

**Preparation of Development Plan for Fourteen Upazilas, Pacakage-02**  
**(Ishwarganj Upazila, Mymensingh; Shibpur and Raipura Upazila, Narsingdi)**

**Ishwarganj Upazila, Mymensingh**

## **1. General**

This plan has been prepared as part of the requirement of Terms of Reference (TOR) under the project “Preparation of Development Plan for Fourteen Upazilas” funded by the Government of Bangladesh. The aim of preparing this plan is to identify the infrastructural facilities needed for overall socio-economic and physical development of the people as well as the society. The Development Plan contains a Five-tier Plan which mentioned below:

- Sub-Regional Plan
- Structure Plan
- Urban Area Plan
- Rural Area Plan
- Action Area Plan

## **2. Vision of the Plan Packages**

The vision of the plan is the creation of an urban livable environment where the people, able and or disable, irrespective of age-sex and income, cast-creed and religion, can live and enjoy today within affordable means without sacrificing interests of tomorrow. However the overall vision of the Master Plan is to make the upazila by revitalizing its growth and make it a poverty free, livable and economically vibrant upazila.

It contains a comprehensive package of social, economic and physical policies which deals in principles only with all aspects of development (urban/rural) over a given period of time. The predominant policy areas

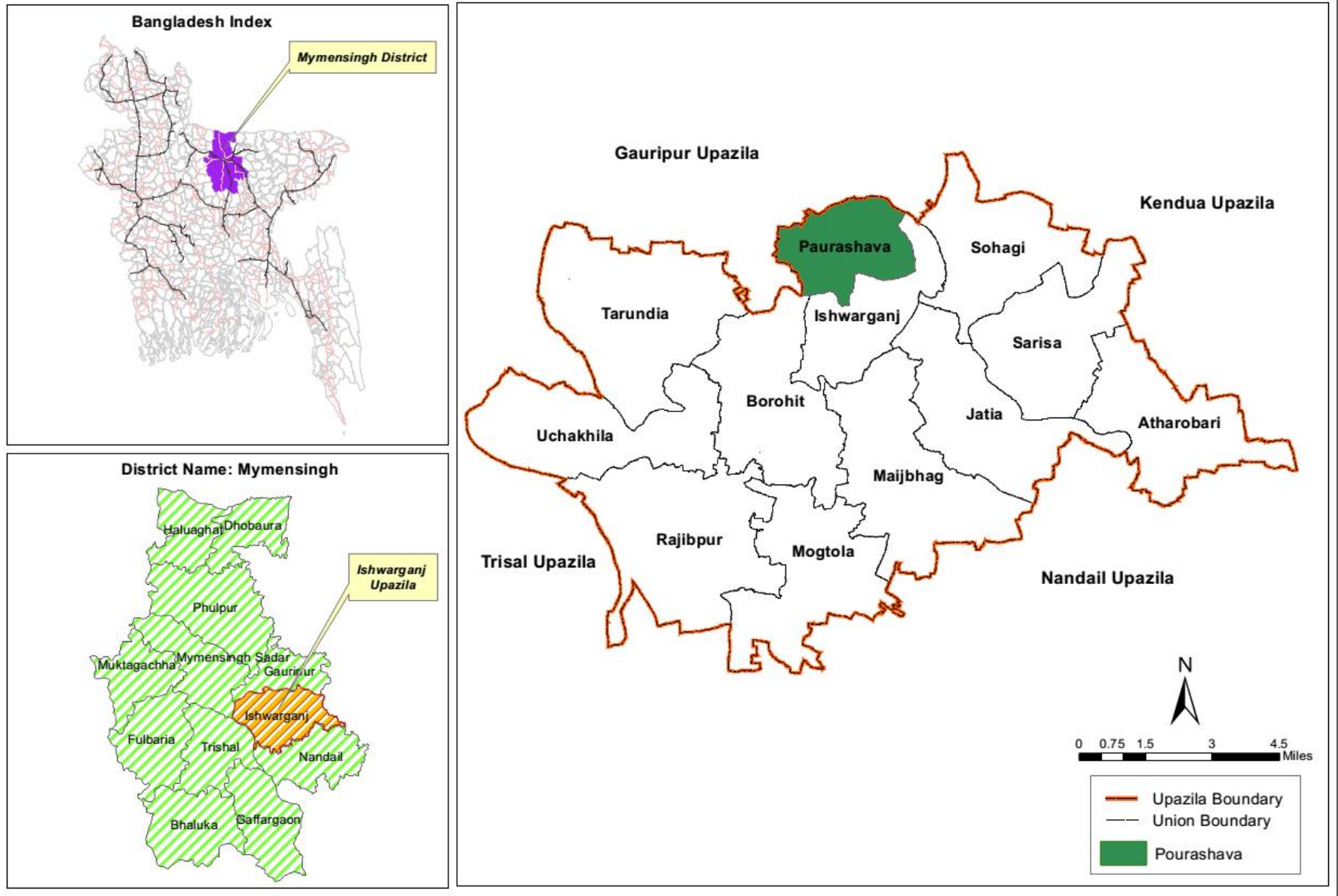
include employment, land, infrastructure housing, transport and social services. It explains the general principles to be followed in order to guide the “general content, form and locations of development and the methods by financial and implementation.” The vision, goals and objectives are to guide the development of the region under the plan over the next 20 years.

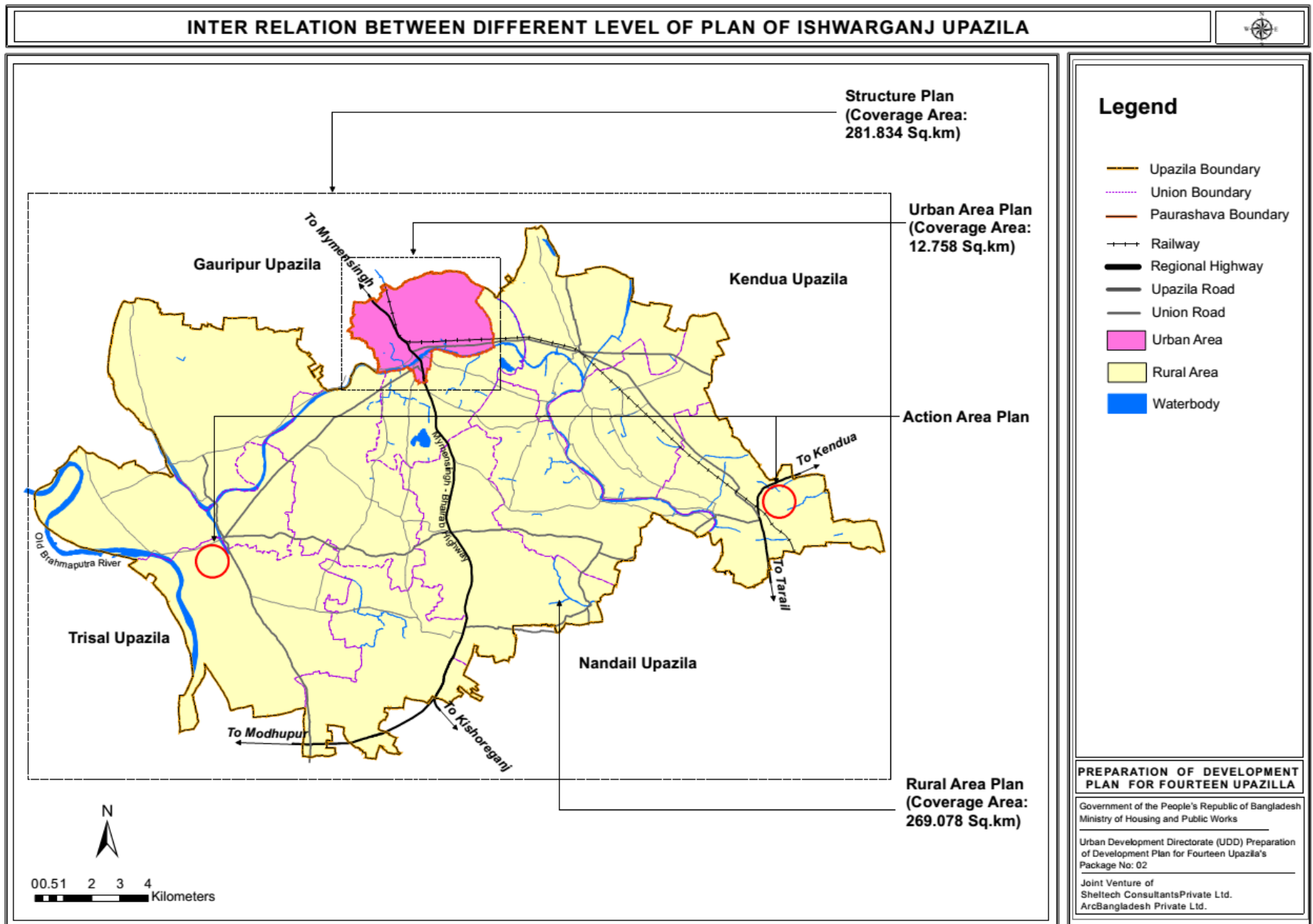
## **3. Objectives of the Plan Packages**

To achieve the vision of developing Ishwarganj Upazila as livable planned and sustainable upazila, the following objectives are outlined:

- Making a balance between rural and urban areas;
- Formulating policies and strategies for guiding desired land use in this Upazila;
- Making and ensuring environmental/ecological balance;
- Identifying some bankable projects to generating employment and income;
- Strengthening management expertise.

## LOCATION MAP OF ISHWARGANJ UPAZILA







## Sub-Regional Plan

### Goals and Objectives of Sub-Regional Plan

To achieve the vision of developing Ishwarganj Upazila as environmentally livable planned and sustainable upazila, the following objectives are outlined:

- To prepare a Development Plan for Ishwarganj Upazila for 20 years according to the guidelines form: national policies and plans and to Integrate different sectoral strategies at sub regional level;
- To formulate a conservation plan at sub regional level;
- To formulate development Plan; and
- To setup provision and plans for the growth of economy, employment, social, and environmental conditions.

### Methods of Sub-Regional Plan

#### Shift-Share Analysis

As a regional planning tool shift share analysis explores the scenario of economic growth of a region which is generated by a national growth in that sector, supportive industry mix and comparative advantage of that particular region. The shift-share analysis divides the change in local industry employment into three components: National Growth Share, Industrial Mix/Proportionality Shift, and Local Share/ Regional Shift/Differential Shift.

#### Overall Analysis

The analysis has been carried out by comparing the percentage change values of the national share, proportionality shift,

differential shift and regional growth with respect to the total employment in the respective region considering employment data in the year 2003 and 2013. The percentage change instead of absolute values has been used to assess the actual magnitude of the change and to find out the actual progress of the regions.

In Ishwarganj Upazila the national and local share component has the major impact on total regional employment growth. Differential shift comprises a positive value which means some local factors employment growth has potentialities as the national growth. It has been also found that the Proportionality Shift Component has a negative impact on the employment growth.

Ishwarganj Upazila has large number of employment in manufacturing, wholesale and retail, education, accommodation and food sector. Besides this Financial and Insurance activities, public administration and defence sectors have positive employment growth of this sectors. The possible reason behind this may be the rapid urbanization and close proximity with Dhaka. All these sector has been promoting large employment for local advantages.

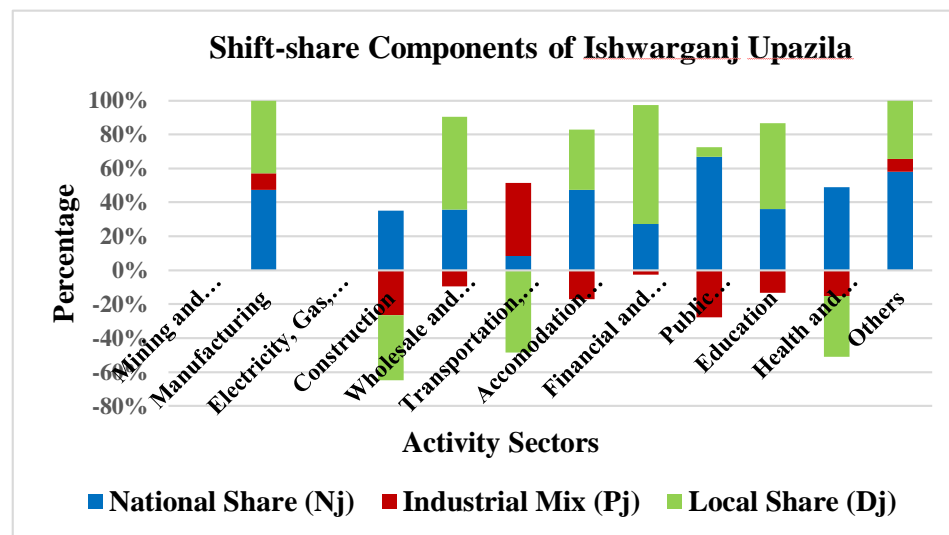


Fig: Shift-share components of different activity sectors.

## **Policies of Sub-Regional Plan**

The national sub-regional plan will promote Ishwarganj Upazila as an agro-based area. As an agricultural and fisheries hub, this upazila can serve Dhaka by supporting agricultural product and fish. In terms of service provisions, the upazila to be self-sufficient so that economic resources do not leave from the region to Dhaka. The following policies were put forward to achieve these goal:

***Policy1:*** Give emphasize on agricultural production and expanding the agri-market

***Policy 2:*** Give emphasize on expanding source of income (Agricultural land not enough to generate sufficient income)

***Policy 3:*** Employment generation through development of potential sectors.

***Policy4:*** Increase mobility within the Upazila through development of road network

***Policy 5:*** Developing Growth Center/Markets as transfer points for agricultural goods

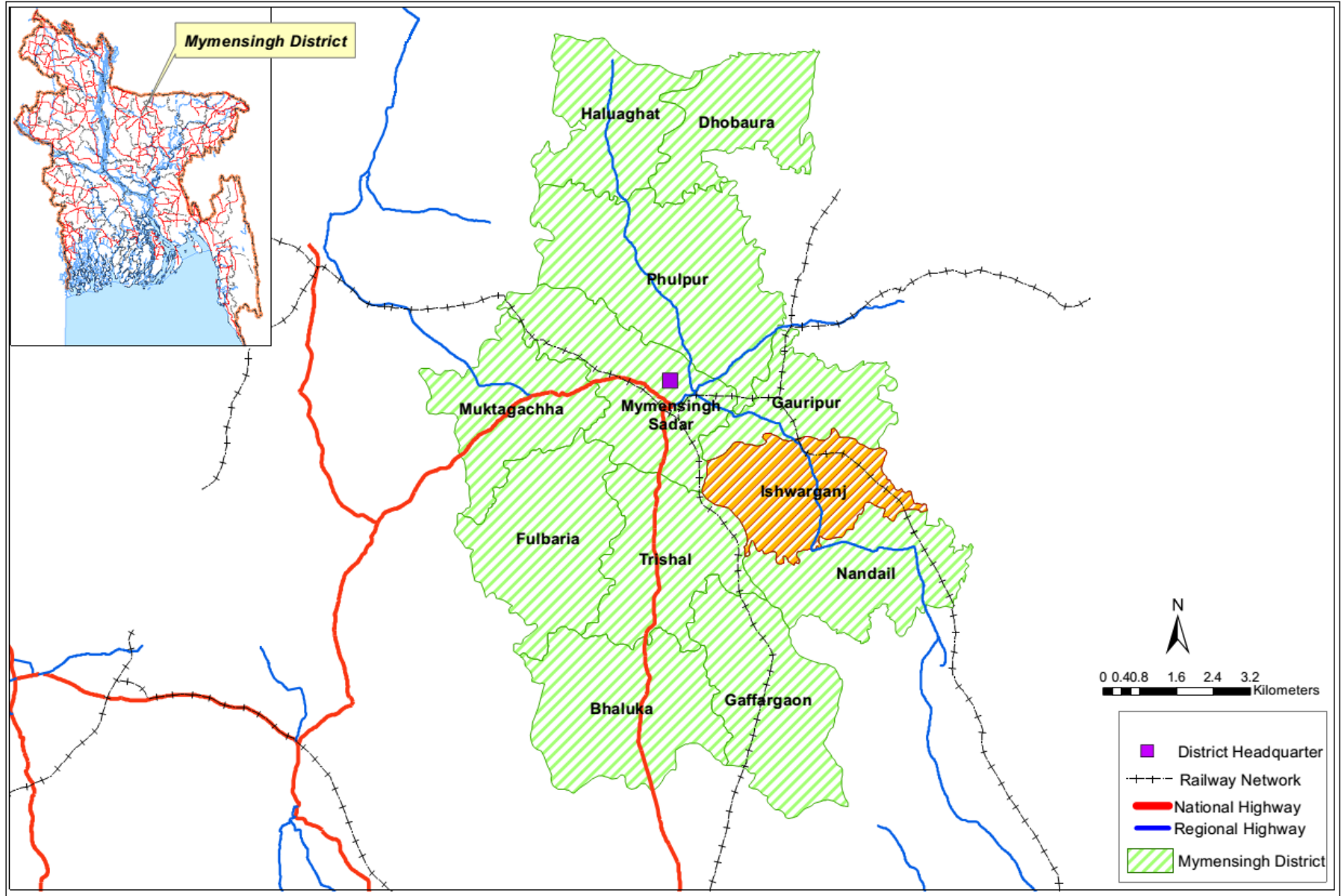
***Policy 6:*** Identify, promote and protect historical and culturally sensitive places as tourism side.

***Policy 7:*** Develop human resource training under Ministry of Youth Development in collaboration with child and Women Affairs Ministry.

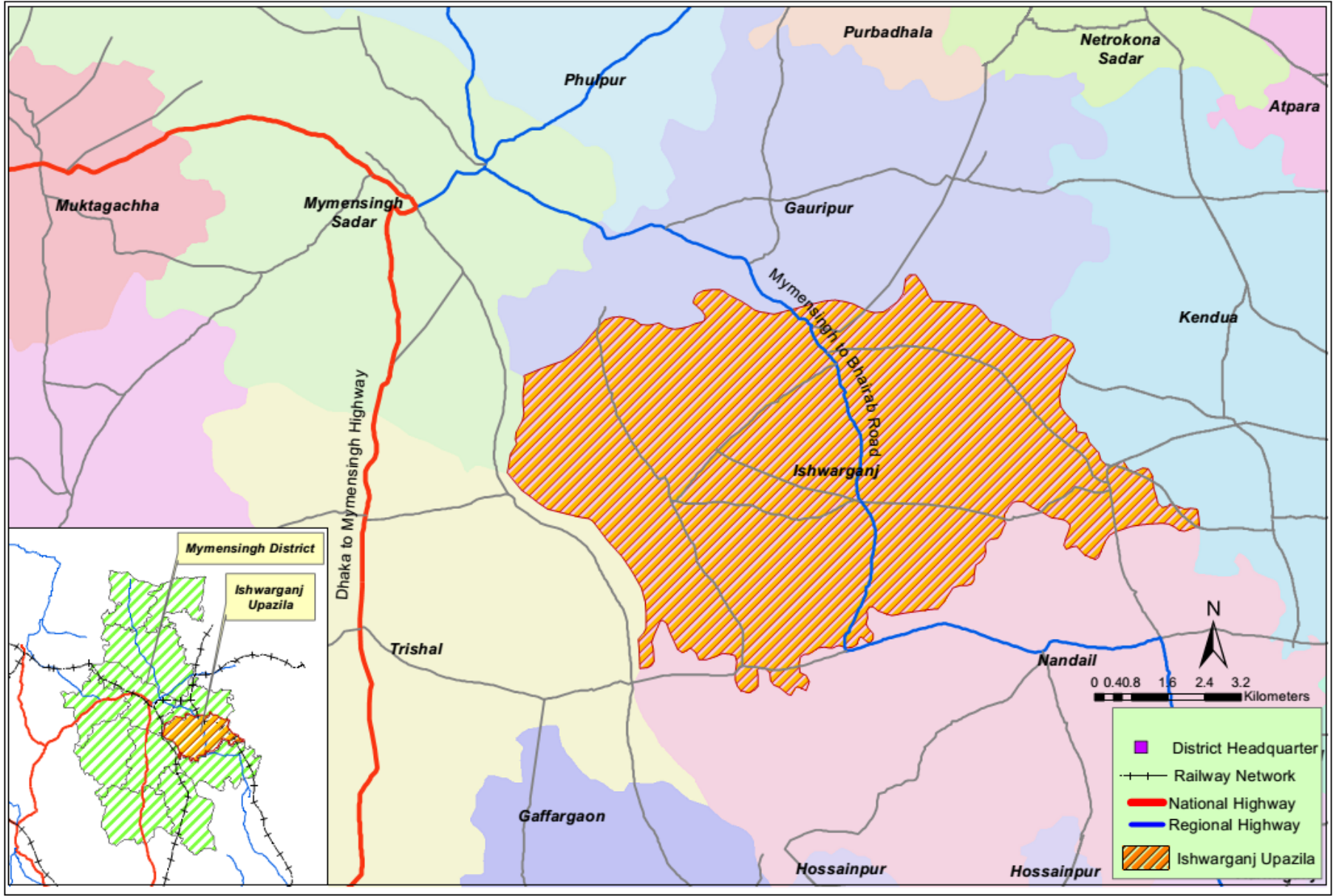
***Policy 8:*** Developed basic community and utility services within all over the Upazila.

***Policy 9:*** Strengthening and expanding of existing major institutions and educational facilities and educational facilities.

## REGIONAL LINKAGE OF MYMENSINGH DISTRICT



# REGIONAL LINKAGE OF ISHWARGANJ UPAZILA



## STRUCTURE PLAN

### Objectives of Structure Plan

The Structure Plan has the following objectives. These are:

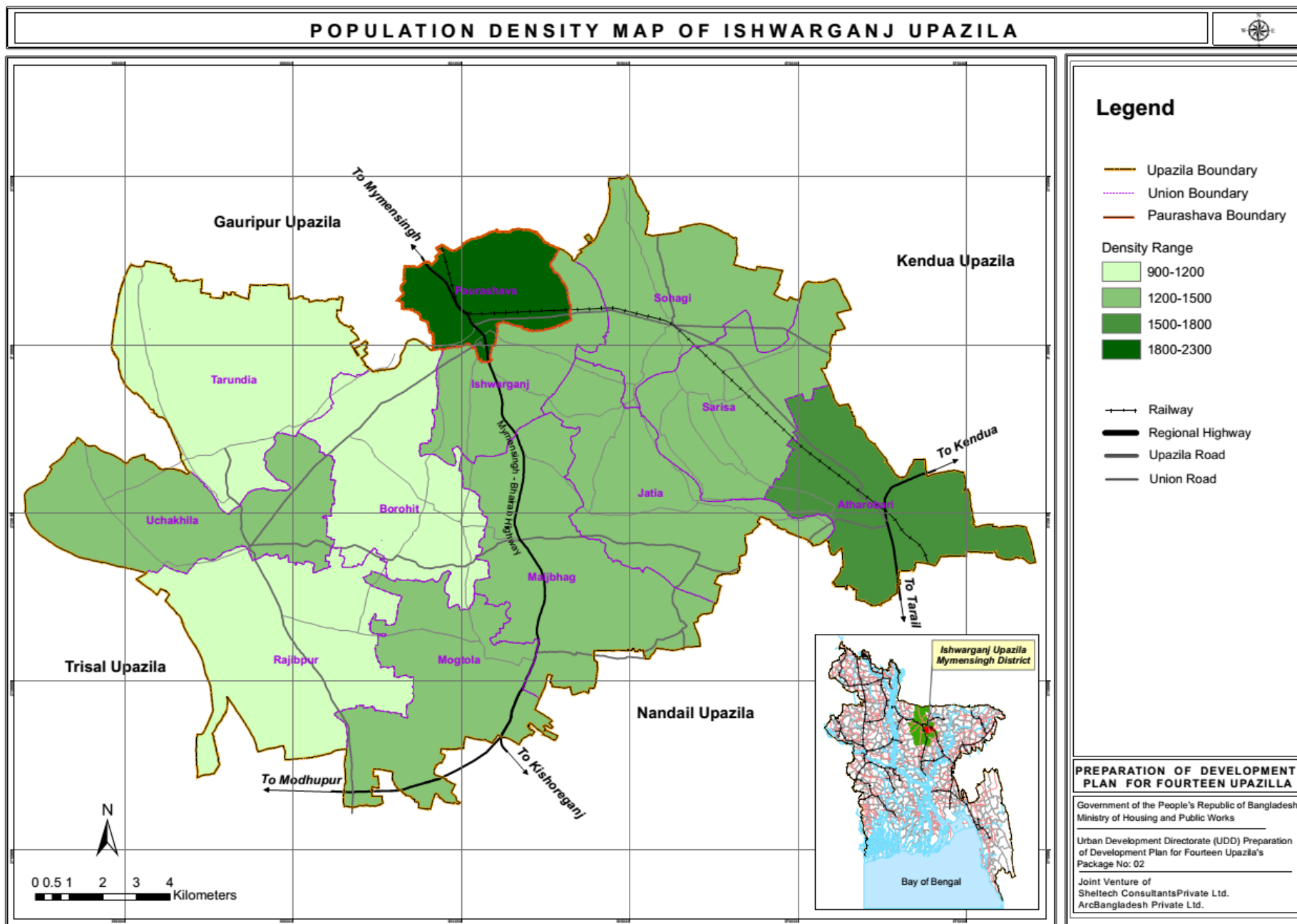
- Identifying the main development issues, major opportunities and constraints in the Upazila;
- Identifying the possible growth and physical expansion of the areas as foreseen considering economic base and growth trend;
- Identifying the required and suitable land for future physical expansion and development;
- Identifying the sector wise strategies for pursuing the future development control in a desirable direction;
- To establish inter-sectoral goals, policies and general proposals for urban spatial development;
- Identifying the development options to offer maximum benefit to the people;
- To provide framework for the next hierarchy of plans, in this case of Development Plan and Action Area Plan.

### Description of the Project Area

Ishwarganj Upazila is located in 24°33' and 24°44' north latitudes and between 90°28' and 90°46' east longitudes. The upazila is bounded on the north by Gauripur upzila, on the east by Kendua upazila of Netrokona zila, on the south by Nandail upazila and on the west by Trishal and Mymensingh sadar upazilas. It consists of 1 Paurashava, 11 Union Parisads, 293 Mouzas, 13 Mahallas, and 291 villages. The project area covers an area of 69643 acres (281.84 sq.km.) as per GIS database including existing Paurashava area and its total Union area which comprises 11 unions.

Table: Name and Area of Structure Plan.

Name of Area	Area (as per GIS database)		Population (2011)	Density of Population/sq. km (2011)
	Sq.km.	Acre		
Paurashava	12.76	3153	28631	2244
Atharabari Union	21.79	5385	36739	1686
Barahit Union	24.65	6092	29350	1191
Ishwarganj Union	14.68	3627	21223	1446
Jatia Union	23	5684	31515	1370
Maijbagh Union	28.97	7159	38925	1344
Mogtola Union	23.99	5929	35729	1489
Rajibpur Union	31.79	7854	36758	1156
Sarisha Union	21.47	5305	28305	1318
Sohagi Union	21.28	5258	27853	1309
Tarundia Union	32.55	8042	30610	940
Uchakhila Union	24.91	6155	30710	1233
Ishwarganj Upazila (except Paurashava)	269.08	66490	347717	1292
<b>Total</b>	<b>281.84</b>	<b>69643</b>	<b>376348</b>	<b>1335</b>





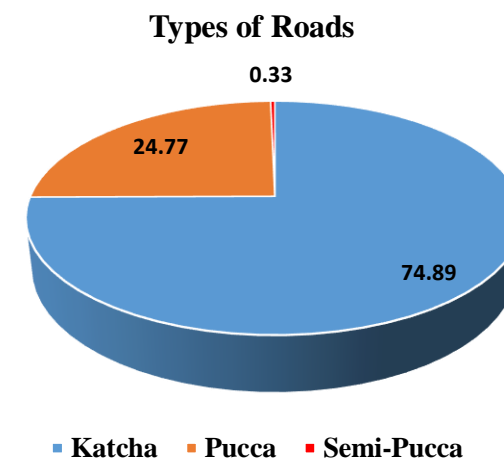
## STRUCTURE TYPE

Physical feature survey depict that there are in total 88855 structures in Ishwarganj Upazila (8561 in Paurashava and 80294 in Rural). In physical feature survey about 91.41% structures are for residential purpose and 4.94% for Commercial activities. 916 structures are used for educational and 665 structures are used for religious purpose. From the survey, it is also revealed that majority of the structures in the Upazila are katcha. In the Ishwarganj Upazila area, out of total structures, 76.22 percent are Kutcha, 21.64 percent are semi-pucca, and only 1.79 percent are pucca structures, among them 8.02% are used for educational purpose. About 0.36 percent structures are under construction.

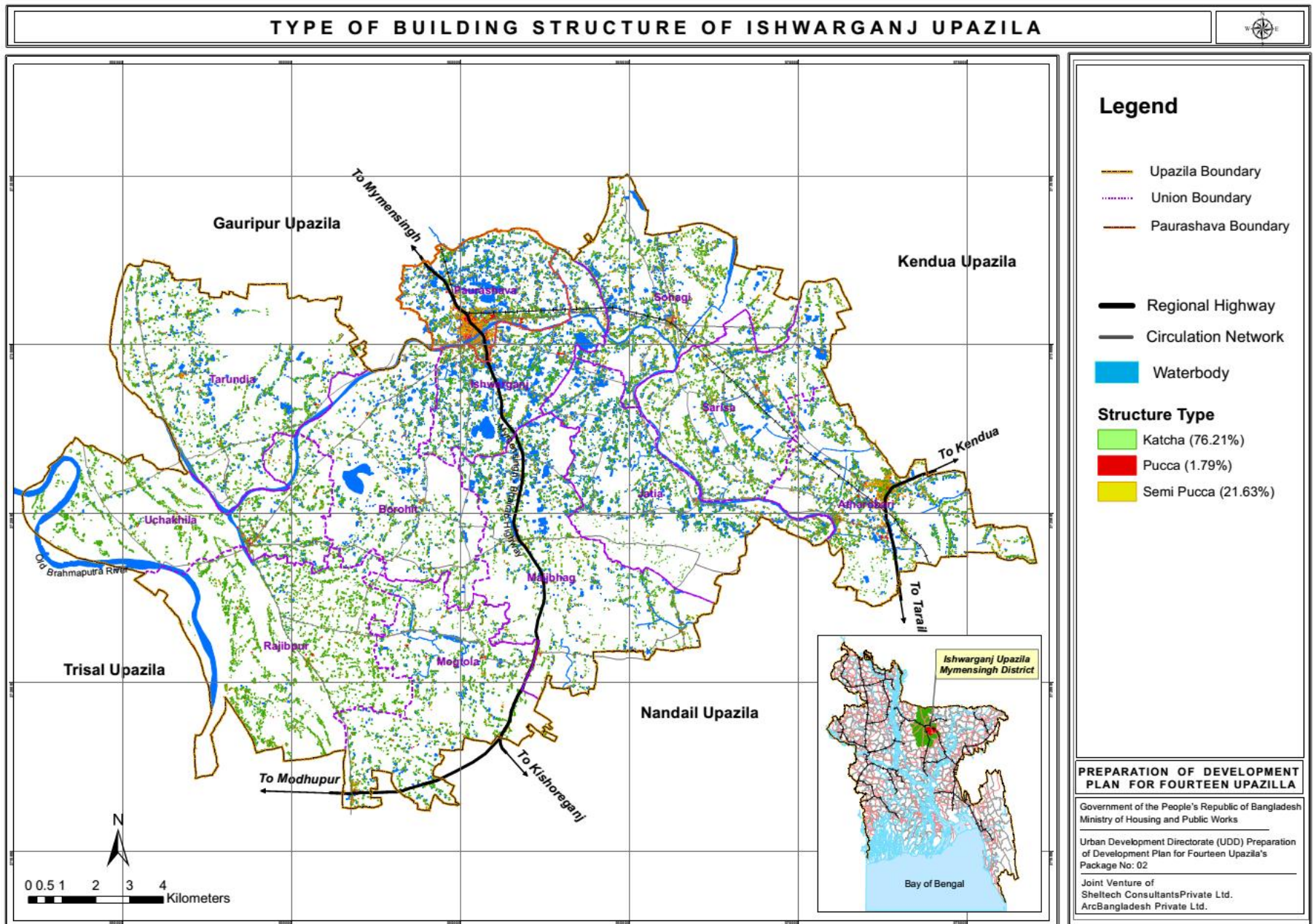
Table: Structure Type of Paurashava and Rural Unions.

Structure Type	Paurashava		Rural Unions		Grand Total	
	No.	%	No.	%	No.	%
Pucca	514	6.01	1077	1.34	1591	1.79
Semi-pucca	3867	45.19	15356	19.14	19223	21.65
Kutcha	4069	47.55	63599	79.26	67668	76.20
Under Construction	108	1.26	209	0.26	317	0.36
<b>Total</b>	<b>8558</b>	<b>100.00</b>	<b>80241</b>	<b>100.00</b>	<b>88799</b>	<b>100</b>
Waterbodies	1743		12465		<b>12434</b>	

Source: Physical Feature Survey, 2016.

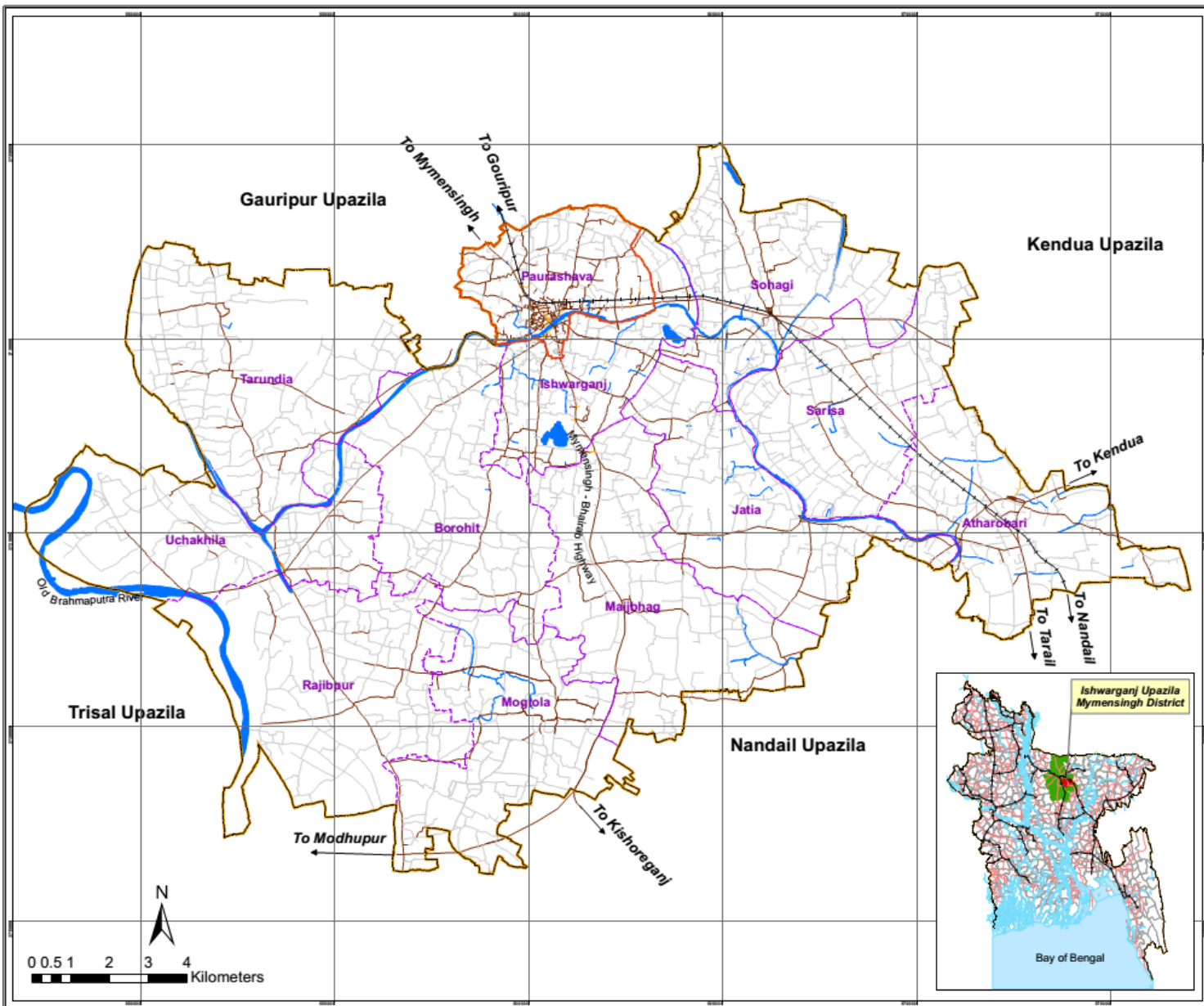


Source: Physical Feature Survey, 2016.



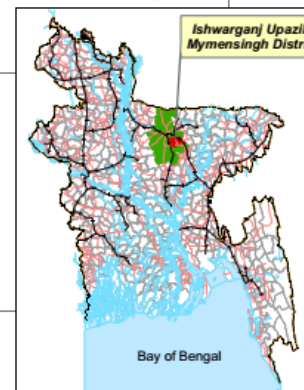


# ROAD TYPE OF ISHWARGANJ UPAZILA



## Legend

- Upazila Boundary
- Union Boundary
- Paurashava Boundary
- +— Railway
- Pucca Road
- Katcha Road
- Semi-Pucca Road
- Major Waterbody



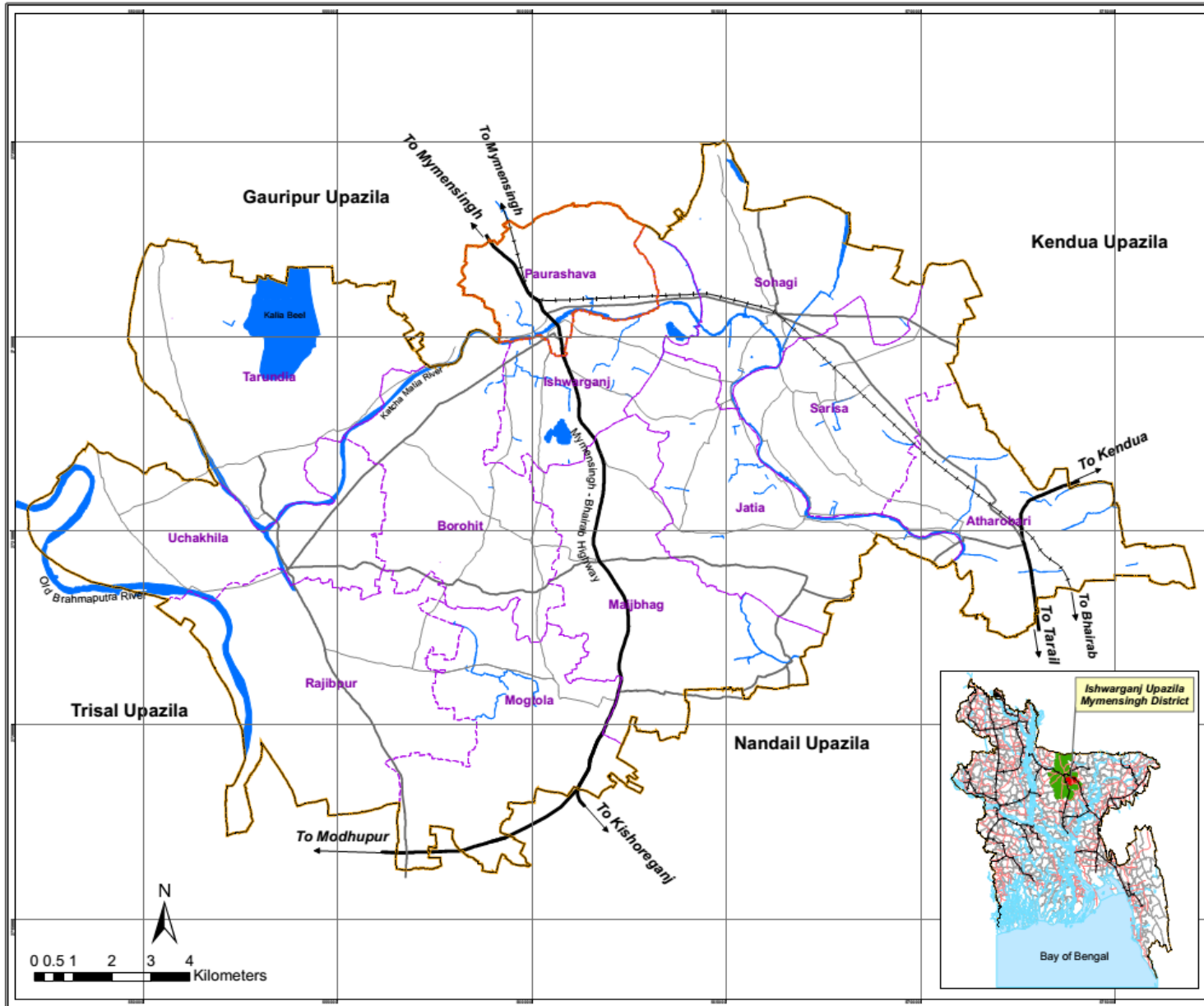
## PREPARATION OF DEVELOPMENT PLAN FOR FOURTEEN UPAZILLA

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Ministry of Housing and Public Works

Urban Development Directorate (UDD) Preparation  
of Development Plan for Fourteen Upazila's  
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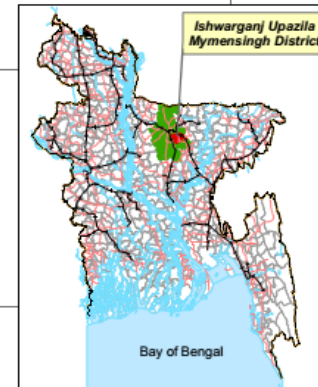
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# ROAD HIERARCHY OF ISHWARGANJ UPAZILA



## Legend

- Upazila Boundary
- Union Boundary
- Paurashava Boundary
- +— Railway
- Road Hierarchy**
  - Regional Highways
  - Upazila Road
  - Union Road
  - Major Waterbody

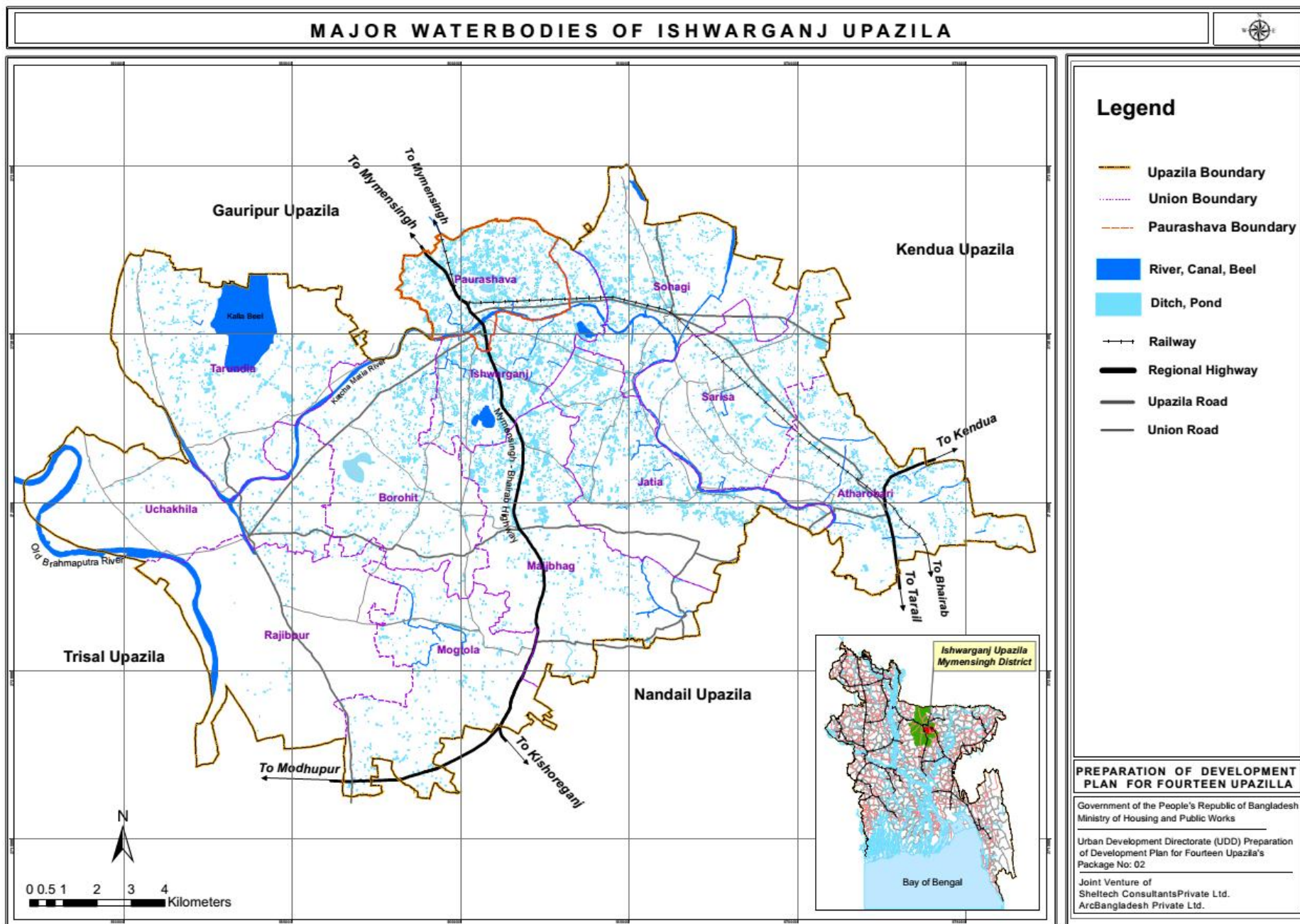


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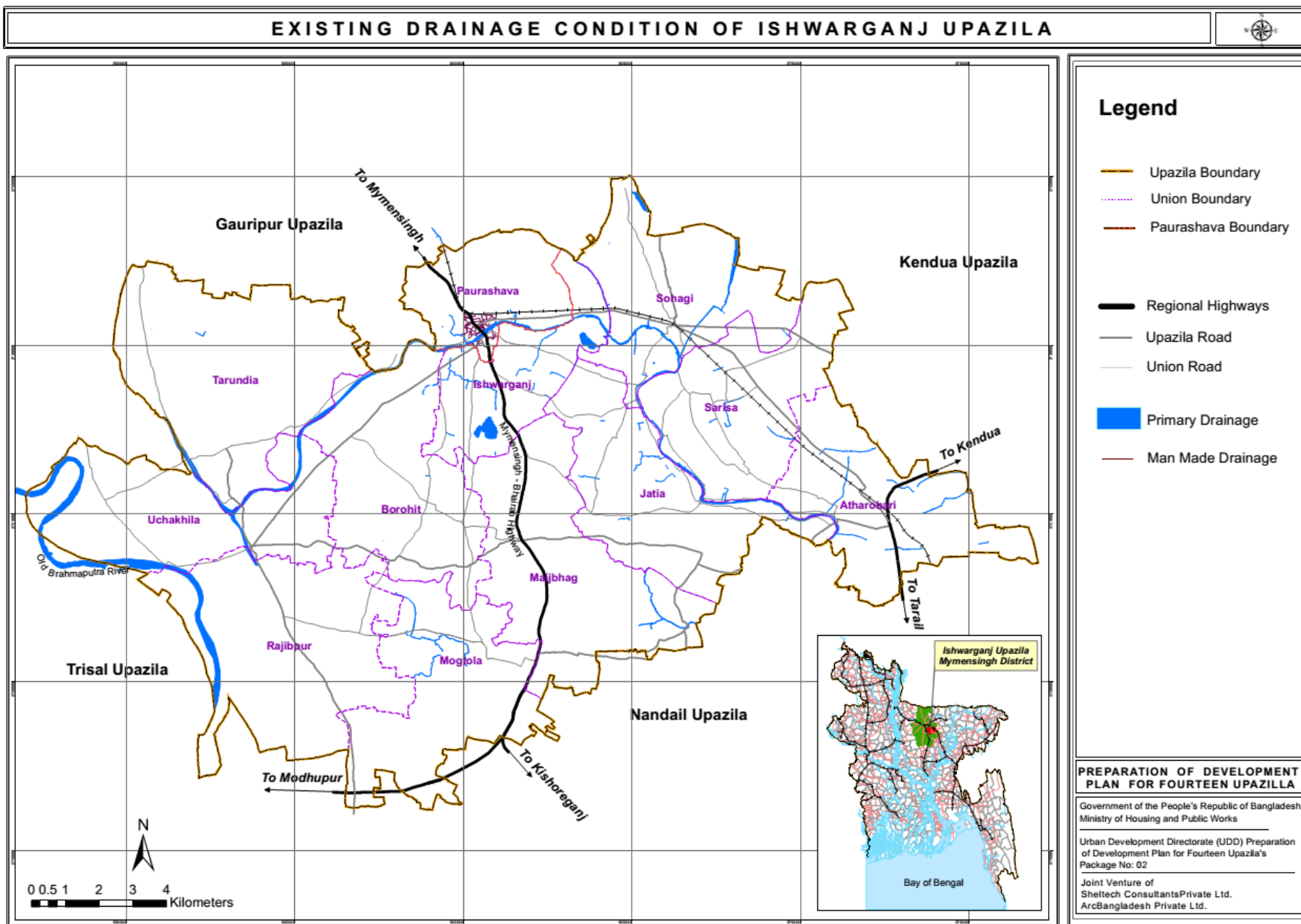
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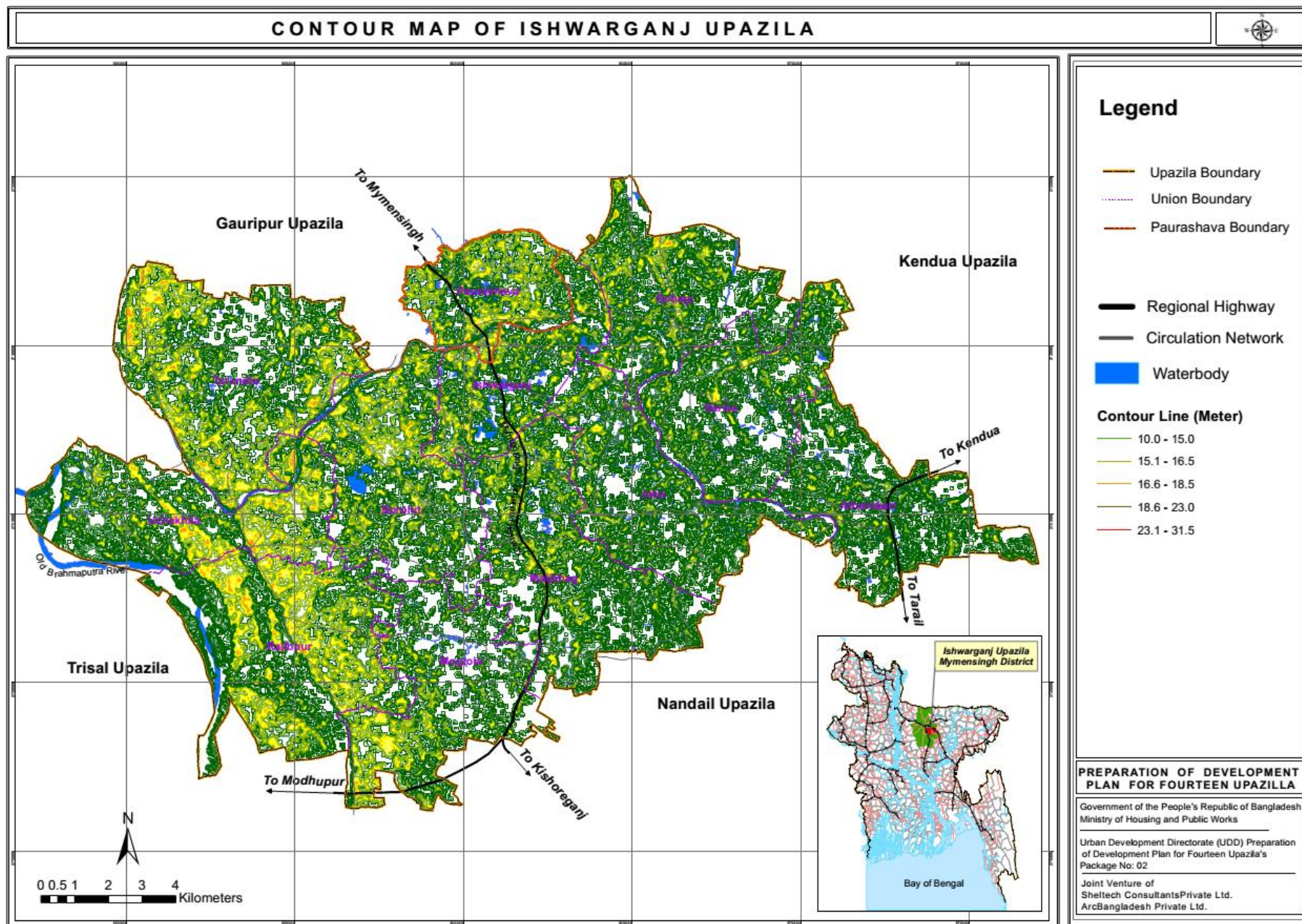
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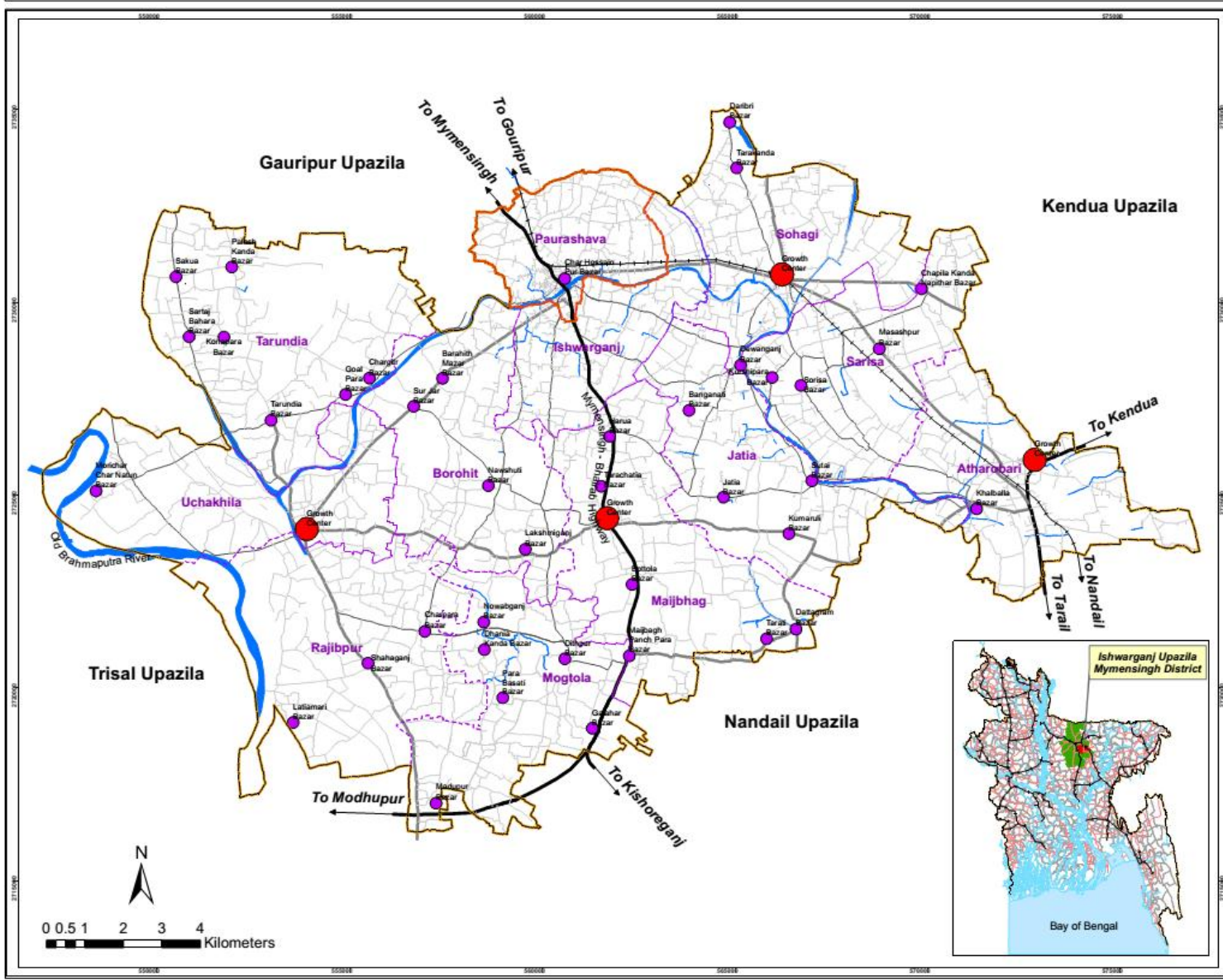






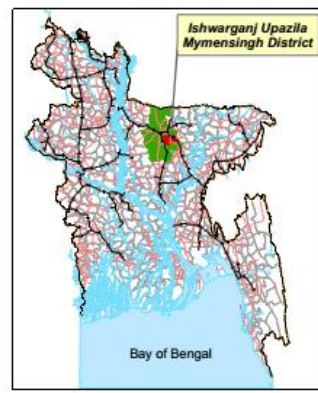


# GROWTH CENTER & HAT BAZAR MAP OF ISHWARGANJ UPAZILA



## Legend

- Upazila Boundary
- Union Boundary
- Paurashava Boundary
- Hat Bazar Area
- Growth Center
- Railway
- Regional Highway
- Upazila Road
- Union Road
- Village Road
- Waterbody

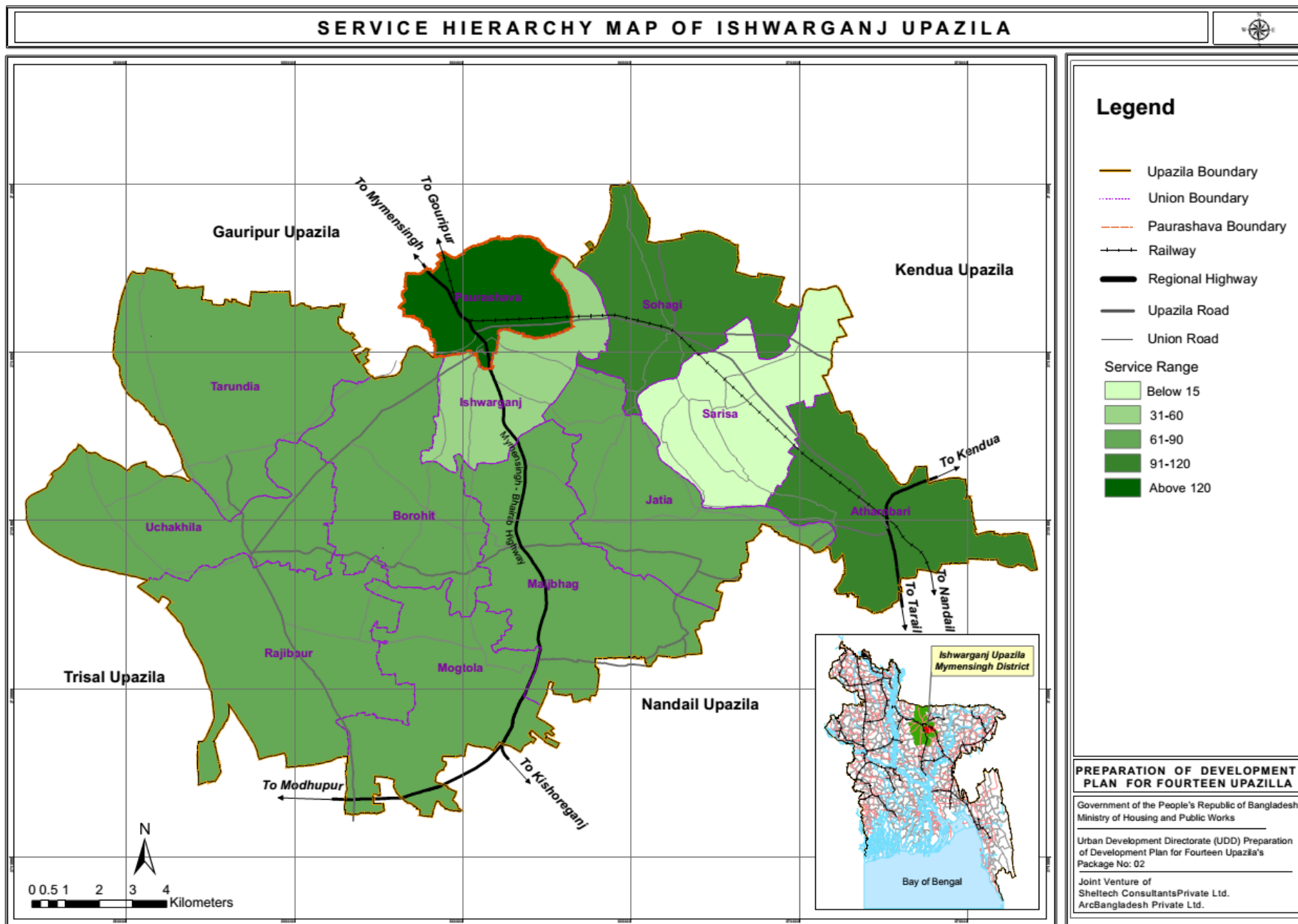


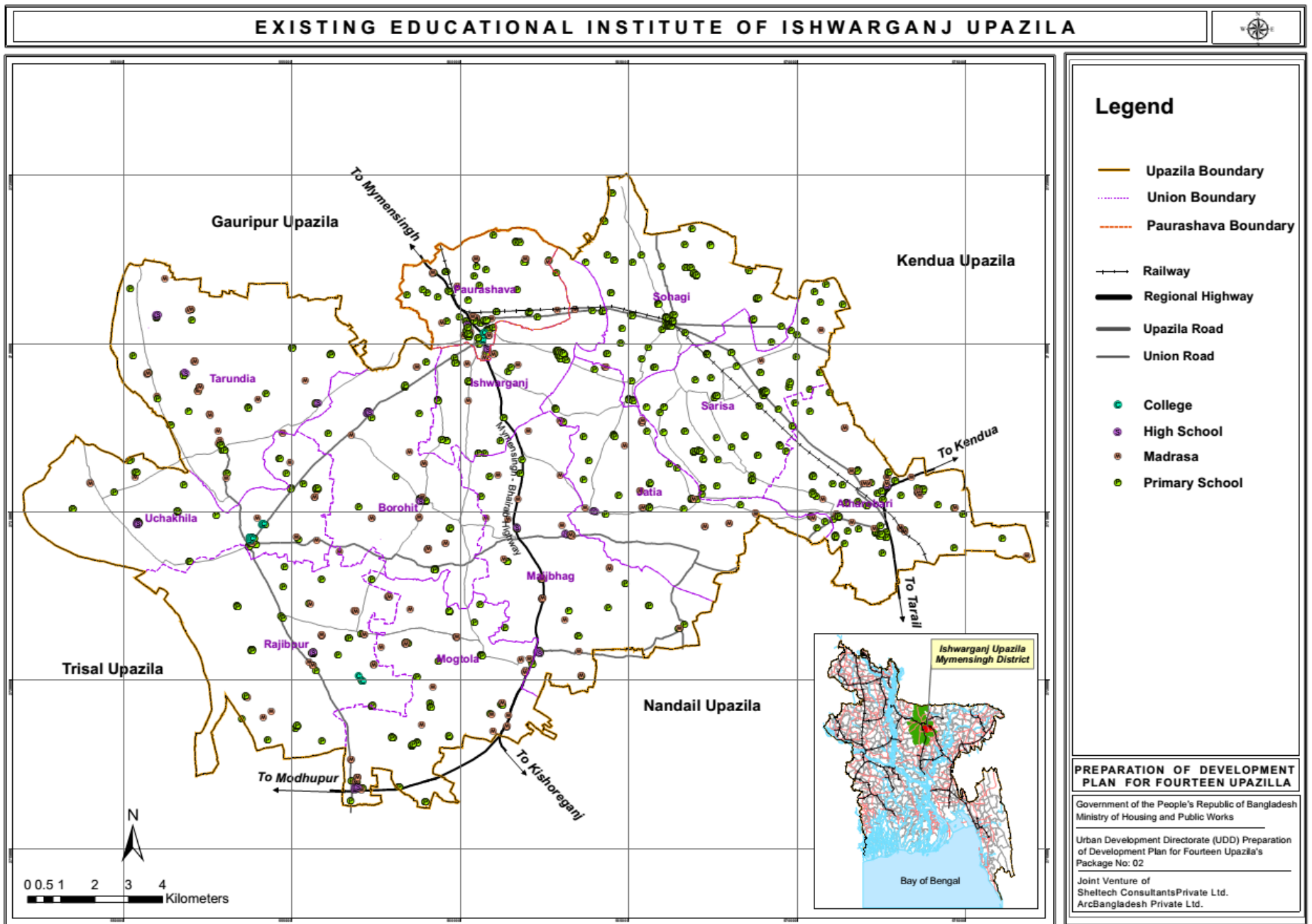
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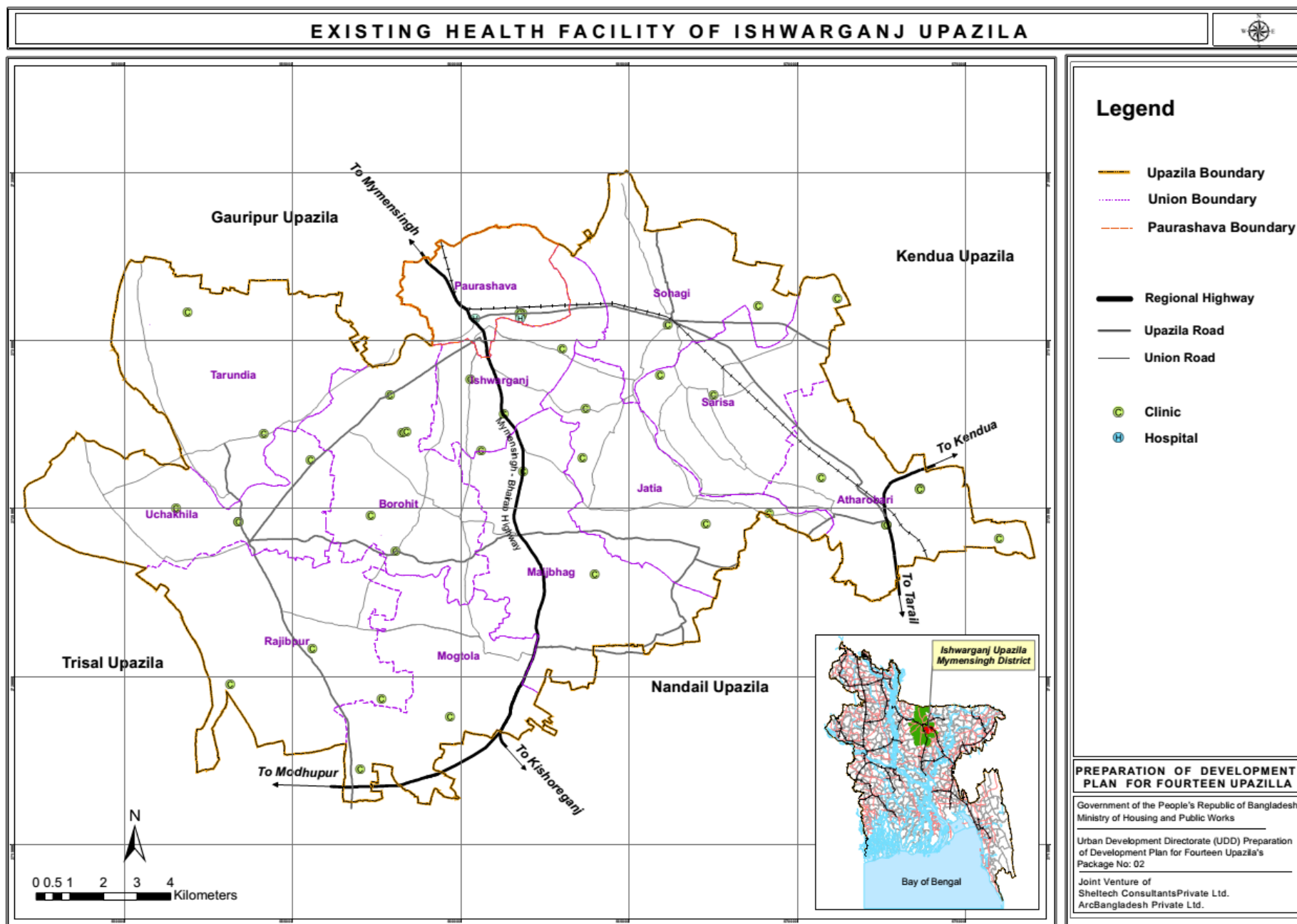
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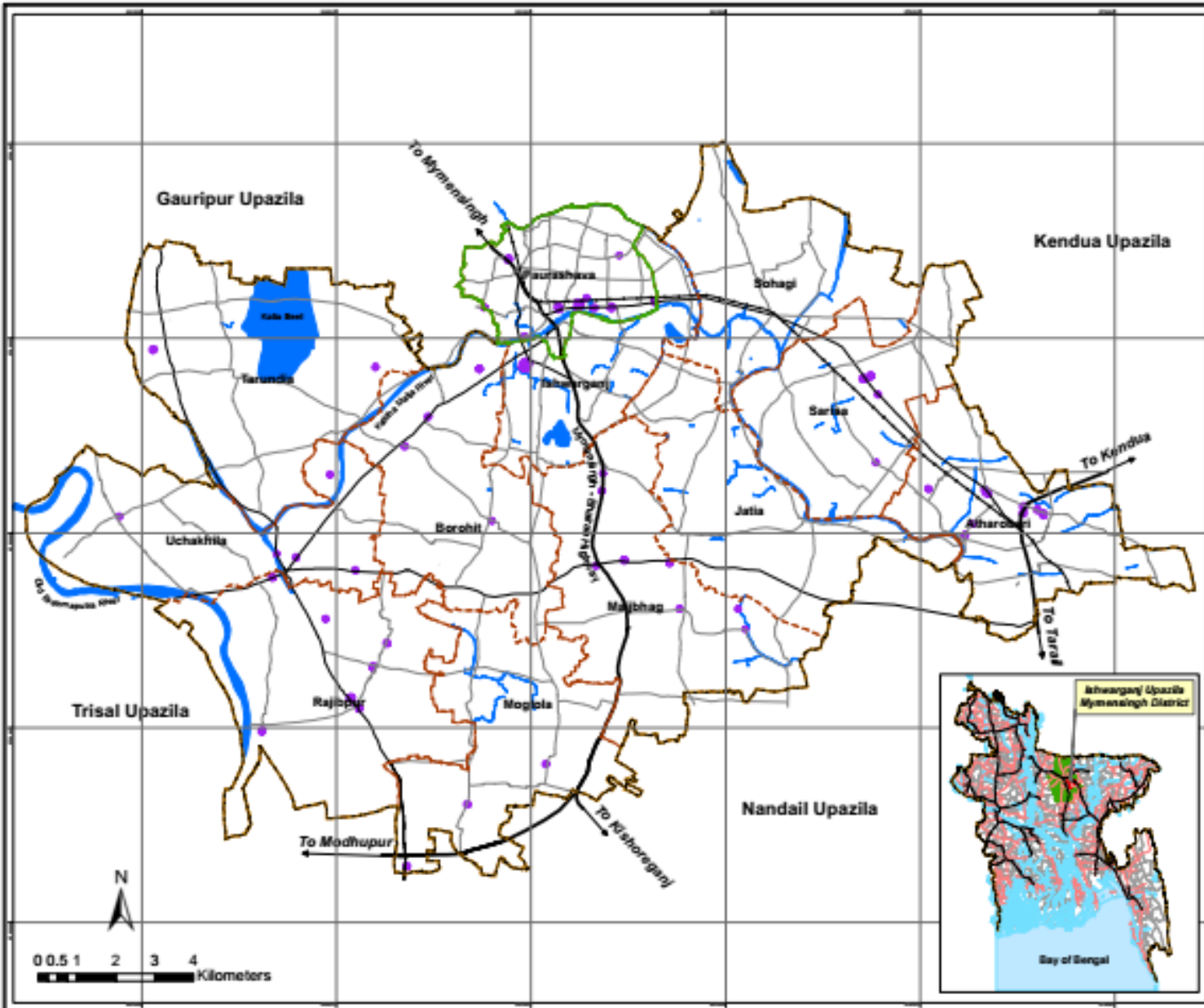






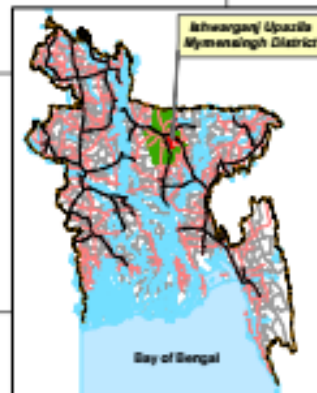


# EXISTING INDUSTRY OF ISHWARGANJ UPAZILA



## Legend

- Upazila Boundary
- - - Union Boundary
- Paurashava Boundary
- Railway
- Regional Highway
- Primary Road
- Secondary Road
- Existing Industry
- Waterbody



## PREPARATION OF DEVELOPMENT PLAN FOR FOURTEEN UPAZILA

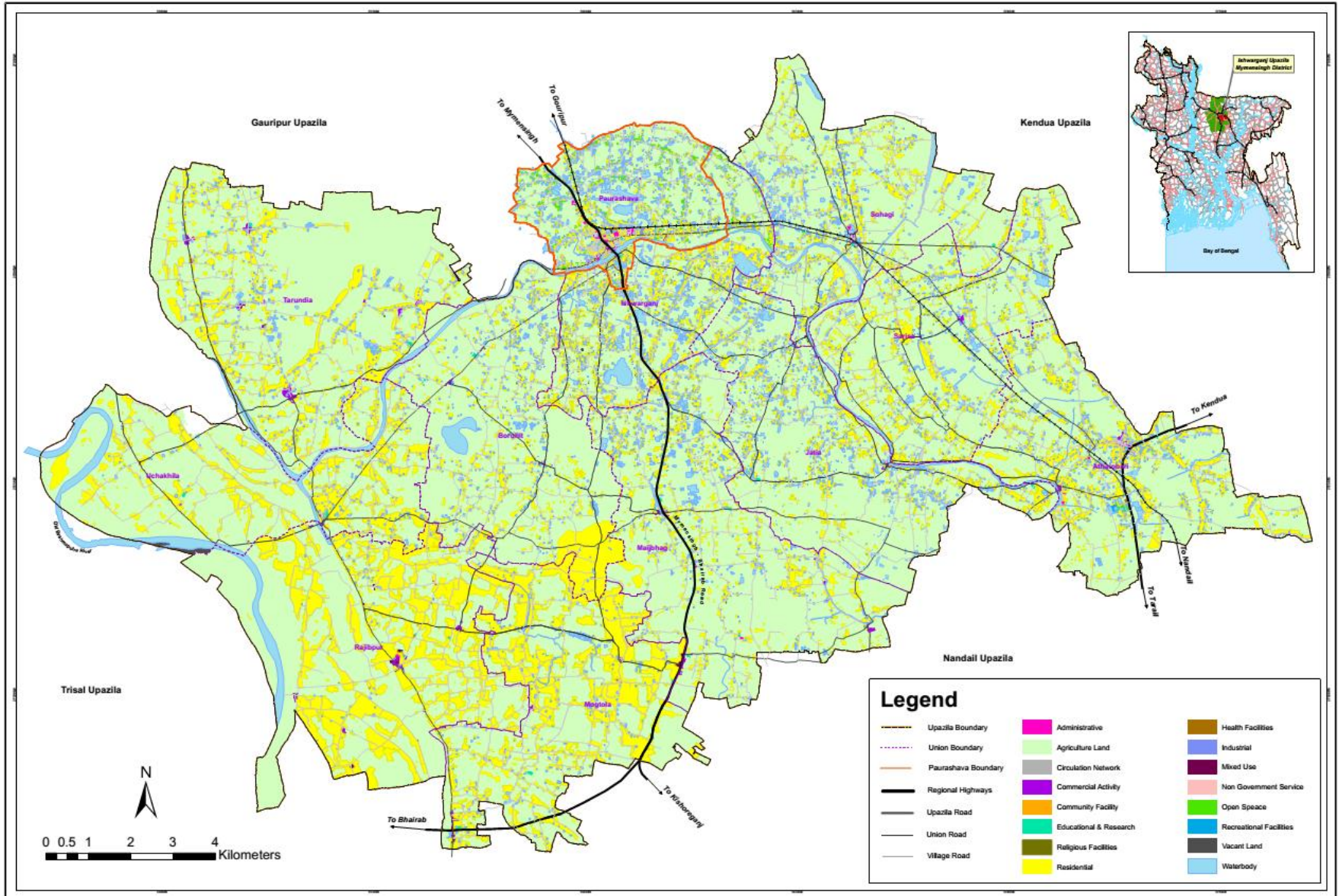
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**Table:** Major Landuse of Ishwarganj Upazila.

Landuse	Area (in acre)																									
	Paurashava		Atharobari		Borohit		Ishwarganj		Jatia		Maijbhag		Mogtola		Rajibpur		Sarisa		Sohagi		Tarundia		Uchakhila		Total	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
Administrative/Government Services	27.54	0.87	5.63	0.10	0.84	0.01					2.05	0.03	0.51	0.01	2.45	0.03	1.17	0.02	1.58	0.03	0.43	0.01	0.47	0.01	42.67	0.06
Agricultural Area	1759.78	55.88	3992.81	74.15	4863.54	79.31	2207.73	60.83	4441.44	78.16	5608.36	78.17	2993.50	50.48	5010.75	63.28	4065.20	76.72	4066.55	76.95	6274.42	78.07	4217.48	69.72	49501.47	71.05
Circulation Network	67.30	2.14	60.32	1.12	57.35	0.94	50.73	1.40	53.00	0.93	74.03	1.03	66.05	1.11	72.02	0.91	58.90	1.11	60.43	1.14	69.08	0.86	53.60	0.89	742.78	1.07
Commercial Activities	25.29	0.80	38.62	0.72	8.24	0.13	0.53	0.01	4.97	0.09	26.71	0.37	17.44	0.29	22.63	0.29	7.89	0.15	13.54	0.26	47.70	0.59	11.82	0.20	225.37	0.32
Community Facilities	3.59	0.11		0.00		0.00	0.18	0.00		0.00		0.00	0.10	0.00	0.44	0.01		0.00	0.46	0.01		0.00	1.43	0.02	6.20	0.01
Educational & Research	14.19	0.45	13.74	0.26	7.74	0.13	0.08	0.00	5.74	0.10	11.79	0.16	18.45	0.31	9.88	0.12	10.80	0.20	12.23	0.23	15.85	0.20	8.19	0.14	128.66	0.18
Health Facilities	4.00	0.13	1.36	0.03	0.49	0.01		0.00	0.05	0.00	0.53	0.01	0.45	0.01	0.76	0.01	0.16	0.00	0.43	0.01	0.33	0.00	0.82	0.01	9.37	0.01
Industrial Activities	6.09	0.19	2.99	0.06	0.52	0.01	6.83	0.19		0.00	1.11	0.02	0.75	0.01	2.69	0.03	1.04	0.02		0.00	0.68	0.01	0.55	0.01	23.25	0.03
Mixed Use	1.22	0.04		0.00		0.00		0.00		0.00		0.00	23.71	0.40	15.92	0.20	0.11	0.00	0.03	0.00	2.82	0.04	0.26	0.00	44.07	0.06

Landuse	Area (in acre)																									
	Paurashava		Atharobari		Borohit		Ishwarganj		Jatia		Maijbhag		Mogtola		Rajibpur		Sarisa		Sohagi		Tarundia		Uchakhila		Total	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
Non-Government Service	0.43	0.01	0.85	0.02		0.00	0.33	0.01	0.08	0.00	0.56	0.01	0.63	0.01		0.00		0.00	0.23	0.00		0.00		0.00	3.11	0.00
Open Space	2.28	0.07	6.84	0.13	0.25	0.00	18.05	0.50	0.02	0.00	0.09	0.00		0.00		0.00		0.00	0.22	0.00		0.00		0.00	27.75	0.04
Recreational Facility	0.18	0.01	4.92	0.09	3.81	0.06		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	5.11	0.01
Religious	9.20	0.29	8.28	0.15		0.00	0.11	0.00	1.40	0.02	3.30	0.05	4.91	0.08	6.02	0.08	3.55	0.07	9.96	0.19	5.12	0.06	4.24	0.07	59.90	0.09
Residential Area	792.98	25.18	994.80	18.47	883.37	14.41	896.52	24.70	741.18	13.04	1138.44	15.87	2684.07	45.26	2583.39	32.63	906.38	17.11	745.66	14.11	1356.74	16.88	1335.92	22.08	15059.45	21.62
Waterbody	431.91	13.71	253.67	4.71	306.21	4.99	444.24	12.24	434.28	7.64	307.27	4.28	119.14	2.01	191.20	2.41	243.69	4.60	373.23	7.06	263.93	3.28	384.15	6.35	3752.86	5.39
Vacant Land	3.33	0.11		0.00		0.00	3.76	0.10		0.00		0.00		0.00		0.00		0.00	0.14	0.00		0.00	30.51	0.50	37.73	0.05
Total	3149.31	100.00	5384.83	100.00	6132.35	100.00	3629.10	100.00	5682.17	100.00	7174.21	99.97	5929.69	100.00	7918.14	99.97	5298.88	100.00	5284.70	100.00	8037.09	100.00	6049.43	100.00	69669.73	100.00

# EXISTING LANDUSE MAP OF ISHWARGANJ UPAZILA





## VULNERABILITY RISK ASSESSMENT

Risk Assessment survey was done for find out building condition of Ishwarganj Upazila. 8 types data like overhanging, soft story, pounding, set back, short column, mobile tower, tilting and ground set has been identified to assess risk of the existing structure.

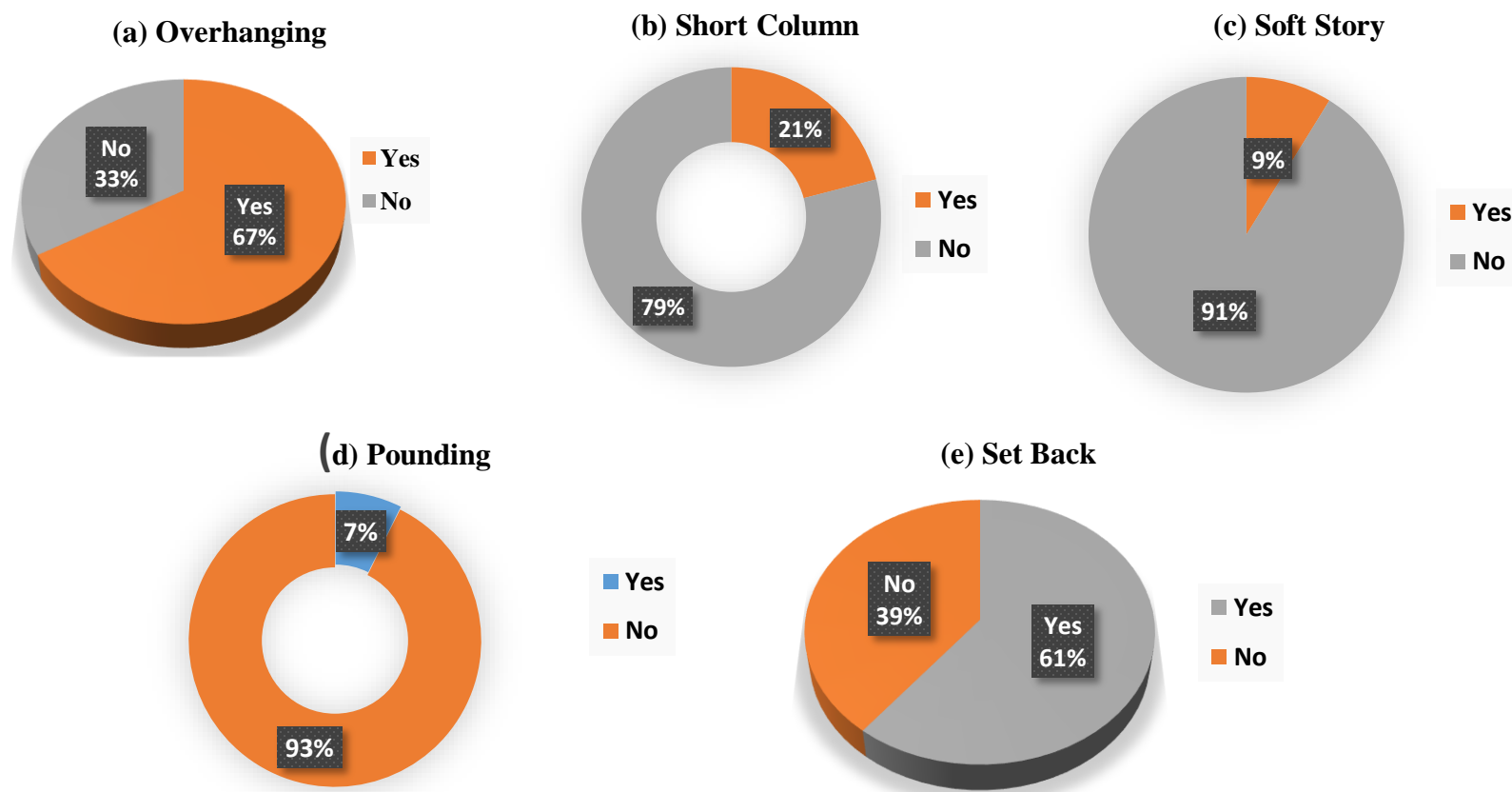


Figure: (a) Overhanging, (b) Short Column, (c) Soft Story, (d) Pounding, (e) Set Back.

Source: Risk Assessment Survey, 2017.

## AGRICULTURAL LAND AREA COVERAGE

The land of Ishwarganj Upazila is dominant in agriculture and also intensively used for poultry, fish culture, settlements with homestead forest and other infrastructural activities. Ishwarganj Upazila gets high potentials for its land and agricultural production. The general overview depicts that Puarashava covers less land area for agriculture on an average and Tarundia union covers the highest land area in an average.

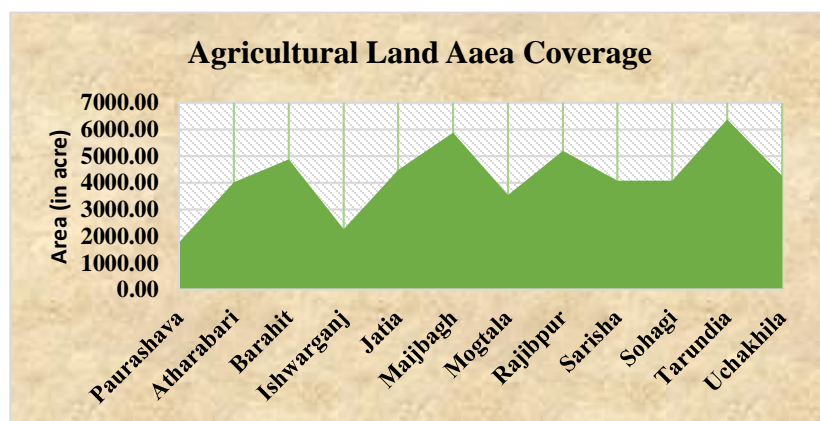


Figure: Agriculture Land Area Coverage.

Source: Land use Survey, 2016.

## CROPPING INTENSITY

The average cropping intensity under Ishwarganj Upazila is 213% which is less than cropping intensity of Unions of Rajibpur (218%) & Sarisha (214%) respectively. There is an ample scope of increasing double and triple cropped areas under each Union and Paurashava after development irrigation facilities, ensure availability of quality crop production inputs and market infrastructure through intervention of Urban Development project.

The average cropping intensity under Ishwarganj Upazila is 213% which is less than Mymensingh district (215%) and higher than national average cropping intensity (190%) (Krishi Diary 2016).

## CROPPING PATTERN

Percentage of single, double, triple and multiple cropped area used in Ishwarganj Upazila is shown in. The highest percentage is double cropped area (81%) followed by triple cropped area (14%) and single cropped area (5%) under Ishwarganj Upazila.

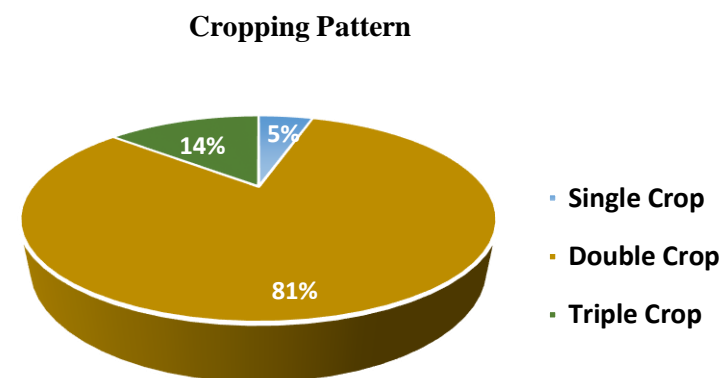
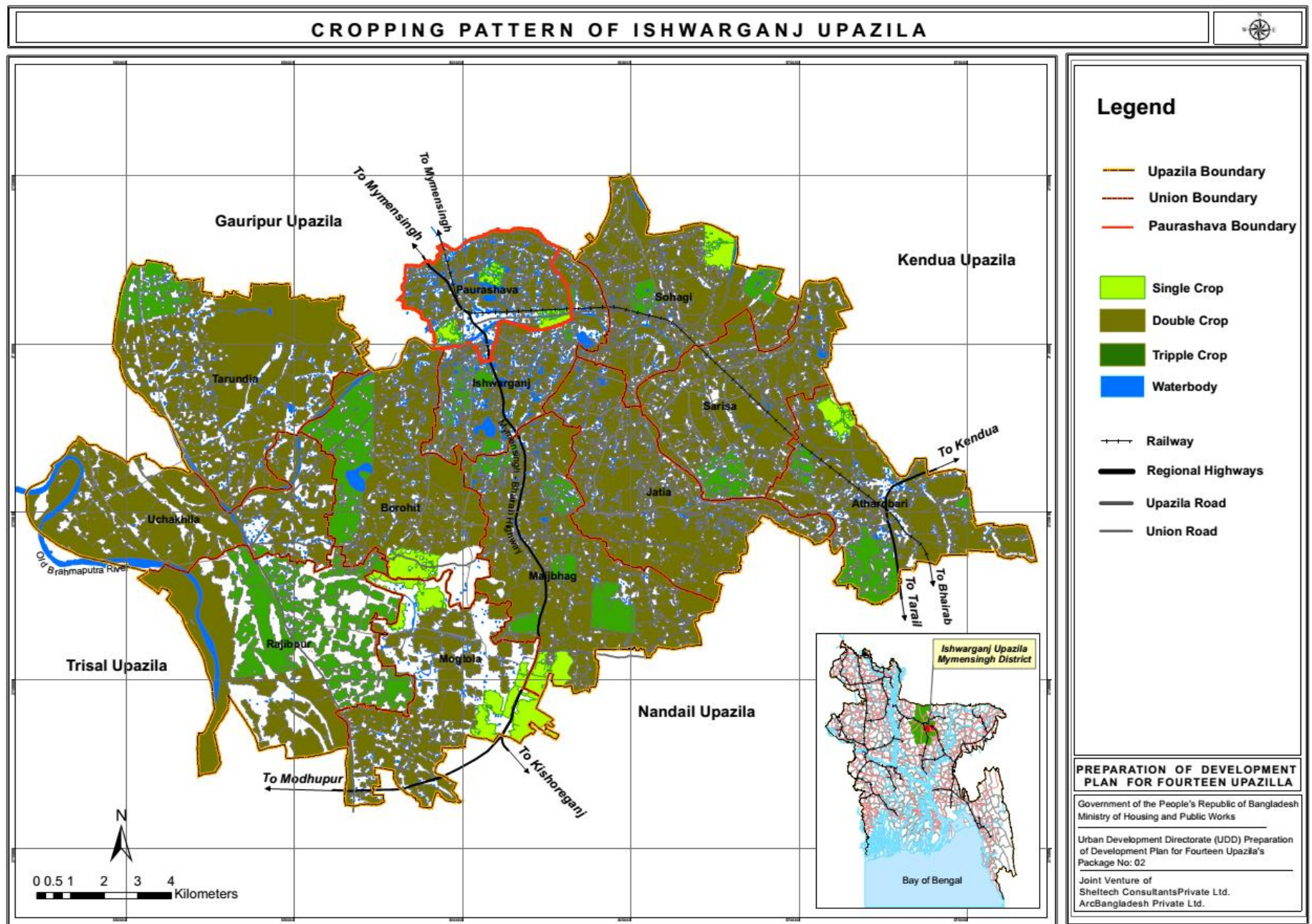


Figure: Cropping Pattern.

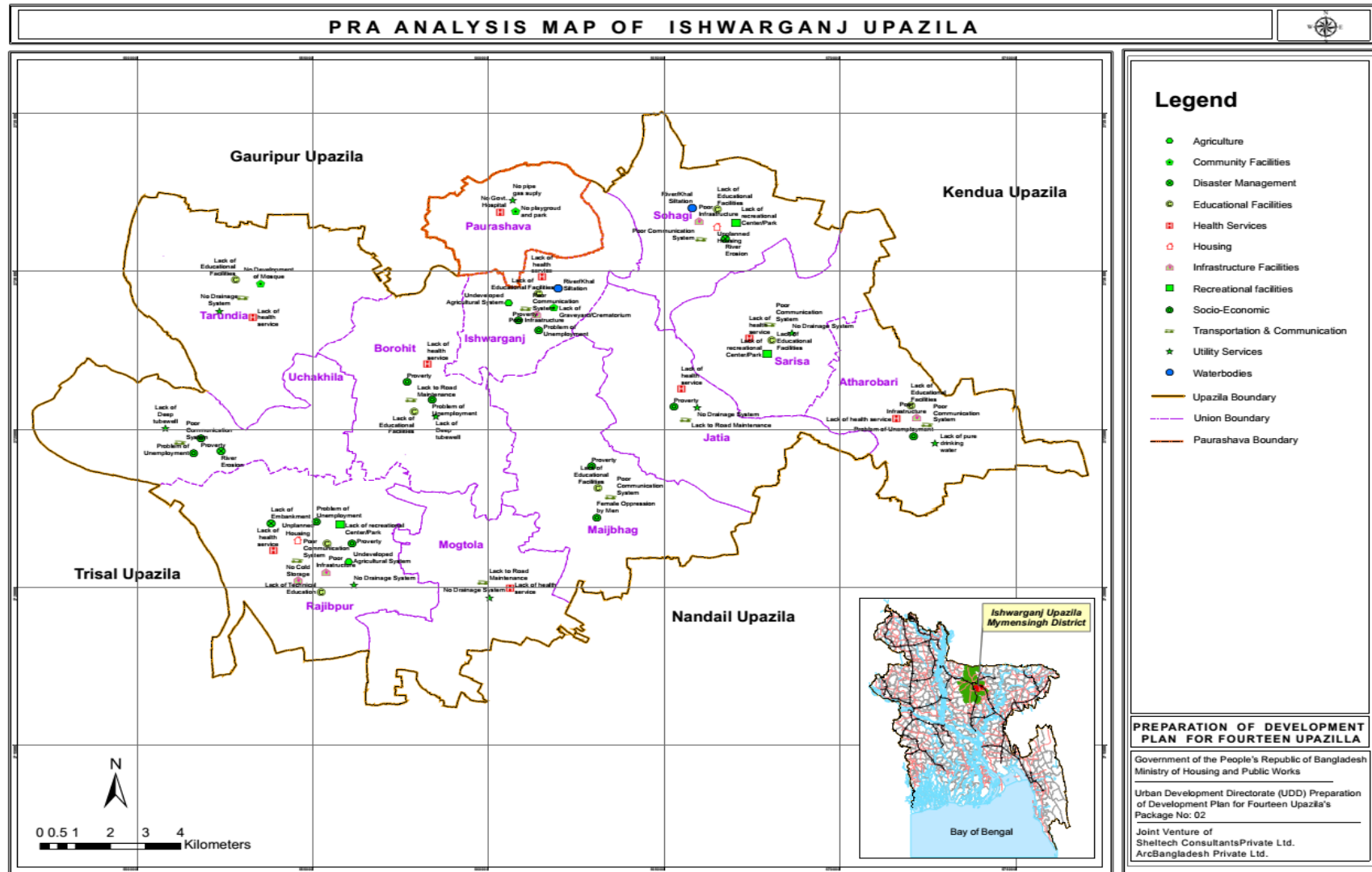
Source: Land use Survey, 2016.





## PARTICIPATORY RURAL APPRAISAL

Participatory Rural Appraisal (PRA) is considered one of the popular and effective procedure to incorporate the knowledge and opinions of people in the planning and management of development projects and programs. In recent years there has been rapid expansion of new participatory reflection and action methods (PRA) and related approaches in the context of development and research.



## GEOLOGY

For conducting of Geotechnical and Geophysical Test 8 locations have been selected across the whole Ishwarganj Upazilla. About three types of boreholes has been dug deep in those locations. Map shows the location of the boreholes according with their typology and depth.

Based on the test on those location 3 types of geology found in Ishwarganj. Most of the area in Ishwarganj upazilla consist of alluvial silt and clay. On the other hand Maizbagh, Barahit, Magtala area consist of alluvial silt .Uchakhila, Tarundia, Rajibpur area consist of Chandian alluvium. Geology typology has been delineated in the map.

Surface Geology	Area
Alluvial sit and clay	30623.38
Chadian Alluvial	18759.49
Alluvial	22339.03
Waterbody	1198.26

## Soil Type

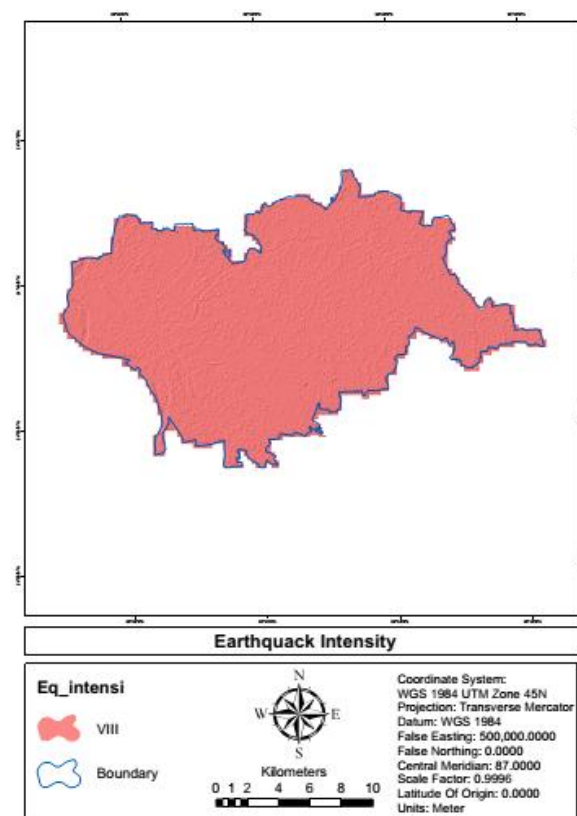
Based on the average shear wave velocity the soil type has been divided into 6 class with different characteristics. Among them about 4 types of soil such that D2, D3, D4, D5 has been found in Ishwarganj.

Soil Type	Area
D2 - Stiff/ Dense Soil	494.208
D3 - Medium Stiff to Stiff/ Medium Dense to Dense Soil	2594.59
D4 - Medium Stiff / Medium Dense Soil	56432.37
D5 - Soft / Loose to Medium Stiff / Medium dense Soil	16787.628

## Earthquake Intensity Map

Based on the earthquake intensity there are two types of soil i.e; Type VIII and Type IX. One for severe shaking and another for violent shaking. The whole area of Ishwarganj comprises of severe shaking type soil. For this type of soil the PGA (Pick Ground Acceleration) value lies between 0.34 to 0.65.

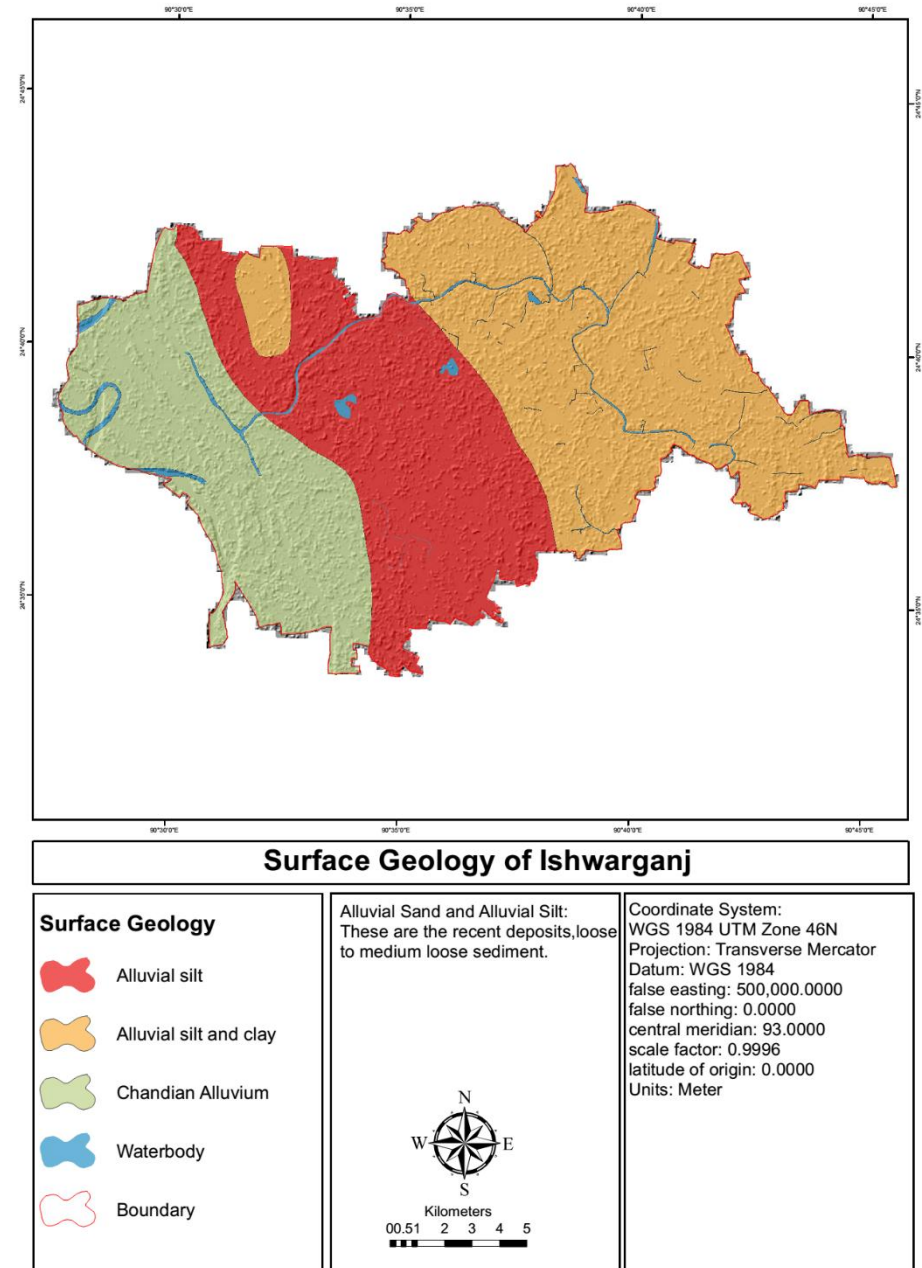
Foundation Type	Area
Earthquack Intensity	76308.80

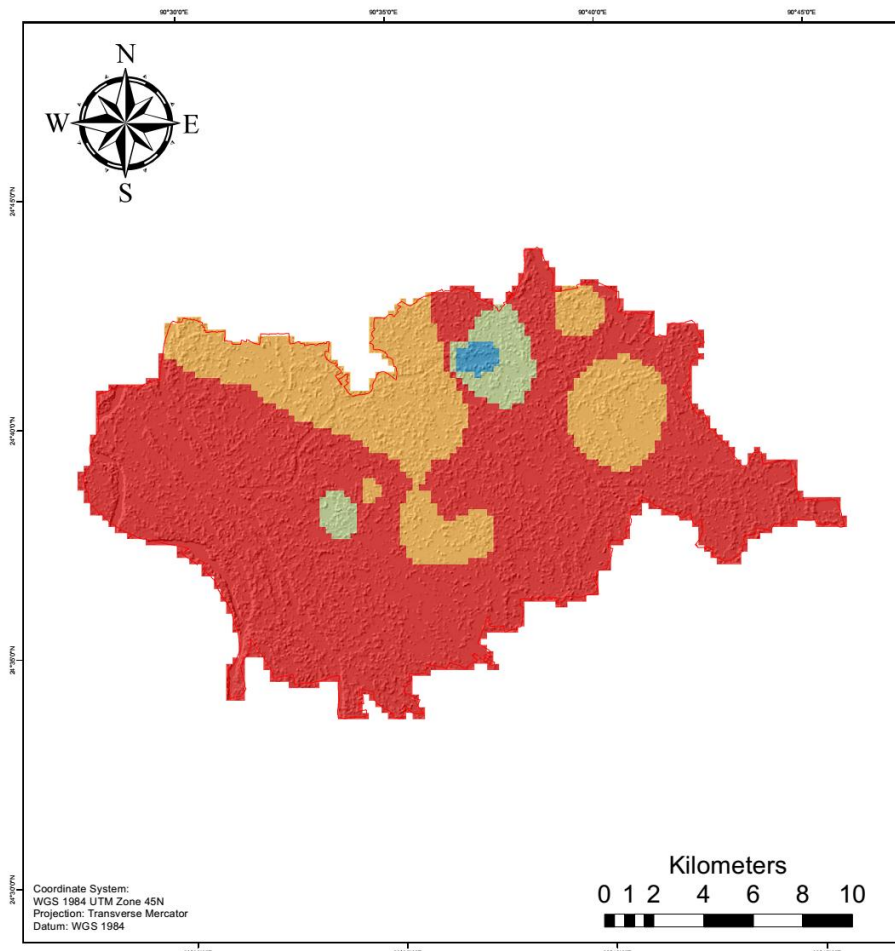


## Earthquake Sensitivity Map:

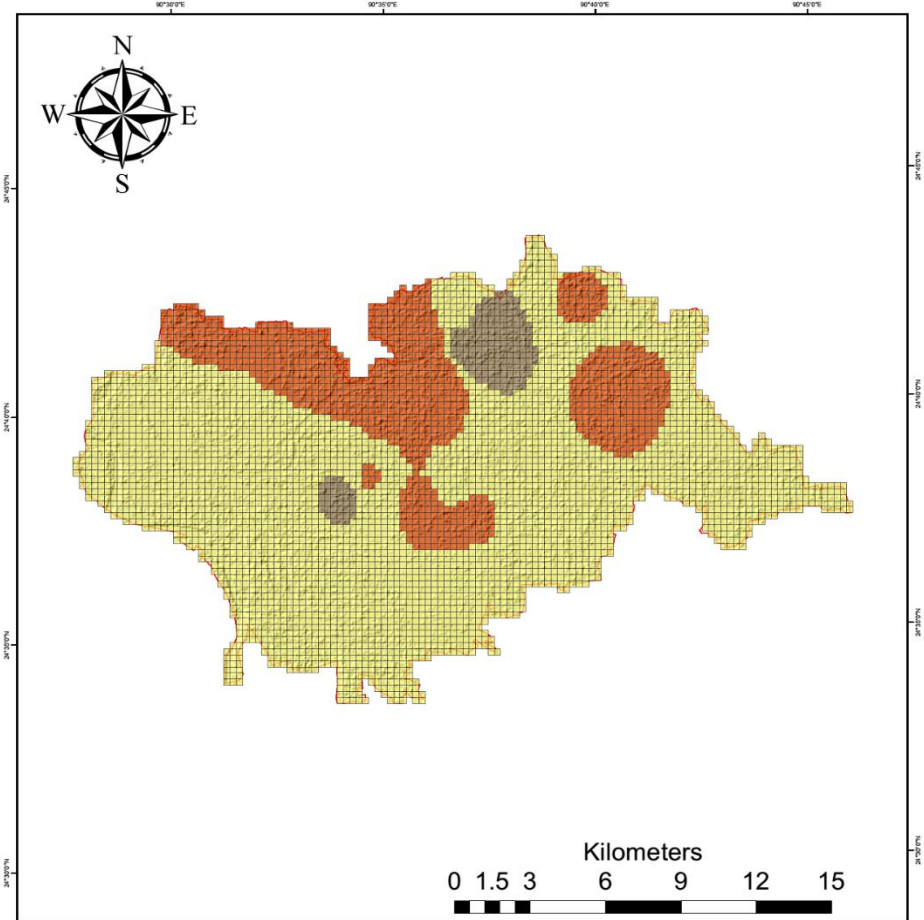
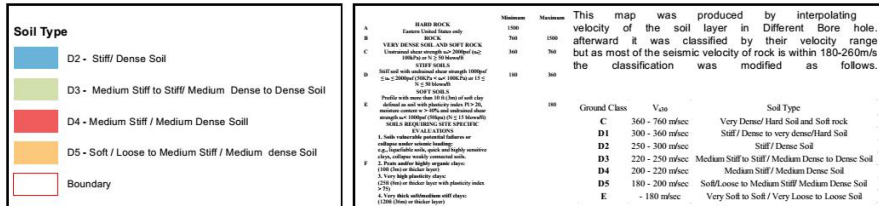
This map was produced by multiplying PGA values with Amplification factors corresponded for different soil type. as the  $V_s$  is within 120-250m/s so soil was classified as (E,D5,D4,D3). thus the amplification factor was also modified. Spectral Acceleration at Engineering Ground Surface(Depth upto 30).

Probability	Area
1 <sup>0</sup> Sensitive	16787.62
2 <sup>0</sup> Sensitive	56432.37
3 <sup>0</sup> Sensitive	3088.8

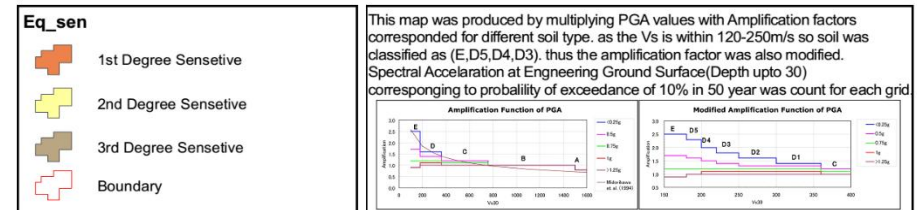




**Soil Type According to Average Seismic Velocity (upto 30m)**



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



## SUITABILITY ANALYSIS

For the plan preparation of Ishwarganj Upazila suitability analysis is an essential step. Through this analysis suitable area for agriculture, urban and infrastructure development will be identified.

### **Agricultural suitability**

To identify the best suitable area for agriculture an analysis has been done. It is derived from the data of water depth, slope and cropping intensity. The main reason of this analysis is to identify the most suitable agricultural land for conservation.

### **Hydrological suitability**

To identify the best suitable area for agriculture an analysis has been done. It is derived from the data of water depth and DEM.

### **Human Settlement Suitability**

To identify the best suitable area for human settlement an analysis has been done. It is derived from the data of water depth, slope and cropping intensity. The main reason of this analysis is to identify the most suitable agricultural land for conservation.

### **Urban Suitability**

For the identification of the urban suitable area some criteria have been fixed such as DEM, Geological suitability and major road. In which areas these four criteria have met the consideration those areas are the urban suitable areas.

### **Geological Suitability**

In order to identify the area for zoning an analysis has been carried out. For this analysis the criteria are shear wave, PGA and foundation layer. From this analysis most and least suitable areas for infrastructure has been identified which will help for further development.

### **Factors behind Hydrological Suitability Calculation:**

Depth of water = Depth of water positively influenced the agriculture suitability.

Here, depth 0 – 0.3m =  $F_0$  = Permitted for agriculture and other uses

depth 0.3 – 0.9 m =  $F_1$  = double/triple crop land and permitted only for Agriculture.

depth 0.9 – 1.8 m =  $F_2$  = Single crop land and permitted only for Agriculture.

DEM = DEM Inversely influenced the Hydrological suitability from maximum to minimum value.

### **Factors behind Agriculture Suitability Calculation:**

Cropping Intensity = Cropping intensity positively influenced the Agriculture suitability from single crop land to multiple crop land.

Depth of water = Depth of water positively influenced the agriculture suitability.

Here, depth 0 – 0.3m =  $F_0$  = double/triple crop land

depth 0.3 – 0.9 m =  $F_1$  = double/triple crop land

depth 0.9 – 1.8 m =  $F_2$  = Single crop land

### **Factors behind Infrastructure Suitability Calculation**

Foundation Depth = Foundation Depth Inversely influenced the infrastructure suitability from minimum to maximum.

PGA Value = PGA Value Inversely influenced the infrastructure suitability from minimum to maximum.

Earthquake Intensity = Earthquake intensity inversely influenced the infrastructure suitability from minimum to maximum.

Where, 1<sup>0</sup> Sensitive means high risk zone

2<sup>0</sup> Sensitive means Moderate risk zone

3<sup>0</sup> Sensitive means Low risk zone

### **Factors behind Human Settlement Suitability Calculation:**

DEM = positively influenced the Human Settlement Suitability from minimum to maximum Value.

Population density = positively influenced the Human Settlement Suitability from minimum to maximum Range.

Settlement Area = positively influenced the Human Settlement Suitability in a range of 1 to 5 in respect of landuse type.

Proximity to road = Proximity to Road influenced the human settlement suitability according to road type. (Katcha = 1; Semi pucca= 2; Pucca =3)

Infrastructure Suitability = Infrastructure Suitability positively influenced Human Settlement Suitability from “poor” to “very good”.

### **Factors behind Urban Area Suitability Calculation**

DEM = positively influenced the Human Settlement Suitability from minimum to maximum Value.

Settlement Area = positively influenced the Human Settlement Suitability in a range of 1 to 5 in respect of landuse type.

Proximity to road = Proximity to Road influenced the human settlement suitability according to road type. (Katcha = 1; Semi pucca= 2; Pucca =3)

Infrastructure Suitability = Infrastructure Suitability positively influenced Human Settlement Suitability from “poor” to “very good”.



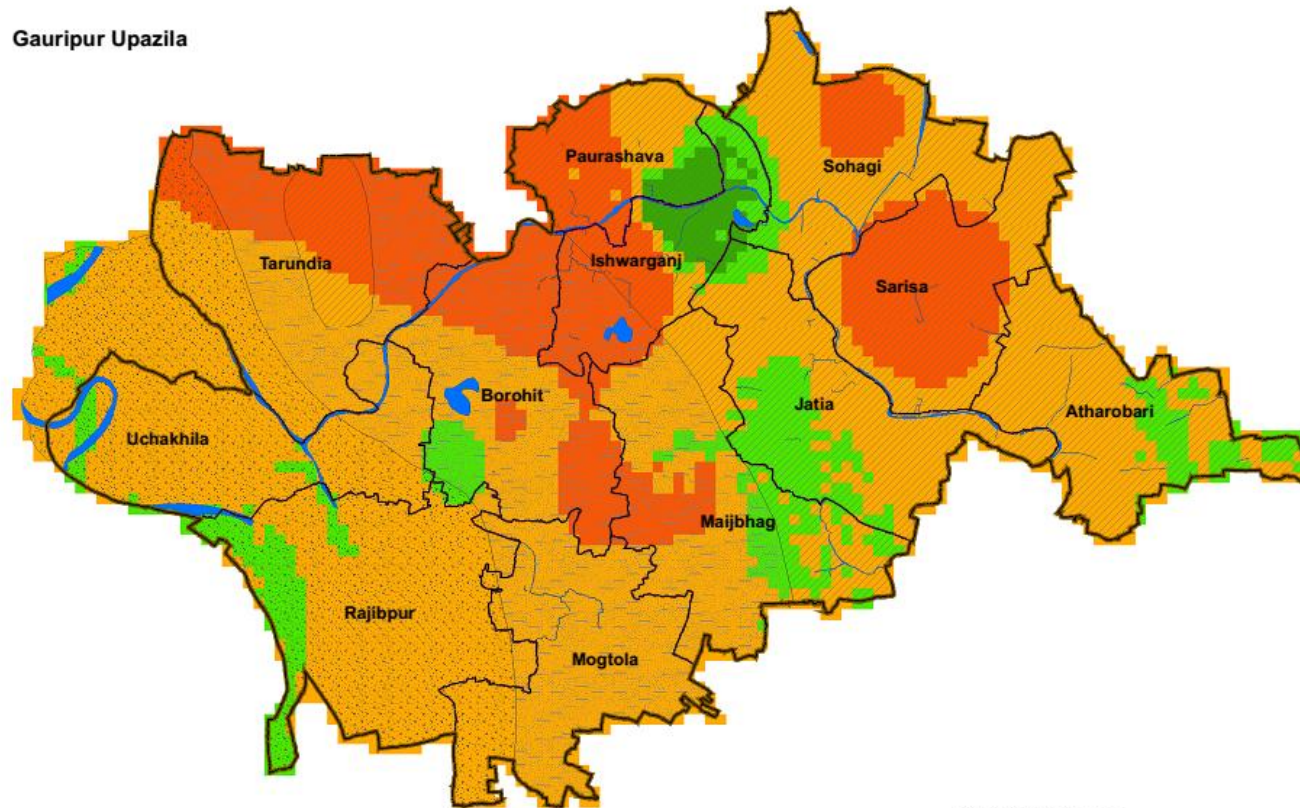


# INFRASTRUCTURE SUITABILITY IN ISHWARGANJ UPAZILA



Gauripur Upazila

Kendua Upazila



Trishal Upazila

Nandail Upazila

## Legend

### Surface Geology

- Alluvial silt
- Alluvial silt and clay
- Alluvium Sand
- Waterbody

### Infrastructure Suitability

- Class
- Very Good
  - Good
  - Moderate
  - Poor

- Upazila Boundary
- Paurashava Boundary
- Union Boundary

## PREPARATION OF DEVELOPMENT PLAN FOR FOURTEEN UPAZILLA

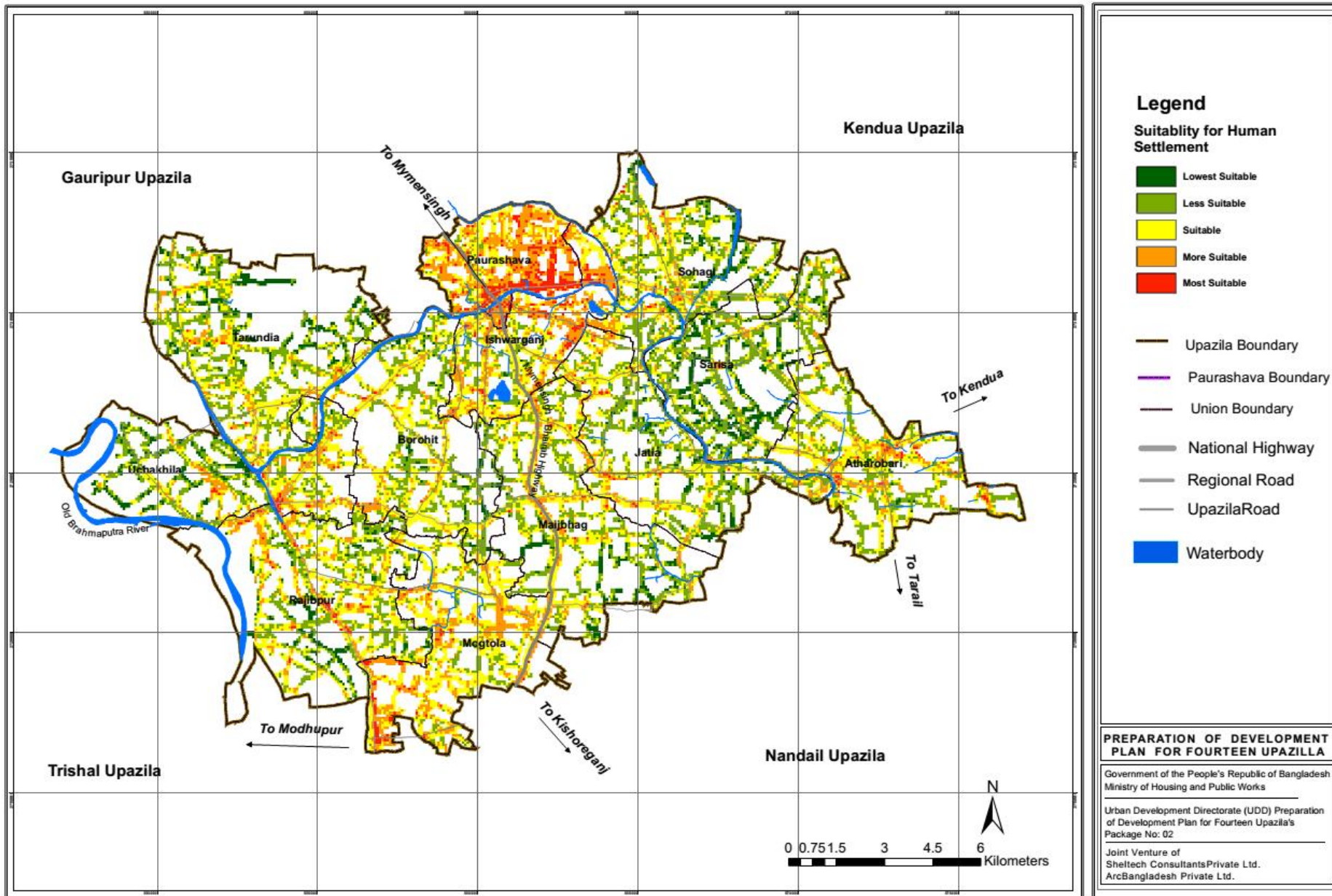
Government of the People's Republic of Bangladesh  
Ministry of Housing and Public Works

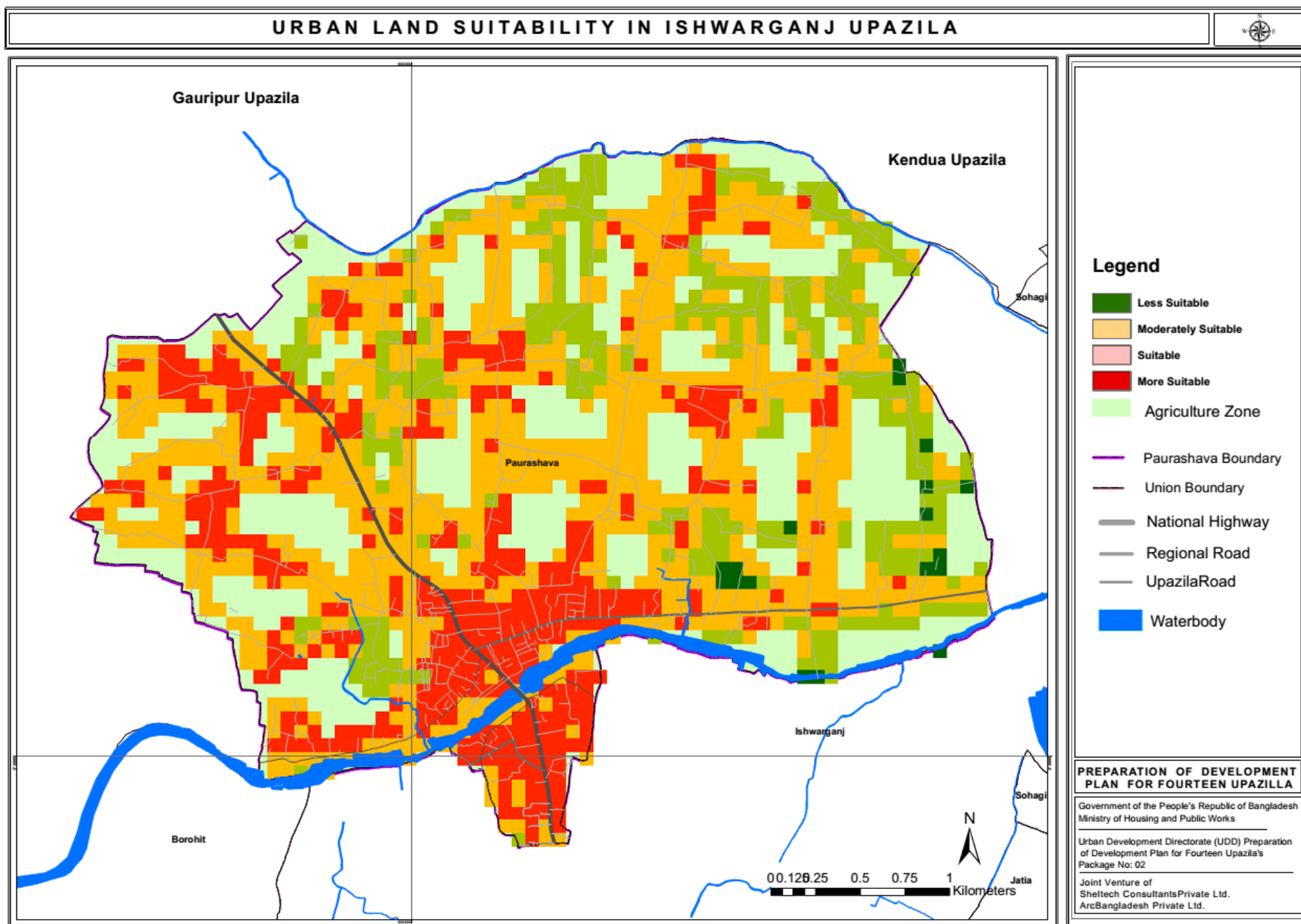
Urban Development Directorate (UDD) Preparation of  
Development Plan for Fourteen Upazilla's  
Package No: 02

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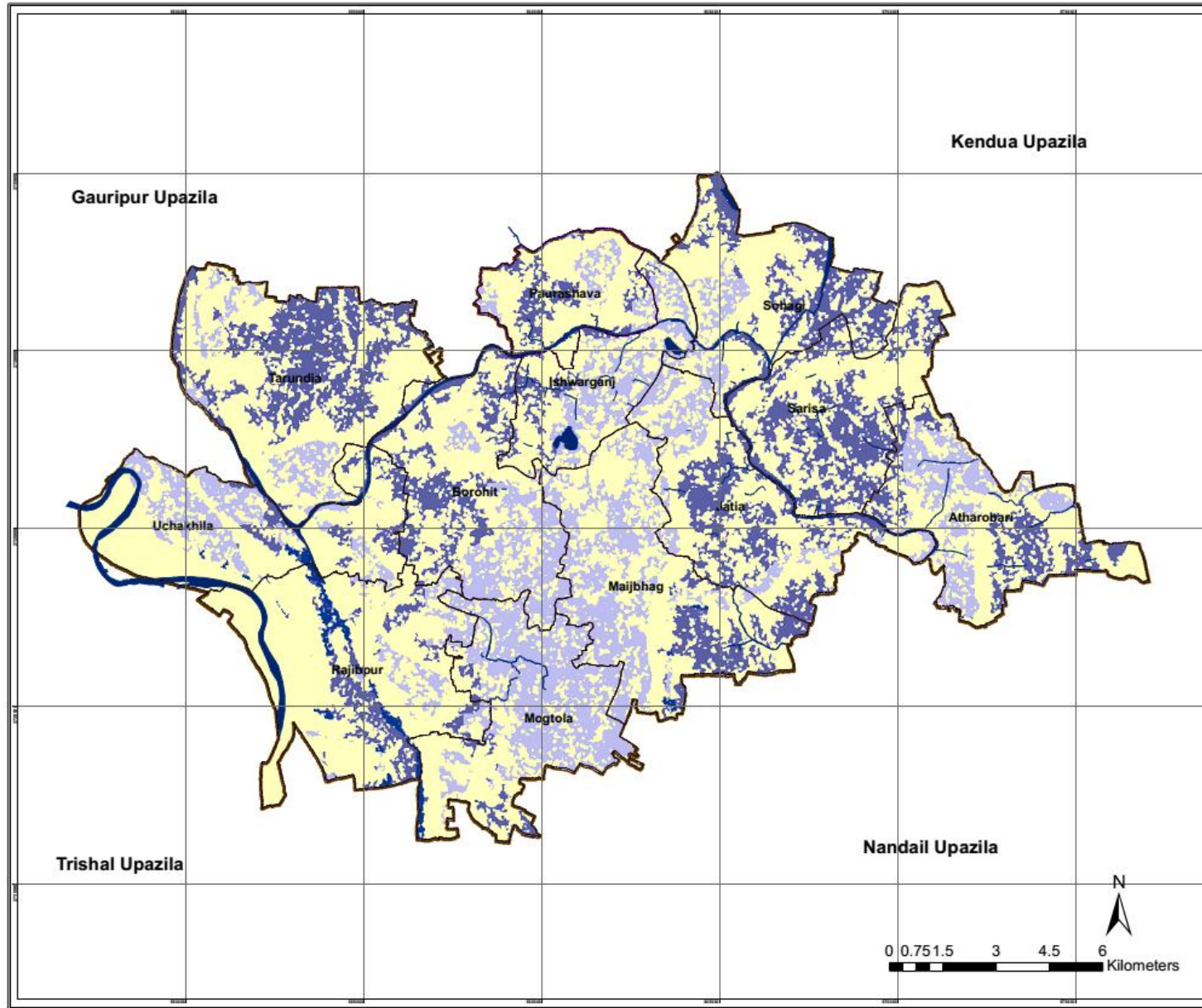


# LAND SUITABILITY FOR HUMAN SETTLEMENTS OF ISHWARGANJ UPAZILA





# LAND INUNDATED AREA DURING LAST 20 YEARS IN ISHWARGANJ UPAZILA



## Legend

- Land not Suitable for any other use (Waterbody)
- Land Suitable for Agriculture
- Land Moderately Suitable for Other Uses
- Not Inundated
- Upazila Boundary
- Paurashava Boundary
- Union Boundary

## PREPARATION OF DEVELOPMENT PLAN FOR FOURTEEN UPAZILLA

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## BROAD LANDUSE ZONING

Total area of Ishwarganj Upazila is segregated under some broad classes that will basically guide future growth with wide aspects. Definitions of eight broad classes of Upazila Structure Plan are given below for conceptualizing focus of the future magnitude as well as illustration of the policies and

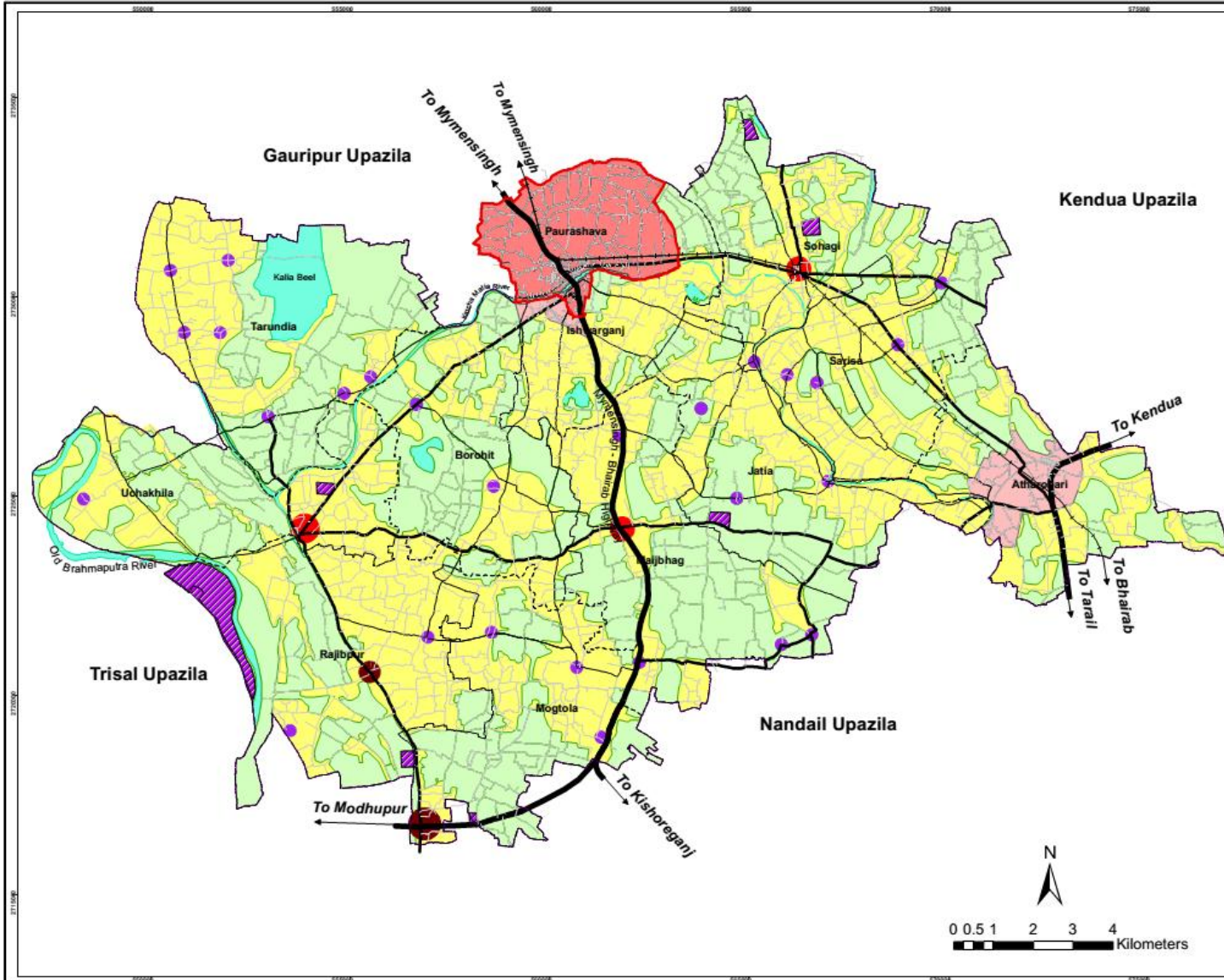
**Table:** Structure Plan Categories of Ishwarganj Upazila.

Structure Plan Categories	Definition	Area (acre)	%
Agricultural Area	Agricultural land (also <i>agricultural area</i> ) denotes the land suitable for agricultural production, both crops and livestock.	31948.84	45.74
Circulation Network	Circulation network contains major road network and railways linkage with regional and national settings.	735.70	1.05
Existing Growth Center	Growth centres are service centres (rural or urban) which has a potential for further development and hence need to be supported by further public and private sector investment. It has been conceived as points of attraction for the people who otherwise would go to large congested urban areas. Rural Growth Centre is a centre which provides goods and services to its own population as well as its surroundings population creating balanced socio-economic development of an area.	227.47	0.325
New Growth Center	Hat bazar area which has the potentiality of new development in smaller context and has a good connectivity and prospects to serve local community by increasing commercial activities.	455.11	0.65
Hat Bazar	Hat Bazar serves as a trading venue for local people in rural areas. These area is considered as the market place for the villages provide a noticeable number of commercial activities and have a higher concentration of structures than the rural settlement area.	34.99	0.05
Industrial Zone	Industrial Zone refers to a zone for industries and associated uses in specific areas where special consideration of the nature and impacts of industrial uses is required. And two major types of industries are considered in this zone; Agro-based industry and heavy industry.	175.01	0.25
Existing Urban Area	This area is also known as built-up area or core area. This is defined as the area which has the highest concentration of services; it also has the highest population concentration and density at the present day. Height restriction or density zoning can be the tool to control the present growth trend and establish the targeted density.	1307.68	1.8
New Urban Area	This zone will be the required additional area for future planned urban development as per population projection. Existing physical trend of growth and potential areas shall have to be consider for new urban land development. New facilities and services like road, drains, footpath, waste transfer station and other civic services will be provided. This area is proposed to grow within the plan period (2035). This zone also accommodates the required area for proposed public facility like administrative services, utilities, recreational area, major religious educational area, etc.	30678.60	44.2
Rural Settlements & Vegetation	Rural settlement is a sparsely populated community that exists in the upazila, away from densely populated urban centers and has low population density. This area is predominantly influenced by agriculture, homestead farming and vegetation.	3034.94	4.3
Waterbody	Water bodies containing areas equals to or more than 0.25 acres including khal, canal, ponds and river.	1044.97	1.7
<b>Total</b>		69643.31	100

Source: Prepared by Consultants, 2017.



# STRUCTURE PLAN OF ISHWARGANJ UPAZILA



## Legend

- Upazila Boundary
- Union Boundary
- Paurashava Boundary
- Regional Highways
- Upazila Road
- Union Road
- Village Road
- Railway
- Hat Bazar Area
- Growth Center
- New Growth Center
- Agriculture
- Industrial Zone
- New Urban Area
- Rural Settlement with Vegetation
- Urban Area
- Waterbody

## PREPARATION OF DEVELOPMENT PLAN FOR FOURTEEN UPAZILLA

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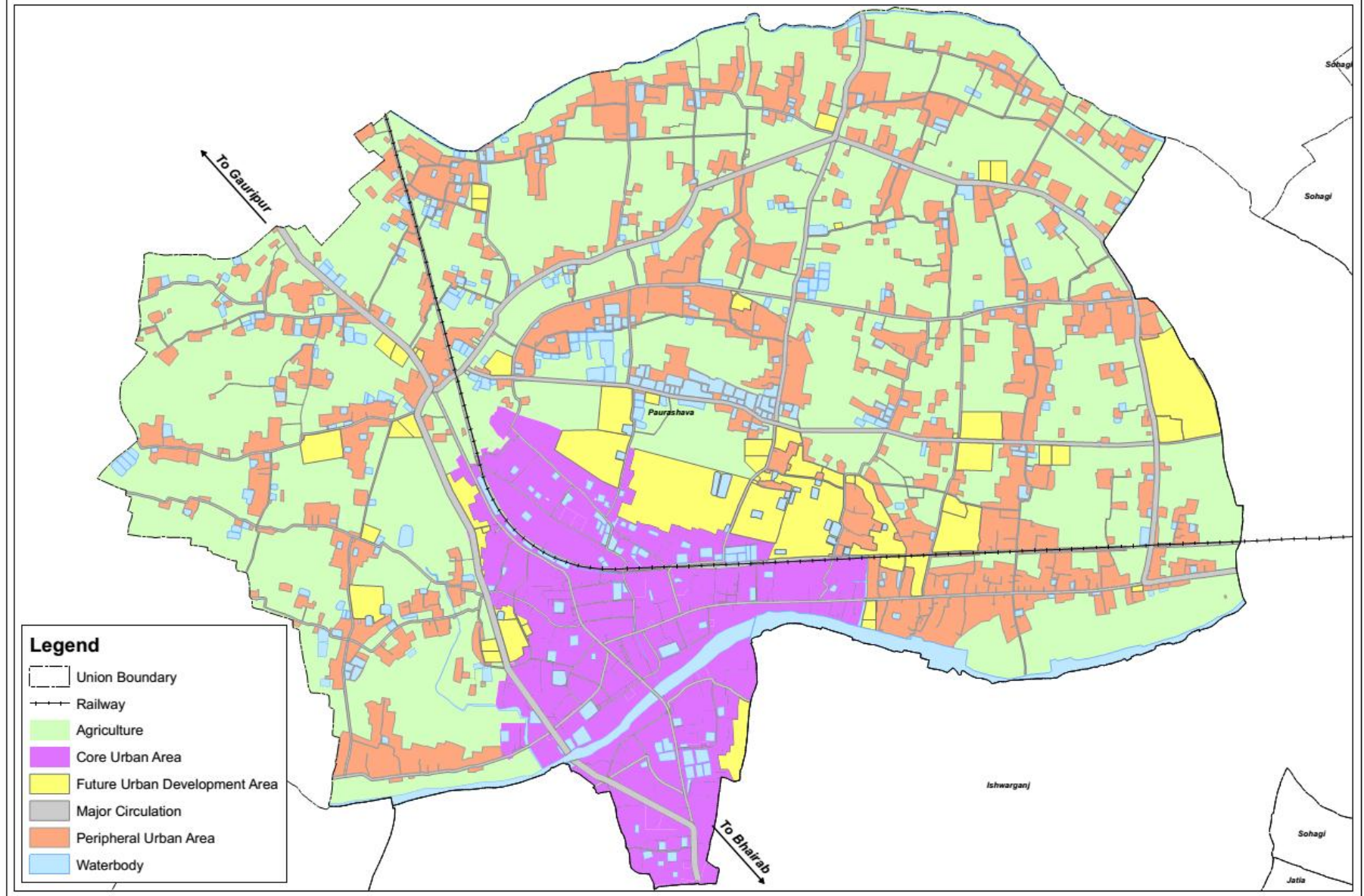
## URBAN STRUCTURE PLAN

Total area of Urban Area Plan is segregated under some broad classes that will basically guide future growth with wide aspects. Definitions of five broad classes of Urban Structure Plan are given below for conceptualizing focus of the future magnitude as well as illustration of the policies and strategies.

**Table:** Structure Plan Categories of Ishwarganj Urban Area

Structure Plan Categories	Definition	Area (acre)	%
Agriculture	Agricultural land (also <i>agricultural area</i> ) denotes the land suitable for agricultural production, both crops and livestock.	1554.82	49.31
Circulation Network	Circulation network contains major road network and railways linkage with regional and national settings.	240.82	7.64
Core Urban Area	This area is also known as built-up area. This is defined as the area which has the highest concentration of services; it also has the highest population concentration and density. It may absorb most population growth during the Land use Plan (2015-2031) period.	342.64	10.87
Future Urban Development Area	This zone will be the required additional area for future planned urban development as per population projection. Existing physical trend of growth and potential areas shall have to be consider for new urban land development. New facilities and services like road, drains, footpath, waste transfer station and other civic services will be provided. This area is proposed to grow within the plan period (2035). This zone also accommodates the required area for proposed public facility like administrative services, utilities, recreational area, major religious educational area, etc.	240.06	7.61
Peripheral Area	This is the zone where a slow trend of urbanization is continuing in unplanned manner. The area identified in the Structure Plan as the likely choice for new urban development beyond the core area. Ideally, it might be reasonable to provide primary infrastructure networks in this area to foster development and encouraged to enable a more rapid urbanization in a planned way	581.51	18.44
Waterbody	Water bodies containing areas equals to or more than 0.25 acres including khal, canal, ponds and river.	193.15	6.13
<b>Total</b>		<b>3153</b>	<b>100.00</b>

## STRUCTURE PLAN MAP OF ISHWARGANJ PAURASHAVA



## **Policies of Structure Plan**

The following policies were put forward to achieve Structure Plan goal:

***Policy 1:*** Density Control

***Policy 2:*** Densification of Residential Areas through People's Participation

***Policy 3:*** Creation of trained grassroots level family planning workers for motivational works

***Policy 4:*** Encourage investment in business

***Policy 5:*** Reduce cost of doing business

***Policy 6:*** Support SME for creation of jobs and economic upliftment

***Policy 7:*** Employment Generation through Development of Potential Sectors

***Policy 8:*** Develop efficient inter upazila communication facilities

***Policy 9:*** Maintenance or repairing of roads

***Policy 10:*** Development of missing linkages

***Policy 11:*** For better accessibility transport terminals should be located at major roads

***Policy 12:*** Improvement of road

***Policy 13:*** Functional and hierarchical road network development

***Policy 14:*** Incepting drainage network plan in response of water logging problems

***Policy 15:*** Facilitating access for all citizens to basic level of services in water supply and sanitation

***Policy 16:*** Facilitating access for all citizens to electricity supply

***Policy 17:*** Facilitating access for all citizens to basic level of services in water supply and sanitation

***Policy 18:*** Facilitating access for all citizens to electricity and gas supply

***Policy 19:*** Incepting Drainage Network Plan in response of Water logging problems

***Policy 20:*** Preservation of natural Water resources

***Policy 21:*** Ensuring Safe Sanitation to Citizen

***Policy 22:*** Identifying the hazard risk zones

***Policy 23:*** Pollution Control

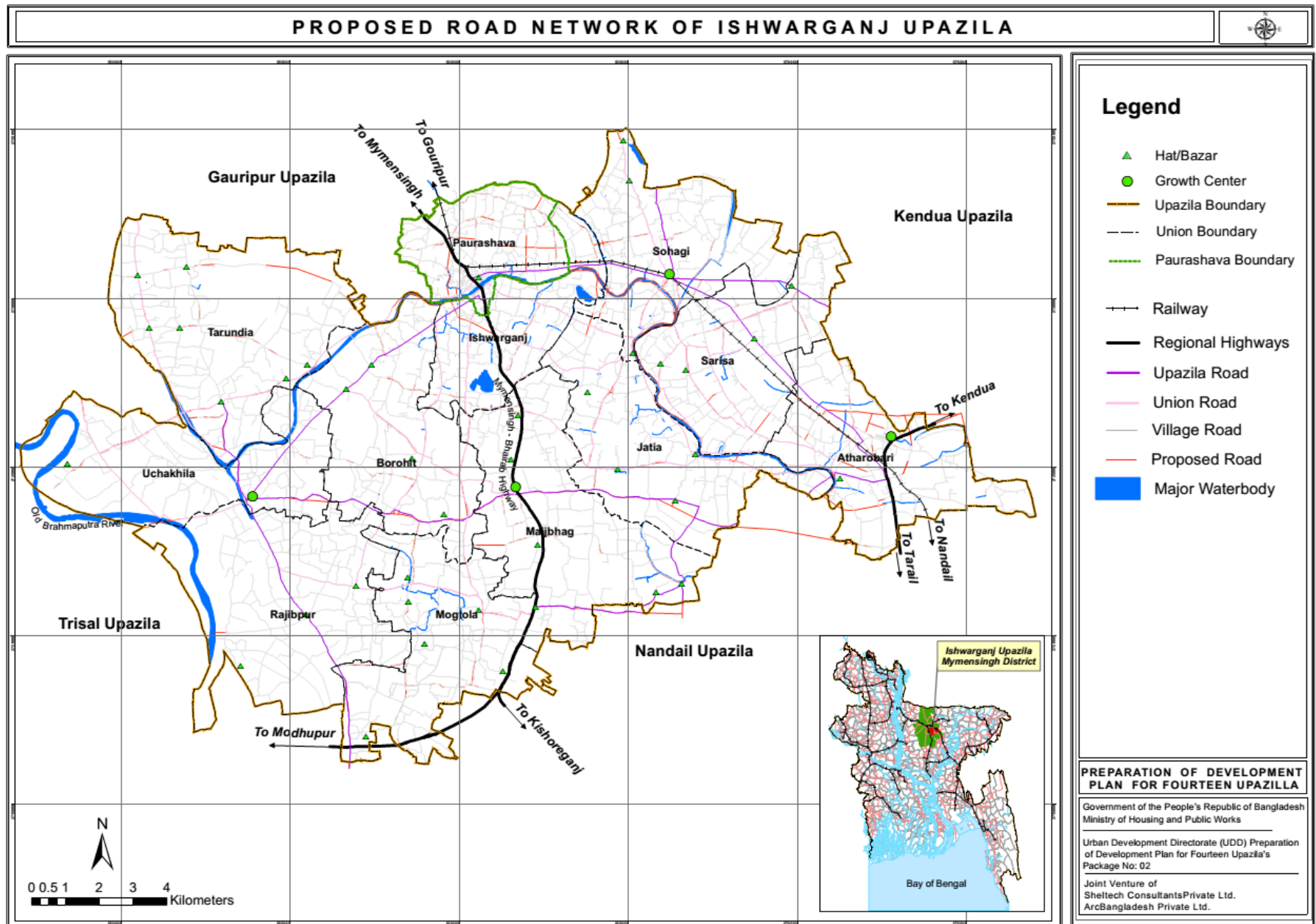


## PLAN PROPOSALS

### Proposed Road Network of Ishwarganj Upazila

Table: Proposed Road Type of Ishwarganj Upazila.

Landuse Category	Hierarchy of Roads	Length (km.)	%
Circulation Network	National Highway	16.7	1.51
	Primary Road	70.24	6.34
	Secondary Road	264.33	23.85
	Tertiary/Local Road	757.18	68.31
Total		1108.45	100.00

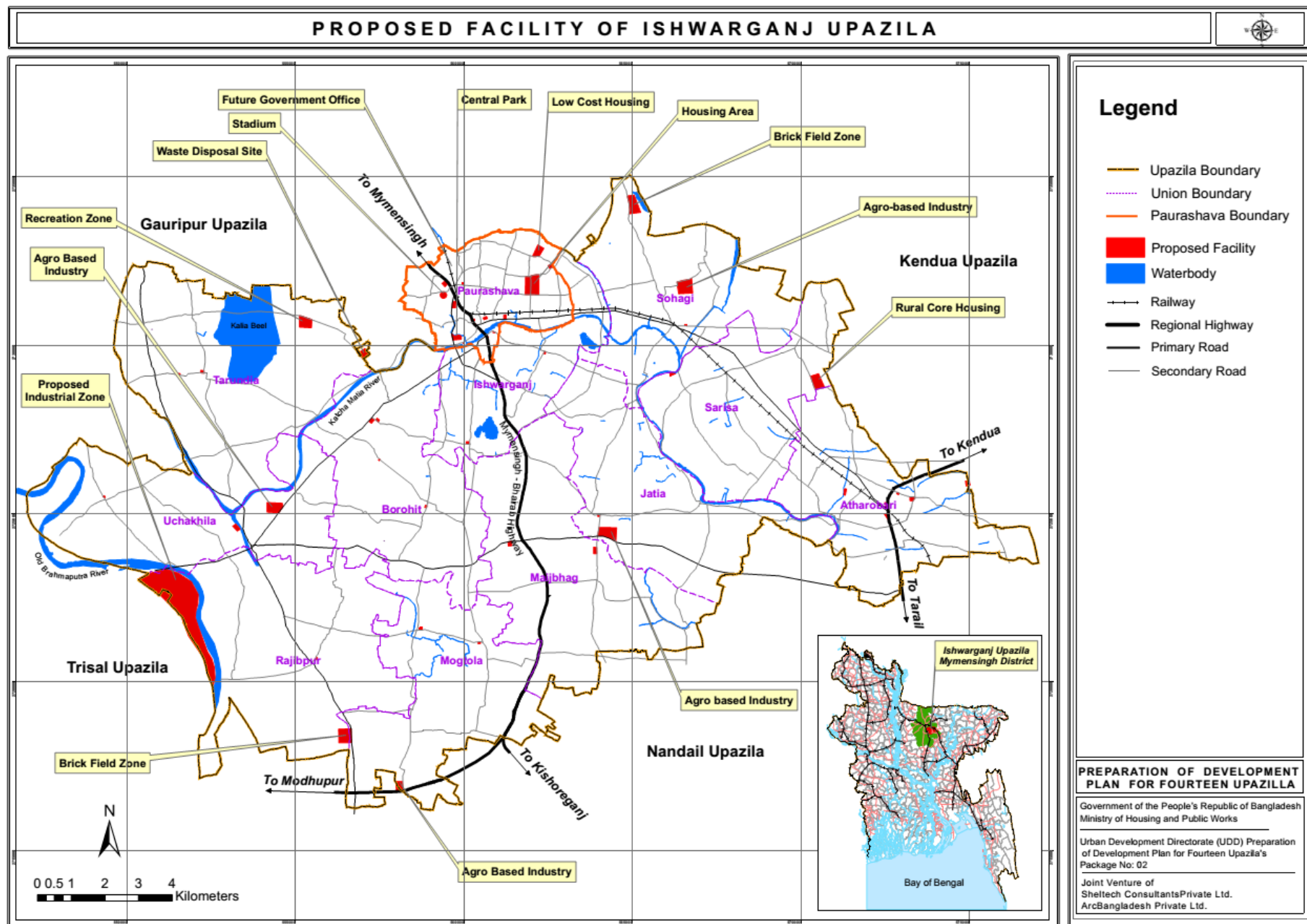


## Proposed Facilities of Ishwarganj Upazila

Table: Proposed Facilities of Ishwarganj Upazila.

Proposed facility	Union	Area (acre)
Agriculture Training Center	Borohit	3.21
Agro Based Industry	Mogtola	14.48
	Uchakhila	30.82
	Jatia	38.77
	Sohagi	41.74
Brick Field Zone	Mogtola	37.9
	Rajibpur	37.9
	Sohagi	33.55
Bus Terminal	Atharobari	3.32
Central Graveyard	Ishwarganj	3.06
CNG/Auto Stand	Atharobari	0.53
Cold Storage	Rajibpur	0.21
College	Borohit	1.67
	Tarundia	1.85
Community Clinic	Atharobari	0.83
	Borohit	0.83
	Ishwarganj	0.83
	Tarundia	0.83
	Rajibpur	0.86
	Mogtola	0.83
	Jatia	0.82
	Sohagi	0.83

Proposed facility	Union	Area (acre)
Graveyard	Maijbhag	3.81
High School	Ishwarganj	1.27
Hospital	Atharobari	3.68
	Maijbhag	3.6
Park	Atharobari	2.44
Passenger Shed	Mogtola	0.09
Proposed Industrial Zone	Rajibpur	Govt. Proposed
	Uchakhila	Govt. Proposed
Recreational Zone	Tarundia	26.85
Rural Core Housing	Atharobari	29.43
	Sarisa	29.43
Shopping Complex	Atharobari	0.63
Village Park	Sarisa	2.07
	Uchakhila	5.77
Vocational Training Institute	Mogtola	1.86
Waste Disposal Site	Atharobari	4.03
	Tarundia	13.37
Waste Transfer Station	Borohit	0.49
	Uchakhila	0.64





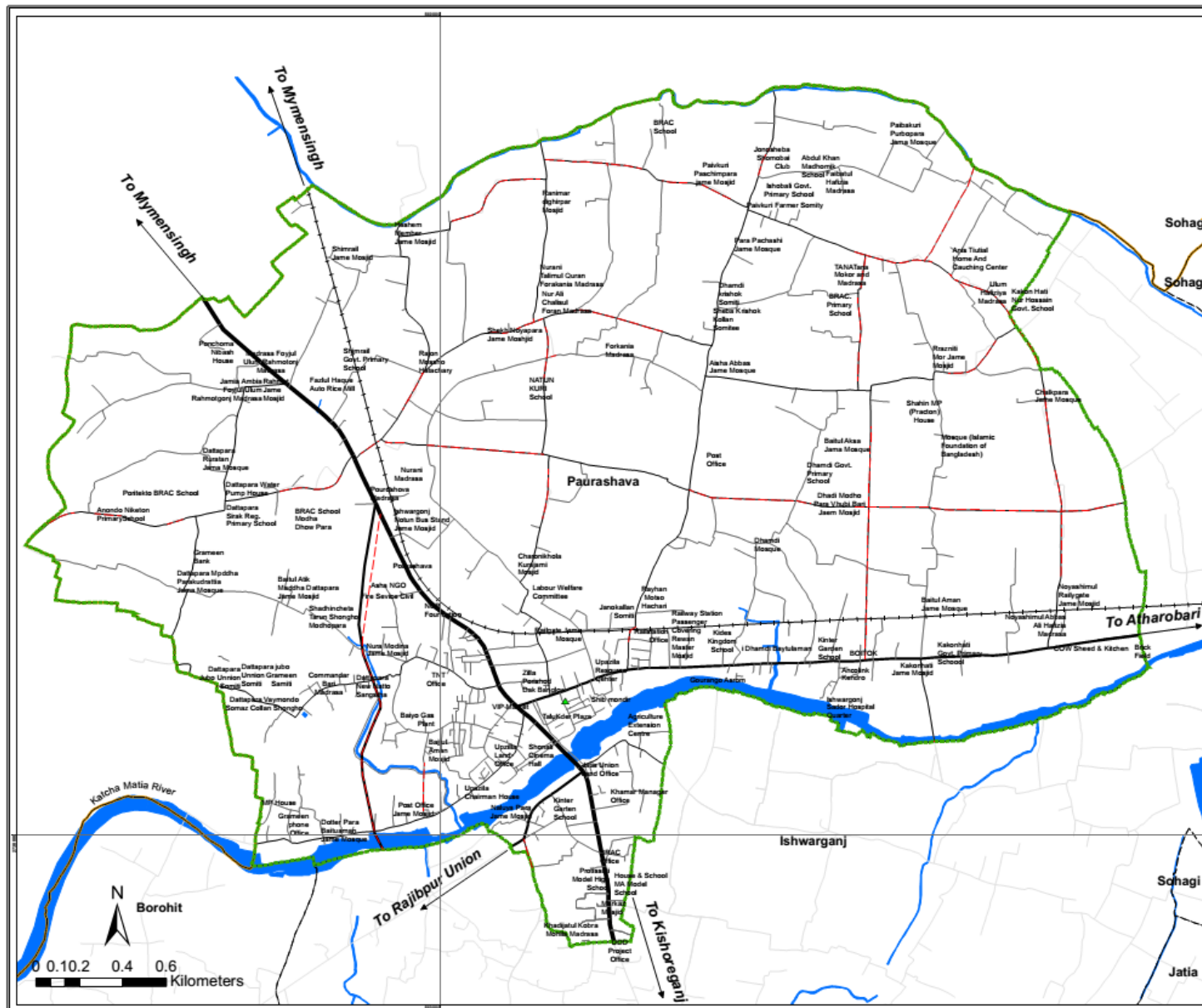
## PLAN PROPOSALS (URBAN AREA)

### Proposed Road Network of Ishwarganj Paurashava

Table: Proposed Road Type of Ishwarganj Paurashava

Landuse Category	Hierarchy of Roads	Length (km.)	%
Circulation Network	Regional Road	3.65	3.98
	Primary Road	5.06	5.51
	Secondary Road	27.42	29.89
	Tertiary/Local Road	54.71	59.63
	Walkway	0.91	0.99
Total		91.75	100.00

# PROPOSED ROAD NETWORK OF ISHWARGANJ PAURASHAVA



## Legend

- Upazila Boundary
- Union Boundary
- Paurashava Boundary
- + + Railway
- Regional Highway
- Primary Road
- Secondary Road
- Tertiary Road
- Proposed Road
- Waterbody

## PREPARATION OF DEVELOPMENT PLAN FOR FOURTEEN UPAZILLA

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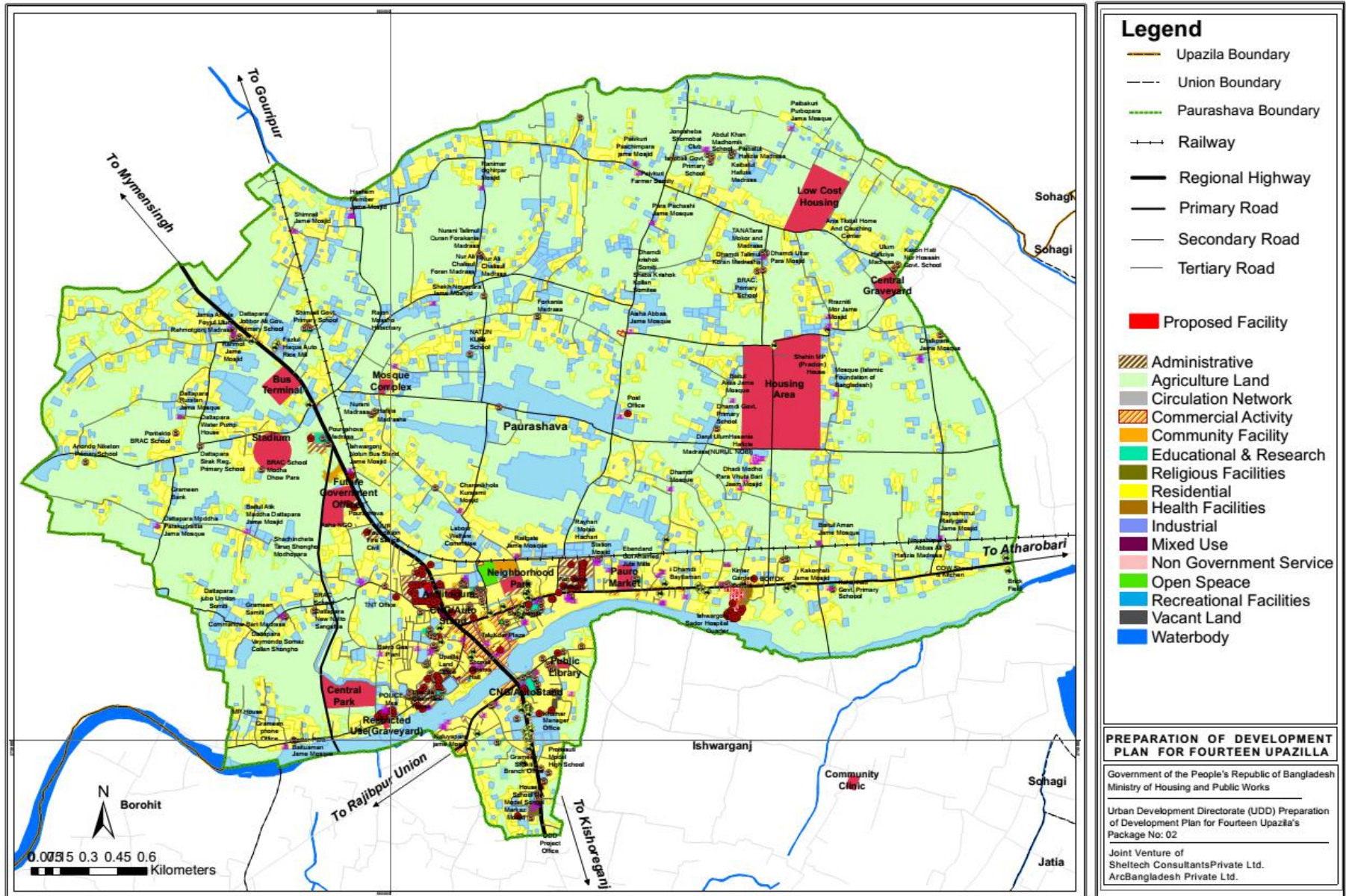
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## Proposed Facilities of Ishwarganj Urban Area

Table: Proposed Facilities of Ishwarganj Urban Area

Sl. No.	Proposed Facility	Area (acre)
1	Auditorium	0.36
2	Bus Terminal	5.33
3	Central Graveyard	3.06
4	Central Park	8.57
5	CNG/Auto Stand	0.1
6		0.2
7	Future Government Offices	5.72
8	Housing Area	55.79
9	Low Cost Housing	15.71
10	Mosque Complex	0.98
11	Neighborhood Park	1.66
12	Pauro Market	2.06
13	Public Library	0.5
14	Restricted Use(Graveyard)	0.15
15	Stadium	7.18

# DRAFT LANDUSE PLAN OF ISHWARGANJ PAURASHAVA





## Consultation Meeting at Upazila

