



**Government of the People's Republic of Bangladesh**  
**Ministry of Housing and Public Works**  
**Urban development Directorate (UDD)**

**“Preparation of Development Plan for Fourteen Upazilas”**

**Package-03**

**Bagmara Upazila, Rajshahi Faridpur Sadar Upazila, Faridpur and  
Gangni Upazila, Meherpur.**

**Implemented By:**



**Engineering Consultants and Associates Limited (ECAL)**

# **Presentation**

**on**

**Final Plan of Bagmara Upazila, Rajshahi Under Fourteen Upazilas Project**

**Date: 30<sup>th</sup> May, 2018**

**Presented by**

Mohammad Jamal Uddin (Chief Consultant)

Abdulla Al Fahad (Urban Planner)

**Implemented By:**



**Engineering Consultants and Associates Limited (ECAL)**

# Vision

Bangladesh is now approaching towards achieving the status of developing nation. This plan will help meet this goal along with the SDGs of Bangladesh at Upazila level. There are some upazillas which are not well enough but rich in terms of resources. These Upazillas need proper utilization of its resources in planned manner to achieve the vision of development that Bangladesh heading for. **Bagmara** is rich in resources and now needs planned development for its sustainable growth.

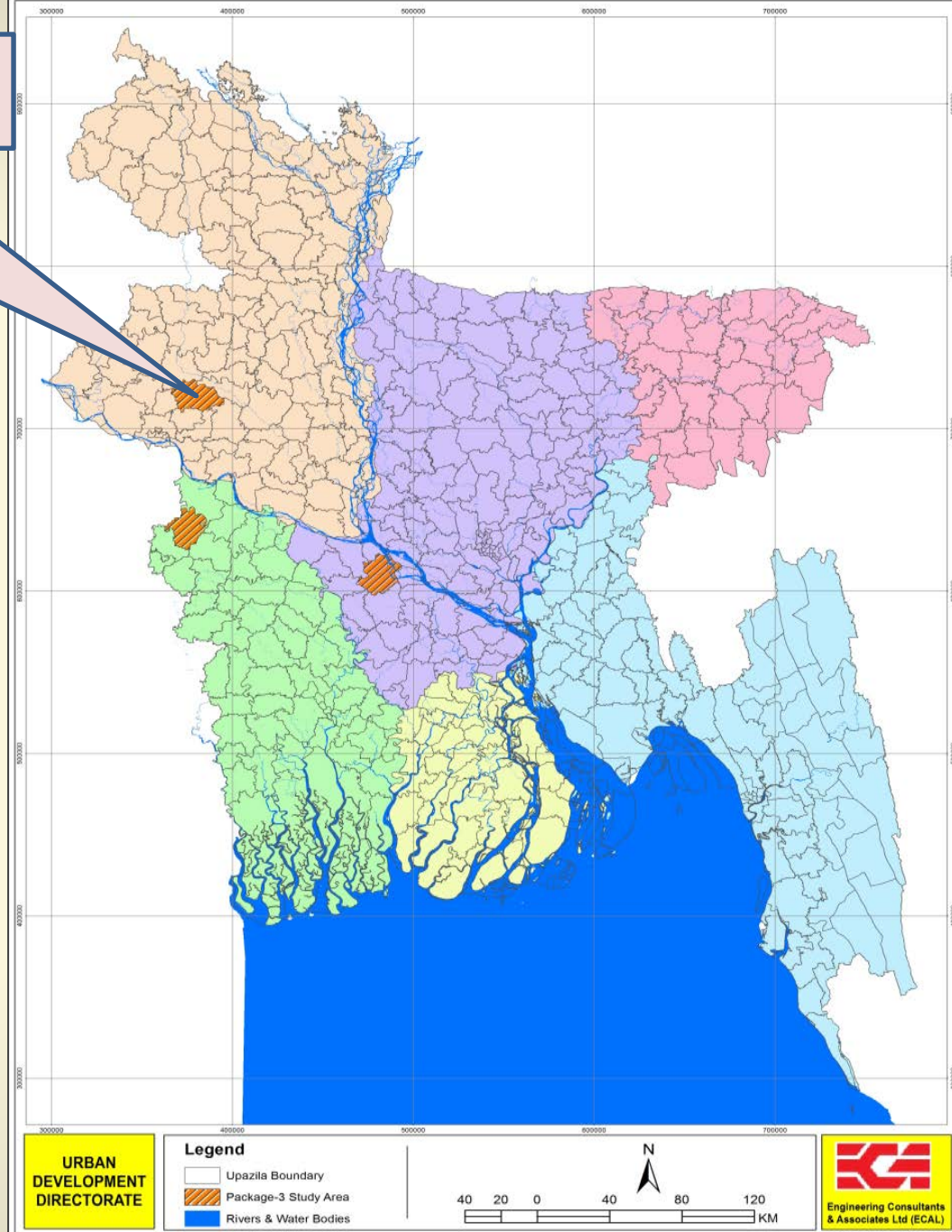
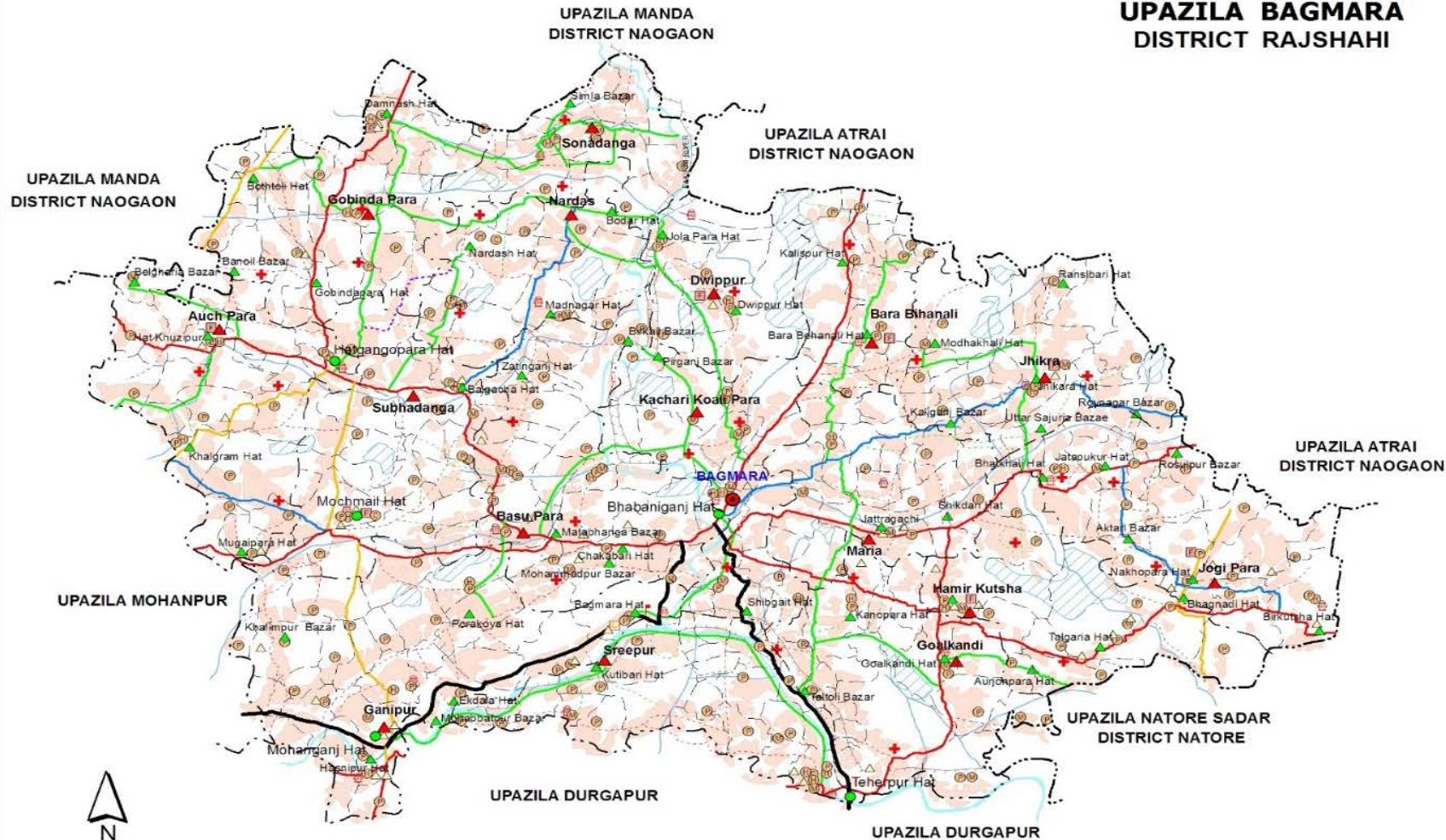
## Objectives

- To find the development issues and potential of the Upazila and make a 20 year development vision
- To develop, improve and update provisions for better transport network, housing, social and community needs of the poor and the disadvantaged groups for a better quality of life.
- To prepare a multi-sector short and long term investment plan through participatory process for better living standards by identifying area based priority
- To provide controlled provisions for private sector development, clarity and security with regard to future development



# Bagmara Upazila

## UPAZILA MAP UPAZILA BAGMARA DISTRICT RAJSHAHI



URBAN  
DEVELOPMENT  
DIRECTORATE

### Legend

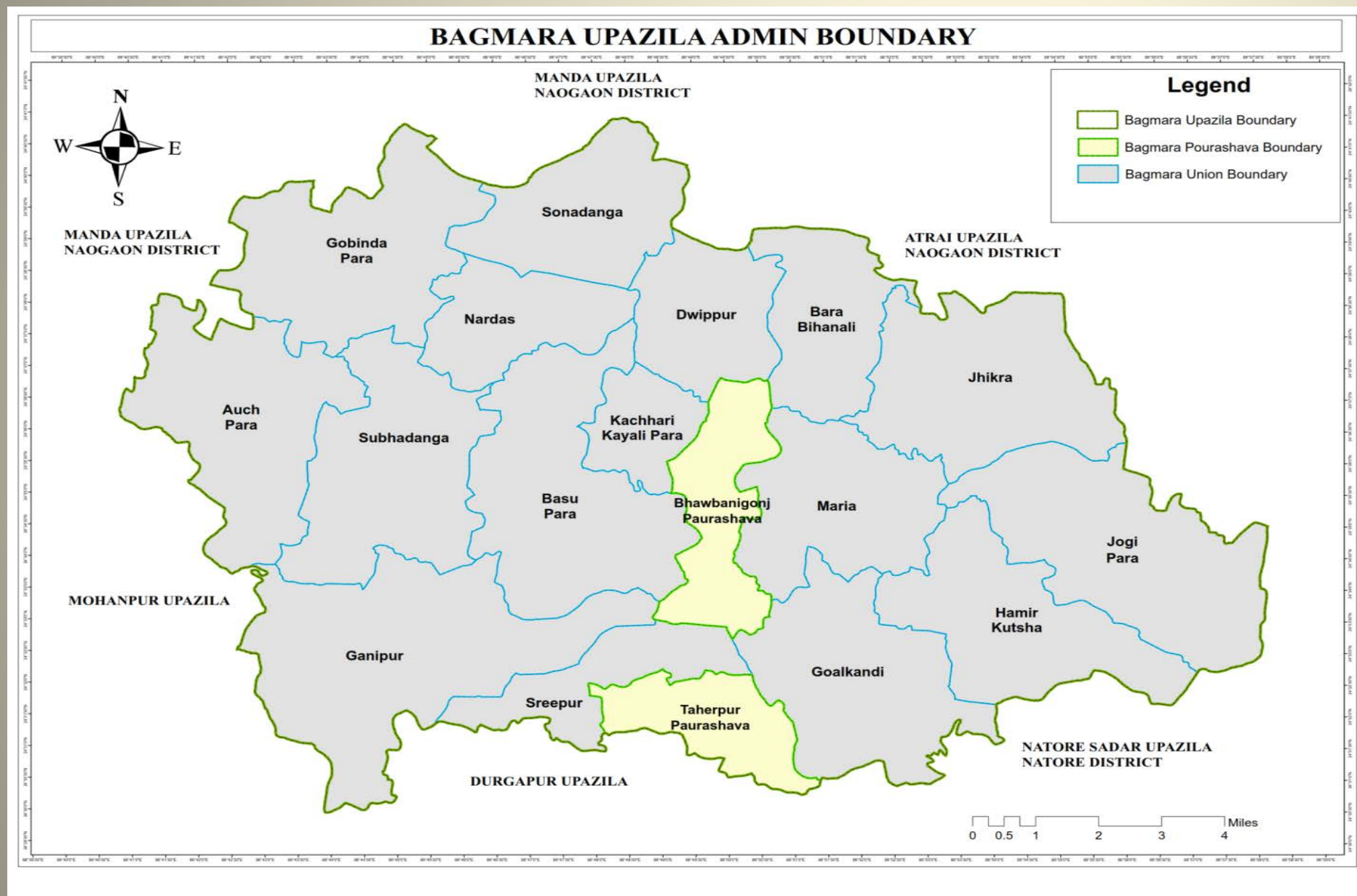
- Upazila Boundary
- Package-3 Study Area
- Rivers & Water Bodies

40 20 0 40 80 120  
KM

**ECAL**  
Engineering Consultants  
& Associates Ltd (ECAL)



# Introduction to Bagmara Upazila

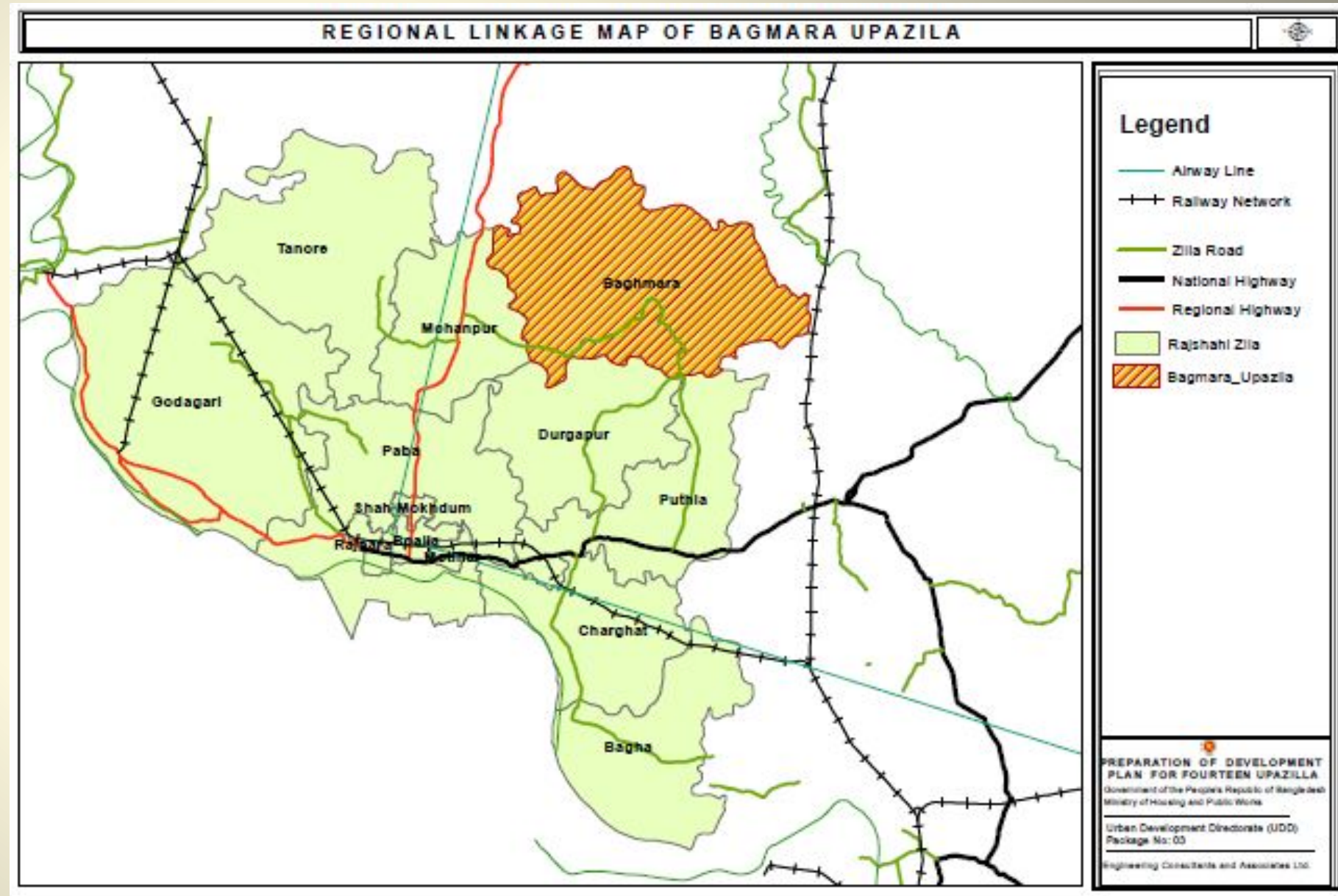


**Area = 363.3 sq km,**  
Thana was formed in 1869 and it was turned into an Upazila in 1984.

**Water Bodies:**  
Baranai; Fakinni river, Beel Joshoi, Takta Beel, Mosher Beel, Nakkati Beel, Katila Beel

# Regional Context of Bagmara Upazila

Bagmara Upazila has great significance in the context of road network. Bagmara Upazila is directly connected with Mohonpur, Durgapur and Puthia through the zila road. This zila road also covers Godagari, Poba, Shahmokhdum, Rajpara, Boalia Charghat and Bagha. The regional highway doesn't cover Bagmara Upazila. It covers Godagari, Poba, Shahmokhdum, Rajpara, Boalia and Moanpur. There is no railway network in Bagmara Upazila. Railway network passes by the outside of Bagmara Upazila area.





# Population Distribution at Different Administrative Tier

Upazila (363.3 sq.km)								
Municipality	Union	Mouza	Village	Population		Density (per Sq. km)	Literacy Rate (%)	
				Urban	Rural		Urban	Rural
2	16	358	332	35,899	3,18,765	881	70.30	38.31

Bwabaniganj Municipality (Pouro Webportal)						
Area (sq. km.)	Ward	Mahalla	Population	Density (per sq. km)	Literacy rate (%)	
10.00	9	23	17955	1,178	64.6	

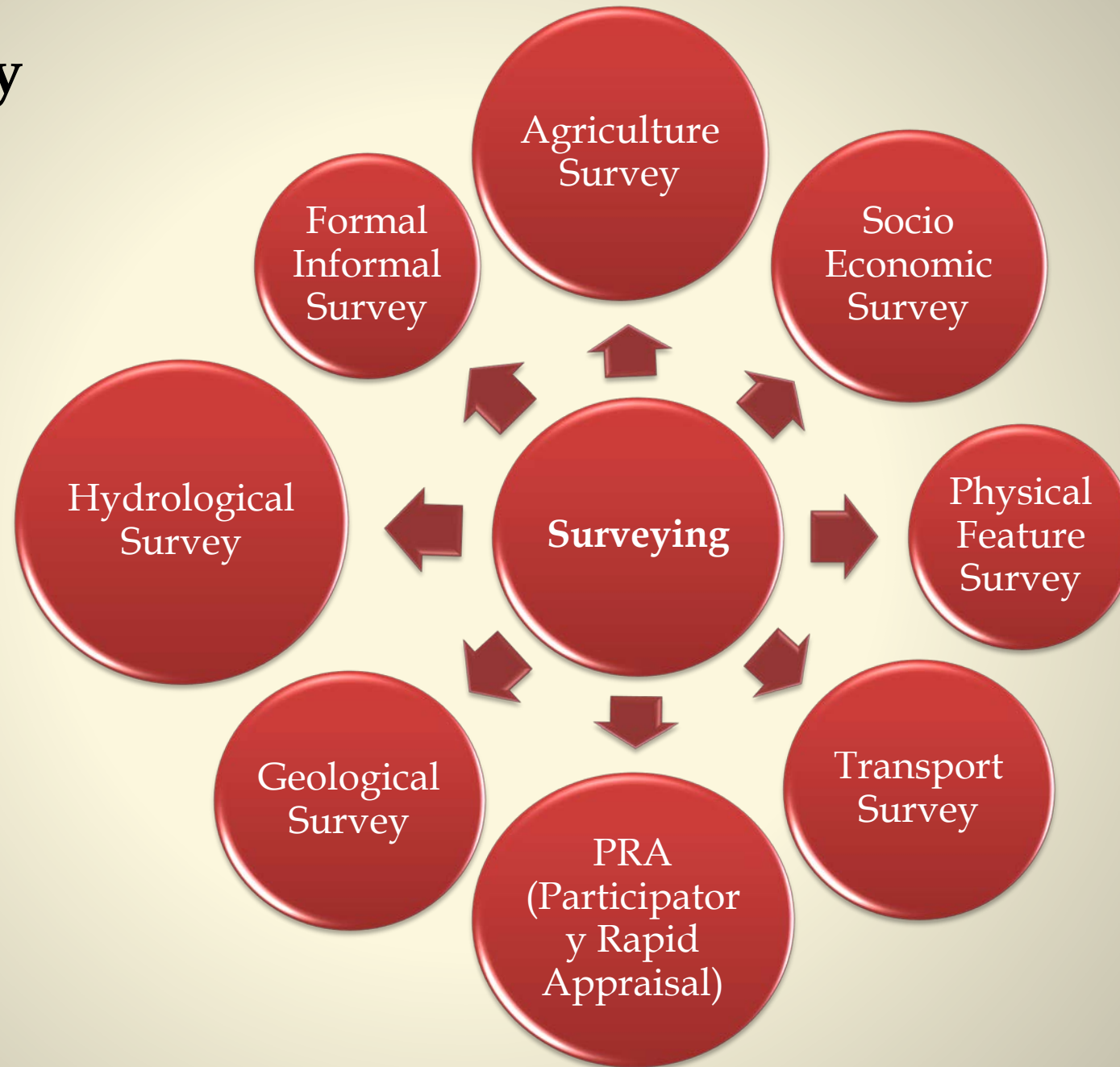
Taherpur Municipality (Pouro Webportal)					
Area (sq. km.)	Ward	Mahalla	Population	Density (per sq. km)	Literacy rate (%)
10.825	9	18	17944	778	76

# Plan Preparation Methodology

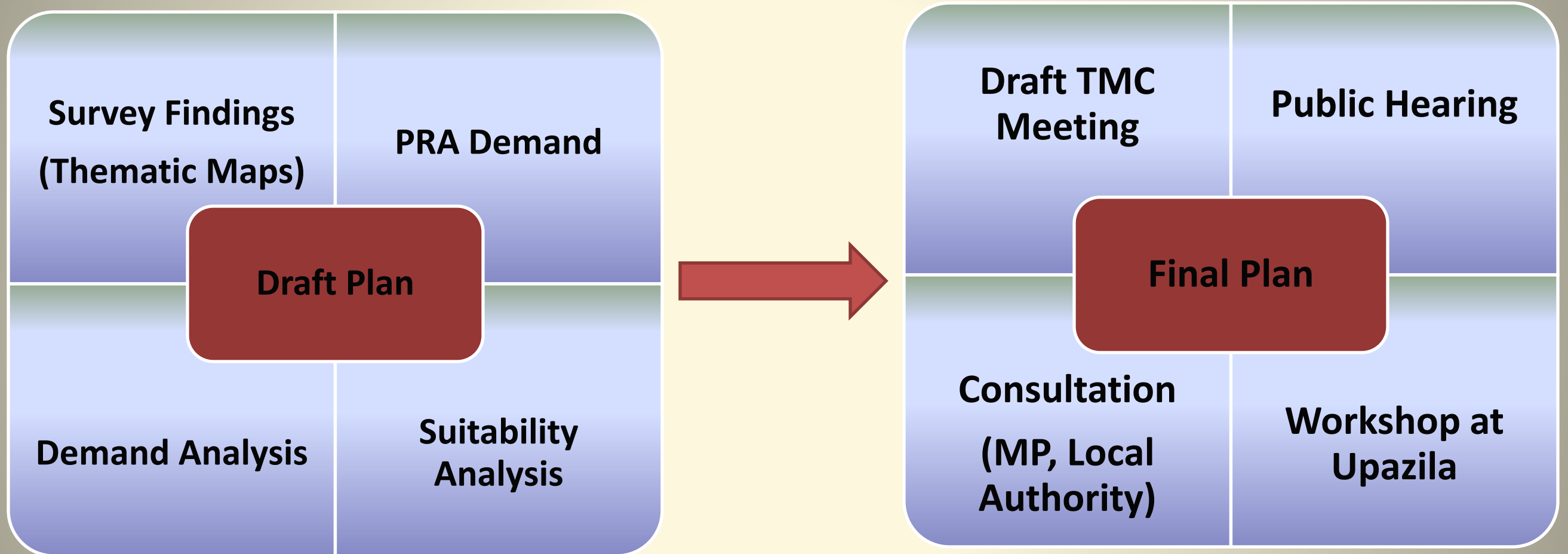




# Conducted Survey

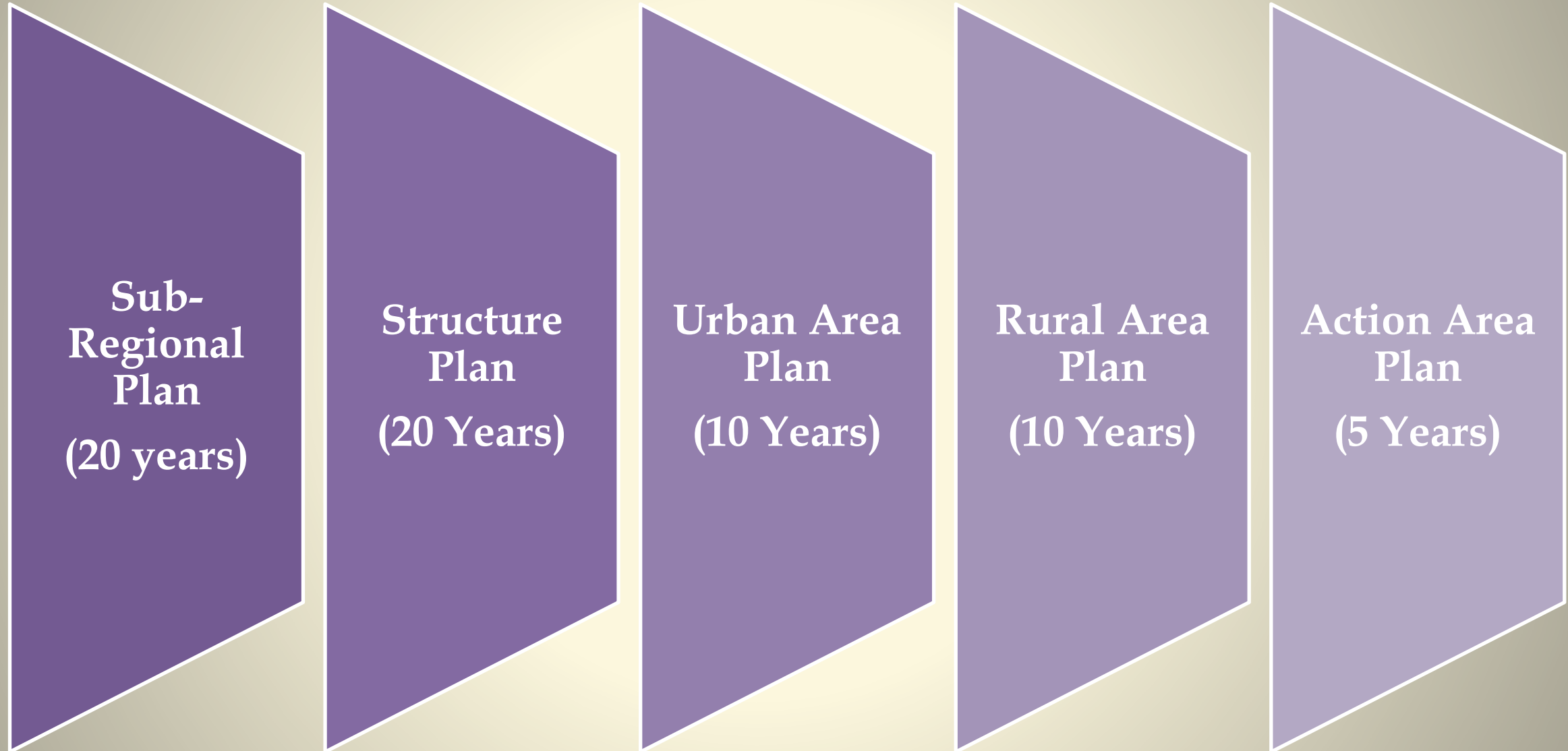


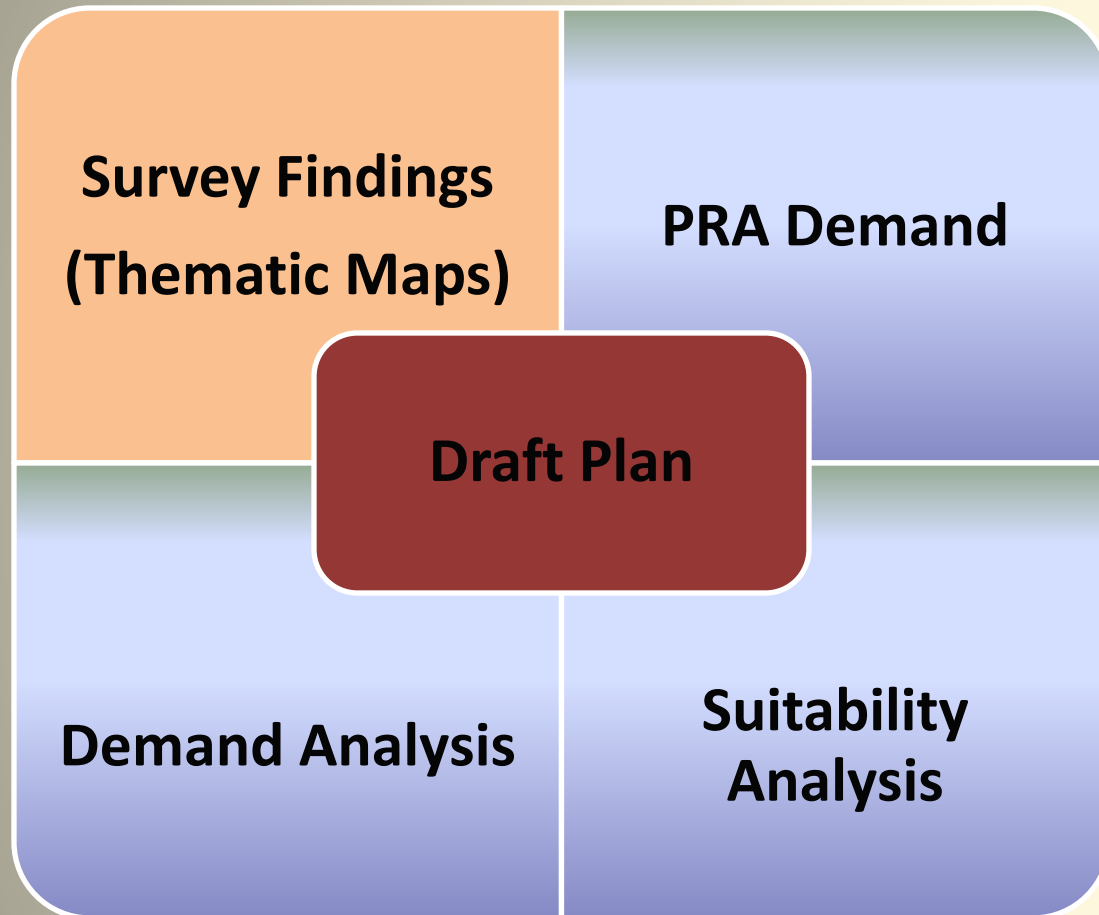
# Plan Procedure





# 5 Tier of Development Plan



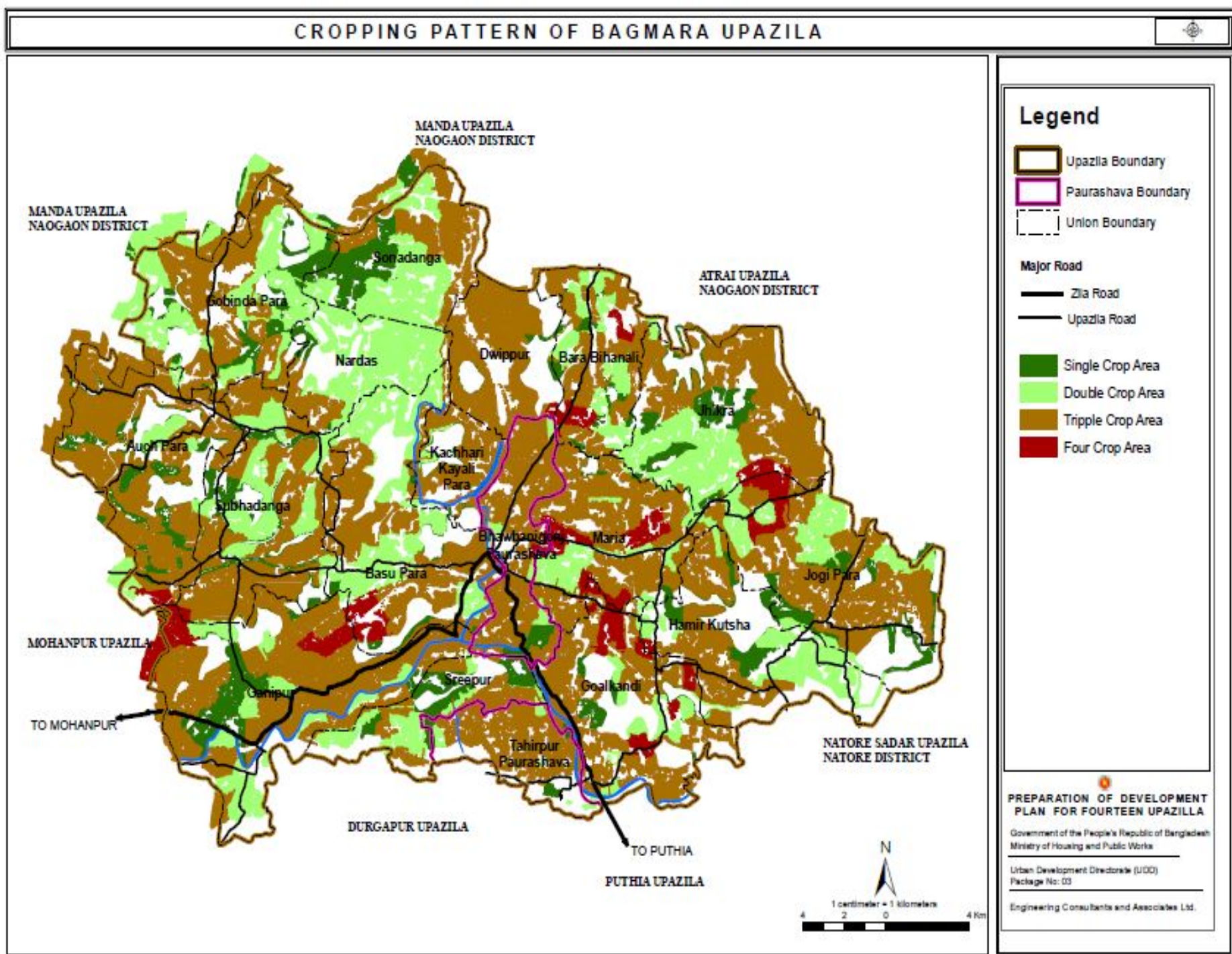


**Survey Findings  
(Thematic Maps)**



# Cropping Intensity Map of Bagmara Upazila

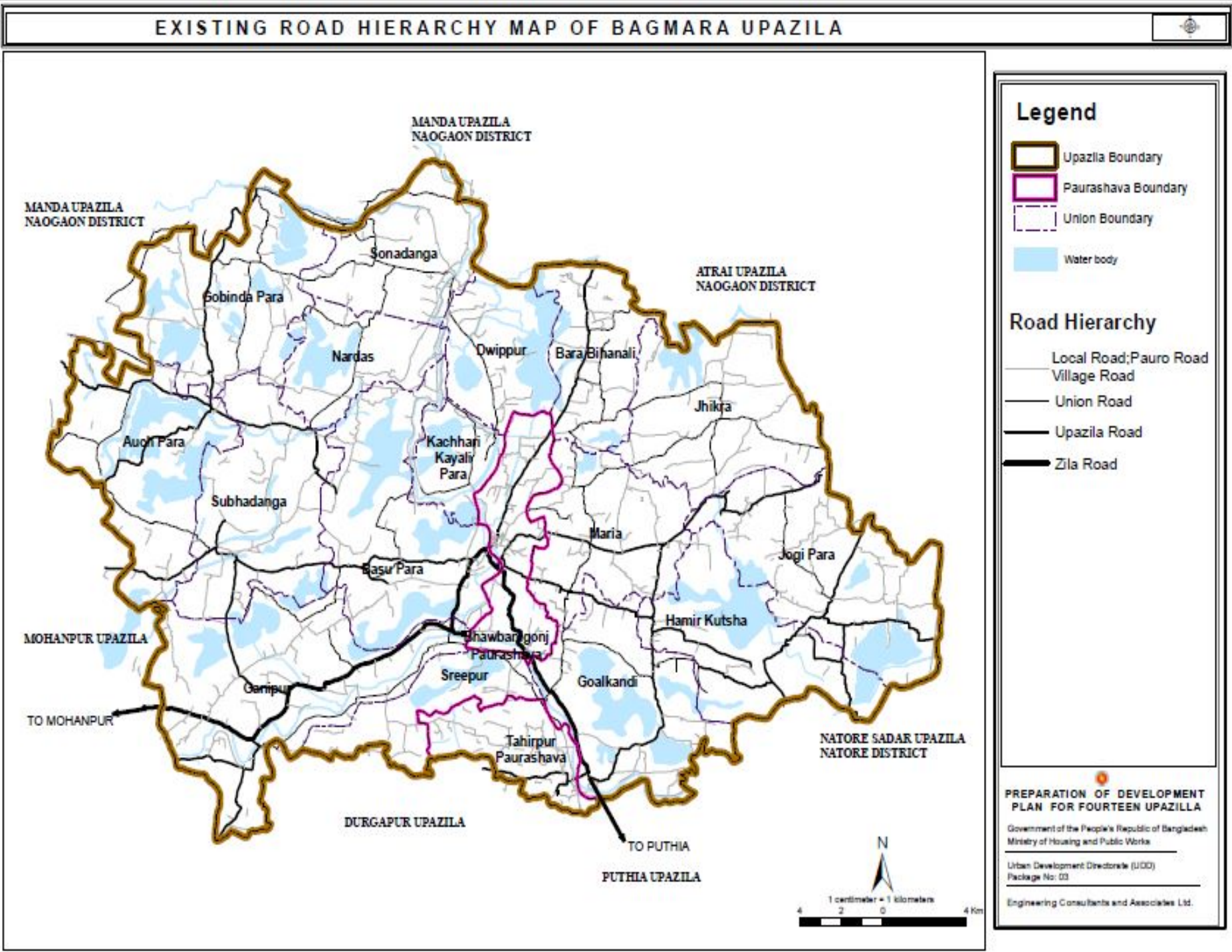
Cropping Pattern	Area in Acre	Area in Sq.km	Percentage
Single Cropping	7790.023111	31.525105	12.85%
Double Cropping	15651.78868	63.340542	25.81%
Triple Cropping	34876.84722	141.141593	57.51%
Four Cropping	2324.321155	9.406194	3.83%
Total	60642.98017	245.413434	100%





# Existing Circulation Network

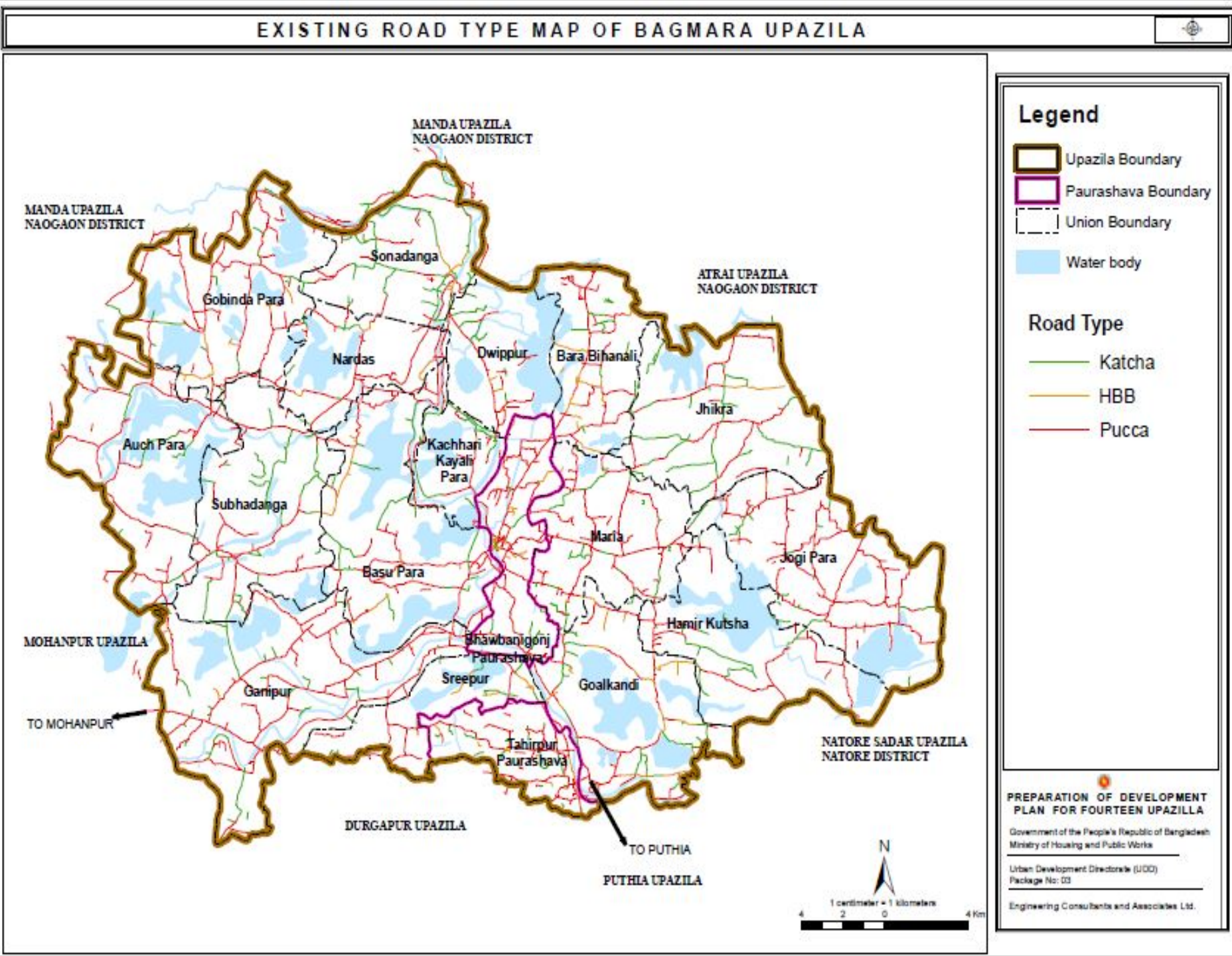
Road Hierarchy	Length in Km.	Percentage
Local Road	14.07	2.03%
Pouro Road	41.75	6.02%
Union Road	152.14	21.93%
Upazila Road	123.95	17.87%
Village Road	338.57	48.80%
Zilla Road	23.35	3.36%
Total	693.83	100.00%





# Existing Circulation Network

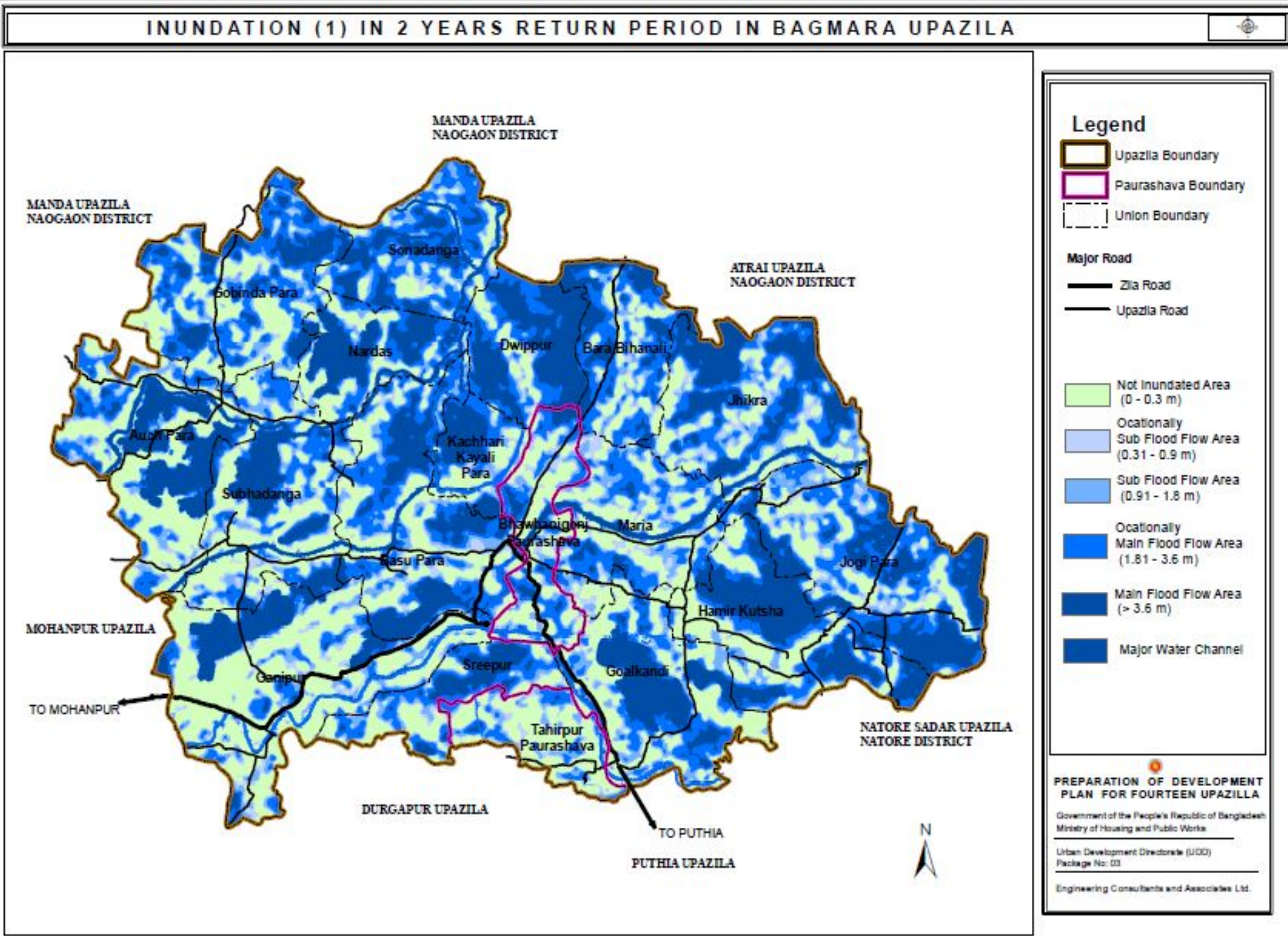
Road Type	Length in Km.	Percentage
Katcha	166.96	24.15%
HBB	45.32	6.55%
Pucca	479.06	69.30%
Total	691.34	100%





# Flood Inundation Map

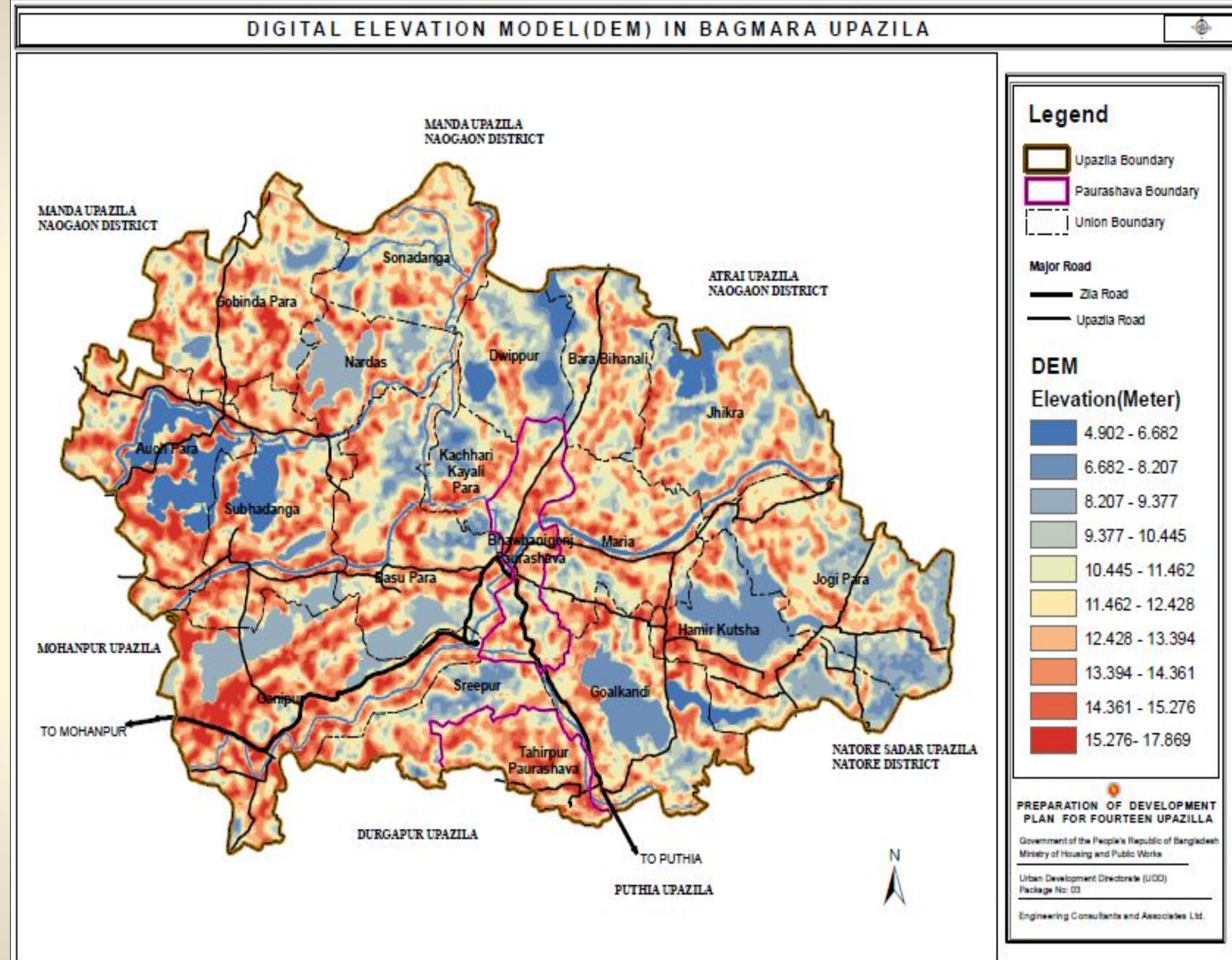
Flooded Land Category	Water Depth	Percent age area	Remarks
1st Degree Flooded area	0-0.3m	28%	Not Inundated Area
2nd Degree Flooded area	0.31-0.9m	9%	Ocationally Sub Flood Flow Area
3rd Degree Flooded area	0.91-1.8m	13%	Sub Flood Flow Area
4th Degree Flooded area	1.81-3.6m	22%	Ocationally Main Flood Flow Area
5th Degree Flooded area	>3.6m	27%	Main Flood Flow Area





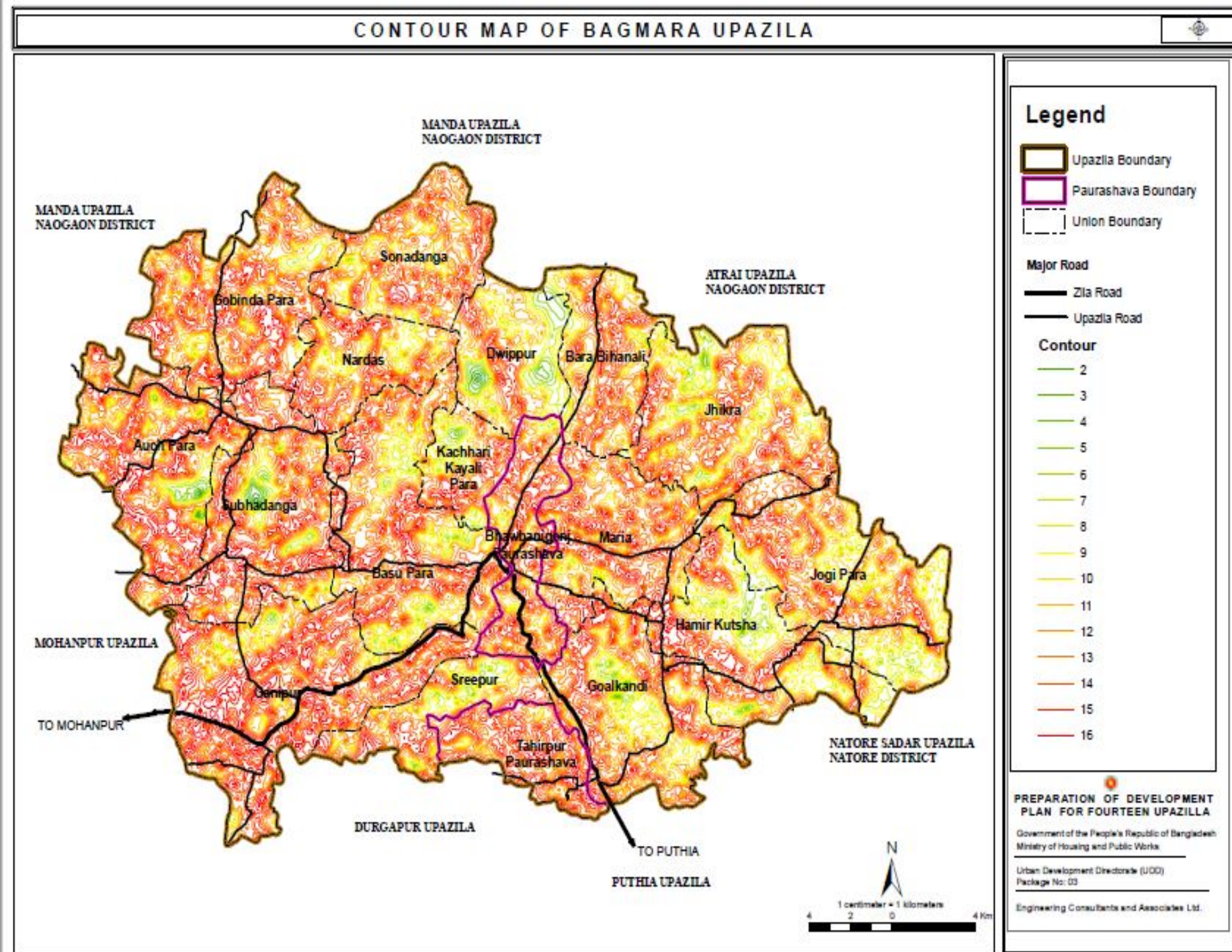
# Digital Elevation Model in Bagmara Upazila

The overall elevation condition in Bagmara Upazila is moderately good. The higher elevation has been found in Ganipur, Gobindapara Union and half portion of Subhadanga Union. Taherpur and Bwabanigonj Pourashava have a medium elevation in context of the unions where higher elevation has been found.

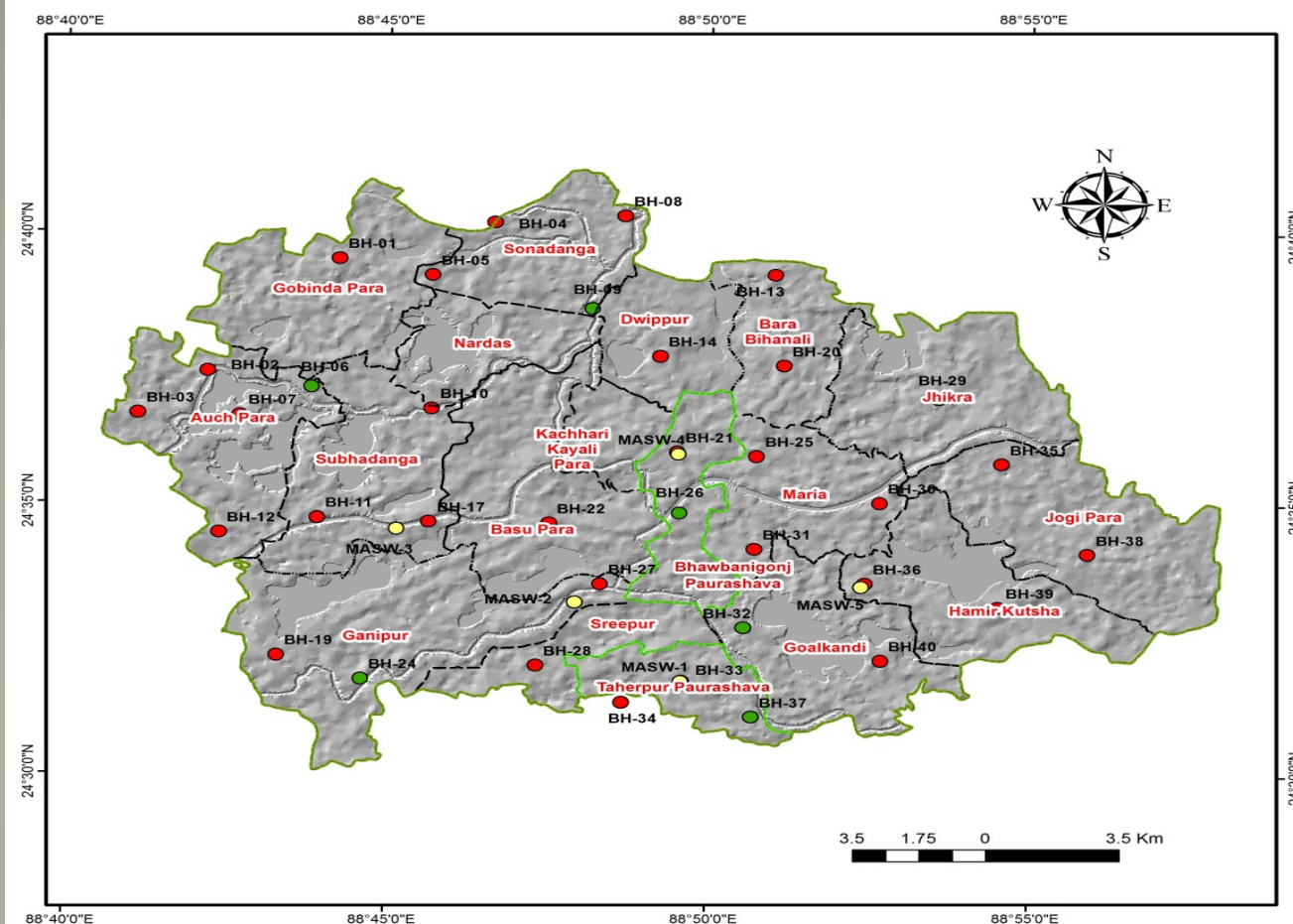




# Contour Map of Bagmara Upazila







## Geotechnical and Geophysical Test locations of Bagmara Upazila

### Legend

#### Work Locations

#### Geotechnical and Geophysical Test

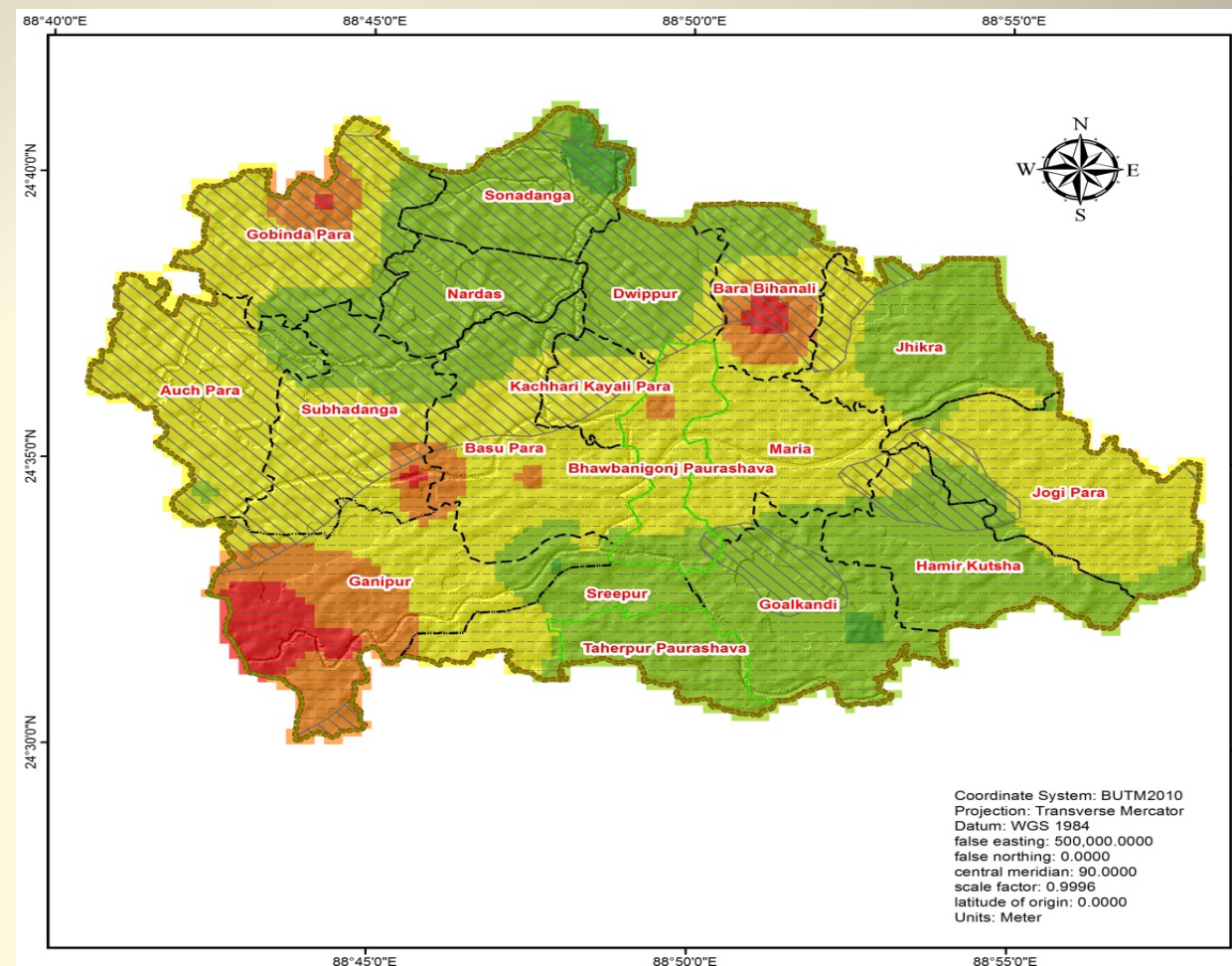
- Downhole Seismic Test (PS Logging)
- Multi-channel Analysis of Surface Wave (MASW)
- Standard Penetration Test (SPT) Drilling
- BAGMARA\_UNION\_BND
- Upazila Boundary

This map has been produced by plotting the co-ordinates of all the Geotechnical and Geophysical works which was acquired during field investigation. The drilling depth of those boroholes are up to 30m from the existing ground level (EGL).

Coordinate System: BUTM2010  
 Projection: Transverse Mercator  
 Datum: WGS 1984  
 false easting: 500,000.0000  
 false northing: 0.0000  
 central meridian: 90.0000  
 scale factor: 0.9996  
 latitude of origin: 0.0000  
 Units: Meter

# Geological Works

# Geological Works (Soil Classification)



Engineering Geological Map based on Avarage Shear wave Velocity (upto 30m)

### Legend

Upazila Boundary

### Surface Geology Units

Alluvial silt  
 Alluvial silt and clay  
 Marsh clay and peat

### Soil Classification Type

D2 - Stiff/Dense Soil  
 D3 - Medium Stiff / Medium Dense Soil to Stiff/Dense Soil  
 D4 - Medium Stiff / Medium Dense Soil  
 D5 - Soft / Loose to Medium Stiff / Medium dense Soil  
 E - Very Soft to Soft / Very Loose to Loose Soil

Site Class	Site class description	Shear wave velocity (m/sec)	
		Min	Max
A	<b>HARD ROCK</b> Eastern United States only	1500	
B	<b>ROCK</b>	760	1500
C	<b>VERY DENSE SOIL AND SOFT ROCK</b> Undrained shear strength $u_u > 2000 \text{ psf}$ ( $u_u < 100 \text{ kPa}$ ) or $N_u > 50$ blows/ft	360	760
D	<b>STIFF SOILS</b> Stiff soil with undrained shear strength $1000 \text{ psf} < u_u < 2000 \text{ psf}$ ( $50 \text{ kPa} < u_u < 100 \text{ kPa}$ ) or $15 < N_u < 50$ blows/ft	180	360
E	<b>SOFT SOILS</b> Profile with more than 10 ft (3m) of soft clay defined as soil with plasticity index $PI > 20$ , moisture content $w > 40\%$ and undrained shear strength $u_u < 1000 \text{ psf}$ ( $50 \text{ kPa}$ ) ( $N_u < 15$ blows/ft)		180
F	<b>SOILS REQUIRING SITE SPECIFIC EVALUATIONS</b> 1. Soils vulnerable potential failures or collapse under seismic loading: e.g., liquefiable soils, quick and highly sensitive clays, collapse weakly connected soils. 2. Peats and/or highly organic clays: (10ft (3m) or thicker layer) 3. Very high plasticity clays: ( $25\% \text{ (fine) or thicker layer with plasticity index } > 75$ ) 4. Very thick soft/medium stiff clays: ( $120\text{ft (36m) or thicker layer}$ )		

Site class based on  $V_{s30}$  — according to NEHRP (National Earthquake Hazard Reduction Program, USA) provisions

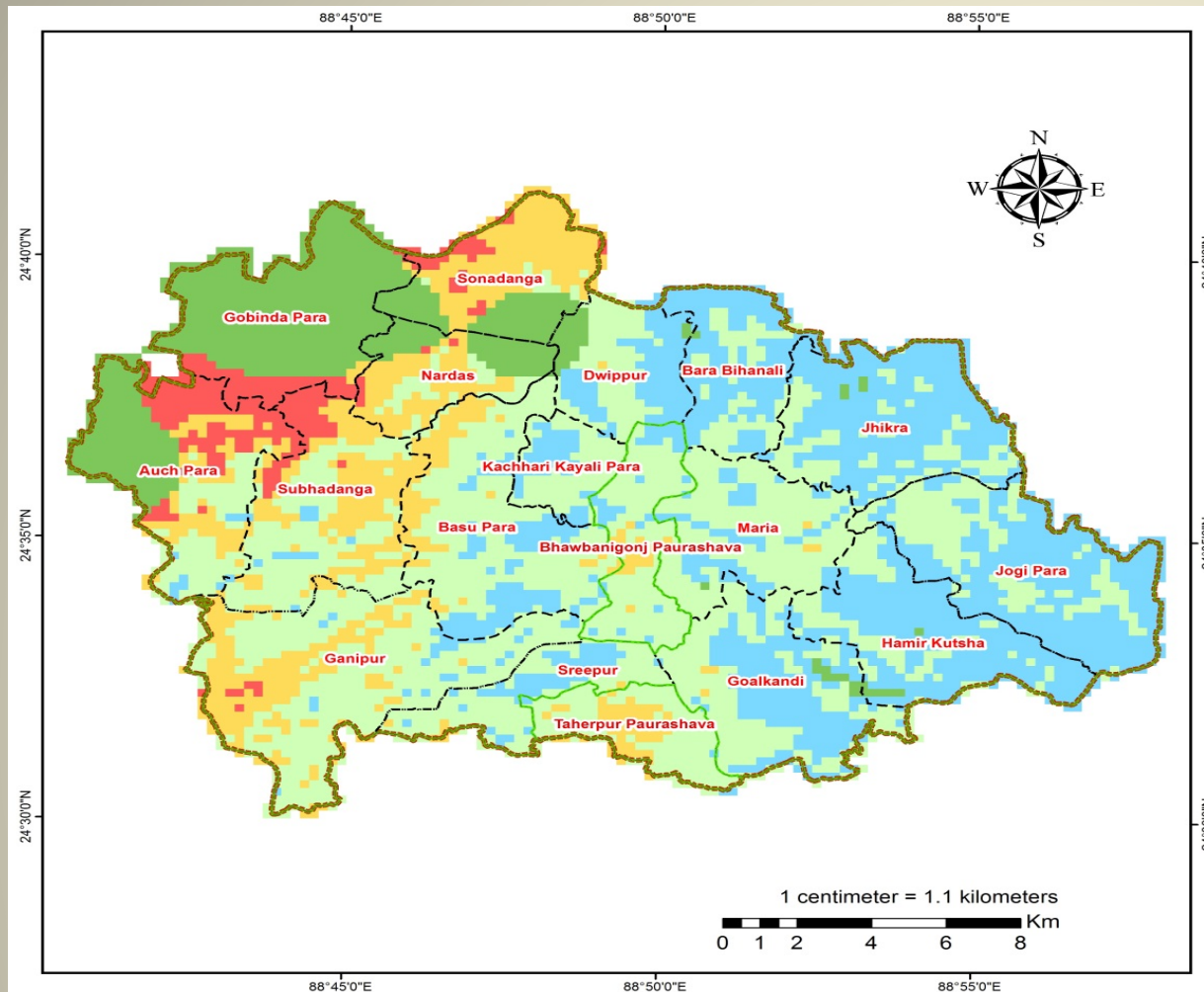
This map was produced by interpolating velocity of the soil layer in different Bore hole. Afterward it was classified by their velocity range according to a method provided by NEHRP (stands for National Earthquake Hazard Reduction Program, USA) Provisions but as most of the shear wave velocity of soil is within 168-244m/s the classification was modified as follows.

Ground Class	$V_{s30}$	Soil Type
C	360 - 760 m/sec	Very Dense/ Hard Soil and Soft rock
D1	300 - 360 m/sec	Stiff / Dense to very dense/Hard Soil
D2	230 - 300 m/sec	Stiff / Dense Soil
D3	220 - 250 m/sec	Medium Stiff to Stiff / Medium Dense to Dense Soil
D4	200 - 220 m/sec	Medium Stiff / Medium Dense Soil
D5	180 - 200 m/sec	Soft/Loose to Medium Stiff / Medium Dense Soil
E	< 180 m/sec	Very Soft to Soft / Very Loose to Loose Soil

*Modified classification of the soils applied in this study*

**Scale:**  
1 centimeter = 1.1 kilometers





**Foundation Layer Recommendation Map**

**Legend**

BAGMARA\_UNION\_BND

Upazila Boundary

**Engineering Soil Layers**

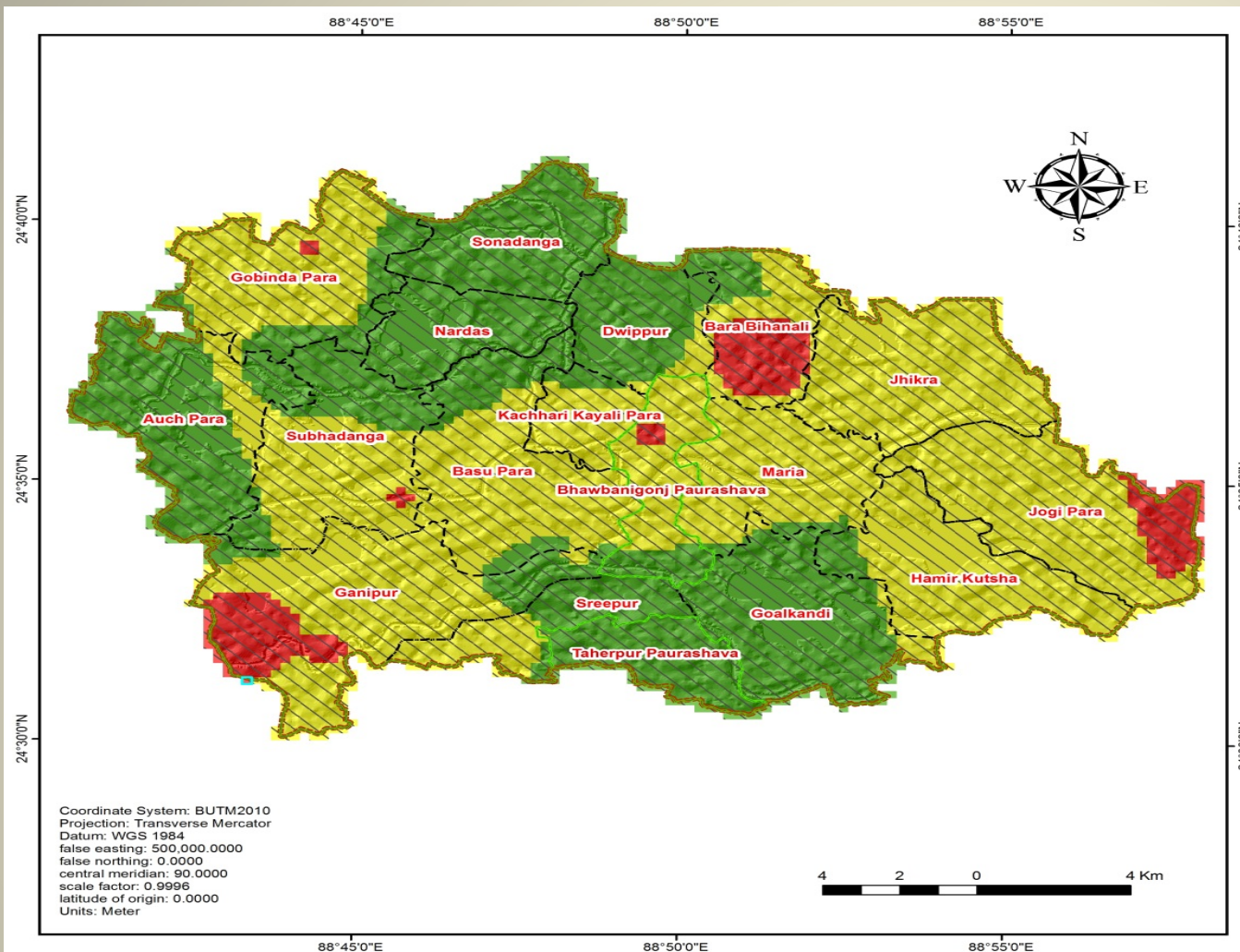
**Foundation Depth (m) from EGL**

- 2.00 - 4.00
- 4.01 - 10.00
- 10.01 - 15.00
- 15.01 - 20.00
- 20.01 - 33.53

Coordinate System: BUTM2010  
Projection: Transverse Mercator  
Datum: WGS 1984  
false easting: 500,000.0000  
false northing: 0.0000  
central meridian: 90.0000  
scale factor: 0.9996  
latitude of origin: 0.0000  
Units: Meter

**Geological Works  
(Foundation Layer  
Recommendation)**

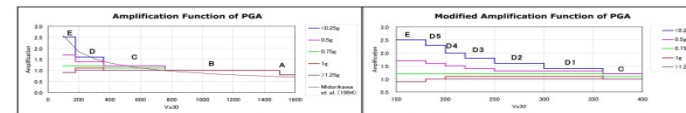




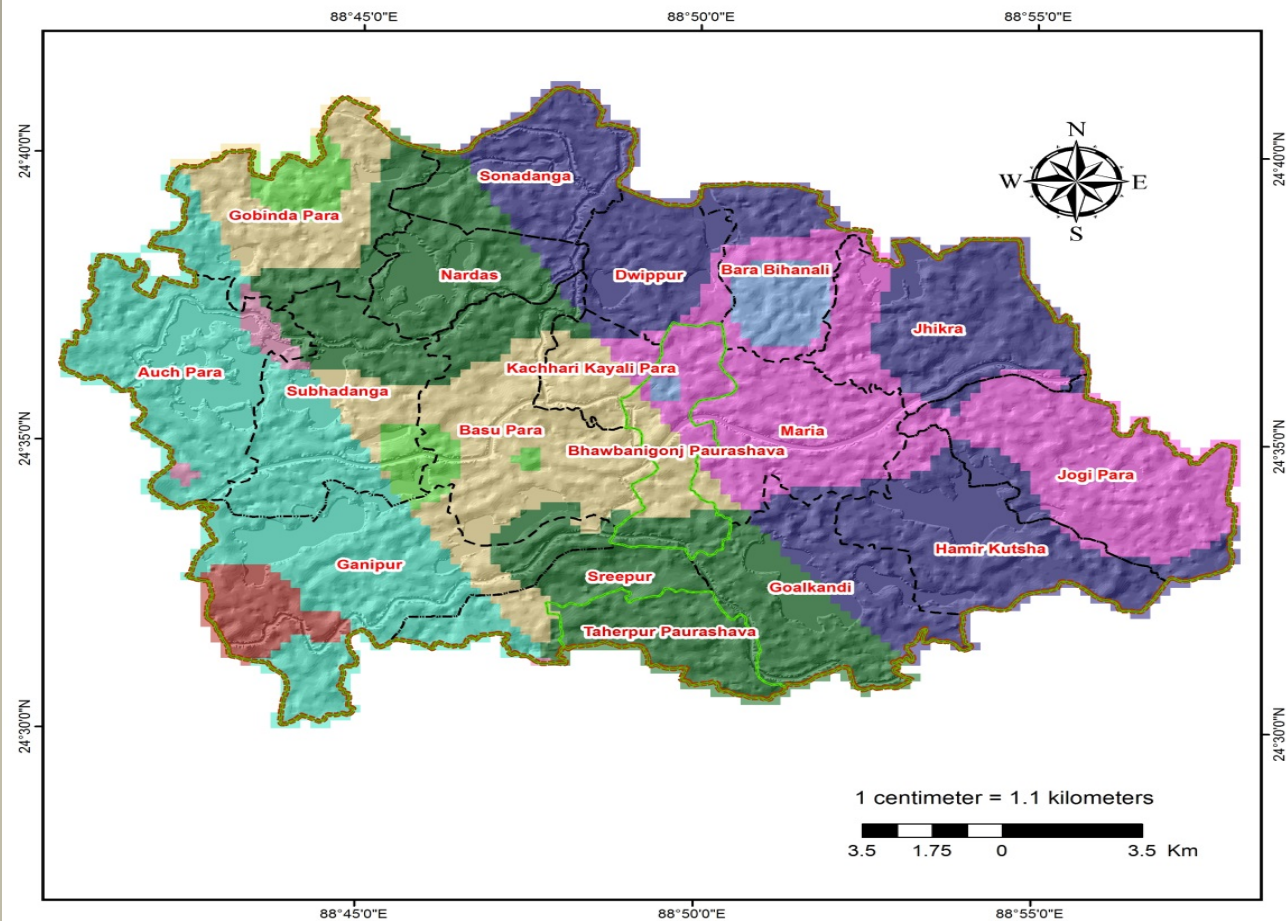
## Peak Ground Acceleration (PGA) (g) at Engineering Seismic Ground Surface (Depth upto 30m) Corresponding to a Probability of Exceedance of 10% in 50 years



This map was produced by multiplying PGA values with Amplification factors corresponded for different soil type. as the  $V_s$  is within 168-244m/s so soil was classified as (E,D5,D4,D3). thus the amplification factor was also modified. Spectral Acceleration (PGA) (g) at Engineering Ground Surface (Depth upto 30) corresponding to probability of exceedance of 10% in 50 year was count for each grid.



## Geological Works (Probabilities Seismic Hazard Assessment)



**Building Height Recommendation Map of Bagmara Upazila**

### Legend

Upazila Boundary

#### Building Sensitivity

##### Low and High Rise Building

- 1st Degree Sensitive for Highrise, 1st Degree Sensitive for Lowrise
- 1st Degree Sensitive for Highrise, 2nd Degree Sensitive for Lowrise
- 1st Degree Sensitive for Highrise, 3rd Degree Sensitive for Lowrise
- 2nd Degree Sensitive for Highrise, 1st Degree Sensitive for Lowrise
- 2nd Degree Sensitive for Highrise, 2nd Degree Sensitive for Lowrise
- 2nd Degree Sensitive for Highrise, 3rd Degree Sensitive for Lowrise
- 3rd Degree Sensitive for Highrise, 1st Degree Sensitive for Lowrise
- 3rd Degree Sensitive for Highrise, 2nd Degree Sensitive for Lowrise
- 3rd Degree Sensitive for Highrise, 3rd Degree Sensitive for Lowrise

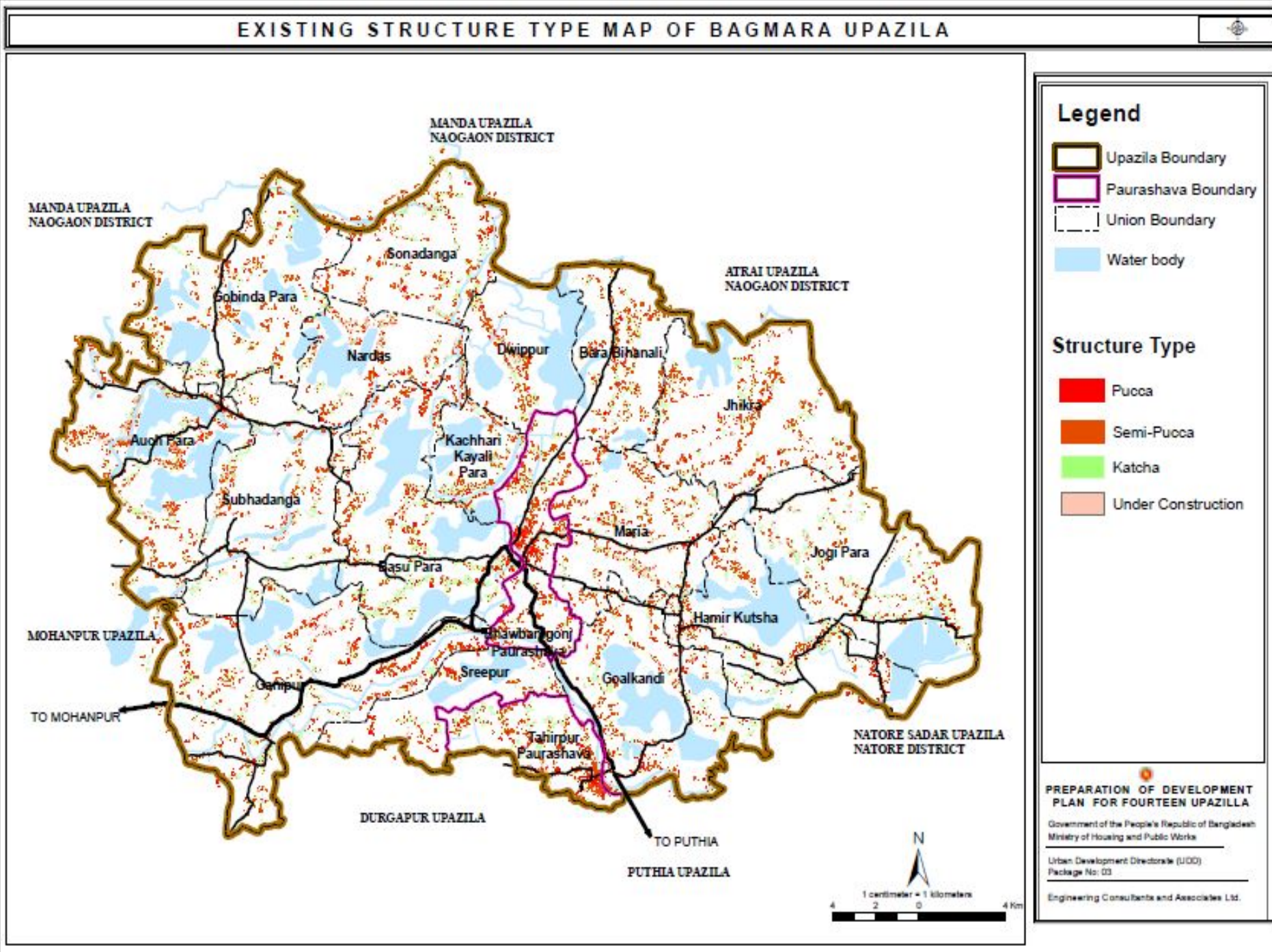
Coordinate System: BUTM2010  
 Projection: Transverse Mercator  
 Datum: WGS 1984  
 false easting: 500,000.0000  
 false northing: 0.0000  
 central meridian: 90.0000  
 scale factor: 0.9996  
 latitude of origin: 0.0000  
 Units: Meter

## Geological Works (Building Height Recommendation)



# Existing Physical Features

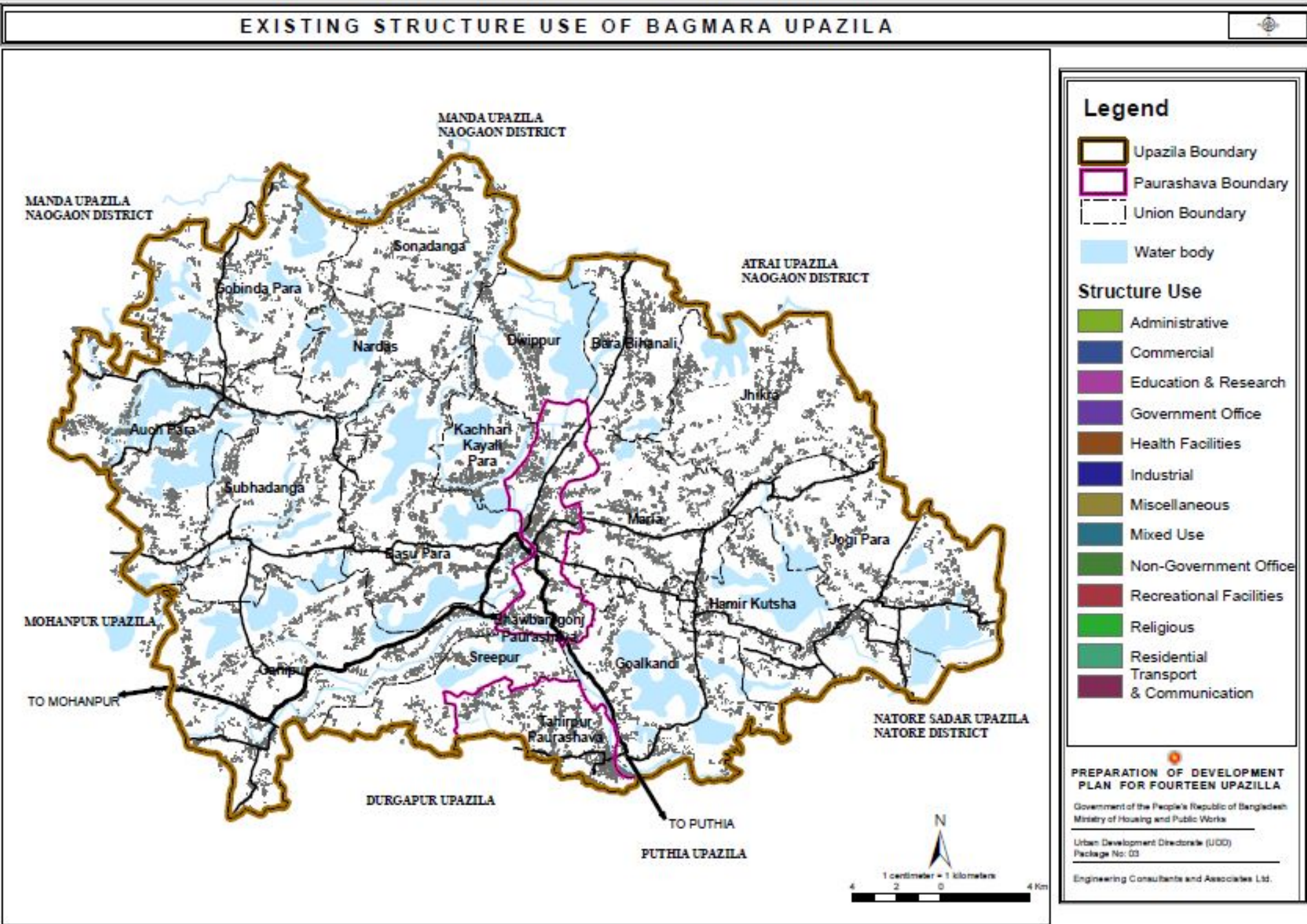
Structure Type	No. of Structures	Percentage
Katcha	17055	27.33%
Semi Pucca	39703	63.62%
Pucca	5604	8.98%
Under Construction	48	0.08%
Total	62410	100%





# Existing Physical Features

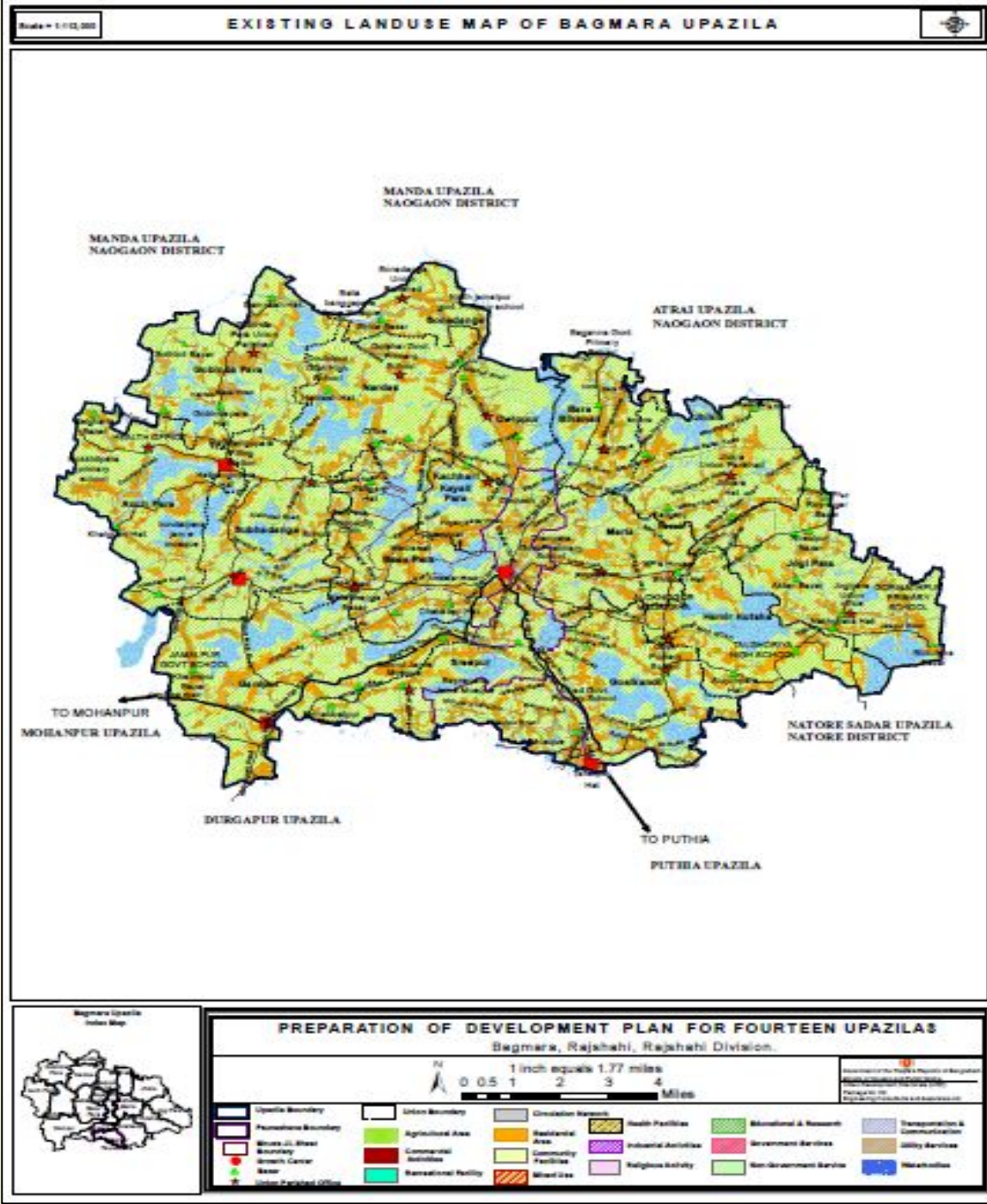
Structure Use	No. of Structures
Administrative	123
Agricultural	70
Commercial	1982
Community Facilities	2
Education and Research	220
Health Facilities	22
Industrial	34
Miscellaneous	37
Mixed Use	60
Non-Government Services	21
Recreational Facilities	2
Religious	97
Residential	59723
Transportation Facilities	9
Utility Facilities	8





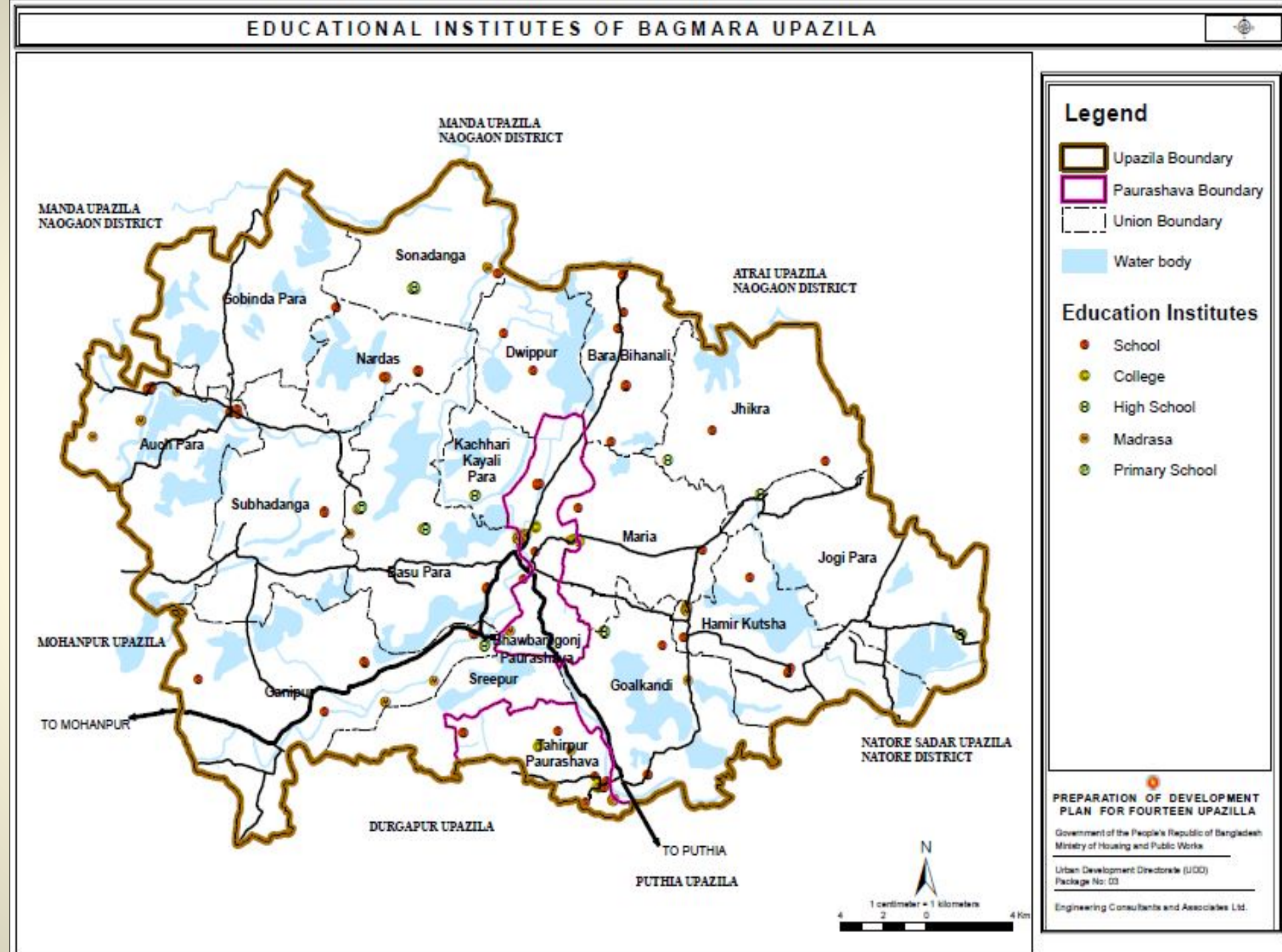
# Landuse Map of Bagmara Upazila

Landuse	Area in Acres	Area in Sq.km
Administrative	26.46	0.107072
Agricultural	58611.48	237.192252
Commercial	164.12	0.664175
Community Facilities	0.39	0.001594
Education & Research	61.28	0.247976
Health Facilities	2.63	0.01066
Industrial	6.96	0.028185
Miscellaneous	0.50	0.002008
Mixed Use	14.86	0.060136
NGO	0.51	0.002046
Recreational Facilities	0.14	0.00056
Religious	8.55	0.034616
Residential	16316.24	66.029498
Utility Facilities	0.91	0.003689
Waterbodies	15502.78	62.737509
Circulation Network	495.50	2.00523
Total	91213.32	369.13



# Existing Educational Facilities

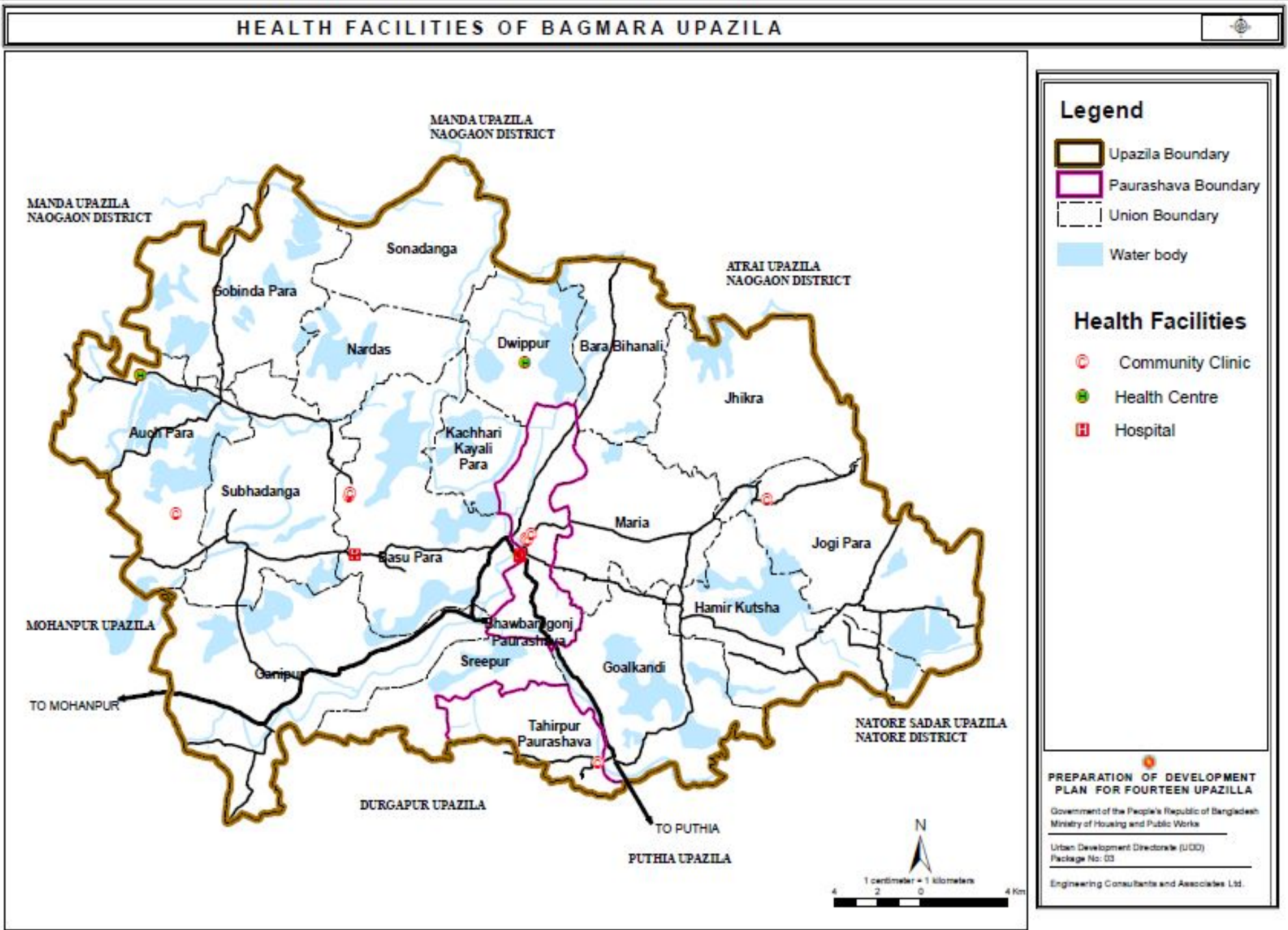
Educational Facilities	No. of Structures
Primary School/School	124
High school	21
College	22
Madrasa	46

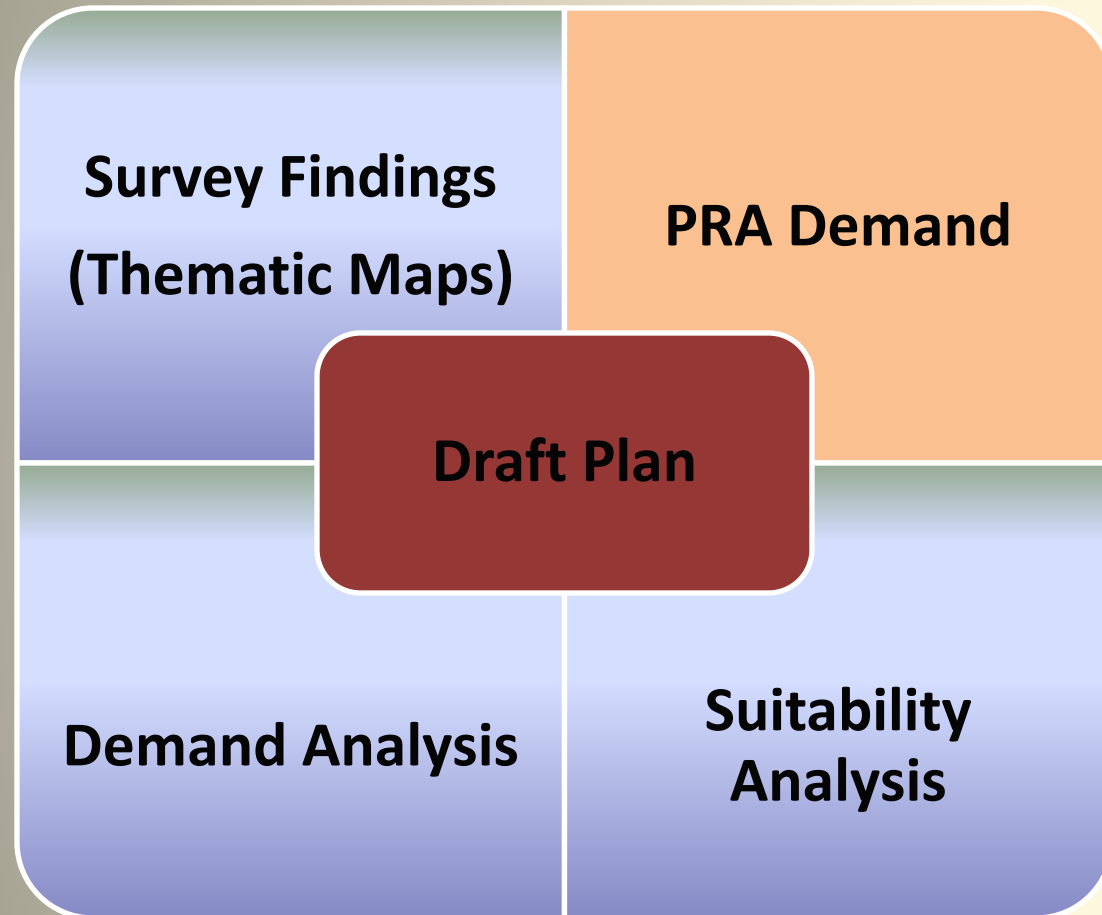




# Existing Health Facilities

Health Facilities	No. of Structures
Community Clinic	13
Health Center	4
Hospital	4





**PRA Demand**



# PRA Findings of Bagmara Unions and Pourashavas

Union/Ward	Problems	Potentials
Auchpara Union	<ul style="list-style-type: none"> <li>➤ Communication</li> <li>➤ Pure drinking water</li> <li>➤ Drainage problem</li> <li>➤ Education</li> <li>➤ Unemployment</li> </ul>	<ul style="list-style-type: none"> <li>➤ Agricultural land</li> <li>➤ Fruit garden</li> <li>➤ Cattle farming</li> <li>➤ Fish farming</li> <li>➤ Active manpower</li> </ul>
Basu Para Union	<ul style="list-style-type: none"> <li>➤ Communication</li> <li>➤ Pure drinking water</li> <li>➤ Agricultural problem</li> <li>➤ Educational infrastructure</li> <li>➤ Health service</li> </ul>	<ul style="list-style-type: none"> <li>➤ Agricultural land</li> <li>➤ Educated people</li> <li>➤ Cattle farming</li> <li>➤ Fish farming</li> <li>➤ Farmer</li> </ul>
Bara Bihanali Union	<ul style="list-style-type: none"> <li>➤ Communication</li> <li>➤ HealthFacilities</li> <li>➤ Water Logging</li> <li>➤ Electricity</li> <li>➤ Child Marriage</li> </ul>	<ul style="list-style-type: none"> <li>➤ Agriculture</li> <li>➤ Fisheries</li> <li>➤ Livestock &amp; Fisheries</li> <li>➤ Hat-Bazar</li> <li>➤ Man power</li> </ul>
Dwippur Union	<ul style="list-style-type: none"> <li>➤ Communication</li> <li>➤ Health Facilities</li> <li>➤ Water Logging</li> <li>➤ Electricity</li> <li>➤ Child Marriage</li> </ul>	<ul style="list-style-type: none"> <li>➤ Agriculture</li> <li>➤ Fisheries</li> <li>➤ Livestock &amp; Fisheries</li> <li>➤ Hat-Bazar</li> <li>➤ Man power</li> </ul>
Goalkandi Union	<ul style="list-style-type: none"> <li>➤ Polder</li> <li>➤ Communication</li> <li>➤ Pure Drinking water</li> <li>➤ Agricultural Instruments</li> <li>➤ Health Complex lacking</li> </ul>	<ul style="list-style-type: none"> <li>➤ Beel</li> <li>➤ Agricultural Land availability</li> <li>➤ Fisheries</li> <li>➤ Active Manpower</li> <li>➤ Livestock</li> </ul>

# PRA Findings of Bagmara Unions and Pourashavas

Union/Ward	Problems	Potentials
Gabindapara Union	<ul style="list-style-type: none"> <li>➤ Communication</li> <li>➤ Electricity</li> <li>➤ Pure Drinking Water</li> <li>➤ Modern Education</li> <li>➤ Agriculture</li> </ul>	<ul style="list-style-type: none"> <li>➤ Agricultural Land</li> <li>➤ Active Manpower</li> <li>➤ Livestock &amp; Fisheries</li> <li>➤ Educational Institutions</li> <li>➤ Hat-Bazar</li> </ul>
Gonipur Union	<ul style="list-style-type: none"> <li>➤ Communication</li> <li>➤ Pure Drinking Water</li> <li>➤ Electricity</li> <li>➤ Education</li> <li>➤ Health</li> </ul>	<ul style="list-style-type: none"> <li>➤ Bettle leaf</li> <li>➤ Agriculture</li> <li>➤ Fisheries</li> <li>➤ Livestock</li> <li>➤ Hat-Bazar</li> </ul>
Hamirkutsha Union	<ul style="list-style-type: none"> <li>➤ Communication</li> <li>➤ Health Facilities</li> <li>➤ Water Logging</li> <li>➤ Electricity</li> <li>➤ Child Marriage</li> </ul>	<ul style="list-style-type: none"> <li>➤ Agriculture</li> <li>➤ Fisheries</li> <li>➤ Livestock</li> <li>➤ Hat-Bazar</li> <li>➤ Man Power</li> </ul>
Jhikra Union	<ul style="list-style-type: none"> <li>➤ Communication</li> <li>➤ Electricity</li> <li>➤ Water Logging</li> <li>➤ Health Facilities</li> <li>➤ Industry Lacking</li> </ul>	<ul style="list-style-type: none"> <li>➤ Agriculture Land</li> <li>➤ Fisheries</li> <li>➤ Livestock</li> <li>➤ Hat-Bazar</li> <li>➤ Fruits &amp; Forest</li> </ul>
Jogipara Union	<ul style="list-style-type: none"> <li>➤ Communication</li> <li>➤ Pure Drinking Water</li> <li>➤ Drainage Problem</li> <li>➤ Education</li> <li>➤ Unemployment</li> </ul>	<ul style="list-style-type: none"> <li>➤ Agriculture Land</li> <li>➤ Fruit Garden</li> <li>➤ Cattle Farming</li> <li>➤ Fish Farming</li> <li>➤ Active Manpower</li> </ul>



# PRA Findings of Bagmara Unions and Pourashavas

Union/Ward	Problems	Potentials
Kachari Kayalipara Union	<ul style="list-style-type: none"> <li>➤ Communication</li> <li>➤ Electricity</li> <li>➤ Educational Institute</li> <li>➤ Health Facilities</li> <li>➤ River Digging</li> </ul>	<ul style="list-style-type: none"> <li>➤ Agriculture</li> <li>➤ Fisheries</li> <li>➤ Livestock</li> <li>➤ Adeqate River</li> <li>➤ Man Power</li> </ul>
Maria Union	<ul style="list-style-type: none"> <li>➤ Communication</li> <li>➤ Agricultural Facilities</li> <li>➤ Health Facilities</li> <li>➤ Residential</li> <li>➤ Agriculture</li> </ul>	<ul style="list-style-type: none"> <li>➤ Agriculture Land</li> <li>➤ Fruit Garden</li> <li>➤ Cattle Farming</li> <li>➤ Fish Farming</li> <li>➤ Active Manpower</li> </ul>
Nordas Union	<ul style="list-style-type: none"> <li>➤ Communication</li> <li>➤ Pure Drinking Water</li> <li>➤ Drainage Problem</li> <li>➤ Education</li> <li>➤ Unemployment</li> </ul>	<ul style="list-style-type: none"> <li>➤ Agriculture Land</li> <li>➤ Fruit Garden</li> <li>➤ Cattle Farming</li> <li>➤ Fish Farming</li> <li>➤ Active Manpower</li> </ul>
Sonadanga Union	<ul style="list-style-type: none"> <li>➤ Communication</li> <li>➤ Water Logging</li> <li>➤ Education</li> <li>➤ Agricultural Facilities</li> <li>➤ Electricity &amp; Fuel</li> </ul>	<ul style="list-style-type: none"> <li>➤ Agriculture</li> <li>➤ Fruit Garden</li> <li>➤ Manpower</li> <li>➤ Livestock &amp; Fisheries</li> <li>➤ Hat-Bazar</li> </ul>
Sreepur Union	<ul style="list-style-type: none"> <li>➤ Communication</li> <li>➤ Agricultural Facilities</li> <li>➤ Health Facilities</li> <li>➤ Residential</li> <li>➤ Agriculture</li> </ul>	<ul style="list-style-type: none"> <li>➤ Agriculture Land</li> <li>➤ Fruit Garden</li> <li>➤ Cattle Farming</li> <li>➤ Fish Farmnig</li> <li>➤ Acticve Manpower</li> </ul>

# PRA Findings of Bagmara Unions and Pourashavas

Union/Ward	Problems	Potentials
Subhadanga Union	<ul style="list-style-type: none"> <li>➤ Communication</li> <li>➤ Agricultural Facilities</li> <li>➤ Health Facilities</li> <li>➤ Residential</li> <li>➤ Agriculture</li> </ul>	<ul style="list-style-type: none"> <li>➤ Agriculture Land</li> <li>➤ Educated Person</li> <li>➤ Cattle Farming</li> <li>➤ Fish Farming</li> <li>➤ Active Manpower</li> </ul>
Bwabanigonj Pourashava Ward No. 01	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Channel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>
Bwabanigonj Pourashava Ward No. 02	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Channel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>
Bwabanigonj Pourashava Ward No. 03	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Channel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>
Bwabanigonj Pourashava Ward No. 04	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Channel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>



# PRA Findings of Bagmara Unions and Pourashavas

Union/Ward	Problems	Potentials
<b>Bwabanigonj Pourashava Ward No. 05</b>	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Cannel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>
<b>Bwabanigonj Pourashava Ward No. 06</b>	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Cannel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>
<b>Bwabanigonj Pourashava Ward No. 07</b>	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Cannel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>
<b>Bwabanigonj Pourashava Ward No. 08</b>	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Cannel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>
<b>Bwabanigonj Pourashava Ward No. 09</b>	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Cannel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>

# PRA Findings of Bagmara Unions and Pourashavas

Union/Ward	Problems	Potentials
<b>Taherpur Pourashava Ward No. 01</b>	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Cannel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>
<b>Taherpur Pourashava Ward No. 02</b>	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Cannel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>
<b>Taherpur Pourashava Ward No. 03</b>	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Cannel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>
<b>Taherpur Pourashava Ward No. 04</b>	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Cannel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>
<b>Taherpur Pourashava Ward No. 05</b>	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Cannel</li> <li>➤ Bus Stand Main Road in City</li> </ul>



# PRA Findings of Bagmara Unions and Pourashavas

Union/Ward	Problems	Potentials
<b>Taherpur Pourashava Ward No. 06</b>	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Cannel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>
<b>Taherpur Pourashava Ward No. 07</b>	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Cannel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>
<b>Taherpur Pourashava Ward No. 08</b>	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Cannel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>
<b>Taherpur Pourashava Ward No. 09</b>	<ul style="list-style-type: none"> <li>➤ Shortage of Pure Drinking Water</li> <li>➤ Road Broken</li> <li>➤ Water Logging</li> <li>➤ Unemployment to Women</li> <li>➤ Problem of Drug addiction &amp; Entertainment</li> </ul>	<ul style="list-style-type: none"> <li>➤ River</li> <li>➤ Children Park</li> <li>➤ Natural Cannel</li> <li>➤ Bus Stand</li> <li>➤ Main Road in City</li> </ul>

# Participatory Rapid Appraisal (PRA) - City Level



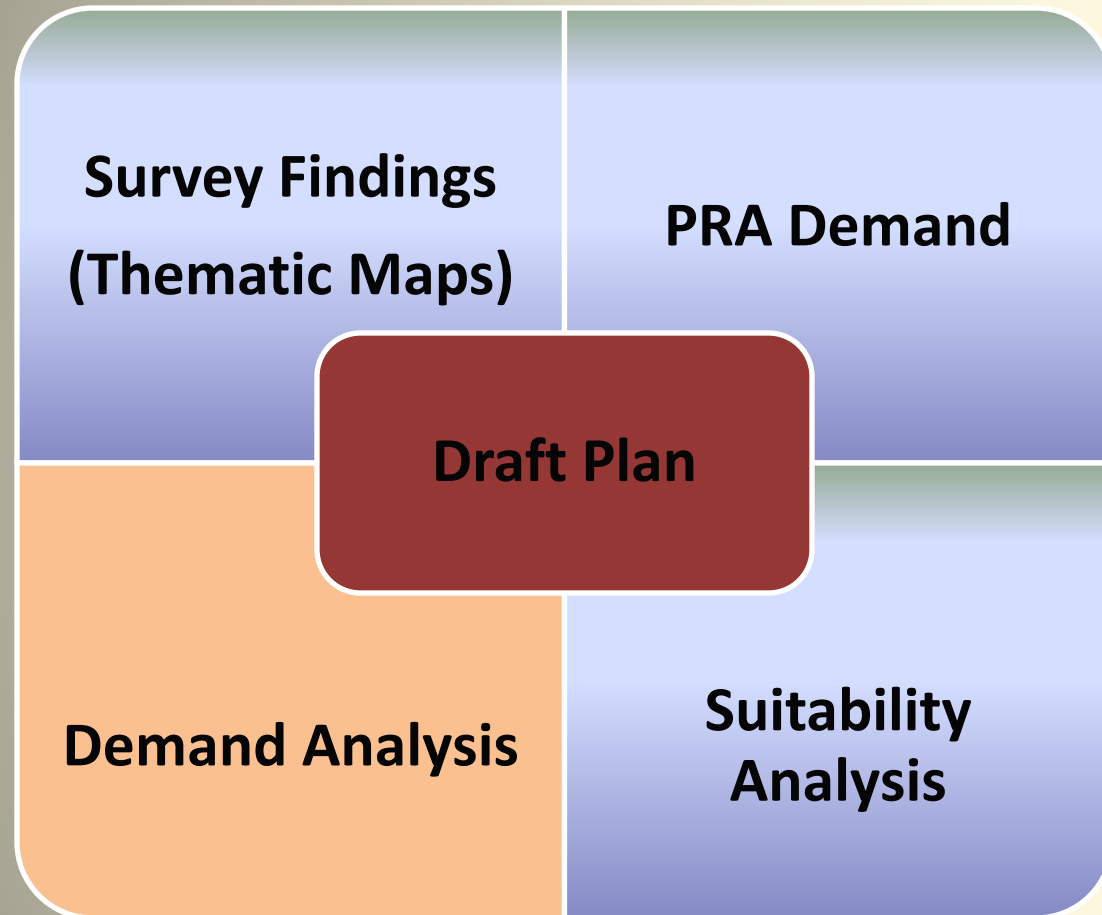
PRA Taherpur Pourashava, Bagmara



PRA Bwabaniganj Pourashava, Bagmara







# Demand Analysis

# Projected Population

Exponential Compound Growth Method has been used for population projection

Area	Base Year Population (BBS,2011)	Projected Population (Consider Medium Growth Rate, 1.28%)			
		2018	2023	2028	2035
Paurashava	35899	39242	41818	44564	48714
Rural Area	318765	348447	371326	395707	432553
Total	354664	387689	413144	440271	481267

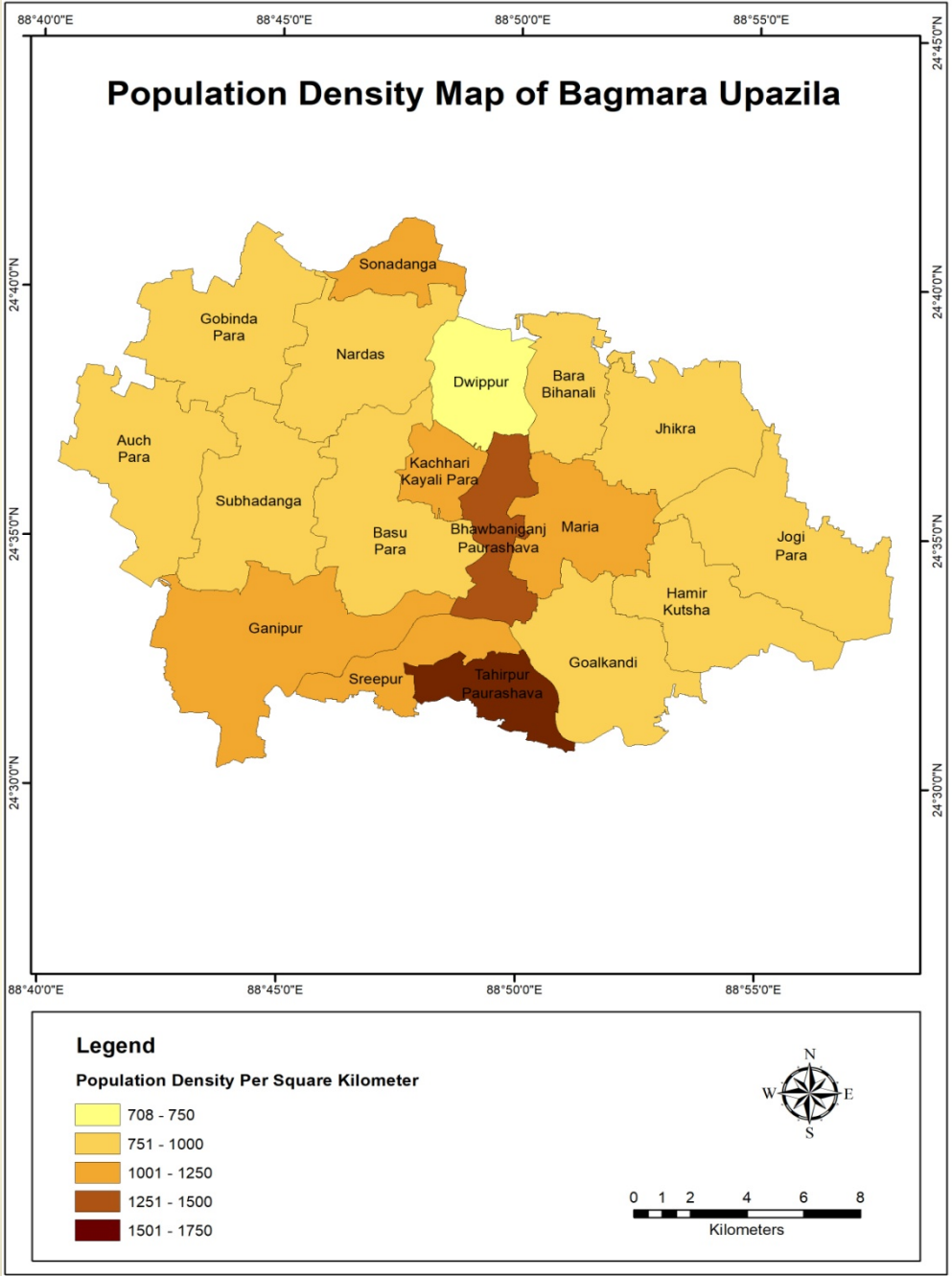
## Urban Area Population Projection

Pourashava	Base Year Population (BBS,2011)	Projected Population (Consider Medium Growth Rate, 1.28%)			
		2018	2023	2028	2035
Bwabaniganj	17955	19627	20916	22289	24364
Taherpur	17944	19615	20903	22275	24349



# Rural Area Population Projection

Unions	Base Year Population (BBS,2011)	Projected Population (Consider Medium Growth Rate, 1.28%) 2035
Auch Para	26685	36211
Bara Bihanali	12571	17058
Basu Para	26943	36561
Dwippur	9852	13369
Goalkandi	24275	32940
Gobinda Para	22707	30813
Ganipur	36469	49487
Hamir Kutsha	19817	26891
Jhikra	22026	29889
Jogipara	24830	33693
Kachari Kayali Para	7509	10189
Maria	19487	26443
Nardas	19528	26499
Sonadanga	8684	11784
Sreepur	11789	15997
Shubhadanga	25593	34729



# Demand Analysis of Bagmara Upazila

Union/ Paurashava	Facilties	Population Standard	Projected Population (2035)	Required Faciliities	Existing Facilities
<b>Bhabaniganj Paurashava</b>	Primary School/ kindergarten	5000	24364	5	4
	Secondary/High School	20000	24364	1	3
	College	20000	24364	1	3
	Neighborhood park	10000	24364	2	1
	Health center	5000	24364	5	5
<b>Taherpur Paurashava</b>	Primary School/ kindergarten	5000	24349	5	4
	Secondary/High School	20000	24349	1	4
	College	20000	24349	1	3
	Neighborhood park	10000	24349	2	0
	Health center	5000	24349	5	4
<b>Auch Para</b>	Primary School/ kindergarten	5000	36211	7	14
	Secondary/High School	20000	36211	2	6
	College	20000	36211	2	3
	Neighborhood park	10000	36211	4	0
	Health center	5000	36211	7	5



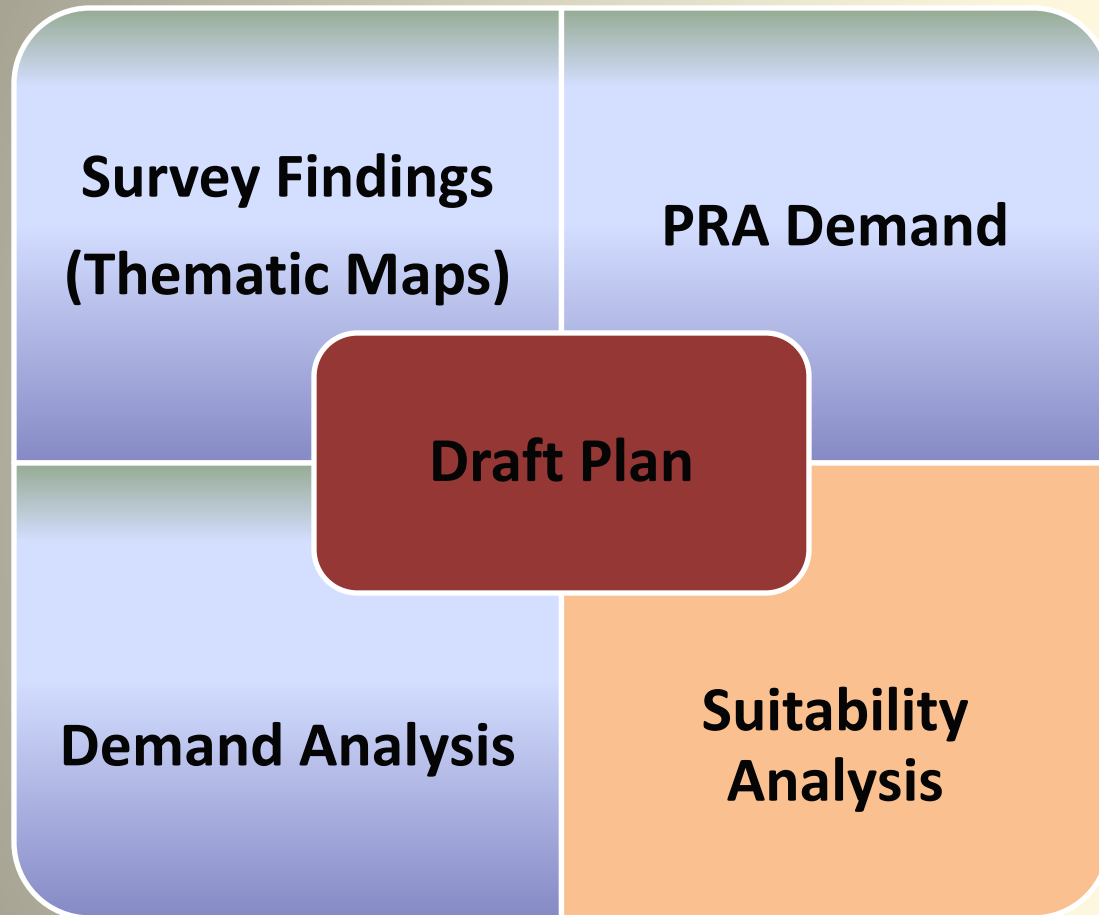
Union/ Paurashava	Facilities	Population Standard	Projected Population (2035)	Required Facilities	Existing Facilities
Bara Bihanali	Primary School/ kindergarten	5000	17058	3	0
	Secondary/High School	20000	17058	1	4
	College	20000	17058	1	0
	Neighborhood park	10000	17058	2	0
	Health center	5000	17058	3	0
Basu Para Union	Primary School/ kindergarten	5000	36561	7	2
	Secondary/High School	20000	36561	2	1
	College	20000	36561	2	1
	Neighborhood park	10000	36561	4	0
	Health center	5000	36561	7	3
Dwippur Union	Primary School/ kindergarten	5000	13369	3	7
	Secondary/High School	20000	13369	1	3
	College	20000	13369	1	0
	Neighborhood park	10000	13369	1	0
	Health center	5000	13369	3	0
Goalkandi Union	Primary School/ kindergarten	5000	32940	7	12
	Secondary/High School	20000	32940	2	2
	College	20000	32940	2	0
	Neighborhood park	10000	32940	3	0
	Health center	5000	32940	7	2

Union/ Paurashava	Facilities	Population Standard	Projected Population (2035)	Required Facilities	Existing Facilities
Gobinda Para Union	Primary School/ kindergarten	5000	30813	6	16
	Secondary/High School	20000	30813	2	4
	College	20000	30813	2	2
	Neighborhood park	10000	30813	3	0
	Health center	5000	30813	6	0
Ganipur Union	Primary School/ kindergarten	5000	49487	10	4
	Secondary/High School	20000	49487	2	5
	College	20000	49487	2	3
	Neighborhood park	10000	49487	5	0
	Health center	5000	49487	10	0
Hamir Kutsha Union	Primary School/ kindergarten	5000	26891	5	10
	Secondary/High School	20000	26891	1	2
	College	20000	26891	1	0
	Neighborhood park	10000	26891	3	0
	Health center	5000	26891	5	0
Jhikra Union	Primary School/ kindergarten	5000	29889	6	15
	Secondary/High School	20000	29889	1	4
	College	20000	29889	1	1
	Neighborhood park	10000	29889	3	0
	Health center	5000	29889	6	0



Union/ Paurashava	Facilities	Population Standard	Projected Population (2035)	Required Faciliities	Existing Facilities
Jogi Para Union	Primary School/ kindergarten	5000	33693	7	7
	Secondary/High School	20000	33693	2	4
	College	20000	33693	2	2
	Neighborhood park	10000	33693	3	1
	Health center	5000	33693	7	1
Kachhari Kayali Para Union	Primary School/ kindergarten	5000	10189	2	2
	Secondary/High School	20000	10189	1	1
	College	20000	10189	1	1
	Neighborhood park	10000	10189	1	0
	Health center	5000	10189	2	0
Maria Union	Primary School/ kindergarten	5000	26443	5	9
	Secondary/High School	20000	26443	1	8
	College	20000	26443	1	1
	Neighborhood park	10000	26443	3	0
	Health center	5000	26443	5	1
Nardas Union	Primary School/ kindergarten	5000	26499	5	2
	Secondary/High School	20000	26499	1	2
	College	20000	26499	1	1
	Neighborhood park	10000	26499	3	0
	Health center	5000	26499	5	0

Union/ Paurashava	Facilities	Population Standard	Projected Population (2035)	Required Facilities	Existing Facilities
Sonadanga Union	Primary School/ kindergarten	5000	11784	2	5
	Secondary/High School	20000	11784	1	2
	College	20000	11784	1	1
	Neighborhood park	10000	11784	1	0
	Health center	5000	11784	2	0
Sreepur Union	Primary School/ kindergarten	5000	15997	3	2
	Secondary/High School	20000	15997	1	1
	College	20000	15997	1	1
	Neighborhood park	10000	15997	2	0
	Health center	5000	15997	3	1
Subhadanga Union	Primary School/ kindergarten	5000	34729	7	11
	Secondary/High School	20000	34729	2	2
	College	20000	34729	2	2
	Neighborhood park	10000	34729	3	0
	Health center	5000	34729	7	0

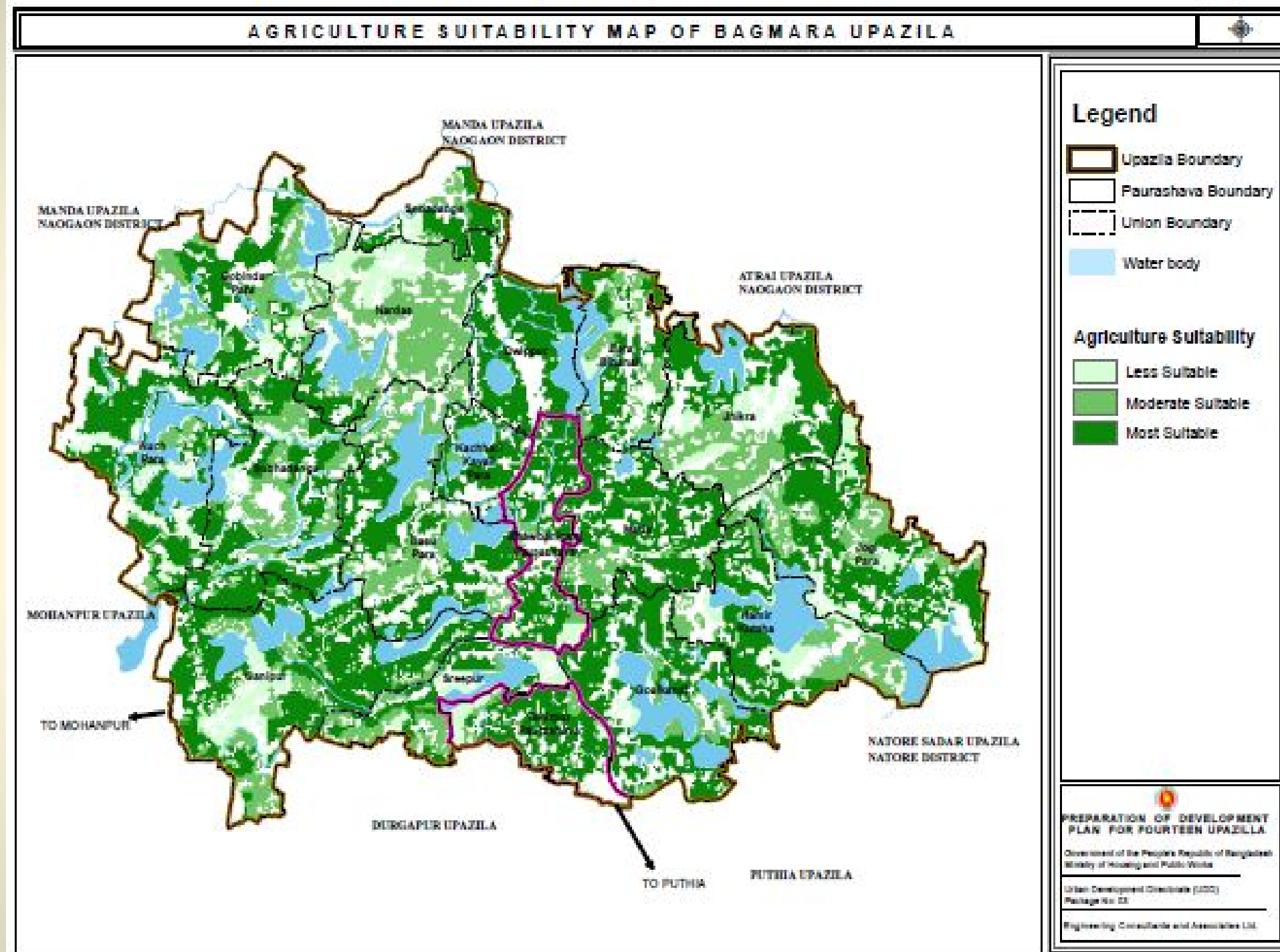


# Suitability Maps



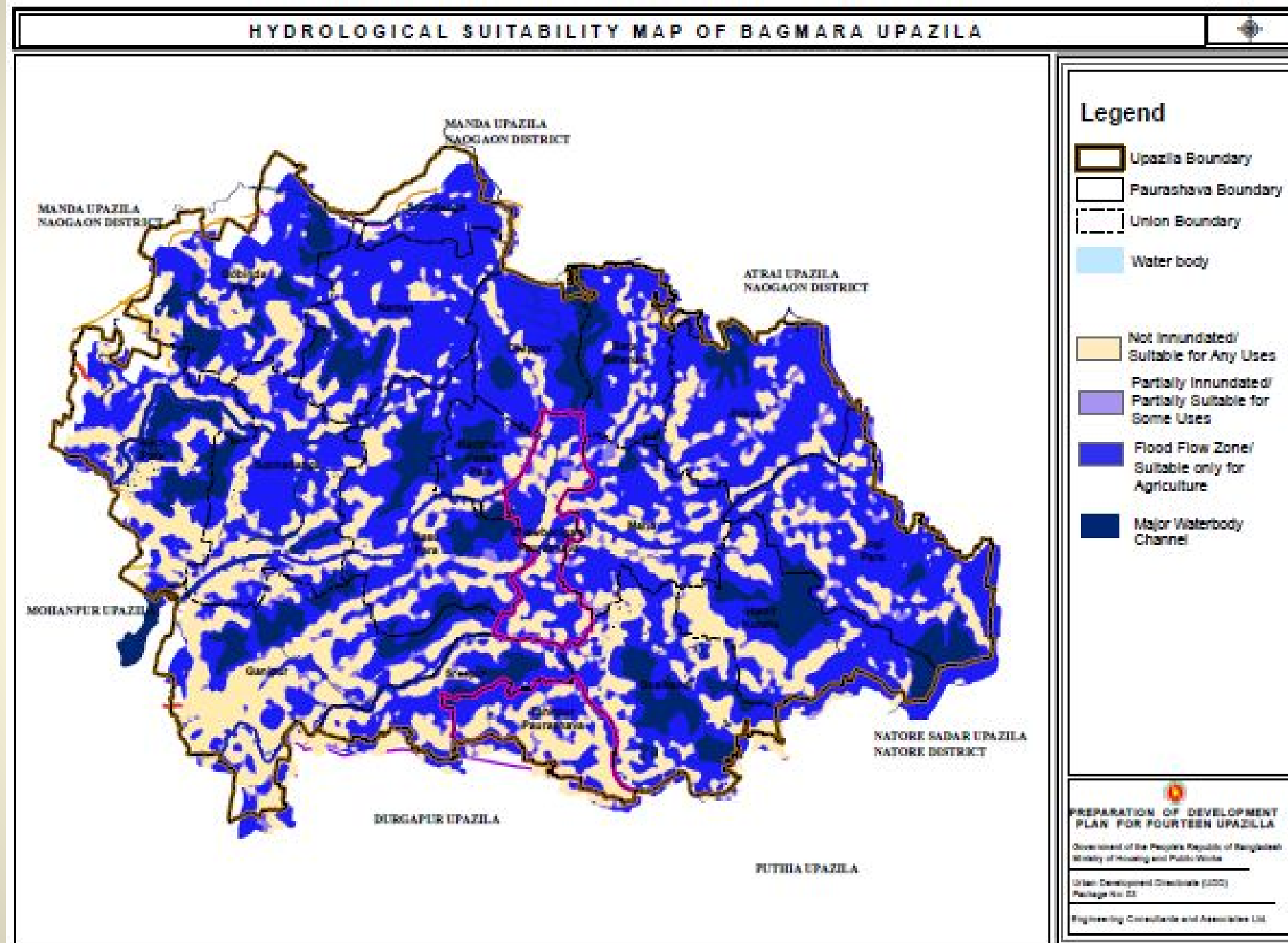
# Agricultural Suitability

Crop-land suitability analysis is a prerequisite to achieve optimum utilization of the available land resources for sustainable agricultural production. Maximum agricultural land condition of Bagmara Upazila is most suitable. A large part of Jhikra Union and Ganipur Kutsha Union are less suitable. Agricultural lands of Bwabanigonj Pourashava and Taherpur Pourashava are most suitable.



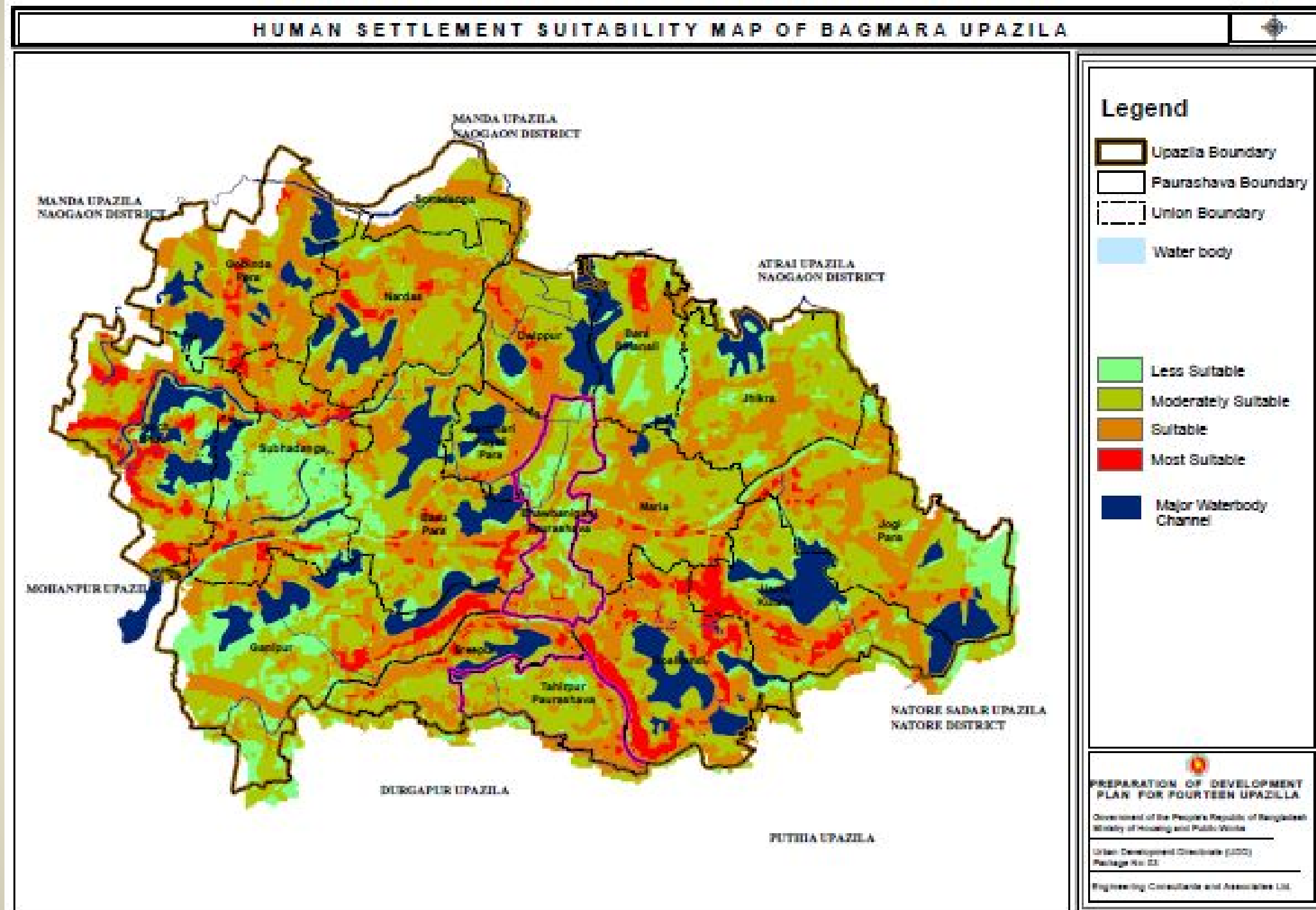
# Hydrological Suitability

Maximum portion of Nardas, Dwippur, Jhikra, Jogipara, Maria and Subhadanga Unions have gone under flood flow zone. A huge area of Ganipur Union is not inundated. In the context of hydrological suitability analysis, the condition of Taherpur Pourashava is better than Bwabaniganj Pourashava.



# Land Suitability for Human Settlement

A less area of Bagmara Upazila is most suitable in the context of human settlement suitability. This most suitable human settlement is belonged to Goalkandi and Hamir Kutsha Union. Overall Bagmara Upazila have a suitable human settlement.

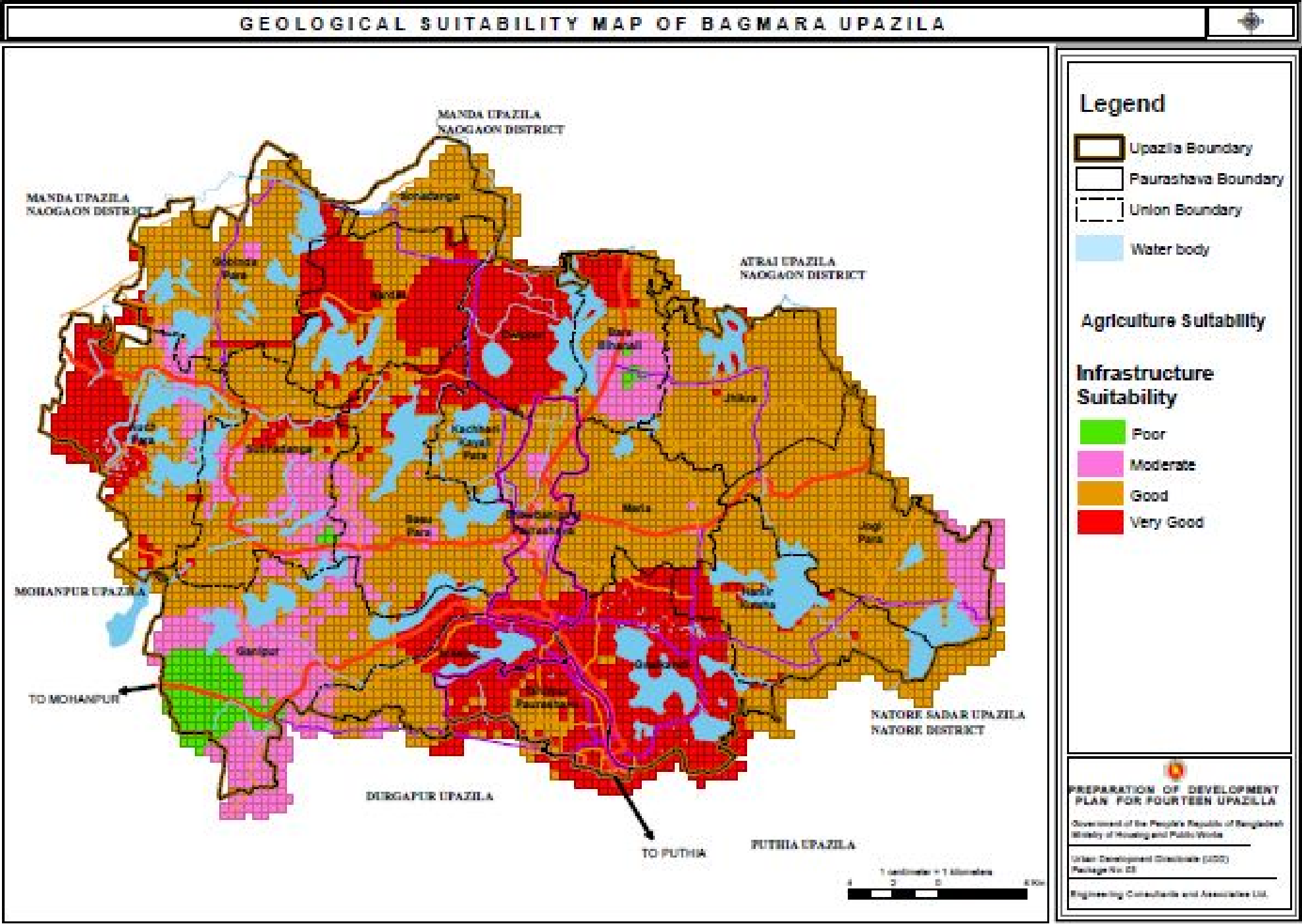




# Geological Suitability

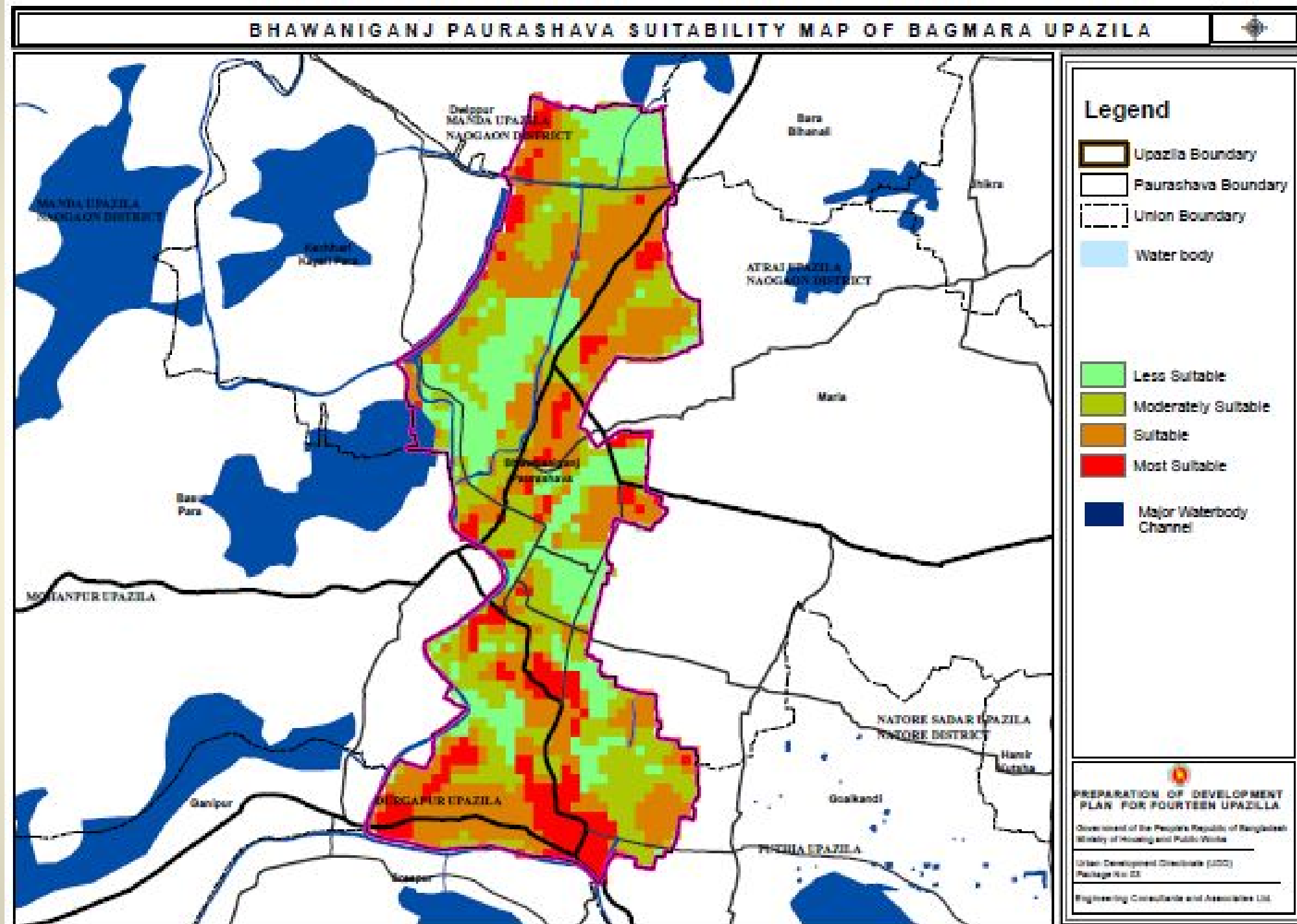
The infrastructure suitability condition of Goalkandi Union, Dwippur Union, Sreepur Union and Taherpur Pourashava are very good. Half portion of Nardas Union and Auch Para Union are in very good condition. On the other side, Ganipur Union has poor infrastructure suitability. Overall Infrastructure suitability of Bagmara Upazila is good.

Infrastructure Category	Area(Sq.Km)	% of Area
Good	228.88	58.98%
Moderate	46.00	11.85%
Poor	8.06	2.08%
Very Good	105.13	27.09%
Total	388.06	100%



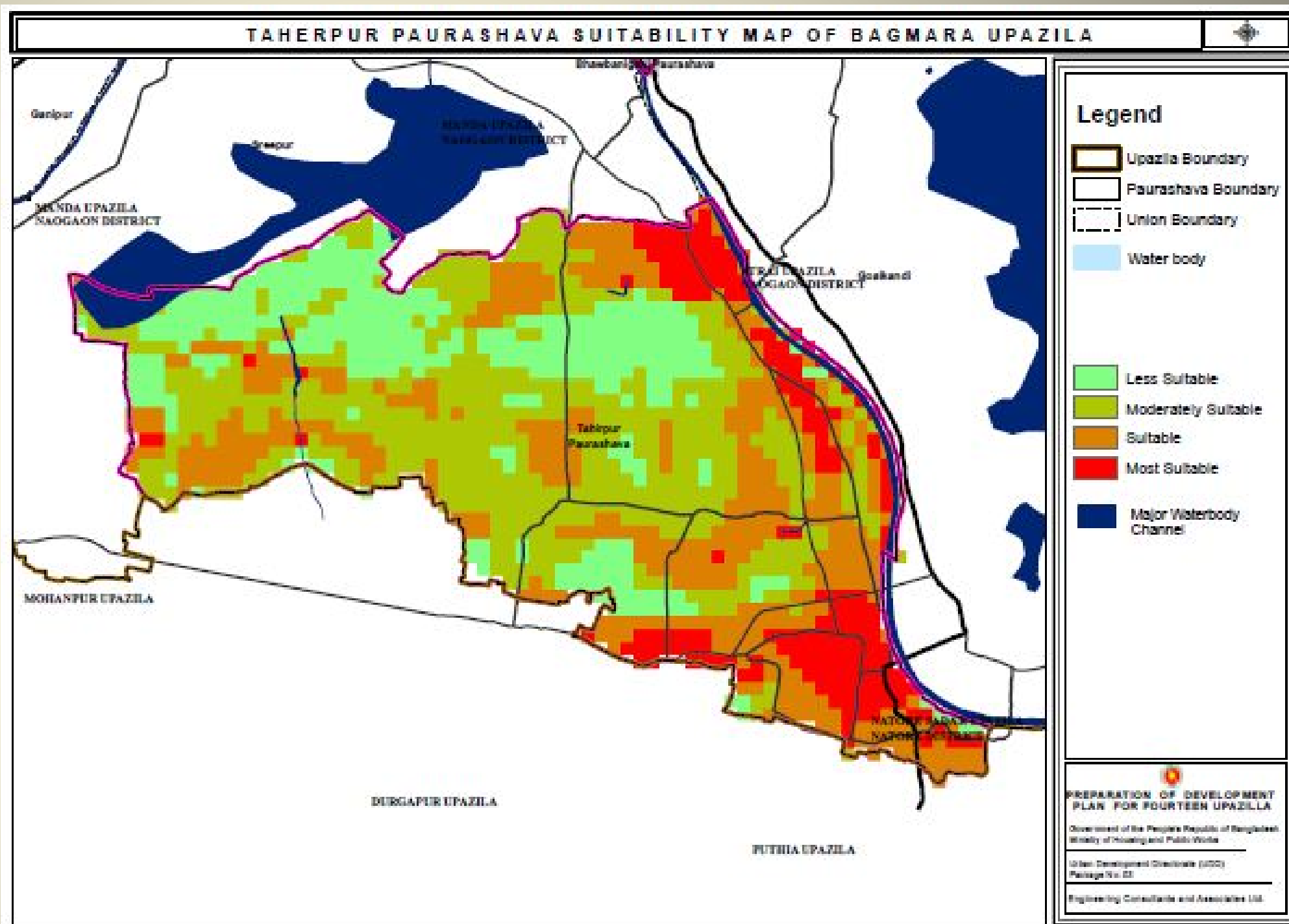
# Urban Area Suitability: Bwabanigonj Pourashava

Half portion of the total area of Bwabaniganj Pourashava is less suitable. The center of Bwabaniganj Pourashava as well as the border area of pourashava consists of most suitable and moderately suitable area.



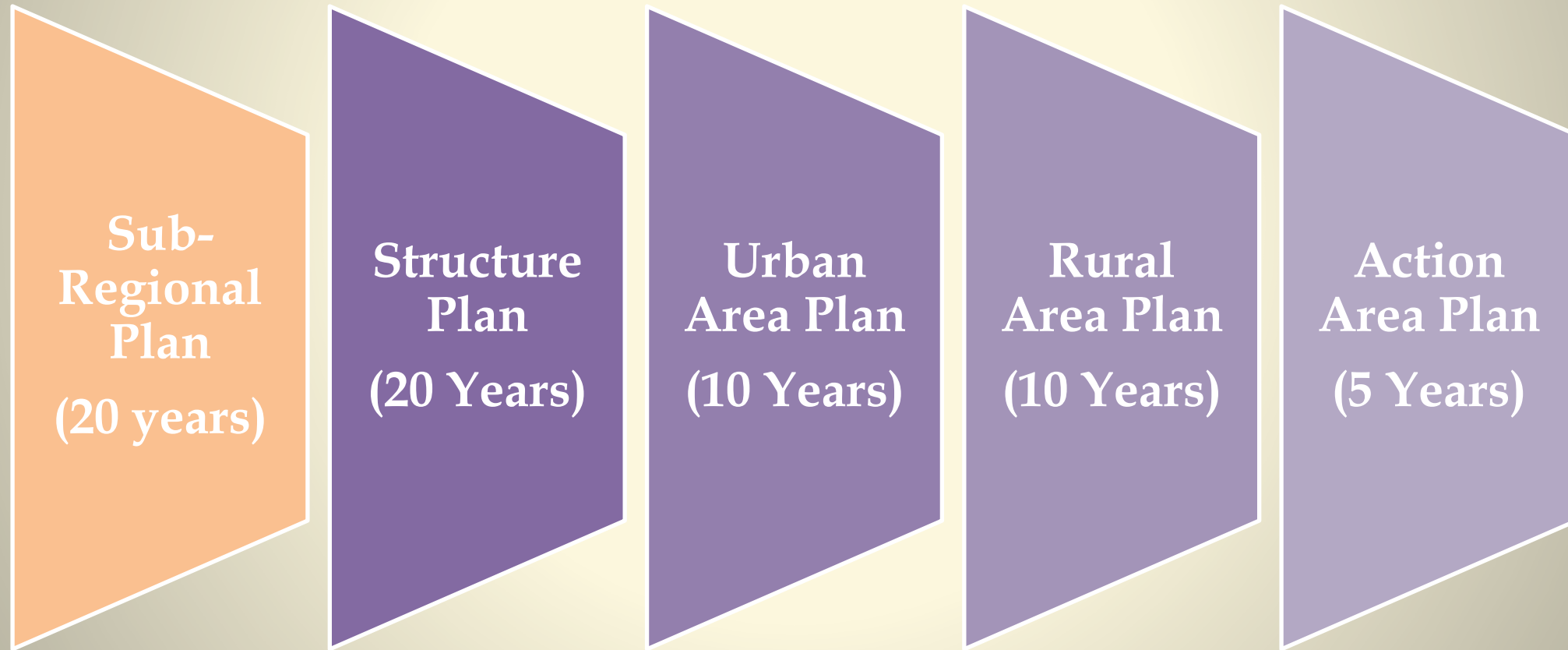
# Urban Area Suitability: Taherpur Pourashava

Overall maximum area of Taherpur Pourashava are less suitable and moderately suitable. Taherpur growth center area is the most suitable area among Taherpur Pourashava area.





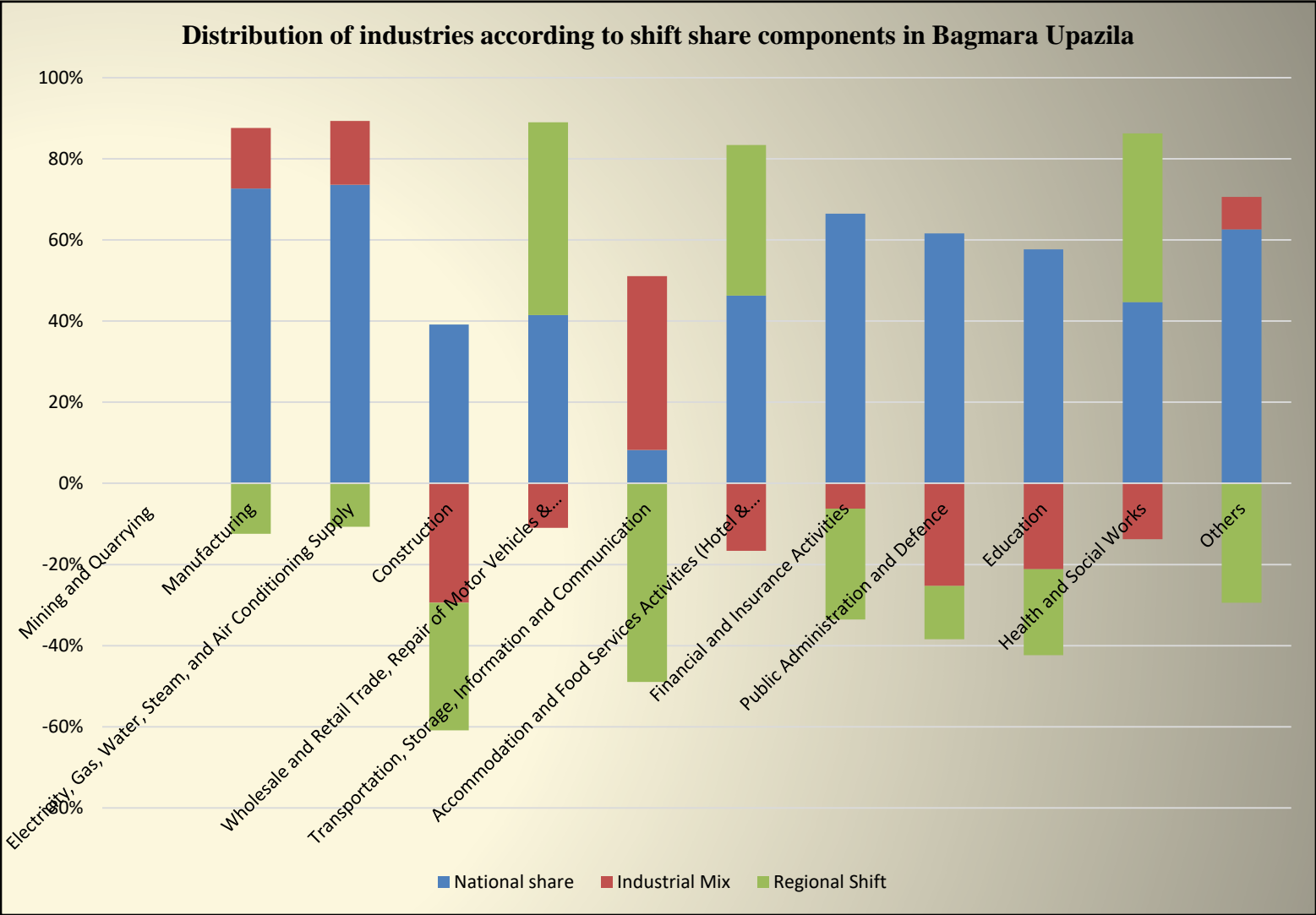
# Sub-Regional Plan



# Shift-Share Analysis

## Sector wise Analysis

The aim of sector wise analysis is to compare the employment growth of each sector in Bagmara Upazila. From the calculation it could be easily recognized that which sector is progressive and which sector is less progressive in this sector by using Net Shift Component. If the value of Net Shift Component is positive it indicates regional growth of this sector is better than national growth. If the value is negative, it indicates less regional growth of this sector than national growth.



# Progressive and Less Progressive Sectors of Bagmara Upazila.

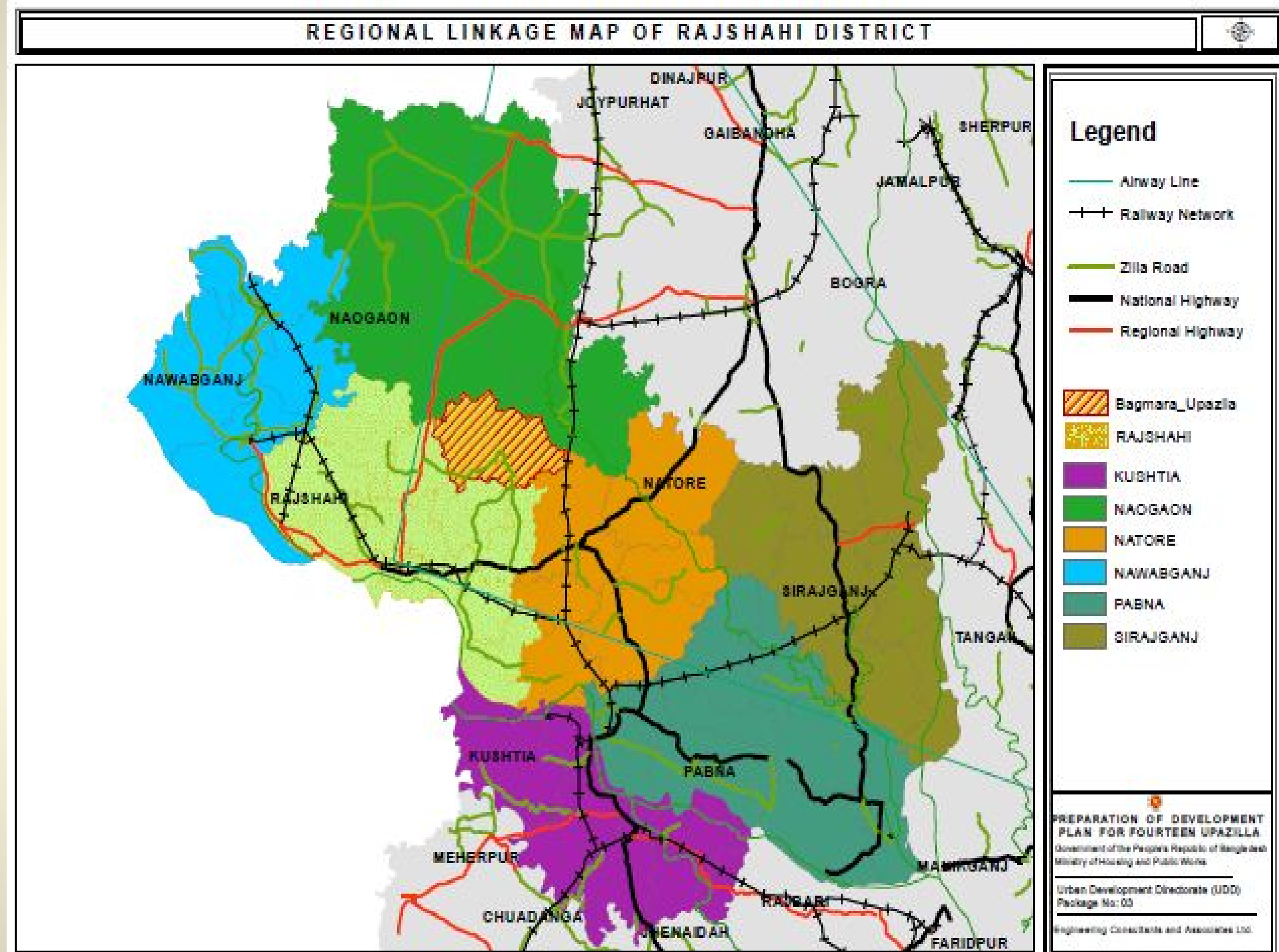
It is important to keep in mind that this is a descriptive tool rather than a diagnostic one is important. The shift-share analysis does not tell us why some local industries are more competitive and why some are less competitive—differences may be due to technology, management, or worker productivity. A more in-depth analysis of local versus national industries is required to sort out the sources of these differences. Potential factors could include access to natural resources, local wage rates, workforce productivity, or regional transportation networks.

Activity Sector	Progressive	Less Progressive
Mining and Quarrying		
Manufacturing	✓	
Electricity, Gas, Water, Steam, and Air Conditioning Supply		
Construction		✓
Wholesale and Retail Trade, Repair of Motor Vehicles & Motorcycles	✓	
Transportation, Storage, Information and Communication		✓
Accommodation and Food Services Activities (Hotel & Restaurants)	✓	
Financial and Insurance Activities		✓
Public Administration and Defense		✓
Education		✓
Health and Social Works	✓	
Others		✓



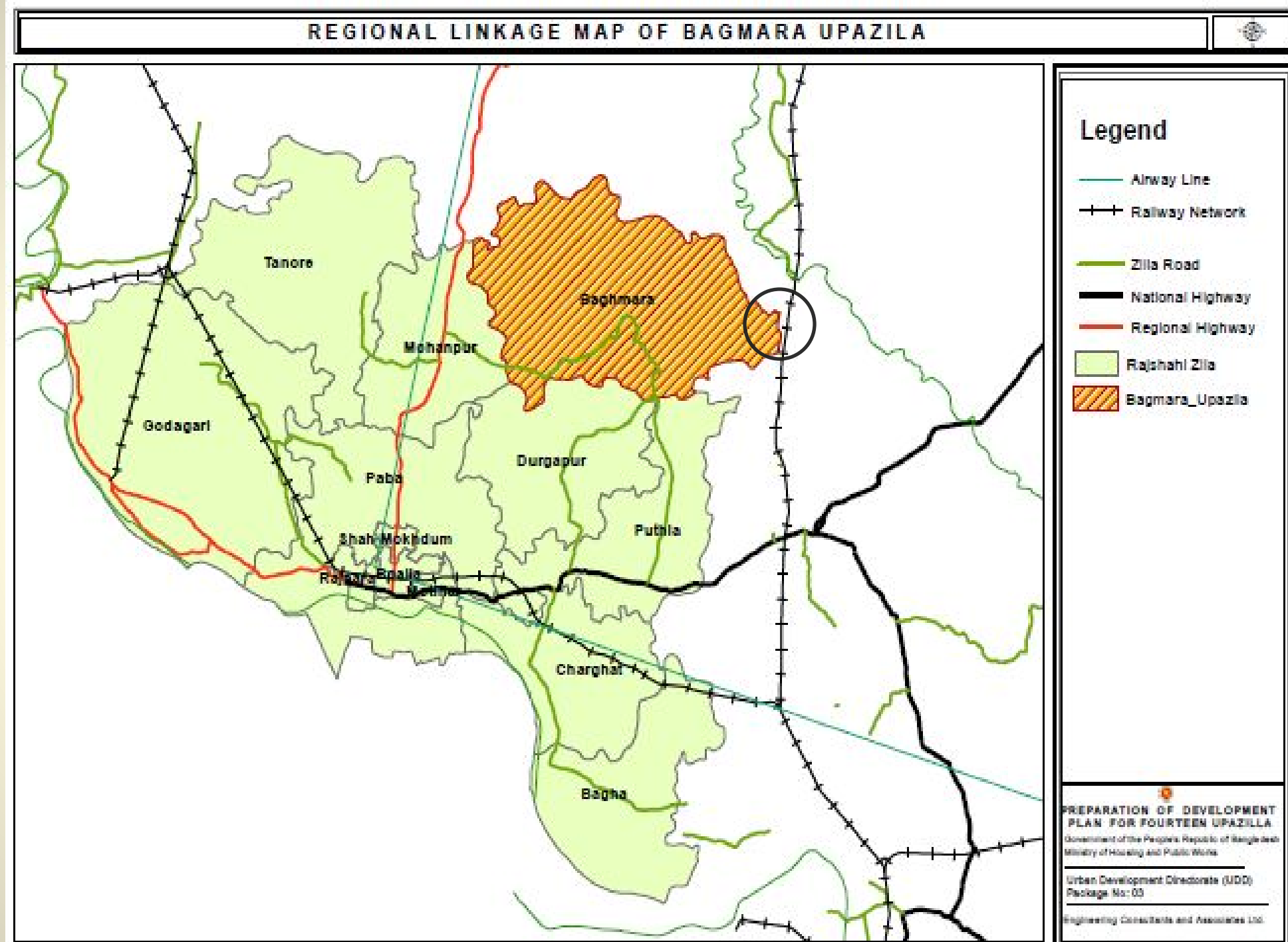
# Regional Linkage Plan of Rajshahi District

- Rajshahi District is directly connected with Natore, Pabna, and Kushtia through the national highway.
- The regional highway covers Naogaon, Rajshahi, Bogra and Kushtia.
- Railway network covers a huge area. Nawabganj, Rajshahi, Natore, Sirajganj, Pabna, Kushtia, Chuadanga and Bogura has a good railway communication



# Regional Linkage Plan of Bagmara Upazila

- Bagmara Upazila is directly connected with Mohonpur, Durgapur and Puthia through the zila road.
- This zila road also covers Godagari, Poba, Shahmokhdum, Rajpara, Boalia Charghat and Bagha.
- The regional highway doesn't cover Bagmara Upazila but covers Godagari, Poba, Shahmokhdum, Rajpara, Boalia and Moanpur.
- There is no railway network in Bagmara Upazila. Railway network passes by the outside of Bagmara Upazila area.



# **Policies for Sub-Regional Planning**

## **Connectivity and Transportation Network**

- Accelerate high standard road links through widening of primary and secondary and construction of new tertiary roads.
- Developing an integrated local, regional and national transportation
- Improving local transport network within the Upazila linking the nearest districts.
- Establishing a Railway Platform Connecting to the Jogi Para Union for better communications.

## **Biodiversity and Nature Conservation**

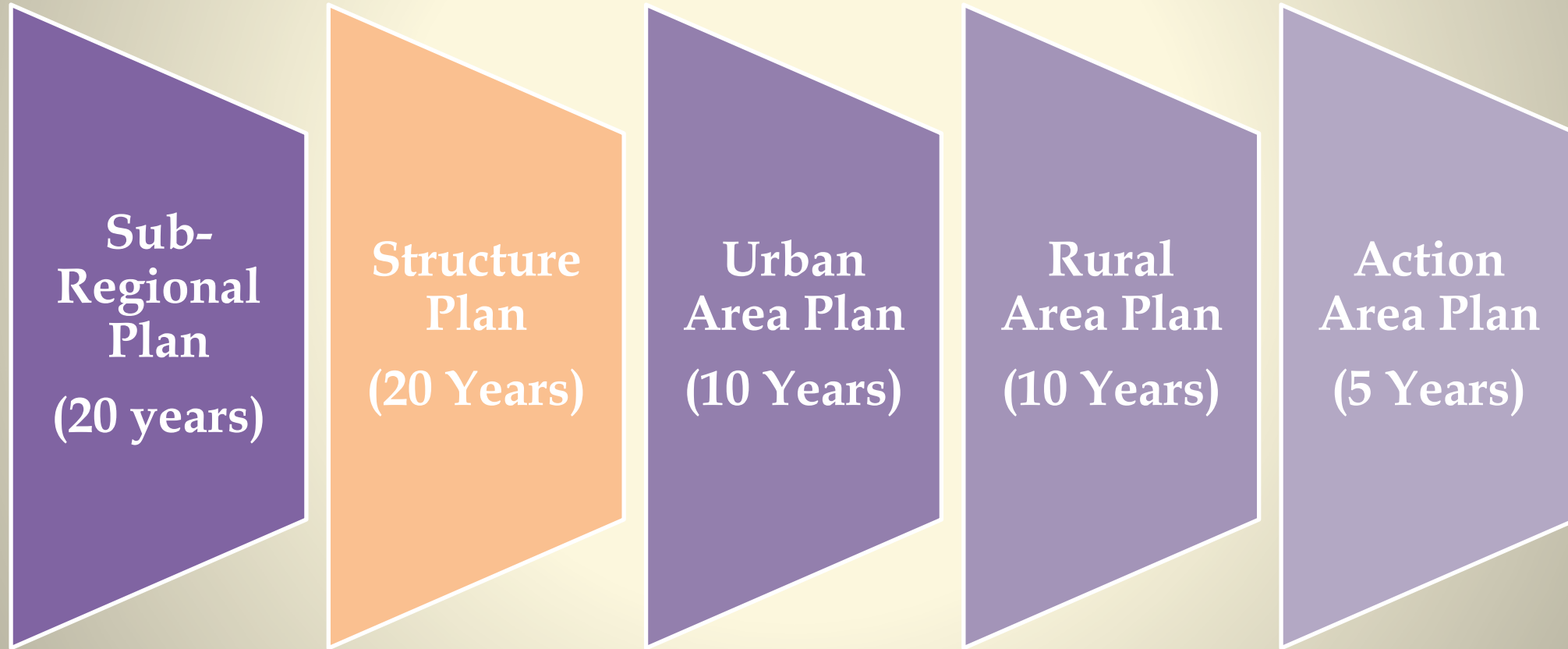
- Conserve natural/environmental resources like hills, reserve forests and water bodies.
- Execute land use planning for the enhancement of ecosystem and species diversity.
- Conserving the play field, open space, park and natural water reservoir.

## **Community Resilience through Disaster Management**

- Identification of seismic hazard prone zones.
- Provision and implementation of a risk sensitive land use planning.

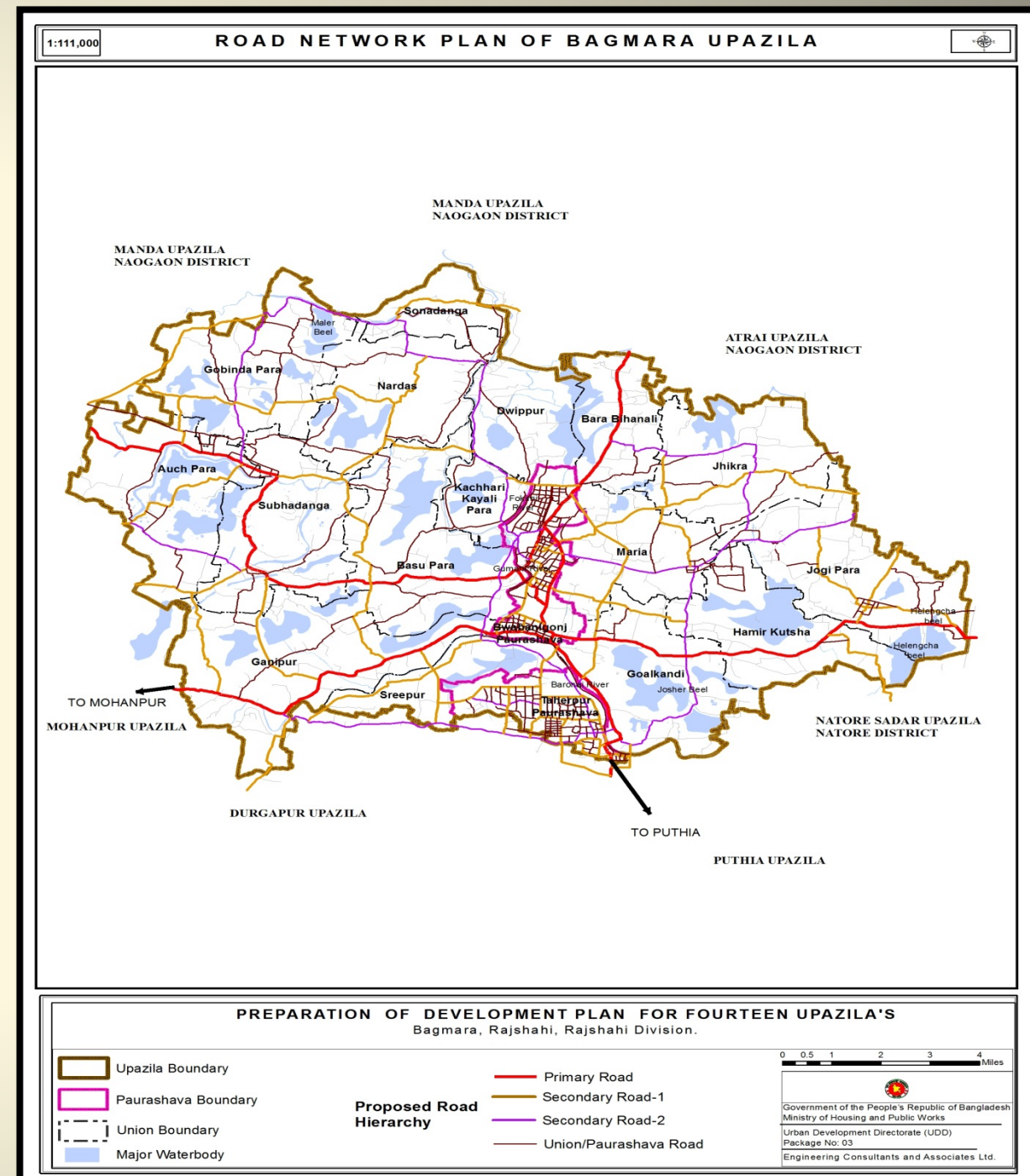


# Structure Plan



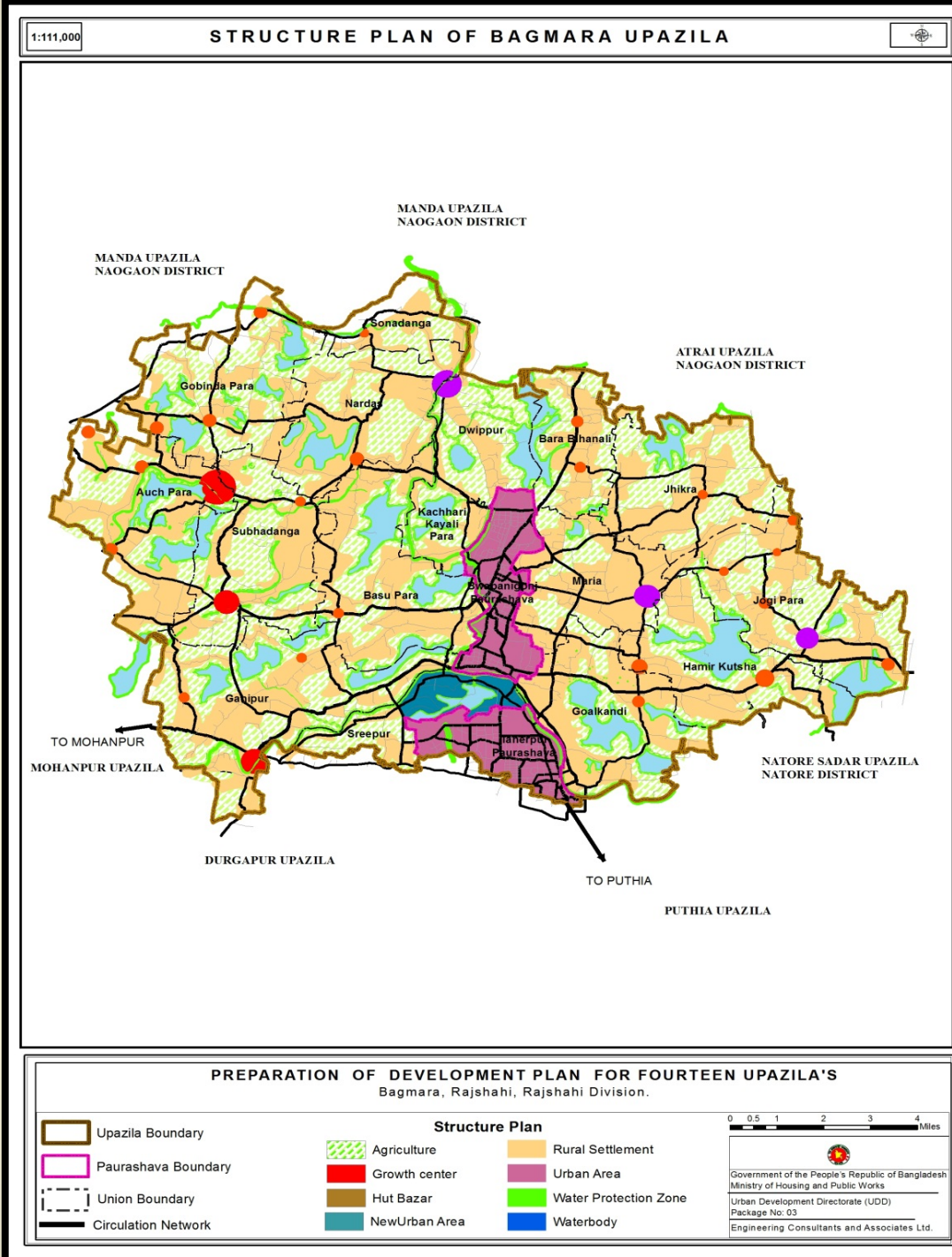
# Proposed Road Network Plan of Bagmara Upazila

Proposed Road Type	Road Length(Km)
Primary Road	67.44
Secondary Road-1	128.8
Secondary Road-2	81.18
Pouro/Union Road	530.77
Total	808.19



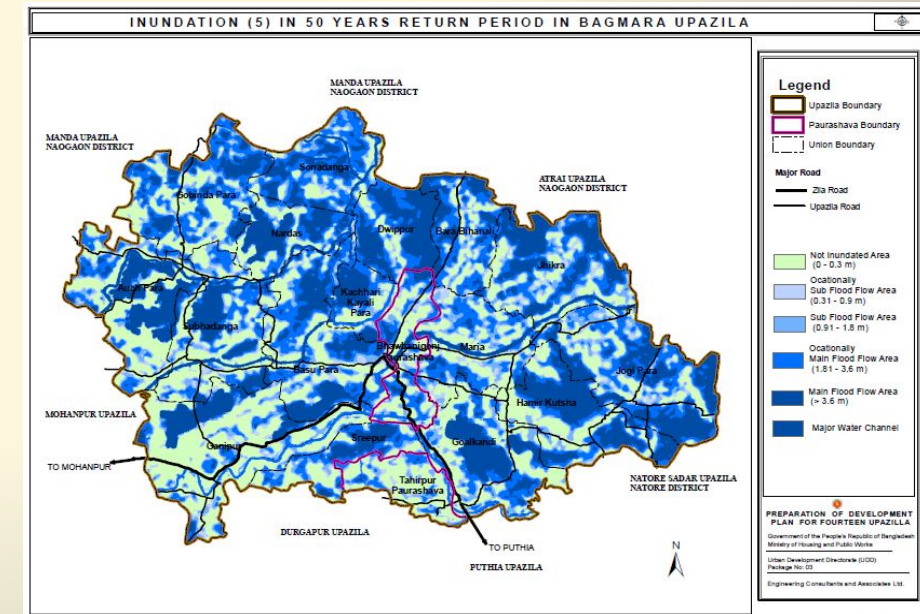
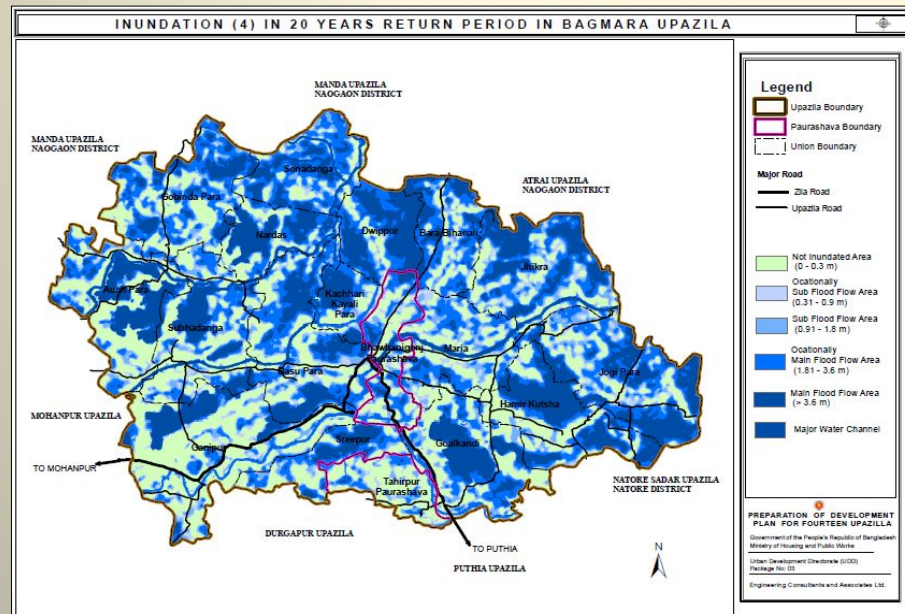
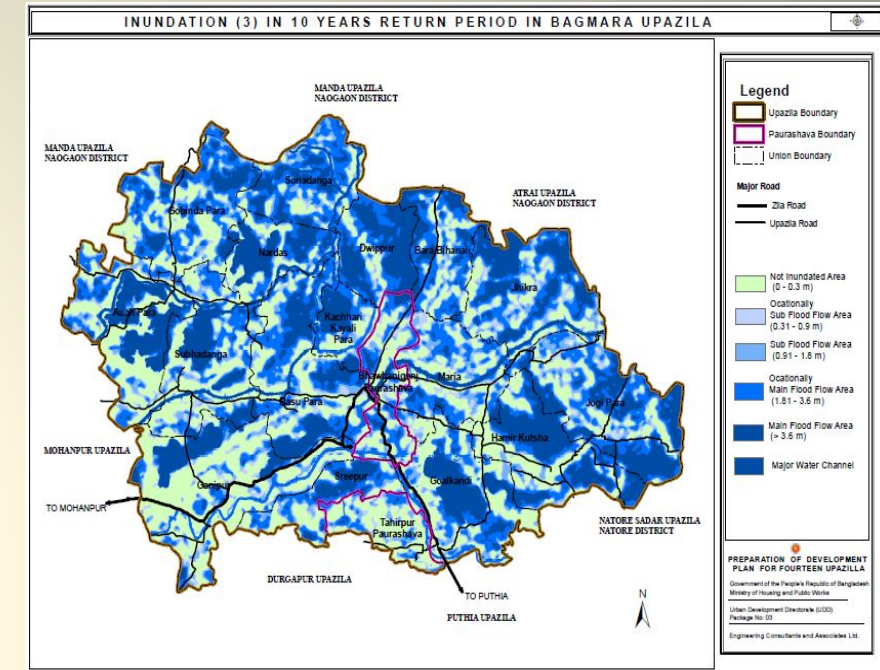
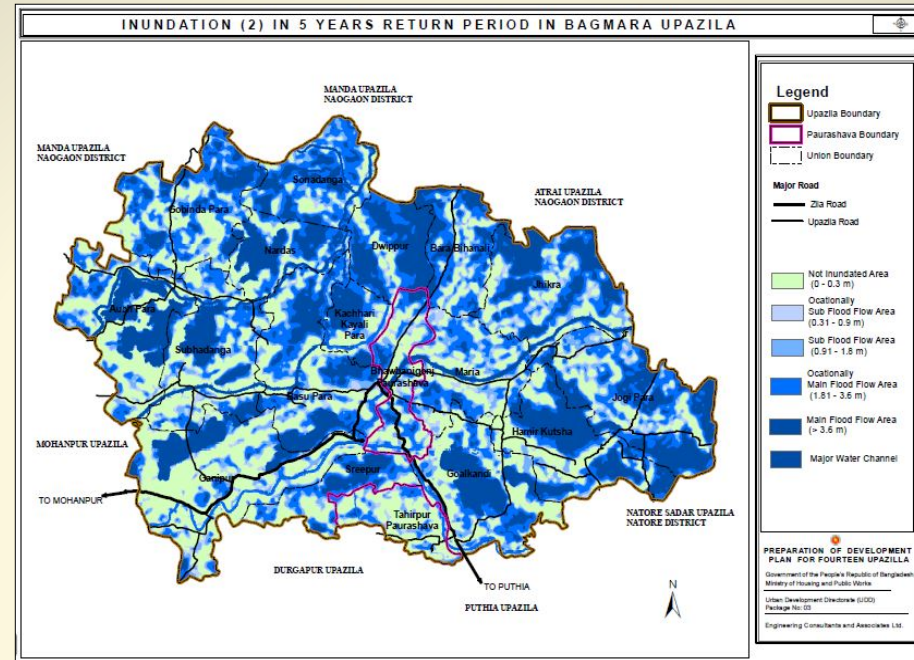
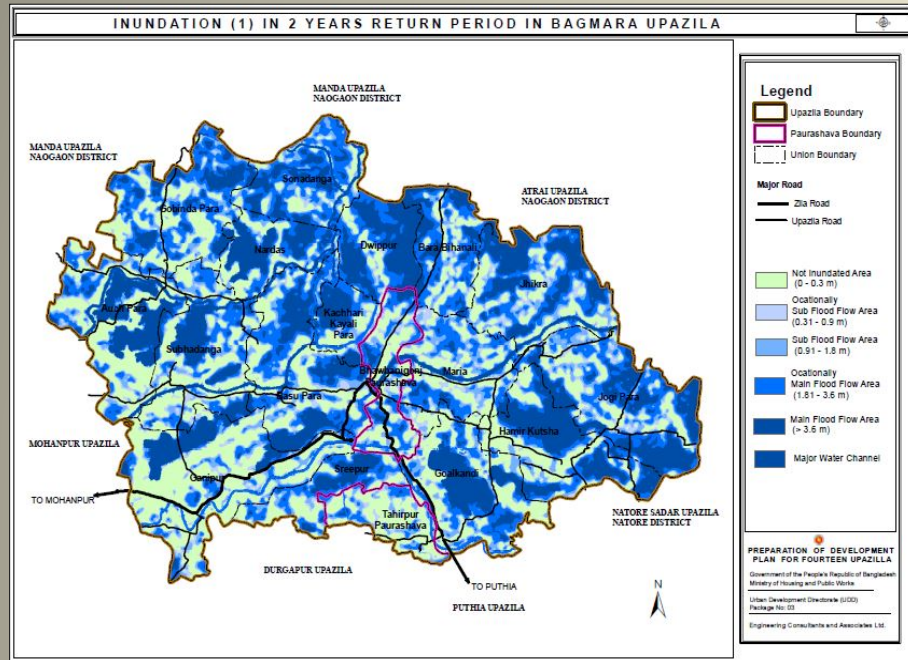
# Structure Plan: Bagmara Upazila

Type	Area(Acre)
Growth center	458.407315
Hut Bazar	554.369952
New Growth Center	355.444428
Rural Settlement	38425.70047
Agriculture	31059.09998
Urban Area	5536.848893
Waterbody	11023.7377
Water Protection Zone	2272.860141
Circulation Network	1297.68





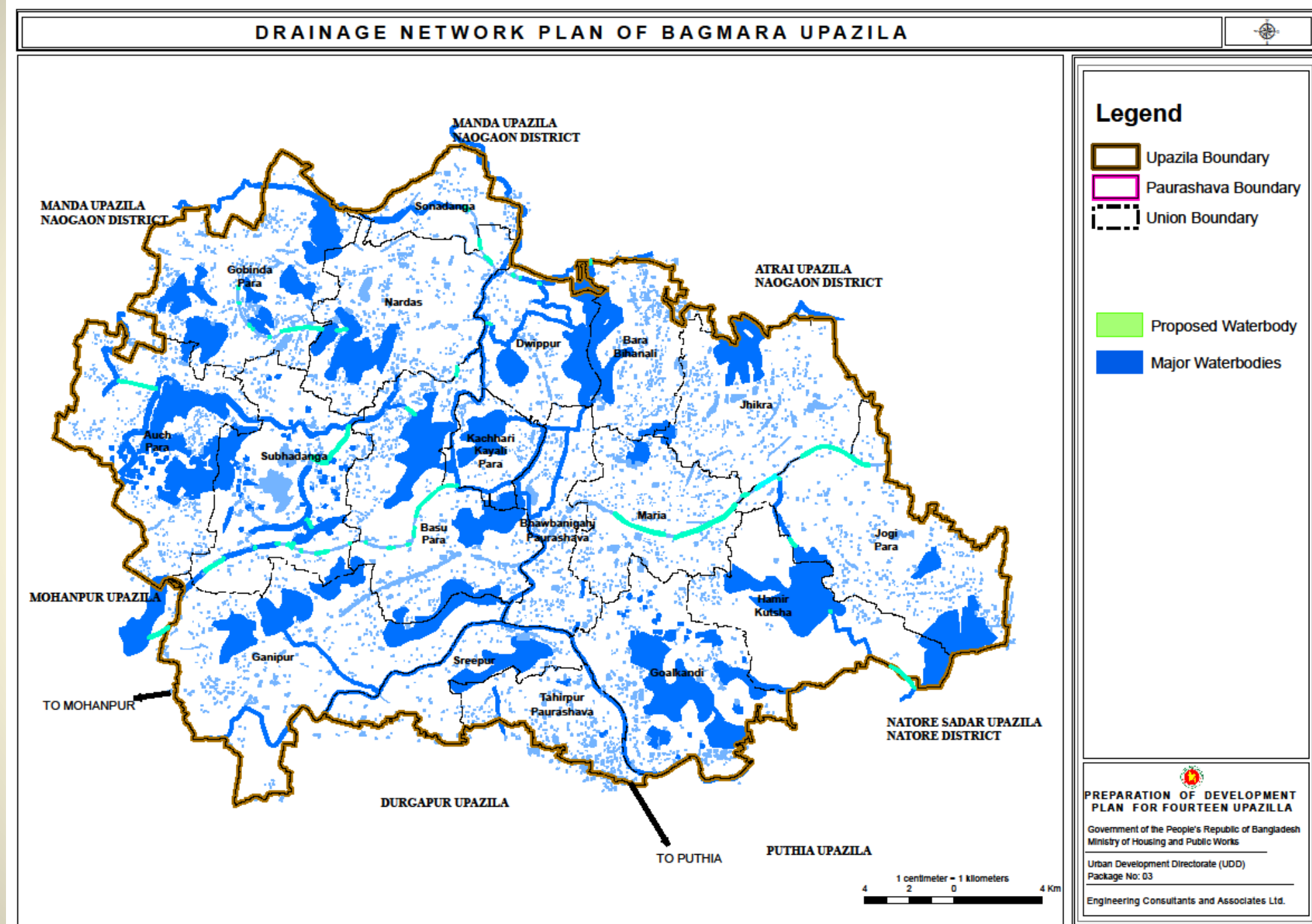
# Flood Inundation Maps



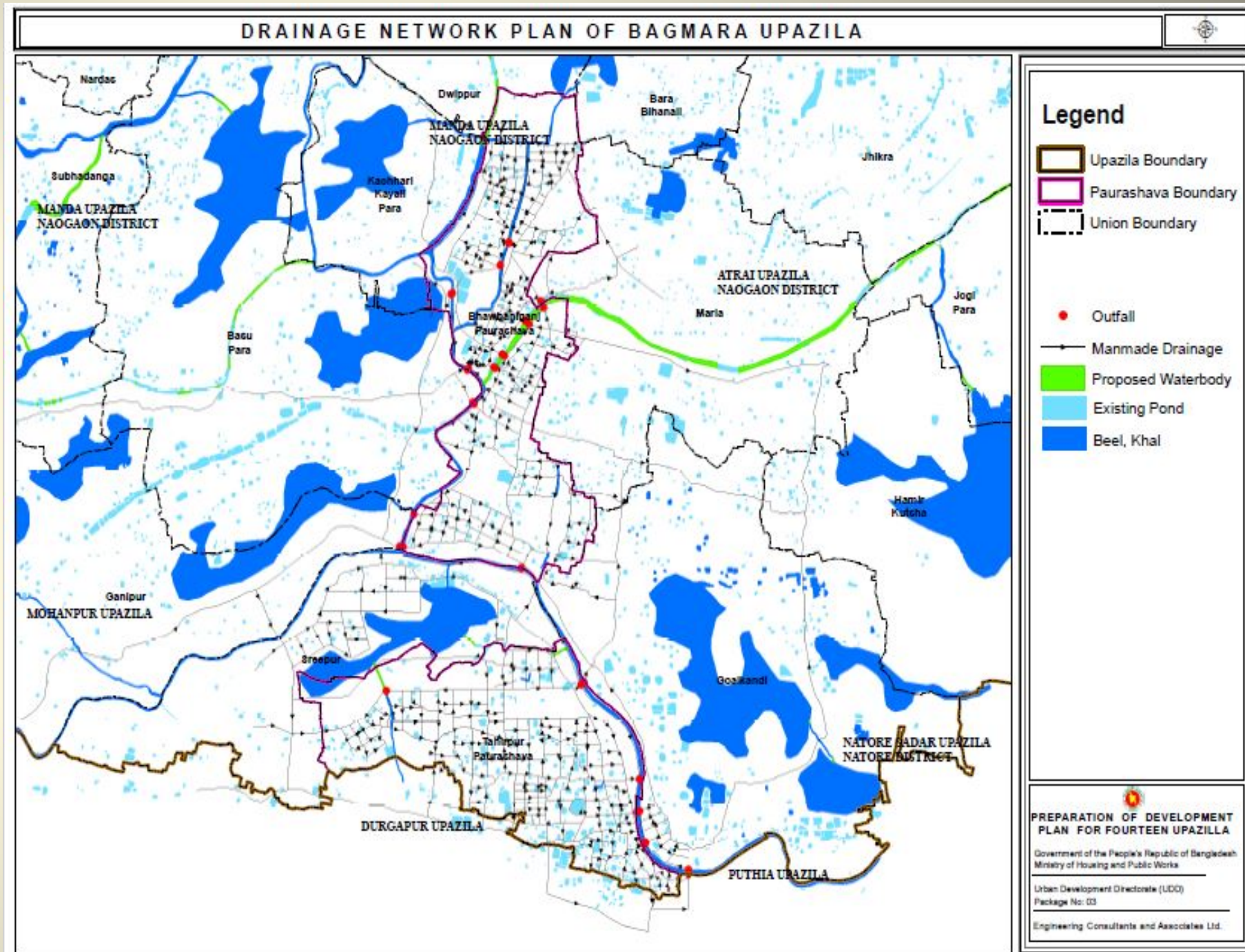


# Drainage Network Plan of Bagmara Upazila

- Barannoi & Fakinni River
- Land of Beel
- Beels remaining water in all the year round:
  - Lakatti Beel- Kachari Koyalipara
  - Likra Beel- Dwippur
  - Pallarkati Beel- Basupara
  - Joshir Beel-Goalkandi
  - Kalar beel-Shuvadanga
  - Hathkholar Beel, Gamar Beel, Harjor Beel- Gobindapara
  - Nimar Beel-Auchpara
  - Hatar Beel-Nardas



# Man-made Drainage Network Plan of Bagmara Upazila





# Policies for Structure Plan

## Agriculture

- Demarcating 2 crops and 3 crops land and preserving the existing agricultural lands.
- Discouraging residential expansion in the agricultural land.
- Demarcating and preserving the existing and future potential locations and areas for livestock production.
- Stopping establishment of new brick fields within the Paurashava area and close proximity of any agricultural zone.
- Ensure surface water irrigation keeping water bodies (canals and rivers) active for the sustainable agriculture development.
- Increasing production in the existing agricultural lands.

# Policies for Structure Plan

## Circulation Network

- Ensure integration of bus, rail and water transportation networks.
- Connect union headquarters, market places, growth centres and hats/bazars through better transportation network.

## Urban Settlements

- Promote urban area to buildable lands.
- Provision of appropriate infrastructure and service facilities (road, drain, bridge, culvert, water supply, sewerage and sanitation, garbage disposal, energy, education and health etc) with equity to the urban dwellers.

# **Policies for Structure Plan**

## **Flood Flow, Water Body and Water Supply Protection Zone**

- Protect main flood flow zone from encroachment.
- Preserving and maintaining the existing natural water bodies for drainage, flood control and environmental purposes.
- Developing drainage system within the Paurashava area.
- Preserving the existing beels and ponds to increase the fish production.

## **Geology**

- Discourage development of urban and industrial agglomeration, headquarters, market place and growth centres in seismic hazard prone zone
- Promote and ensure alternation utilization (e.g. agriculture, forestry) in geologically vulnerable zone.



# **Policies for Structure Plan**

## **Economic Development**

- Creating Industrial Area in Paurashava and Agro based industry in rural area for faster industrial development
- Establishing agro based industries,
- Promote technology-driven agriculture practices for intensive and extensive cultivation.

## **Other Policies**

- Expanding hospitals and other health facilities in the whole upazila area.
- Taking appropriate measure for Solid Waste Collection and Management.
- Providing street lighting within the whole upazila boundary

# Contingency Plan

## Planning Assumptions

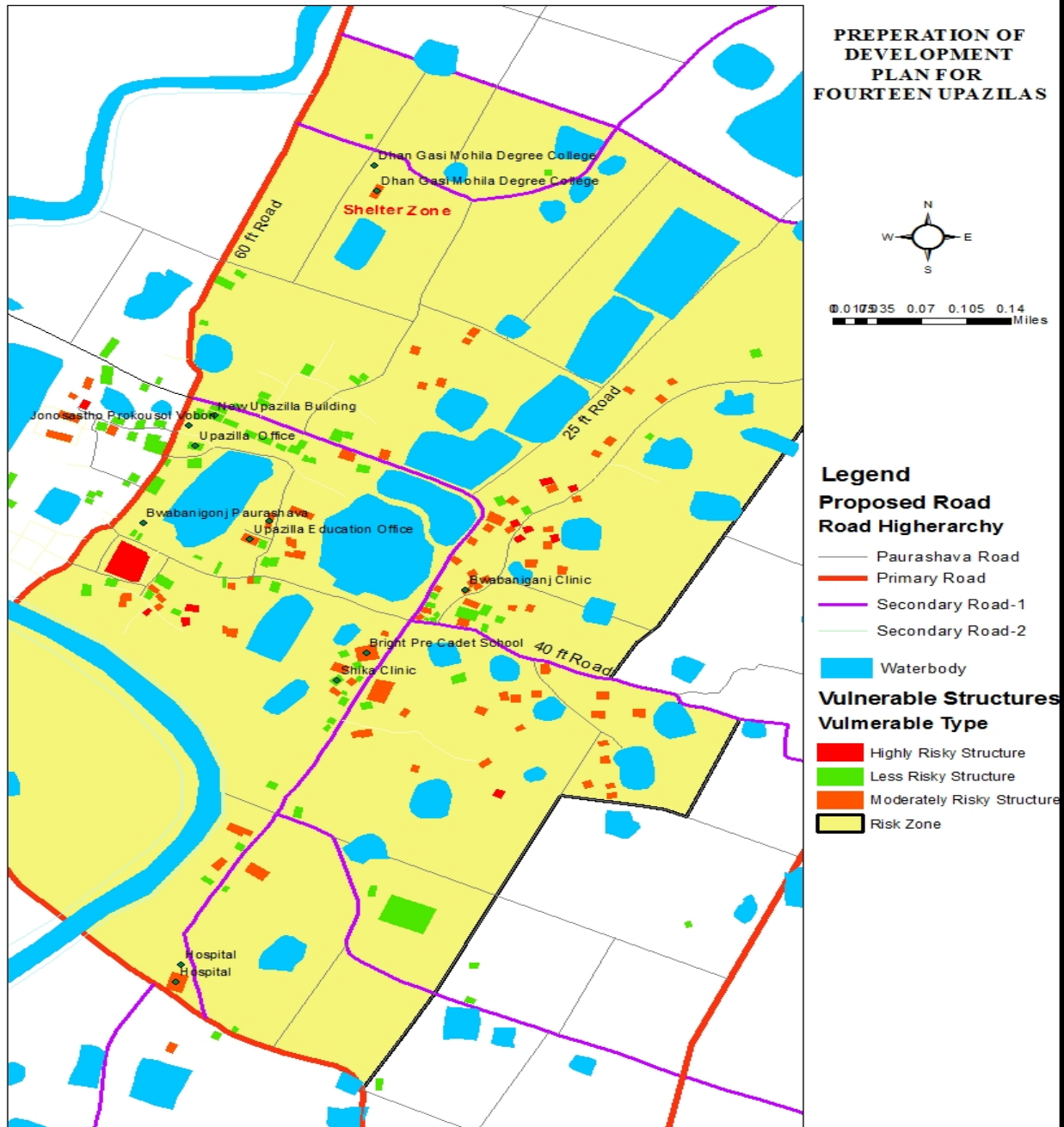
- Earthquakes are impact type events and provide no warning preventing any pre-event response activities
- There is likelihood of secondary effects following an earthquake or aftershocks which may include fire, flood, liquefactions, subsidence and release of hazardous and toxic chemicals
- Strong aftershocks will continue for several days resulting in further building collapse
- Access will be severely restricted due to debris, collapsed bridges etc.

## Operational Constraints

In order for the preparation of a successful contingent plan the first and foremost activity is to assess the disruptions and causalities which are likely to occur during the event as well as in the aftermath period. A pros and cons analysis of the operational constraints has been conducted for the earthquake hazard in Bagmara Upazila. A detailed list of the constraints are given below:

- ✓ Disruption in the communication system
- ✓ Disruption in the key supplies (electricity)
- ✓ Lack of response capacity (first responders dead or injured)
- ✓ Unavailability of decision-makers\
- ✓ Disruption of infrastructure and transport system

## Contingency Plan for Bagmara Upazila (Bwabaniganj Paurashava)



## Statistics of Vulnerable structures of Bwabanigonj Paurashava

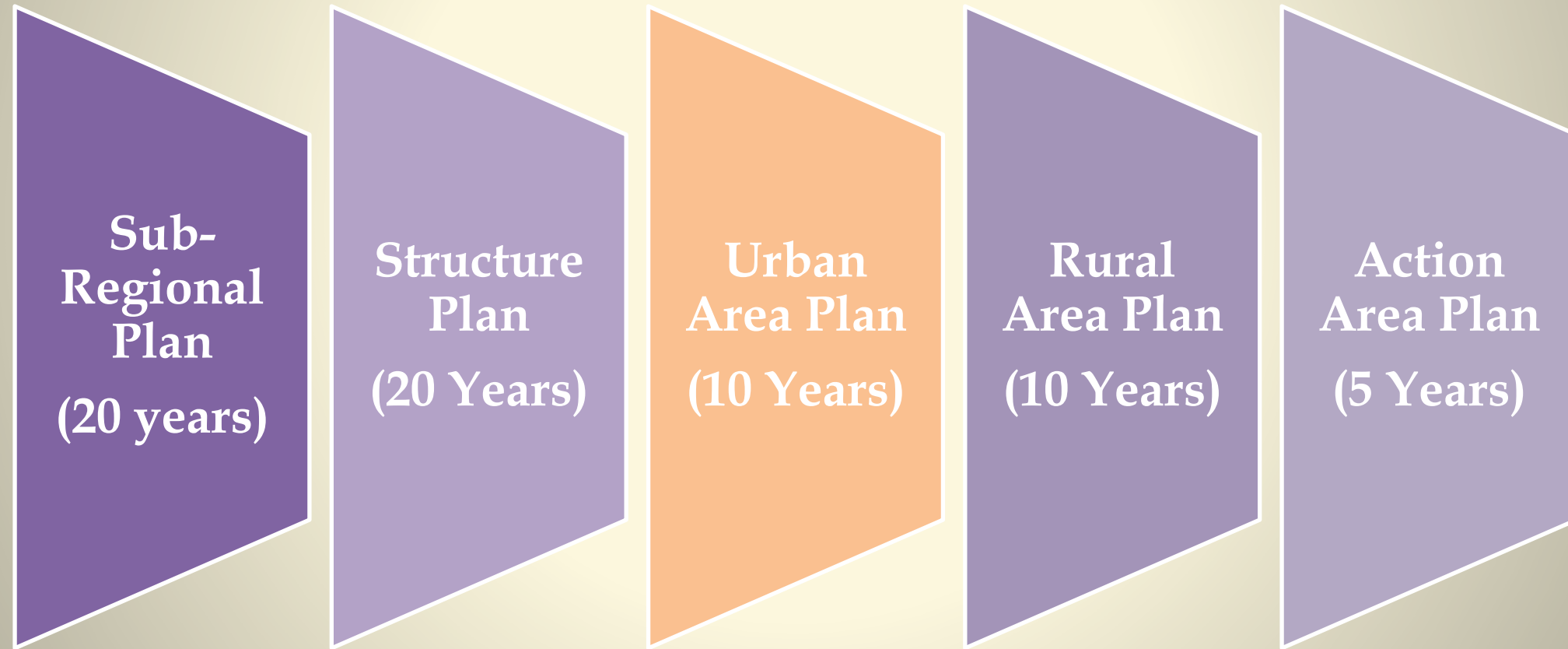
Vulnerable Type	No. Of Structures
Highly Risky	12
Moderately Risky	87
Less Risky	109



Sectors	Actions	Physical Planning
Health	<ul style="list-style-type: none"> <li>Preparedness planning for Community Clinic</li> <li>Mobilization of doctors and medical teams</li> </ul>	<ul style="list-style-type: none"> <li>Location of Clinic (Existing and Proposed)</li> <li>Connectivity with the Clinic</li> </ul>
Food Security Cluster	<ul style="list-style-type: none"> <li>Supply and distribution of Food and relief</li> </ul>	<ul style="list-style-type: none"> <li>Location of Godown and Food Storage</li> </ul>
Shelter	<ul style="list-style-type: none"> <li>Identification of Shelter Place</li> </ul>	<ul style="list-style-type: none"> <li>Location of Open Space and Safe Govt. Institution, multipurpose of Govt. School College</li> </ul>
	<ul style="list-style-type: none"> <li>Identification of the people needing shelter in camps</li> </ul>	<ul style="list-style-type: none"> <li>Proximity of this place</li> </ul>
WASH	<ul style="list-style-type: none"> <li>Restoration of water supply and drainage</li> </ul>	<ul style="list-style-type: none"> <li>Identification of water hydrant and reservoir</li> </ul>
Logistics	<ul style="list-style-type: none"> <li>Risk Assessment</li> <li>Accommodations facilities for humanitarian workers (tents)</li> </ul>	<ul style="list-style-type: none"> <li>Accessibility to the vulnerable locations</li> </ul>
Fire Service	<ul style="list-style-type: none"> <li>Preparedness planning for Fire Service</li> </ul>	<ul style="list-style-type: none"> <li>Location of Fire Service Station</li> <li>Fire Service Route Planning</li> </ul>
Child Protection	<ul style="list-style-type: none"> <li>Family training</li> <li>Coordinate with other sectors</li> </ul>	
Early Recovery	<ul style="list-style-type: none"> <li>Governance</li> <li>Debris Management</li> </ul>	<ul style="list-style-type: none"> <li>Waste Disposal Site locations</li> </ul>

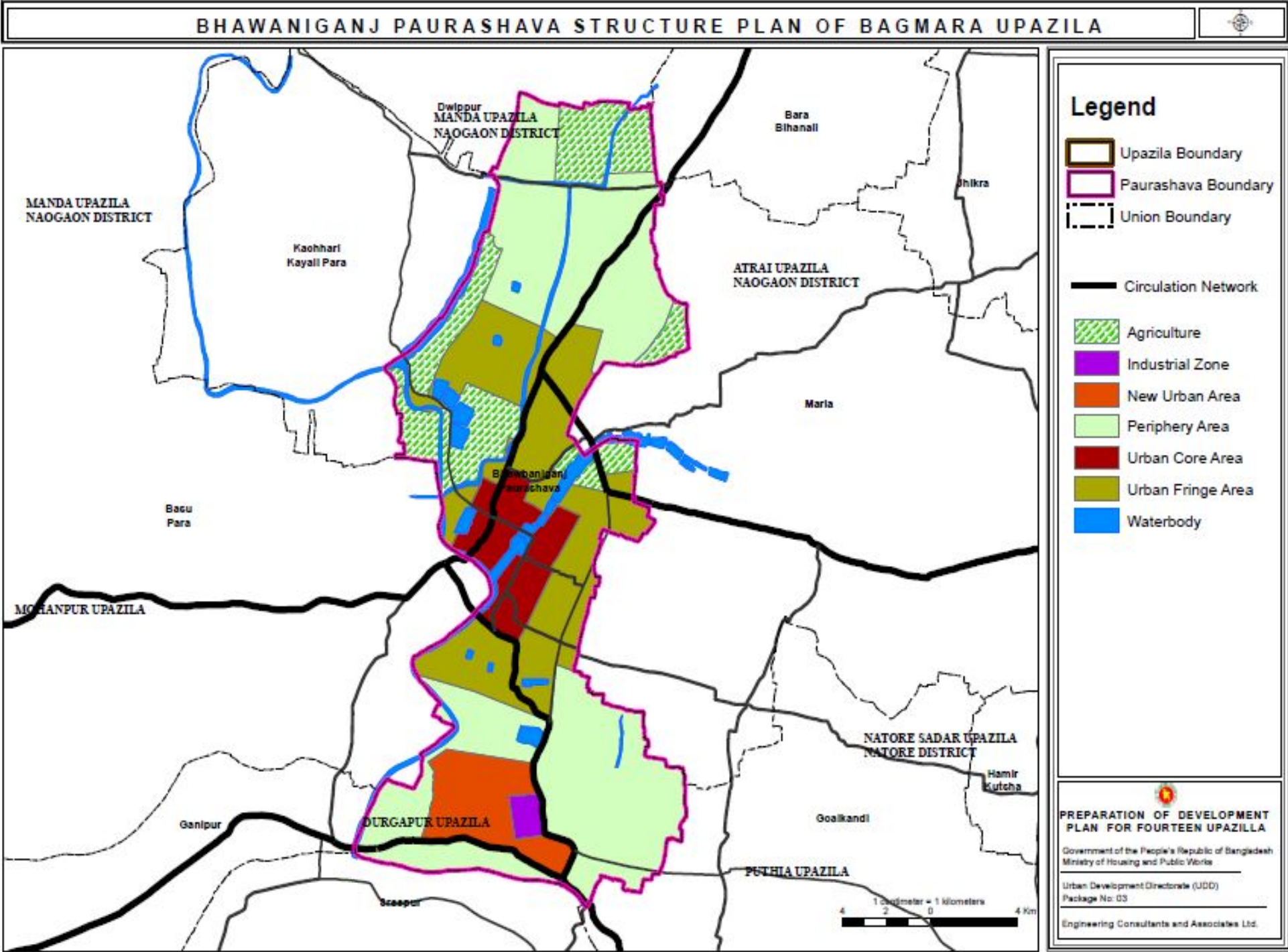
# Sector Wise Contingency Action Plan

# Urban Area Plan



# Urban Structure Plan: Bwabanigonj Pourashava

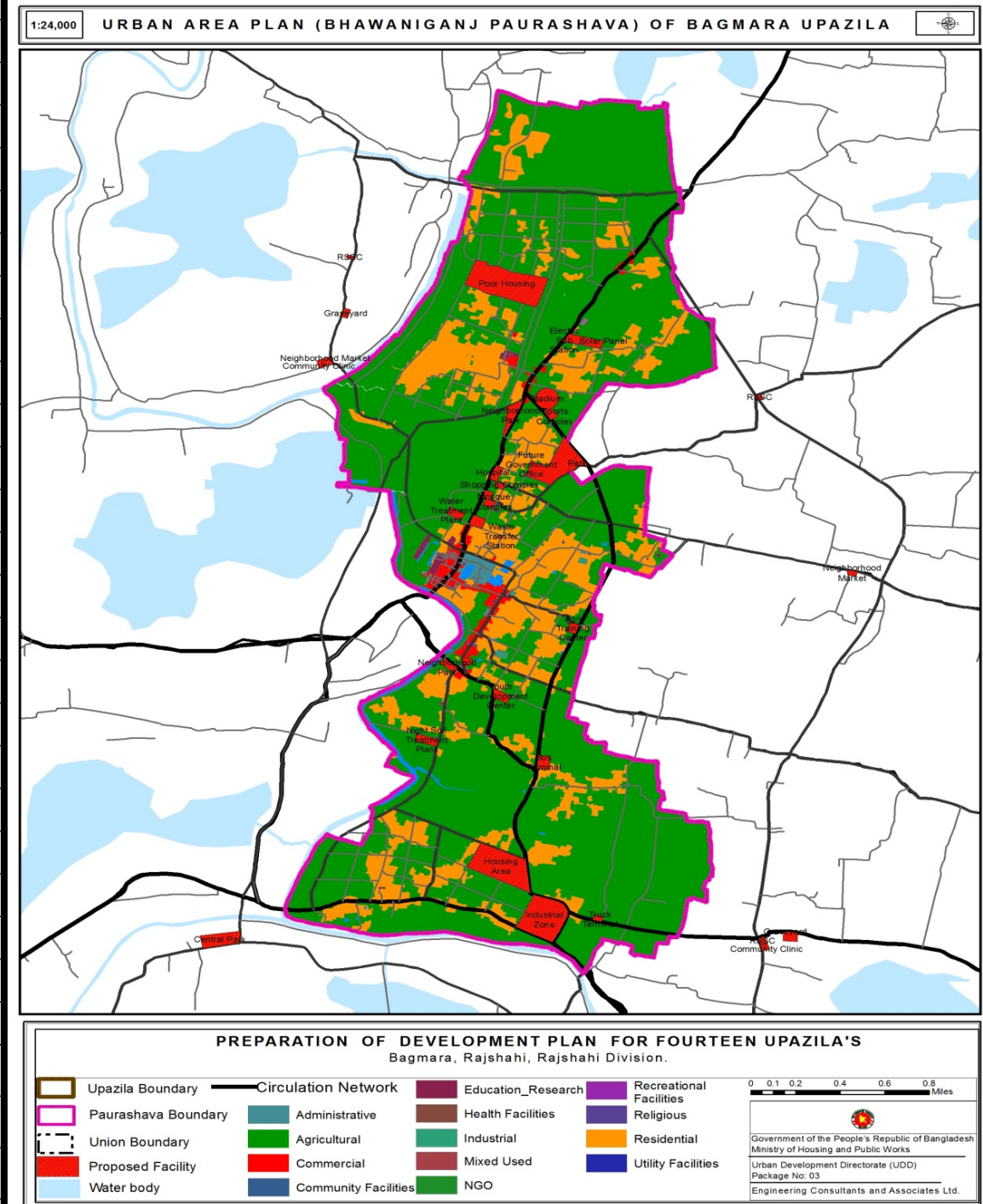
Type	Area
Periphery Area	1353.114
Agriculture	447.847
Urban Core Area	209.6371
Urban Fringe Area	720.7871
Industrial Zone	27.87249
New Urban Area	198.3439
Waterbody	259.6626





# Proposed Urban Area Plan of Bwabanigonj Paurashava

Bwabanigonj Paurashava	Poor Housing	30.9864
Bwabanigonj Paurashava	Shopping Complex	0.73848
Bwabanigonj Paurashava	Mosque Complex	1.07285
Bwabanigonj Paurashava	Future Government Office	15.3498
Bwabanigonj Paurashava	Waste Transfer Station	0.14864
Bwabanigonj Paurashava	Bus Terminal	2.43084
Bwabanigonj Paurashava	Industrial Zone	22.2581
Bwabanigonj Paurashava	Truck Terminal	0.70679
Bwabanigonj Paurashava	Night Soil Treatment Plant	2.50918
Bwabanigonj Paurashava	Hospital	1.74306
Bwabanigonj Paurashava	Pauro Market	1.96548
Bwabanigonj Paurashava	Neighborhood Park	3.74401
Bwabanigonj Paurashava	Water Treatment Plant	1.86574
Bwabanigonj Paurashava	Neighborhood Park	1.61334
Bwabanigonj Paurashava	Multi Purpose Hall	0.98793
Bwabanigonj Paurashava	Agri Training Center	1.38473
Bwabanigonj Paurashava	Community Center	0.85305
Bwabanigonj Paurashava	Youth Development Center	2.09504
Bwabanigonj Paurashava	Sports Complex	1.47509
Bwabanigonj Paurashava	Park	2.03618
Bwabanigonj Paurashava	Electric Sub Station	1.9064
Bwabanigonj Paurashava	Solar Panel	2.55453
Bwabanigonj Paurashava	Housing Area	23.9803
Bwabanigonj Paurashava	Stadium	5.56982
Bwabanigonj Paurashava	Mosque Complex	1.07285
Bwabanigonj Paurashava	Multi Purpose Hall	0.98793
Bwabanigonj Paurashava	Sports Complex	1.47509



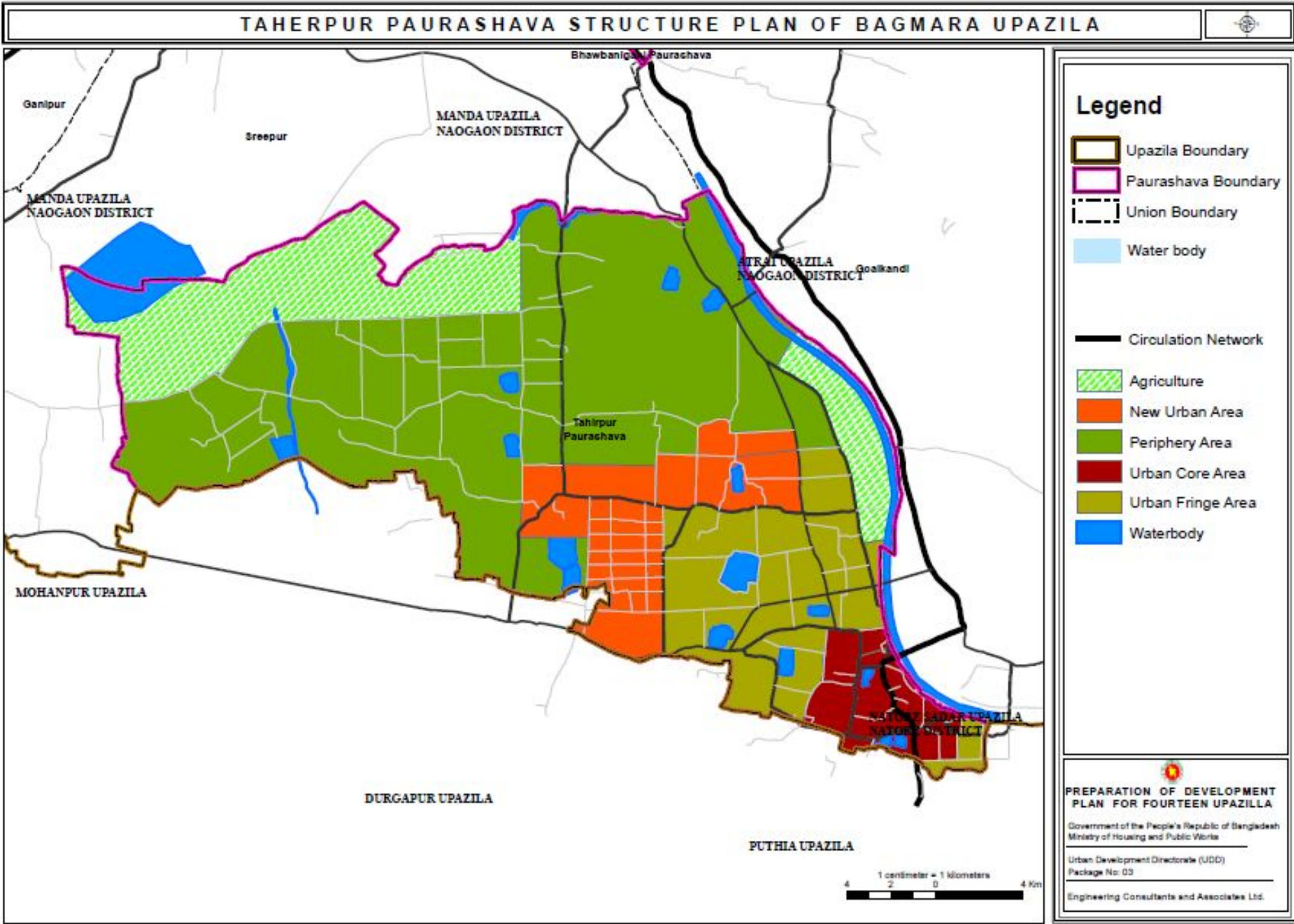
# Plot Schedule for Proposed Facilities (Bhawaniganj)

3	Shopping Complex	0.73848 1	1025	1027	1028	1029	1030	1031	1032	1033	Dogachi 173 001	Bwabanigonj Paurashava
				1036	1037	1038	1041	1045	1046	1047		
				1048	1061							
4	Mosque Complex	1.07285 24316	821	822	824	825	826	827	828	829	Dogachi 173 001	Bwabanigonj Paurashava (Ward-4)
				830	831	832	833	823				
5	Future Government Office	15.3498 49		1164	1170	1171	1172	1173	1174	1175	Takta Para 198 000,  Dogachi 173 001,  Paharpur 197 000	Bwabanigonj paurashava
				1176	1177	1178	1179	1179	1180	1181		
				1182	1183	1184	1185	1186	1187	1188		
				1189	1190	1191	1192	1193	1194	1195		
				1197	1198	1198	679	1158	1159	1160		
				1162	1165	468	469	470	471	472		
				473	474	475	476	480	481	482		
				483	484							
14	Waste Transfer Station	0.14863 7									Dogachi 173 001	Bhawbaniganj Paurashava(Wa rd-04)
			854	855	856	1195						
15	Bus Terminal	2.43083 9	279	280	281	282	286	287	288	289	Dargamaria 246 000	Bhawbaniganj Paurashava(Wa rd-08)
				290	291	292	293	294	295	296		
				297	298	298	299	300	302	303		
				304	308	309	428	429	430	431		
				432	433	434	435	436	441	657		
				658	660	660	661	662	663	664		
				665	666	671	672	426				
21	Hospital	1.74305 5	1044	1045	1053	1056	732	732	733	734	Dogachi 173 001	Bhawbaniganj Paurashava(Wa rd-04)
				756	758	759	760	761	762	763		
				764	765	766	767	768	769	775		
				776	777	778	779	1054	1055	1057		



# Urban Structure Plan: Taherpur Paurashava

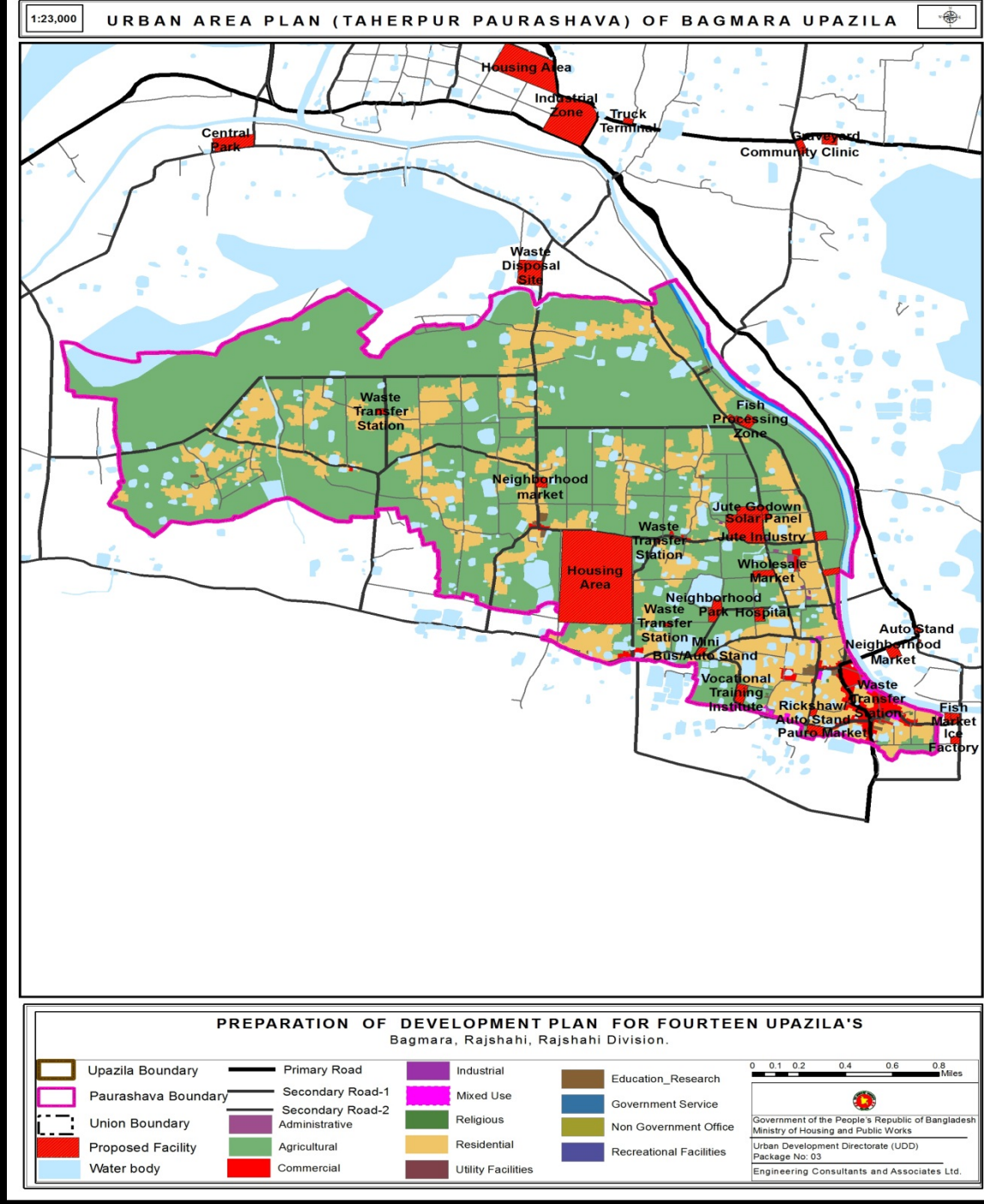
Type	Area
Periphery Area	1367.26546
Urban Core Area	137.085676
New Urban Area	302.739842
Agriculture	503.300351
Urban Fringe Area	422.878452
Waterbody	199.605746





# Proposed Urban Area Plan of Taherpur Pourashava

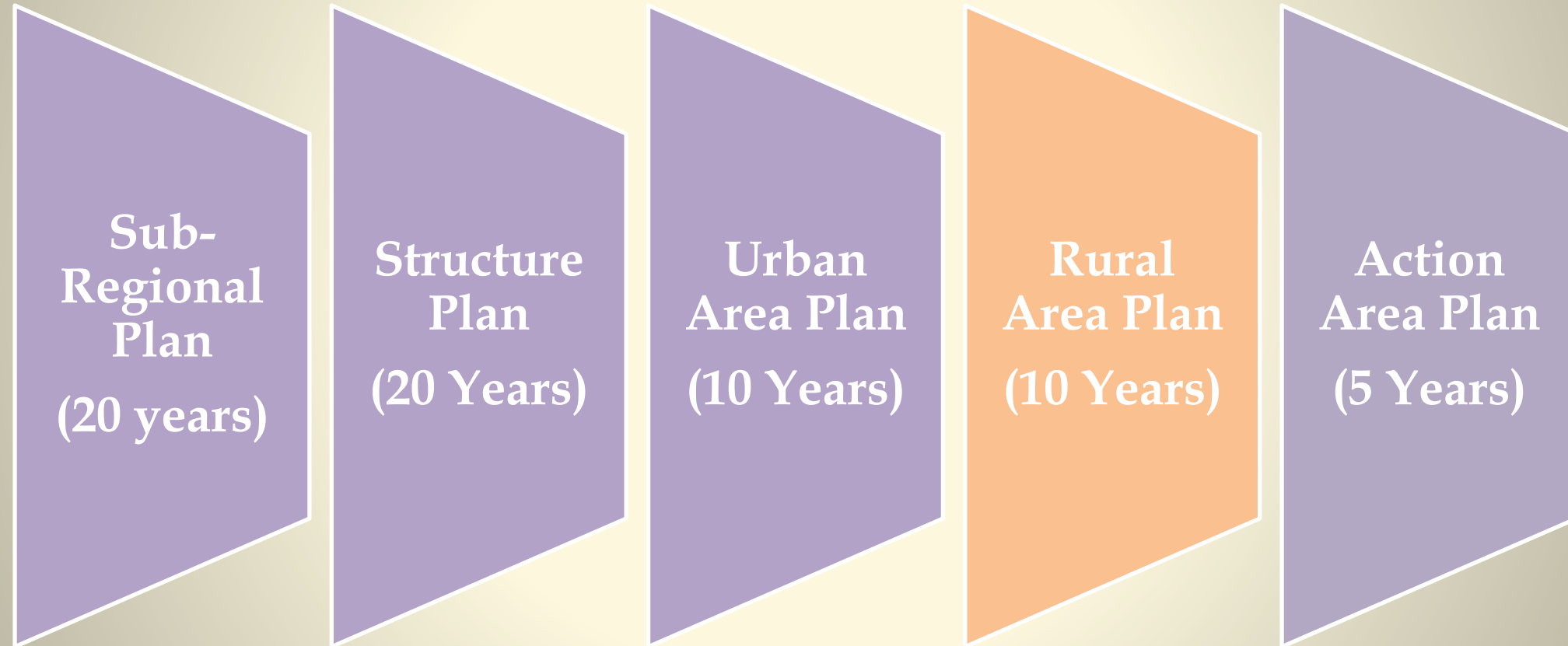
Taherpur Paurashava	Housing Area	87.9684
Taherpur Paurashava	Water Treatment Plant	1.45313
Taherpur Paurashava	Waste Transfer Station	0.13105
Taherpur Paurashava	Waste Transfer Station	0.11918
Taherpur Paurashava	Waste Transfer Station	0.25235
Taherpur Paurashava	Public Toilet	0.09015
Taherpur Paurashava	Waste Transfer Station	0.73571
Taherpur Paurashava	Waste Transfer Station	0.43652
Taherpur Paurashava	Mini Bus/Auto Stand	0.83461
Taherpur Paurashava	Rickshaw/ Auto Stand	0.62336
Taherpur Paurashava	Neighborhood Park	1.37854
Taherpur Paurashava	Pauro Market	2.00816
Taherpur Paurashava	Neighborhood Park	2.92357
Taherpur Paurashava	Neighborhood market	1.56327
Taherpur Paurashava	Wholesale Market	1.8213
Taherpur Paurashava	Vocational Training Institute	2.49237
Taherpur Paurashava	Fish Processing Zone	1.77861
Taherpur Paurashava	Jute Industry	12.4998
Taherpur Paurashava	Jute Godown	2.70281
Taherpur Paurashava	Electric Sub Station	0.70914
Taherpur Paurashava	Solar Panel	0.57777
Taherpur Paurashava	Fish Mrket	0.37835
Taherpur Paurashava	Ice Factory	0.33196
Taherpur Paurashava	Cold Storage	0.37423
Taherpur Paurashava	Hospital	1.80051



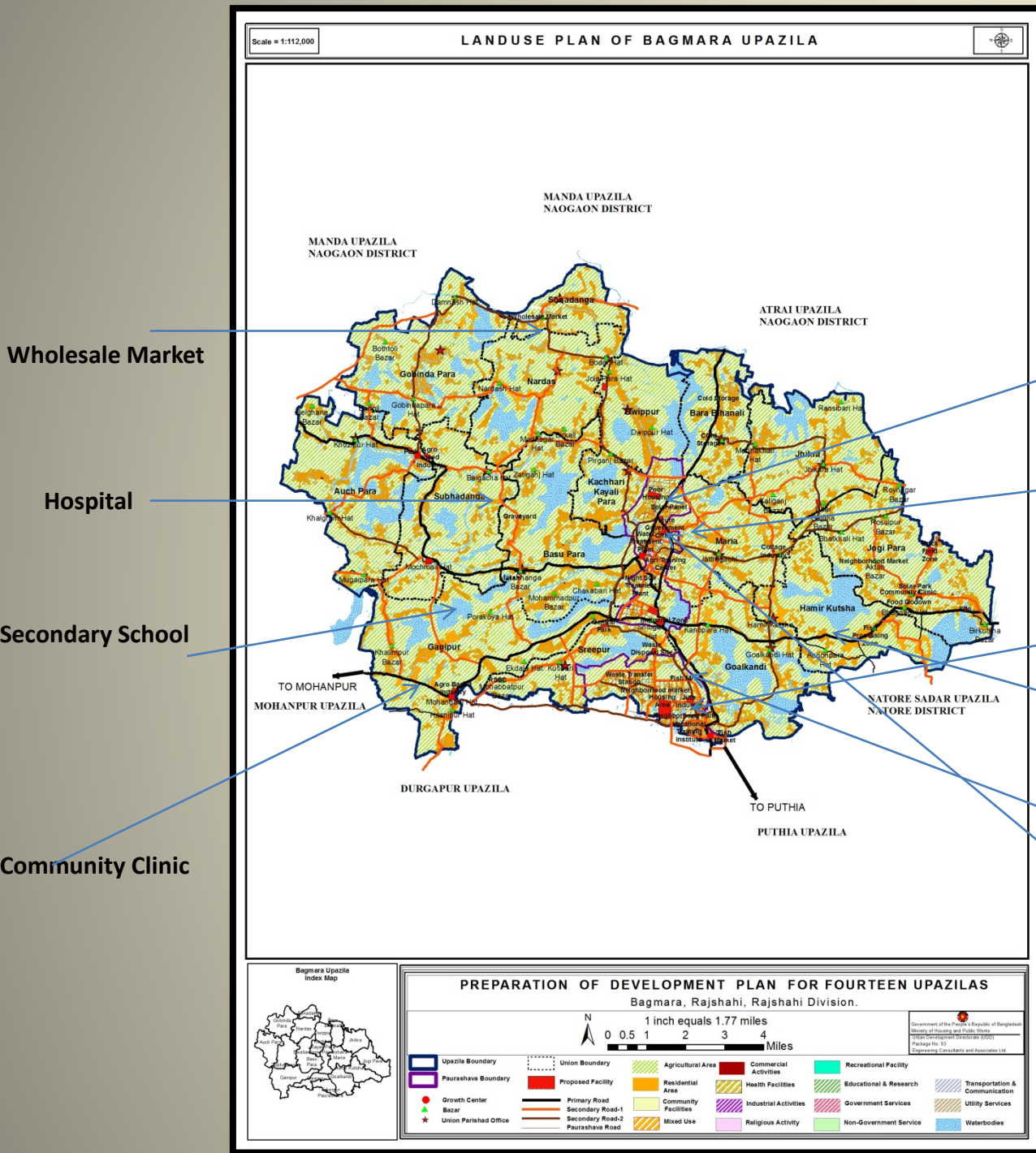
# Plot Schedule for Proposed Facilities (Taherpur)

8	Waste Transfer Station	0.131048	115	120	202	208	230	237	238	Jaganathpur 152 000	Tahirpur Paurashava( Ward-05)	
9	Waste Transfer Station	0.119176	1513	1514						Taherpur Paschim 153 000	Tahirpur Paurashava( Ward-02)	
10	Waste Transfer Station	0.252347	1811	1758 1779	1770 1809	1771	1772	1773	1774	1775	Taherpur Paschim 153 000	Tahirpur Paurashava( Ward-02)
11	Public Toilet	0.090153	1672	1616	1646	1669					Taherpur Paschim 153 000	Tahirpur Paurashava( Ward-02)
12	Waste Transfer Station	0.735707	1342	1343 1164 1346	1365 1165 1354	1366 1170 1963	1394 1338 1339	1399 1340	1385 1344	1393 1345	Dakshin Koalipara 158 000	Tahirpur Paurashava( Ward-07)
13	Waste Transfer Station	0.436517	1762	1764 1790	1765 1761	1771 1763	1781 1815	1782	1783	1787	Jaganathpur 152 000	Tahirpur Paurashava( Ward-05)
18	Mini Bus/Auto Stand	0.834607	884	885 896	886 897	887 898	891 899	892 894	893 907	895	Taherpur Paschim 153 000	Tahirpur Paurashava( Ward-02)
19	Rickshaw/ Auto Stand	0.623361	1431	1433 1475	1438	1464	1470	1476	1477	1660	Taherpur Paschim 153 000	Tahirpur Paurashava( Ward-02)

# Rural Area Plan







# Proposed Rural Area Plan of Bagmara Upazila

The proposed facilities are:

- ✓ Waste Disposal Site- Taherpur
- ✓ Night Soil Treatment - Bwabanigonj
- ✓ RSSC (Rural Sales And Service Center)
- ✓ Agro Based Industry- Maria
- ✓ Cottage Industry- Maria
- ✓ Cold Storage- Ganipur, Dwippur
- ✓ Fish Processing Zone- Goalkandi
- ✓ Neighborhood Park - Auch Para, Subhadanga, Sreepur
- ✓ Primary School-Ganipur, Bara Bihanali
- ✓ Secondary School- Ganipur
- ✓ College-Hamir Kutsha, Dwippur, GoalKandi
- ✓ Mini Bus/Auto Stand
- ✓ Health Center- Basu Para, Gobinda Para, Ganipur, Hamir Kutsha, Jhikra, Nardas, Sonadanga, Subhadanga, Bara Bihanali, Dwippur
- ✓ Waste Transfer Station- Every Union
- ✓ Wholesale Market - Sonadanga

# Proposal In Rural Area

Auch Para	Agro based Industry
Auch Para	Neighborhood Market
Auch Para	Hospital
Auch Para	Park
Auch Para	Graveyard
Auch Para	Vocational Training Institute
Auch Para	Cold Storage
Auch Para	Food Godown
Auch Para	Solar Park
Auch Para	RSSC
Auch Para	RSSC
Auch Para	RSSC
Auch Para	Community Clinic
Auch Para	Community Clinic
Auch Para	Neighborhood Market
Auch Para	Graveyard

Bara Bihanali	RSSC
Bara Bihanali	Cold Storage
Bara Bihanali	Neighborhood Market
Bara Bihanali	Community Clinic
Bara Bihanali	Neighborhood Market
Bara Bihanali	Cold Storage
Bara Bihanali	Community Clinic

Kachhari Kayali Para	Neighborhood Market
Kachhari Kayali Para	Community Clinic
Kachhari Kayali Para	RSSC
Kachhari Kayali Para	Graveyard

Basu Para	RSSC
Basu Para	Community Clinic
Basu Para	RSSC
Basu Para	Community Clinic
Basu Para	Graveyard
Basu Para	RSSC
Basu Para	Community Clinic

Dwippur	Brick Field Zone
Dwippur	RSSC
Dwippur	Community Clinic
Ganipur	Agro Based Industry
Ganipur	Neighborhood Market
Ganipur	RSSC
Ganipur	RSSC
Ganipur	Community Clinic
Ganipur	Graveyard
Ganipur	Community Clinic

Hamir Kutsha	Agro Based Industry
Hamir Kutsha	Fish Processing Zone
Hamir Kutsha	Fish Market
Hamir Kutsha	Neighborhood Market
Hamir Kutsha	RSSC
Hamir Kutsha	Community Clinic
Hamir Kutsha	RSSC
Hamir Kutsha	Community Clinic

Nardas	Community Clinic
Nardas	RSSC
Nardas	Community Clinic
Nardas	RSSC

Gobinda Para	RSSC
Gobinda Para	Community Clinic
Gobinda Para	Neighborhood Market
Gobinda Para	Community Clinic
Gobinda Para	Cold Storage
Gobinda Para	Graveyard
Gobinda Para	RSSC

Goalkandi	Neighborhood Park
Goalkandi	Fish Market
Goalkandi	Cold Storage
Goalkandi	Neighborhood Market
Goalkandi	Auto Stand
Goalkandi	Waste Transfer Station
Goalkandi	Graveyard
Goalkandi	RSSC
Goalkandi	Community Clinic
Goalkandi	RSSC

Jhikra	Agro Based Industry
Jhikra	Community Clinic
Jhikra	RSSC
Jhikra	Neighborhood Market
Jhikra	Community Clinic
Jhikra	Cold Storage
Jhikra	RSSC
Jhikra	Community Clinic

Jogi Para	Brick Field Zone
Jogi Para	Community Clinic
Jogi Para	Food Godown
Jogi Para	Solar Park
Jogi Para	Neighborhood Market
Jogi Para	Silo
Jogi Para	Wholesale Market

Maria	Future Government Office
Maria	Park
Maria	Neighborhood Market
Maria	Community Clinic
Maria	Neighborhood Market
Maria	Agro Based Industry
Maria	Cottage Industry
Maria	RSSC
Maria	RSSC
Maria	Community Clinic

Sreepur	Waste Disposal Site
Sreepur	Central Park
Sreepur	RSSC
Sreepur	Community Clinic
Sreepur	Neighborhood Market

Subhadanga	Community Clinic
Subhadanga	Neighborhood Market
Subhadanga	Agro based Industry

Sonadanga	Wholesale Market
Sonadanga	RSSC
Sonadanga	Community Clinic

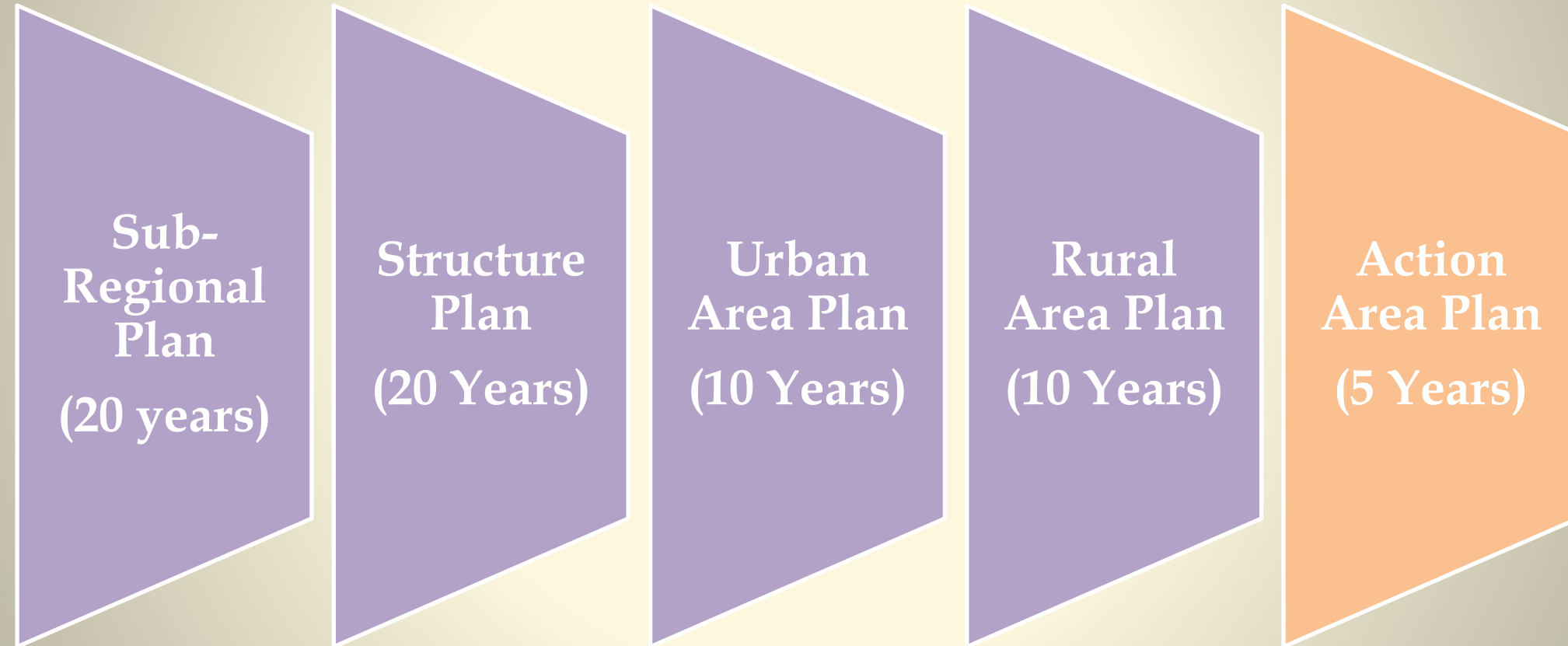


# Plot Schedule for Proposed Facilities (Rural Areas)

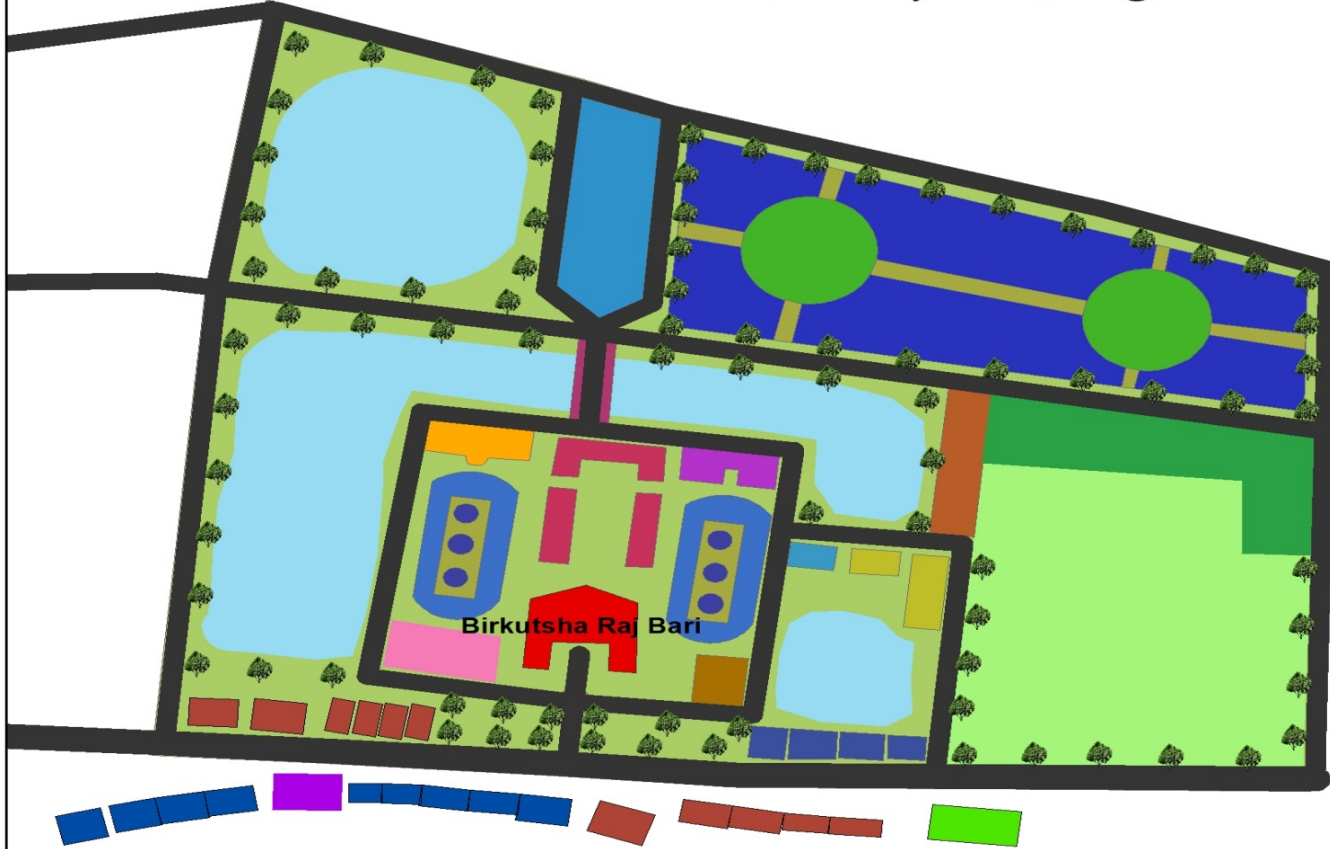
Serial No.	Name	Area in acres	Plot No.					MAUZA JL S	Union/ Paurashava
5	Neighborhood Park	1.37854	273	273	273	277	277	Taherpur Paschim 153 000, Muthrapur 154 000, Hasnipur 256 000	Taherpur Paurashava(Ward-02, Ward-04), Goalkandi
				279	279	313	320		
				324	324	361	1429		
				1430	1431	1454	1456		
				1457	322	1430	1459		
						847			
6	Fish Market	1.190312	10976					Ramrama 257 004	Goalkandi
7	Waste Disposal Site	7.664404	821	822	824	825	826	Ramguia 160 000	Sreepur



# Action Area Plan

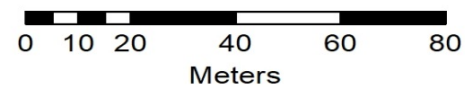
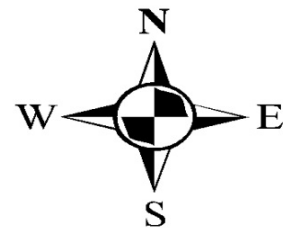


## Action Plan for Bir Kutsha Raj Bari, Bagmara

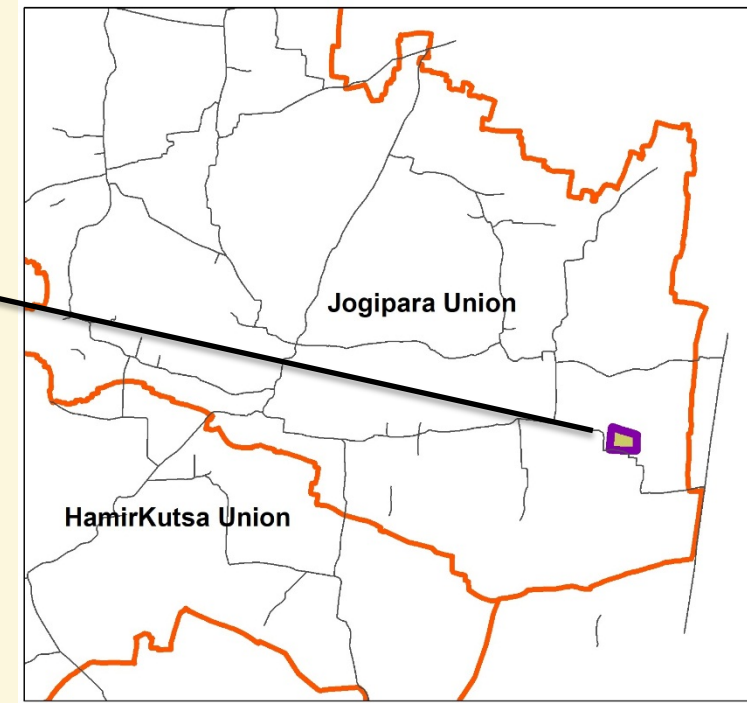


### Legend

	Trees		Parks
	Road		Bridge
	Bank		Car Parking
	High school		Graveyard
	Land Office		Museum
	Post Office		Play Field
	Proposed Market		Roundabout
	Raj bari Palace		Temple
	Primary school		Birkutsha Raj Bari
	Waterbody		Shop
	House		



## Action Area Plan for Bir Kutsha Raj Bari, Bagmara



Area Of Proposed Action Area Plan is 8.5 Acres

## Action Area Plan ( Neighbourhood Park, Taherpur )

### Legends

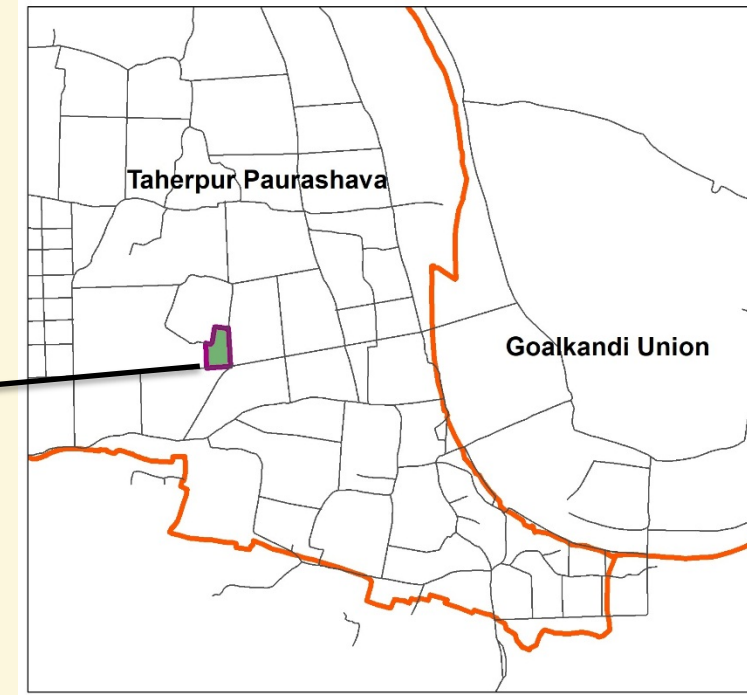
- Trees
- Bench
- Playground for Kids
- Food Court Zone
- Playground
- Parking Lots
- Circulation Network
- Neighbourhood Park



0 4.5 9 18 27 36  
Meters



## Action Area Plan of Neighborhood Park, Taherpur



Area Of Proposed Action Area Plan is 3.14 Acres



## Action Area Plan (Integrated Community Service Zone)



Children Park

## Action Area Plan of Integrated Community Service Zone, Bhawaniganj

Area Of Proposed Action Area  
Plan is 5.16 Acres

# Draft TMC Meeting







## TMC MEETING AT URBAN DEVELOPMENT DIRECTORATE

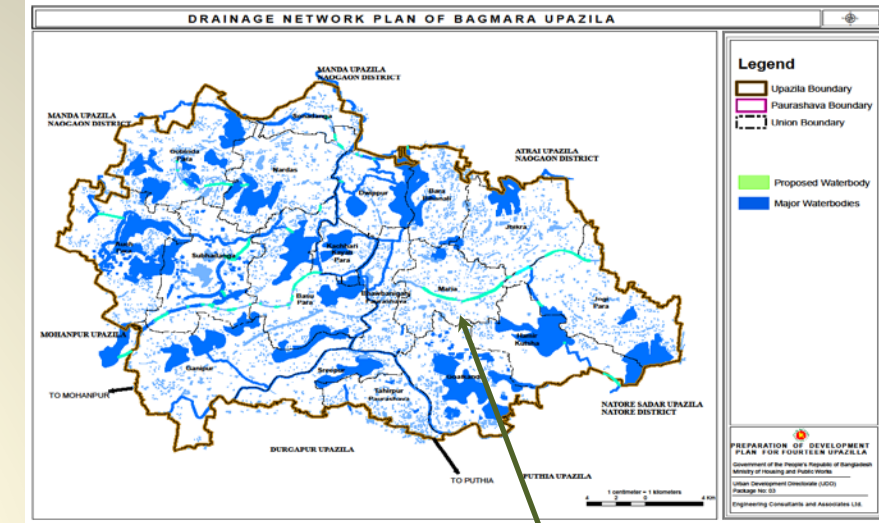
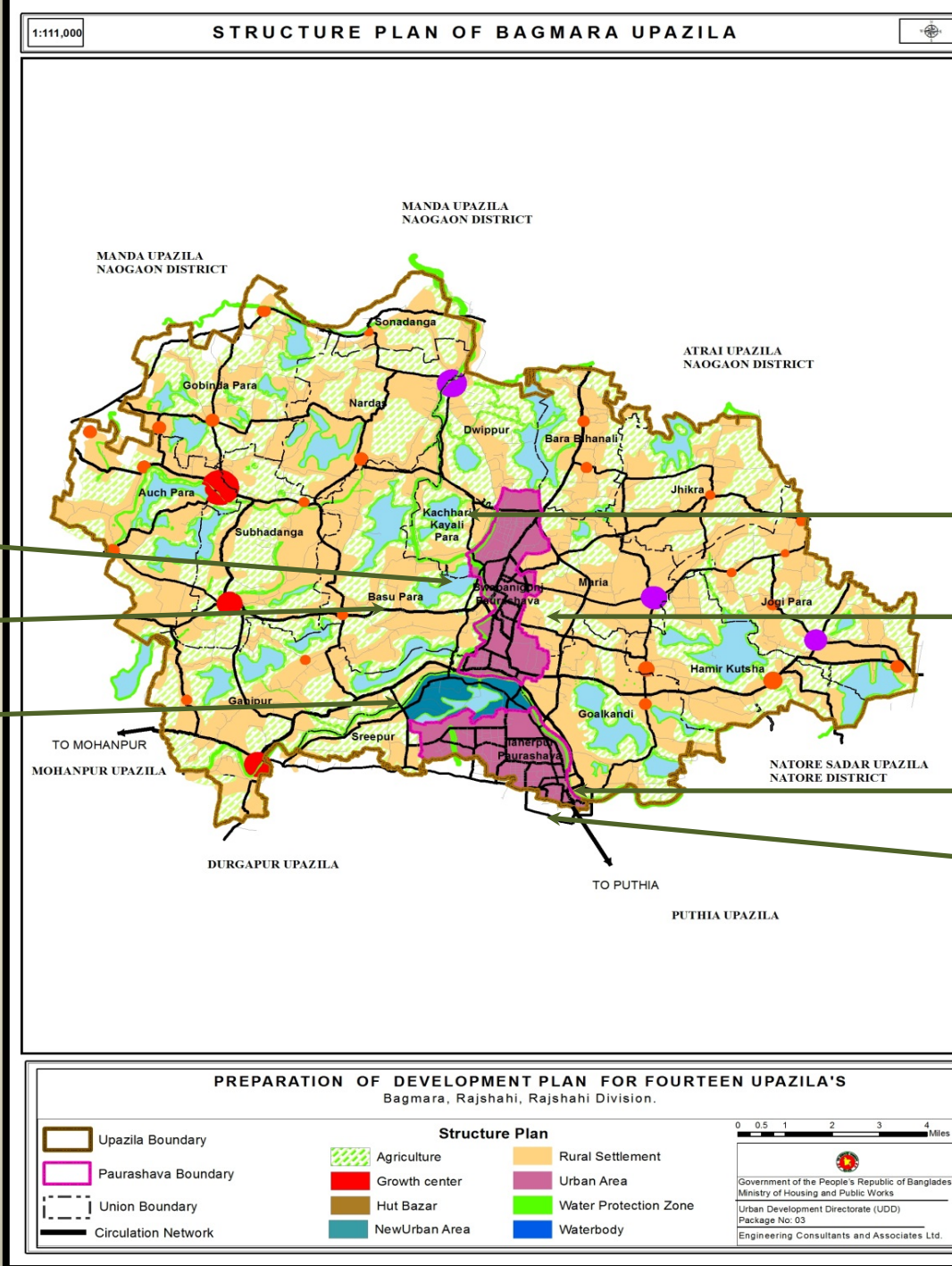




Comments and  
Adjustment  
status

Comments	Action
Total Water Network Among Beels	Has been Addressed
Solar Park	Has been Addressed
Conflict Zone	Has been Addressed
As the two Paurashava areas are situated side by side and there are two rivers named Baronoi and Fokirni go on, the two Paurashava area can be merged under one Paurashava area	Has been Addressed
Identifying the Sources of River Channels	Has been Addressed
Bypass to Puthia at the outside of the boundary	Has been Addressed
Proposed Housing Area at BwabanigonjPaurashava	Has been Addressed
Roads will be Straight	Has been Addressed
Allocate Bridges in Regional Network	Has been Addressed
Helipad at Stadium	Has been Addressed
Government Offices Will be Allocated in Administrative Zone	Has been Addressed
Electric Service Station at Each Paurashava	Has been Addressed
Creation of a Eco Sensitive Zone with the Beels	Has been Addressed
Swimming Pool	Has been Addressed
Creation an Urban Network by fixing Water Network	Has been Addressed
Cold Storage Beside Taherpur Bazar	Has been Addressed
A Park Between Two Paurashava Areas	Has been Addressed
Bypass Road at Maria Union	Has been Addressed
Change the location of Waste Disposal Site	Has been Addressed

# Comments and Adjustment status



Bypass for Bhawaniganj Paurashava

Road Straighten

New Urban Area

Eco Sensitive Zone

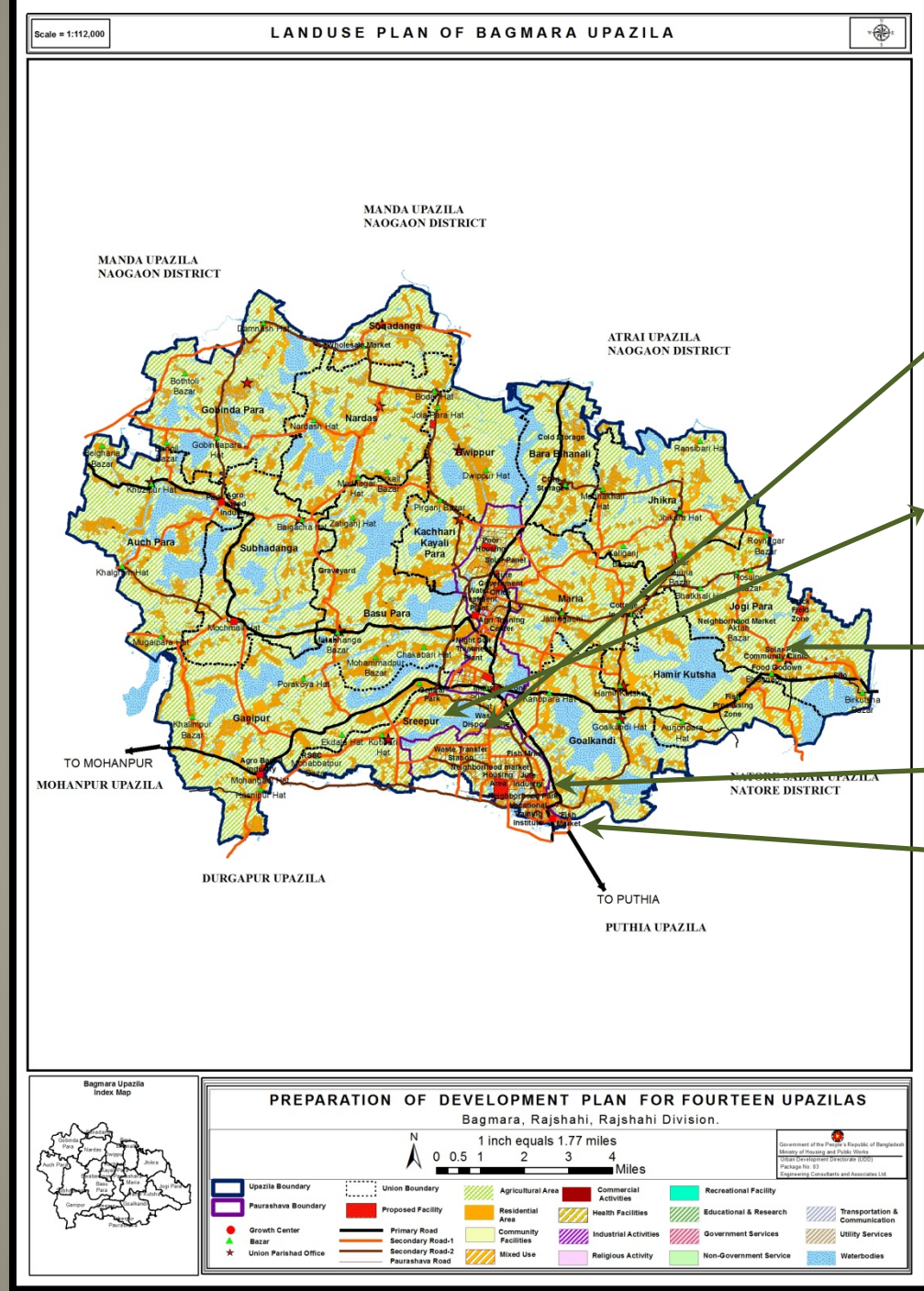
Outer Bypass

Right Bypass for Taherpur Paurashava (For Goalkandi Road)

Left Bypass for Taherpur Paurashava (For Mohonpur Road)

Water Network among Beels, Canal and River Re excavation





# Comments and Adjustment status

Waste Disposal Site Location Change

Common Park Area for two Paurashava

Solar Park

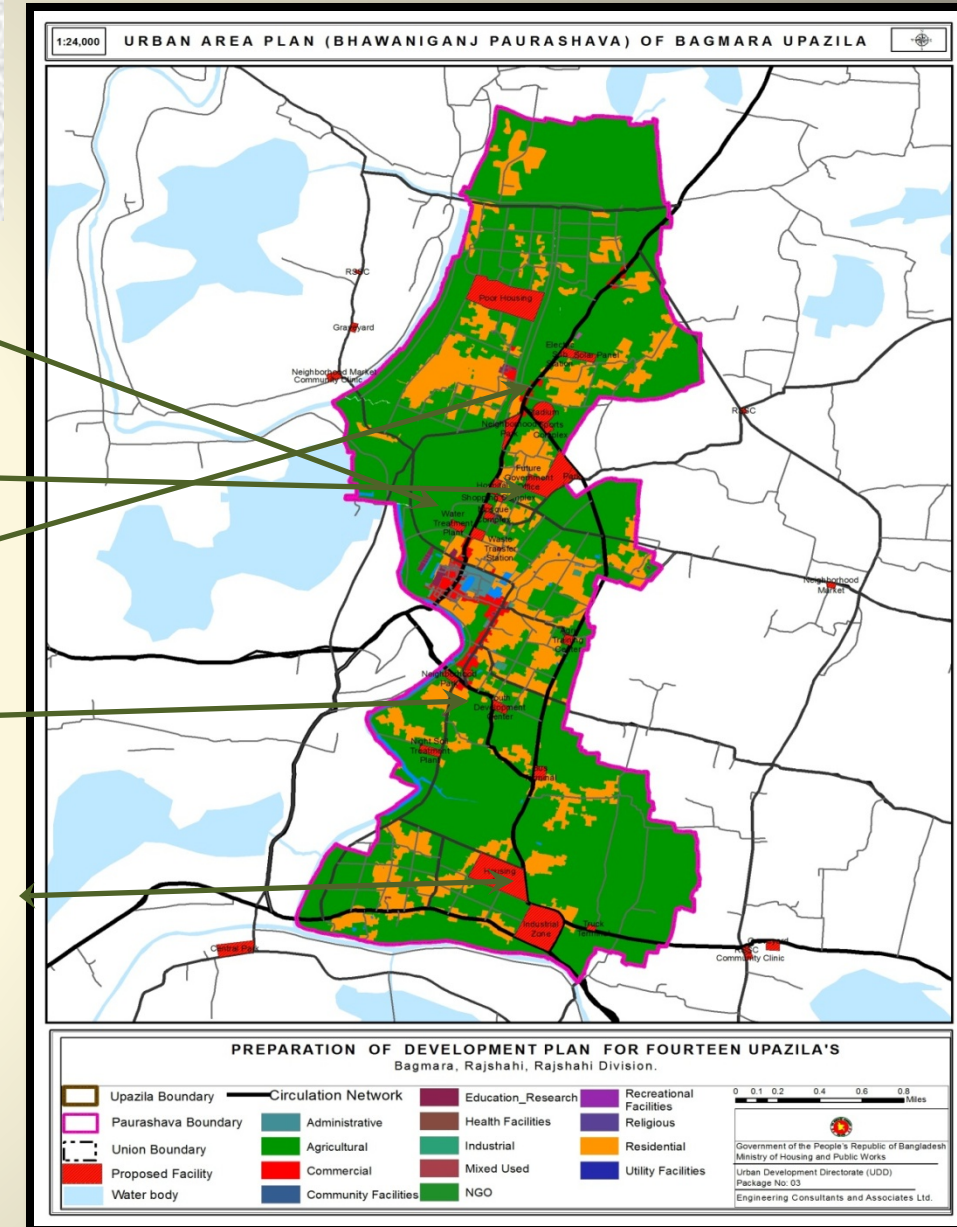
Electric Sub Station

Cold Storage and Ice factory at Taherpur

Electric Sub Station

Government Offices

Housing Area





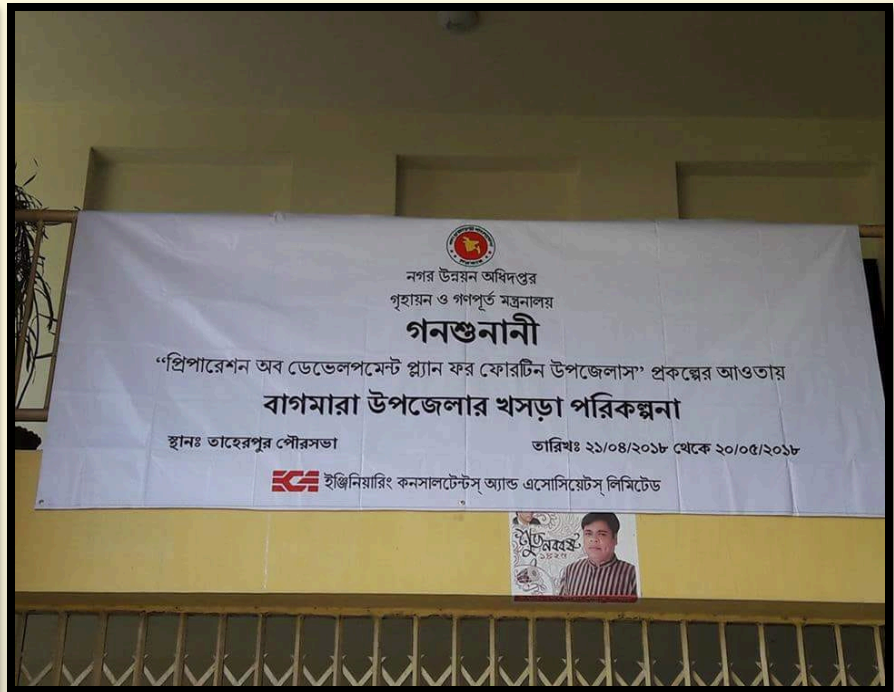
# Public Hearing







Newspaper,  
Miking, Banner  
Announcement



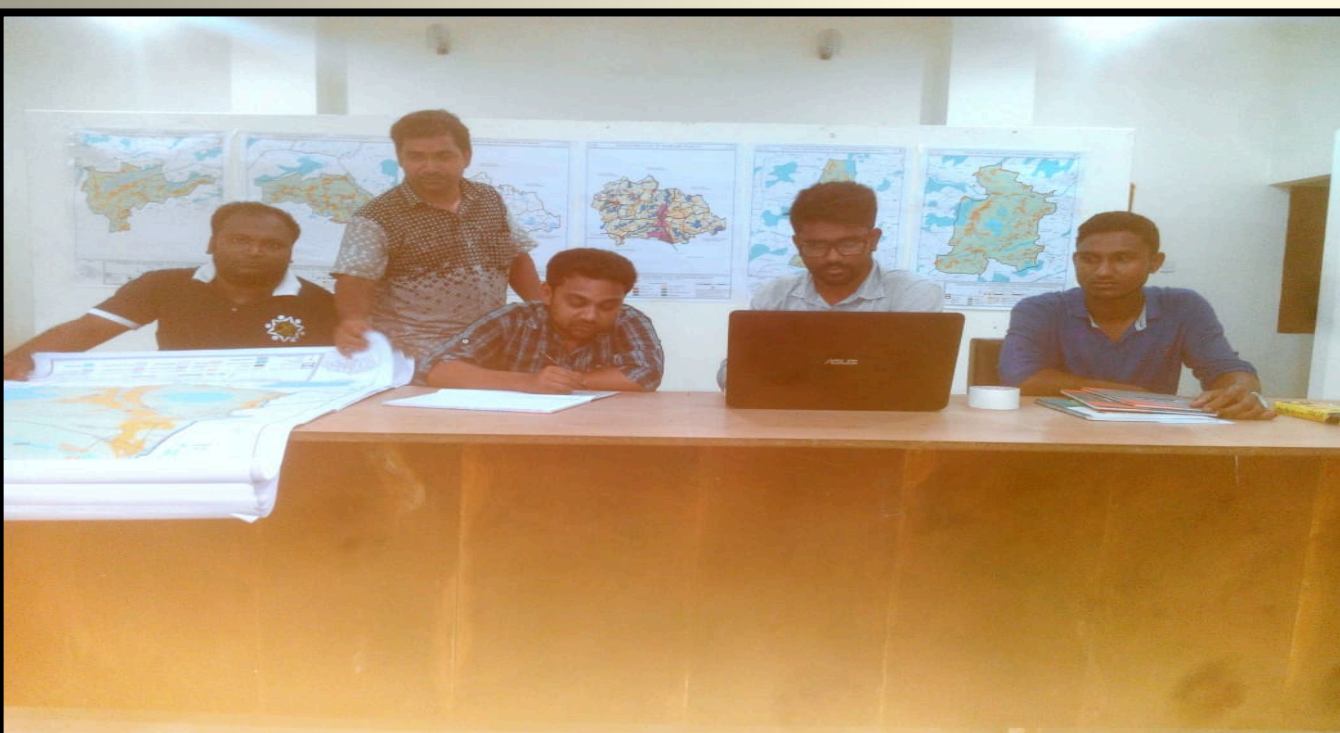




## Miking at Union Level









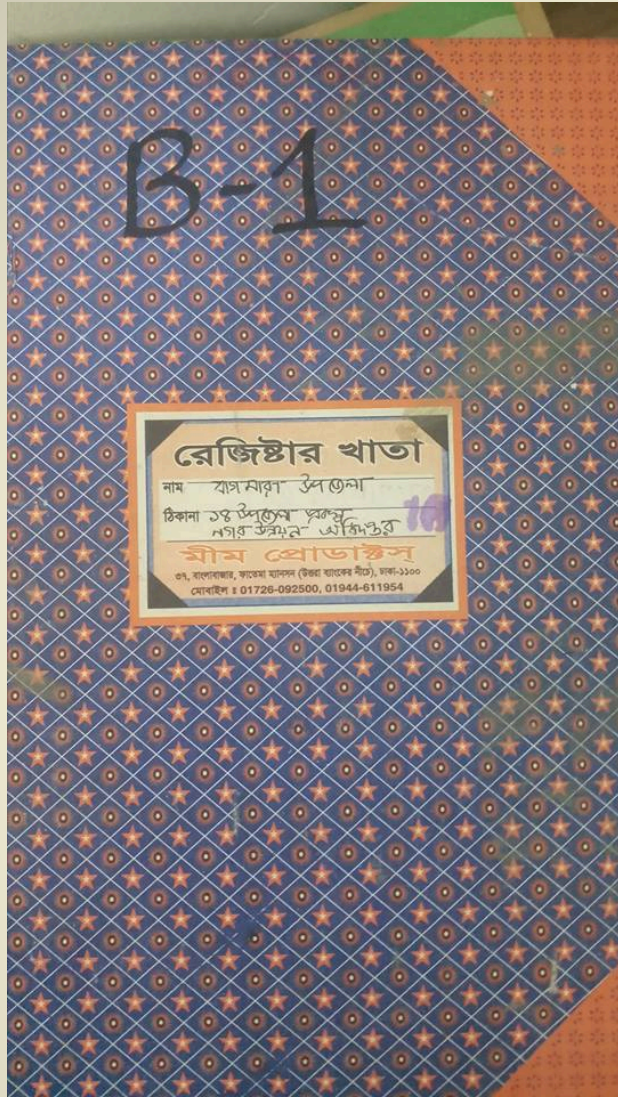
ভারী যন্ত্রবাহন চলাচল এবং জোয়ার  
যাত্রার আমতে মুক্ত রাখার জন্য  
জোয়ারগাত ডিগ্ৰী বালুভূমি সম্মুখ  
পেট স্থানীয় যক্ষিবর্ন, নদীর উপর  
একটি বীজ নিয়াম।

০৫ দীক্ষাভ্যাস অবস্থিত উত্তরবঙ্গীয়  
মহাবিদ্যালয় কলিকাতা, পুষ্ক ভবন  
মহানগর হিন্দু বিশ্ববিদ্যালয়  
কলিকাতা, বোম্বে মহানগর  
সিমান্ত প্রদেশে ।

০৭ ডায়ারী দ্বারা প্রাপ্ত আর্থিক  
উন্নতি, প্রাপ্তি প্রাপ্ত প্রাপ্ত  
প্রাপ্তি ।

০৪) প্রাচীনতম ও দারাজাতী হালাল  
স্টেডিজিয়ারটি মিয়ান ফালে প্রকাশিত  
আনন্দ সুবিধা ২০।

০৭/শিল্পদেও সামগ্রিক বিকাশ,  
স্বয়ংসিদ্ধি ও চিন্তাদানও তদ  
বদর্শি সামগ্রিক শিল্পদেও



מס' עמ'	שם	תאריך	מס' עמ'
1	המלך המשיח	ה'תש"ח	1
2	המלך המשיח	ה'תש"ח	2
3	המלך המשיח	ה'תש"ח	3
4	המלך המשיח	ה'תש"ח	4
5	המלך המשיח	ה'תש"ח	5
6	המלך המשיח	ה'תש"ח	6
7	המלך המשיח	ה'תש"ח	7
8	המלך המשיח	ה'תש"ח	8
9	המלך המשיח	ה'תש"ח	9
10	המלך המשיח	ה'תש"ח	10
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12	המלך המשיח	ה'תש"ח	12
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19	המלך המשיח	ה'תש"ח	19
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27	המלך המשיח	ה'תש"ח	27
28	המלך המשיח	ה'תש"ח	28
29	המלך המשיח	ה'תש"ח	29
30	המלך המשיח	ה'תש"ח	30

1) आवासीय (होम) लव, आवासीय  
 2) आवासीय (होम) लव, आवासीय  
 3) आवासीय (होम) लव, आवासीय  
 4) आवासीय (होम) लव, आवासीय  
 5) आवासीय (होम) लव, आवासीय

2) பெரும்புதங்கள் மாறி உரு  
வாய்வு மூலம் பூக்கள் பாய்வு  
மேல் பூக்கள் நிழலாய்வு

2) संस्कृत - वर्ण

18. 19/10/2020 - Monday

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 ၂- ဇီဝ ၁ ကာလ ၁ ကာလ

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आ. प्रशासनिक व्यय  
वर्ष २०२२, २०२३, २०२४  
प्रमाणित, सचिवारी।

3/ 2018 06 10

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2)  $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

பெரிய கிணறுக்குள் சென்று

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# Comments and Plan adjustment (Upazila)

Serial no.	Notebook Serial no.	Name	Location and Address	Comments	Consulting farms Comments
01.	04	Shamim Osman	Chowgasi	Need water drainage system ,wards no- 4 and 5 Mouza no-(72-73).	Already proposed a planned drainage system in Urban area.
02.	05	Mohammed Shakil	Mohanpur	Need passenger shade beside Mohonpurroad.	Have been proposed
03.	06	Md. Tushar Ali	Vabaniganj, municipality	Need permanent burial ground at BaghmaraUpzilla	Have been proposed
04.	07	Md. Salam Uddin	Vabaniganj, municipality	Need Park	Have been proposed
05.	08	Md. Ibrahim	Vabaniganj, municipality	Need Youth Development Training Centre	Already proposed in two urban areas
06.	09	Abdul Jalil	Uttar Ekdala	Need permanent waste dumping place	Have been proposed
7.	12	Sree Horan	Uttar Ekdala	Need cremation ground (shoshanghat)	Have been proposed



# Comments and Plan adjustment (Upazila)

8.	13	Shobuj Ali	Vabaniganj	Need playground	Has been Proposed
9.	14	Md. Hatem	Dangasi	Primary school is needed at Dangachivillage.	Has been Proposed
10.	15	SreeDipok	Borokoa, Borobihanoli Union	Need playground	Has been Proposed
11.	16	Md. Monzu	Dorgamaria	School playground or playground need	This is under concern of local municipality
12.	17	MdMamun	Dangasi, Vabaniganj	Need Eidgah ground	Has been Proposed
13.	18	Md. Nayem	Bagmara	Stadium is needed	Has been Proposed
14.	19	Md. Mamunur Rashid	Dangasi	Graveyard needed	Has been Proposed
15.	21	Md. Jakirul	Dwogasi	Water supply station is needed	Has been Proposed
16.	22	MunirHosain	Dwogasi	Dustbin is needed	This is under concern of local municipality
17.	23	Md. ImtiasIsrak	Vabaniganj	Solar panel light system	Has been Proposed
18.	25	Md. Altab	Vabaniganj	Drainage system is needed	Has been Proposed
19.	26	Abdul Malake	Hadaetpara	Drainage system is needed	Has been Proposed
20.	28	Md. Montu shake	Dwogasi	Graveyard need	Will be proposed
21.	31	Md. Rajon	Vabaniganj	Mini Stadium is needed	A large stadium already proposed in two urban areas

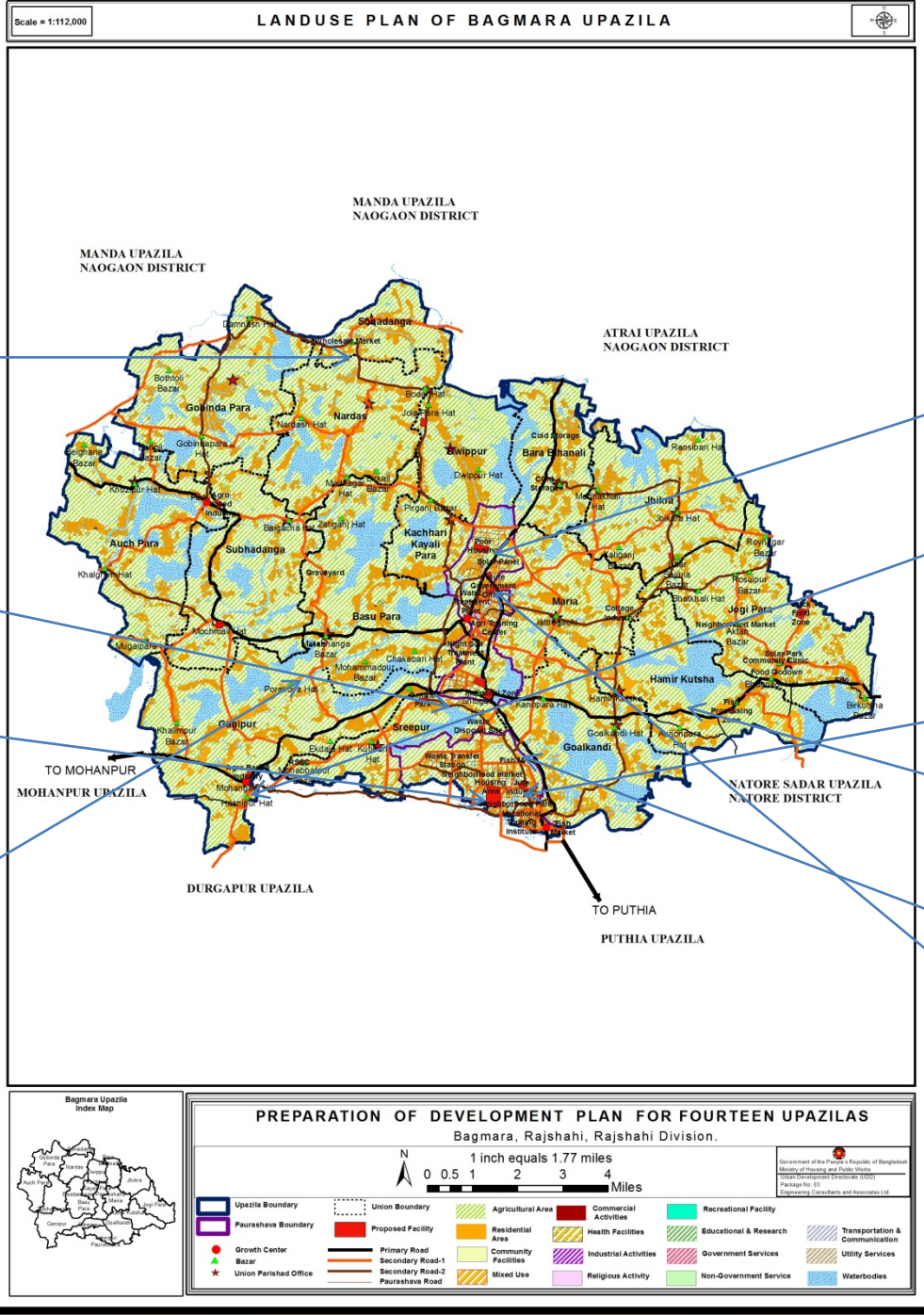
# Comments and Plan adjustment (Bhawaniganj Paurashava)

08	09	Md. Abdul Malek Mayor,	Vabaniganj Pourashova	<ol style="list-style-type: none"> <li>1. Construction of Bridge over Fakirniriver at Bhabanigar Degree Collage for removing traffic jam.</li> <li>2. Developed burial ground is needed</li> <li>3. Stadium is needed</li> <li>4. Children Park is to be needed.</li> <li>5. Buss/truck terminal is to be established at Chanpara.</li> <li>6. Solar panel is needed at Chanpara.</li> <li>7. Construction of public toilet every ward at Bhabanigang.</li> <li>8. Prevention of Fakirni river bank erosion for sustain haose.</li> <li>9. Construction of wider road from Taherpur to Naogon</li> <li>10. Construction of public toilet center of the Bhabanigang.</li> <li>11. Crippler hospitals is needed at Suryopara.</li> <li>12. Construction Vatenari training center.</li> <li>13. Need to build an industry at Surjopara, konipar, Dagafaria.</li> <li>14. Irrigation system developed by solar panel.</li> <li>15. Construct fish hatchery for fish processing at Bhabaniganj and Chanpara.</li> <li>16. Build an Open University for developing education system.</li> <li>17. Construct a bridge/culvert for transporting agricultural at Bilsoti and Matikata.</li> </ol>	Has been Proposed
04.	05.	Md. FayazUddin	7 no. ward	<ol style="list-style-type: none"> <li>1. children park</li> <li>2. Passenger shade.</li> <li>3. Supply pure drinking water.</li> <li>4. Agricultural training center</li> <li>5. House facility for homeless people</li> </ol>	Has been Proposed
05	06.	MossammotShahanara Woman Councilor ( 4,5,6 no ward)	5 no ward	Ward no-5 <ol style="list-style-type: none"> <li>1. Govt. graveyard, public toilet, and project to prevent river erosion is to be needed.</li> <li>2. Eidgah ground is to be needed.</li> <li>3. School is needed for autistic child.</li> </ol>	Has been Proposed
06	07.	Md. Rohidul Islam	VabaniganjPourashova	<ol style="list-style-type: none"> <li>1. Govt. graveyard</li> <li>2. Eidgah ground is to be needed.</li> <li>3. Seepage system is needed.</li> <li>4. Employments for educated unemployed women and youth.</li> </ol>	Has been Proposed
07	08	RunaBibi Woman Councilor (1,2,3 no ward)	VabaniganjPourashova	<ol style="list-style-type: none"> <li>1. Development of road</li> <li>2. Supply pure drinking water</li> <li>3. Public toilate is to be needed</li> </ol>	Proposed

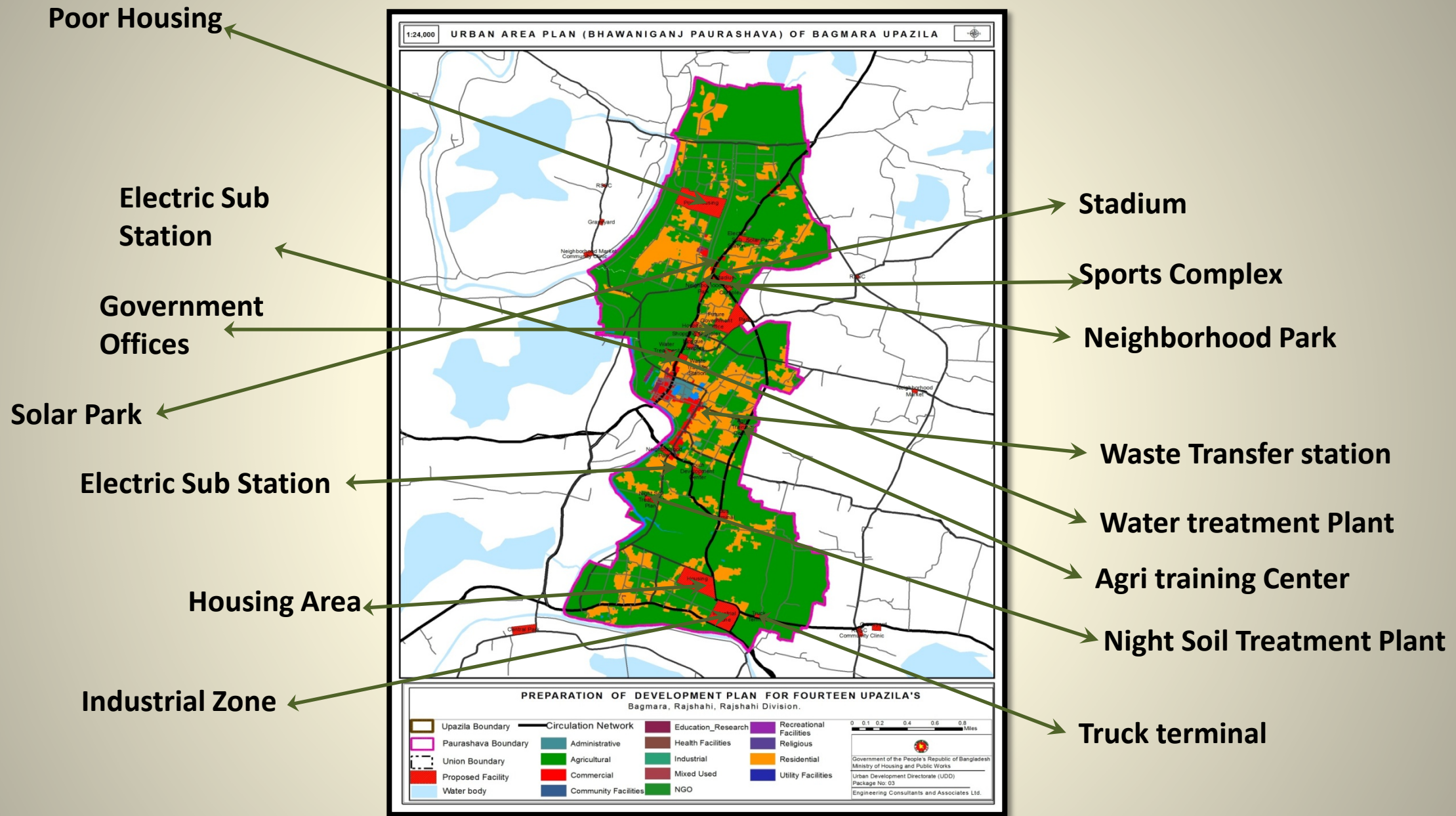


# Comments and Plan adjustment (Taherpur Paurashava)

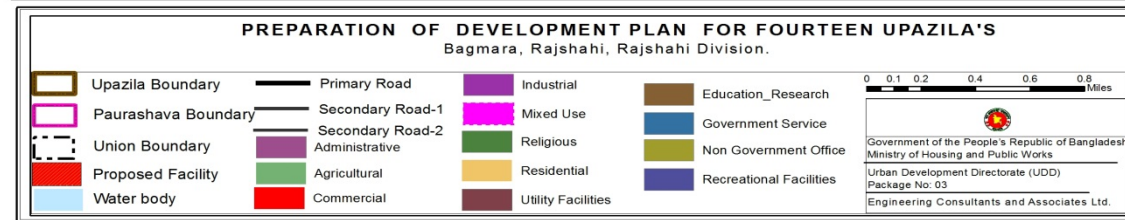
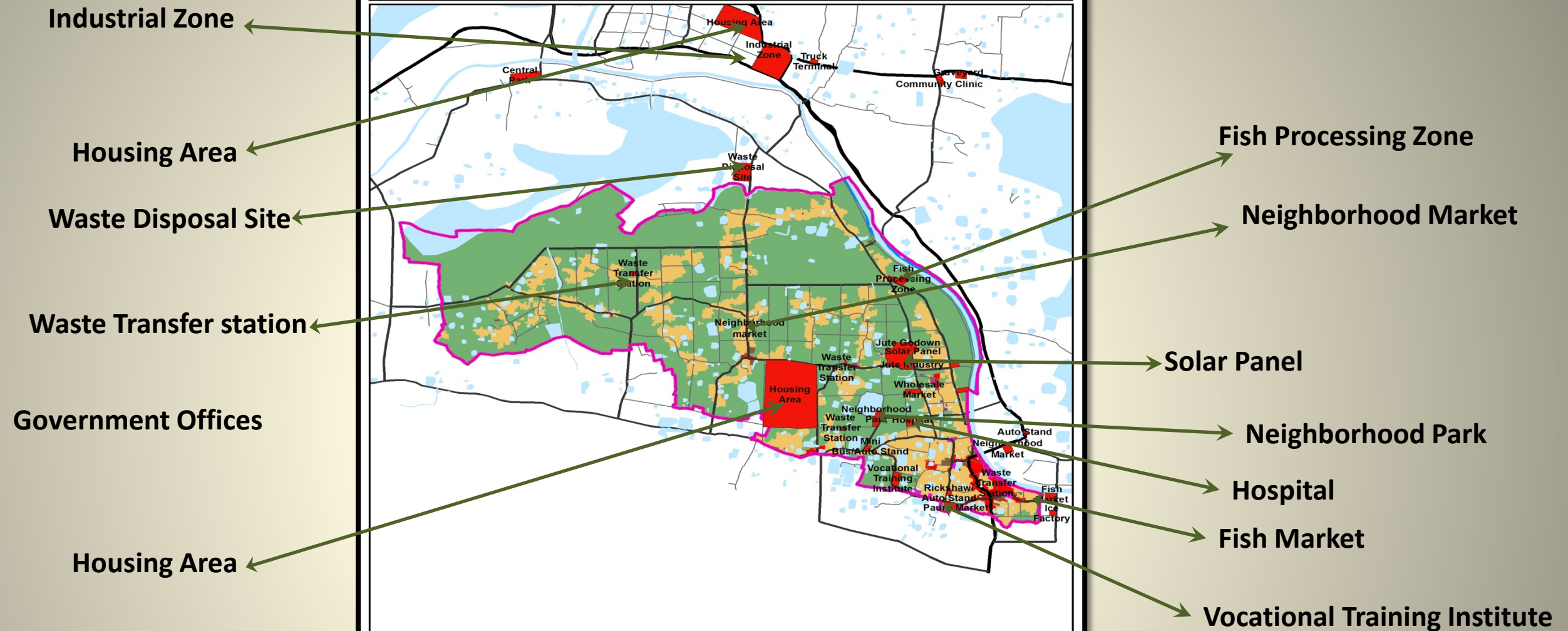
01.	02.	Md. Raisuddin Councilor	9. no ward	Nine Waste transfer stations build in nine Wards.	A large waste transfer station has been proposed in urban area.
02.	06.	Hafizul Islam Councilor	7 no ward	Managing Fish Processing Zone in large area.	Proposed already
03.	07.	Md. AubaliShordar Councilor	2 No. ward	Construct Bypass road from Walton-mor to Bachiapara.	Have been Addressed
04.	08.	Md, Abdul Rahim Professor Mohila College	Mohila college	Vocational training center is in the right place but another is needed at Zamgram village.	No need
05.	09.	Ashraful Islam	Jamgram	Vocational training center is needed at Zamgram village.	It has been proposed at urban area
06.	11.	Abdul Zalil Councilor	4 no ward	Several public toilet is essential at the market place in 1, 2, &3 No Ward.	Have been proposed
07.	13.	ShamimaAkhtar Beauty Councilor	7,8,9 no ward	Park situated in right place.	Have been proposed
08.	14.	Doctor Yeasin	2 no ward	1. Essential for construct a Medical and Maternity center. 2. Need nine Community Clinic in nine wards.	Have been proposed
9.	15.	MdHasanuzzaman Primary teacher	2 no ward	Fire Brigade	Will be Addressed
10.	16.	Md. AyubaliShorkar	2. No ward	Need to manage drainage system	Have been proposed
11.	18.	Taposh Kumar pintu councilor	9. no ward	Construct a bridge over Barnoy river in 1No Ward.	Will be Addressed
12.	19.	Abdur Rahim Principle	Mohila college	Environmental Office is needed preservation of agricultural product and meat processing	Will be Addressed
13.	21.	Abulkalam Azad Mayor	Taherpur.	A stadium and children park is needed.	Have been proposed



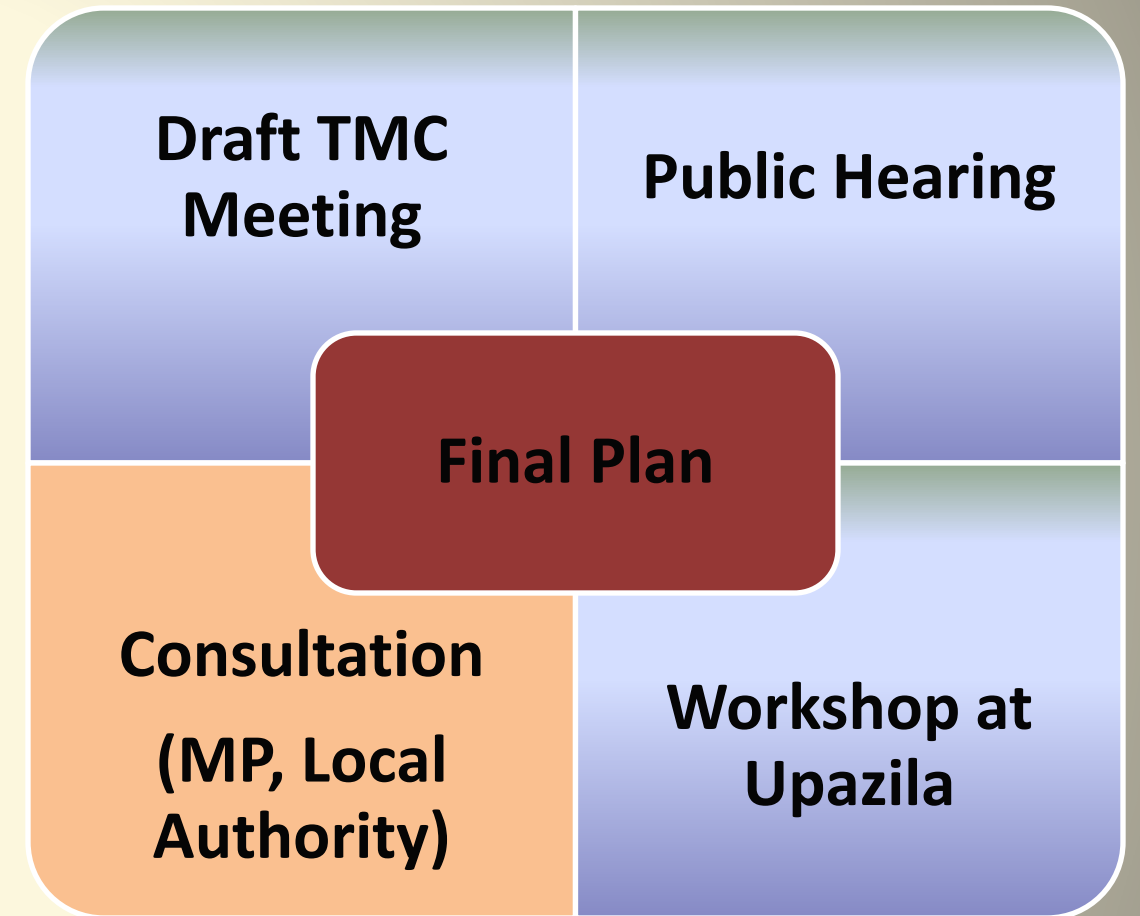








# **Consultation (MP Meeting, Local Authority)**





## PUBLIC PARTICIPATION AND LOCAL CONSULTATION





## PUBLIC PARTICIPATION AND LOCAL CONSULTATION



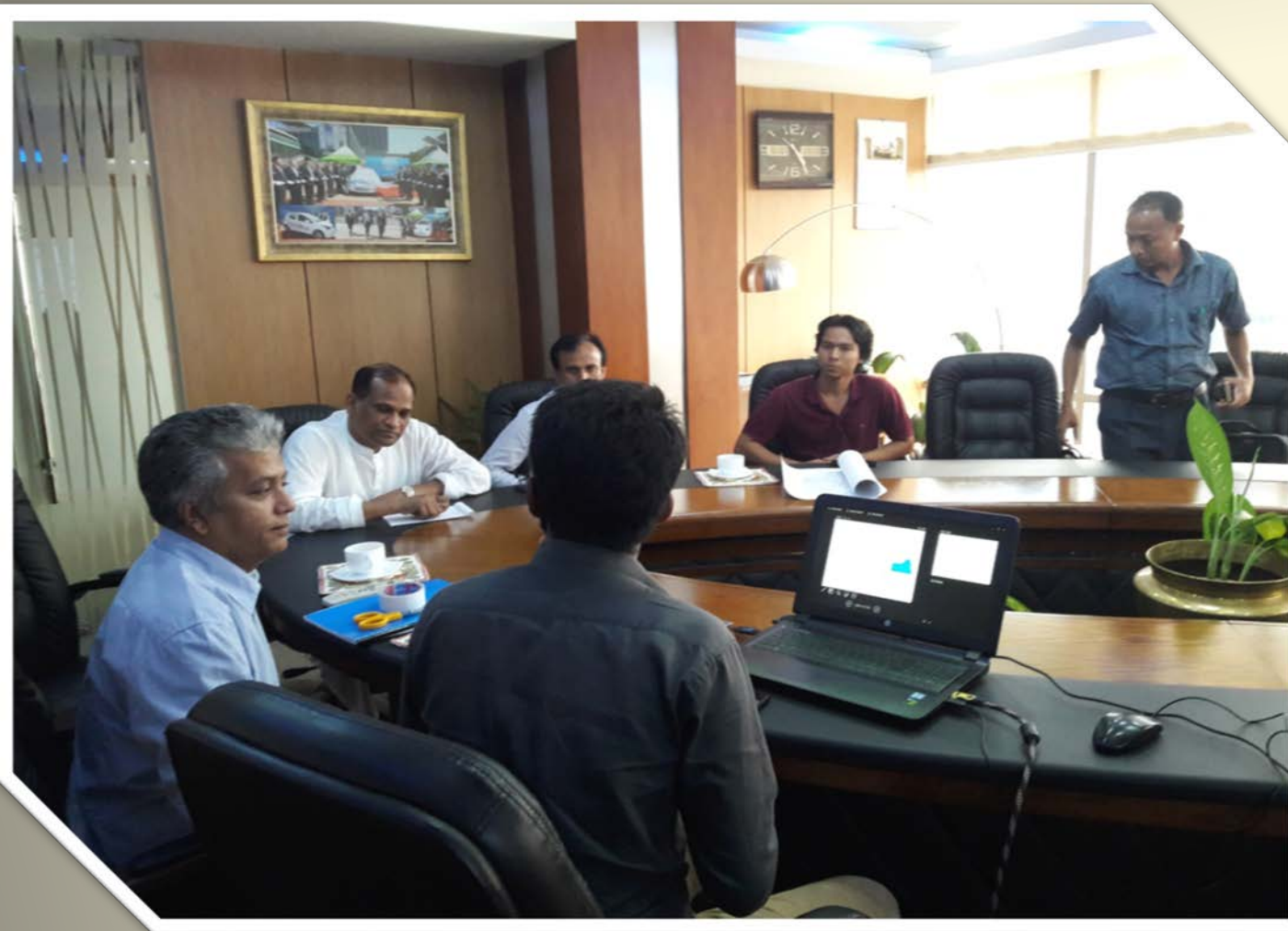


# MP CONSULTATION





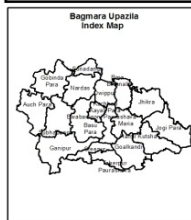
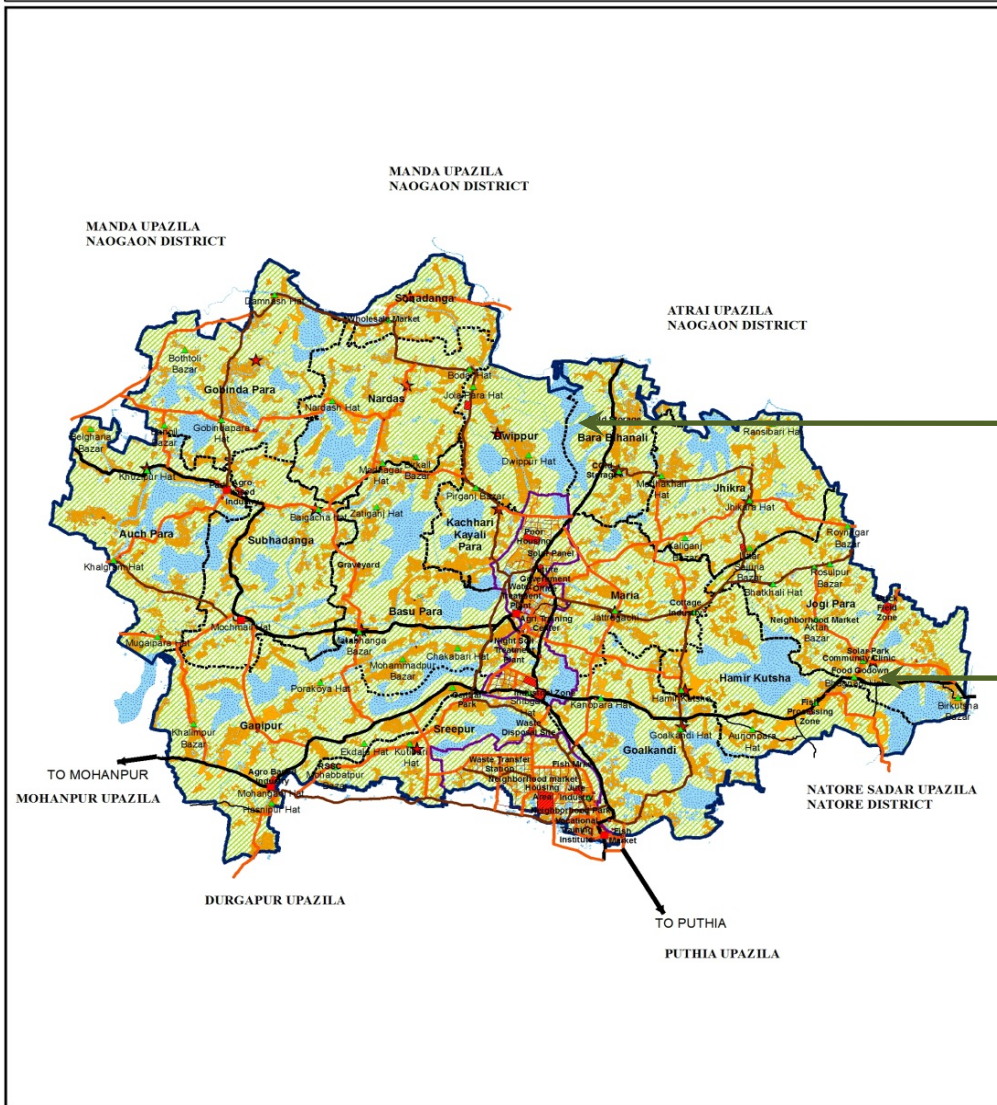
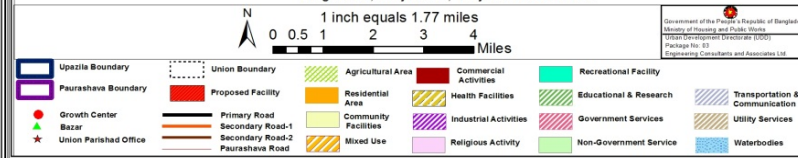
# MP CONSULTATION





Scale = 1:112,000

## LANDUSE PLAN OF BAGMARA UPAZILA

PREPARATION OF DEVELOPMENT PLAN FOR FOURTEEN UPAZILAS  
Bagmara, Rajshahi, Rajshahi Division.

Waterway Preservation

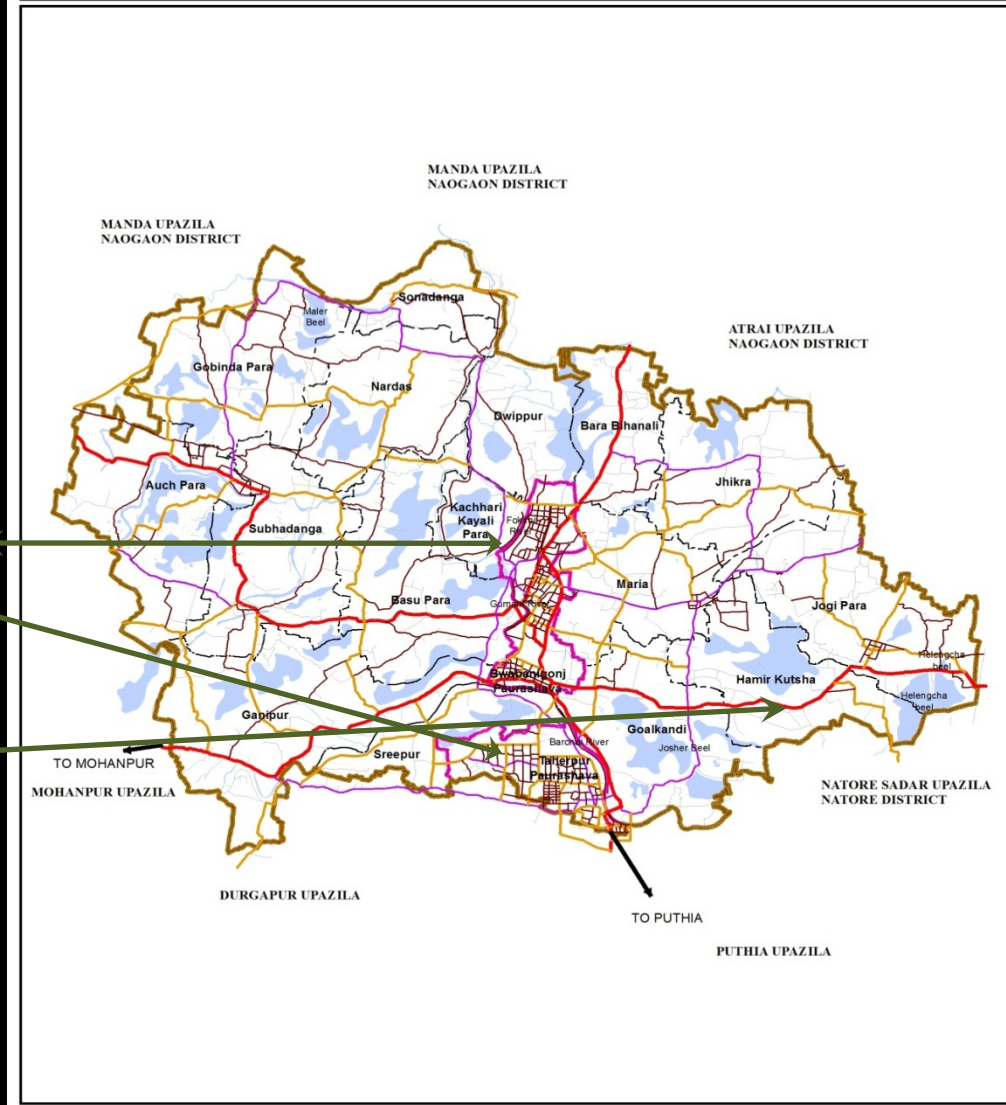
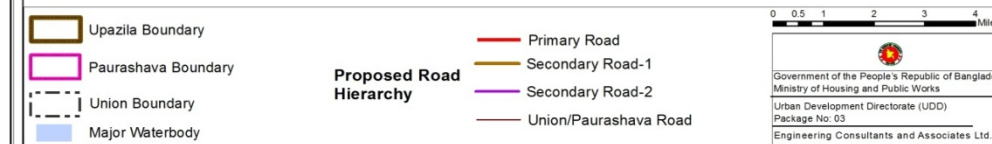
Grid Road Network in  
Paurashava Area

Proposed Silo

Proposed Primary  
Road (60 Feet)

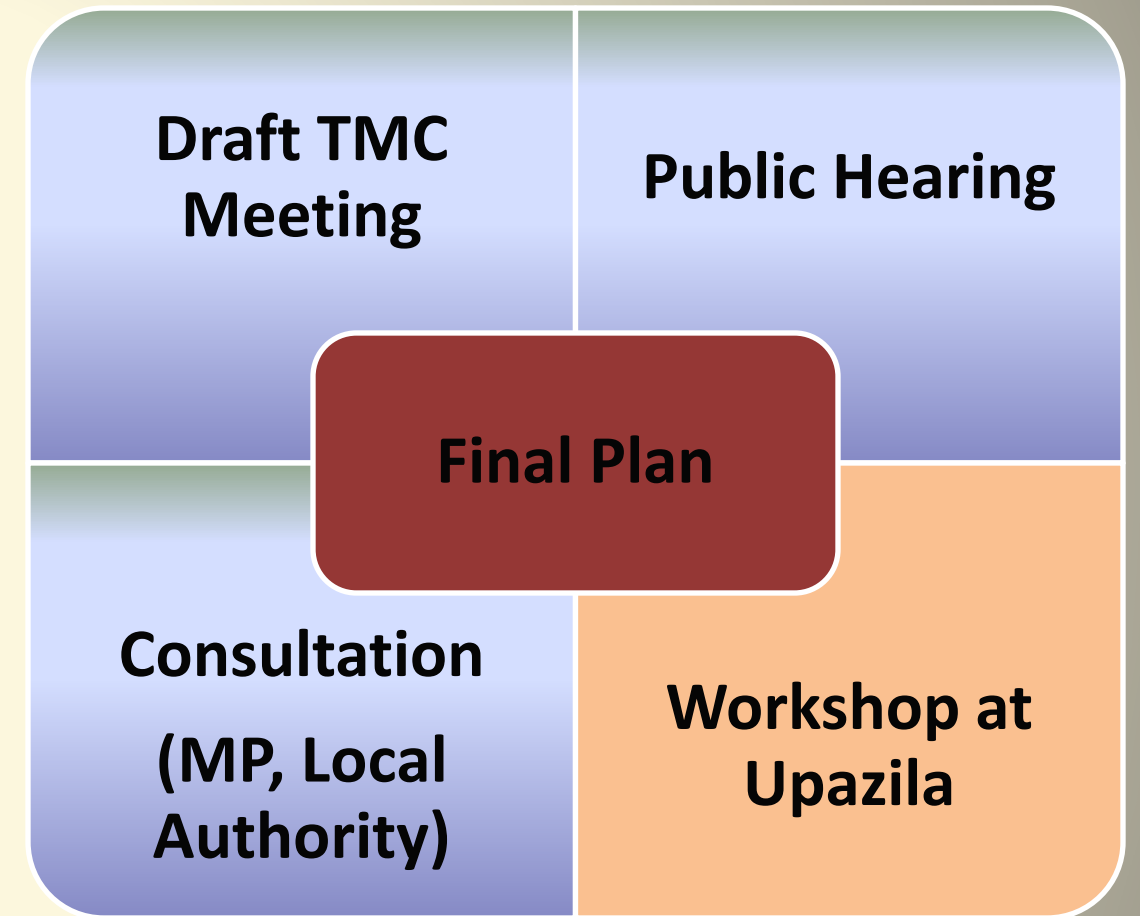
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## ROAD NETWORK PLAN OF BAGMARA UPAZILA

PREPARATION OF DEVELOPMENT PLAN FOR FOURTEEN UPAZILA'S  
Bagmara, Rajshahi, Rajshahi Division.



# Workshop at Upazila

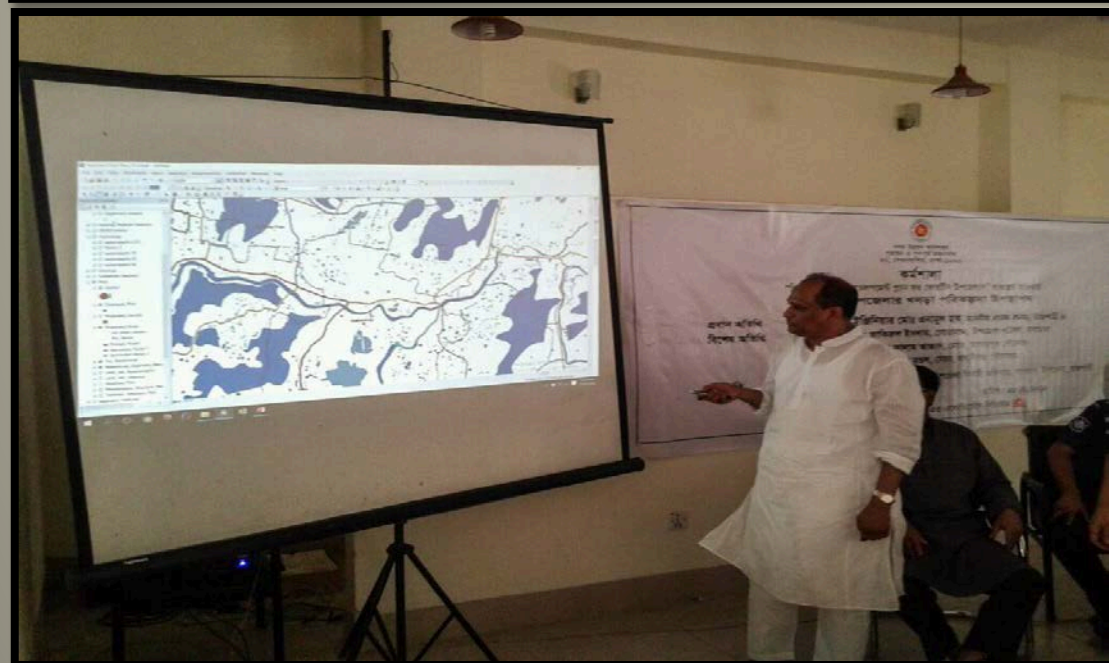







# Workshop at Bagmara Upazila





# Workshop at Bagmara Upazila




  
 নগর উন্নয়ন অধিদপ্তর  
 গৃহায়ন ও গণপূর্ত মন্ত্রণালয়  
 ৮২, সেতুনবাগিচা, ঢাকা-১০০০

**কর্মশালা**

“প্রিপারেশন অব ডেভেলপমেন্ট প্ল্যান ফর ফোরটিন উপজেলাস” প্রকল্পের আওতায়  
**বাগমারা উপজেলার খসড়া পরিকল্পনা উপস্থাপন**

প্রধান অতিথি	:	জনাব ইঞ্জিনিয়ার মোঃ এনামুল হক, মাননীয় সংসদ সদস্য, রাজশাহী-৪
বিশেষ অতিথি	:	জনাব মোঃ জাকিরুল ইসলাম, চেয়ারম্যান, উপজেলা পরিষদ, বাগমারা
	:	জনাব মোঃ আবুল কালাম আজাদ, মেয়র, তাহেরপুর পৌরসভা
	:	জনাব মোঃ আঃ মালেক মন্ডল, মেয়র, ভবানীগঞ্জ পৌরসভা
সভাপতি	:	জনাব মোঃ জাকিউল ইসলাম, উপজেলা নির্বাহী অফিসার, বাগমারা উপজেলা, রাজশাহী

স্থান : সভা কক্ষ, বাগমারা উপজেলা পরিষদ      তারিখ : ২২ মে, ২০১৮

আয়োজনে: ইঞ্জিনিয়ারিং কনসালটেন্টস এন্ড এসোসিয়েটস লিমিটেড 



# Meeting Discussion at Workshop

Designation	Comments
Engineer, Member of Parliament, Rajshahi-4	<ul style="list-style-type: none"><li>• Need drainage map in details</li><li>• Detailed landuse policy</li></ul>
Chairman, Sonadanga	<ul style="list-style-type: none"><li>• Natural conservation at rural area</li><li>• Need cold storage</li></ul>
Chairman, Auchpara	<ul style="list-style-type: none"><li>• No widen road at east bagmara and west bagmara</li></ul>
Chairman, Gobindapara	<ul style="list-style-type: none"><li>• River excavation</li><li>• Supply of pure drinking water</li><li>• Establishment of dam</li></ul>
President, Bonik Somiti	<ul style="list-style-type: none"><li>• Bypass at bwabaniganj bazaar</li></ul>
Chairman, Kachari kayalipara	<ul style="list-style-type: none"><li>• Flood Control</li><li>• Dam repair</li><li>• Excavation of river</li></ul>
Principal, Bwabaniganj College	<ul style="list-style-type: none"><li>• Plan for border area people of upazila boundary</li></ul>



# **SDGs and Proposed Plan**

SDGs	Proposed Plan of Bagmara Upazila
<b>SDG-1:</b> Ensure access for all to adequate housing and basic services and upgrade slums	<ul style="list-style-type: none"> <li>• Core Housing Area- for low income people</li> <li>• Planned Housing Area</li> </ul>
<b>SDG-2:</b> Provide access to safe affordable accessible and sustainable transport systems for all, improving road safety, notable by expanding public transport .	<ul style="list-style-type: none"> <li>• By pass</li> <li>• Over pass</li> <li>• Grade separations and</li> <li>• Different types of new service roads</li> </ul>
<b>SDG-3:</b> Enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	<ul style="list-style-type: none"> <li>• Human settlement land suitability analysis</li> <li>• Hydrological suitability analysis</li> <li>• Geological suitability analysis</li> <li>• Road network analysis</li> </ul>
<b>SDG-4:</b> Strengthen efforts to protect and safeguard the worlds cultural and natural heritage	Heritage sites such as <ul style="list-style-type: none"> <li>• Bir Kutsha Jomidar Bari</li> <li>• Goalkandi Rajar Bari</li> </ul>
<b>SDG-5:</b> Reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses .	<ul style="list-style-type: none"> <li>• Only some sub flood flow zone has identified after analyzing previous 20 years flood flow data.</li> <li>• Human settlement on sub flood flow zone are discouraged.</li> </ul>



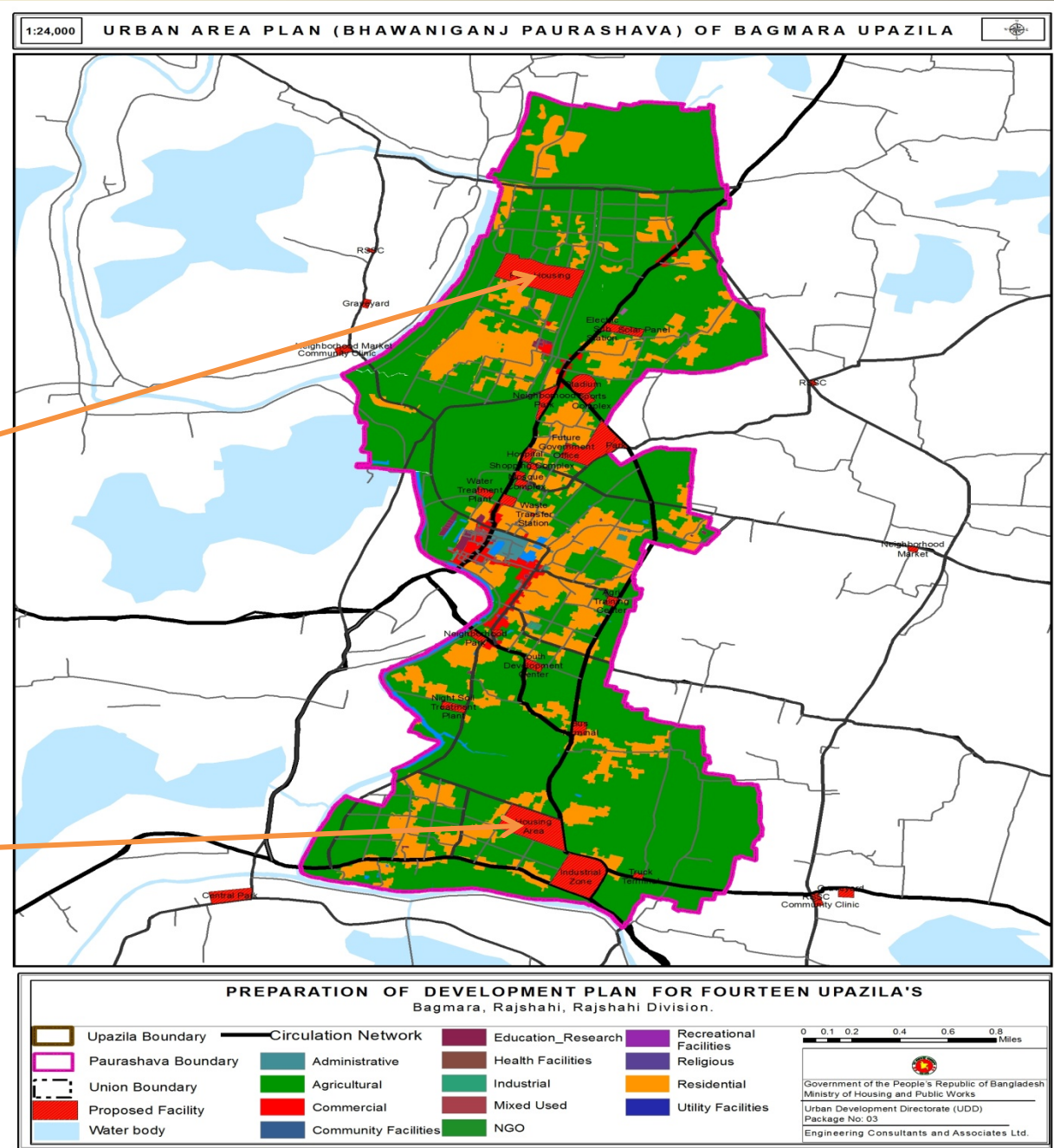
<p><b>SDG-6:</b> Reduce the adverse per capita environmental impact of cities including by paying quality and municipal and other waste management.</p>	<ul style="list-style-type: none"> <li>• One waste transfer station at each union and 4 waste transfer station in paurashava.</li> <li>• One waste Disposal Site in Upazila.</li> <li>• One Night Soil Treatment Plant in Upazila.</li> <li>• A Water Treatment Plant to evade direct mix of industrial waste with water.</li> <li>• Suggestion of different policy and strategy for waste management and pollution control.</li> </ul>
<p><b>SDG-7:</b> Reduce the adverse per capita environment impact of cities including by paying special attention to air quality and municipal and other waste management</p>	<ul style="list-style-type: none"> <li>• In Urban, and peri-urban area brick field is restricted within 3 km. buffer zone from centre of the Paurashava.</li> <li>• Considering this consultant has proposed the brick field area near to paurahsava will be converted into different facilities and for other uses.</li> </ul>
<p><b>SDG-8:</b> Provide universal access to safe inclusive and accessible green and public spaces in particular for women and children, older persons and persons with disabilities .</p>	<ul style="list-style-type: none"> <li>• Urban parks,</li> <li>• Village parks,</li> <li>• Play grounds</li> <li>• Public Place Action Plan Bir Kutsha and Taherpur</li> <li>• 2 new park and</li> <li>• A stadium</li> </ul>
<p><b>SDG-9:</b> Support positive economic , social and environment links between urban, peri-urban and rural areas by strengthening national and regional development planning</p>	<ul style="list-style-type: none"> <li>• Shopping complex,</li> <li>• Pauro market,</li> <li>• Residential zone ,</li> <li>• Recreational park,</li> <li>• Government college,</li> <li>• Mosjid complex,</li> <li>• Hospital,</li> <li>• Bus terminal and</li> <li>• Central park etc.</li> </ul>
<p><b>SDG-10:</b> Support least developed countries including through financial and technical assistance in building sustainable and resilient buildings utilizing local material.</p>	<ul style="list-style-type: none"> <li>• Risk Assessment survey</li> <li>• Collection of 8 type's structural data such as Overhanging, Soft Story, Pounding, Set Back, Short Column, Mobile Tower, tilting and Ground Set.</li> </ul>

## Goal 01: No Poverty

- ❑ Policy Guideline to reduce Proverty
- ❑ Housing
- ❑ Poor Housing

Poor Housing at Bwabanigonj(30 Acre)

Housing(23.98 Acre)

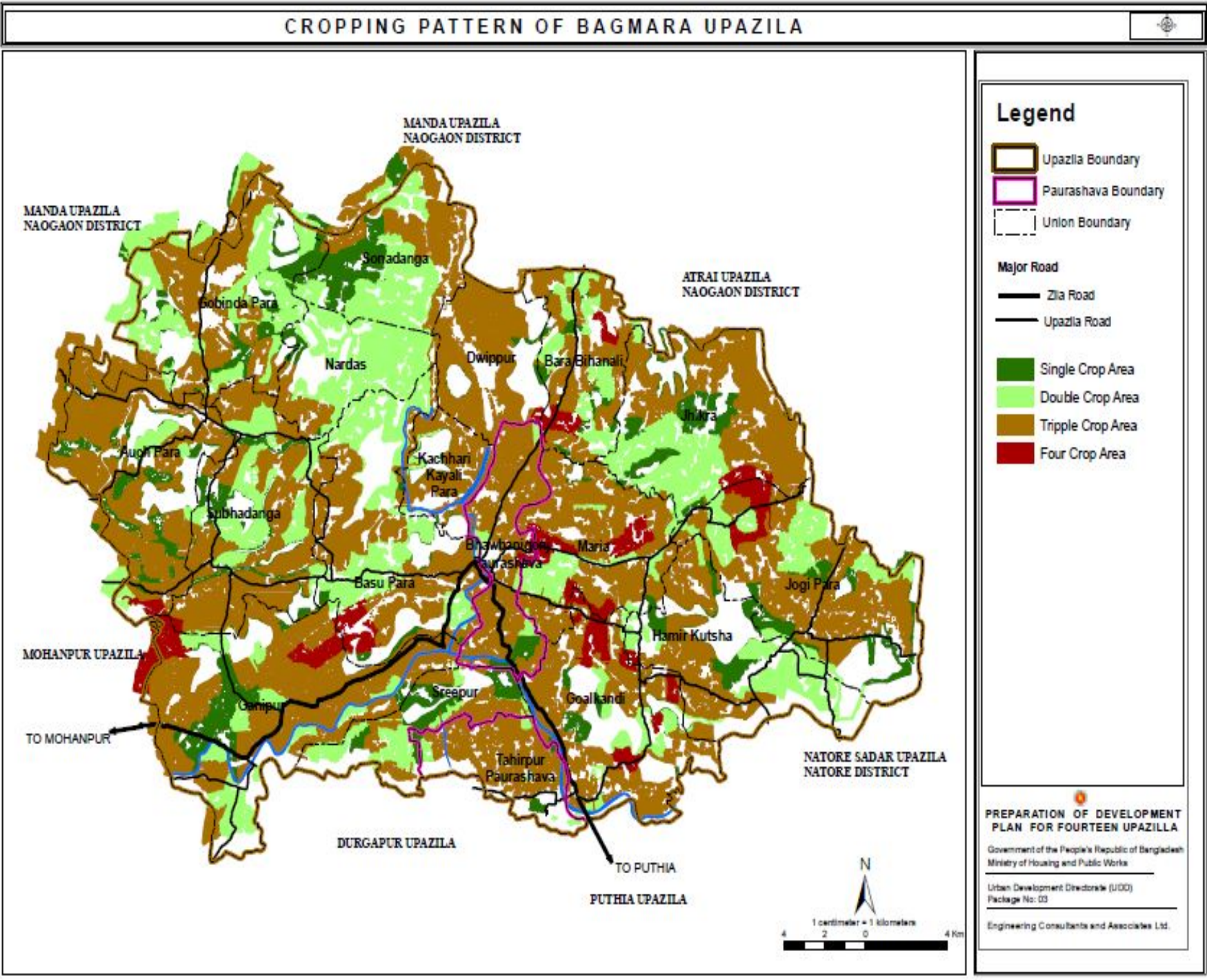




# Goal 02: Zero Hunger

Ensure food Security by Preserving Agriculture Land

Cropping Pattern	Area in Acre	Area in Sq.km	Percentage
Single Cropping	7790.023111	31.525105	12.85%
Double Cropping	15651.78868	63.340542	25.81%
Triple Cropping	34876.84722	141.141593	57.51%
Four Cropping	2324.321155	9.406194	3.83%
Total	60642.98017	245.413434	100%





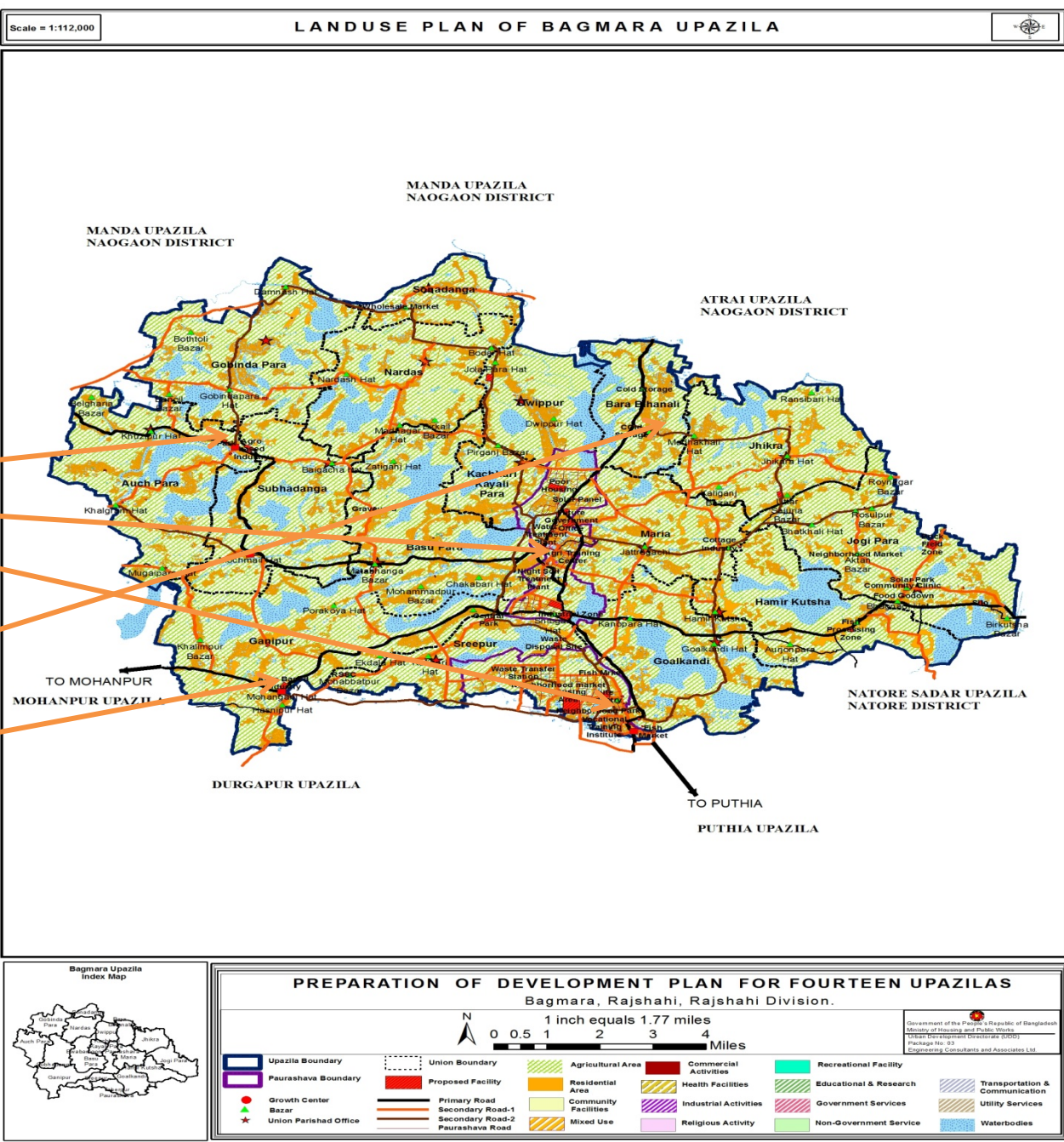
Goal 03: Good Health and Well-Being

Ensure healthy lives and promote well-being for all at all ages.

- ❑ Proposed Hospital
- ❑ Proposed Community Clinic in each Union

Hospital

Community Clinic



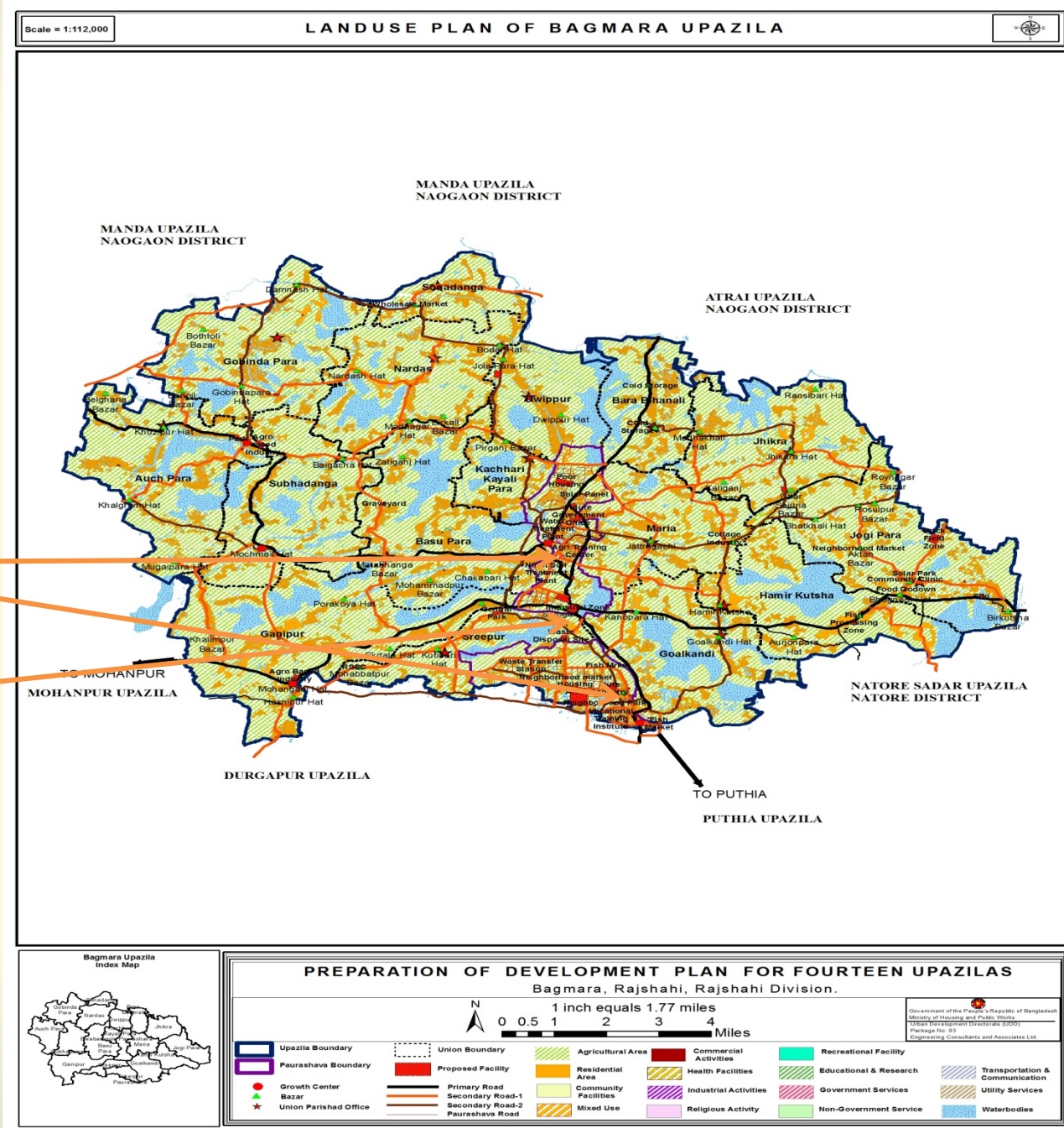


Goal 06: Clean Water and Sanitation

- ❖ Water Treatment Plant -2 no's (1.85 acres and 1.45 acres)
- ❖ Night Soil Treatment Plant(2.5 acre) in Bwabanigonj Paurashava
- ❖ Waste Disposal Site (7.66 acre) in between Bwabanigonj and Taherpur Paurashava

Water Treatment Plant

Waste Disposal Site

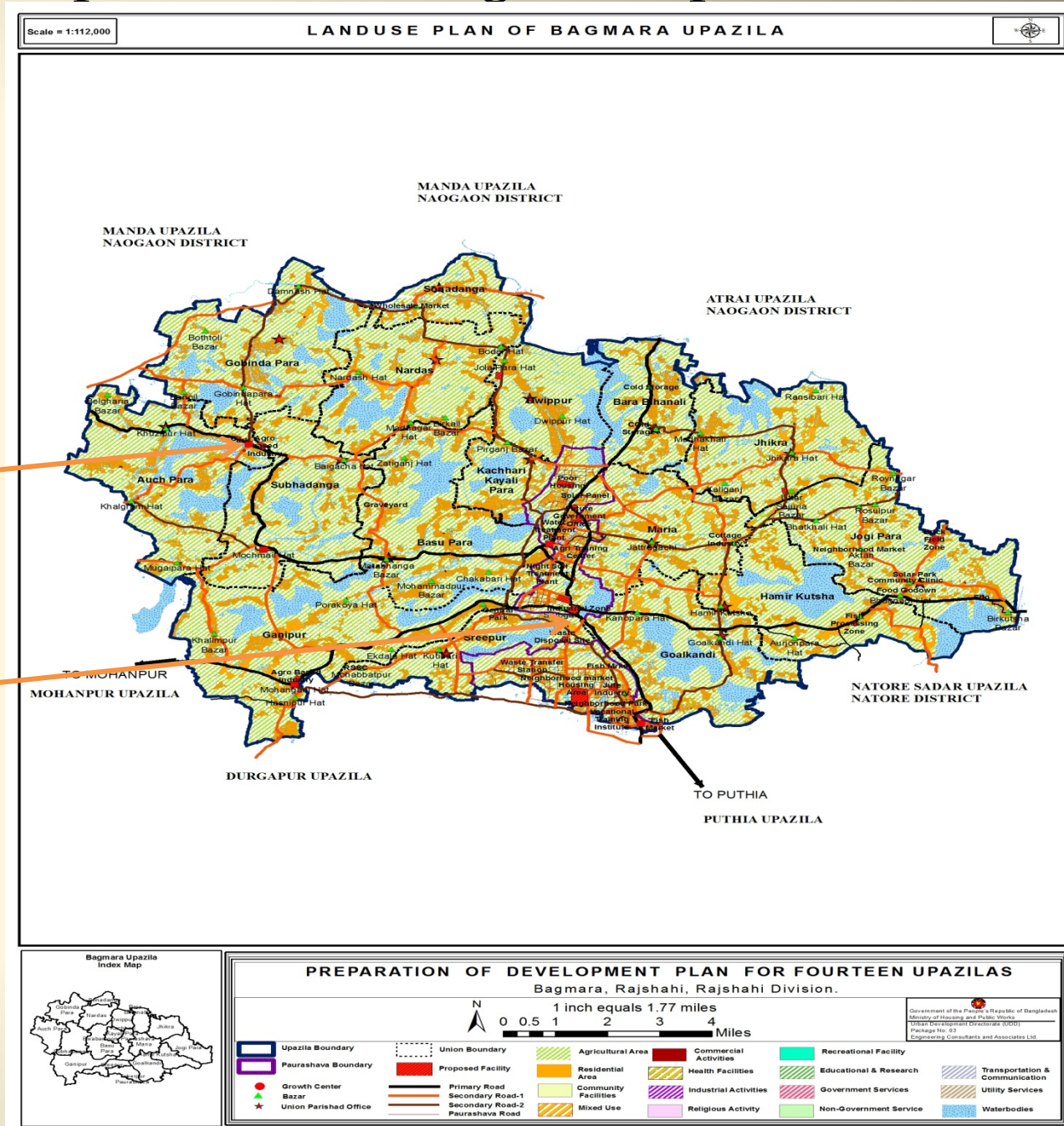


Goal 07: Affordable and Clean Energy

- ❖ Solar Park (3 acre)
- ❖ Solar Panel (2 acre)

Solar Park

Solar Panel





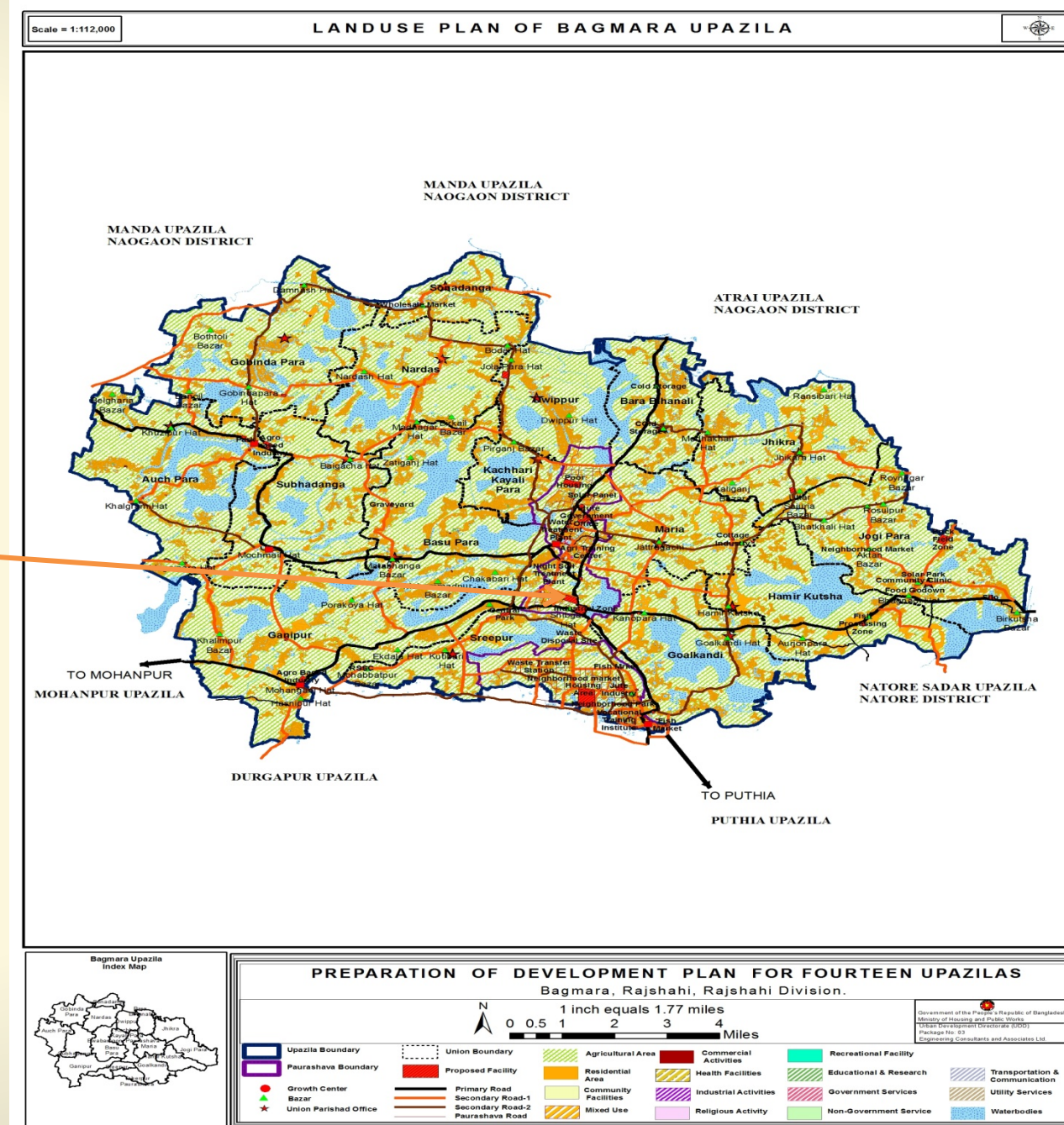
## COMMUNICATION AND INFRASTRUCTURE

# Goal 09: Industry, Innovation & Infrastructure ,Commerce and Industry

## Activities and Strategies

- Industrial Zone
- Jute Industry
- Rural Sales Service Center
- Sustainable Transportation Planning
- (Road, Walkway and Water way)
- Truck Terminal, Bus Terminal, Auto/Minibus/CNG Stand

Industrial  
Zone(22.25  
acre)



**Thank You for Your Kind Attention**