



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”

**Sariakandi, Bogura**



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DATA EXPERTS  
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**Delight**  
Engineers & Consultants Ltd. (DECL)  
Delight Engineers & Consultants Ltd.

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# CONTENTS

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<b>Glossary</b> .....	<b>i</b>
<b>Abbreviation</b> .....	<b>ii</b>
<b>Background</b> .....	<b>iii</b>
<b>1 Description of the Upazila</b> .....	<b>1</b>
1.1 Geography and Demography .....	1
1.2 Education Features.....	1
1.3 Rural Road Communications.....	1
1.4 Agriculture, Food Production and Fisheries.....	1
1.5 Growth Centre and Hatbazar.....	1
<b>2 Location of the Upazila</b> .....	<b>2</b>
<b>3 Approach &amp; Methodology</b> .....	<b>3</b>
3.1 Study Team Composition.....	3
3.2 Study Area.....	3
3.3 Database Review and Analysis .....	3
3.4 Prioritization Criteria of Sub-projects .....	4
3.5 Weightage Distribution for Prioritization.....	4
3.6 Mapping Hard-to-reach Villages & Population.....	5
3.7 Wrap Up Meeting.....	5
3.8 Validation Workshop.....	5
3.9 National Workshop.....	6
<b>4 Rural Road Connectivity to the Villages</b> .....	<b>7</b>
4.1 Summary of the Village Connectivity.....	7
4.2 Villages and their connectivity – Union level.....	7
4.3 Map of Hard-to-Reach Villages & Proposed Roads.....	12
<b>5 Consultation Meeting &amp; Field Visit</b> .....	<b>13</b>
5.1 Upazila Level Meeting .....	13
5.2 Visit to Case Study Union .....	13
<b>6 Data Collection &amp; Analysis</b> .....	<b>15</b>
6.1 Proposed Riverine routes .....	15
6.2 Proposed Roadway for Hard-to-Reach Villages:.....	16
6.2.1 Proposed All Weather Routes:.....	16
6.2.2 Proposed Submersible Routes:.....	17
6.2.3 Proposed Roads for Hard-to-Reach Villages Having No ID: .....	19
6.2.4 Priority for Road Development .....	20
<b>7 Conclusion &amp; Recommendations</b> .....	<b>21</b>
<b>Annexure - 1</b> .....	<b>22</b>
<b>Annexure - 2</b> .....	<b>24</b>

### ***List of Figures***

Figure 1: Location Map of the Upazila.....	2
Figure 2: Prioritization indicators & their weightage values .....	5
Figure 3: The Upazila Map .....	12
Figure 4: Upazila level Consultation Meeting.....	13
Figure 5: Condition of the visited road alignment at Case Study Union .....	13

### ***List of Tables***

Table 1: Total villages in the Unions and their connectivity.....	7
Table 2: Union wise connected & Hard-to-Reach Villages and their population .....	7
Table 3: Proposed riverine routes of the Upazila .....	15
Table 4: Summary of the rural roads in the Upazila.....	16
Table 5: Proposed all weather roads in the Upazila .....	16
Table 6: Proposed submersible roads in the Upazila .....	17
Table 7: Proposed roads for Hard-to-Reach Villages having No ID.....	19
Table 8: Considered weightage values for the prioritization.....	20

## GLOSSARY

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

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

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

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

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

**Hat** Synonym of bazar or market

**Walking Trail** mean in the Study the village pathway or access used for walking by commuters, in the most cases do not have gazetted or established or commonly used alignment, and to the most, passable by bi-cycle or motor bike. These village trails are not passable by motorized jeep or mini truck or emergency service vehicle or not even by any three wheelers.

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

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

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



## ABBREVIATION

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





## BACKGROUND

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### Context of the Project

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

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

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

### Context of the Report

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

This report contains rural connectivity status and priority plan of the **Sariakandi** Upazila of **Bogura** District.



# 1 DESCRIPTION OF THE UPAZILA

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## 1.1 GEOGRAPHY AND DEMOGRAPHY

The geographical area of Sariakandi Upazila is 408.50 square kilometers and has 12 Unions, 100 mouzas and 173 villages. The Upazila is 22 km away from District headquarters of Bogura. There are 6 rivers flowing over the Upazila- Manash, Belai, Dakuria, Sukhdaha, Bangali & the major river Jamuna. The total population of the Upazila is approx. 2,71,000 of which 1,35,000 are male and 1,36,000 female, total number of households are 75,614 and average household size is 3.58 with a population density of 663 (*as per population census 2011*).

## 1.2 EDUCATION FEATURES

According to the information of the relevant local government offices there are 83 govt. primary, 78 registered primary, 4 non-government primary schools, 83 NGO schools & 6 kindergarten schools. On the other hand, Sariakandi has one government high school, 23 non-government high schools with 5 private colleges, and 22 madrasahs. The literacy rate for the Upazila is 36.9% as per BBS 2011.

## 1.3 RURAL ROAD COMMUNICATIONS

Bangladesh scored in the rural accessibility index at around 87 per cent among South Asian and some other Africa countries. Generally, the people of Bangladesh get all weather within 2 kilometers adjacent to their living places. But the feature of rural roads communications in Sariakandi 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 Sariakandi is 578.12 km, out of which, 207.40 km paved and 370.72 km earthen.

## 1.4 AGRICULTURE, FOOD PRODUCTION AND FISHERIES

Agriculture has a major importance for the economy of the people of Sariakandi. There are 65,488 acres of arable land in the Upazila. In the fiscal year 2010-11 the Rice production was 2596, 15923 & 36079 metric tons for Aus, Aman & Boro seasons respectively. The Upazila also produced 863 metric tons of Wheat, 10413 metric tons of Jute, 1663 metric tons of Potato and 264 metric tons of Oilseed in the same fiscal year 2010-11. A notable quantity of fruits and vegetables are also produced here in this Upazila.

According to the BBS (2010-11) data Sariakandi has 147 acres of pond, dhighee & other wetlands that produced 61.5 metric tons of fishes. There also exists only 25 poultry & 80 dairy farms.

## 1.5 GROWTH CENTRE AND HATBAZAR

Growth Centre and Rural Hatbazar is one of the main centres of the rural economy. Hatbazar is like the heart for the development of the rural economy. Rural hatbazar plays a role in increasing production and creating employment impacting on the supply chain of agriculture and non-agriculture products. There are 24 hatbazar and 5 growth centers in the Upazila. The structural development of hatbazar and growth is pivotal to boosting up the rural economy. A details of the growth center & hatbazar of the Upazila has been attached in the [Annexure-I](#).

## 2 LOCATION OF THE UPAZILA

Sariakandi Upazila is located in the Northern Bangladesh under Bogura District in Rajshahi Division. The location has been shown in the map. It is surrounded by Saghatta and Sonatala Upazilas on the north, Dhunat and Kazipur Upazilas on the south, Islampur, Madarganj and Sarishabari Upazilas on the east, Gabtali Upazila on the west. The Upazila is located within the **Brahmaputra River Basin**. The river, Brahmaputra is a trans-boundary river which flows through Tibet (mountains), India (Arunachal Pradesh & Assam), and Bangladesh and is the 9<sup>th</sup> largest river in the world by discharge. The river is prone to catastrophic flooding in the summer & monsoon (March – October) when the Himalayan snow melts along with the heavy rainfall takes place in Meghalaya, India. During monsoon, the Brahmaputra discharges a large volume of water and at the same time brings in huge amounts of sediments. The entire lower Brahmaputra (*i.e., the part inside Bangladesh and also known as **Jamuna River***) consists of a vast network of channels, that are dry in the pre & post monsoon but are submerged during the monsoon. It has numerous islands due to the heavy sedimentation that are locally known as chars and the ‘Sariakandi’ is such a char Upazila. The huge amount of water Jamuna River carries during monsoon, overflows its carrying capacity and inundates the northern part of the country within its basin as well as the Upazila. 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.

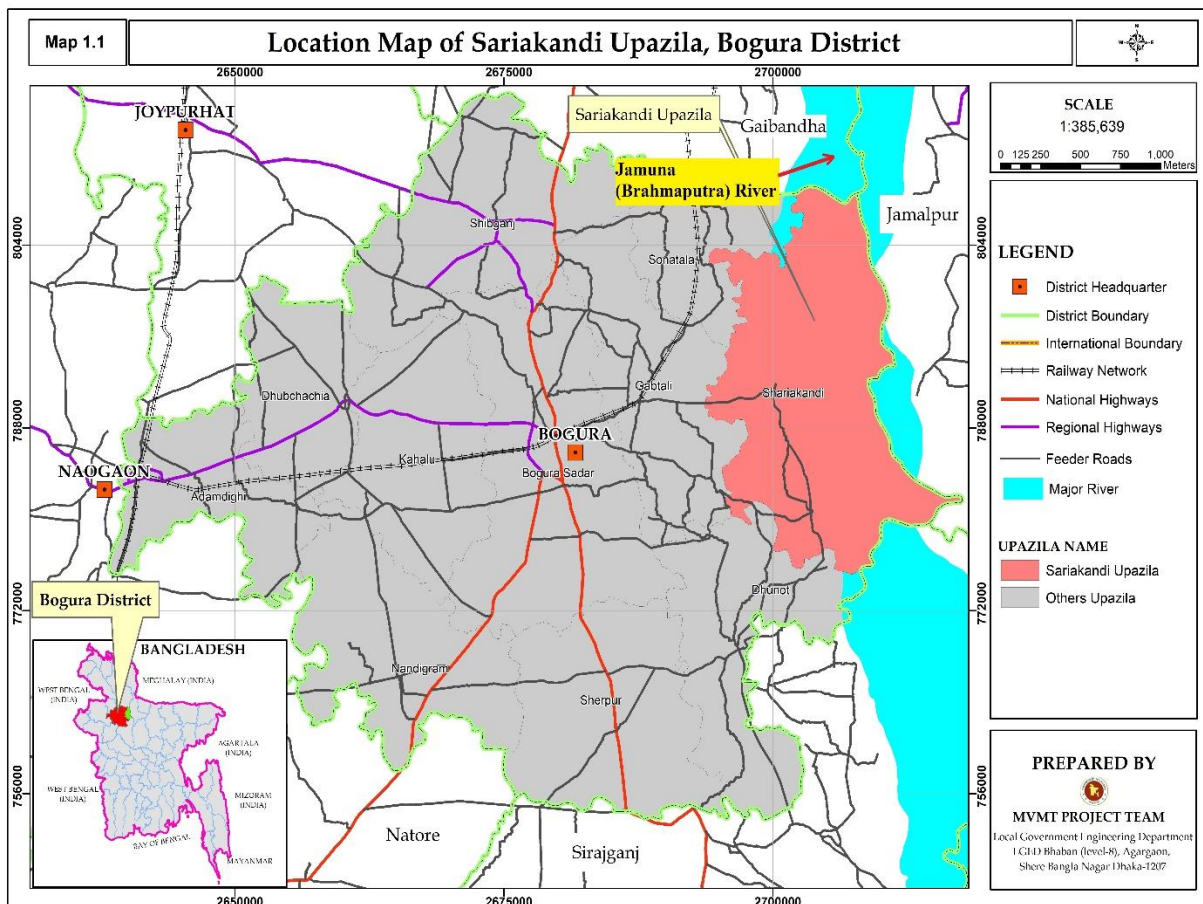


Figure 1: Location Map of the Upazila.

## 3 APPROACH & METHODOLOGY

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### 3.1 STUDY TEAM COMPOSITION

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

#### **Stakeholder Consultation Meeting**

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

### 3.2 STUDY AREA

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

### 3.3 DATABASE REVIEW AND ANALYSIS

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

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

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

### **3.4 PRIORITIZATION CRITERIA OF SUB-PROJECTS**

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

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

### **3.5 WEIGHTAGE DISTRIBUTION FOR PRIORITIZATION**

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



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

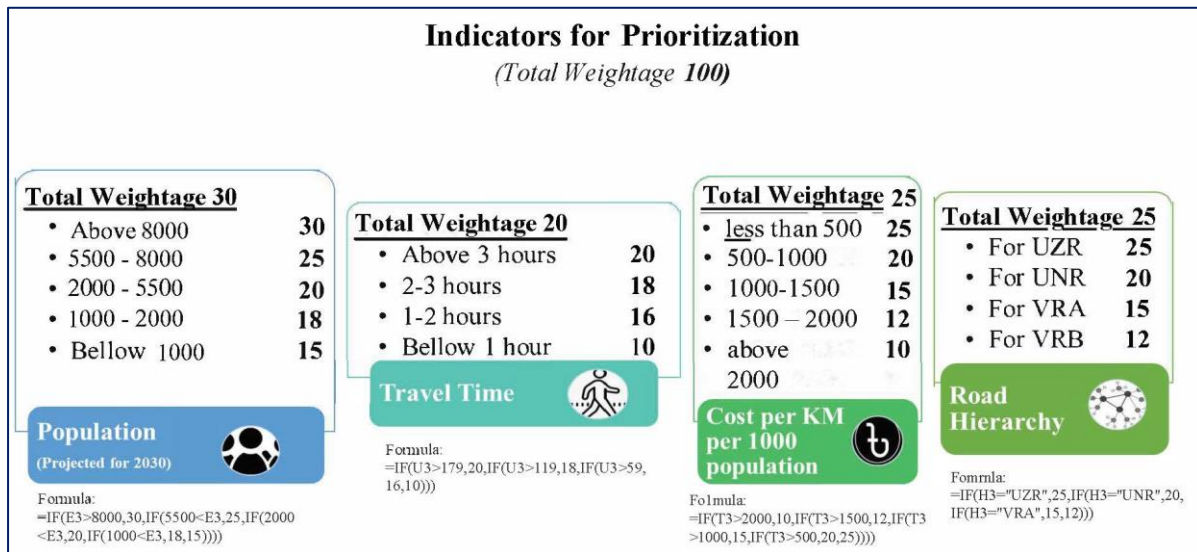


Figure 2: Prioritization indicators & their weightage values

### 3.6 MAPPING HARD-TO-REACH VILLAGES & POPULATION

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

### 3.7 WRAP UP MEETING

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

### 3.8 VALIDATION WORKSHOP

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

### **3.9 NATIONAL WORKSHOP**

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



## 4 RURAL ROAD CONNECTIVITY TO THE VILLAGES

### 4.1 SUMMARY OF THE VILLAGE CONNECTIVITY

Sariakandi is an Upazila with major Chars within its area. The rural road communication is quite poor here. Out of 193 villages, 103 are disconnected from the developed paved road network that brings huge sufferings for the people of those villages. The total rural road network of Sariakandi is 578.12 km, out of which 207.40 km paved and 370.72 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	Bhelabari	16	0	16
2	Bohail	13	6	7
3	Chaluabari	14	5	9
4	Chandan Baisha	12	3	9
5	Fulbari	24	12	12
6	Hat Sherpur	15	11	4
7	Kamalpur	18	13	5
8	Karnibari	26	14	12
9	Kazla	13	6	7
10	Kutubpur	14	3	11
11	Narchi	18	9	9
12	Sariakandi	13	8	5
<b>Total=</b>		<b>193</b>	<b>90</b>	<b>103</b>

### 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)
Bhelabari (16)	1			Baliadighi	19918
	2			Kotamoin	
	3			Moishaban	
	4			Bhelabari	2424
	5			Chayhata	5276
	6			Sonatola	1243
	7			Dumkandi	1224
	8			Dakhin Banshata	2311
	9			Dakshin Jorgachha	9149
	10			Kanair Tar	22552

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	11			Solair tar	9756
	12			Kutub pur	
	13			Satbeki	
	14			Dhamacama	14322
	15			Shilda bari	
	16			Pacokanaiya	
	<b>Sub Total=</b>			<b>0</b>	
Bohail (13)	1	Aolakandi	1931	Bohali	3100
	2	Chandbari	1418	Dhara Barsha	5853
	3	Dakshin Kalaihata	500	Kumarpur	1281
	4	Kaliani	604	Lakshmikola	968
	5	Majhbari	1232	Majhira	2357
	6	Pautibari	1838	Sardar para	801
	7			Shankarpur	4306
	<b>Sub Total=</b>			<b>7523</b>	
Chaluabari (14)	1	Bhangar Gachha	887	Auchar Para	442
	2	Char Manik Dair	4686	Bahladanga	1077
	3	Fazilpur	1292	Biramar Panchgachhi	233
	4	Hatbaria Hariajani	1667	Char Chaluabari	137
	5	Shimul Tair	2128	Dhara Barsha	1161
	6			Kakaliara	1421
	7			Radhikar Panchgachhi	270
	8			Sujaner Para	827
	9			Teligari	615
	<b>Sub Total=</b>			<b>10660</b>	
Chandan Baisha (12)	1	Char Chandan Baisha	4513	Baniapara	10312
	2	Dakshin 'Chandan Baisha	3859	Majhira	
	3	Uttar 'Chandan Baisha	3353	Komolpur	
	4			Ghughumari Moddho para	4583
	5			Ghughumari Uttar para	7211
	6			Ghughumari Dakkhin para	
	7			Shekhpara	3437
	8			Takamagura	4583
	9			Shakdaha	
	<b>Sub Total=</b>			<b>11725</b>	
Fulbari (24)	1	Baluatair	783	Amtali	1675
	2	Bhita Para	826	Baita bhanga	2284
	3	Char Domkandi	1231	Chakibari	1975

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)	
	4	Char Ramnagar	1055	Fulbari	7418	
	5	Chhagaldhara	4646	har Paikpara	1711	
	6	Dargahtali	385	Harina	2461	
	7	Dhapara	1213	Krittina	1445	
	8	Domkandi	1224	Kumra Dangapara	1719	
	9	Faringa Para	404	Majbari	1871	
	10	Goalbatan	802	Malopara	1719	
	11	Katakhali	2811	Ramchandrapur	2435	
	12	Sonatala	1243	Ramnagar	2500	
	<b>Sub Total=</b>		<b>16623</b>		<b>29206</b>	
	Hat Sherpur (15)	1	Chak Ratinath	1659	Char Barurbari	505
		2	Dhanar Para	488	Hat Sherpur	2067
		3	Dharband	352	Nij Balali	4598
		4	Dhega Para	494	Nij Barurbari	899
		5	Karanja Para	756		
		6	Karnibari (Char)	331		
		7	Khord Balali	3359		
8		Naya Para	651			
9		Sahanbanda	714			
10		Shimulbari	278			
11		Tajur Para	792			
<b>Sub Total=</b>		<b>9874</b>		<b>8069</b>		
Kamalpur (18)	1	Bagu Para	454	Haurakali	1803	
	2	Bibir Para	2038	Kashiahata	779	
	3	Burail	789	Pakurtali	2817	
	4	Chamkadaha	799	Rauhadaha	2113	
	5	Char Para	416	Sutanara	3112	
	6	Dari Para	2693			
	7	Fakir Para	663			
	8	Ghedakhali	734			
	9	Ishamara	1438			
	10	Kamalpur	2493			
	11	Karitala	1033			
	12	Kashahar	1180			
	13	Satbhita	1236			
	<b>Sub Total=</b>		<b>15966</b>		<b>10624</b>	
Karnibari (26)	1	Dakshin Char Kumar Para	374	Adarsha Gram	2495	
	2	Karnibari	0	Banglabazar Para	2277	
	3	Madhaya Char Kumar Para	367	Dharabarsha Uttar	7013	

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)	
	4	Madhya Charpara	0	Dharabarsha Dakkhin		
	5	Maithain	502	Haorakhali	3074	
	6	Mathura Para Bazar	418	Hothat para	2292	
	7	Milanpur	426	Indurmara	3081	
	8	Pantha Para	319	Mulbari	1457	
	9	Paschim Char Para	320	Paschim Nandinar Char	3760	
	10	Paschim Chhanpacha	1465	Purba Nandinar Char	0	
	11	Purbachar Chhanpacha	0	Rahdah	1439	
	12	Ulladanga	2177	Shonpacha Dakatmara	5754	
	13	Uttar Char Kumar Para	0	Shimantopara	1146	
	14	Uttar Charpara	408			
	<b>Sub Total=</b>		<b>6776</b>		<b>35618</b>	
	Kazla (13)	1	Benipur	2021	Ananda Bazar	1719
		2	Kazla	1168	Bera Panchbaria	2324
3		Kuri Para	1225	Char Ghagua	2858	
4		Mayurer Char	209	Jamthal	3275	
5		Pakuria	3391	Manikdair	2712	
6		Taka Maguria	102	Pakerdaha	3660	
7				Tengarakura	9571	
<b>Sub Total=</b>		<b>8116</b>		<b>26119</b>		
Kutubpur (14)	1	Boyrakandi	1235	Bara Kutubpur	5062	
	2	Dhalirkandi	1975	Baraikandi	4291	
	3	Nij Karnibari	2295	Debdanga	3436	
	4			Domkandi	1224	
	5			Kajla	2106	
	6			Kalartai	1145	
	7			Kutub pur	2750	
	8			Machir Para	2193	
	9			Par Debdanga	1218	
	10			Sholartari	4242	
	11			Chhota Kutubpur	1416	
<b>Sub Total=</b>		<b>6921</b>		<b>24021</b>		
Narchi (18)	1	Banshgari	450	Char Godagari	1665	
	2	Bheramara	374	Fakir Para	1453	
	3	Budarbhita	301	Ganak Para	726	
	4	Char Harina	1902	Godagari	1061	
	5	Kuptala	4502	Uttar Deber Para	1716	

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	6	Narchi	3006		
	7	Nayurgachha	1094		
	8	Sankhahati	1611		
	9	Tadpara	0		
	<b>Sub Total=</b>		<b>13240</b>		<b>6621</b>
Sariakandi (13)	1	Antar Para	1084	Chandina Noapara	1361
	2	Char Batia	605	Dakshin Gosaibari	1683
	3	Dakshin Gajaria	1012	Paik Para	1228
	4	Daruna	296	Par Titparal	3639
	5	Dhantala	401	Ramkrishnapur	812
	6	Dighalkandi	3922		
	7	Nabadri	775		
	8	Paikartali	234		
	<b>Sub Total=</b>		<b>8329</b>		<b>8723</b>

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

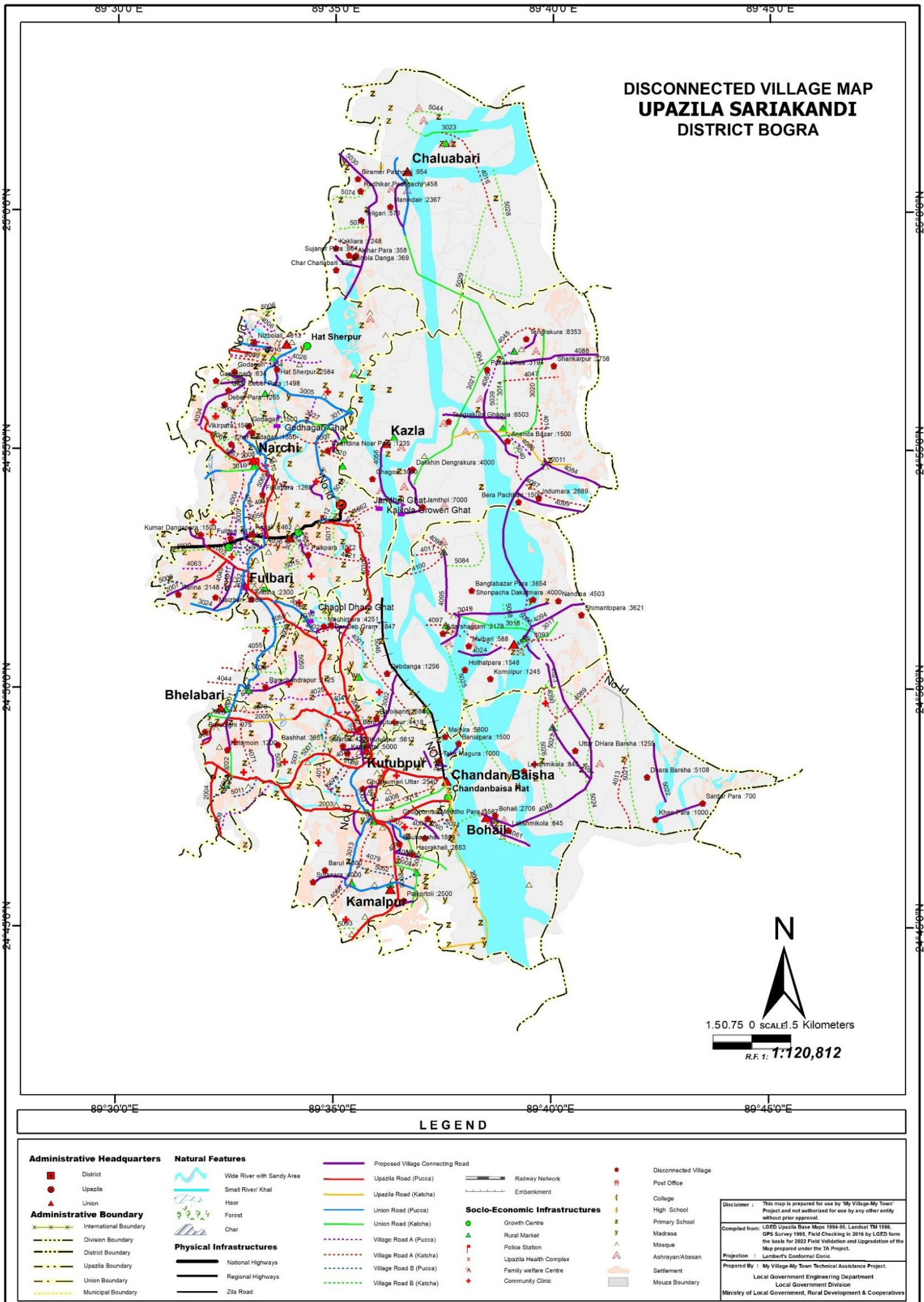


Figure 3: The Upazila Map



## 5 CONSULTATION MEETING & FIELD VISIT

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### 5.1 UPAZILA LEVEL MEETING

The consultant arranged a meeting at Upazila conference room with the support of the UE office, Sariakandi 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 **Kazla (RDA)**, the case study Union in Sariakandi Upazila, through “Jamthol Bazar - Bohail UP via Nandina Bazar, Laxicola hat, Dharabarsha” Road having the ID: 110814048. The road was selected for the site visit considering the beneficiary population, educational institutes along the road and the recommendations of the UE Office as the road has a priority within the Union.

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



*Figure 5: Condition of the visited road alignment at Case Study Union*

The length of this road is 8.1 km, having 3.6km paved and 4.5km earthen. The road connects one major village of the Union named 'Berapachbari' having the total population of approx. 2500. 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 inundated. There exists, one madrasa and one Primary School. A 60m bridge is required at the very beginning of this road.



## 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

Rowmari Upazila is located within the *Brahmaputra River Basin* that has plenty of chars. As per actual field visit and data analysis, obtained from the UE office, Rowmari; about 50% of the total area of Rowmari are char, topographically low land in the dry season but submerged during monsoon. Waterway becomes the only mood of transport during monsoon. According to the UE, Rowmari there exists 10 riverine route that can be used around 7-8 months a year and connects the chars with the Upazila HQ. Generally Small Boat, Engine Boat are used to transport community & commodity.

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

*Table 3: Proposed riverine routes of the Upazila*

Sl. No	Name of the Riverine Route	Name of the Stream	Type of the Stream	Types of Water Vehicle	Need of excavation
1	Dhara Barsha H/Q- Kalitola Ghat – Dhara Barsha	Jamuna River	Intermittent (Jun - Sep)	Small Boat, Engine Boat & Trawler	No
2	Lakshmikolav H/Q- Kalitola-Komorpur-Laxmikola	Jamuna River	Intermittent (Jun - Sep)	Small Boat, Engine Boat & Trawler	No
3	Shankarpur HQ- kalitola Ghat - Shankarpur	Jamuna River	Intermittent (Jun - Sep)	Small Boat, Engine Boat & Trawler	No
4	Manikdair H/Q – Kalitola Ghat-Manikdair	Jamuna River	Intermittent (Jun - Sep)	Small Boat, Engine Boat & Trawler	No
5	Shimultair H/Q – Kalitola Ghat- Shimultair	Jamuna River	Intermittent (Jun - Sep)	Small Boat, Engine Boat & Trawler	No
6	Chardolika H/Q- Kalitola Ghat- Chardolika	Jamuna River	Intermittent (Jun - Sep)	Small Boat, Engine Boat & Trawler	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, 10 (ten) bridges are 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)
578.12	207.40	370.72	140.8

### 6.2.1 PROPOSED ALL WEATHER ROUTES:

There are 27 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	Fulbari GC-Toronihat GC Via Durgahata (Shariakandi part)	110812007	All Weather	0.7
2	Fulbari GC-Naruamala GC Rd. (Shariakandi part)	110812010	All Weather	1.2
3	Kutubpur UP-Muthurapara Hat	110813002	All Weather	3.78
4	Bhelabari U.P-Jurgacha hat Rd.	110813022	All weather	1
5	Bandherhat - Narchi UP via Borurbari GPS	110813027	All Weather	1.4
6	Hatsherpur UP-Charpara Bazar Via Solur Ghat Road.(Shariakandi Part.)	110813028	All Weather	1.5
7	Majbari Baita Bhangra	110814011	All Weather	1.5
8	Gonokpara bottola-Gonokpara uttarpara Eidgah	110814034	All Weather	1.5
9	Gonokpara collage-Ganokpara Enamul Members house	110814038	All Weather	0.5
10	Koritola Goshibari UZR-Howrakhali GPS	110814042	All Weather	2.5
11	Koritola Goshibari UZR-Howrakhali GPS	110814042	All Weather	1
12	Rahdah Abu abdulla madrasha - Bagu para Technical college road	110814051	All Weather	2
13	Rahdah Abu abdulla madrasha - Bagu para Technical college road	110814051	All Weather	2.2
14	Thati Bridge - Ramnagar GPS Road	110814072	All Weather	0.7
15	Gonokpara College - Bot Tola road	110814077	All Weather	1.1
16	Jorgacha-Baghopara	110815011	All Weather	0.5
17	Solartair Mosque-Chandanbaisha Police Fari Road.	110815045	All Weather	0.6
18	Ramchandrapur Village-Charpaikpara Road.	110815050	All Weather	1.5

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
19	Narchi Fakirpara Mithu's Shop - Kushur's House ( Narchi UP End Boundary ) road	110815065	All Weather	2.1
20	Kutubpur Lutfor House - Kuddus Sakider House road	110815071	All Weather	0.7
21	Chokibari Bridge - Krittina Khal road	110815077	All Weather	1.5
22	Fulbari Malopara Pucca Road - Amtoli RHD Bridge road.	110815078	All Weather	1.1
23	Fulbari Poschimpara Primary School - Mister House road.	110815082	All Weather	0.4
24	Paikortoli H/O Gendi - Paikortoli Rafkuler Hosue	No ID	All Weather	1
25	Kashihata Bot tola - tonni Chandan Baisha Road Via Charpara Imdad Hosue	No ID	All Weather	1.5
26	Hatsherpur UP Office - Wabda Bandth - Hosnapara Bazar	No ID	All Weather	2
27	Sutanara Purba Para - Burail Via Berer House	No ID	All Weather	3

### 6.2.2 PROPOSED SUBMERSIBLE ROUTES:

There are 42 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	4 No Balijuri U.P-Dakathmara hat Via purba Sonpacha Flood Shelter Rd.(Shariakandi pat)	110813019	Submersible	3.5
2	Nandina Purbapara bazer-Zauner Char Daskinpara Flood Shetter Rd.	110814023	Submersible	2
3	Nandina Adarsha Gram-Jamuna Ghat Rd	110814024	Submersible	2.5
4	Jamthol Bazar - Bohail UP via Nandina Bazar, Laxicola hat, Dharabarsha	110814048	Submersible	4.5
5	CharGgua more - Berapachbaria road	110814056	Submersible	4
6	Manikdair BazarSouth Side - Uttar tangrakura road	110814057	Submersible	1.6
7	Anondobazar East Side Bridge--- Chargagua Farikhate Road.	110814058	Submersible	1.2
8	Ghugumari-Chandanbaisha Police Fari Road.	110814060	Submersible	0.94

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
9	Majhira - Komorpur Via Bohail Hat Road.	110814061	Submersible	4
10	Majhira - Komorpur Via Bohail Hat Road.	110814061	Submersible	4
11	Sagoldhara Bazar - Debdanga Shimultola Via Sagoldhara Ghat Road	110814073	Submersible	1.2
12	Zamthol Bazar - Shadhin Bazar road.	110814084	Submersible	3
13	Pakerdaha - Ananda Bazar Via Kotapur Bazar road.	110814085	Submersible	3
14	Ananda Bazar - Shahzalal Bazar road.	110814086	Submersible	4
15	Belal Mondal House - Mothergonj Boundary road.	110814088	Submersible	3
16	Bottrish Khada Ashrayn - Baroy Para Via Uzzol Member House road.	110814091	Submersible	4.05
17	Nandina GPS - Shimanta Para Eid-Gah Math road.	110814094	Submersible	2
18	Shonpocha Flood Shelter - Mulbari Char Road	110814095	Submersible	3
19	Mothergonj Boundary - Indurmara Hat road.	110814099	Submersible	1.5
20	Bhelabari Old U.P Office - Baliadighi Boundary Road.	110814101	Submersible	2
21	Beramer Panchgachi-Shimoul Tayer Rd	110815030	Submersible	6
22	Ghugumari Madda para - Ghugumari Dakhin para via moti sarkar house road	110815037	Submersible	2
23	Bansh hata GPS - Chaihata road.	110815038	Submersible	2
24	Ramchandrapur Village-Charpaikpara Road.	110815050	Submersible	1.5
25	Shariakandi LSD Godaun-Paikpara Road.	110815053	Submersible	1
26	Ramnagar( Ferry Ghat) - Char Gosaibari GPS road.	110815058	Submersible	1.9
27	Chandina Nowapara Pucca road - Ramkrishnapur More road.	110815069	Submersible	1
28	Borokutubpur ( Amtola ) - Kutubpur Girls Govt. Primary School road.	110815070	Submersible	0.55
29	Kadi Mondal House - Suzolpara Babu House road.	110815075	Submersible	1.5

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
30	Kalartair - Bashata road.	110815079	Submersible	1.2
31	Dharabarsha Tozzam Kaha House-Siddiq Member's House Rd	110815022	Submersible	4
32	Baniapara - Chandan Baisha Jamuna River Ghat	No ID	Submersible	4
33	Uttar Tengrakura H/O Shaheb Ali - H/O Siddik Mosque	No ID	Submersible	0.6
34	Choto Kutubpur Jame Mosque - Kalair tair Bridge	No ID	Submersible	1.5
35	Partitporol H/O Huda - H/O Attaf Pramanik	No ID	Submersible	0.6
36	Dakatmara Bazar - Adarshagram	No ID	Submersible	1.5
37	Ganokpara H/O Raja - Godagari Bangali River Ghat	No ID	Submersible	2.5
38	Takamagura - Chandanbaisha Jamuna River Ghat	No ID	Submersible	2.5
39	Shekhpara Jame Mosque - Chandaibaisha Badh	No ID	Submersible	2.5
40	Jamthol Bazar - Jamuna Ferry Ghat	No ID	Submersible	3.5
41	Godagari Bangali River ghat - Vikir para	No ID	Submersible	3
42	Sardar Para - Dhara Bordsha Khan para	No ID	Submersible	2.5

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

There are 15 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	Paikortoli H/O Gendi - Paikortoli Rafkuler Hosue	No ID	1
2	Kashihata Bot tola - tonni Chandan Baisha Road Via Charpara Imdad Hosue	No ID	1.5
3	Hatsherpur UP Office - Wabda Bandth - Hosnapara Bazar	No ID	2
4	Sutanara Purba Para - Burail Via Berer House	No ID	3
5	Baniapara - Chandan Baisha Jamuna River Ghat	No ID	4
6	Uttar Tengrakura H/O Shaheb Ali - H/O Siddik Mosque	No ID	0.6
7	Choto Kutubpur Jame Mosque - Kalair tair Bridge	No ID	1.5
8	Partitporol H/O Huda - H/O Attaf Pramanik	No ID	0.6

Sl. No	Road Name	Road ID	Unpaved length (Km)
9	Dakatmara Bazar - Adarshagram	No ID	1.5
10	Ganokpara H/O Raja - Godagari Bangali River Ghat	No ID	2.5
11	Takamagura - Chandanbaisha Jamuna River Ghat	No ID	2.5
12	Shekhpara Jame Mosque - Chandaibaisha Badh	No ID	2.5
13	Jamthol Bazar - Jamuna Ferry Ghat	No ID	3.5
14	Godagari Bangali River ghat - Vikir para	No ID	3
15	Sardar Para - Dhara Bordsha Khan para	No ID	2.5

#### 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
<b>Total=</b>	<b>100</b>

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

## 7 CONCLUSION & RECOMMENDATIONS

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- Sariakandi Upazila is located within the ***Brahmaputra River Basin*** that has plenty of chars, topographically low land in the dry season but submerged during monsoon. The Upazila has enormous agricultural potential due to highly fertile soil gains from heavy siltation. There are 6 (six) major rivers that dominate the ecosystem & transport system of the Upazila. That are Manash, Belai, Dakuria, Sukhdaha, Bangali & Jamuna rivers. During monsoon, these rivers carry huge volume of sediments as well as flood water. Though the Upazila has a number of rivers, riverine transport is available in this Upazila and can be used as multi-modal transport system approx. 3-4 months a year. Generally Small Boat & Engine Boat are used to transport community & commodity.
- The Upazila faces extensive flood and river erosion during monsoon, rural roads and structures are highly vulnerable in this Upazila.
- The Upazila has a total number of 103 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 flood. Due to climate change, the vulnerability is getting intense.
- 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 Sariakandi in Bogura District is highly recommended.

# ANNEXURE - 1

## DETAILS OF GROWTH CENTER & HATBAZAR

Union	Market Name	Market Category (GC=Growth Center, HB=Hat Bazar)	Market Listed? (Yes/ No)	Market Category (General/ Special/ Collection center)	Market Category (Wholesale/ Retail/both)	Hat Day	Chandina Viti (Number)	Chandina Viti (Land)	Chandina Viti (Shop)	Land Area (Acre)			Lease/ Khas Collection BDT (2020)	Lease/ Khas Collection BDT (2019)
										Toha	Khas	Private		
Bhelabari	Saihata College Hat	HB	No											
Bhelabari	Jorgachha Hat	HB	Yes	General Market	Wholesale	2	0	0.00	35				1365510	314427
Bohail	Bohail Hat	HB	Yes	General Market	Wholesale	2	1	0.05	8	0.15	0.20		54000	45000
Chaluabari	Manikdair Hat	HB	No											
Chandanbaisha	Chandonbaisha hat	GC	No											
Fulbari	Domkandi bazar	HB	No											
Fulbari	Fulbari hat	GC	Yes	General Market	Wholesale	2	1	0.10	15	0.10	2.89		1248500	1177000
Fulbari	Ramchandrapur Hat	HB	Yes	General Market	Wholesale	2				0.20	1.38		176501	225792
Fulbari	Sagoldhora Hat	HB	Yes	General Market	Wholesale	2					0.25			
Hatsherpur	Hat sherpur	GC	No											
Hatsherpur	Karamja Para Hat	HB	No											
Hatsherpur	Hasnapara Hat (Khordobolail Hat)	HB	Yes	General Market	Wholesale	2			20	0.05		0.15	62000	61669
Hatsherpur	Nejbolial Hat	HB	Yes	General Market	Wholesale	2			15	0.05		0.13	28101	38330
Kamalpur	Koritola Hat	HB	Yes	General Market	Wholesale	2	1	0.14	11	0.42	0.56		536000	490000
Kamalpur	Daripara Hat	HB	Yes	General Market	Wholesale	2	1	0.07	4	0.20	0.27		31200	16500
Kamalpur	Ruhadhao Bazar	HB	Yes	General Market	Wholesale	2				0.06			4700	1970
Karnibari	Mothurapara Hat	HB	No											



Union	Market Name	Market Category (GC=Growth Center, HB=Hat Bazar)	Market Listed? (Yes/ No)	Market Category (General/ Special/ Collection center)	Market Category (Wholesale/ Retail/both)	Hat Day	Chandina Viti (Number)	Chandina Viti (Land)	Chandina Viti (Shop)	Land Area (Acre)			Lease/ Khas Collection BDT (2020)	Lease/ Khas Collection BDT (2019)
										Toha	Khas	Private		
Karnibari	Nandina Purba Para Hat	HB	No											
Karnibari	Muthurapara Hat	HB	Yes	General Market	Wholesale	2				0.50	1.26	0.50	1109967	921667
Karnibari	Dakatmara Hat	HB	Yes	General Market	Wholesale	2				0.10			1001	800
Kazla	Ananda Bazar	HB	No											
Kazla	Jamthal Hat	HB	No											
Kazla	Katapur Bazar	HB	No											
Kutubpur	Kutubpur hat	GC	Yes	General Market	Wholesale	2				0.40	1.18		240000	151000
Kutubpur	Debdanga Hat	HB	Yes	General Market	Wholesale	2				0.15	0.26		50500	51750
Narchi	Gonokpara Hat	HB	No											
Narchi	Narchi Bazar	HB	No											
Sariakandi	Bondar Hat	HB	No											
Sariakandi	Shariakandi hat	GC	No											

# ANNEXURE - 2

## 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	Bhelabari	Bhelabari, Sonatola, Chayhata, Dumkandi	10167	Bhelabari U.P-Jurgacha hat Rd.	110813022	UNR	All weather	1			1	1	120	200	1800	1920	10167	189	15	30	10	25	20	85
2	Bohail	Majhira, Komorpur, Bohail, Lakshmikola	7706	Majhira - Komorpur Via Bohail Hat Road.	110814061	VRA	Submersible	4			4	4	720		0	720	1927	93	60	25	16	25	15	81
3	Bohail	Dhara Barsha	5853	Bottrish Khada Ashrayn - Baroy Para Via Uzzol Member House road.	110814091	VRA	Submersible	4.05			4.05	4.05	729		0	729	1445	125	61	25	16	25	15	81
4	Fulbari	Harina	2461	Fulbari GC-Toronihat GC Via Durgahata (Shariakandi part)	110812007	UZR	All Weather	4.4	3.7		0.7	0.7	84		0	84	3516	34	11	20	10	25	25	80
5	Bhelabari	Bhelabari, Baliadighi, Kotamoin, Moishaban	22342	Bhelabari Old U.P Office - Baliadighi Boundary Road.	110814101	VRA	Submersible	2			2	2	360	80	720	1080	11171	48	30	30	10	25	15	80
6	Kutubpur	Baroi Kandi, Debb Danga	7727	Kutubpur UP-Muthurapara Hat	110813002	UNR	All Weather	4.2	0.42		3.78	3.78	453.6		0	453.6	2044	59	57	25	10	25	20	80
7	Kazla	Tengrakura	9571	Zamthol Bazar - Shadhin Bazar road.	110814084	VRA	Submersible	3			3	3	540	40	360	900	3190	94	45	30	10	25	15	80
8	Kornibari	Shonpacha Dakatmara	5754	4 No Balijuri U.P-Dakathmara hat Via purba Sonpacha Flood Shelter Rd.(Shariakandi pat)	110813019	UNR	Submersible	3.5			3.5	3.5	630	60	540	1170	1644	203	53	25	10	25	20	80
9	Bohail	Paschim Dhara barsha	5853	Dharabarsha Tozzam Kaha House-Siddiq Member's House Rd	110815022	VRB	Submersible	4			4	4	720		0	720	1463	123	60	25	16	25	12	78
10	Fulbari	Kumra Dangapara	1719	Fulbari GC-Naruamala GC Rd. (Shariakandi part)	110812010	UZR	All Weather	3		1.8	1.2	3	360		0	360	573	209	18	18	10	25	25	78
11	Bhelabari	Jorgacha, Satbeki, Dhamacama	18905	Jorgacha-Baghopara	110815011	VRB	All Weather	0.5			0.5	0.5	60		0	60	37810	3	8	30	10	25	12	77
12	Bhelabari	Shilda bari, Pacokanaiya	14322	Kalartair - Bashata road.	110815079	VRB	Submersible	1.2			1.2	1.2	216		0	216	11935	15	18	30	10	25	12	77
13	Bhelabari	Kanair Tar, Solair tar, Kutub pur, Bashhat	24863	Bansh hata GPS - Chaihata road.	110815038	VRB	Submersible	2			2	2	360	200	1800	2160	12432	87	30	30	10	25	12	77
14	Kazla	Tengrakura Ghagua	2858	CharGgua more - Berapachbaria road	110814056	VRA	Submersible	4			4	4	720	40	360	1080	714	378	60	20	16	25	15	76
15	Kornibari	Dharabarsha Uttar, Dharabarsha Dakkhin	7013	Nandina Purbapara bazer-Zauner Char Daskinpara Flood Shetter Rd.	110814023	VRA	Submersible	2			2	2	360	30	270	630	3507	90	30	25	10	25	15	75
16	Chaluabari	Biramer Pachgari, Radhikar Pachgachi, Dharabarsha, Telibari	2279	Beramer Panchgachi-Shimoul Tayer Rd	110815030	VRB	Submersible	6			6	6	1080		0	1080	380	474	90	20	16	25	12	73
17	Fulbari	Fulbari	7418	Fulbari Poschimpara Primary School - Mister House road.	110815082	VRB	All Weather	0.4			0.4	0.4	48		0	48	18544	6	6	25	10	25	12	72
18	Kutubpur	Bara Kutubpur, Chhota Kutubpur	6478	Solartair Mosque-Chandanbaisha Police Fari Road.	110815045	VRB	All Weather	0.6			0.6	0.6	72		0	72	10797	11	9	25	10	25	12	72
19	Chandan Baisha	Ghughumari Uttar para, Ghughumari Dakkhin para	7211	Ghugumari Madda para - Ghugumari Dakhin para via moti sarkar house road	110815037	VRB	Submersible	2			2	2	360	30	270	630	3606	87	30	25	10	25	12	72
20	Kazla	Berapachbari	2324	Jamthol Bazar - Bohail UP via Nandina Bazar, Laxicola hat, Dharabarsha	110814048	VRA	Submersible	8.1	3.6		4.5	4.5	810	60	540	1350	516	581	68	20	16	20	15	71
21	Fulbari	Ramnagar	2500	Thati Bridge - Ramnagar GPS Road	110814072	VRA	All Weather	0.7			0.7	0.7	84		0	84	3572	34	11	20	10	25	15	70
22	Chandan Baisha	Ghughumari Moddho para	4583	Ghugumari-Chandanbaisha Police Fari Road.	110814060	VRA	Submersible	2	1.06		0.94	0.94	169.2		0	169.2	4876	37	14	20	10	25	15	70
23	Fulbari	Maizbari, Baita bhanga	4163	Majbari Baita Bhanga	110814011	VRA	All Weather	1.5			1.5	1.5	180		0	180	2775	43	23	20	10	25	15	70
24	Bohail	Shankarpur	4306	Belal Mondal House - Mothergonj Boundary road.	110814088	VRA	Submersible	3			3	3	540		0	540	1435	125	45	20	10	25	15	70
25	Kornibari	Nandina, Shimantopara	4906	Nandina GPS - Shimanta Para Eid-Gah Math road.	110814094	VRA	Submersible	2			2	2	360	40	360	720	2453	147	30	20	10	25	15	70
26	Kornibari	Hothat para, Mul Bari	3749	Nandina Adarsha Gram-Jamuna Ghat Rd	110814024	VRA	Submersible	2.5			2.5	2.5	450	20	180	630	1500	168	38	20	10	25	15	70
27	Kamalpur	Rauhadaha	2113	Rahdah Abu abdulla madrasha - Bagu para Technical college road	110814051	VRA	All Weather	2			2	2	240	16	144	384	1056	182	30	20	10	25	15	70
28	Kazla	Tengrakura Ghagua	2858	Anondobazar East Side Bridge---Chargagua Farikhate Road.	110814058	VRA	Submersible	4.7	3.5		1.2	1.2	216	50	450	666	2381	233	18	20	10	25	15	70
29	Kornibari	Indurmara	3081	Mothergonj Boundary - Indurmara Hat road.	110814099	VRA	Submersible	1.5			1.5	1.5	270	50	450	720	2054	234	23	20	10	25	15	70
30	Kazla	Manikdair	2712	Manikdair BazarSouth Side - Uttar tangrakura road	110814057	VRA	Submersible	1.6			1.6	1.6	288	45	405	693	1695	256	24	20	10	25	15	70
31	Kazla	Paker dhaa	3660	Pakerdaha - Ananda Bazar Via Kotapur Bazar road.	110814085	VRA	Submersible	3			3	3	540	60	540	1080	1220	295	45	20	10	25	15	70
32	Kornibari	Banglabazar Para	2277	Shonpocha Flood Shelter - Mulbari Char Road	110814095	VRA	Submersible	3			3	3	540	60	540	1080	759	474	45	20	10	25	15	70
33	Hat Sherpur	Nizbolail	4598	Hatsherpur UP-Charpara Bazar Via Solur Ghat Road.(Shariakandi Part.)	110813028	UNR	All Weather	1.5			1.5	1.5	180	300	2700	2880	3065	626	23	20	10	20	20	70
34	Kazla	Ananda Bazar	1719	Ananda Bazar - Shahzalal Bazar road.	110814086	VRA	Submersible	4			4	4	720	50	450	1170	430	681	60	18	16	20	15	69
35	Kamalpur	Haurakali	1803	Koritola Goshibari UZR-Howrakhali GPS	110814042	VRA	All Weather	1			1	1	120	10	90	210	1803	116	15	18	10	25	15	68
36	Narchi	Uttar Deber Para	1716	Gonokpara bottola-Gonokpara uttarpura Eidgah	110814034	VRA	All Weather	1.5			1.5	1.5	180	15	135	315	1144	184	23	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
37	Kutubpur	Baro kutubpur	5062	Borokutubpur ( Amtola ) - Kutubpur Girls Govt. Primary School road.	110815070	VRB	Submersible	0.55			0.55	0.55	99		0	99	9204	20	8	20	10	25	12	67
38	Fulbari	Malopara, Amtoli	3394	Fulbari Malopara Pucca Road - Amtoli RHD Bridge road.	110815078	VRB	All Weather	1.1			1.1	1.1	132		0	132	3085	39	17	20	10	25	12	67
39	Fulbari	Ramchandrapur, Char Paikpara	4153	Ramchandrapur Village-Charpaikpara Road.	110815050	VRB	All Weather	1.5			1.5	1.5	180		0	180	2769	43	23	20	10	25	12	67
40	Fulbari	Krittina, Chokibari	3427	Chokibari Bridge - Krittina Khal road	110815077	VRB	All Weather	1.5			1.5	1.5	180		0	180	2285	53	23	20	10	25	12	67
41	Sariakandi	Chandina Noar Para, Ramkrishnapur	2174	Chandina Nowapara Pucca road -Ramkrishnapur More road.	110815069	VRB	Submersible	1			1	1	180		0	180	2174	83	15	20	10	25	12	67
42	Chalubari	Sujaner Para, Alchar Para, Bohola Danga, Kakaliara, Char Chariyabari	3905	Kadi Mondal House - Suzolpara Babu House road.	110815075	VRB	Submersible	1.5			1.5	1.5	270	100	900	1170	2603	300	23	20	10	25	12	67
43	Kutubpur	Domkandi	1224	Kutubpur Lutfor House - Kuddus Sakider House road	110815071	VRB	All Weather	0.7			0.7	0.7	84		0	84	1748	69	11	18	10	25	12	65
44	Narchi	Ganokpara	726	Gonokpara collage-Ganokpara Enamul Members house	110814038	VRA	All Weather	0.5			0.5	0.5	60		0	60	1453	83	8	15	10	25	15	65
45	Sariakandi	Paikpara	1228	Shariakandi LSD Godaun-Paikpara Road.	110815053	VRB	Submersible	1.5	0.5		1	1	180		0	180	1228	147	15	18	10	25	12	65
46	Narchi	Fakirpara	1453	Narchi Fakirpara Mithu's Shop - Kushur's House (Narchi UP End Boundary) road	110815065	VRB	All Weather	2.1			2.1	2.1	252		0	252	692	173	32	18	10	25	12	65
47	Narchi	Ganokpara	726	Gonokpara College - Bot Tola road	110814077	VRA	All Weather	1.1			1.1	1.1	132		0	132	660	182	17	15	10	25	15	65
48	Sariakandi	Char Gosaibari	1683	Ramnagar( Ferry Ghat) - Char Gosaibari GPS road.	110815058	VRB	Submersible	1.9			1.9	1.9	342		0	342	886	203	29	18	10	25	12	65
49	Kutubpur	Machirpara, Par Deb gram	3411	Sagoldhara Bazar - Debdanga Shimultola Via Sagoldhara Ghat Road	110814073	VRA	Submersible	1.2			1.2	1.2	216	200	1800	2016	2842	591	18	20	10	20	15	65
50	Hat Sherpur	Borubari	1405	Bandherhat - Narchi UP via Borurbari GPS	110813027	UNR	All Weather	4.5	3.1		1.4	1.4	168	300	2700	2868	1003	2042	21	18	10	10	20	58
51	Chandan Baisha	Baniapara, Majhira, Komolpur	10312	Baniapara - Chandan Baisha Jamuna River Ghat	No ID	VRB	Submersible	4			4	4	720	50	450	1170	2578	113	60	30	16	25	12	83
52	Kazla	Tengrakura	9571	Uttar Tengrakura H/O Shaheb Ali - H/O Siddik Mosque	No ID	VRB	Submersible	0.6			0.6	0.6	108	15	135	243	15951	25	9	30	10	25	12	77
53	Kutubpur	Kalartai, Solair tair, Kajla	7493	Choto Kutubpur Jame Mosque - Kalair tair Bridge	No ID	VRB	Submersible	1.5			1.5	1.5	270	40	360	630	4996	84	23	25	10	25	12	72
54	Sariakandi	Par Titparal	3639	Partiporol H/O Huda - H/O Attaf Pramanik	No ID	VRB	Submersible	0.6			0.6	0.6	108		0	108	6065	30	9	20	10	25	12	67
55	Kamalpur	Pakurtali	2817	Paikortoli H/O Gendi - Paikortoli Rafkuler Hosue	No ID	VRB	All Weather	1			1	1	120	10	90	210	2817	75	15	20	10	25	12	67
56	Hat Sherpur	Hat sherpur	2067	Hatsherpur UP Office - Wabda Bandth - Hosnapara Bazar	No ID	VRB	All Weather	2			2	2	240		0	240	1033	116	30	20	10	25	12	67
57	Narchi	Godagari, Char Godagari, Ganakpara	3452	Ganokpara H/O Raja - Godagari Bangali River Ghat	No ID	VRB	Submersible	2.5			2.5	2.5	450		0	450	1381	130	38	20	10	25	12	67
58	Chandan Baisha	Takamagura, Shakdaha	4583	Takamagura - Chandanbaisha Jamuna River Ghat	No ID	VRB	Submersible	2.5			2.5	2.5	450	45	405	855	1833	187	38	20	10	25	12	67
59	Kornibari	Adarsha Gram	2495	Dakatmara Bazar - Adarshagram	No ID	VRB	Submersible	1.5			1.5	1.5	270	30	270	540	1664	216	23	20	10	25	12	67
60	Kamalpur	Sutanara	3112	Sutanara Purba Para - Burail Via Berer House	No ID	VRB	All Weather	3			3	3	360	40	360	720	1037	231	45	20	10	25	12	67
61	Chandan Baisha	Shekhpara	3437	Shekhpara Jame Mosque - Chandaibaisha Badh	No ID	VRB	Submersible	2.5			2.5	2.5	450	60	540	990	1375	288	38	20	10	25	12	67
62	Kazla	Jamthol	3275	Jamthol Bazar - Jamuna Ferry Ghat	No ID	VRB	Submersible	3.5			3.5	3.5	630	60	540	1170	936	357	53	20	10	25	12	67
63	Kamalpur	Kashihata	779	Kashihata Bot tola - tonni Chandan Baisha Road Via Charpara Imdad Hosue	No ID	VRB	All Weather	1.5			1.5	1.5	180	6	54	234	519	300	23	15	10	25	12	62
64	Bohail	Sardar para	802	Sardar Para - Dhara Bordsha Khan para	No ID	VRB	Submersible	2.5			2.5	2.5	450		0	450	321	561	38	15	10	20	12	57
65	Narchi	Godagari	1061	Godagari Bangali River ghat - Vikir para	No ID	VRB	Submersible	3			3	3	540	400	3600	4140	354	3902	45	18	10	10	12	50

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\*\*\* Weightage Values; (Population = 30, Travel Time= 20, Cost per1000 people= 25, Road Hierarchy= 25)