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"

Rowmari, Kurigram

dat Ex
DATA EXPERTS
Data Experts (Pvt.) Limited

Delight
Engineers & Consultants Ltd. (DECL)
Delight Engineers & Consultants Ltd.

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CONTENTS

List of Figures

List of Tables

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 **Rowmari** Upazila of **Kurigram** District.

1 DESCRIPTION OF THE UPAZILA

1.1 GEOGRAPHY AND DEMOGRAPHY

The geographical area of Rowmari Upazila is 197.03 square kilometers and has 5 Unions, 29 mouzas and 198 villages. The Upazila is 49 km away from the District headquarters of Kurigram. There are 4 rivers flowing over the Upazila- Brahmaputra, Halhali, Jinjiram & Sonabhari. The total population of the Upazila is 1,96,417 of which 95,783 are male and 1,00,634 female, total number of households are 46,871 and average household size is 4.19 with a population density of 997 *(as per population census 2011).*

1.2 EDUCATION FEATURES

According to the information of the relevant local government offices there are 39 government, 63 registered, 7 non-government primary schools, 248 NGO schools & 5 kindergarten schools. On the other hand, Rowmari has 24 non-government high schools, only a school & college that operates jointly, with 5 privet colleges and 32 madrashas. The literacy rate for the Upazila is 34.6% 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 Rowmari 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 Rowmari is 485.82 km and out of which, 146.50 km paved and 339.32 km earthen.

1.4 AGRICULTURE, FOOD PRODUCTION AND FISHERIES

Agriculture has a major importance for the economy of the people of Rowmari. There are 47,007 acres of arable land in the Upazila. In the fiscal year 2010-11 the Rice production was 3, 18531 & 45565 metric tons for Aus, Aman & Boro seasons respectively. The Upazila also produced 2095 metric tons of Wheat, 1762 metric tons of Sugarcane, 4721 metric tons of Jute, 881 metric tons of Potato and 472 metric tons of Oilseed in the same fiscal year 2010-11. There also exists only 40 poultry & 12 dairy farms.

1.5 GROWTH CENTRE AND HATBAZAR

Growth Centre and Rural Hatbazr is one of the main centres of the rural economy. Hatbazar is like the heart for the development of the rural economy. Rural hatbazar plays a role in increasing production and creating employment impacting on the supply chain of agriculture and non-agriculture products. There are 20 hatbazar and 3 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-1.***

2 LOCATION OF THE UPAZILA

Rowmari Upazila is located in the Northern Bangladesh under Kurigram District in Rangpur Division. The location has been shown in the map. It is surrounded by Ulipur Upazila and Assam state of India on the north, Char Rajibpur Upazila on the south, Assam state of India on the east, Char Rajibpur, Chilmari and Ulipur Upazilas 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 9th 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 occurring in Meghalaya, India. During monsoon, the Brahmaputra discharges a large volume of water coming from upstream 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 'Rowmari' is a Upazila with plenty of such chars. 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.
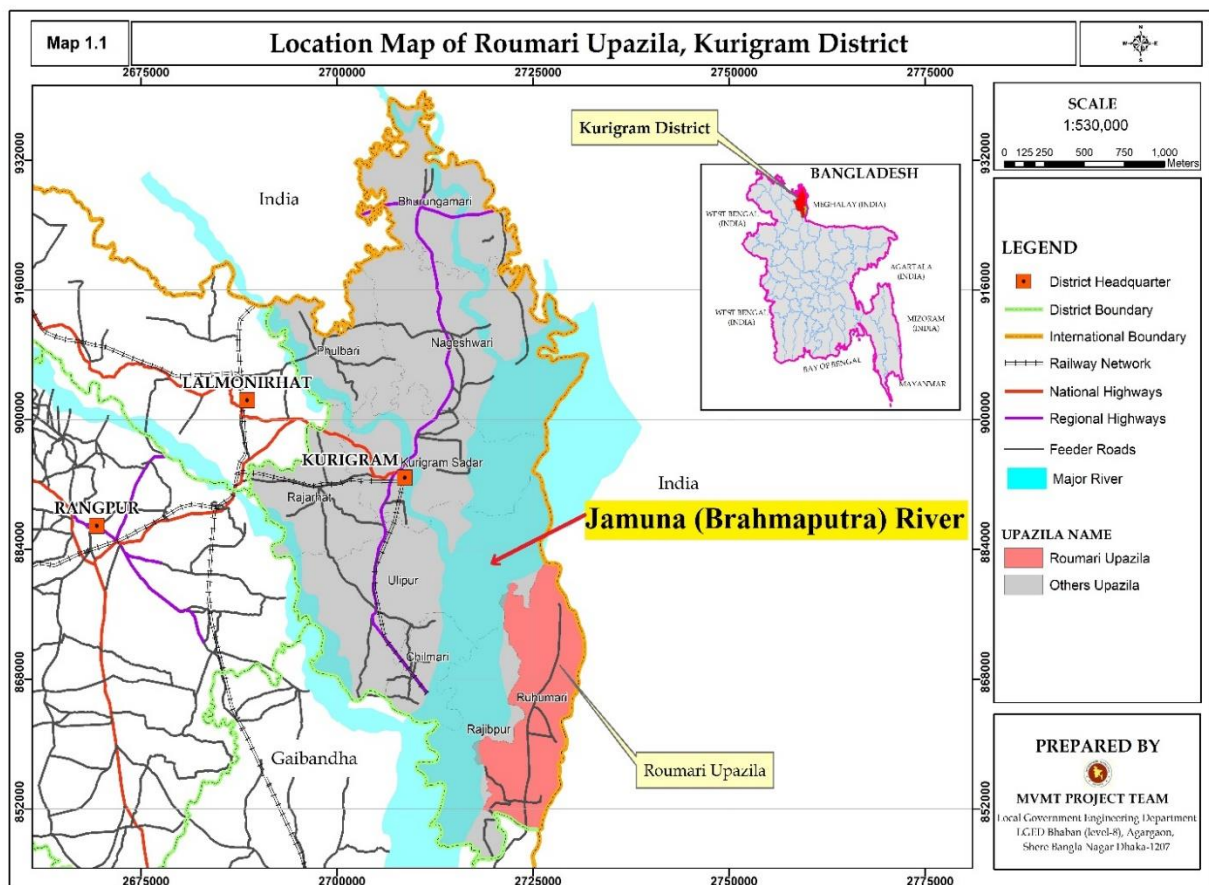
Figure 1: *Location Map of the Upazila.*

3 APPROACH & METHODOLOGY

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.
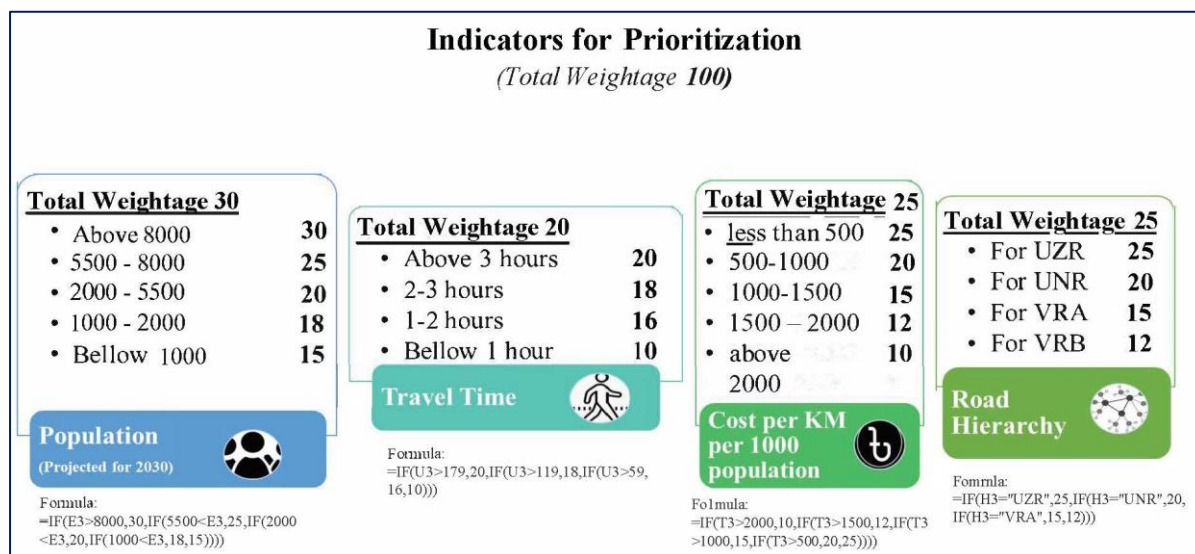
Figure 2: Prioritization indicators & their weightage values

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

Rowmari is an Upazila with major Chars. The rural road communication is quite poor here. Out of 208 villages, 50 are disconnected from the developed paved road network that brings huge sufferings for the people of those villages. The total rural road network of Rowmari is 485.82 km and out of which, 146.50 km paved and 339.32 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	Bandaber	46	39	7
2	Dantbhanga	44	29	15
3	Jadur Char	37	30	7
4	Roumari	49	43	6
5	Saulmari	32	17	15
	Total =	**208**	**158**	**50**

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)
Bandaber (46)	1	Badurtila	333	Char Baghmara	2163
	2	Baitkamari	2050	Char Bandaber	2988
	3	Baladmara	1005	Dakshin Khan Janmara	1453
	4	Banchhar Char	1779	Nalbari	539
	5	Bandaber	2285	Paschim Khan Janmara	1172
	6	Baraikandi	1100	Purar Char	2001
	7	Bhaguar Char	3192	Purba Khan Janmara	2583
	8	Char Gandaragla	1121		
	9	Char Saulmari	1098		
	10	Daikhaya	683		
	11	Dakshin khadaimari	1276		
	12	Dakshin tapur Char	1549		
	13	Dakshin Bhitkamari	1715		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	14	Faluar Char	490		
	15	Fulkar Char	596		
	16	Ghughumari	1734		
	17	Jantirkanda	2018		
	18	Jiknikandi	720		
	19	Junkir Char	663		
	20	Khas Para & Baguar Char	1281		
	21	Madhya tapur Char	1235		
	22	Madhyer Char	498		
	23	Mashaler Char	589		
	24	Miar Char	1632		
	25	Pakheura	1176		
	26	Pakhiura	2312		
	27	Paschim Baghmara	526		
	28	Paschim Char Khadaimari	557		
	29	Purba Baghmara	686		
	30	Purba Char Khadaimari	1141		
	31	Purba Char Sailmari	1181		
	32	Sonapur	1328		
	33	Sukharbati	2234		
	34	Tangari Para	1068		
	35	Tapur Char Bazar	1142		
	36	Tiltali	459		
	37	Uttar tapur Char	663		
	38	Uttar Char Khadaimari	1399		
	39	Wahednagar	640		
		Sub Total=	**47154**		**12899**
Dantbhanga (44)	1	Bariakandi	606	Ambari	5842
	2	Bheramara	490	Balurgram	1130
	3	Char Dant Tala	767	Bogarchar	458
	4	Char Italokanda	2313	Bongsher Char	331
	5	Chat Karaibari	391	Char kazaikata	592
	6	Chat Karaibari	816	Chhota Data Tala	1117
	7	Dakshin Dharmapur	504	Chhota Kauniar Char	584
	8	Dakshin Harindhara	881	Dakshinpara Kazaikata	564
	9	Dakshin Tapur Char	1478	Dharmapur	685
	10	Dant Tala	532	Dicree Char	981

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	11	Dantbhanga	1379	Goita Para	344
	12	Fulkar Char	691	Gotligram	1259
	13	Harindhara	1540	Kauniar Char	760
	14	Italokanda	1477	Khetar Char	432
	15	Jhagrar Char	2476	Uttar Datbhanga	521
	16	Kazaikata	1027		
	17	Kharanipar	867		
	18	Kowar Char	1382		
	19	Madhyapara Kazaikata	913		
	20	Miar Char	1045		
	21	Pakani Jhagrar Char	1896		
	22	Parer Char	755		
	23	Santir Char (Kazaikat Psc)	972		
	24	Shantir Char	1072		
	25	Tapur Char	2701		
	26	Ujan Jhagrar Char	1701		
	27	Uttar Kauniar Char	628		
	28	Uttar Para Kazaikata	1621		
	29	Uttar Ujan Jhagrar Char	213		
		Sub Total=	**33134**		**15600**
Jadur Char (37)	1	Baim Mari (Baisha)	1125	Algar Char	1397
	2	Bakbanda Bepari Para	1636	Dubalabari	445
	3	Bekari Bil	1264	Jadur Char Purba Para	1011
	4	Bokbandha Nama Para	720	Khewar Char	781
	5	Chaktabari	1726	Khewar Char	1691
	6	Charergram	1618	Lalkura	2066
	7	Dhanar Char	0	Latialdanga	400
	8	Dhanar Char Madhya Para	915		
	9	Dhanar Char Natungram	2232		
	10	Dhanar Char Paschimpara	934		
	11	Dhanar Char Purbapara	552		
	12	Dhanar Char Sarkar Para	0		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	13	Dhanar Char Tangra Para	755		
	14	Golabari	1103		
	15	Hatkholagram	820		
	16	Jadur Char Natungram (Tin)	2066		
	17	Karatimari	1127		
	18	Kartimari Bazar	911		
	19	Kashiabari	1886		
	20	Komarbhangi	1138		
	21	Komarbhangi Bheta Para	1111		
	22	Komarbhangi Naya Para	1110		
	23	Komarbhangi Paschim Para	981		
	24	Komarbhangi Sharkar Para	591		
	25	Komarbhangi Tangra Para	429		
	26	Komarbhangi Uttar Para	953		
	27	Puran Judur Char	528		
	28	Shebaridangi	1009		
	29	Sreefalgati	519		
	30	Tingari Para	308		
		Sub Total=	**30067**		**7791**
Roumari (49)	1	Bamnar Char	1166	Algar Char	1397
	2	Bar Bandar	848	Chaktabari	1196
	3	Bara Madhartila	1046	Char Bamnar Char	2316
	4	Baraibari	1216	Jhawbari	548
	5	Bawirgram	1928	Mirza Para	618
	6	Boraikandi	349	Suter Para	764
	7	Chak Tamari Baliamari	583		
	8	Chander Char	337		
	9	Char Natun Bhandar	787		
	10	Char Pulbari	1078		
	11	Chhota Madartilla	319		
	12	Chuliar Char Kutub Sarka	335		
	13	College Para	1785		
	14	Dakshin Barabanda	2357		

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	15	Dakshin Pulbari	1378		
	16	Dhandani Para	949		
	17	Dublabari	1174		
	18	Goalgram	1824		
	19	Ishakuri puber Para	1640		
	20	Ishakuri Chaker Dianirgr	895		
	21	Ishakuri Rahmat Dianirgr	651		
	22	Ishakuri Zabbar Dianirgr	985		
	23	Islamari	1909		
	24	Jahar Dewanirgran	374		
	25	Kalabari	1174		
	26	Kanda Para	0		
	27	Karaikandi	901		
	28	Khan Para	707		
	29	Khatiamari	973		
	30	Konasi Para	976		
	31	Majhi Para	596		
	32	Mandal Para	851		
	33	Mirza Para Balair Para	1498		
	34	Natun Bhandar	1438		
	35	Natun Para	2683		
	36	Nurpur	371		
	37	Pulbari	434		
	38	Puran Suliar Char	1526		
	39	Ratanpur	841		
	40	Raumari Bazar	1633		
	41	Raumari Uttar Para	773		
	42	Raumarigram	3171		
	43	Sobuj Para	410		
		Sub Total=	**46869**		**8305**
Saulmari (32)	1	Baoilmari	1327	Bahular Char	1522
	2	Baraikandai	1767	Bausmari	1160
	3	Bathergram	2076	Char Boailmari	2636
	4	Charargram	622	Char Gandaragla	1121
	5	Dakshin Boailmari	1487	Chatlakanda	1263
	6	Dangua Para	1722	Daikhaya	683
	7	Gayata Para (East)	813	Dakshin khadaimari	1276
	8	Hapati Para	1039	Fakir Para	1031

Union	Sl. No	Connected Villages	Population 2021 (Based on BBS 2011)	Hard-to-Reach Villages	Population 2021 (Based on BBS 2011)
	9	Jhunkir Char	897	Gayata Para (North)	1198
	10	Kalmar Char	804	Ghughumari	1734
	11	Majhi Para	333	Mashaler Char	589
	12	Natun Saulmari	1054	Mollapara	2062
	13	Nawbari	512	Purar Char	787
	14	Sangta Para	2156	Saulmari	1187
	15	Sutirpar	534	Sukharbati	2234
	16	Talur Char	1455		
	17	Upharakanda	591		
Sub Total=			**19189**		**20483**
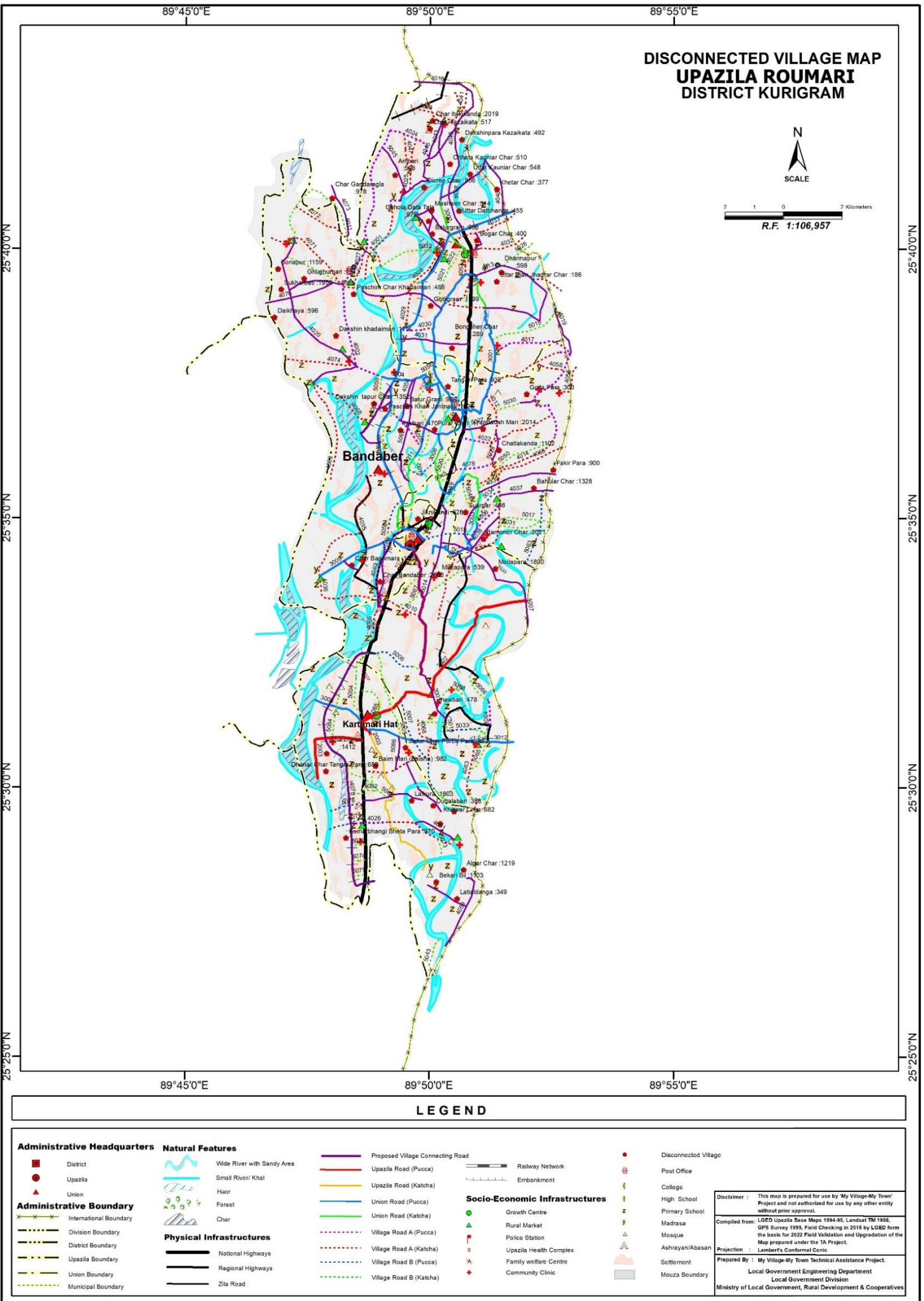
Figure 3: The Upazila Map

5 CONSULTATION MEETING & FIELD VISIT

5.1 UPAZILA LEVEL MEETING

The consultant arranged a meeting at Upazila conference room with the support of the UE office, Roumari that was participated by UNO, UE and all the UP Chairmen & their secretaries. 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 consultant visited "Purarchar Tackrar – Tinteli Gram Road" having the Road ID: 149794004 in Bandaber, the case study Union. 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, took photos, interviewed road users.

Figure 4: Condition of the visited road alignment at Case Study Union

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

Figure 6: Condition of the visited road alignment at Case Study Union

Figure 7: Condition of the visited road alignment at Case Study Union

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

Figure 9: Condition of the visited road alignment at Case Study Union

Figure 10: Condition of the visited road alignment at Case Study Union

The length of the road is 2.8 km, totally earthen. The road connects a major village of the Union, named 'Purar Char' having the total population of approximately 2,000. People living here doesn't have any good road network with the Upazila H/Q due to having unpaved road communication.

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	Upzila H/Q Taluarchar-Purarchar Nolbari- tintoly	Sonavori Khal	Intermittent *(April-Dec)*	Small Boat Engine Boat	No
2	Upzila H/Q-Dantbhanga Shalur More Kawniar Char-Kajaikata-Ambari Khoranirchar- Ananda Bazar	Holholia	Intermittent *(April-Dec)*	Small Boat Engine Boat	No
3	Upazila H/Q-Kortimari- West Kashiabari Lalkura ghat-CharLalkura- bokbanda Nampara-Kheyarchar-Pahartoli-Baliamari	Jinjiram	Intermittent *(April-Dec)*	Small Boat Engine Boat	No
4	Upazila H/Q-Saydabad-Char Lalkura-Soburer Kheyaghat-Bokbanda Namapara-Bokbanda village	Jinjiram	Intermittent *(April-Dec)*	Small Boat Engine Boat	No
5	Upazila H/Q-Khonjonmara-Baitkamari-Pakhiura-Char Shoulmari Hat-Sukherbati-Ghugumari ghat	Holholia	Intermittent *(April-Dec)*	Small Boat Engine Boat	No
6	Upazila H/Q-Jadurchar-Shiberdangi-Lathial danga-Pahartoli gram	Jinjiram	Intermittent *(April-Dec)*	Small Boat Engine Boat	No

Sl. No	Name of the Riverine Route	Name of the Stream	Type of the Stream	Types of Water Vehicle	Need of excavation
7	Upazila H/Q-Chatlakanda-Baushmari-shoulmari-Notun Shoulmari-Charergram-Char Boalmari ghat- Bagherhat-Takanigram	Jinjiram	Intermittent *(April-Dec)*	Small Boat Engine Boat	No
8	Upazila H/Q- Chaktabari-Kandapara-Charbondober	Sonavori	Intermittent *(April-Dec)*	Small Boat Engine Boat	No
9	Upazila H/Q-Dantbhanga-Boro Dhantala-Moshaler Char Ghat-CharShoulmari-Sonapur	Holholia	Intermittent *(April-Dec)*	Small Boat Engine Boat	No
10	Upazila H/Q-Boraikandi-Tapurchar-Hazir hat-Shimultoli-Miar Char ghat-Char Shoulmari-Fulkar Char-Char kajaikata	Holholia	Intermittent *(April-Dec)*	Small Boat Engine Boat	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)
485.82	146.50	339.32	177

6.2.1 PROPOSED ALL WEATHER ROUTES:

There are 49 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	Roumari-Baliamari GC road via Chuliarchar (Roumari portion)	149792001	All Weather	3.61
2	Kartimari GC to Baliamari GC via Lalkuraghat,Kheyarchar Bazar road(Roumari portion).	149792004	All Weather	8.06
3	Purarchar tackrar-Tinteli Gram	149794004	All Weather	2.8
4	Purarchar tackrar-Tinteli Gram	149794004	All Weather	2.8
5	Sutirpar Rd(near the h/o Golam Gaus member) - Mollahpara Gram.	149794007	All Weather	5.31

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
6	Dantbhanga GC Rd - Jhagrarchar R&H Rd. via Dharmapur	149794013	All Weather	6.05
7	Holholia Embt(Near Hazir Hat) - Gutligram.	149794016	All Weather	2.61
8	Kazikata hat - Degreerchar	149794018	All Weather	4.81
9	New Shoulmari river ghat-Char Boalmari road	149794019	All Weather	3.96
10	Khedaimari hat-Ghugumari via Pakhiura more	149794020	All Weather	6.45
11	Char sholmari-Ghugumari road	149794021	All Weather	3.52
12	Chartapur char FCD - JhograrcharR&H Rd via Bonshir char road	149794031	All Weather	4.16
13	Dantbhanga R&H Rd(Shalur More) - Kazaikata(GPS) Kheyaghat road	149794034	All Weather	3
14	Hapatikanda-Behularchar school	149794037	All Weather	2.7
15	Char Bamuner char Guchogram-Rotonpur clinick	149794038	All Weather	2.4
16	Soulmari clinic-Behulerchar madrasha via Fakirpara	149794039	All Weather	3.8
17	Kowniar char Holholi river-Lowbarirhat.	149794043	All Weather	3.86
18	Kazaikata H/o Chanu-Gachbari	149794045	All Weather	2.5
19	Lowbari hat-H/o Zahir via char kazaikata.	149794046	All Weather	3.9
20	Khetar char-H/O Dulal	149794048	All Weather	4.55
21	Baro Dhantala-Mashaler char	149794049	All Weather	3.19
22	Balurgram-Char\Dhantala R.P.School.	149794050	All Weather	3.28
23	Choto Dhantala H/O Shamsul-Choto Dhantala R.P.S.	149794051	All Weather	3.47
24	Uttar Algar char H/O Fulmiah member - Baliamari Kheya ghat	149794059	All Weather	2.5
25	Gingiram River ghat-Algar char RNGPS via Kheyar char bazer	149794061	All Weather	2.5
26	Baitkamari Taher mour-Khangonmara F.C.D Embt. Near the H/oQader .	149794067	All Weather	2.643
27	Char Shoulmari College-Brahmaputra river ghat via Sukher bati School	149794070	All Weather	3.1
28	Sonapur bazer-Holholia river ghat	149794073	All Weather	2.1

Sl. No	Road Name	Road ID	Road Condition	Unpaved length (Km)
29	Chakta bari R&H Rd(near GPS) - Shiberdangi R&H Rd.	149794075	All Weather	7.75
30	Bousmari R&H Rd(near Edga) - Mirjapara road Via Mondol para Gram.	149795014	All Weather	3
31	Kawniar Char Gram -- FCD Via H/o Samsul C.O	149795023	All Weather	5.85
32	R& H Rd(Pagler Majar)--Bogar Char	149795025	All Weather	3.01
33	Baushmarii R&H Road To Boalmari GPS	149795027	All Weather	3.52
34	Boalmari Gram To H/O Joynal Chiarman	149795028	All Weather	2.45
35	Sutirpar Sluice Gate To Shoulmari Via H/o Ashad	149795029	All Weather	2.45
36	Shoulmari Clinik To Goytapara	149795030	All Weather	3.5
37	Bondair more- west side Ananda bazar via Talirmore	149795045	All Weather	6
38	Kutirchar Mortuz Chairman's house - south side 4 No. Union Border via CharBondabar GPS.	149795052	All Weather	3.6
39	Konjonmara A.Hakim shop - West south side of Kutirchar GPS	149795053	All Weather	2.7
40	Tapurchar Abul Hose to south side Jiknikandi Bridge (Taltola) via Tintaligram.	149795062	All Weather	5
41	Jadurchar Prubopara Abu syed Bapari house to south side Kashiabari Momin house.	149795086	All Weather	2.1
42	Pakhiura Hat to Char Shoulmari hat Via Women College	No ID	All Weather	2.1
43	R& H Rd (Neer Dhonerchar Mojibar House) to Lalkura Village Via Lalkura GPS	No ID	All Weather	2.25
44	Kutirchar Kha para - Char Baghmara	No ID	All Weather	3
45	Saburer Khewa ghat to Khewer Char Bazar	No ID	All Weather	3.2
46	Chat koraibari Pacca Road- Char Goitapara Via Khetar Char	No ID	All Weather	4
47	Sonapur bazer-Daikhaya Gram	No ID	All Weather	2.5
48	Baliamari GC to Lathial Danga	No ID	All Weather	2.05
49	Kashiabari Pacca Road to Dublabar Village	No ID	All Weather	3

6.2.2 PROPOSED SUBMERSIBLE ROUTES:

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

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

There are 8 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 Hard-to-Reach Villages having No ID

Sl. No	Road Name	Road ID	Unpaved length (Km)
1	Pakhiura Hat to Char Shoulmari hat Via Women College	No ID	2.1
2	R& H Rd (Neer Dhonerchar Mojibar House) to Lalkura Village Via Lalkura GPS	No ID	2.25
3	Kutirchar Kha para - Char Baghmara	No ID	3
4	Saburer Khewa ghat to Khewer Char Bazar	No ID	3.2
5	Chat koraibari Pacca Road- Char Goitapara Via Khetar Char	No ID	4
6	Sonapur bazer-Daikhaya Gram	No ID	2.5
7	Baliamari GC to Lathial Danga	No ID	2.05
8	Kashiabari Pacca Road to Dublabar Village	No ID	3

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 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.

7 CONCLUSION & RECOMMENDATIONS

- Rowmari 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 exist 4 (four) rivers that dominates the ecosystem and transport system of the Upazila, that are Brahmaputra, Halhali, Jinjiram & Sonabhari rivers. Though the Upazila has a number of rivers, riverine transport is available in this Upazila only during April – Decwmber. 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 50 Hard-to-Reach Villages. To develop rural connectivity, there are proposals only for all weather 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 flood, erosion etc. is highly recommended. A special study regarding the road and structure design of the Upazila Rowmari in Kurigram 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		
Bandaber	Tapurchar Hat	HB	Yes	General Market	Wholesale	2	1	0.27	42	0.27	0.54		350000	240000
Bandaber	Baitkamari Hat	HB	Yes	General Market	Wholesale	2	1	0.50	35	0.49	0.99		157500	160000
Bandaber	Faluerchar Hat	HB	No											
Char Shoulmari	Charsowlmari Hat	HB	Yes	General Market	Wholesale	2	1	0.51	79	0.51	1.02		371100	305500
Char Shoulmari	Pakhiura Hat	HB	Yes	General Market	Wholesale	2	1	0.16	11	0.15	0.31		21151	16000
Char Shoulmari	Sonapur Hat	HB	Yes	General Market	Wholesale	2	1	0.43	28	0.42	0.85		7500	9950
Char Shoulmari	Ghughumari Hat	HB	No											
Char Shoulmari	Khedaimari Hat	HB	No											
Dantbhanga	Datbhanga hat	GC	Yes	General Market	Both	2	2	0.63	181	0.33	0.00	0.00	580000	450000
Dantbhanga	Tapurchar Hazir Hat	HB	Yes	General Market	Wholesale	2	1	0.50	53				61100	51800
Dantbhanga	Mollapara Hat	HB	No	General Market	Both	2	1	1.00	41				26300	17999
Dantbhanga	Kazaikata(Ambari) Hat	HB	No											
Dantbhanga	Shimultali Hat	HB	No	General Market	Wholesale	2	0							
Jadurchar	Kartimary hat	GC	Yes	General Market	Both	2	11	2.70	263	2.63	3.23	0.55	3302000	3108000
Jadurchar	Saidabad Hat	HB	Yes	General Market	Both	2	5	0.16	191	0.42	0.15	0.15	285000	191500
Jadurchar	Kheyer Char Hat	HB	Yes	General Market	Wholesale	2	4	0.12	48	0.25	0.19	0.18	83000	90000

Union	Market Name	Market Category (GC=Growth Center, HB=Hat Bazar)	Market Listed? (Yes/No)	Market Category (General/Special/Collection center)	Market Category (Wholesale/Retail/both)	Hat Day	Chandina Viti (Number)	Chandina Viti (Land)	Chandina Viti (Shop)	Land Area (Acre) Toha	Land Area (Acre) Khas	Land Area (Acre) Private	Lease/Khas Collection BDT (2020)	Lease/Khas Collection BDT (2019)
Rowmari	Rowmari hat(h.q)	GC	Yes	General Market	Both	2	3	2.93	129	2.93	2.93		22500000	18695000
Rowmari	Goalgram Hat	HB	Yes	General Market	Both	3	5	0.75	104	0.38	1.18		120000	105000
Rowmari	Chuliar Char Hat	HB	Yes	General Market	Wholesale	3	9	0.38	80	0.38	0.80		50000	26700
Rowmari	Natun Bandar Hat	HB												
Rowmari	Raumari Hat And Bazar	HB												
Shoulmari	Boraikandi Hat	HB	Yes	General Market	Both	3	103	2.90	103	2.30	4.06	1.70	370000	322000
Shoulmari	Hapatikanda Hat	HB	No											

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	Bandaber	Khan Janmara	9785	Baitkamari Taher mour-Khangonmara F.C.D Embt. Near the H/oQader .	149794067	VRA	All Weather	2.643			2.643	2.643	317.16		0	317.16	3702	32	40	30	10	25	15	80
2	Saulmari	Char Boalmari	2636	New Shoulmari river ghat-Char Boalmari road	149794019	VRA	All Weather	3.96			3.96	3.96	475.2		0	475.2	666	180	59	20	16	25	15	76
3	Saulmari	Mollapara	2062	Sutirpar Rd(near the h/o Golam Gaus member) - Mollahpara Gram	149794007	VRA	All Weather	5.31			5.31	5.31	637.2		0	637.2	388	309	80	20	16	25	15	76
4	Bandaber, Saulmari	Purar Char	2788	Purarchar tackrar-Tinteli Gram	149794004	VRA	All Weather	2.8			2.8	2.8	336		0	336	996	121	42	20	10	25	15	70
5	Roumari	Char Bamoner char	2316	Char Bamuner char Guchogram-Rotonpur clinick	149794038	VRA	All Weather	2.4			2.4	2.4	288		0	288	965	124	36	20	10	25	15	70
6	Char Saulmari	Sukharbati	2234	Char Shoulmari College-Brahmaputra river ghat via Sukher bati School	149794070	VRA	All Weather	3.1			3.1	3.1	372		0	372	721	166	47	20	10	25	15	70
7	Roumari	Jhawbari	548	Roumari-Baliamari GC road via Chuliarchar (Roumari portion)	149792001	UZR	All Weather	12.24	8.63		3.61	3.61	433.2		0	433.2	152	791	54	15	10	20	25	70
8	Char Saulmari	Dakshin khadaimari	1276	Khedaimari hat-Ghugumari via Pakhiura more	149794020	VRA	All Weather	6.95	0.5		6.45	6.45	774		0	774	198	606	97	18	16	20	15	69
9	Roumari	Chaktabari	1196	Chakta bari R&H Rd(near GPS) - Shiberdangi R&H Rd.	149794075	VRA	All Weather	7.75			7.75	7.75	930		0	930	154	777	116	18	16	20	15	69
10	Saulmari	Bahular Char	1522	Hapatikanda-Behularchar school	149794037	VRA	All Weather	2.7			2.7	2.7	324		0	324	564	213	41	18	10	25	15	68
11	Jadur Char	Algar Char	1397	Uttar Algar char H/O Fulmiah member - Baliamari Kheya ghat	149794059	VRA	All Weather	2.5			2.5	2.5	300		0	300	559	215	38	18	10	25	15	68
12	Roumari	Algar Char	1397	Gingiram River ghat-Algar char RNGPS via Kheyar char bazer	149794061	VRA	All Weather	2.5			2.5	2.5	300		0	300	559	215	38	18	10	25	15	68
13	Char Saulmari	Char Gandaragla	1121	Sonapur bezer-Holholia river ghat	149794073	VRA	All Weather	2.1			2.1	2.1	252		0	252	534	225	32	18	10	25	15	68
14	Dantbhanga	Gotligram	1259	Holholia Embt(Near Hazir Hat) - Gutligram.	149794016	VRA	All Weather	2.61			2.61	2.61	313.2		0	313.2	482	249	39	18	10	25	15	68
15	Dantbhanga	Balurgram	1130	Balurgram-Char\Dhantala R.P.School.	149794050	VRA	All Weather	3.28			3.28	3.28	393.6		0	393.6	344	348	49	18	10	25	15	68
16	Dantbhanga	Chhota Data Tala	1117	Choto Dhantala H/O Shamsul-Choto Dhantala R.P.S.	149794051	VRA	All Weather	3.47			3.47	3.47	416.4		0	416.4	322	373	52	18	10	25	15	68
17	Saulmari	Fakir Para	1031	Soulmari clinic-Behulerchar madrasha via Fakirpara	149794039	VRA	All Weather	3.8			3.8	3.8	456		0	456	271	442	57	18	10	25	15	68
18	Jadur Char	Khewar Char	781	Kartimari GC to Baliamari GC via Lalkuraghat,Kheyarchar Bazar road(Roumari portion).	149792004	UZR	All Weather	10.2	2.14		8.06	8.06	967.2	95	855	1822.2	97	2332	121	15	18	10	25	68
19	Bandaber	Char Bandaber	2988	Kutirchar Mortuz Chairman's house - south side 4 No. Union Border via CharBondabar GPS.	149795052	VRB	All Weather	3.6			3.6	3.6	432		0	432	830	145	54	20	10	25	12	67
20	Dantbhanga	Dicree Char	981	Kazikata hat - Degreerchar	149794018	VRA	All Weather	4.81			4.81	4.81	577.2		0	577.2	204	589	72	15	16	20	15	66
21	Dantbhanga	Ambari	1003	Bondair more- west side Ananda bazar via Talirmore	149795045	VRB	All Weather	7.5	0.5	1	6	7	840		0	840	143	838	90	18	16	20	12	66
22	Saulmari	Chatlakanda	1263	Boalmari Gram To H/O Joynal Chiarman	149795028	VRB	All Weather	2.45			2.45	2.45	294		0	294	515	233	37	18	10	25	12	65
23	Jadur Char	Jadur Char Purba Para	1011	Jadurchar Prubopara Abu syed Bapari house to south side Kashiabari Momin house.	149795086	VRB	All Weather	2.1			2.1	2.1	252		0	252	481	249	32	18	10	25	12	65
24	Saulmari	Goita Para	1198	Shoulmari Clinik To Goytapara	149795030	VRB	All Weather	3.5			3.5	3.5	420		0	420	342	350	53	18	10	25	12	65
25	Saulmari	Baushmari	1160	Baushmarii R&H Road To Boalmari GPS	149795027	VRB	All Weather	3.52			3.52	3.52	422.4		0	422.4	329	364	53	18	10	25	12	65
26	Char Saulmari	Ghughumari	1734	Char sholmari-Ghugumari road	149794021	VRA	All Weather	3.52			3.52	3.52	422.4	50	450	872.4	492	503	53	18	10	20	15	63
27	Dantbhanga	Kawniar Char	760	Kawniar Char Gram -- FCD Via H/o Samsul C.O	149795023	VRB	All Weather	5.85			5.85	5.85	702		0	702	130	924	88	15	16	20	12	63
28	Roumari	Sutirpar	764	Sutirpar Sluice Gate To Shoulmari Via H/o Ashad	149795029	VRB	All Weather	2.45			2.45	2.45	294		0	294	312	385	37	15	10	25	12	62
29	Dantbhanga	Dharmapur	685	Dantbhanga GC Rd - Jhagrarchar R&H Rd. via Dharmapur	149794013	VRA	All Weather	6.68	0.63		6.05	6.05	726		0	726	113	1060	91	15	16	15	15	61
30	Dantbhanga	Dakshinpara Kazaikata	564	Kazaikata H/o Chanu-Gachbari	149794045	VRA	All Weather	2.5			2.5	2.5	300		0	300	225	532	38	15	10	20	15	60
31	Dantbhanga	Uttar Datbhanga	521	Dantbhanga R&H Rd(Shalur More) - Kazaikata(GPS) Kheyaghat road	149794034	VRA	All Weather	3			3	3	360		0	360	174	691	45	15	10	20	15	60
32	Bandaber	Paschim Khan Janmara	1172	Konjonmara A.Hakim shop - West south side of Kutirchar GPS	149795053	VRB	All Weather	2.7			2.7	2.7	324	60	540	864	434	737	41	18	10	20	12	60

*** 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
33	Dantbhanga	Char kazaikata	592	Lowbari hat-H/o Zahir via char kazaikata.	149794046	VRA	All Weather	3.9			3.9	3.9	468		0	468	152	790	59	15	10	20	15	60
34	Dantbhanga	Chhota Kauniar Char	584	Kowniar char Holholi river-Lowbarirhat.	149794043	VRA	All Weather	3.86			3.86	3.86	463.2		0	463.2	151	793	58	15	10	20	15	60
35	Bandaber	Nalbari	539	Tapurchar Abul Hose to south side Jiknikandi Bridge (Taltola) via Tintaligram.	149795062	VRB	All Weather	5			5	5	600		0	600	108	1114	75	15	16	15	12	58
36	Dantbhanga	Bongsher Char	331	Chartapur char FCD - JhograrcharR&H Rd via Bonshir char road	149794031	VRA	All Weather	4.16			4.16	4.16	499.2		0	499.2	80	1508	62	15	16	12	15	58
37	Roumari	Mirzapara	618	Bousmari R&H Rd(near Edga) -Mirjapara road Via Mondol para Gram.	149795014	VRB	All Weather	3			3	3	360		0	360	206	583	45	15	10	20	12	57
38	Dantbhanga	Bogarchar	458	R & H Rd(Pagler Majar)--Bogar Char	149795025	VRB	All Weather	3.01			3.01	3.01	361.2		0	361.2	152	788	45	15	10	20	12	57
39	Dantbhanga	Khetar Char	432	Khetar char-H/O Dulal	149794048	VRA	All Weather	4.55			4.55	4.55	546	50	450	996	95	2306	68	15	16	10	15	56
40	Char Saulmari	Mashaler Char	589	Baro Dhantala-Mashaler char	149794049	VRA	All Weather	3.19			3.19	3.19	382.8	120	1080	1462.8	185	2484	48	15	10	10	15	50
41	Char Saulmari	Char Saulmari	2864	Pakhiura Hat to Char Shoulmari hat Via Women College	No ID	VRB	All Weather	2.1			2.1	2.1	252		0	252	1364	88	32	20	10	25	12	67
42	Jadur Char	Lalkura	2066	R& H Rd (Neer Dhonerchar Mojibar House) to Lalkura Village Via Lalkura GPS	No ID	VRB	All Weather	2.25			2.25	2.25	270		0	270	918	131	34	20	10	25	12	67
43	Bandaber	Char Baghmara	2163	Kutirchar Kha para - Char Baghmara	No ID	VRB	All Weather	3			3	3	360		0	360	721	166	45	20	10	25	12	67
44	Jadur Char	Khewer Char	1691	Saburer Khewa ghat to Khewer Char Bazar	No ID	VRB	All Weather	3.2			3.2	3.2	384		0	384	528	227	48	18	10	25	12	65
45	Char Saulmari	Daikhaya	683	Sonapur bazer-Daikhaya Gram	No ID	VRB	All Weather	2.5			2.5	2.5	300		0	300	273	439	38	15	10	25	12	62
46	Dantbhanga	Char Goitapara	344	Chat koraibari Pacca Road- Char Goitapara Via Khetar Char	No ID	VRB	All Weather	4			4	4	480		0	480	86	1396	60	15	16	15	12	58
47	Jadur Char	Lathial Danga	400	Baliamari GC to Lathial Danga	No ID	VRB	All Weather	2.05			2.05	2.05	246		0	246	195	615	31	15	10	20	12	57
48	Jadur Char	Dublabari	445	Kashiabari Pacca Road to Dublabar Village	No ID	VRB	All Weather	3			3	3	360		0	360	148	810	45	15	10	20	12	57

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