

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"

Nabinagar, Brahmanbaria







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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 **Nabinagar** Upazila of **Brahmanbaria** District.

1 DESCRIPTION OF THE UPAZILA

1.1 GEOGRAPHY AND DEMOGRAPHY

The geographical area of Nabinagar upazila is 350.32 square kilometers and has 21 unions, 149 mouzas and 200 villages. The upazila is 76 km away from district headquarters of Brahmanbaria. 4 major rivers have flown over the upazila that are Meghna, Titash, Buri & Pagla. The total population of the upazila is approximately 4,93,000 of which 2,30,000 are male and 2,63,000 female, total number of households are 94,871 and average household size is 5.19 with a population density of 1409 (as per population census 2011).

1.2 EDUCATION FEATURES

According to the information of the relevant local government offices there are 144 government, 72 registered, 2 non-government primary schools, 39 NGO schools & 60 kindergarten schools. On the other hand, Nabinagar has 39 non-government high schools with only a government college, 5 private colleges, and 40 madrashas. The literacy rate for the upazila is 43.6% 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 Nabinagar 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 Nabinagar is 847.36 km and out of which, 301.16 km paved and 546.20 km earthen.

1.4 AGRICULTURE, FOOD PRODUCTION AND FISHERIES

Both the Agriculture & Pisciculture have major importance for the economy of the people of Nabinagar. There are 87,373 acres of arable land in the upazila. In the fiscal year 2010-11 the Rice production was 835, 21175 & 63926 metric tons for Aus, Aman & Boro seasons respectively. The upazila also produced 2138 metric tons of Wheat, 1152 metric tons of Jute, 11747 metric tons of Potato and 1292 metric tons of Oilseed in the same fiscal year 2010-11. A notable quantity of vegetable is also produced here in this upazila.

According to the BBS (2010-11) data Nabinagar has 5,812 acres of pond, dhighee & other wetlands that produced 5,397 metric tons of fishes. There also exists 222 poultry & 178 dairy farms.

All the agricultural products are adequate to meet the demand of the upazila and surpluses are sold to outside of Nabinagar.

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 17 hatbazar and 6 growth centers in the upazila. The structural development of hatbazar and growth is pivotal to boosting up the rural economy. A details of the growth center & hatbazar of the Upazila has been attached in the <u>Annexure-1</u>.

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2 LOCATION OF THE UPAZILA

Nabinagar upazila is in the Eastern part of the country under Brahmanbaria district of Chattogram division. The location has been shown in the map. It is surrounded by Brahmanbaria Sadar, Ashuganj and Raipura upazilas on the north, Muradnagar upazila on the south, Kasba and Brahmanbaria Sadar upazilas on the east, Banchharampur and Raipura upazilas on the west. The upazila is within *Middle Meghna Flood Plain zone*. During monsoon the river Meghna carries a large volume of flood water coming from upstream, while the upstream is typically flood plain zone of Sylhet, Sunamganj, Habiganj, Moulvibazar, Kishoreganj & Netrokona districts. The hilly rivers coming down from the 'Khasi and Jaintia hills' in Meghalaya, India carry particularly high volumes of water during monsoon as they come from some of the rainiest (*Cherrapunji*) places in the world, resulting flash flood in these mentioned districts inside Bangladesh. Being the downstream, the river Meghna thus receives enormous water from the surface runoff and the stream overflows due to the channel runoff exceeds its carrying capacity. As a result, it inundates a large area of Meghna Flood Plain zone as well as the Nabinagar upazila. Floods induce severe impacts in both the built and the natural environment. The effects of flood can be catastrophic and show extensive diversity, ranging from damages in buildings and infrastructure to impacts on vegetation, human lives and livestock.

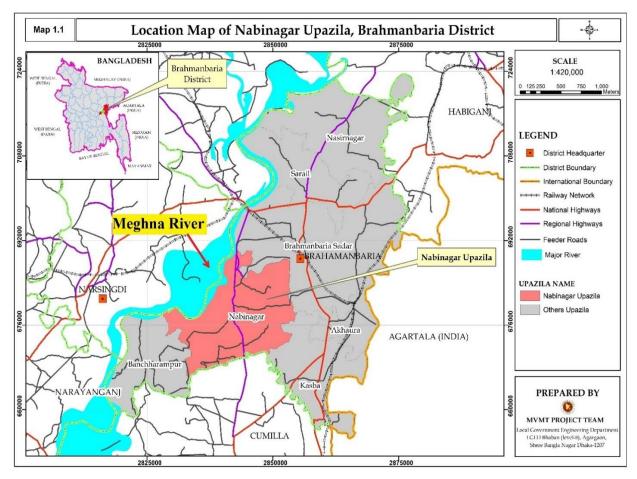


Figure 1: Upazila Location Map.

3 APPROACH & METHODOLOGY

3.1 STUDY TEAM COMPOSITION

A team consisting of Senior Rural Road Infrastructure Specialist, Associate Rural Infrastructure Specialist, Assistant Engineer engaged by Project Management Office

(PMO) conducted the study. On the other hand, A team consisting of Deputy Team Leader cum Rural Infrastructure Engineer, Junior GIS expert and Junior Engineer engaged by consulting firm (datEx & DECL JV) conducted the study. Participatory approach to review the database and identify priority transport infrastructure needs ('sub-projects') instrumental. At the stakeholder consultation meeting held in each district, the database was reviewed, priority needs identified and mapped working together with the LGI representatives and **LGED** technical **LGED** team. and LGI

Stakeholder Consultation Meeting

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

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

3.2 STUDY AREA

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

3.3 DATABASE REVIEW AND ANALYSIS

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

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

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

3.4 Prioritization Criteria of Sub-projects

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

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

3.5 WEIGHTAGE DISTRIBUTION FOR PRIORITIZATION

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

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

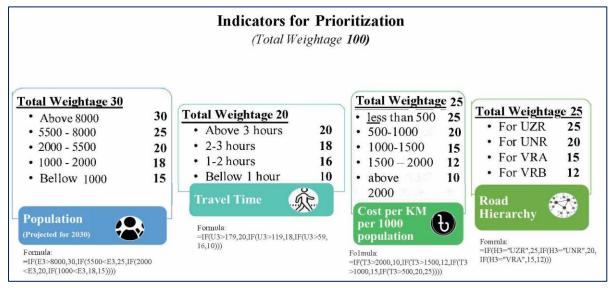


Figure 2: Prioritization indicators & their weightage values

3.6 Mapping Hard-to-reach Villages & Population

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

3.7 WRAP UP MEETING

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

3.8 VALIDATION WORKSHOP

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

3.9 NATIONAL WORKSHOP

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

4 DESCRIPTION OF WETLANDS

4.1 DISTRIBUTION OF THE HAORS/ WETLANDS

The upazila has no major floodplain zone. The roads within the upazila need relevant measures during road construction and maintenance.

Distribution of Haors: Nabinagar Upazila

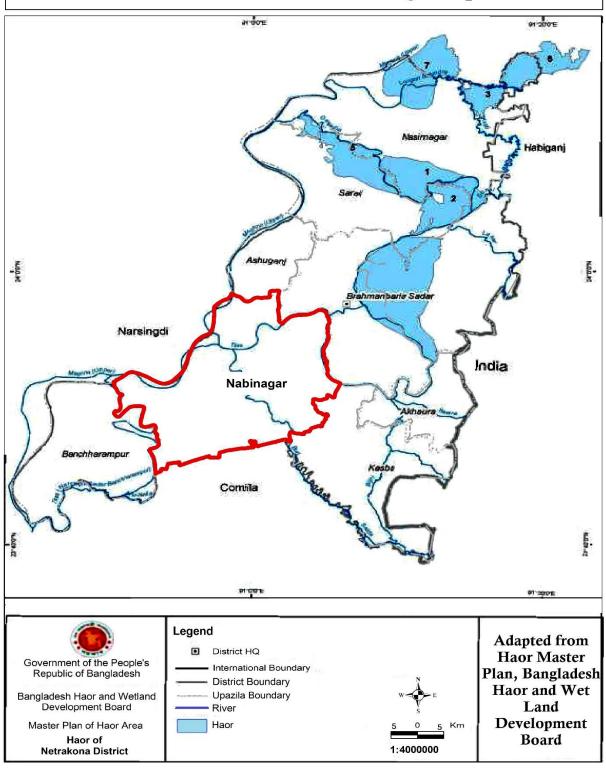


Figure 3: Haor Distribution Map

4.2 HAOR/ WETLAND CATEGORY

However, the upazila is neither Foot Hill nor in deeply flooded zone. Therefore, road or other infrastructure development in this Upazila does not have any major environmental consequences.

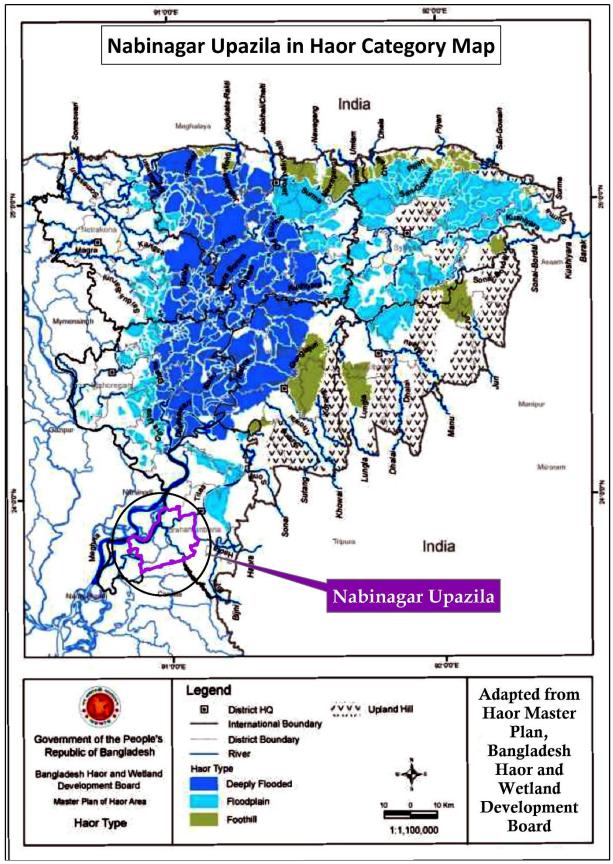


Figure 4: Haor Catagory Map.

4.3 BIO-ECOLOGICAL CHARACTERISTICS

The Bio-ecological characteristics map of the upazila has been shown below. The map shows that, it is mostly within Meghna Floodplain zone and partially a haor basin. Therefore, adequate opening for the road and road structures should be maintained.

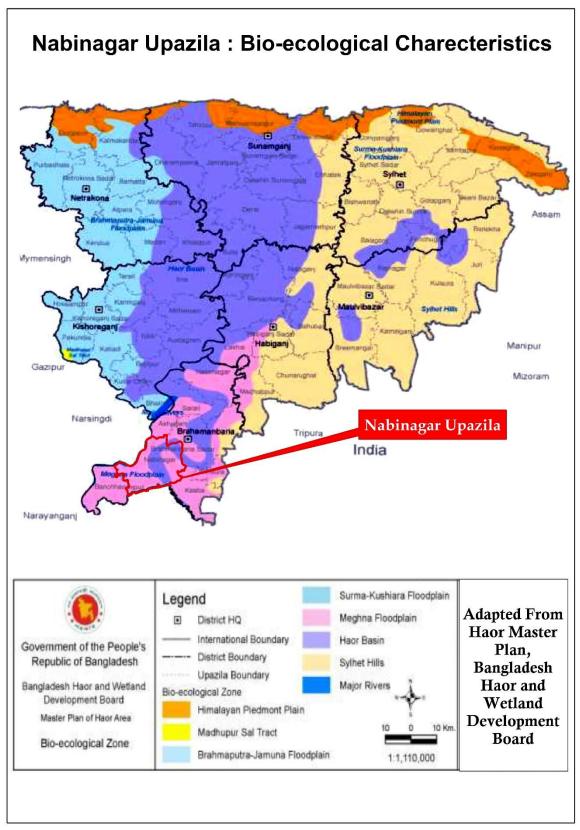


Figure 5: Bio Ecological Characteristics Map

5 RURAL ROAD CONNECTIVITY TO THE VILLAGES

5.1 SUMMARY OF THE VILLAGE CONNECTIVITY

Nabinagar is an upazila with major haors. The rural road communication is quite poor here. Out of 196 villages, 43 are disconnected from the developed paved road network that brings huge sufferings for the people of those villages. The total rural road network of Nabinagar is 847.36 km and out of which, 301.16 km paved and 546.20 km earthen.

Table 1: Total villages in the unions and their connectivity

SL No	Union	No of Villages	Connected Villages	Disconnected Villages
1	Barail	9	7	2
2	Barikandi	8	8	0
3	Biddyakut	10	6	4
4	Birgaon	11	8	3
5	Bitghar	11	9	2
6	Ibrahimpur	6	3	3
7	Junedpur	13	10	3
8	Kaitala	8	8	0
9	Krishnanagar	11	8	3
10	Laur Fatehpur	10	9	1
11	Natghar	12	10	2
12	Paschim Nabinagar	8	2	6
13	Purba Nabinagar	5	4	1
14	Rasullabad	5	3	2
15	Ratanpur	14	14	0
16	Salimganj	10	10	0
17	Satmura	14	8	6
18	Shibpur	14	11	3
19	Shyamgram	11	11	0
20	Sreerampur	6	4	2
	Total=	196	153	43

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 & disconnected villages and their population

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Disconnected Villages	Population 2021 (Based on BBS 2011)
	1	Barail	6521	Gonsaipur	2761
9	2	Char Gonsaipur	4971	Meratali	1934
	3	Dhopachang	210		
Barail	4	Ghiara	203		
	5	Jalsuka	2453		
	6	Kharghar	2460		
	7	Radhanagar	1448		
		Sub Total=	18266		4695
	1	Barikandi	5008		
®	2	Dharabhanga	3175		
Ē	3	Dolaiganj	683		
kan	4	Kulasin	1676		
Barikandi	5	Moktarampur	3206		
B	6	Nurjahanpur	2065		
	7	Sonabalua	737		
	8	Thollakandi	4935		
		Sub Total=	21485		0
	1	Biddyakut	11297	Bhayralnagar	3147
10)	2	Durgapur	778	Ganganagar	1496
	3	Merkuta	4028	Manipur	2561
Biddyakut (10)	4	Salimnagar	1547	Rajapur	687
Idy	5	Samantaghar	5124		
Big	6	Urkhalia	2980		
		Sub Total=	25754		7891
	1	Amtali	3318	Durgarampur	2148
11)	2	Birgaon	3183	Haripur	1088
n	3	Daskandi	691	Tilokia	918
Birgaon	4	Kedarkhola	1680		
Bir	5	Kishorepur	2206		
	6	Nazar Daulat	2263		
	7	Shibpur	1783		
	8	Sobharampur	695		
		Sub Total=	15819		4154
	1	Bishnupur	48	Bhaturia	2239
(11)	2	Chinamachhi	1382	Durain	2003
ır (3	Daulatpur	447		
Bitghar (11)	4	Gobindapur	296		
Bit	5	Gurigram	3936		
	6	Maheshpur(Part-1)	4251		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Disconnected Villages	Population 2021 (Based on BBS 2011)
	7	Ramchandrapur	3430		
	8	Samashpur	8657		
	9	Tiara	4432		
		Sub Total=	26879		4242
our	1	Basidpur	587	Kalipura	1224
6 iii	2	Ibrahimpur	10613	Kazimabad	873
Ibrahimpur (6)	3	Jafarpur	2045	Shyampur	237
IPI		Sub Total=	13245		2334
	1	Asrafpur	50	Balibari	1266
13)	2	Bara Bangora	347	Bangora	6454
r (3	Char Para	978	Nilnagar	602
ndı	4	Hurua	2741		
Junedpur (13)	5	Junedpur	2112		
Ju	6	Kanthalia	3044		
	7	Karaibari	2310		
	8	Malai	1946		
	9	Merkuta	1968		
	10	Pandabnagar	173		
		Sub Total=	15669		8322
	1	Brahmanhata	5867		
8	2	Goali	3020		
Kaitala (8)	3	Kaitala	74		
aita	4	Konaur	3283		
K	5	Naroi	3283		
	6	Noagaon	7101		
	7	Ramnagar	1278		
	8	Shibnagar	390		
		Sub Total=	24296		0
(11)	1	Ashrafpur	2161	Dakshin Lashmipur	4278
r (J	2	Daulatpur	4216	Gaurnagar	5197
ıgaı	3	Gazirkandi	2080	Sitarampur	2883
ans	4	Hajirhati	3461		
shn	5	Paschim Krishnanagar	2981		
Krishnanagar	6	Purba Krishnanagar	3050		
	7	Sathgorhati	2408		
	8	Thanakandi	2890		
		Sub Total=	23247		12358
ur	1	Ahammadpur	5368	Badragacha	1988
tehp 10)		Barikhola	3791	5	-
Fat (1	3	Basaruk	4409		
Laur Fatehpur (10)	4	Bishnupur	623		
La	5	Fatehpur	2541		
)	1 atempui	<i>L</i> J41		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Disconnected Villages	Population 2021 (Based on BBS 2011)
	6	Hajipur	3012		
	7	Laur	2523		
	8	Radhanagar	613		
	9	Tanchara	918		
		Sub Total=	23798		1988
	1	Barahit	851	Ekaichhara	1375
12)	2	Bhandushar	717	Nasarabari	794
Natghar (12)	3	Charilam	2090		
ghg	4	Kharaiala	2922		
Nai	5	Kurighar	8055		
	6	Nandura	856		
	7	Natghar	6972		
	8	Panchbaria	890		
	9	Rasulpur	3599		
	10	Rudrakhabari	772		
		Sub Total=	27724		2169
Paschim Nabinagar (8)	1	Daskandi	581	Char Napang	4832
S (8)	2	Narasingpur	1550	Chitri	3123
Nak	3			Dari Napang	1384
ii.	4			Fatehpur	1629
sch	5			Nabipur	4629
Pa	6			Napang	3324
		Sub Total=	2131		18921
Purba	1	Chander Char	221	Bagdahar	7775
Pu gar	2	Dupakandi	1420		
Pun Nabinagar	3	Mohalla	4112		
Nab	4	Sona Para	607		
		Sub Total=	6360		7775
Rasullabad (5)	1	Lahari	3346	Kalgharia	3336
		Molla	2455	Rasullahbad	9630
Ras	3	Uttar Darara	2413		
. –		Sub Total=	8214	0	12966
	1	Baje Bishara	2203		
(14)	2	Baldibari	1352		
ur	3	Bauchail	1518		
anp	4	Bhiti Bishara	2905		
Ratanpur	5	Chaturangakhola	943		
, ,	6	Dabachail	2292		
	7	Dimla	477		
	8	Golpukuria	739		
	9	Jasatua	1569		
	10	Khagatua	3791		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Disconnected Villages	Population 2021 (Based on BBS 2011)
	11	Majhiara	1722		
	12	Perakandi	1307		
	13	Ratanpur	4988		
	14	Shahpur	4790		
		Sub Total=	30596		0
_	1	Badda	1548		
10)	2	Banda Baher Char	1050		
.E.	3	Barail	5927		
Salimganj (10)	4	Barail Kaibart Para	778		
alin	5	Char Badda	2020		
Š	6	Kadair	2974		
	7	Kazirgaon	191		
	8	Nilakhi	2838		
	9	Rajnagar	707		
	10	Salimaganj	831		
		Sub Total=	18864		0
	1	Bara Sikania	426	Bhatar Pukur	572
(14)	2	Chechar	1410	Chelikhola	920
ra	3	Chouria	2884	Chhota Sikanika	1190
Satmura	4	Jagannathpur	1582	Ichhapura	730
Sat	5	Kajella	1868	Isanagar	355
	6	Padmanagar	199	Madhdabpur	284
	7	Satmura	4900		
	8	Uttar Pandabnagar	131		
		Sub Total=	13400		4051
	1	Akubpur	1160	Julai Para	2660
(14)	2	Atiara	974	Kanikara	6834
Shibpur (14)	3	Baghaura	4577	Mirpur	5722
ibp	4	Dhanashi	2215		
Sh	5	Islampur	864		
	6	Kajalia	1810		
	7	Kamalpur	312		
	8	Mahespur(Part)	1627		
	9	Saharpur	1648		
	10	Shibpur	3839		
	11	Warrok	3799		1701
g		Sub Total=	22825		15216
Shyamgram (11)	1	Baniachang	902		
	2	Char Maniknagar	206		
hys	3	Dirghasair	977		
S 2	4	Jalli	2918		
	5	Kurinal	1872		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Disconnected Villages	Population 2021 (Based on BBS 2011)
	6	Nasirabad	4342		
	7	Noagaon	1861		
	8	Sahabazpur	4695		
	9	Sahebnagar	2365		
	10	Shyamgram	6724		
	11	Sreeghar	4567		
		Sub Total=	31429		0
9	1	Gopalpur	7123	Ayitala	1249
onr	2	Riazatpur	1574	Dari Sreerampur	2699
amp	3	Sadekpur	520		
Sreerampur	4	Sreerampur	8797		
Sr		Sub Total=	18014		3948

5.3 MAP OF DISCONNECTED VILLAGES & PROPOSED ROADS

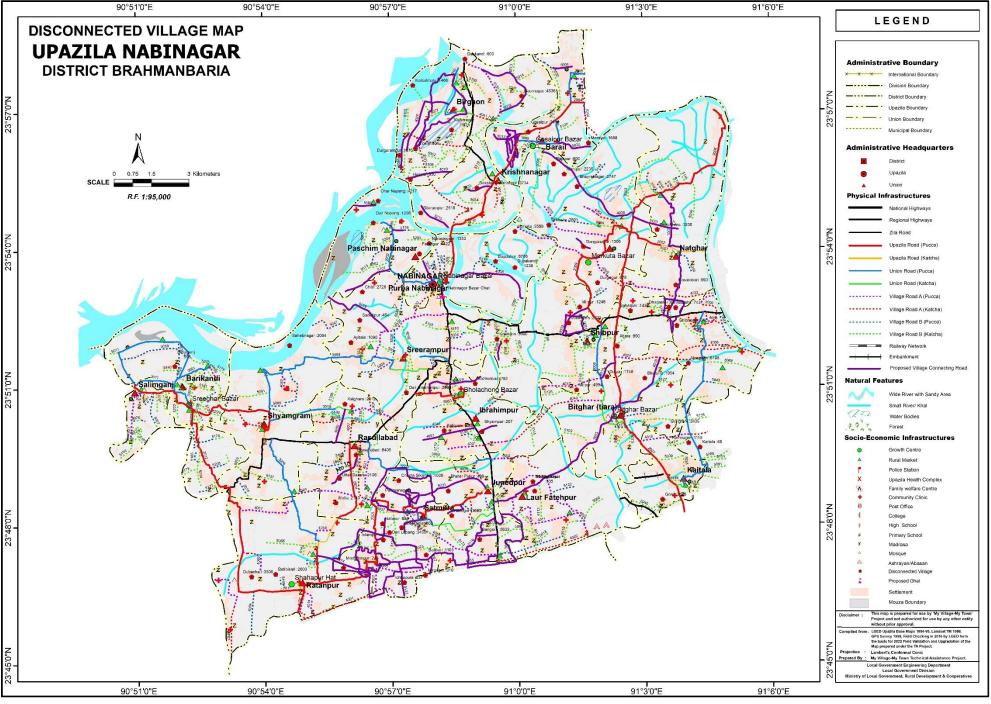


Figure 6: Upazila Map

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, Nabinagar 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 two case study unions in Nabinagar Upazila, that are 'Paschim Nabinagar & Purba Nabinagar'.

In **Paschim Nabinagar** union, the consultant visited "Nabinagar nabipur Rd - Nabipur bara bari" having the Road ID: 412855024. The road was selected for the site visit considering the beneficiary population, educational institutes along the road and the recommendations of the UE Office as the road has a priority within the union.

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

The length of this road is 2.25 km that is completely earthen. The road connects 5 major villages of the union named Char Lapang, Lapang, Nabipur, Islampur, Dari Lapang having the total population of approx. 17,700. People living here doesn't have any good road network with the Upazila HQ due to having unpaved road communication. There exists, one madrasa and two Primary Schools. A bridge (75m) is required at the very beginning of this road.



Figure 8: Condition of the visited road alignment at Case Study union

In **Purbo Nabinagar** union, the consultant visited "Mohalla Bazar Bridge - Baogdahar algahati road" having the Road ID: 412855219. This road was visited considering the number of beneficiaries, educational institutes and the suggestions of the UE Office.

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 9: Condition of the visited road alignment at Case Study union

The length of this road is 3.9 km having 0.9 km paved and rest of the 3 km earthen. The road connects 2 major villages of the union named Bagdahar & Dupkandi having the total population of approx. 9200. This road passes through the middle of the union that connect two village but used by all the people of the union for going upazila headquarters. There exists two Primary Schools and a bazar along the alignment.

7 DATA COLLECTION & ANALYSIS

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

7.1 Proposed Riverine Routes

As per actual field visit and data analysis from haor development board, Nabinagar Upazila is not within deep haor zone. It is partially a floodplain zone within *Meghna River Basin*. About four rivers have passed through Nabinagar Upazila. These are Meghna, Titas, Buri and Pagla river. At present, roads are the most partially dominant mode of transportation. Most of the structures were built on the rivers to make the road communication effective. On the other hand, the UE office, Nabinagar mentioned no riverine routes for multi-modal transport system except the river Meghna, which is one of the major perennial streams in the country that needs no excavation.

7.2 Proposed Roadway for Disconnected 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 disconnected villages (KM)
847.36	301.16	546.20	83.98

7.2.1 PROPOSED ALL WEATHER ROUTES:

There are 32 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	Kurighar bazar-Dhanasi Bazar Road via Natghar UP	412853007	All Weather	1.5
2	Barial UP - Pagla River ferighat	412853013	All Weather	0.545
3	Nabinagar - Fatehpur Road	412853014	All Weather	0.07

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
4	Nabinagar-Bag dahor Rd	412854008	All Weather	2.46
5	Krishnagar Graveyrd-South Lakshipur Rd	412854010	All Weather	1.52
6	Bangura village Rd	412854015	All Weather	1.35
7	Tiara - baturia road	412854018	All Weather	3.45
8	Tilukia feryghat-Haripur subarmpur nazradaulat Rd.	412854028	All Weather	1.2
9	Bagaura- julaiuara road.	412854033	All Weather	3
10	Rasullabad R&H - Lahari Madrasha Road	412854050	All Weather	1.5
11	Ibrahimpur Bash Bazar(R&H) - Kalipura via Ibrahimpur Pacchim Eidgha	412854051	All Weather	3.1
12	Bangura Bazar - Satmura Bazar Rd	412854053	All Weather	4.6
13	Satmura UP Office to chelikhola road via natun Bazar	412854057	All Weather	1.65
14	Chasra h/o Ali Asghar - Eishannagar H/O Dr.Mosharaf hossen	412854067	All Weather	1.25
15	Telokia Gaveyard - Durgharampur Lanchghart	412854069	All Weather	1.5
16	Ratanpur Bazar - Satmura Bazar road via Madabpur	412854074	All Weather	3
17	Durain village Road	412855010	All Weather	1.6
18	Maratali Road	412855020	All Weather	1.29
19	Nabinagar nabipur RdNabipur bara bari	412855024	All Weather	2.25
20	Asamuti Khal - Ibrahimpur Road	412855027	All Weather	1.75
21	Karibari R&H - Dashmuza Bazar Rd	412855031	All Weather	4.4
22	Thana kandi-Gurnagar Rd	412855032	All Weather	4.12
23	Dasmuza Bazar - Jamuna River Via Shikanina Pry School	412855036	All Weather	0.55
24	Charlapang new-Maddypara Rd	412855086	All Weather	3
25	Chitri Kander para - Narsingpur Road	412855107	All Weather	2.5

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
26	Ekaichara A. Rahaman house-Mohesh Rd.	412855123	All Weather	2.1
27	Reajatpur - Sadekpur bazar	412855129	All Weather	5
28	Ichapura-Dashmuza Rd.	412855133	All Weather	1.25
29	Nilnagar Pri School - Mailai Pry School Via Malai Village Graveyard	412855209	All Weather	1.275
30	Sitaarumpur bazar - H/ o Jabbar Hazi r Bari road	412855215	All Weather	2
31	Rahim Master House - Darara Shamim Market Via Chairman's House	No ID	All Weather	1.5
32	Darind Ghosh Bari - Ansar Alir Bari	No ID	All Weather	1

7.2.2 PROPOSED SUBMERSIBLE ROUTES:

There are 5 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 5: Proposed submersible roads in the upazila

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
1	Bottali R&H-Bitghar GC Road.	412852003	Submersible	4.8
2	Kazimabad-Gonianpara via Bolachang bazar	412854029	Submersible	3
3	Biddakut Monipur - Monipur Ferri Ghat	412854038	Submersible	5
4	Durgharampur Khayaghat -Kadirkhola Via Harepur Shobarampur	412854070	Submersible	3.5
5	Kanikara Vich Chairman Bari - boree nade road	412855198	Submersible	0.4

7.2.3 PROPOSED ROADS FOR DISCONNECTED VILLAGES HAVING NO ID:

There are 2 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 6: Proposed roads for disconnected villages having No ID

Sl. No	Road Name	Road ID	Unpaved length (Km)
1	Rahim Master House - Darara Shamim Market Via Chairman's House	No ID	1.5
2	Darind Ghosh Bari - Ansar Alir Bari	No ID	1

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 (<u>Annexure-2</u>) for the HTRV (Hard to Reach Villages). The priority score has been determined according to following

Table 7: Considered weightage values for the prioritization

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

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

8 CONCLUSION & RECOMMENDATIONS

- Nabinagar Upazila is located within *Middle Meghna Flood Plain zone*. There are 4 (four) major rivers that dominate the ecosystem, transport system of the Upazila. That are Meghna, Titash, Buri & Pagla rivers. During monsoon, these rivers carry huge volume of flood water. Though the Upazila has a number of rivers, riverine transport is available only along Meghna river.
- 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 43 disconnected villages. To develop rural connectivity, there are proposals for both all weather and submersible roads. This report contains a list of roads with their priority. The priority has been determined based on Population, Travel Time, Cost per KM/1000 people & Road Hierarchy.
- This Upazila is highly vulnerable to disasters. Due to climate change, 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 Nabinagar in Brahmanbaria district is highly recommended.

ANNEXURE - 1

DETAILS OF GROWTH CENTER & HATBAZAR

		ory	13	ory	ory					Land	l Area (Acre)	Ŧ	T
Union	Market Name	Market Category (GC=Growth Center, HB=Hat Bazar)	Market Listed? (Yes/ No)	Market Category (General/ Special/ Collection center)	Market Category (Wholesale/ Retail/both)	Hat Day	Chandina Viti (Number)	Chandina Viti (Land)	Chandina Viti (Shop)	Toha	Khas	Private	Lease/ Khas Collection BDT (2020)	Lease/ Khas Collection BDT (2019)
Barail	GOSAIPUR BAZAR	GC	Yes	General Market	Both		50	0.20	50	0.36	0.56	0.00	27000	14000
Barail	Barail Bazar	НВ	Yes	General Market	Both		71	0.41	71	0.61	1.70	0.00	20000	20000
Bidyakut	MERKUTA BAZAR	GC	Yes	General Market	Both		65	0.26	65	0.36	0.95	0.00	3000	5000
Bidyakut	Biddakut Bazar	НВ	Yes	General Market	Both		64	0.30	64	0.36	0.71	0.00	3000	5000
Birgaon	Baishmaza Bazar	НВ	Yes	General Market	Both	2	140	0.67		0.71	2.29	0.00	1405000	1325000
Bitghar	BITGHAR BAZAR	GC												
Borikandi	SREEGOR BAZAR	GC	Yes	General Market	Both	1	101			-	-	0.00	1611000	1701000
Jenodpur	Jenodpur Bazar	НВ	Yes	General Market	Both		6	0.13		0.20	0.61	0.00	56500	56000
Jenodpur	Bangoura Bazar	НВ	Yes	General Market	Both		20	0.10	20	0.08	-	0.00	10000	4000
Jenodpur	Bangora Bazar	НВ	Yes	General Market	Both		37	0.38	78	0.44	1.27	0.00	55000	45000
Kaitala south	Kaitala Bazar	НВ	Yes	General Market	Both		49	0.25		0.08	0.56	0.00	6000	6000
Krishnanagar	Krishnanagar Bazar	НВ	Yes	General Market	Both		18	0.05	18	0.12	0.17	0.00	2500	1000
Krishnanagar	Thanakandi Bazar	НВ	Yes	General Market	Both		23			-	-	0.00	2000	2000
Laurfaterhpur	Laurfaterhpur Bazar	НВ	Yes	General Market	Both		19	0.08		0.20	0.28	0.00	2000	2000
Municipality(Purb a Nabinagar)	NABINAGAR BAZAR	GC	No	General Market	Both	2	90		90	0.90	2.57	0.00	0	0
Natghar	Korigor Bazar	НВ	Yes	General Market	Both		66	0.43		1.03	0.43	0.00	2000	2000

		gory	d?	ategory	ategory e/ h)		:=	:=	ij	Land	l Area (A	Acre))T	BDT	
Union	Market Name	Market Category (GC=Growth Center, HB=Hat Bazar)	Market Listed? (Yes/ No) Market Catego (General/ Special/ Collection center)		Market Categ (Wholesale/ Retail/both)	Hat Day	Chandina Viti (Number)	Chandina Viti (Land)	Chandina Viti (Shop)	Toha	Khas	Private	Lease/Khas Collection BDT (2020)	Lease/Khas Collection BI (2019)	
Ratanpur	Ratanpur Bazar	НВ	Yes	General Market	General Both		4	0.09		0.24	0.46	0.00	2500	2500	
Ratanpur	SHAHAPUR HAT	GC													
Salimganj	Salimganj Bazar	НВ	Yes	General Market	Both		224	0.99		1.23	5.54	0.00	1200000	1860575	
Satmura	Satmura Bazar	НВ	Yes	General Market	Both		33	0.23		0.24	0.85	0.00	2500	2500	
Shamogram	Shamogram Bazar	НВ	Yes	General Market	Both		7	0.04	7	0.10	0.20	0.00	72000	60000	
Shibpur	Shibpur Bazar	НВ	Yes	General Market	Both	1	191			-	-	0.00	15000	17500	
Sreerampur	Gopalpur Bazar	НВ	Yes	General Market	Both		55		55	-	-	0.00	3000	3000	

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	Biddyakut	Bhayralnagar, Maniour, Rajapur	6396	Biddakut Monipur - Monipur Ferri Ghat	412854038	VRA	Submersible	5			5	5	900	120	1080	1980	1279	310	75	25	16	25	15	81
2	Shibpur	Julai Para, Mirpur	8382	Bagaura- julaiuara road.	412854033	VRA	All Weather	3			3	3	360	30	270	630	2794	75	45	30	10	25	15	80
3	Paschim Nabinagar	Char Lapang, Lapang, Nabipur, Islampur, Dari Lapang	17606	Nabinagar nabipur RdNabipur bara bari	412855024	VRB	All Weather	2.25			2.25	2.25	270	75	675	945	7825	54	34	30	10	25	12	77
4	Junedpur	Bangora	6454	Bangura village Rd	412854015	VRA	All Weather	1.35			1.35	1.35	162		0	162	4781	25	20	25	10	25	15	75
5	Barail	Gosaipur	2761	Barial UP - Pagla River ferighat	412853013	UNR	All Weather	2.5	1.155	0.8	0.545	1.345	161.4	20	180	341.4	2053	124	8	20	10	25	20	75
6	Purba Nabinagar	Bagdahar	7775	Nabinagar-Bag dahor Rd	412854008	VRA	All Weather	5.01	2.55		2.46	2.46	295.2	320	2880	3175.2	3161	408	37	25	10	25	15	75
7	Laur Fatehpur	Badragacha	1988	Bottali R&H-Bitghar GC Road.	412852003	UZR	Submersible	7	2.2		4.8	4.8	864	190	1710	2574	414	1295	72	18	16	15	25	74
8	Krishnanagar	Gaurnagar	5197	Thana kandi-Gurnagar Rd	412855032	VRB	All Weather	4.12			4.12	4.12	494.4	20	180	674.4	1261	130	62	20	16	25	12	73
9	Sreerampur	Ayitala, Dari Sreerampur	2624	Reajatpur - Sadekpur bazar	412855129	VRB	All Weather	5			5	5	600		0	600	525	229	75	20	16	25	12	73
10	Shibpur	Kanikara	6834	Kanikara Vich Chairman Bari - boree nade road	412855198	VRB	Submersible	0.4			0.4	0.4	72	6	54	126	17086	18	6	25	10	25	12	72
11	Krishnanagar	Dakshin Lashmipur	4278	Krishnagar Graveyrd-South Lakshipur Rd	412854010	VRA	All Weather	1.52	0		1.52	1.52	182.4		0	182.4	2815	43	23	20	10	25	15	70
12	Rasullabad	Kalgharia	3336	Rasullabad R&H - Lahari Madrasha Road	412854050	VRA	All Weather	1.5			1.5	1.5	180		0	180	2224	54	23	20	10	25	15	70
13	Natghar	Nasarabari	794	Kurighar bazar-Dhanasi Bazar Road via Natghar UP	412853007	UNR	All Weather	6.06	4.56		1.5	1.5	180		0	180	529	227	23	15	10	25	20	70
14	Bitghar	Bhaturia	2239	Tiara - baturia road	412854018	VRA	All Weather	4.8	1.35		3.45	3.45	414	30	270	684	649	306	52	20	10	25	15	70
15	Birgaon	Durgarampur	2148	Telokia Gaveyard - Durgharampur Lanchghart	412854069	VRA	All Weather	1.5			1.5	1.5	180	70	630	810	1432	377	23	20	10	25	15	70
16	Junedpur	Balibari	1266	Bangura Bazar - Satmura Bazar Rd	412854053	VRA	All Weather	4.6			4.6	4.6	552	62	558	1110	275	877	69	18	16	20	15	69
17	Ibrahimpur	Kalipura	1224	Ibrahimpur Bash Bazar(R&H) - Kalipura via	412854051	VRA	All Weather	3.83	0.73		3.1	3.1	372		0	372	395	304	47	18	10	25	15	68
18	Paschim	Fatehpur	1629	Ibrahimpur Pacchim Eidgha Nabinagar - Fatehpur Road	412853014	UNR	All Weather	1.32	1.25		0.07	0.07	8.4	100	900	908.4	23275	558	1	18	10	20	20	68
19	Nabinagar Bitghar	Durain	2003	Durain village Road	412855010	VRB	All Weather	1.6			1.6	1.6	192		0	192	1252	96	24	20	10	25	12	67
20	Krishnanagar	Sitarampur	2883	Sitaarumpur bazar - H/ o Jabbar Hazi r Bari road	412855215	VRB	All Weather	2			2	2	240	80	720	960	1441	333	30	20	10	25	12	67
21	Satmura	Chhota Sikanika	1190	Dasmuza Bazar - Jamuna River Via Shikanina Pry School	412855036	VRB	All Weather	0.55			0.55	0.55	66	00	0	66	2164	55	8	18	10	25	12	65
22	Barail	Meratali	1934	Maratali Road	412855020	VRB	All Weather	1.29			1.29	1.29	154.8		0	154.8	1499	80	19	18	10	25	12	65
	Birgaon	Tilokia	918	Tilukia feryghat-Haripur subarmpur nazradaulat Rd.	412854028		All Weather	2.9	1.7		1.2	1.2	144		0	144	765	157	18	15	10	25	15	65
24	Natghar	Ekaichhara	1375	Ekaichara A. Rahaman house-Mohesh Rd.	412855123	VRB	All Weather	2.1			2.1	2.1	252		0	252	655	183	32	18	10	25	12	65
25	Satmura	Chelikhola	920	Satmura UP Office to chelikhola road via natun Bazar	412854057	VRA	All Weather	2.5	0.85		1.65	1.65	198		0	198	558	215	25	15	10	25	15	65
26	Satmura	Isanagar	355	Chasra h/o Ali Asghar - Eishannagar H/O Dr.Mosharaf hossen	412854067	VRA	All Weather	1.25			1.25	1.25	150		0	150	284	422	19	15	10	25	15	65
27	Birgaon	Haripur	1088	Durgharampur Khayaghat -Kadirkhola Via Harepur Shobarampur	412854070	VRA	Submersible	3.5			3.5	3.5	630		0	630	311	579	53	18	10	20	15	63
28	Satmura	Bhatar Pukur	572	Karibari R&H - Dashmuza Bazar Rd	412855031	VRB	All Weather	4.4			4.4	4.4	528		0	528	130	924	66	15	16	20	12	63
29	Satmura	Ichhapura	730	Ichapura-Dashmuza Rd.	412855133	VRB	All Weather	1.25			1.25	1.25	150		0	150	584	206	19	15	10	25	12	62
30	Junedpur	Nilnagar	602	Nilnagar Pri School - Mailai Pry School Via Malai Village Graveyard	412855209	VRB	All Weather	1.275			1.275	1.275	153		0	153	472	254	19	15	10	25	12	62
31	Paschim Nabinagar	Char Napang	4832	Charlapang new-Maddypara Rd	412855086	VRB	All Weather	3			3	3	360	300	2700	3060	1611	633	45	20	10	20	12	62
32	Paschim Nabinagar	Chitri	3123	Chitri Kander para - Narsingpur Road	412855107	VRB	All Weather	2.5			2.5	2.5	300	200	1800	2100	1249	672	38	20	10	20	12	62
33	Ibrahimpur	Shyampur	237	Asamuti Khal - Ibrahimpur Road	412855027	VRB	All Weather	1.75			1.75	1.75	210		0	210	136	885	26	15	10	20	12	57
34	Ibrahimpur	Kazimabad	873	Kazimabad-Gonianpara via Bolachang bazar	412854029	VRA	Submersible	3			3	3	540	80	720	1260	291	1443	45	15	10	15	15	55
35	Satmura	Madhdabpur	284	Ratanpur Bazar - Satmura Bazar road via Madabpur	412854074	VRA	All Weather	3			3	3	360	30	270	630	95	2217	45	15	10	10	15	50
36	Rasullabad	Rasullabad	9630	Rahim Master House - Darara Shamim Market Via Chairman's House	No ID	VRB	All Weather	1.5			1.5	1.5	180	20	180	360	6420	37	23	30	10	25	12	77
37	Biddyakut	Ganganagar	1496	Darind Ghosh Bari - Ansar Alir Bari	No ID	VRB	All Weather	1			1	1	120		0	120	1496	80	15	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)