VILLAGE CONNECTIVITY

Muksudpur is an Upazila with major Beel areas. The rural road communication is quite poor here. Out of 258 villages, 90 are disconnected from the developed paved road network that brings huge sufferings for the people of those villages. The total rural road network of Muksudpur is of 1120.27 km, out of which 605.06 km paved and 515.21 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	Bahugram	13	8	5
2	Banshbaria	14	12	2
3	Batikamari	8	4	4
4	Bhabrasur	18	10	8
5	Dignagar	32	29	3
6	Gobindapur	31	24	7
7	Gohala	22	17	5
8	Jalirpar	10	3	7
9	Kasalia	15	6	9
10	Khandarpara	17	15	2
11	Maharajpur	15	9	6
12	Mochna	18	13	5
13	Nanikshir	7	1	6
14	Pasargati	8	3	5
15	Ramdi	20	12	8
16	Ujani	10	2	8
	Total =	**258**	**168**	**90**

4.2 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)
Bahugram (13)	1	Balnarayan	697	Chhota Tarail	667
	2	Banbari	136	Harinahati	382
	3	Bara Tarail	1178	Kaunia	942
	4	Bidbhu Basuria	316	Khagradanga	355
	5	Dublasur	2343	Mothbari	347
	6	Garalgati	2165		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	7	Khord Dublasur	693		
	8	Majhigati	1267		
		Sub Total=	**8795**		**2693**
Banshbaria (14)	1	Athaldia	693	Dhopakandi	1266
	2	Banshbaria	393	Ghechua Golla	1050
	3	Banshbaria	622		
	4	Dhakalduar	910		
	5	Dhopakandi	1266		
	6	Digharia	1440		
	7	Juthigram	1050		
	8	Khorat	2137		
	9	Paraihati	510		
	10	Pora Ujani	1800		
	11	Simulsur	1080		
	12	Tholnarpar	539		
		Sub Total=	**12440**		**2316**
Batikamari (8)	1	Alipur	2416	Bara Bahara	6730
	2	Batikamari	4412	Chaowcha	862
	3	Dakalipur	320	Kahaldia	2885
	4	Jonaranka	450	Purbo Chaowcha	665
		Sub Total=	**7598**		**11142**
Bhabrasur (18)	1	Amirabad	422	Bhabrasur	2557
	2	Bakpura	323	Bhumsara	749
	3	Baliakandi	867	Boalia	1803
	4	Baman Barara	1063	Gaendar	638
	5	Bhramarbila	170	Kalia	1350
	6	Krishnakhola	33	Kalinagar	2068
	7	Krishnapur	612	Naldanga	666
	8	Mandalgati	500	Rasulpur	453
	9	Salia	66		
	10	Tungibari	293		
		Sub Total=	**4349**		**10284**
Dignagar (32)	1	Badusa	18	Kanuria	2602
	2	Bagail	474	Padmakanda	1093
	3	Bagat	1110	Raghuardanga	425
	4	Baghadia	2084		
	5	Bahugram	2836		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	6	Baksakhola	807		
	7	Baraihat	1468		
	8	Barni	402		
	9	Bhajandi	2399		
	10	Bishwambhardi	1346		
	11	Brahmankandi	108		
	12	Chandrakhola Nischintapur	479		
	13	Dighalkandi	296		
	14	Dignagar	2405		
	15	Dignagar	1224		
	16	Goderanka	272		
	17	Joaria	475		
	18	Khajtapur	1344		
	19	Khas Baghadia	300		
	20	Mirerdangi	551		
	21	Nalkona	196		
	22	Nihsanka	875		
	23	Nischintapur	802		
	24	Phatepatti	2946		
	25	Saiddi	1439		
	26	Sholagharia	332		
	27	Soulkhola	456		
	28	Sunuria	1401		
	29	Tegharia	57		
		Sub Total=	**28902**		**4120**
Gobindapur (31)	1	Adampur	966	Dangadurgapur	713
	2	Arjundaha	991	Dighirpur	920
	3	Bhramargram	222	Durgapur	1858
	4	Chak Majhigati	825	Gopalpur	1811
	5	Daserhat	1283	Kulapar (Fularpur)	920
	6	Dhak Para	1135	Palpara	722
	7	Fakir Natkhola	477	Sarupi	408
	8	Gobindapur	1884		
	9	Kadampur	2135		
	10	Kalidaharpur	144		
	11	Kazitola	241		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	12	Kulakona	1087		
	13	Latibpur	600		
	14	Muksudpur	818		
	15	Nagar Sundardi	526		
	16	Paschim Bhakuri	257		
	17	Pathrail	952		
	18	Phulhara	296		
	19	Purba Bhakuri	1251		
	20	Ramchandrapur	826		
	21	Salinabaksa	1470		
	22	Sasunia	702		
	23	Sreenibashkati	898		
	24	Sultan Dighirpur	367		
		Sub Total=	**20353**		**7352**
Gohala (22)	1	Achar Para	714	Bhattachar Jyakandi	527
	2	Aruakandi	1091	Golakandi	1995
	3	Bamandanga	4645	Munirkandi	2105
	4	Biswanathpur	251	Prasannapur	1177
	5	Chak Ambari	750	Shantipur	1414
	6	Dakshin Gangarampur	2298		
	7	Debottar	293		
	8	Fatehpur	567		
	9	Gohala	1500		
	10	Harir Char	964		
	11	Hatiardaha	144		
	12	Jatrabari	1327		
	13	Jiratali	121		
	14	Kazi Para	475		
	15	Muriajhora	530		
	16	Purba Naokhanda	1493		
	17	Uttar Gangarampur	1414		
		Sub Total=	**18577**		**7218**
Jalirpar (10)	1	Asraon	767	Baniar Char	3571
	2	Hotathgram	415	Bil Chanda	1554
	3	Santipur	649	Fulkumari	1305
	4			Jalirpar (Guchhagram)	7799
	5			Kaligram	6498
	6			Munshi Kaligram	524
	7			Talbari	880
		Sub Total=	**1831**		**22131**

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
Kasalia (15)	1	Bamangati	588	Betgram	4112
	2	Bil Chintapur	1173	Daria	398
	3	Gunahar	1707	Delbagarkandi	575
	4	Hindu Kasalia	269	Hazragati	788
	5	Kasalia	1108	Ibrahim Kasalia	296
	6	Sarsakandi	678	Khalkula	933
	7			Maldia	665
	8			Nayakandi	1031
	9			Tongrail	338
		Sub Total=	**5523**		**9136**
Khandarpara (17)	1	Batiangram	199	Bejara	1396
	2	Chhota Bhatra	825	Guptagati	1558
	3	Chilarpur	57		
	4	Chitalkona	151		
	5	Dharenda	419		
	6	Distail	327		
	7	Induhati	434		
	8	Jhakar	800		
	9	Kendua	679		
	10	Khandarpar	1663		
	11	Machhiara	632		
	12	Mathabhanga Gopalpur	395		
	13	Panchra	1487		
	14	Tekerhat	103		
	15	Uttar Dhirail	336		
		Sub Total=	**8507**		**2954**
Maharajpur (15)	1	Chhota Banagram	985	Bara Banagram	1370
	2	Duaridanga	771	Lohachura	2077
	3	Khalisakandi	1722	Lohair	5470
	4	Khondakarkandi	556	Ramkrishnapur	970
	5	Madhya Banagram	2820	Ramkrishnapur	1114
	6	Maharajpur	4660	Uttar Narayanpur	1503
	7	Milik Sreerampur	284		
	8	Munshi Narayanpur	981		
	9	Tar Sreerampur	254		
		Sub Total=	**13033**		**12504**
Mochna (18)	1	Aikdia	1716	Bamunia	669
	2	Dhalikandi	431	Dobila	461
	3	Dhopadi	1327	Dumari	720
	4	Katurakandi	741	Ganiari	736
	5	Khanpura	758	Ghonshi	2518
	6	Mochna	850		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	7	Mothbari	367		
	8	Nahatta	1929		
	9	Nigura	1666		
	10	Paikdia	2384		
	11	Satiani	581		
	12	Suasur	1163		
	13	Uttar Khanpura	408		
		Sub Total=	**14321**		**5104**
Nanikshir (7)	1	Bara Bhatra	3583	Banagram	2287
	2			Goalgram	3948
	3			Mahishtali	1213
	4			Nanikshir	3864
	5			Paschim Naokhanda	1956
	6			Patharghata	497
		Sub Total=	**3583**		**13765**
Pasargati (8)	1	Jaigirar Para	496	Bahirbhag	2152
	2	Kaoaldia	1858	Janbagh	1050
	3	Panchuria	2147	Krishnadia	3844
	4			Pasargati	1515
	5			Surop Khorikini	694
		Sub Total=	**4501**		**9255**
Ramdi (20)	1	Baradia	1764	Char Prasannadi	4523
	2	Chhagalchhira	2223	Daserkandi	729
	3	Dighirpar	134	Gaurinadi	637
	4	Garjina	357	Raghdi	1386
	5	Garubhanga	433	Sasirkandi	471
	6	Ghoshkandi	181	Sundardi	595
	7	Mathpur	322	Tantihati	1333
	8	Mridhandi	170	Uttar Molladi	1540
	9	Naya Kandi	553		
	10	Raghdi Domrakandi	2080		
	11	Sreejutpur	952		
	12	Taparkanda	1905		
		Sub Total=	**11074**		**11214**
Ujani (10)	1	Decreckandi	485	Banahati	1266
	2	Patkelbari	2194	Barampalta	1840
	3			Basudebpur	2371
	4			Basuria	1093
	5			Dharma Royerbari	937
	6			Mahatali	2206
	7			Tikerdanga	346
	8			Ujani	3570
		Sub Total=	**2679**		**13629**
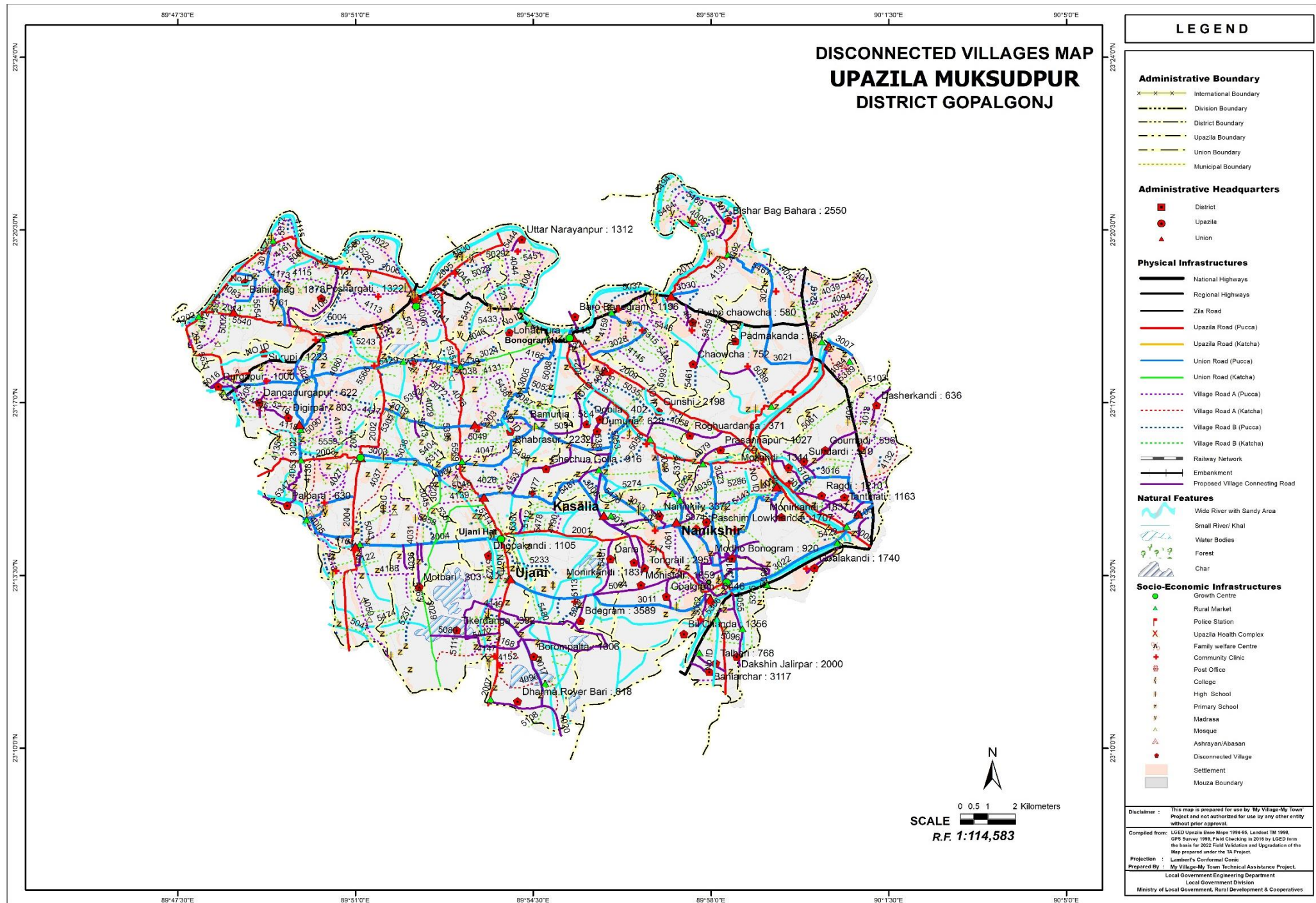
Figure 3: Upazila Map

5 CONSULTATION MEETING & FIELD VISIT

5.1 UPAZILA LEVEL MEETING

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

Figure 4: 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.

5.2 VISIT TO CASE STUDY UNION

The team visited Kashalia Union in Muksudpur Upazila, along the alignment of "Notun bazar to Tungrail via Betgram road" having the Road ID: 335584181. The road was selected for the site visit considering the beneficiary population 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 5: Condition of the visited road alignment at case study Union

Figure 6: Condition of the visited road alignment at case study Union

Figure 7: Condition of the visited road alignment at case study Union

The length of this road is 3.5 km, having 1.5 km paved 1 km HBB and 1 km earthen. The road connects 6 major villages of the Union named Tongrail, Uttar Bedgram, Dakshin Bedgram, Nayakandi, Daria, Delbazarkandi having the total population of approx. 6000. 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.

6 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:3)* showing prioritized roads and Hard-to-Reach Villages. The proposed riverine & road connectivity by the UE office have been discussed in this section.

6.1 PROPOSED RIVERINE ROUTES

Muksudpur Upazila is located within *Padma River Basin*, downstream to the estuary of the two major trans-boundary rivers, *Ganga (Padma) & Brahmaputra (Jamuna)*. There are 6 (six) major rivers that dominate the ecosystem & transport system of the Upazila. That are Bara Atrai, Soto Atrai, Nagar, Barnoi, Nandakuja & Gurr rivers. According to the Ue office, Muksudpur, there exists only one riverine route that can be used as multi-modal transport system. Generally Large Boat, Small Boat, Engine Boat, Trawler, Cargo are used throughout the year.

The name of the riverine route & the associated stream with types of water vehicle are as follows;

Table 3: Proposed riverine route 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	Takerhat – Jalirpar – Baniarchar – Satpar	Madaripur bill Route canal	Perennial	Large Boat, Small Boat, Engine Boat, Trawler, Cargo	No

6.2 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, 1 (one) bridge is needed to fulfil the purpose.

Table 4: 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)
1120.27	605.06	515.21	149.15

6.2.1 PROPOSED ALL WEATHER ROUTES:

There are 88 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. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
1	Ujani-Jalirpar (UZR) to Mochna Bazar via Kashalia U.P Office and Kashalia High School High School Road.	335583014	All Weather	
2	Ujani UP complex - Patkelbari Hat Road	335583017	All Weather	1
3	Chagolchira R&H- Battala to Rajoir FRB Dasherkandi	335584018	All Weather	2.9
4	Rahutror GC - Chak borompalta	335584020	All Weather	2.01
5	Ragdi Munsur Dr.house to Garubhanga Mosque	335584028	All Weather	2.3
6	Mochna Badal Master Bridge to Hazragati GPS via Suasur Road	335584033	All Weather	1.3
7	Basuria to Tikardangi road	335584036	All Weather	2
8	Garolgati -Tarail-Nakra Khal via Bashuria high school road	335584050	All Weather	0.25
9	Gobindapur Bazer (UZR)-Bathandunga Bazer Via Palpara	335584053	All Weather	2.32
10	Jalirpar R&H road to Betgra(Rajor Border)	335584055	All Weather	2.05
11	Bamondanga UZR - Nowhata Bazar via Dhopadi GPS	335584058	All Weather	3.89
12	Praswannapur Bazar -Bamondanga road	335584079	All Weather	2
13	Takerhat R&H (Baniarchar Bazar) To Fulkumari village Road	335584090	All Weather	1.5
14	Takerhat R&H (Karitas office) to Baniarchar GPS	335584091	All Weather	3
15	Tantihati-Balurmadth- Gazina Basu Mollah house via Tantihati Madrasha Mosque	335584097	All Weather	2.5
16	Poshargati Munshibari - Nabin Chandar Rd. via Kawaldia & Kalikhola Rd	335584108	All Weather	0.25
17	Bahugram-Khagradunga Rd	335584129	All Weather	0.2
18	Sundardi Siraj Master H/O to Sashirkandi Rezaul Matubbor	335584146	All Weather	2.8
19	Chagolcira stand to gournadi GPS	335584148	All Weather	2.3

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
20	Basudebpur high school to anil member house via rash vita	335584149	All Weather	0.9
21	Dighra Mondir - Ghechua Charghata via Betbita Shimulshur	335584153	All Weather	2.3
22	Notun bazar to Tungrail via Betgram road	335584181	All Weather	1
23	Durbasur - Kawnia road via Junu Sk.House	335584197	All Weather	
24	Salinabox-Durgapur Road	335585016	All Weather	2.34
25	Boalnaraon-Harinahat Road	335585042	All Weather	1.68
26	Jalirpar- Jalirpar Bill Road	335585062	All Weather	1
27	Mohistoli samadi Mondir-bedgram road	335585064	All Weather	2.5
28	Jalirpara village - Jalirpar	335585065	All Weather	0.85
29	Korikhan Pachuria Rd-H/O Mohon Biswas	335585066	All Weather	1.9
30	Bahara -Bisharbug to GPS	335585077	All Weather	3.5
31	Gayander GPS to tongibari GPS	335585087	All Weather	1
32	Kanuria Village - Boroihat Bazar Rd.	335585089	All Weather	1.5
33	Ramkrishnapur to kalinagar hat via kalinagar high school	335585094	All Weather	0.6
34	Mollahdi jamal Master to Rathkhola via Gournadi GPS	335585102	All Weather	2.1
35	Charprosannadi K.M. Zakir Hossain to Charprosannadi village	335585105	All Weather	1.8
36	paschim lokhanda South side gohala bazar	335585138	All Weather	2.75
37	Gohala Main road to Manir kandi village road	335585152	All Weather	3
38	Bonogram(jalirpar)-pucca road to H/O sujid Bala goalgram road	335585155	All Weather	1.5
39	Aditto house- Dangadurgapur peer bari road	335585216	All Weather	2.5
40	Gailakandi to Gangarampur road	335585253	All Weather	1
41	Bannahati H/O Bijoy Mandal to Bedgram Hat via Mandal Bari	335585265	All Weather	1.45
42	Ujani(UZR) - Goalgram road to Bedgram Hat via Bedgram High School	335585269	All Weather	1.25

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
43	Kaligarm Bus Stand to YMCA Bridge-Thagor Shope	335585293	All Weather	0.9
44	Goptorgati Madrasha to H/O Sanad	335585313	All Weather	0.53
45	Muksudpur-Baraitala(R&H)-Chaowcha purbopara masterbari road	335585316	All Weather	2
46	Ramkrishnapur(Islampur) Bridge to Aikdia pucca road	335585320	All Weather	0.82
47	Ujani - Jalirpar GC Rd(Khalkula) - Gechua road	335585337	All Weather	1.75
48	Gopalpur Sardarpara Nadir Ghat to Gopalpur KGA road	335585346	All Weather	1.5
49	koturakandi-jalirpar road to pathorgram Nanikhir UP Office road	335585353	All Weather	1
50	Dangadurgapur-khaspara-Dasherhat road	335585356	All Weather	2
51	Goalgram niro bala to karati bari dhakkin goalgram	335585365	All Weather	2
52	Nanikhir paschimpara to serajul kazi-milon kazi bari	335585366	All Weather	2.3
53	Bonogram boro road Acharpara via kaliganga mondir road	335585367	All Weather	2
54	Dhakkin Jairpar Gones Pagol Mandir to Fulkumari road	335585377	All Weather	0.5
55	Dumuria-Dobila-Ghunshi road	335585381	All Weather	4
56	Kolia Moshin House to Madrasha road	335585432	All Weather	0.6
57	Naldanga Battala to Tungibari road	335585435	All Weather	1.5
58	Bhoomsara Bridge to Bhoomsara Dhakkinpara road	335585438	All Weather	0.8
59	Narayonpur Chara Battala to Bazar road - Al Jamiatur Madrasha road	335585444	All Weather	1
60	Lohair Hamid Market to Boro Madth road	335585449	All Weather	1.8
61	Sashirkandi Jakir Sk.house to Chagolchira-Gournadi Connecting road	335585454	All Weather	0.7
62	Kasalia UP Office to Gunahar via Ibrahim Kasalia road	335585458	All Weather	1.9
63	Chaowcha wadud Bhuayan bari to GPS road	335585460	All Weather	2
64	Bahara Alim madrasha to H.O Miraj Member	335585466	All Weather	1.25
65	Purbo Kahaldia H/O Sakayet to H/O Abul Khayer Moulana road	335585467	All Weather	1

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
66	Khalkula Bridge(East side) to Sarsakandi(South Border) road	335585479	All Weather	1.5
67	Basuria voumik Bari to Das Bari via Basuria - Tikardangi Khal road	335585504	All Weather	1.15
68	Janbag Nalini Kanto Kar to Hazir bag road	335585528	All Weather	0.61
69	Rasulpur H/O kawsar Fakir to krishnapur Mosque via kamal sheikh	335585545	All Weather	1.5
70	Ujani-Rahuthor road to WAPDA khal road via Farid Mollha Bari	335585573	All Weather	0.4
71	Ghunshi GPS-Ghushi Sonvita	No ID	All Weather	2
72	Bhabrasur Paschimpara to Kalinagar	No ID	All Weather	2
73	Bairbag Bridge - Janbag Madrasa via Palbari	No ID	All Weather	1.5
74	Kathaltola RHD - Dakshin Para Jame Mashjeed	No ID	All Weather	0.8
75	Mohatali GPS - Khalpar Rd.	No ID	All Weather	1
76	National High - Surupi road	No ID	All Weather	3
77	Paraihati Bridge - Dhopakandi Village	No ID	All Weather	2
78	Moharajpur UZR (FF Atahar Molla's House) - Bonogram Bazar Shwarashoti Mondir via Biddut Sikder's House	No ID	All Weather	1.6
79	Padmakanda GPS - Muksudur Boroitola RHD via Padmakanda Khanbari Mashjeed	No ID	All Weather	3
80	Jalirpar UP - Sathpar via Talbaria	No ID	All Weather	6
81	Gopalganj RHD to Sendia Road	No ID	All Weather	
82	Bolia H/O Eliyes sardar to Boalia Utterpaera rezaul road	NO ID	All Weather	0.6
83	Bezra Alia Madrasha to Balnarayon-Pucca Mizan Master Bari-Milon Mollah	NO ID	All Weather	0.4
84	Bamunia to Aikdia	NO ID	All Weather	2.5
85	Ganiari to Khandpura Battala	NO ID	All Weather	1.5
86	Jalirpar UZR - Munshi Kaligram GPS	No ID	All Weather	1
87	Sultan Dighirpar Fulhar aBanargi Para Road	NO ID	All Weather	1
88	Bhattacharjeekandi Pannu Member House to Beel Road Via Siddque House	No ID	All Weather	1.5

6.2.2 PROPOSED SUBMERSIBLE ROUTES:

There are only 2 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	Natun Bazar- Noyakandi Choksing	335585481	Submersible	2
2	Ujani Rahuthor UZR- Bashuria GPS via tikardangi	335585080	Submersible	3.75

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

There are 18 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 7: Proposed roads for Hard-to-Reach Villages having No ID

Sl. No	Road Name	Road ID	Unpaved length (Km)
1	Ghunshi GPS-Ghushi Sonvita	No ID	2
2	Bhabrasur Paschimpara to Kalinagar	No ID	2
3	Bairbag Bridge - Janbag Madrasa via Palbari	No ID	1.5
4	Kathaltola RHD - Dakshin Para Jame Mashjeed	No ID	0.8
5	Mohatali GPS - Khalpar Rd.	No ID	1
6	National High - Surupi road	No ID	3
7	Paraihati Bridge - Dhopakandi Village	No ID	2
8	Moharajpur UZR (FF Atahar Molla's House) - Bonogram Bazar Shwarashoti Mondir via Biddut Sikder's House	No ID	1.6
9	Padmakanda GPS - Muksudur Boroitola RHD via Padmakanda Khanbari Mashjeed	No ID	3
10	Jalirpar UP - Sathpar via Talbaria	No ID	6
11	Gopalganj RHD to Sendia Road	No ID	
12	Bolia H/O Eliyes sardar to Boalia Utterpaera rezaul road	NO ID	0.6
13	Bezra Alia Madrasha to Balnarayon-Pucca Mizan Master Bari-Milon Mollah	NO ID	0.4
14	Bamunia to Aikdia	NO ID	2.5
15	Ganiari to Khandpura Battala	NO ID	1.5
16	Jalirpar UZR - Munshi Kaligram GPS	No ID	1
17	Sultan Dighirpar Fulhar aBanargi Para Road	NO ID	1
18	Bhattacharjeekandi Pannu Member House to Beel Road Via Siddque House	No ID	1.5

6.2.4 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 8: 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.

7   CONCLUSION & RECOMMENDATIONS

➢ Muksudpur Upazila is located within **Padma River Basin**, downstream to the estuary of the two major trans-boundary rivers, *Ganga (**Padma**) & Brahmaputra (**Jamuna**)*. There is a major river that dominate the ecosystem of the Upazila known as Kumar. During monsoon, this river carries huge volume of flood water. Though the Upazila has only a major river, riverine transport is available in this Upazila that can be used throughout the year. Small Boat, Engine Boat, Cargo ships carrying agricultural products and passengers throughout the year.

➢ The Upazila is heavily flooded during monsoon, rural roads and structures are highly vulnerable in this Upazila.

➢ The Upazila has a total number of 90 Hard-to-Reach Villages. To develop rural connectivity, there are proposals for both all weather & 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 Muksudpur in Gopalganj District is highly recommended.

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) Toha	Land Area (Acre) Khas	Land Area (Acre) Private	Lease/ Khas Collection BDT (2020)	Lease/ Khas Collection BDT (2019)
Bahugram	Bolonarayaon Hat	HB	Yes	General Market	Wholesale		29	0.15	32	0.14	0.56		1250	1400
Batikamari	Batikamari Hat	HB	Yes	General Market	Both	2	27	0.15	27	0.04	0.19		401000	386840
Batikamari	Holdivita Bazar	HB	Yes	General Market	Wholesale		0	0.00	0	0.00	0.40		1560	3250
Batikamari	Bahara Hat	HB	Yes	General Market	Wholesale	2	45	0.23	4	0.05	0.73			
Bhabrasur	Boalia Hat	HB	Yes	General Market	Wholesale	2	0	0.00	0	0.12	0.15		900	1200
Bhabrasur	Baliakandi Bazar	HB	Yes	General Market	Wholesale		0	0.00	0	0.13	0.16		16000	1800
Dignagar	Dignagar Bazar	HB	Yes	General Market	Wholesale	2	106	0.60	106	1.35	2.36		226110	172000
Dignagar	Bhajandi Bazar	HB	Yes	General Market	Wholesale		7	0.04	7	0.37	0.44		1150	1200
Gobindapur/Gobidopur	Muksudpur Hat	HB	Yes	General Market	Wholesale	2	136	0.68	135	0.67	1.50		137500	52450
Gobindapur/Gobidopur	Salinabaxa Hat	HB	Yes	General Market	Wholesale	2	60	0.30	13	0.32	0.63		33900	60000
Gobindapur/Gobidopur	Fularpat Bazar/Fularpar Bazar	HB	Yes	General Market	Wholesale	7	0	0.00	0	0.00	0.08		500	500
Gohala	Bamon Danga Hat	HB	Yes	General Market	Wholesale	2	73	0.37	67	0.42	0.81		6700	20000
Gohala	Gohala Bazar	HB	Yes	General Market	Wholesale		28	0.11	26	0.12	0.23		2300	6000
Jalirpar	Jalirpar Hat	HB	Yes	General Market	Both	2	242	2.03	120	2.31	4.34		177900	186800
Jalirpar	Baniar Char Bazar	HB	Yes	General Market	Wholesale		73	2.36	62	2.29	4.65		90500	525000
Khandarpara	Khandarpara hat	GC	Yes	General Market	Both	2	158	0.79	131	1.46	2.73	0.00	185700	10600

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) Toha	Land Area (Acre) Khas	Land Area (Acre) Private	Lease/ Khas Collection BDT (2020)	Lease/ Khas Collection BDT (2019)
Khandarpara	Sreepur Tekerhat	HB	Yes	General Market	Wholesale		0	0.00	0	0.00	0.09		550	500
Maharajpur	Bonogram hat	GC	Yes	General Market	Both	2	128	1.99	128	0.11	2.10		1650000	810000
Maharajpur	Moharajpur Bazar/Maharazpur Bazar	HB	Yes	General Market	Wholesale		22	0.11	14	0.11	0.22		85000	131500
Maharajpur	Lohachura Bazar	HB	Yes	General Market	Wholesale		0	0.00	0	0.00	1.15		500	1500
Maharajpur	Naraonpur Notun Bazar/Uttarnarayanpur	HB	Yes	General Market	Wholesale		33	0.11	33	0.12	0.23		500	500
Mochna	Mochna Bazar	HB	Yes	General Market	Wholesale	2	36	0.17	8	0.96	1.51		30200	12950
Mochna	Nowhata Hat	HB	Yes	General Market	Wholesale	2	14	0.07	14	0.49	0.56		3150	1500
Moksudpiur	Tangrakhola hat	HB	No	Special Market	Both	2	0	0.67	0	0.00	0.67		2860300	2477500
Nanixmir	Jalirpar hat	GC												
Pashargati	Krishnadia Hat	HB	Yes	General Market	Both	2	67	0.33	67	0.31	0.64		44900	95600
Radhdi	Takerhat Uttarpar Hat	HB	Yes	Special Market	Both	2	1002	5.09	230	1.48	18.26		1155000	1072000
Ujani	Ujani hat	GC	Yes	General Market	Wholesale	2	115	0.58	120	0.30	1.00		275000	427000
	Tengrakhola hat	GC												

PRIORITY 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	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	Kashalia	Tongrail, Uttar Bedgram, Dakshin Bedgram, Nayakandi, Daria, Delbazarkandi	5771	Notun bazar to Tungrail via Betgram road	335584181	VRA	All Weather	3.5	1.5	1	1	2	240	30	270	510	2886	88	15	25	10	25	15	75
2	Ujani	Borompalta	1840	Ujani UP complex - Patkelbari Hat Road	335583017	UNR	All Weather	6.5	1.5	4	1	5	600		0	600	368	326	15	18	10	25	20	73
3	Poshargati	Poshargati, Krishnadia	5359	Poshargati Munshibari - Nabin Chandar Rd. via Kawaldia & Kalikhola Rd	335584108	VRA	All Weather	3.5	0.75	2.5	0.25	2.75	330		0	330	1949	62	4	20	10	25	15	70
4	Ujani	Basudebpur	2371	Basudebpur high school to anil member house via rash vita	335584149	VRA	All Weather	1.3		0.4	0.9	1.3	156		0	156	1824	66	14	20	10	25	15	70
5	Jalirpar	Baniarchar	3571	Takerhat R&H (Karitas office) to Baniarchar GPS	335584091	VRA	All Weather	3.83		0.83	3	3.83	459.6		0	459.6	932	129	45	20	10	25	15	70
6	Jalirpar	Dakshin Jalirpar	2292	Jalirpar R&H road to Betgra(Rajor Border)	335584055	VRA	All Weather	2.55		0.5	2.05	2.55	306		0	306	899	134	31	20	10	25	15	70
7	Gohala	Prasannapur	1177	Praswannapur Bazar -Bamondanga road	335584079	VRA	All Weather	2			2	2	240		0	240	588	204	30	18	10	25	15	68
8	Jalirpar	Fulkumari	1305	Takerhat R&H (Baniarchar Bazar) To Fulkumari village Road	335584090	VRA	All Weather	4.5	2.5	0.5	1.5	2	240	15	135	375	653	287	23	18	10	25	15	68
9	Ragdi	Ragdi	1386	Ragdi Munsur Dr.house to Garubhanga Mosque	335584028	VRA	All Weather	2.3			2.3	2.3	276	40	360	636	603	459	35	18	10	25	15	68
10	Ujani	Ujani	3570	Ujani-Rahuthor road to WAPDA khal road via Farid Mollha Bari	335585573	VRB	All Weather	0.4			0.4	0.4	48		0	48	8925	13	6	20	10	25	12	67
11	Jalirpar	Kaligram	2292	Kaligarm Bus Stand to YMCA Bridge-Thagor Shope	335585293	VRB	All Weather	0.9			0.9	0.9	108		0	108	2546	47	14	20	10	25	12	67
12	Nanikhir	Goalgram	3948	Goalgram niro bala to karati bari dhakkin goalgram	335585365	VRB	All Weather	2			2	2	240		0	240	1974	61	30	20	10	25	12	67
13	Batikamari	Bahara	3809	Bahara Alim madrasha to H.O Miraj Member	335585466	VRB	All Weather	1.25			1.25	1.25	150	10	90	240	3047	63	19	20	10	25	12	67
14	Moharajpur	Luhair	5470	Lohair Hamid Market to Boro Madth road	335585449	VRB	All Weather	2		0.2	1.8	2	240	20	180	420	2735	77	27	20	10	25	12	67
15	Bhabrasur	Kalinagar	2068	Ramkrishnapur to kalinagar hat via kalinagar high school	335585094	VRB	All Weather	0.6			0.6	0.6	72	10	90	162	3447	78	9	20	10	25	12	67
16	Kashalia	Bedgram	4112	Ujani(UZR) - Goalgram road to Bedgram Hat via Bedgram High School	335585269	VRB	All Weather	2.9	0	1.65	1.25	2.9	348		0	348	1418	85	19	20	10	25	12	67
17	Ragdi	Charprosannadi	4523	Charprosannadi K.M. Zakir Hossain to Charprosannadi village	335585105	VRB	All Weather	1.8			1.8	1.8	216	20	180	396	2513	88	27	20	10	25	12	67
18	Nanikhir	Nanihkir	3864	Nanikhir paschimpara to serajul kazi-milon kazi bari	335585366	VRB	All Weather	2.3			2.3	2.3	276	20	180	456	1680	118	35	20	10	25	12	67
19	Batikamari	Kahaldia	2885	Purbo Kahaldia H/O Sakayet to H/O Abul Khayer Moulana road	335585467	VRB	All Weather	1			1	1	120	30	270	390	2885	135	15	20	10	25	12	67
20	Dignagar	Kanuria	2602	Kanuria Village - Boroihat Bazar Rd.	335585089	VRB	All Weather	2		0.5	1.5	2	240	20	180	420	1301	161	23	20	10	25	12	67
21	Gohala	Monirkandi	2105	Gohala Main road to Manir kandi village road	335585152	VRB	All Weather	3			3	3	360	10	90	450	702	214	45	20	10	25	12	67
22	Batikamari	Bishar Bag Bahara	2922	Bahara -Bisharbug to GPS	335585077	VRB	All Weather	3.5			3.5	3.5	420	40	360	780	835	267	53	20	10	25	12	67
23	Khanderpar	Goptorgati	1558	Goptorgati Madrasha to H/O Sanad	335585313	VRB	All Weather	0.53			0.53	0.53	63.6		0	63.6	2940	41	8	18	10	25	12	65
24	Poshargati	Janbag	1050	Janbag Nalini Kanto Kar to Hazir bag road	335585528	VRB	All Weather	0.61			0.61	0.61	73.2		0	73.2	1721	70	9	18	10	25	12	65
25	Gobindapur	Gopalpur	1811	Gopalpur Sardarpara Nadir Ghat to Gopalpur KGA road	335585346	VRB	All Weather	1.5			1.5	1.5	180	0	0	180	1208	99	23	18	10	25	12	65
26	Moharajpur	Uttar Narayanpur	1503	Narayonpur Chara Battala to Bazar road - Al Jamiatur Madrasha road	335585444	VRB	All Weather	1.8	0.8		1	1	120	10	90	210	1503	140	15	18	10	25	12	65
27	Gohala	Goalakandi	1994	Gailakandi to Gangarampur road	335585253	VRB	All Weather	2.5		1.5	1	2.5	300		0	300	797	150	15	18	10	25	12	65
28	Bhabrasur	Kolia	1350	Kolia Moshin House to Madrasha road	335585432	VRB	All Weather	0.6			0.6	0.6	72	15	135	207	2250	153	9	18	10	25	12	65
29	Jalirpar	Bil Chanda	1554	Jalirpar- Jalirpar Bill Road	335585062	VRB	All Weather	1			1	1	120	15	135	255	1554	164	15	18	10	25	12	65
30	Bahugram	Khagradanga	355	Bahugram-Khagradunga Rd	335584129	VRA	All Weather	0.5		0.3	0.2	0.5	60		0	60	710	169	3	15	10	25	15	65
31	Nanikhir	Paschim Lowkhanda	1956	paschim lokhanda South side gohala bazar	335585138	VRB	All Weather	2.75			2.75	2.75	330	15	135	465	711	238	41	18	10	25	12	65
32	Gobindapur	Durgapur	1146	Salinabox-Durgapur Road	335585016	VRB	All Weather	4.1	1.76	0	2.34	2.34	280.8	1	9	289.8	490	253	35	18	10	25	12	65
33	Nanikhir	Bonogram	1233	Bonogram(jalirpar)-pucca road to H/O sujid Bala goalgram road	335585155	VRB	All Weather	1.5			1.5	1.5	180	15	135	315	822	256	23	18	10	25	12	65
34	Ujani	Bonnahati	1266	Bannahati H/O Bijoy Mandal to Bedgram Hat via Mandal Bari	335585265	VRB	All Weather	1.45			1.45	1.45	174	20	180	354	873	280	22	18	10	25	12	65
35	Ragdi	Mollahdi	1540	Mollahdi jamal Master to Rathkhola via Gournadi GPS	335585102	VRB	All Weather	2.1			2.1	2.1	252	25	225	477	733	310	32	18	10	25	12	65
36	Nanikhir	Modho Bonogram	1054	Bonogram boro road Acharpara via kaliganga mondir road	335585367	VRB	All Weather	2			2	2	240	10	90	330	527	313	30	18	10	25	12	65

*** 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)

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)
37	Nanikhir	Mohistoli	1213	Mohistoli samadi Mondir-bedgram road	335585064	VRB	All Weather	2.5			2.5	2.5	300	10	90	390	485	321	38	18	10	25	12	65
38	Ujani	Basuria	1093	Basuria voumik Bari to Das Bari via Basuria - Tikardangi Khal road	335585504	VRB	All Weather	1.15			1.15	1.15	138	30	270	408	950	373	17	18	10	25	12	65
39	Gobindapur	Palpara	722	Gobindapur Bazer (UZR)-Bathandunga Bazer Via Palpara	335584053	VRA	All Weather	3.5	1.18	0	2.32	2.32	278.4	0	0	278.4	311	386	35	15	10	25	15	65
40	Bahugram	Kawnia	942	Durbasur - Kawnia road via Junu Sk.House	335584197	VRA	All Weather	1.85		1.85		1.85	222	20	180	402	509	427	0	15	10	25	15	65
41	Kashalia	Maldia	665	Ujani-Jalirpar (UZR) to Mochna Bazar via Kashalia U.P Office and Kashalia High School High School Road.	335583014	UNR	All Weather	3.45		3.45		3.45	414		0	414	193	623	0	15	10	20	20	65
42	Ragdi	Tantihati	1333	Tantihati-Balurmadth- Gazina Basu Mollah house via Tantihati Madrasha house	335584097	VRA	All Weather	2.5			2.5	2.5	300	50	450	750	533	563	38	18	10	20	15	63
43	Bashbaria	Ghechua Golla	1050	Dighra Mondir - Ghechua Charghata via Betbita Shimulshur	335584153	VRA	All Weather	4.5		2.2	2.3	4.5	540	30	270	810	233	772	35	18	10	20	15	63
44	Moharajpur	Ramkrishnapur	970	Ramkrishnapur(Islampur) Bridge to Aikdia pucca road	335585320	VRB	All Weather	0.82			0.82	0.82	98.4	15	135	233.4	1183	241	12	15	10	25	12	62
45	Bhabrasur	Bhoomsara	749	Bhoomsara Bridge to Bhoomsara Dhakkinpara road	335585438	VRB	All Weather	0.8			0.8	0.8	96	10	90	186	937	248	12	15	10	25	12	62
46	Bhabrasur	Gayeendar	638	Gayander GPS to tongibari GPS	335585087	VRB	All Weather	1			1	1	120	10	90	210	638	329	15	15	10	25	12	62
47	Gobindapur	Digirpar	920	Aditto house- Dangadurgapur peer bari road	335585216	VRB	All Weather	2.5	0	0	2.5	2.5	300	1	9	309	368	336	38	15	10	25	12	62
48	Gobindapur	Dangadurgapur	713	Dangadurgapur-khaspara-Dasherhat road	335585356	VRB	All Weather	2	0	0	2	2	240	1	9	249	356	349	30	15	10	25	12	62
49	Ragdi	Shashirkandi	471	Sashirkandi Jakir Sk.house to Chagolchira-Gournadi Connecting road	335585454	VRB	All Weather	0.7			0.7	0.7	84	10	90	174	673	369	11	15	10	25	12	62
50	Ujani	Dharma Royer Bari	937	Rahutror GC - Chak borompalta	335584020	VRA	All Weather	2.01			2.01	2.01	241.2	30	270	511.2	466	545	30	15	10	20	15	60
51	Kashalia	Hazragati	788	Mochna Badal Master Bridge to Hazragati GPS via Suasur Road	335584033	VRA	All Weather	4.3	0	3	1.3	4.3	516		0	516	183	655	20	15	10	20	15	60
52	Ragdi	Dasherkandi	729	Chagolchira R&H- Battala to Rajoir FRB Dasherkandi	335584018	VRA	All Weather	2.9			2.9	2.9	348	20	180	528	251	725	44	15	10	20	15	60
53	Ragdi	Gournadi	637	Chagolcira stand to gournadi GPS	335584148	VRA	All Weather	2.3			2.3	2.3	276	40	360	636	277	998	35	15	10	20	15	60
54	Mochna	Dumuria, Dobila	1180	Dumuria-Dobila-Ghunshi road	335585381	VRB	All Weather	4			4	4	480	150	1350	1830	295	1551	60	18	16	12	12	58
55	Nanikhir	Pathorghata	497	koturakandi-jalirpar road to pathorgram Nanikhir UP Office road	335585353	VRB	All Weather	1			1	1	120	15	135	255	497	513	15	15	10	20	12	57
56	Kashalia	Khalkhula	933	Ujani - Jalirpar GC Rd(Khalkula) - Gechua road	335585337	VRB	All Weather	1.75			1.75	1.75	210	30	270	480	533	515	26	15	10	20	12	57
57	Bahugram	Horinahati	382	Boalnaraon-Harinahat Road	335585042	VRB	All Weather	1.68			1.68	1.68	201.6		0	201.6	227	528	25	15	10	20	12	57
58	Bhabrasur	Naldanga	666	Naldanga Battala to Tungibari road	335585435	VRB	All Weather	1.5			1.5	1.5	180	20	180	360	444	541	23	15	10	20	12	57
59	Jalirpar	Dakshin Jalirpar Taluk	630	Dhakkin Jairpar Gones Pagol Mandir to Fulkumari road	335585377	VRB	All Weather	1		0.5	0.5	1	120	25	225	345	630	547	8	15	10	20	12	57
60	Jalirpar	Uttar Jalirpar	415	Jalirpara village - Jalirpar	335585065	VRB	All Weather	0.85			0.85	0.85	102	15	135	237	488	571	13	15	10	20	12	57
61	Poshargati	Suropi Khorikain	694	Korikhan Pachuria Rd-H/O Mohon Biswas	335585066	VRB	All Weather	1.9			1.9	1.9	228	20	180	408	365	588	29	15	10	20	12	57
62	Bhabrasur	Rasulpur	453	Rasulpur H/O kawsar Fakir to krishnapur Mosque via kamal sheikh	335585545	VRB	All Weather	1.5			1.5	1.5	180	10	90	270	302	597	23	15	10	20	12	57
63	Batikamari	chaowcha	862	Chaowcha wadud Bhuayan bari to GPS road	335585460	VRB	All Weather	2			2	2	240	40	360	600	431	696	30	15	10	20	12	57
64	Batikamari	Purbo chaowcha	665	Muksudpur-Baraitala(R&H)-Chaowcha purbopara masterbari road	335585316	VRB	All Weather	2			2	2	240	25	225	465	332	700	30	15	10	20	12	57
65	Kashalia	Sarshakandi	678	Khalkula Bridge(East side) to Sarsakandi(South Border) road	335585479	VRB	All Weather	1.5			1.5	1.5	180	40	360	540	452	796	23	15	10	20	12	57
66	Kashalia	Daria	398	Natun Bazar- Noyakandi Choksing	335585481	VRB	Submersible	2			2	2	360		0	360	199	905	30	15	10	20	12	57
67	Ragdi	Sundardi	595	Sundardi Siraj Master H/O to Sashirkandi Rezaul Matubbor	335584146	VRA	All Weather	2.8			2.8	2.8	336	40	360	696	212	1170	42	15	10	15	15	55
68	Bahugram	Chhot Tarail	667	Garolgati -Tarail-Nakra Khal via Bashuria high school road	335584050	VRA	All Weather	5.35	0.91	4.19	0.25	4.44	532.8	50	450	982.8	150	1474	4	15	10	15	15	55
69	Dignagar	Roghuardanga	425	Bamondanga UZR - Nowhata Bazar via Dhopadi GPS	335584058	VRA	All Weather	5.2		1.31	3.89	5.2	624	30	270	894	82	2103	58	15	10	10	15	50
70	Bahugram	Motbari	347	Basuria to Tikardangi road	335584036	VRA	All Weather	4.5		2.5	2	4.5	540	40	360	900	77	2592	30	15	10	10	15	50
71	Kashalia	Ibrahim Kasalia	296	Kasalia UP Office to Gunahar via Ibrahim Kasalia road	335585458	VRB	All Weather	2.5		0.6	1.9	2.5	300	30	270	570	118	1928	29	15	10	12	12	49
72	Ujani	Tikerdanga	346	Ujani Rahuthor UZR- Bashuria GPS via tikardangi	335585080	VRB	Submersible	4.85		1.1	3.75	4.85	873	30	270	1143	71	3303	56	15	10	10	12	47
73	Mochna	Gunshi	2518	Ghunshi GPS-Ghushi Sonvita	No ID	VRA	All Weather	2			2	2	240	30	270	510	1259	203	30	20	10	25	15	70
74	Bhabrasur	Bhabrasur	2557	Bhabrasur Paschimpara to Kalinagar	No ID	VRA	All Weather	2			2	2	240	40	360	600	1279	235	30	20	10	25	15	70
75	Moharajpur	Boro Bonogram	1370	Moharajpur UZR (FF Atahar Molla's House) - Bonogram Bazar Shwarashoti Mondir via Biddut Sikder's House	No ID	VRA	All Weather	2		0.4	1.6	2	240	5	45	285	685	208	24	18	10	25	15	68

*** 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)

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	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
76	Gobindapur	Surupi	1401	National High - Surupi road	No ID	VRA	All Weather	3		0	3	3	360	1	9	369	467	263	45	18	10	25	15	68
77	Bashbaria	Dhopakandi	1266	Paraihati Bridge - Dhopakandi Village	No ID	VRA	All Weather	2			2	2	240	20	180	420	633	332	30	18	10	25	15	68
78	Ujani	Mohatali	2206	Mohatali GPS - Khalpar Rd.	No ID	VRB	All Weather	1			1	1	120		0	120	2206	54	15	20	10	25	12	67
79	Moharajpur	Lohachura	2077	Kathaltola RHD - Dakshin Para Jame Mashjeed	No ID	VRB	All Weather	1		0.2	0.8	1	120	5	45	165	2077	79	12	20	10	25	12	67
80	Poshargati	Bairbag	2152	Bairbag Bridge - Janbag Madrasa via Palbari	No ID	VRB	All Weather	1.5			1.5	1.5	180		0	180	1434	84	23	20	10	25	12	67
81	Khanderpar	Bezra	1499	Bezra Alia Madrasha to Balnarayon-Pucca Mizan Master Bari-Milon Mollah	No ID	VRB	All Weather	0.4			0.4	0.4	48		0	48	3747	32	6	18	10	25	12	65
82	Bhabrasur	Boalia	1803	Bolia H/O Eliyes sardar to Boalia Utterpaera rezaul road	No ID	VRB	All Weather	0.6			0.6	0.6	72	5	45	117	3006	65	9	18	10	25	12	65
83	Gohala	Shantipur	1414	Gopalganj RHD to Sendia Road	No ID	VRB	All Weather	1.5		1.5		1.5	180	10	90	270	943	191	0	18	10	25	12	65
84	Dignagar	Padmakanda	1093	Padmakanda GPS - Muksudur Boroitola RHD via Padmakanda Khanbari Mashjeed	No ID	VRA	All Weather	3			3	3	360	40	360	720	364	659	45	18	10	20	15	63
85	Jalirpar	Munshi Kaligram	524	Jalirpar UZR - Munshi Kaligram GPS	No ID	VRB	All Weather	1			1	1	120		0	120	524	229	15	15	10	25	12	62
86	Gobindapur	Fulhara	296	Sultan Dighirpar Fulhar aBanargi Para Road	No ID	VRB	All Weather	1			1	1	120	0	0	120	296	406	15	15	10	25	12	62
87	Mochna	Ganiari	736	Ganiari to Khandpura Battala	No ID	VRB	All Weather	1.5			1.5	1.5	180	20	180	360	490	489	23	15	10	25	12	62
88	Jalirpar	Talbari	880	Jalirpar UP - Sathpar via Talbaria	No ID	VRA	All Weather	6			6	6	720	50	450	1170	147	1330	90	15	16	15	15	61
89	Mochna	Bamunia	669	Bamunia to Aikdia	No ID	VRA	All Weather	2.5			2.5	2.5	300	25	225	525	268	785	38	15	10	20	15	60
90	Gohala	Bhattacharjeekandi	527	Bhattacharjeekandi Pannu Member House to Beel Road Via Siddque House	No ID	VRB	All Weather	1.5			1.5	1.5	180	10	90	270	351	512	23	15	10	20	12	57

*** Cost for Roads & Structures; (All Weather Rd= 120 lac/km, Submersible= 180 lac/km, Structure= 9 lac/m)
*** Weightage Values; (Population = 30, Travel Time= 20, Cost per1000 people= 25, Road Hierarchy= 25)