



Welcome To The Presentation On

**Draft Final Development Plan of
Sariakandi Upazila, District: Bogura**

“Preparation of Development Plan for Fourteen Upazilas” Project

Presented By:

**Dr. Shamim Mahabubul Haque
Team Leader, Package- 04**

CLIENT:

**Ministry of Housing and Public Works
Urban Development Directorate (UDD)**

CONSULTANT:



Modern Engineers, Planners & Consultants Ltd.

Vision & Objectives of the Project

Vision

The vision of the Development Plan is integrating the rural area with the urban area in both physical and socio-economic terms to implement rural-urban development. The Development Plan aims for rational use of scarce land resources for concentrated development at rural and urban scale following the principles of sustainable development.

Objective

To prepare 5 tire Development Plan proposals inline with the global sustainable development agenda, development priorities of the Government of Bangladesh, and expectations of local people under government declared policy and legal framework for the entire Sonatala Upazila.

Five Tier of Development Plan

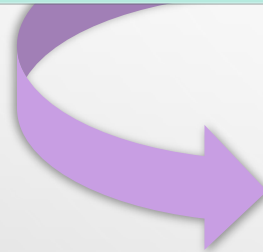
SUB REGIONAL PLAN
(20 Years)

STRUCTURE PLAN
(20 Years)

URBAN AREA PLAN
(10 Years)

RURAL AREA PLAN
(20 Years)

ACTION AREA PLAN
(5 Years)



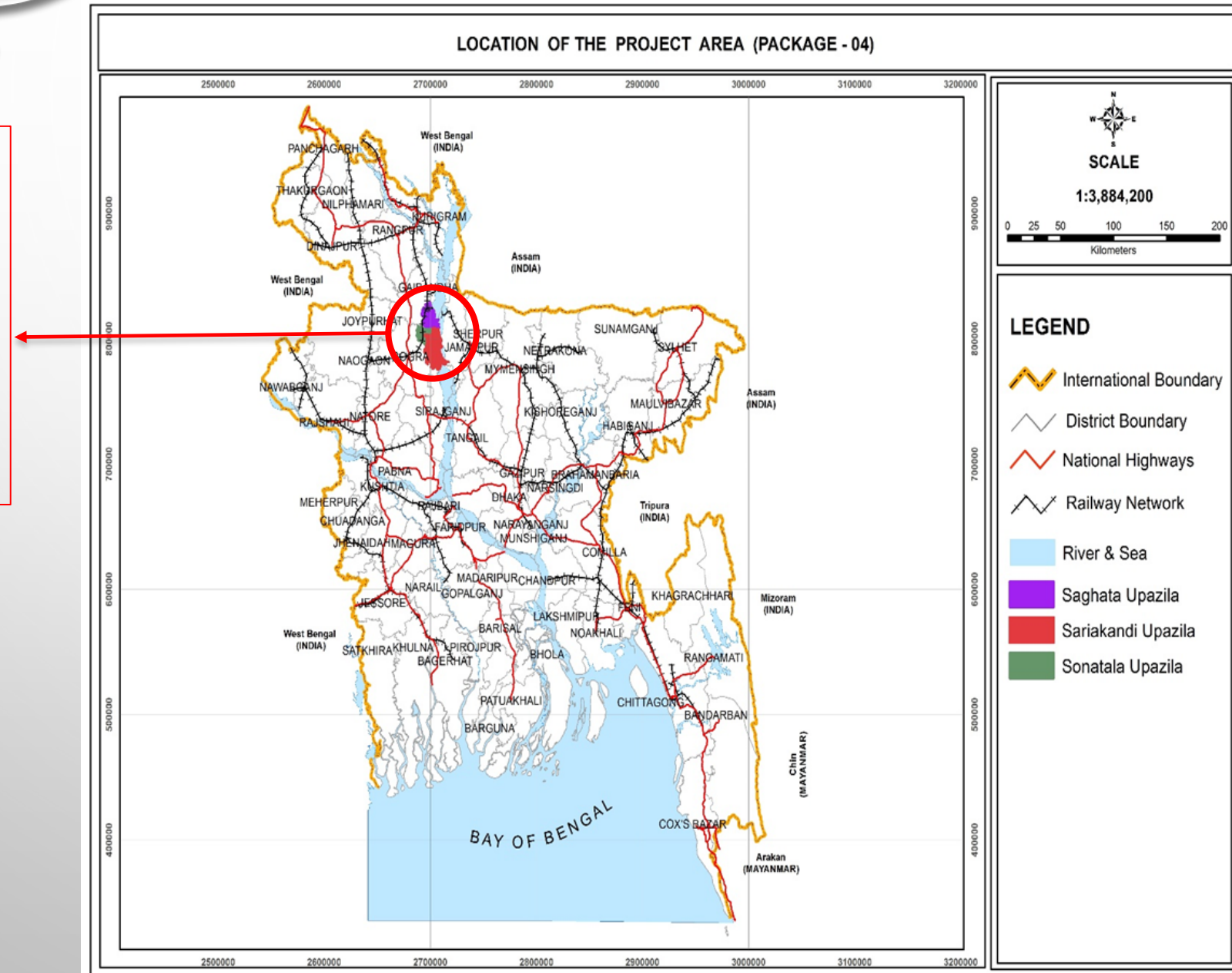
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Study Area

Location Map of the Project Area: Package-4

Package-04 Project Area

Saghata Upazila of
Gaibandha District
And
Sariakandi & Sonatala
Upazila of Bogura District



Sariakandi Upazila at a Glance

Sariakandi Upazila

Administrative Unit: 1 Paurashava, 12 Unions,
117 Mauzas and 173 Villages
Planning Area: 412.05 sq. km. (as per GIS Database)
Total Population: 2,70,719
Population Density: 663 per sq. km.

(Source: BBS, 2011)

1 Paurashava

Urban Area: 3.60 sq. km.
Urban Population: 18,543

12 Unions

Rural Area: 408.45 sq. km.
Rural Population: 2,52,176

Project Area Map of Sariakandi Upazila

Sonatala Upazila

Chaluabari

**Islampur Upazila
(Jamalpur District)**

Hat Sherpur

Kazla

Narchi

Sariakandi Paurashava

Fulbari

Sariakandi

Karnibari

Gabatali Upazila

**Madarganj Upazila
(Jamalpur District)**

Kutubpur

Bhelabari

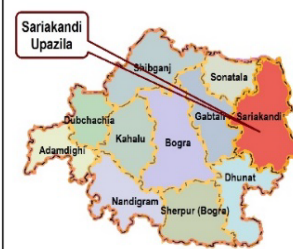
Chandan Baisha

Bohail

Dhunat Upazila

Kamalpur

Bogra District (Upazila Map)



Legend

- Paurashava Boundary
- Ward Boundary
- Upazila Boundary
- Union Boundary

1 in = 5 kilometers



Urban Development Directorate (UDD)
Preparation of Development Plan for Fourteen Upazilas
Package No: 04



Modern Engineers Planners & Consultants Ltd.

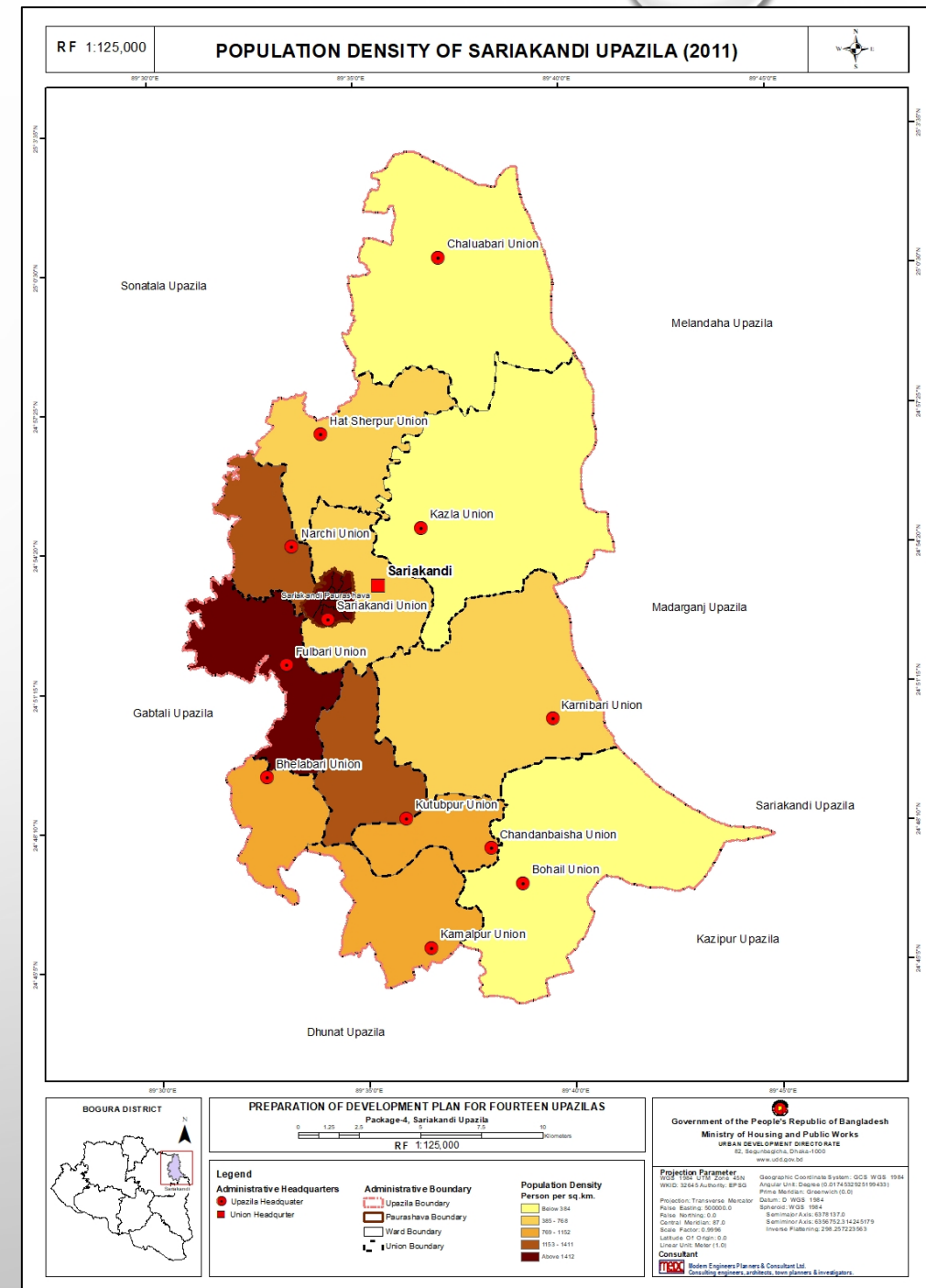
Population Projection

- ❑ **Compound Rate of growth method** has been applied for population projection of Sariakandi Upazila.
- ❑ As per BBS 2011, the projected growth rate for **Urban area is 0.71%** and **Rural area is 1.32%**.

Area	Population in Base Year (BBS, 2011)	Projected Population in Different years				
		2013	2018	2023	2028	2033
Paurashava Area	18543	18807	19484	20186	20913	21666
Rural Area	252176	258877	276420	295152	315153	336510
Sariakandi Upazila	270719	277685	295905	315338	336066	358176

Union Wise Population Density Map of Sariakandi Upazila (2011)

Name of the Area	Pop. Density (per sq. km.)
Bhelabari Union	1150
Bohail Union	380
Chaluabari Union	272
Chandan Baisha Union	820
Fulbari Union	1413
Hat Sherpur Union	575
Kamalpur Union	1070
Kazla Union	384
Karnibari Union	430
Kutubpur Union	1337
Narchi Union	1207
Sariakandi Union	725
Sariakandi Paurashava	5152



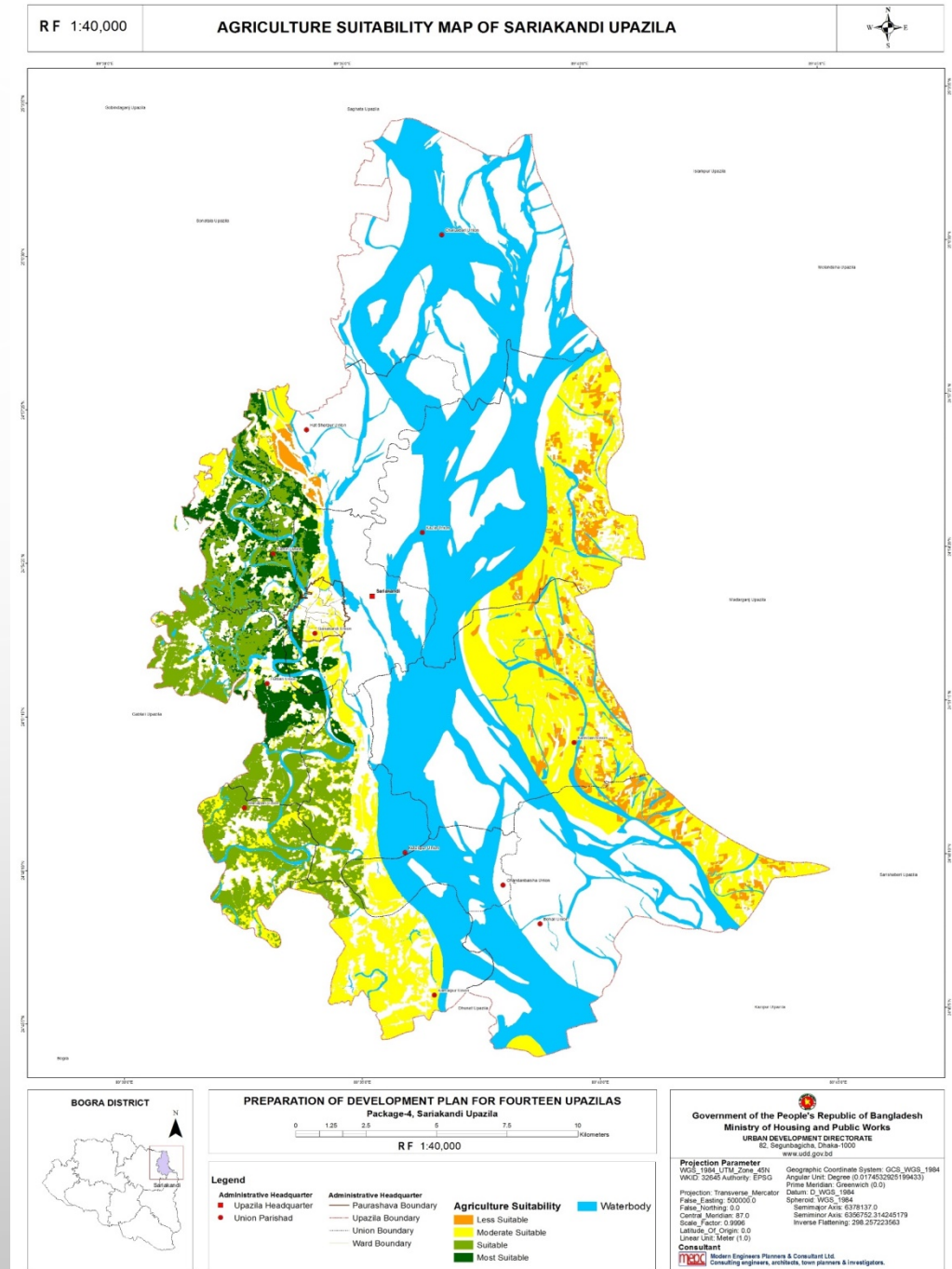
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Suitability Analysis

Agriculture Suitability of Sariakandi Upazila

Criteria

Cropping Intensity 60% Influence
Inundation Depth 40% Influence



Suitable Land for Human Settlement of Sariakandi

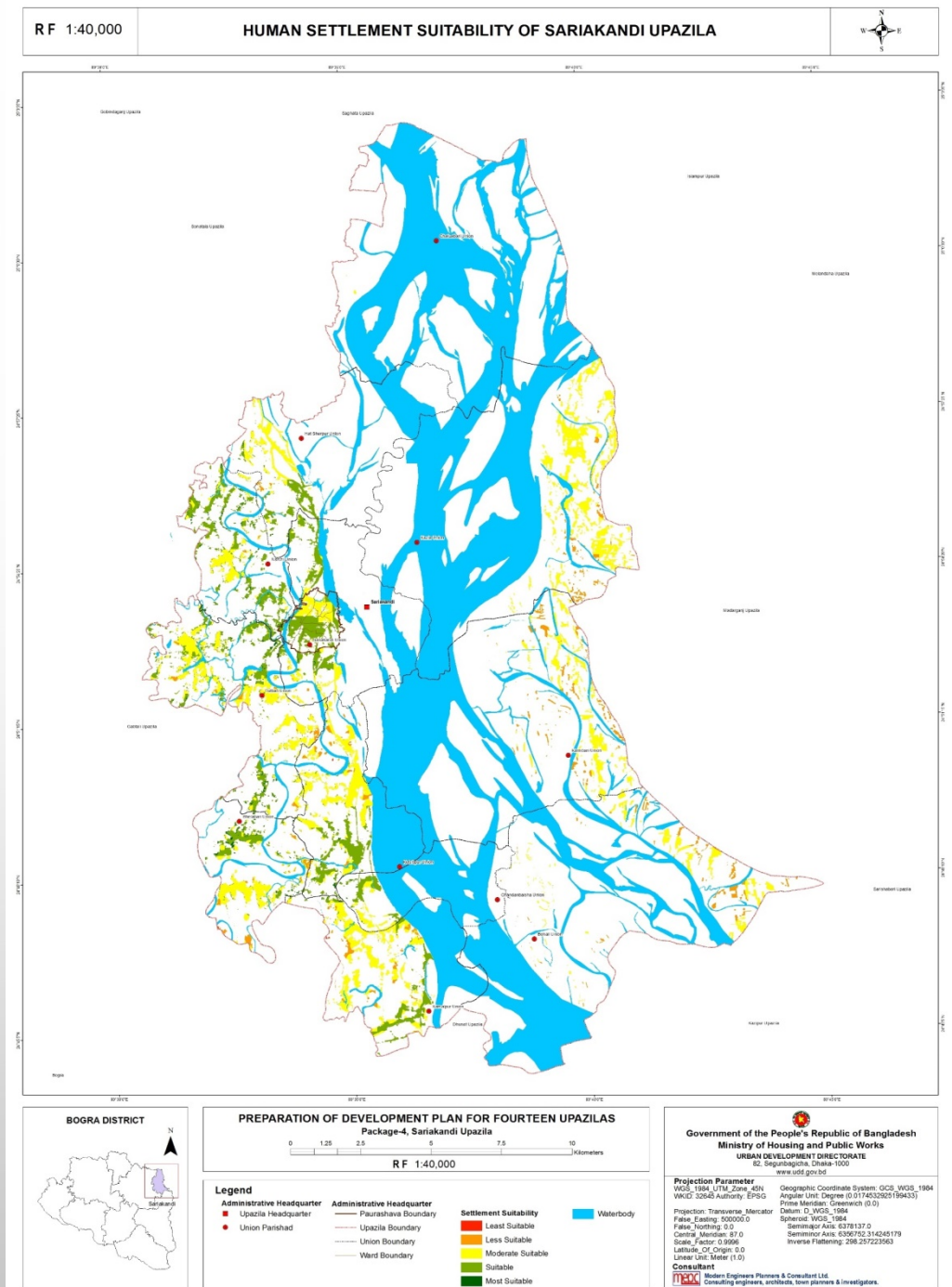
Criteria

Road Reclass 40% Influence

Geological Suitability 30% Influence

Slope 5% Influence

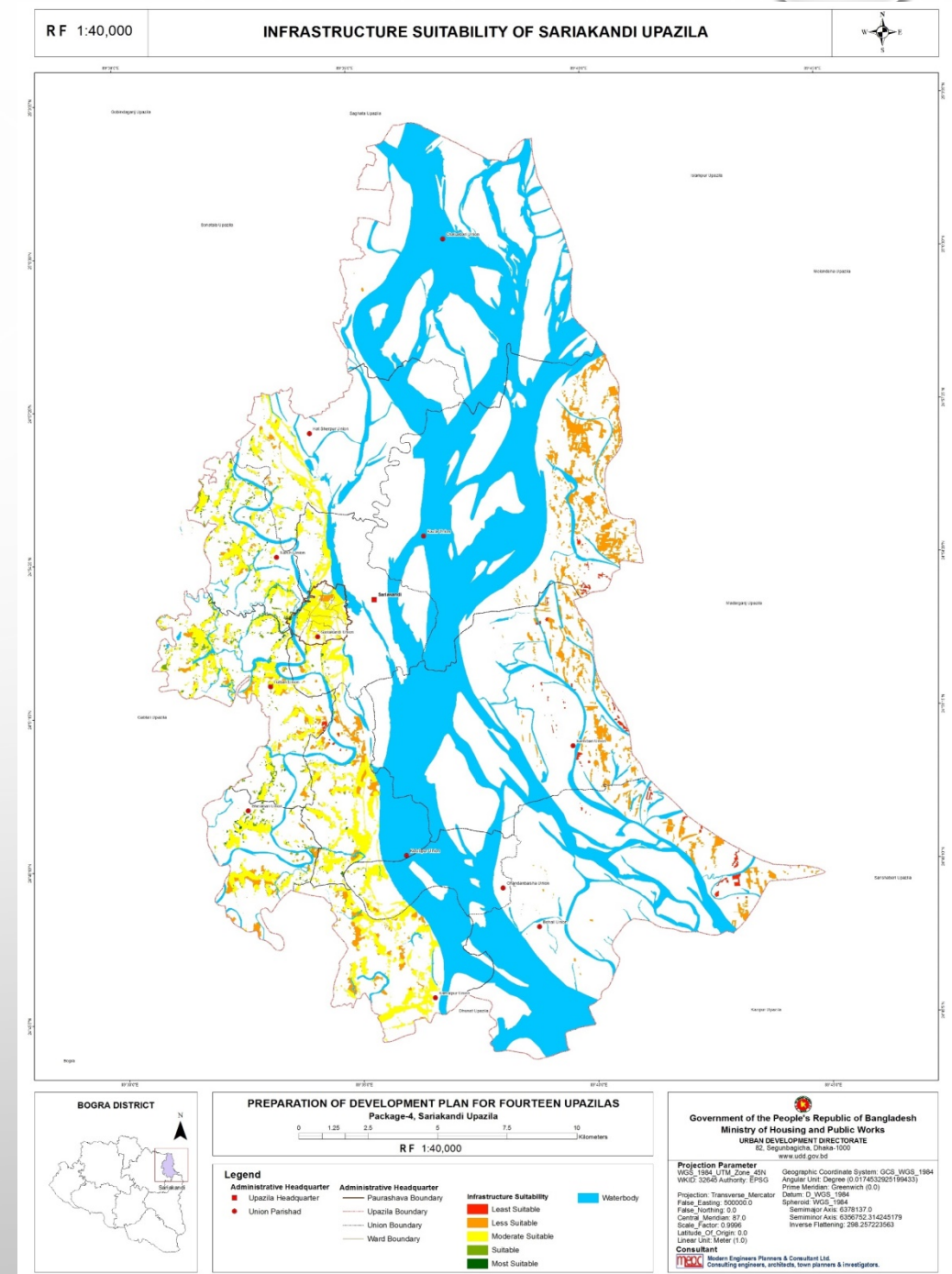
Inundation 25% Influence



Suitable Land for Infrastructure of Sariakandi Upazila

Criteria

Road Reclass 20% Influence
Geological Suitability 40% Influence
Inundation 40% Influence



Desirable and Undesirable Land for Development of Sariakandi

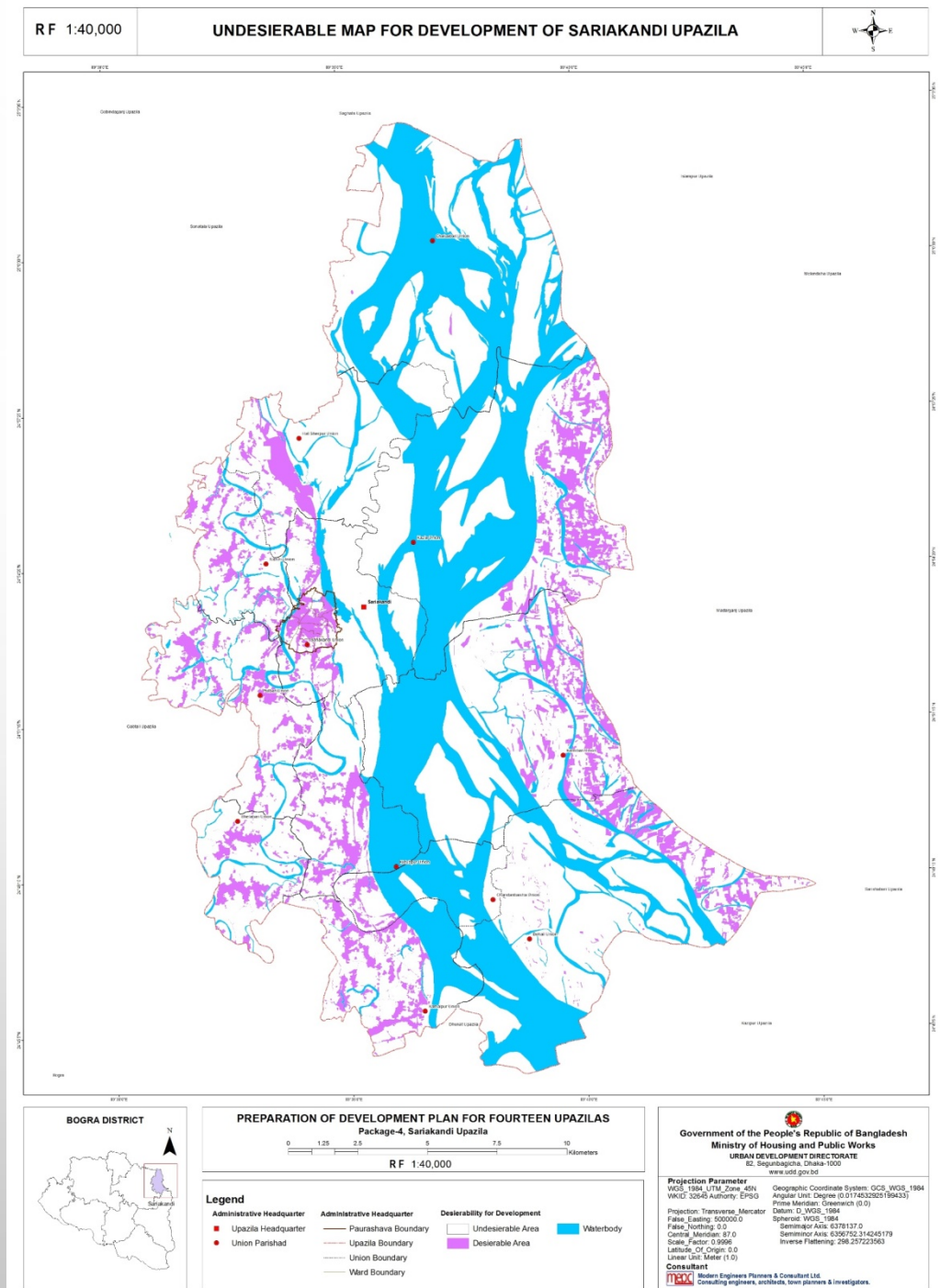
Criteria

Waterbody (Except Pond & Ditch)

Inundation (Main Flood Flow Zone)

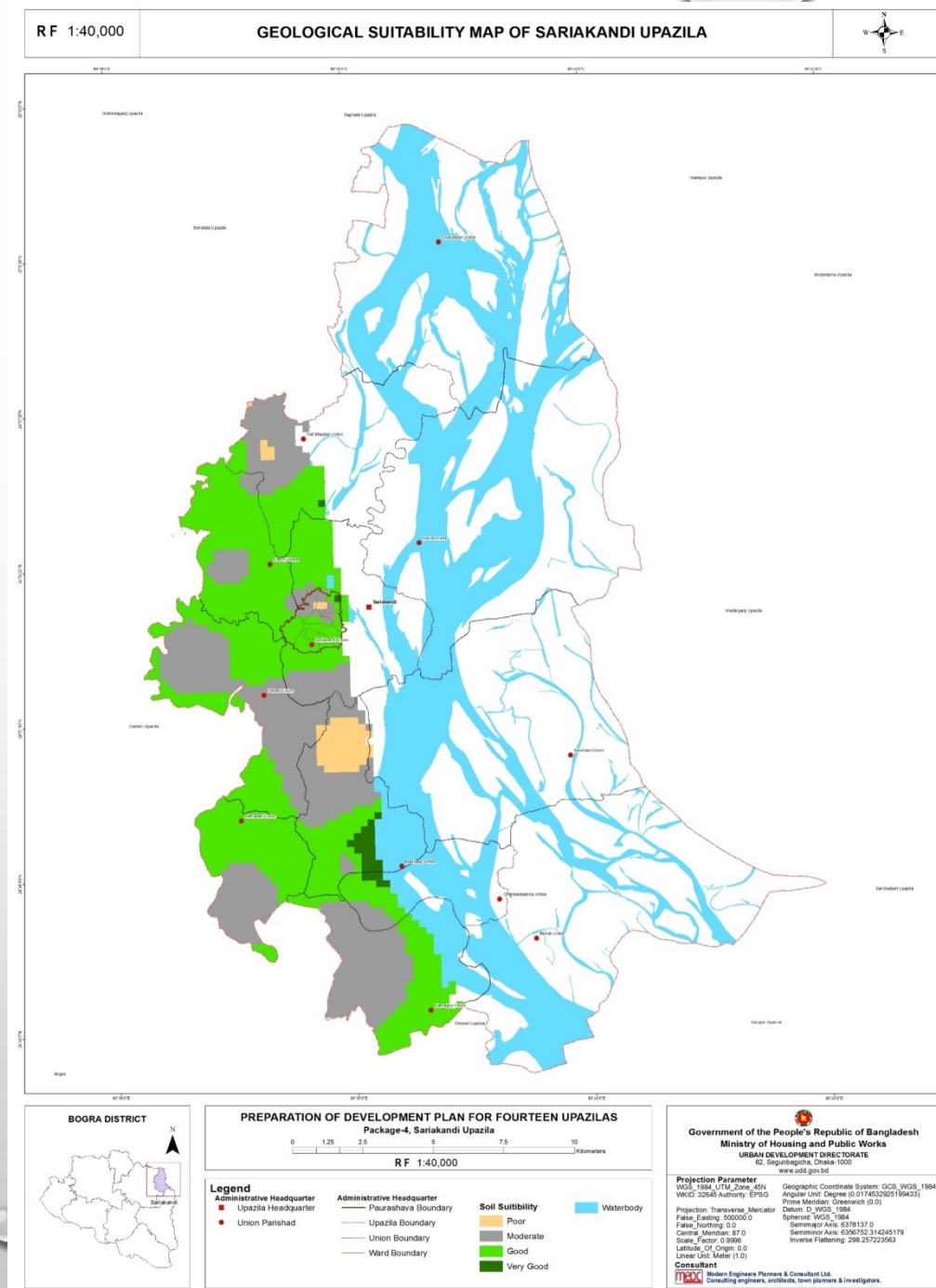
Geological (Poor Soil Suitability)

Cropping Intensity (Double & Triple Crop)

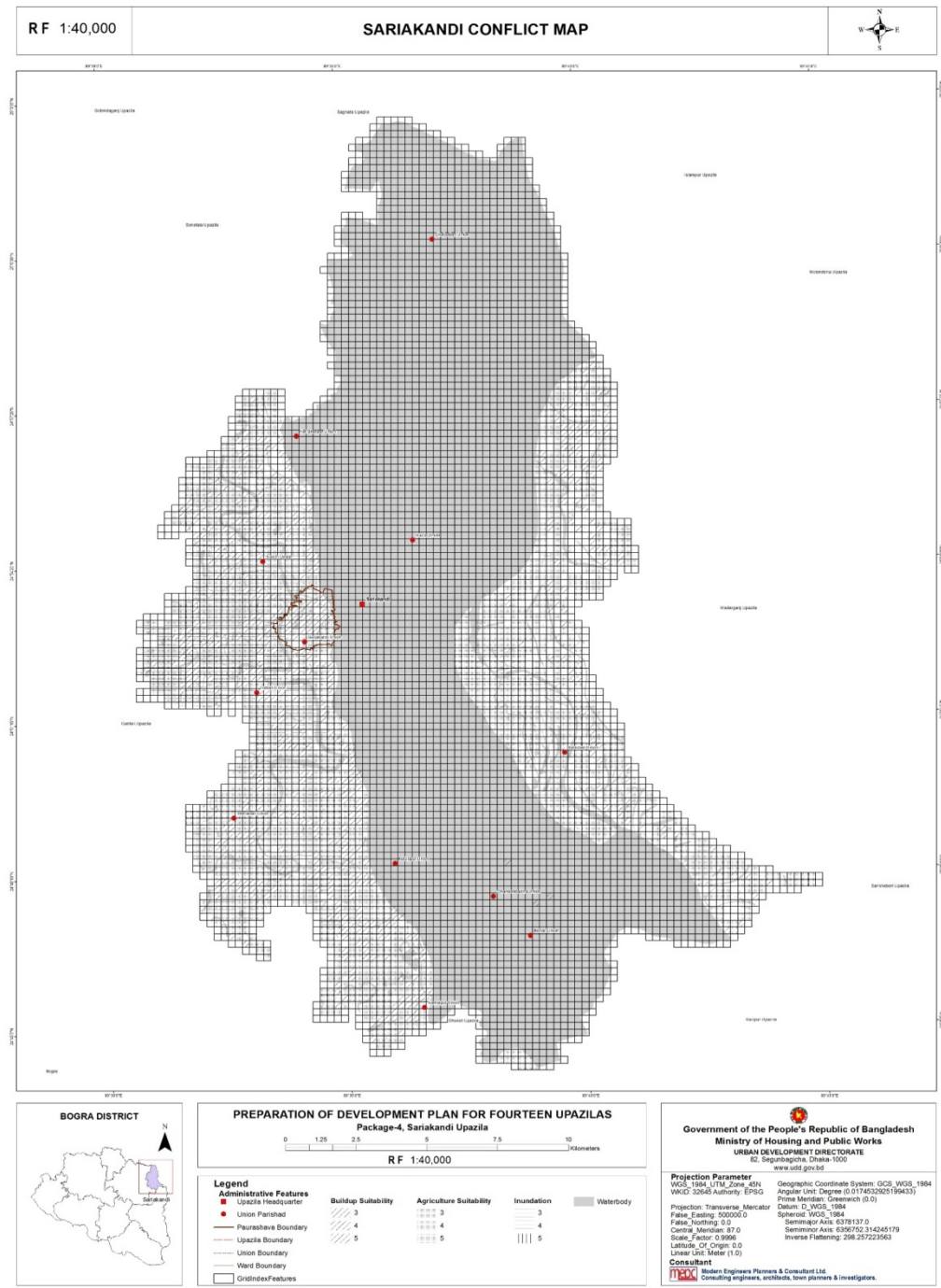


Geological Suitability of Sariakandi Upazila

Infrastructure Suitability	Suggested Landuse Suitability
Very Good	Commercial area, Residential area, industrial zone
Good	Commercial area, Residential area, Industrial zone
Moderate	Industrial zone, Residential area, Commercial area, Agricultural Zone Park, and Recreation
Poor	Agricultural zone, Flood flow zone, Wetland, Rural settlement Park, and Recreation
Very Poor	Agricultural zone, Flood flow zone, Wetland Rural settlement Park, and Recreation



Conflict Map of Sariakandi Upazila



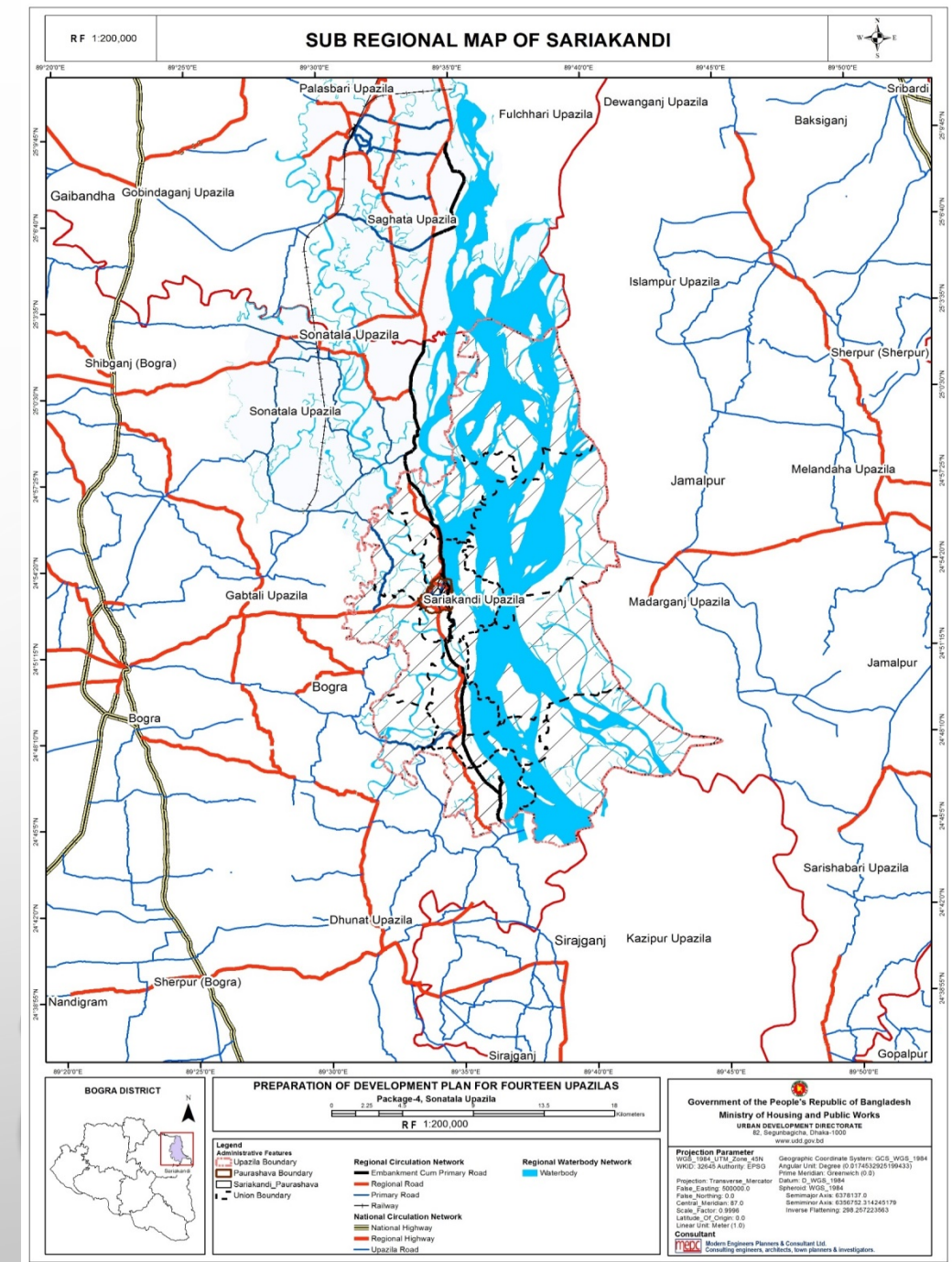
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Sub-Regional Plan

Sub-Regional Plan of Sariakandi

Consideration for Sub-Regional Plan

- For Sariakandi Upazila, mainly Bogura District has been considered as its sub-region;
- In context of connectivity adjacent districts have also been considered;
- Both National and Regional connectivity has been considered.



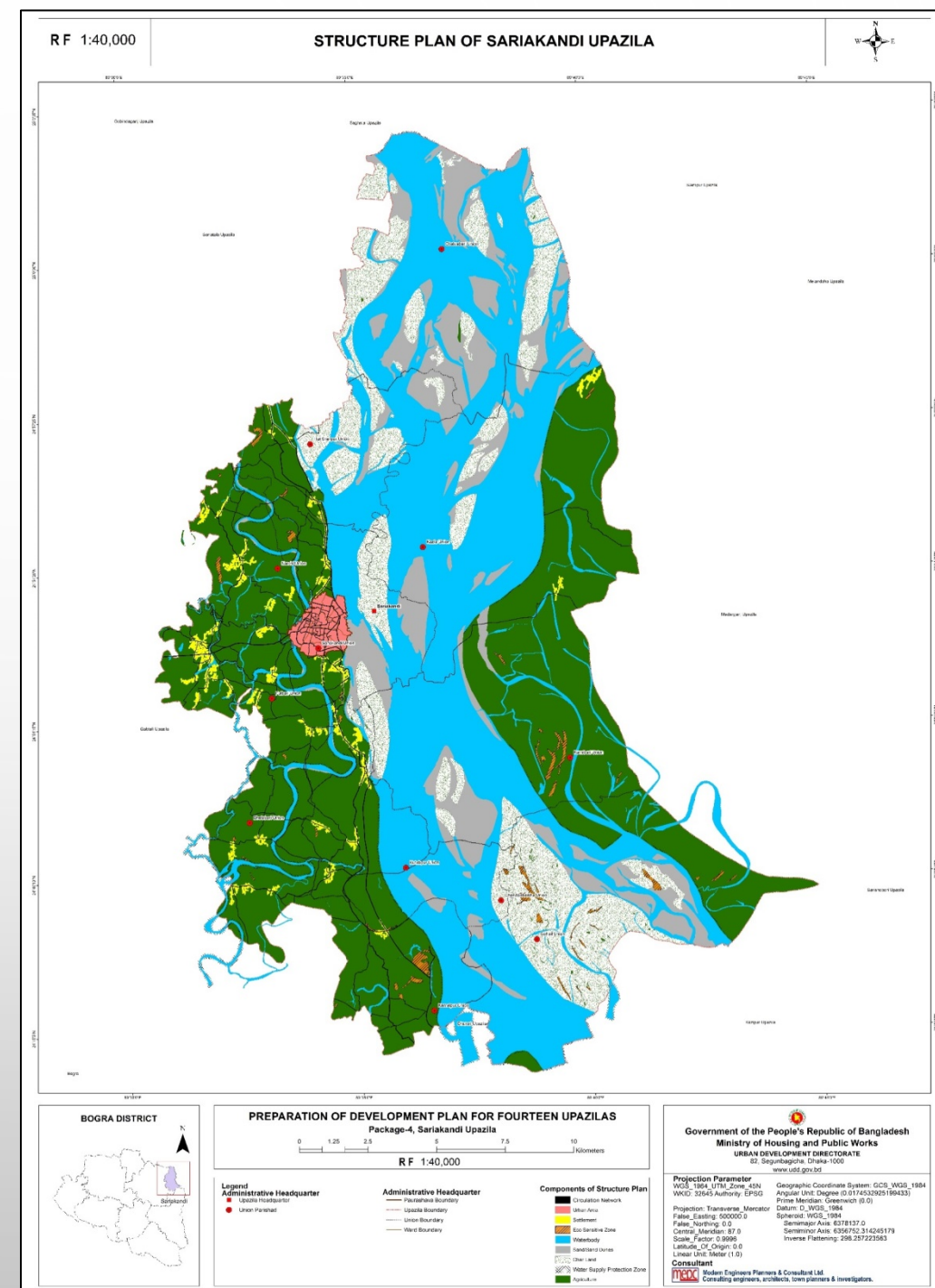
Policies for Sub-Regional Plan

- i. Upazila area should be connected to national and regional network;
- ii. Planning should facilitate inter and intra-regional connectivity through rail, road and waterways;
- iii. Development proposal should consider economic potential of the region;
- iv. Development proposal should consider disaster scenarios (flood and earthquake), i.e. Unhindered flow of flood water and earthquake sensitivity of land and infrastructure.

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Structure Plan

Structure Plan of Sariakandi



Planning Policies for Structure Plan

- Containing urban growth to existing Paurashava boundary;
- Containing rural growth to existing rural settlements;
- Conserving existing agricultural land of higher and where cropping intensity;
- Conserving water bodies and flood flow zones;
- Minimum land acquisition for physical infrastructure.

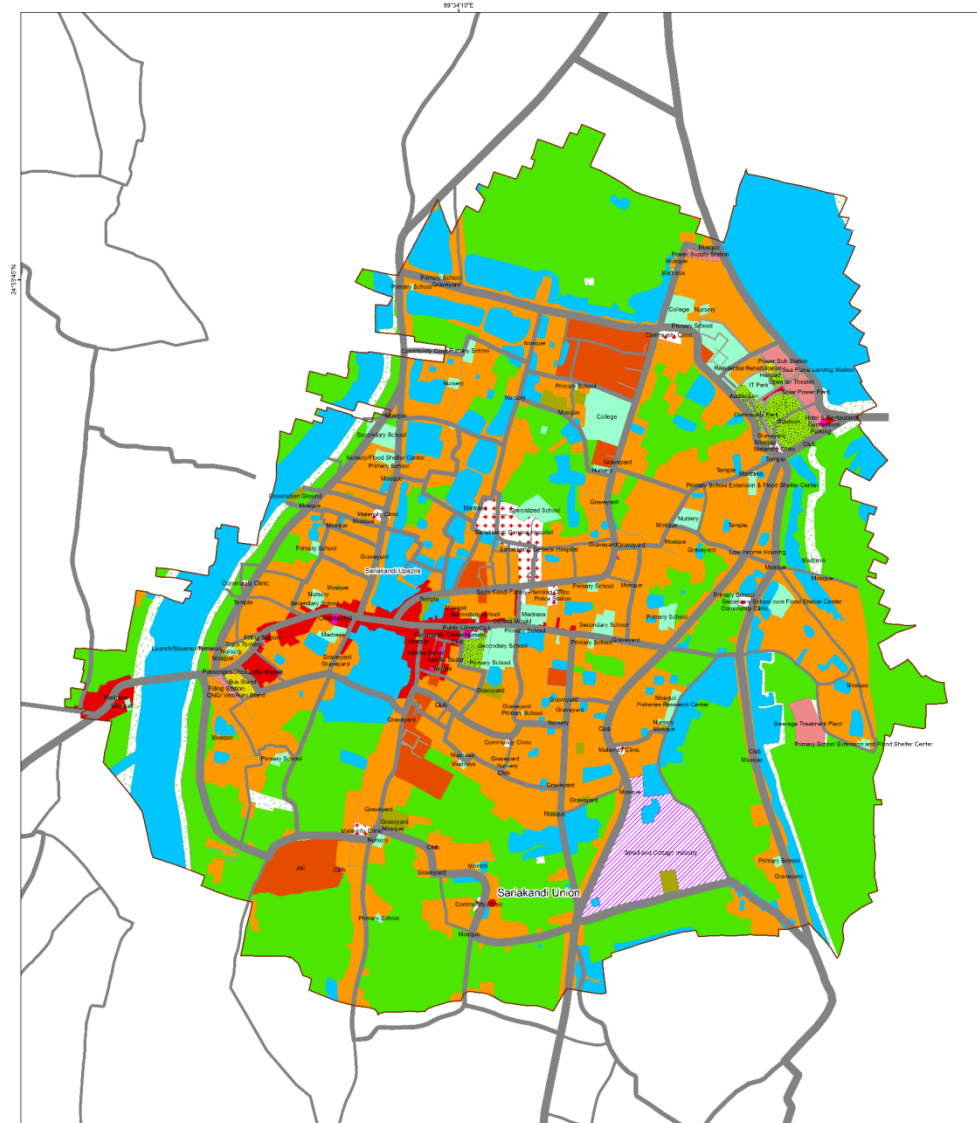
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Urban Area Plan

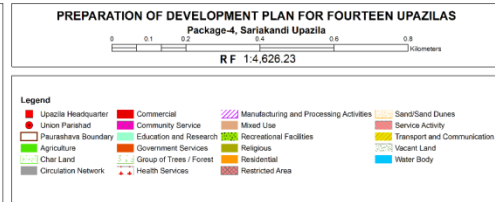
Urban Area Plan of Sariakandi

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URBAN AREA PLAN OF SARIKANDI UPAZILA



BOGRA DISTRICT



Government of the People's Republic of Bangladesh
Ministry of Housing and Public Works
URBAN DEVELOPMENT DIRECTORATE
82, Singu Bagicha, Dhaka-1000
www.ud.gov.bd

Projection Parameter
WGS_1984_UTM_Zone_45N
WKID: 32645; Authority: EPSG
Projection: Transverse_Mercator
False_Easting: 500000.0
False_Northing: 0.0
Central_Meridian: 87.0
Scale_Factor: 0.9996
Latitude_Of_Origin: 0.0
Linear Unit: Meter (1.0)

Geographic Coordinate System: GCS_WGS_1984
Angular Unit: Degree (0.0174532925199433)
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Spheroid: WGS_1984
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Semi-minor Axis: 6356752.314245179
Inverse Flattening: 298.257222593

Consultant
MDR Modern Engineers Planners & Consultant Ltd.
Consulting engineers, architects, town planners & investigators.

Proposed Facilities

Name of Facilities	Existing Facilities	Area (Acre)	Proposed Facilities	Area (Acre)	Total Facilities	Total Area (Acre)
Nursery	6	0.71	7	2.16	13	2.87
Primary School	16	2.96	1	0.41	17	3.37
Primary School Extension and Flood Shelter	-	-	2	0.49	2	0.49
Secondary School	4	3.13	1	1.3	5	4.43
Secondary School Cum Flood Shelter	-	-	1	0.91	1	0.91
College	2	5.25	-	-	2	5.25
Community Park	-	-	1	0.5	1	0.5
Community Center	-	-	1	0.1	1	0.1
Hospital	1	5.27	-	-	1	5.27
Community Clinic	-	-	6	1.31	6	1.31
Maternity/Child Care Center	-	-	4	1.07	4	1.07
Gymnasium	-	-	1	0.12	1	0.12
Graveyard	30	1.9	1	0.07	31	1.97
Auditorium	-	-	1	0.54	1	0.54
Bus Stand	-	-	1	0.78	1	0.78
Cattle Market	-	-	1	1.18	1	1.18
CNG/Van/Auto Stand	-	-	1	0.26	1	0.26
Cremation Ground	-	-	1	0.27	1	0.27
Fisheries Research Center	-	-	1	0.48	1	0.48
Helipad	-	-	1	0.17	1	0.17
Hotel and Restaurant	-	-	1	0.13	1	0.13
IT Park	-	-	1	0.86	1	0.86

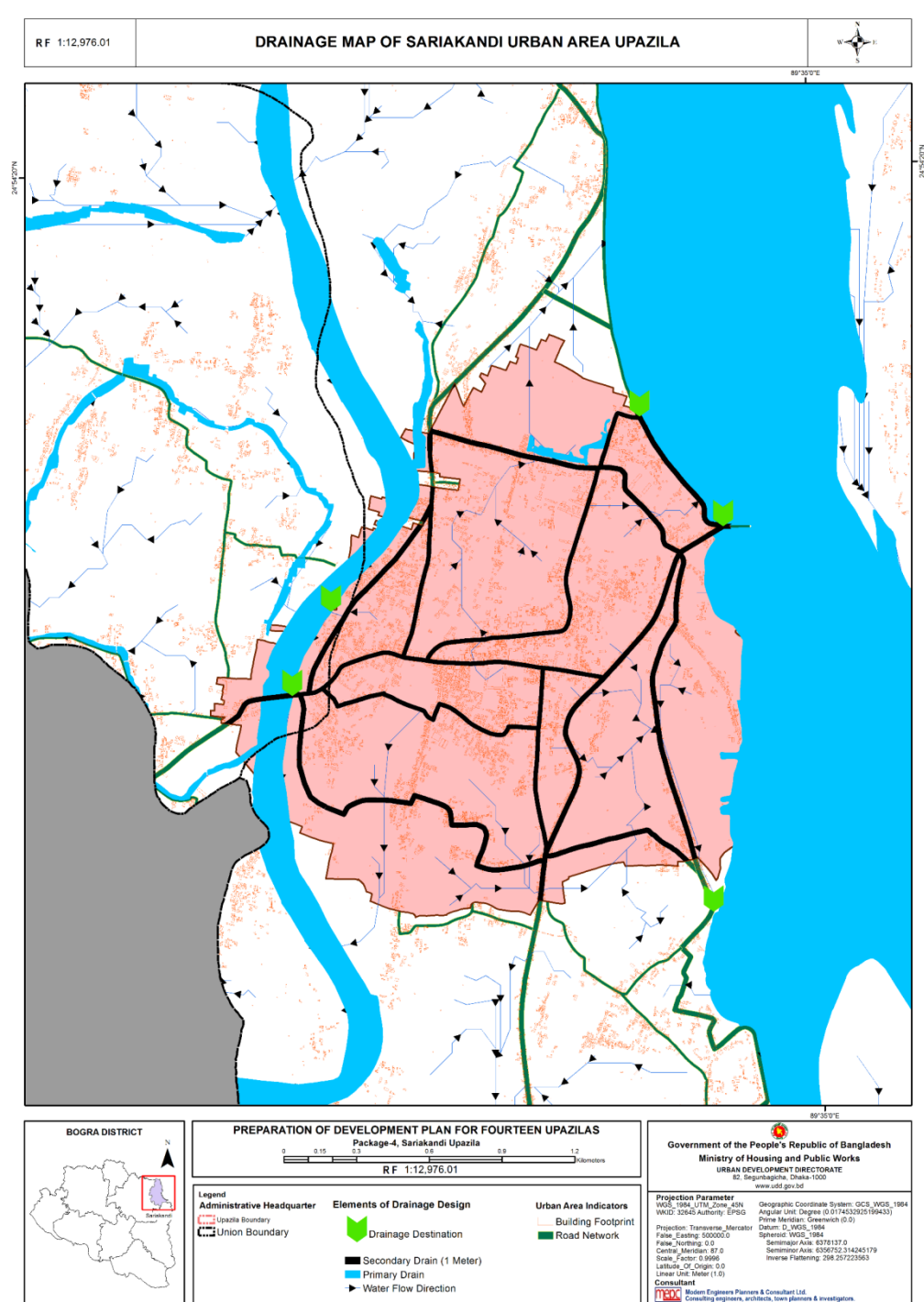
Name of Facilities	Existing Facilities	Area (Acre)	Proposed Facilities	Area (Acre)	Total Facilities	Total Area (Acre)
Jail	-	-	1	6.98	1	6.98
Launch/Steamer Terminal	-	-	1	0.014	1	0.014
Low Income Housing	-	-	1	0.5	1	0.5
Maternity Clinic	-	-	4	1.07	4	1.07
Mukto Monch	-	-	1	0.24	1	0.24
Parking	-	-	1	0.04	1	0.04
Passenger Shed	-	-	1	0.04	1	0.04
Power Sub Station	-	-	1	1.04	0	1.04
Power Supply Station	-	-	1	0.62	0	0.62
Public Toilet	-	-	1	0.01	1	0.01
Residential Rehabilitation	-	-	1	1.01	1	1.01
Sea Plane Landing Station	-	-	1		1	
Small and Cottage Industry	-	-	1	17.71	1	17.71
Solar Power Plant	-	-	1	1.47	1	1.47
Specialized School	-	-	1	1.32	1	1.32
Stadium	-	-	1	3.5	1	3.5
Sewerage Treatment Plant	-	-	1	2.12	1	2.12
Truck Terminal	-	-	1	0.52	1	0.52

Proposed Facilities

Landuse Proposal of Ward No. 2 in Sariakandi Paurashava with Mauza Plot No.

Name of Facilities	Proposed Facilities	Area (Acre)	Mouza Name, JL. Number, Sheet Number	Plot No.
Nursery	1	0.16	Dhap_061_000	548
Community Park	1	0.5	Batia_064_001	72, 73, 735, 739, 740
Community Clinic	1	0.23	Batia_064_001	72, 73
Gymnasium	1	0.12	Batia_064_001	78, 85
Graveyard	1	0.07	Batia_064_001	73
Auditorium	1	0.54	Dhap_061_000	735, 736, 738, 739,
Helipad	1	0.17	Dhap_061_000	727, 767
Hotel and Restaurant	1	0.13	Batia_064_001	78
IT Park	1	86	Dhap_061_000	728, 732, 733, 735, 736, 737
Mukto Monch	1	0.24	Dhap_061_000	726, 727, 729, 767
Parking	1	0.04	Batia_064_001	78, 85
Power Sub Station	1	1.04	Dhap_061_000	719, 722, 723, 727
Power Supply Station	1	0.62	Dhap_061_000	
Residential Rehabilitation	1	1.01	Dhap_061_000	710, 712, 713, 714, 727, 728, 737, 767
Sea Plane Landing Station	1		Dhap_061_000	721
Solar Power Plant	1	1.47	Batia_064_001 & Dhap_061_000	74, 78, 79, 80 & 523, 724, 725
Stadium	1	3.5	Batia_064_001 & Dhap_061_000	73, 74, 75, 76, 77, 78, 85 & 725, 730, 731, 734

Proposed Drainage Plan of Sariakandi Paurashava



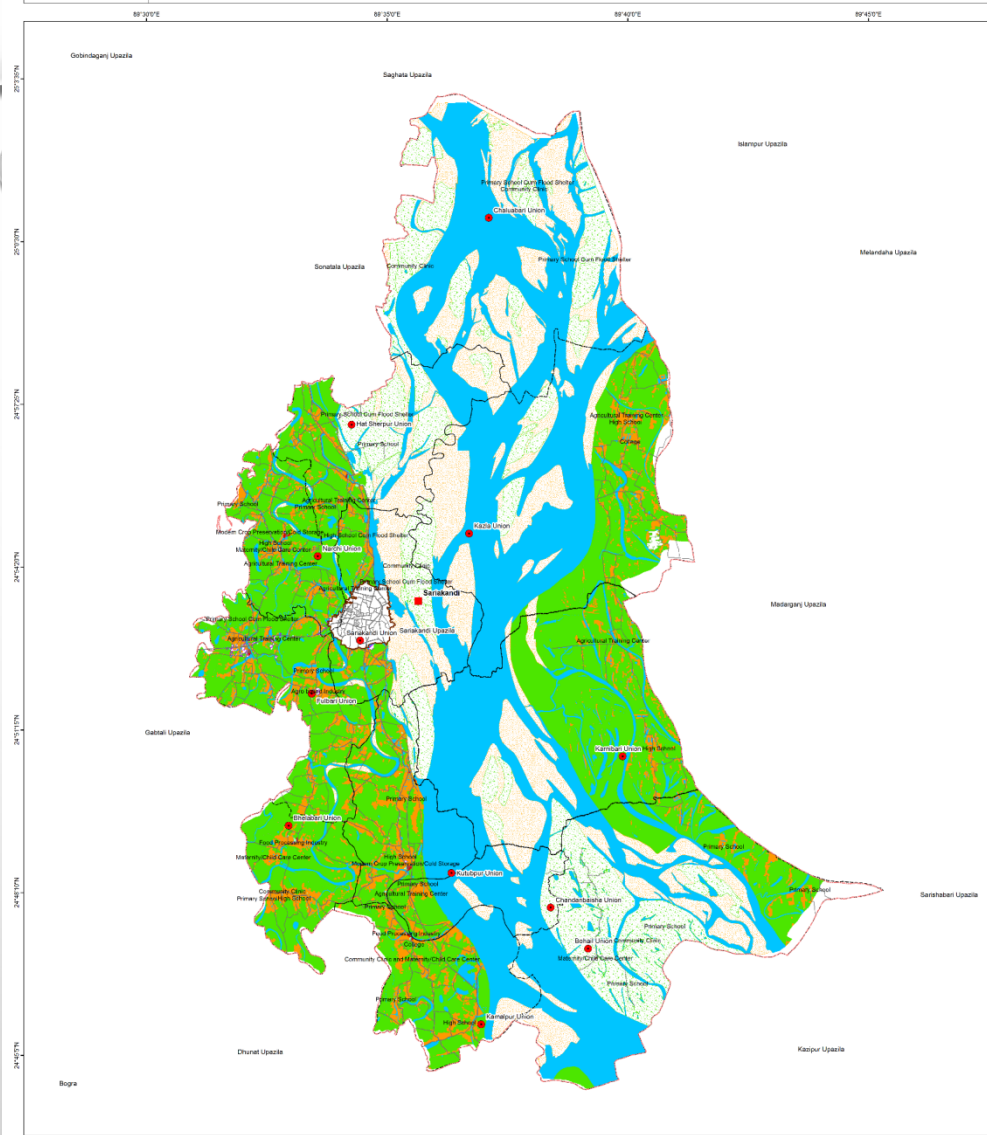
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Rural Area Plan

Rural Area Plan of Sariakandi Upazila

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RURAL AREA PLAN OF SARIKANDI UPAZILA



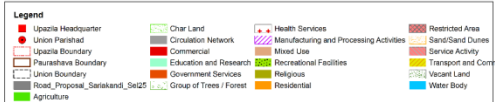
BOGRA DISTRICT



PREPARATION OF DEVELOPMENT PLAN FOR FOURTEEN UPAZILAS

Package-4, Sariakandi Upazila

RF 1:59,922.47



Government of the People's Republic of Bangladesh
Ministry of Housing and Public Works
URBAN DEVELOPMENT DIRECTORATE
82, Begunbari, Dhaka-1000
www.udd.gov.bd

Projection Parameter
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Spheroid: WGS_1984
Prime Meridian: Greenwich (0.0)
Projection: Transverse_Mercator
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False Northing: 0.0
Central Meridian: 87.0
Scale Factor: 0.9996
Linear Unit: Meter (1.0)
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Angular Unit: Degree (0.0174532925199433)
Datum: D_WGS_1984
Spheroid: WGS_1984
Prime Meridian: Greenwich (0.0)
Projection: Transverse_Mercator
False Easting: 500000.0
False Northing: 0.0
Central Meridian: 87.0
Scale Factor: 0.9996
Linear Unit: Meter (1.0)
Consultant: Modern Engineers Planners & Consultant Ltd.
Consulting engineers, architects, town planners & investigators.

Proposed Rural Area Facilities

Name of Facilities	No of Existing Facilities	Area (Acre)	No of New Proposed Facilities	Area (Acre)	Total Facilities
Primary School	59	20.03	13	10.42	72
Primary School Cum Flood Shelter	-	-	6	3.57	6
Secondary School	8	6.40	5	5.38	13
High School Cum Flood Shelter	-	-	1	1.64	1
College	9	7.64	2	2.47	11
Community Clinic	15	1.36	5	2.98	20
Maternity/Child Care Center	-	-	4	2.01	4
Agro Based industry	58	46.66	1	7.38	59
Food Processing Industry	-	-	2	1.49	2
Graveyard	13	1.87	-	-	13
Eidgah	4	1.20	-	-	4
Agricultural Training Center	-	-	8	3.14	8
Modern Crop preservation/Cold Storage	-	-	2	2.35	2
Growth Center	-	-	2	-	2

Proposed Landuse Plan of Narchi Union

Landuse Proposal of Narchi Union with Mauza Plot No.				
Landuse Category	No of New Proposed Facilities	Area (Acre)	Mauza Name, Number and Sheet Number	Plot No
Agricultural training Center	1	0.43	Narchi_159_003	3029
Growth Center	1		Narchi_159_003	2502 and its surrounding area
Maternity/Child Care Center	1	0.43	Narchi_159_003	2733
Primary School	1	0.29	Shakha Hati_053_000	225, 226, 227
Primary School Cum Flood Shelter	1	0.32	Narchi_159_005	5325, 7175
Secondary School	1	0.66	Narchi_159_003	2626
Modern Crop Preservation/ Cold Storage	1	1.13	Narchi_159_003	2483,2483, 2485

Rural Area Plan of Narchi Union in Sariakandi Upazila

Primary School

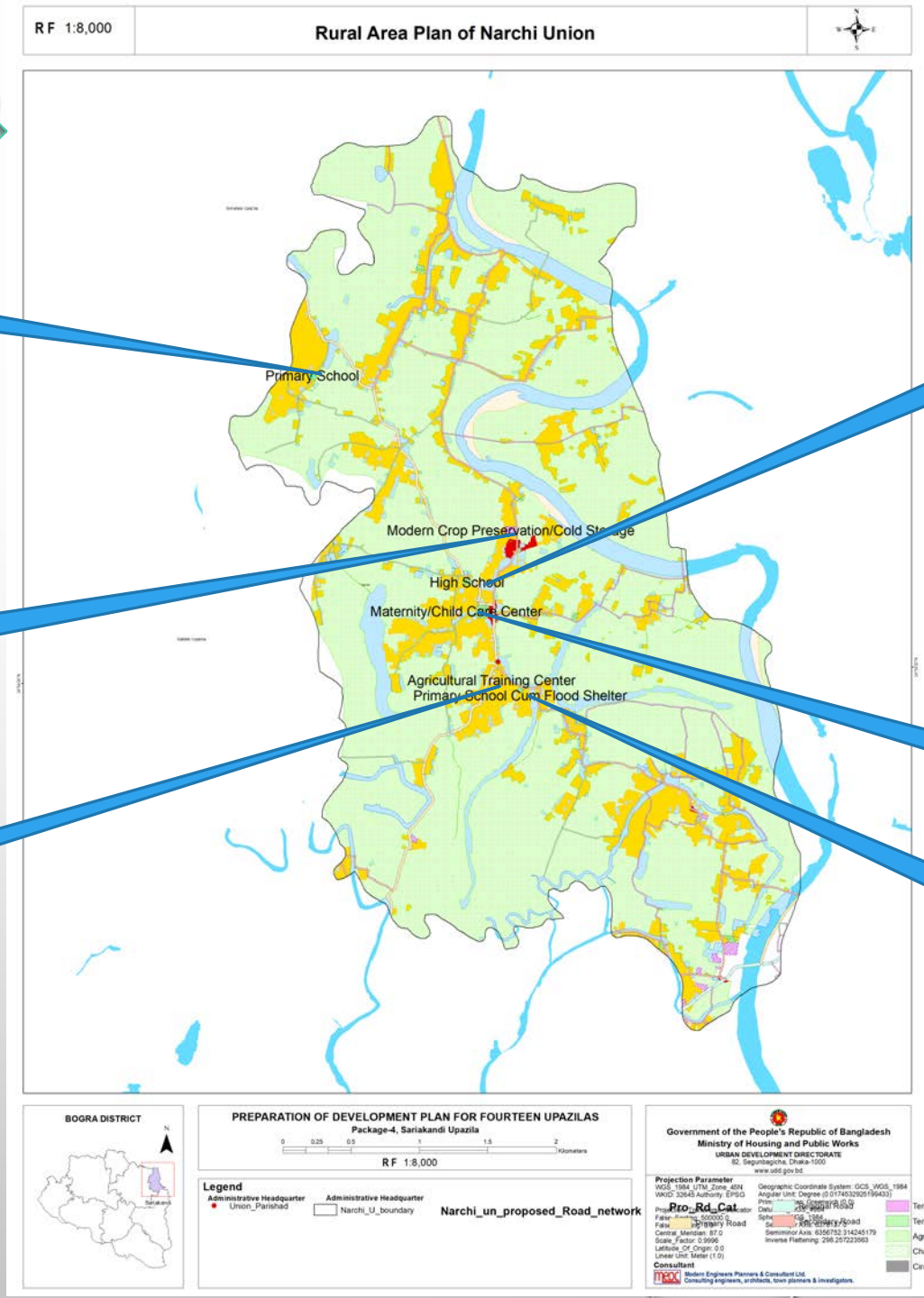
Secondary School

Modern Crop
Preservation/Cold Storage

Maternity/Child
Care Center

Agriculture Training
Center

Primary School
cum Flood Center



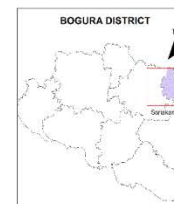
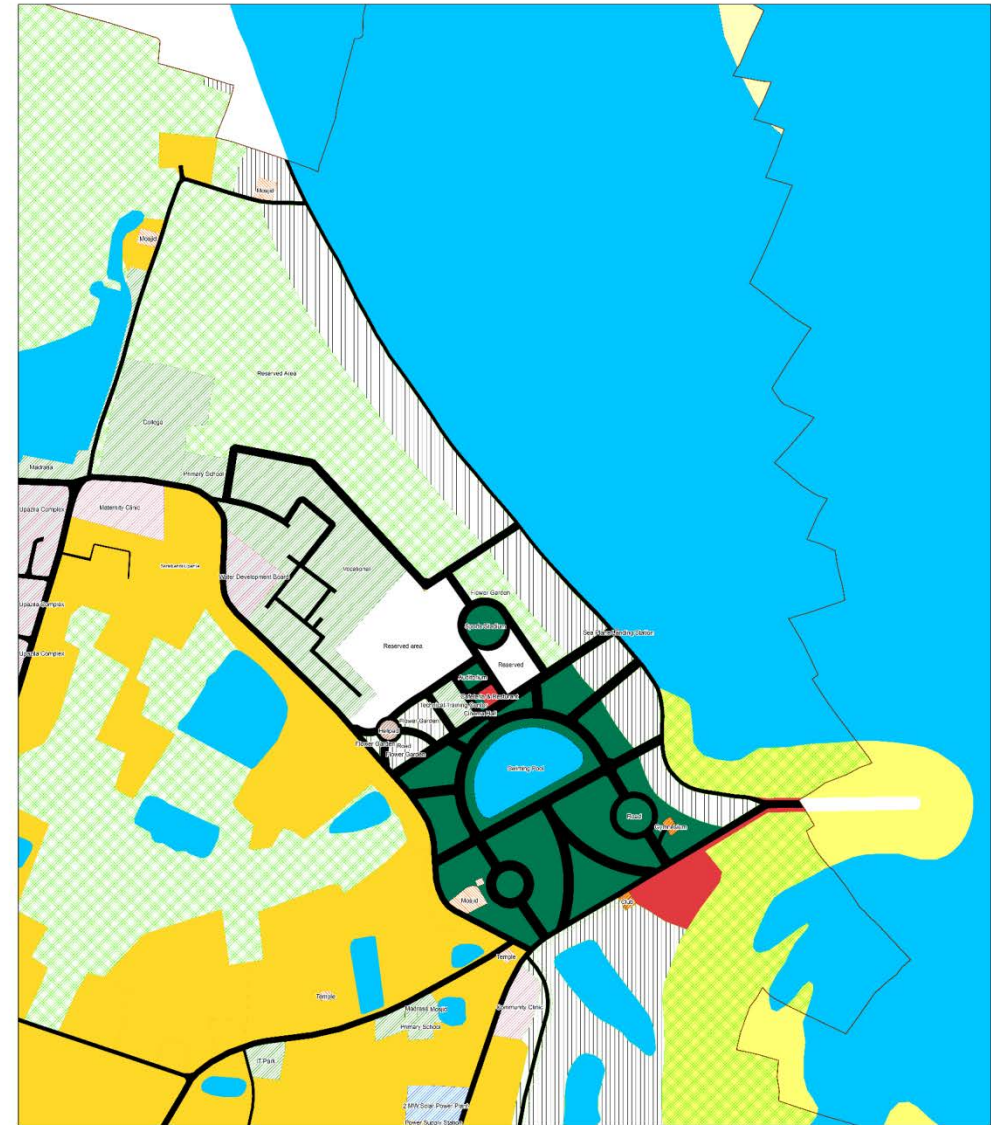
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Action Area Plan

Action Area Plan of Sariakandi Upazila

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ACTION AREA PLAN MAP OF SARIKANDI UPAZILA



PREPARATION OF DEVELOPMENT PLAN FOR FOURTEEN UPAZILAS

Package-4, Sariakandi Upazila

RF 1:904.2



Government of the People's Republic of Bangladesh
Ministry of Housing and Public Works
URBAN DEVELOPMENT DIRECTORATE
 82, Segunbagicha, Dhaka-1000
www.udd.gov.bd

Projection Parameter
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Consultant
MDM Engineers Planners & Consultants Ltd.
 Consulting engineers, architects, town planners & investigators.

Proposed Plan to Achieve SDGs

Sustainable Development Goals	Suggested Proposals for Sariakandi Upazila	
Goal-1: End poverty in all its forms everywhere	- Housing for Low Income People (0.50 acres) - Residential Rehabilitation Zone	
Goal-2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture	- Ensure food security by preserving agricultural land. - 2 nos. of Cold Storage	
Goal-3: Ensure healthy lives and promote well-being for all at all ages	- Community Clinic; - Maternity/Child Care Centre	- 1 nos. of public toilet
Goal-4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	- Primary Schools - Primary School cum Flood Shelters - Secondary Schools; - Secondary School cum Flood Shelter	- Colleges - Specialized School (1.32 acres) - Fisheries Research Center (0.48 acres) - 8 nos. of agricultural training centre (3.14 acres)
Goal 6: Ensure availability and sustainable management of water and sanitation for all	- Sewerage Treatment Plant (2.12 acres)	
Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all	- Power Supply Station (0.62 acres) - Power Sub-Station (1.04 acres)	- Solar Energy Park (1.47 acres)
Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	- Small-scale Cottage Industry (17.71 acres) - 2 nos. of Growth Centre	- 1 nos. of agro based industry (7.38 acres) - 1 nos. of food processing industry
Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	- Proposal of road widening. - Proposal of Embankment cum road into four lanes. - Cattle Market (1.18 acres) - Bus Terminal (0.78 acres)	- Truck Terminal (0.52 acres) - CNG/Van/Auto Stand (0.26 acres) - IT Park (0.86 acres) - Stadium (3.50 acres) - 1 nos. of launch ghat
Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable	- Sewerage Treatment Plant (2.12 acres) - Gymnasium (0.12 acres)	- Community Centre (0.10 acres) - 1 nos. of Auditorium (0.54 acres)
Goal 13: Take urgent action to combat climate change and its impacts	- Preserve the green space (Group of Trees area) - Community Park (0.50 acres)	- Sub-Flood Flow and Main Flood Flow Zone has identified.
Goal 15: Protect, restore & promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	- Proposal of Tree Plantation besides road and river/Khal	

Sustainable Development Goals	Suggested Proposals for Sariakandi Upazila
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Goal-2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture	- Ensure food security by preserving agricultural land. - 2 nos. of Cold Storage
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Goal 6: Ensure availability and sustainable management of water and sanitation for all	- Sewerage Treatment Plant (2.12 acres)
Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all	- Solar Energy Park (1.47 acres) - Power Supply Station (0.62 acres) - Power Sub-Station (1.04 acres)
Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	- Small-scale Cottage Industry (17.71 acres) - 2 nos. of Growth Centre - 1 nos. of agro based industry - 1 nos. of food processing industry
Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	- Proposal of road widening. - Proposal of Embankment cum road into four lanes. - Cattle Market (1.18 acres) - Bus Terminal (0.78 acres) - Truck Terminal (0.52 acres) - CNG/Van/Auto Stand (0.26 acres) - IT Park (0.86 acres) - Stadium (3.50 acres) - 1 nos. of launch ghat
Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable	- Sewerage Treatment Plant (2.12 acres) - Gymnasium (0.12 acres) - Community Centre (0.10 acres) - 1 nos. of Auditorium (0.54 acres)
Goal 13: Take urgent action to combat climate change and its impacts	- Preserve the green space (Group of Trees area) - Community Park (0.50 acres) - Sub-Flood Flow and Main Flood Flow Zone has identified.
Goal 15: Protect, restore & promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	- Proposal of Tree Plantation besides road and river/Khal

The background of the slide is a light gray gradient. It is decorated with numerous realistic water droplets of various sizes. Some droplets are clustered in the top-left corner, while others are scattered across the bottom-right area. Each droplet has a soft highlight and a subtle shadow, giving them a three-dimensional appearance.

Thank You All