

Payra-Kuakata Comprehensive Plan Focusing on Eco-Tourism

Rural Area Plan: 2021-2031

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রেজিস্টার্ড নং ডি এ-১

বাংলাদেশ



গেজেট

অতিরিক্ত সংখ্যা
কর্তৃপক্ষ কর্তৃক প্রকাশিত

বৃহস্পতিবার, আগস্ট ২৯, ২০২৪

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
গৃহায়ন ও গণপূর্ত মন্ত্রণালয়
পরিকল্পনা শাখা-৩

প্রজ্ঞাপন

তারিখ: ০৬ ভাদ্র ১৪৩১ বঙ্গাব্দ/ ২১ আগস্ট ২০২৪ খ্রিষ্টাব্দ

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(২৪৪৫১)

মূল্য : টাকা ৪.০০

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রাষ্ট্রপতির আদেশক্রমে

মোহাম্মদ খাদেমুর রহমান
সহকারী সচিব।

Executive Summary

The development of the Rural Area Plan for Taltali Upazila has been influenced by the policies, strategies, and planning standards outlined in the Structure Plan. Six unions of the Taltali Upazila were taken into account when creating the rural area plan. The local government at the Upazila level has no prior experience putting such plans that integrate rural areas into action. There is no comparable expertise with carrying out physical designs at the rural level. This project's plan preparation will be their first opportunity to put physical plans into action at the Taltali Upazila union level.

Rural Area Plan aims to guide the physical development of Taltali Upazila including all the economic and social activities. Considering the local people's demand from the PRA and based on the planning standards, about 89.69 acres of land has been proposed for educational facilities purpose, about 71.16 acres of land has been proposed for commercial activities purpose, about 5.44 acres of land has been proposed for health facilities purpose, about 107.13 acres of land has been proposed for community facilities purpose, about 1011 acres of land has been proposed for transport facilities purpose. A huge amount of land is proposed for remaining agriculture which is about 26853 acres.

It should be remembered that this development plan serves as a methodical blueprint for growth development and management. Authorities, responsibilities, and the extent of planned development in each Upazila Parishad and Union Parishad region are specified by the current Local Government Acts. Legal obligations and opportunities for coordinating development within the Upazila exist for the Upazila Parishad.

Table of Contents

Executive Summary	i
Table of Contents	iv
List of Tables	v
List of Figures	viii
CHAPTER 01: INTRODUCTION	1
1.1 Introduction	1
1.2 Background of the Rural Area Plan	1
1.3 Objectives of the Rural Area Plan	1
1.4 Coverage Area of the Rural Area Plan	1
CHAPTER 02: RURAL AREA PLAN	4
2.1 Introduction	4
2.2 Existing Land Use Categories in the Rural Area Plan	4
2.3 Existing Scenerio of Taltali Rural Area	5
2.4 Critical Problems Identified from PRA	26
2.5 Standards of Land Use Planning and Infrastructure	28
2.6 Future Land Development Proposal	30
2.7 Union Wise Proposed Land Use	38
2.7.1 Barabagi Union	38
2.7.2 Chhota Bogi Union	42
2.7.3 Karaibaria Union	46
2.7.4 Nishanbaria Union	49
2.7.5 Pancha Koralia Union	53
2.7.6 Sarikkhali Union	57
2.7.7 Sonakata Union	61
CHAPTER 03: PERMITTED AND CONDITIONAL USE	66
3.1 Introduction	66
3.2 Development Control in Rural Area	66
3.3 Land Use Zoning	66
3.4 Classification of Land Use Zoning	67
3.4.1 Administrative Zone	68

3.4.2 Agriculture Zone.....	69
3.4.3 Commercial Zone	70
3.4.4 Growth Center	73
3.4.5 Potential Economic Zone.....	76
3.4.8 Conservation Zone.....	80
3.4.9 Rural Settlement	81
3.4.10 Waterbody	82
CHAPTER 04: CONCLUSION	84
Concluding Remarks	84

List of Tables

Table 1: Administrative Boundary of the Rural Area of Taltali Upazila	3
Table 2: Land Use Categories Considered for the Rural Area Plan of Taltali Upazila	4
Table 3: Existing Land Use of Rural Area of Taltali Upazila	6
Table 4: Existing Facilities and Services of Taltali Upazila.....	8
Table 5: Existing Education Facilities of Taltali Upazila.....	8
Table 6: Existing Hat-Bazar list of Taltali Upazila	8
Table 7: Land Demand Calculation of several land uses for the year 2041	9
Table 8: Water Demand Projection in Taltali Upazila.....	10
Table 9: Electricity Demanad Projection in Taltali Upazila.....	11
Table 10: Solid Waste Generation Projection in Taltali Upazila.....	12
Table 11: Structure Type of Taltali Upazila	13
Table 12: Total Road Network according to Road Type.....	14
Table 13: Total Road Network according to Road Class	14
Table 14: Construction Material of the Upazila Roads	14
Table 15: Union wise Existing Road Network	14
Table 16: Existing Land Use of Barabagi Union.....	15
Table 17: Existing Land Use of Chhota Bogi Union.....	17
Table 18: Existing Land Use of Koraibaria Union	17
Table 19: Existing Land Use of Nishanbaria Union.....	20

Table 20: Existing Land Use of Ponchakoralia Union	20
Table 21: Existing Land Use of Sarikkhali Union.....	24
Table 22: Existing Land Use of Sonakata Union.....	24
Table 23: Representation of Identified Problems With number of Repetition and Rank	26
Table 24: Recommended Planning Standards of Land Use and Infrastructure	28
Table 25: Recommended Proposed Facilities for Future Development Area	30
Table 26: Proposed Land use of Taltali Union for the year 2031	34
Table 27: Road Proposals of Taltali Upazila for the year 2031	35
Table 28: Proposed Facilities of Taltali Upazila for the year 2031	35
Table 29: Proposed Land Use of Barabagi Union	38
Table 30: List of Proposed Facilities for Chhota Bogi Union	38
Table 31: Type Wise Proposed Road Network in Barabagi Union	40
Table 32: Type Wise Proposed Road Network in Barabagi Union	40
Table 33: Proposed Land Use of Chhota Bogi Union	42
Table 34: List of Proposed Facilities for Chhota Bogi Union	42
Table 35: Type Wise Proposed Road Network in Chhota Bogi Union	43
Table 36: List of Proposed Facilities for Chhota Bogi Union	44
Table 37: Proposed Land Uses of Karaibaria Union	46
Table 38: List of Proposed Facilities for Karaibaria Union.....	46
Table 39: Proposed Road Network in Karaibaria Union	47
Table 40: List of Proposed Facilities for Kraibaria Union	47
Table 41: Proposed Land Use of Nishanbaria Union	49
Table 42: List of Proposed Facilities for Nishanbaria Union	49
Table 43: Proposed Road Network in Nishanbaria Union.....	50
Table 44: List of Proposed Facilities for Nishanbaria Union	51
Table 45: Proposed Land Use of Pancha Koralia Union	53
Table 46: List of Proposed Facilities for Pancha Koralia Union	53
Table 47: Proposed Road Network in Pancha Koralia Union	54
Table 48: List of Proposed Facilities for Pancha Koralia Union	54
Table 49: Proposed Land Use of Sarikkhali Union	57

Table 50: List of Proposed Facilities for Sarikkhali Union	57
Table 51: Proposed Road Network in Sarikkhali Union	59
Table 52: List of Proposed Facilities for Sarikkhali Union	59
Table 53: Proposed Land Use of Sonakata Union	61
Table 54: List of Proposed Facilities for Sonakata Union	61
Table 55: Proposed Road Network in Sonakata Union	62
Table 56: List of Proposed Facilities for Sarikkhali Union	62
Table 57: Permitted Land Use for Administrative Zone	68
Table 58: Conditionally Permitted Land Use for Administrative Zone	69
Table 59: Permitted Land Use for Agricultural Zone	70
Table 60: Conditionally Permitted Land Use for Agricultural Zone	70
Table 61: Permitted Land Use for Commercial Zone.....	71
Table 62: Conditionally Permitted Land Use for Commercial Zone.....	73
Table 63: Permitted Land Use for Growth Center	74
Table 64: Conditionally Permitted Land Use for Growth Center	76
Table 65: Permitted Land Use for General Industrial Zone	77
Table 66: Conditionally Permitted Land Use for General Industrial Zone	79
Table 67: Permitted Land Use for Conservation Zone	80
Table 68: Conditionally Permitted Land Use for Conservation Zone	81
Table 69: Permitted Land Use for Rural Settlement Zone	81
Table 70: Conditionally Permitted Land Use for Rural Settlement Zone	82
Table 71: Permitted Land Use for Waterbody	83
Table 72: Conditionally Permitted Land Use for Waterbody	83

List of Figures

Figure 1: Administrative Boundary of Taltali Upazila	2
Figure 2: Existing Land Use Map of Taltali Upazila.....	7
Figure 3: Structure Use of Taltali Upazila	13
Figure 4: Existing Land Use Map of Barabagi Union	16
Figure 5: Existing Land Use Map of Chhota Bogi Union	18
Figure 6: Existing Land Use Map of Koraibnaria Union	19
Figure 7: Existing Land Use Map of Nishanbaria Union	21
Figure 8: Existing Land Use Map of Ponchakoralia Union.....	22
Figure 9: Existing Land Use Map of Sarikkhali Union	23
Figure 10: Existing Land Use Map of Sonakata Union.....	25
Figure 11: Comparative Assessment of Taltali Upazila on the basis of the problems	27
Figure 13: Map of Proposed Land Use fro Taltali Rural Area Plan	37
Figure 14: Map of Proposed Rural Land Use of Barabagi Union	41
Figure 15: Map of Proposed Rural Land Use of Chhota Bagi Union.....	45
Figure 16: Map of Proposed Rural Land Use of Karaibaria Union.....	48
Figure 17: Map of Proposed Rural Land Use of Nishanbaria Union	52
Figure 18: Map of Proposed Rural Land Use of Pancha Koralia Union	56
Figure 19: Map of Proposed Rural Land Use of Sarikkhali Union	58
Figure 20 Prominent Area Stream Line Water Flow	64
Figure 21: Map of Proposed Rural Land Use of Sonakata Union	65

CHAPTER 01: INTRODUCTION

1.1 Introduction

Rural Area Plan is prepared as per the Terms of Reference (TOR) of the project. The policies, strategies, and planning standards adopted in the Structure Plan have guided the process of preparing the Rural Area Plan for Taltali Upazila.

1.2 Background of the Rural Area Plan

The process of raising the standard of living and economic security of rural residents is known as rural development. Rural Area Plan, which addresses the development of rural areas within the project area, offers a long-term strategy for 10 years. The People's Republic of Bangladesh's Prime Minister emphasizes the importance of providing all metropolitan amenities for rural residents in order to improve their quality of life. In order to realize the "Amar Gram-Amar Shohar" vision, the government must provide rural residents with access to urban amenities such as electricity, increased trade and business, development of all forms of communication, planned housing and sewage systems, clean drinking water, healthcare facilities, and internet and technology-based communication. This chapter discusses the current land use scenario, projected land requirements for the rural area plan, a list of the most pressing issues discovered during the rural sector PRA, and suggested facilities for the rural area.

1.3 Objectives of the Rural Area Plan

Rural Area Plan will be a statutory guide and control for development of the six unions of Taltali Upazila. This plan is prepared on mauza map with sectoral development proposals. The Rural Area Plan is aimed to determine the present and future functional structure of the rural area, including land use and provide infrastructure proposals for improving and guiding development of rural area of Taltali Upazila. The objectives of the plan will be attained through orderly location of rural land uses and location of different services and facilities.

1.4 Coverage Area of the Rural Area Plan

The seven unions of Taltali Upazila are considered as the jurisdiction of Rural Area Plan. According to the GIS database, the Rural Area Plan of Taltali Upazila covers total an area of 66066 acres of land. shows the administrative boundary of the Rural Area Plan. **Error! Reference source not found.** shows the administrative boundary, existing and projected population of the Rural Area Plan.

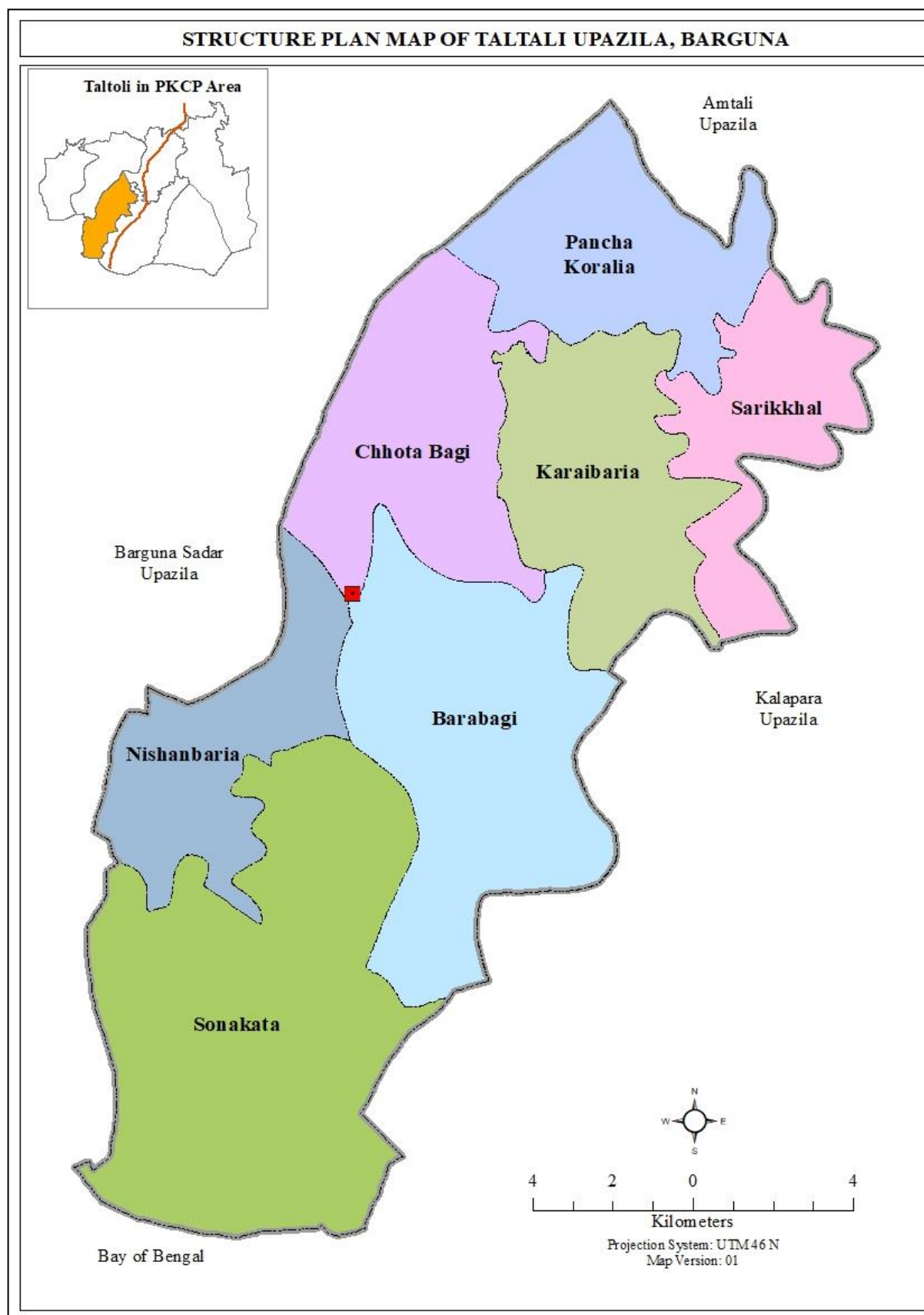


Figure 1: Administrative Boundary of Taltali Upazila

Source: Physical Feature Survey, 2019

Table 1: Administrative Boundary of the Rural Area of Taltali Upazila

<i>Union</i>	<i>Area (Acre)</i>	<i>Year</i>			
		2011	2021	2031	2041
<i>Barabagi</i>	13242	18399	20590	23285	25588
<i>Chhota Bagi</i>	9745	13197	14806	16674	18283
<i>Karaibaria</i>	10863	12920	14465	16337	17978
<i>Nishanbaria</i>	11597	12928	14446	16320	17963
<i>Pancha Koralia</i>	10621	11490	12868	14523	15955
<i>Sarikkhali</i>	8560	7804	8737	9904	10927
<i>Sonakata</i>	17864	11266	12607	14273	15754
<i>Total</i>	82492	88004	98518	111316	122448

CHAPTER 02: RURAL AREA PLAN

2.1 Introduction

The current chapter of the report is about Rural Area Plan covering its development plan proposals. This chapter also describes the existing land use scenario; list of major problems compiled from rural PRA, functional hierarchy of different unions of rural area, future land requirement for different facilities, and proposed facilities for rural area of Taltali Upazila.

2.2 Existing Land Use Categories in the Rural Area Plan

The Rural Area Plan (RAP) is prepared with a number of detailed land use categories to guide the implementation of the Rural Area Plan in a planned manner. Separate land use categories are considered for the rural area of Taltali Upazila. The land use categories considered for the Rural Area Plan of Taltali Upazila are provided in **Error! Reference source not found.**

Table 2: Land Use Categories Considered for the Rural Area Plan of Taltali Upazila

Land Use Categories	Description of the Categories
Administrative	Administrative area covers all kinds of government and nongovernment offices in the project area.
Agricultural Area	Agricultural land (also agricultural area) denotes the land suitable for agricultural production, both crops and livestock. It includes land left temporarily fallow; land under permanent crops (e.g., fruit, plantations); areas for natural grasses and grazing of livestock.
Commercial Area	Commercial areas generally contain one or more of a wide variety of uses that includes business uses, offices, hotels, public houses, and limited forms of retailing. Mainly bazar, shopping agglomerations and areas suitable for commercial development have been placed under this category.
Community Facilities	This land use covers all categories of community facilities and establishments like mosque, temple, church, eidgah, graveyard, community center etc.
Education and Research	Land belonging to educational use includes all categories of educational and training institutions. Educational institute like Medical College, University etc. have been included in this zone.
Forest Area	All kinds of agglomeration of trees and existing forest area
Industrial Area	Processing and manufacturing industries
Health Services	The health service zone includes all existing health service

Land Use Categories	Description of the Categories
	establishments and the areas proposed for health facilities
Mixed Use Area	Mixed Use area will allow residential structures together with commercial uses and other services and facilities
Open Space and Recreation	Open space covers the parks, play fields and the existing open space areas like, forest, park, etc.
Residential Area	Different categories of housing areas have been proposed in the development plan under the categories of residential use. These categories have been made for promotion of housing through private and public initiatives. The residential category includes all areas of future residential development, public housing, hotels and lodging and also the existing housing areas.
Transportation and Communication	All types of roadways, walkways, railways. Transport facilities like, bus and truck terminals have been included in this zone
Utility Services	Public utilities for various services like, fire service, post office, solid waste transfer station, solid waste disposal center, electric substation, filling station, etc. fall under this category
Water bodies	Khal, irrigation canal and river are treated as water bodies.

2.3 Existing Scenerio of Taltali Rural Area

Existing land use data of the rural area of Taltali Upazila has been collected from the field through detailed physical feature survey. The existing land use of the rural area was classified into 17 categories with the provision of further division and sub-division to elaborate each category of use as per requirement of the planning process. The existing land use category of rural area in Taltali Upazila is presented in below-

Table 3: Existing Land Use of Rural Area of Taltali Upazila

Land use Categories	Area (Acre) in GIS	Percentage
Administrative/ Public Service	12.74	0.02
Agriculture	34179.54	54.12
Beach	222.73	0.35
Commercial	40.40	0.06
Community Service	98.49	0.16
Education and Research	92.40	0.15
Forest	6890.30	10.91
Health Service	4.92	0.01
Manufacturing and Processing	183.83	0.29
Mixed Use	25.64	0.04
Rural Settlement	7836.90	12.41
Service Activity	28.15	0.04
Transportation and Communication	451.73	0.72
Vacant Land	51.05	0.08
Vegetation	50.46	0.08
Waterbody	12989.11	20.57
Total	63158.40	100.00

Source: Physical Feature Survey, 2018

Taltali Upazila is surrounded by the Bay of Bengal, rivers and many canal and pond. It is a rural area based Upazila thus agriculture occupies the highest area of land use. From the Land Use analysis, it is clearly evident that out of the total area an amount of 34179.54 acres (54.12%) of land in the rural area is under agricultural use which includes agricultural land, cattle shed, poultry farm, dairy farm, etc. Agricultural category ranks second highest in terms of land use area of the rural area of Taltali Upazila. Rural settlement ranks third in terms of area and occupy 7836.90 acres (12.41%) of land. Forest area category ranks fourth highest in terms of area and occupies an amount of 6890.30 acres (10.91%) of land. Figure 2 illustration the existing land use distribution of rural area in Taltali Upazila.



Figure 2: Existing Land Use Map of Taltali Upazila

Existing Facilities and Services

As a newly developed area Taltali Upazila has lacking of enough public utility and service facilities. From the physical feature survey the below facilities are found in this Upazila-

Table 4: Existing Facilities and Services of Taltali Upazila

Important Features	Nos	Important Features	Nos
Deep Tubewell	3309	Government Office	22
Electric Pole	14293	Overhead Water Tank	1
Community Tap	139	Public Toilet	4
College	2	Clinic/Health Center	23
Primary School	68	Mobile Tower	19
High School	14	High Tension EP	45
Cyclone Shelter	48	Informal Disposal Point	16
Bazar	20	Thermal Power Plan	1

Existing Education Facilities

Taltali Upazila is comparatively backwinded in educational sector basically there are lacking of proper educational facilities. There are mainly shortage of high school and college. People travel a long distance in this regard.

Table 5: Existing Education Facilities of Taltali Upazila

Type	Nos
College	2
High School	14
Kindergarden	3
Madrasha	1
NGO School	6
Primary School	68
Special School	1
Total	101

Existing Hat-Bazar list of Taltali Upazila

From the physical feature survey, it is conducted that there are almost 20 hat-bazars including 3 growth centers named Taltali Bazar, Fokir Hat and Bogir Hat.

Table 6: Existing Hat-Bazar list of Taltali Upazila

SI no.	Name	Unoin Name
1	Name	Union_Name
2	Fokir Hat	Sonakata
3	Notun Bazar	Sonakata
4	Binoy Bazar	Barabagi

5	Loupara Bazar	Sonakata
6	Tate Para Bazar	Sonakata
7	Nidra Bazar	Nishanbaria
8	Chorpara Bazar	Barabagi
9	Kobi Raj Para Bazar	Sonakata
10	Menipara Bazar	Nishanbaria
11	12 Gor Bazar	Barabagi
12	Choto Nishanbaria Bazar	Nishanbaria
13	Joyal Vanga Bazar	Nishanbaria
14	Pajravanga Munshi Bazar	Barabagi
15	Bogi Bad Ghat Bazar	Sarikkhali
16	Taltali Bazar	Barabagi
17	Shanur Bazar	Karaibaria
18	Koraibaria Bazar	Karaibaria
19	Choto Bogi Bazar	Chhota Bagi
20	Ponchakoralia Sluice Gate Bazar	Pancha Koralia

Land Demand Calculation (2041)

Table 7: Land Demand Calculation of several land uses for the year 2041

	Bara bagi	Chhota Bagi	Karaiba ria	Nishanb aria	Pancha Koralia	Sarikk hali	Sonak ata	Tot al
Residential	511.76	365.66	359.56	359.26	319.10	218.54	315.08	2448.96
Education	47.10	31.51	31.07	31.05	28.13	20.84	28.84	218.55
Open Space and Recreational	8.04	5.03	5.44	14.94	14.39	3.00	4.33	55.17
Health	1.60	1.14	1.12	1.12	22.00	0.68	0.98	28.65
Commerce and Shopping	4.42	2.37	2.35	7.35	3.70	1.82	3.18	25.18
Industry	26.40	4.57	4.49	4.49	3.99	2.73	3.94	50.61
Administration	5.00	5.00	5.00	5.00	25.00	5.00	6.00	56.00
Community Facilities	6.26	4.61	4.55	4.54	4.09	2.96	4.04	31.05
Utilities	6.84	5.74	5.70	5.69	16.39	4.64	5.36	50.37
Transportation	1.53	1.16	3.15	3.60	2.45	2.07	4.43	18.39
Government Services	1.64	0.96	1.45	0.95	6.96	1.27	3.39	16.62
Miscellaneous	0.19	0.14	0.13	0.13	0.12	0.08	0.12	0.92
Total area in acre	620.77	427.90	424.01	438.12	446.31	263.65	379.71	3000.47

Water Demand Projection in Taltali Upazila

In the Upazila, the majority of residents have access to clean drinking water. The situation in rural areas is different. Estimates of water demand for the plan period are made in order to plan the Upazila's water delivery system in the future

Table 8: Water Demand Projection in Taltali Upazila

Union Name	Area (Acre)	Population, 2011	Population, 2016	Water demand (thousand litre)	Population, 2021	Water demand (thousand litre)	Population, 2026	Water demand (thousand litre)	Population, 2031	Water demand (thousand litre)	Population, 2036	Water demand (thousand litre)	Population, 2041	Water demand (thousand litre)
Barabagi	13242	18399	19,428	2,331	20,590	2,471	21,929	2,631	23,285	2,794	24,517	2,942	25,588	3,071
Chhota Bagi	9745	13197	13,959	1,675	14,806	1,777	15,747	1,890	16,674	8,337	17,524	2,103	18,283	2,194
Karaibaria	10863	12920	13,645	1,637	14,465	1,736	15,395	1,847	16,337	8,169	17,207	2,065	17,978	2,157
Nishanbaria	11597	12928	13,645	1,637	14,446	1,734	15,370	1,844	16,320	8,160	17,199	2,064	17,963	2,156
Pancha Koralia	10621	11490	12,146	1,458	12,868	1,544	13,693	1,643	14,523	7,262	15,282	1,834	15,955	1,915
Sarikkhali	8560	7804	8,245	989	8,737	1,048	9,313	1,118	9,904	4,952	10,447	1,254	10,927	1,311
Sonakata	17864	11266	11,903	1,428	12,607	1,513	13,423	1,611	14,273	7,136	15,064	1,808	15,754	1,890
Total	82492	88,004	92,970	11,156	98,518	11,822	104869	12,584	111316	46,810	117240	14,069	122448	14,694
Total in Gallons				2945.28		3121.05		3322.25		12357.73		3714.16		3879.14

Electricity Demand Projection in Taltali Upazila

Electricity provision is crucial for giving the Upazila power and energy. People in metropolitan areas rely heavily on energy for both household and business needs. The year-round availability of power is necessary to guarantee the proper operation of community services provided by the public and commercial sectors. The demand of energy will rise in the coming years along with population expansion and urbanization

Table 9: Electricity Demanad Projection in Taltali Upazila

Union Name	Area (Acre)	Population, 2011	Population, 2016	Electricity Consumption (kwh)	Population, 2021	Electricity Consumption (kwh)	Population, 2026	Electricity Consumption (kwh)	Population, 2031	Electricity Consumption (kwh)	Population, 2036	Electricity Consumption (kwh)	Population, 2041	Electricity Consumption (kwh)
Barabagi	13242	18399	19,428	9,714	20,590	10,295	21,929	10,964	23,285	11,643	24,517	12,258	25,588	12,794
Chhota Bagi	9745	13197	13,959	6,979	14,806	7,403	15,747	7,873	16,674	8,337	17,524	8,762	18,283	9,141
Karaibaria	10863	12920	13,645	6,822	14,465	7,232	15,395	7,698	16,337	8,169	17,207	8,603	17,978	8,989
Nishanbaria	11597	12928	13,645	6,822	14,446	7,223	15,370	7,685	16,320	8,160	17,199	8,599	17,963	8,981
Pancha Koralia	10621	11490	12,146	6,073	12,868	6,434	13,693	6,847	14,523	7,262	15,282	7,641	15,955	7,978
Sarikkhali	8560	7804	8,245	4,122	8,737	4,369	9,313	4,656	9,904	4,952	10,447	5,224	10,927	5,463
Sonakata	17864	11266	11,903	5,951	12,607	6,303	13,423	6,711	14,273	7,136	15,064	7,532	15,754	7,877
Total	82492	88,004	92,970	46,485	98,518	49,259	104,869	52,435	111,316	55,658	117,240	58,620	122,448	61,224
Total in mwh				46.48		49.26		52.43		55.66		58.62		61.22

Solid Waste Generation Projection in Taltali Upazila

Table 10: Solid Waste Generation Projection in Taltali Upazila

Union Name	Area (Acre)	Population, 2011	Population, 2016	Waste Generation	Population, 2021	Water demand (thousand litre)	Population, 2026	Water demand (thousand litre)	Population, 2031	Water demand (thousand litre)	Population, 2036	Water demand (thousand litre)	Population, 2041	Water demand (thousand litre)
Barabagi	13242	18399	19,428	4,857	20,590	5,147	21,929	5,482	23,285	5,821	24,517	6,129	25,588	6,397
Chhota Bagi	9745	13197	13,959	3,490	14,806	3,701	15,747	3,937	16,674	4,168	17,524	4,381	18,283	4,571
Karaibaria	10863	12920	13,645	3,411	14,465	3,616	15,395	3,849	16,337	4,084	17,207	4,302	17,978	4,495
Nishanbaria	11597	12928	13,645	3,411	14,446	3,611	15,370	3,843	16,320	4,080	17,199	4,300	17,963	4,491
Pancha Koralia	10621	11490	12,146	3,037	12,868	3,217	13,693	3,423	14,523	3,631	15,282	3,820	15,955	3,989
Sarikkhali	8560	7804	8,245	2,061	8,737	2,184	9,313	2,328	9,904	2,476	10,447	2,612	10,927	2,732
Sonakata	17864	11266	11,903	2,976	12,607	3,152	13,423	3,356	14,273	3,568	15,064	3,766	15,754	3,938
Total	82492	88,004	92,970	23,242	98,518	24,630	104,869	26,217	111,316	27,829	117,240	29,310	122,448	30,612
Total in metric ton				23.24		24.63		26.22		27.83		29.31		30.61

Structure Type of Taltali Upazila

According to the physical feature survey, most of the structures, about 84% is Tinshed with wall made of mud and a huge number of structures are 2 storied. Remaining 9% is semi-pucca, 4% is pucca and only 2% is katcha. On the basis of the use of structure, naturally the dominated one is residential, about 83%. Another dominated one is Commercial.

Table 11: Structure Type of Taltali Upazila

Structure Type	Amount	%
Pucca	729	4
Semi-Pucca	1103	9
Katcha	2697	2
Tinshed	24677	84

Structure Use of Upazila

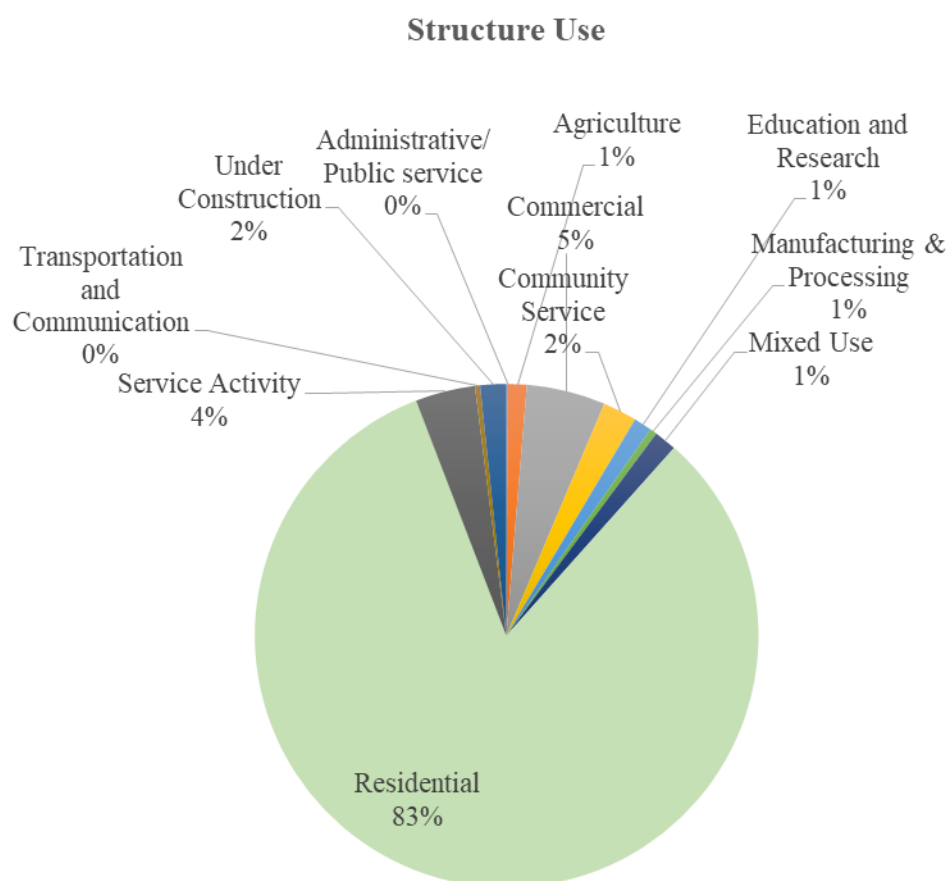


Figure 3: Structure Use of Taltali Upazila

Road Network Development

From the Physical feature survey, it is found that the road condition of Taltali Upazila is very poor. Maximum roads are katcha, about 66%. Only about 24% roads are pucca, constructed

of mainly Reinforced Concrete and Bituminous Carpeting though the condition is not good enough. Remaining roads are semi-pucca.

Table 12: Total Road Network according to Road Type

Road Type	Length (in Km)	%
Katcha	421.46	65.71
Semi Pucca	66.30	10.34
Pucca	153.61	23.95
Total	641.38	100.00

In Taltali Upazila, considering the functional categories of road, it is found that the majority percentage of the roads are in tertiary category which are mainly Katcha roads. On the other hand, Primary roads directly connect this Upazila with the Regional Road in Amtali Upazila.

Table 13: Total Road Network according to Road Class

Road Class	Length (in Km)	%
Primary	16.22	2.53
Secondary	38.98	6.08
Tertiary	586.17	91.39
Path	524.93	
Grand Total	641.38	100.00

From the Physical feature survey, it is found that the road of Taltali Upazila is mainly earthen about 80%. Only 12% roads are constructed of Bituminous carpeting and about 7% roads are Herringbone Bonded. Other roads are constructed of Reinforce Concrete and Tile.

Table 14: Construction Material of the Upazila Roads

Construction Material	Length (in Km)	%
Bituminous Carpeting	140.76	12.08
Earthen	926.04	79.44
Herringbone Bond	80.31	6.89
Reinforced Concrete	17.48	1.50
Tile	1.09	0.09

Table 15: Union wise Existing Road Network

Union_Name	Func_Cat	Area
Barabagi	Primary Road	3.01
	Secondary Road	24.99
	Tertiary Road	110.93
Chhota Bagi	Primary Road	2.16
	Secondary Road	0.45
	Tertiary Road	68.32
Karaibaria	Primary Road	6.05
	Tertiary Road	103.03

Union_Name	Func_Cat	Area
Nishanbaria	Secondary Road	0.21
	Tertiary Road	55.93
Pancha Koralia	Secondary Road	6.92
	Tertiary Road	74.59
Sarikkhali	Primary Road	4.99
	Secondary Road	0.04
	Tertiary Road	73.97
Sonakata	Secondary Road	6.37
	Tertiary Road	99.40
Total		641.36

Existing Land Use:

Taltali Upazila is mainly rural in nature. Some wards are mainly containing urban characteristics. But in recent years, communication development has already impacted the growth and expansion of activities. The existing land use of the Upazila shows that 54.12 percent of the land is used for agricultural activity, and another mentionable land-use area is 12.41 percent rural settlement, 20.57 percent waterbody and 10.91 percent forest area. Table 21 illustrates existing landuse statistics in detail.

Barabagi Union

Table 16: Existing Land Use of Barabagi Union

Union_Name	Land Use Type	Area (Acre)
Barabagi	Administrative/ Public Service	7.94
	Agriculture	8510.50
	Commercial	8.11
	Community Service	12.24
	Education and Research	12.87
	Forest	480.00
	Health Service	1.58
	Manufacturing and Processing	7.61
	Mixed Use	11.76
	Residential	1342.52
	Service Activity	7.09
	Transportation and Communication	106.63
	Vacant Land	5.02
	Waterbody	1936.71
Total		12450.58

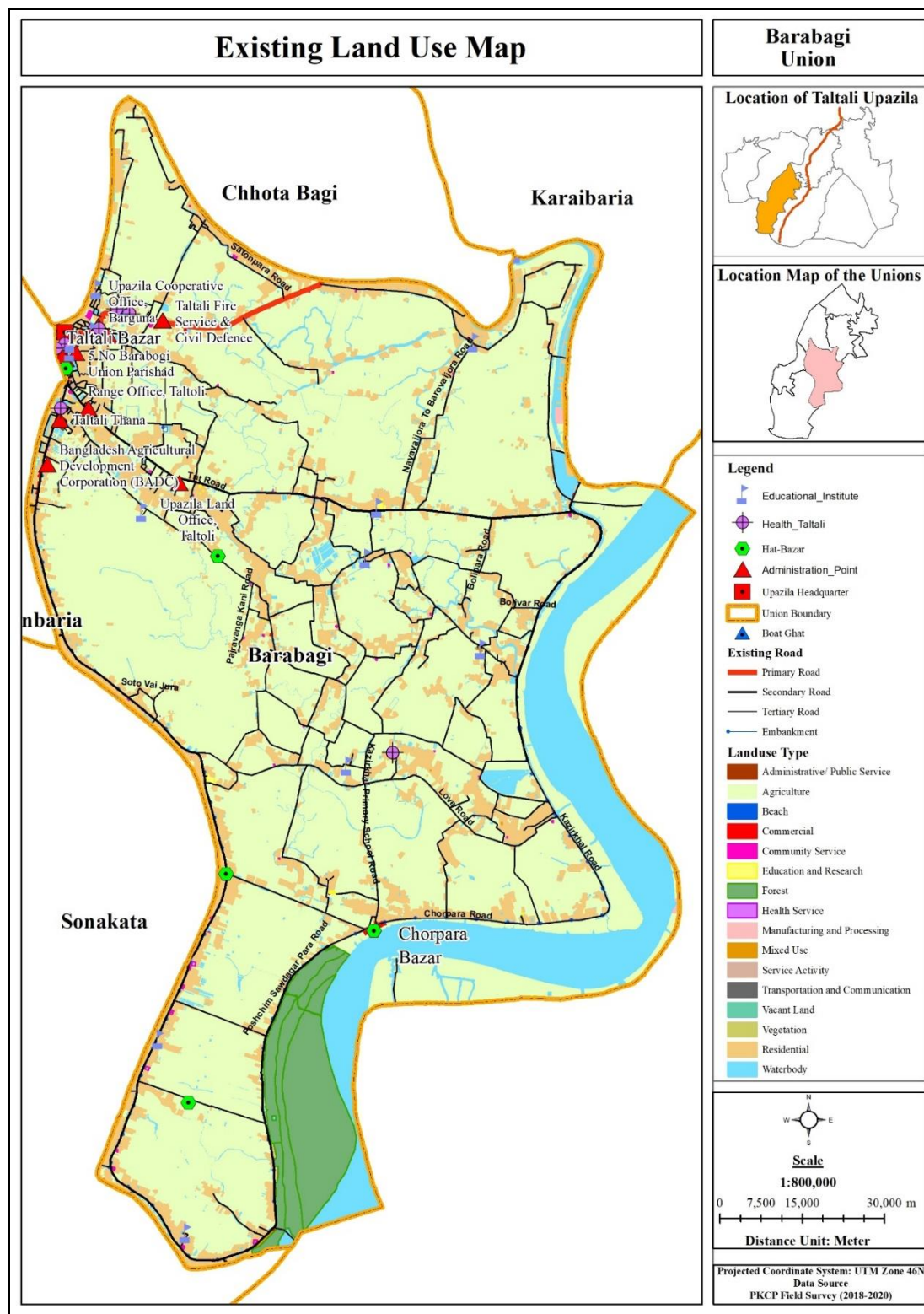


Figure 4: Existing Land Use Map of Barabagi Union

Chhota Bogi Union

Table 17: Existing Land Use of Chhota Bogi Union

Union_Name	Land Use Type	Area (Acre)
Chhota Bagi	Administrative/ Public Service	0.36
	Agriculture	4908.24
	Commercial	2.99
	Community Service	12.29
	Education and Research	12.67
	Manufacturing and Processing	2.98
	Mixed Use	0.50
	Residential	995.68
	Service Activity	3.93
	Transportation and Communication	51.06
	Waterbody	2424.82
Chhota Bagi Total		8415.52

Karaibaria Union

Table 18: Existing Land Use of Karaibaria Union

Union_Name	Land Use Type	Area (Acre)
Karaibaria	Administrative/ Public Service	0.02
	Agriculture	5556.67
	Commercial	8.43
	Community Service	19.71
	Education and Research	17.49
	Health Service	0.16
	Manufacturing and Processing	19.10
	Mixed Use	2.60
	Residential	1209.50
	Service Activity	2.79
	Transportation and Communication	75.25
	Vacant Land	15.95
	Vegetation	14.81
	Waterbody	918.17
Karaibaria Total		7860.65

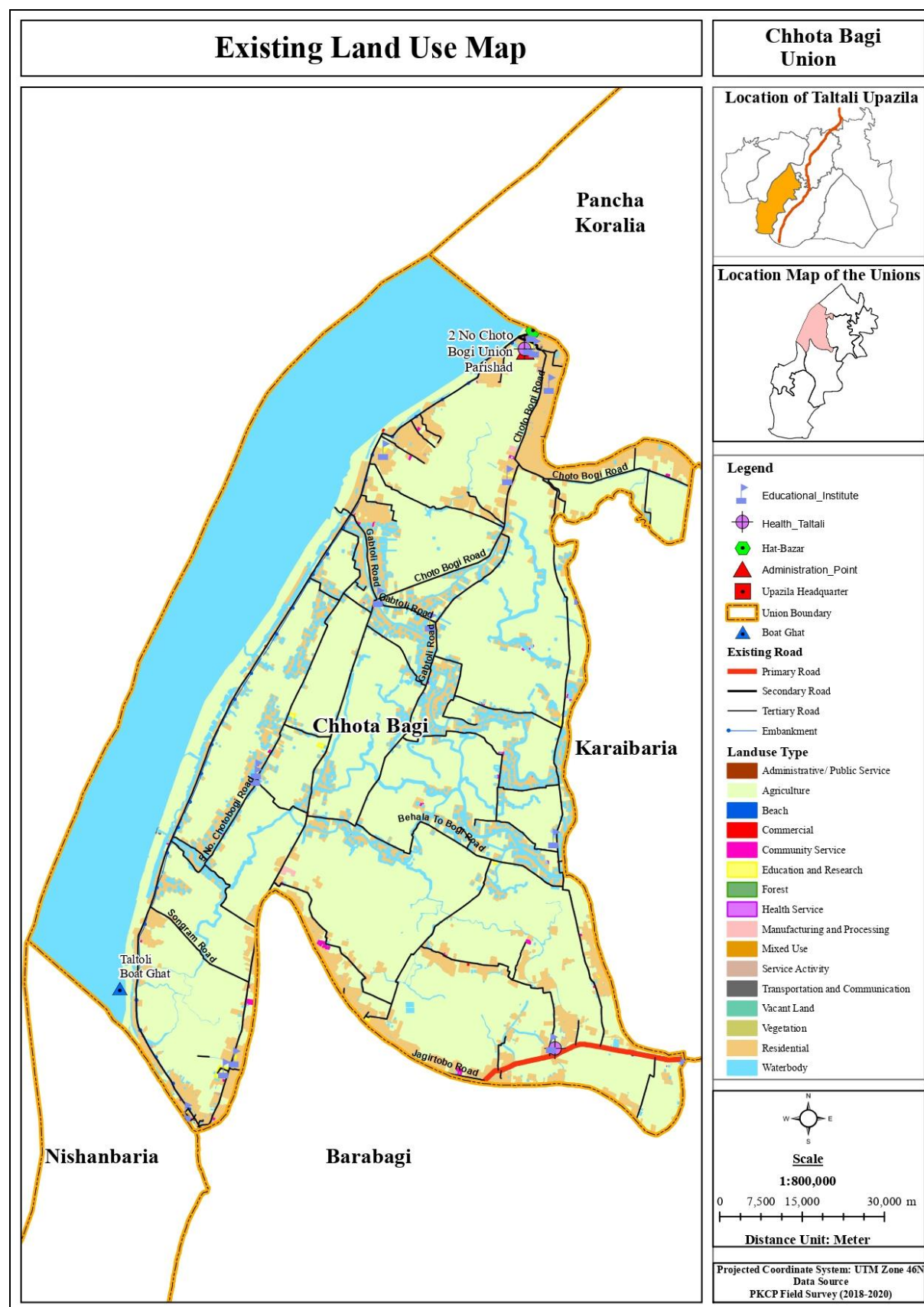


Figure 5: Existing Land Use Map of Chhota Bogi Union

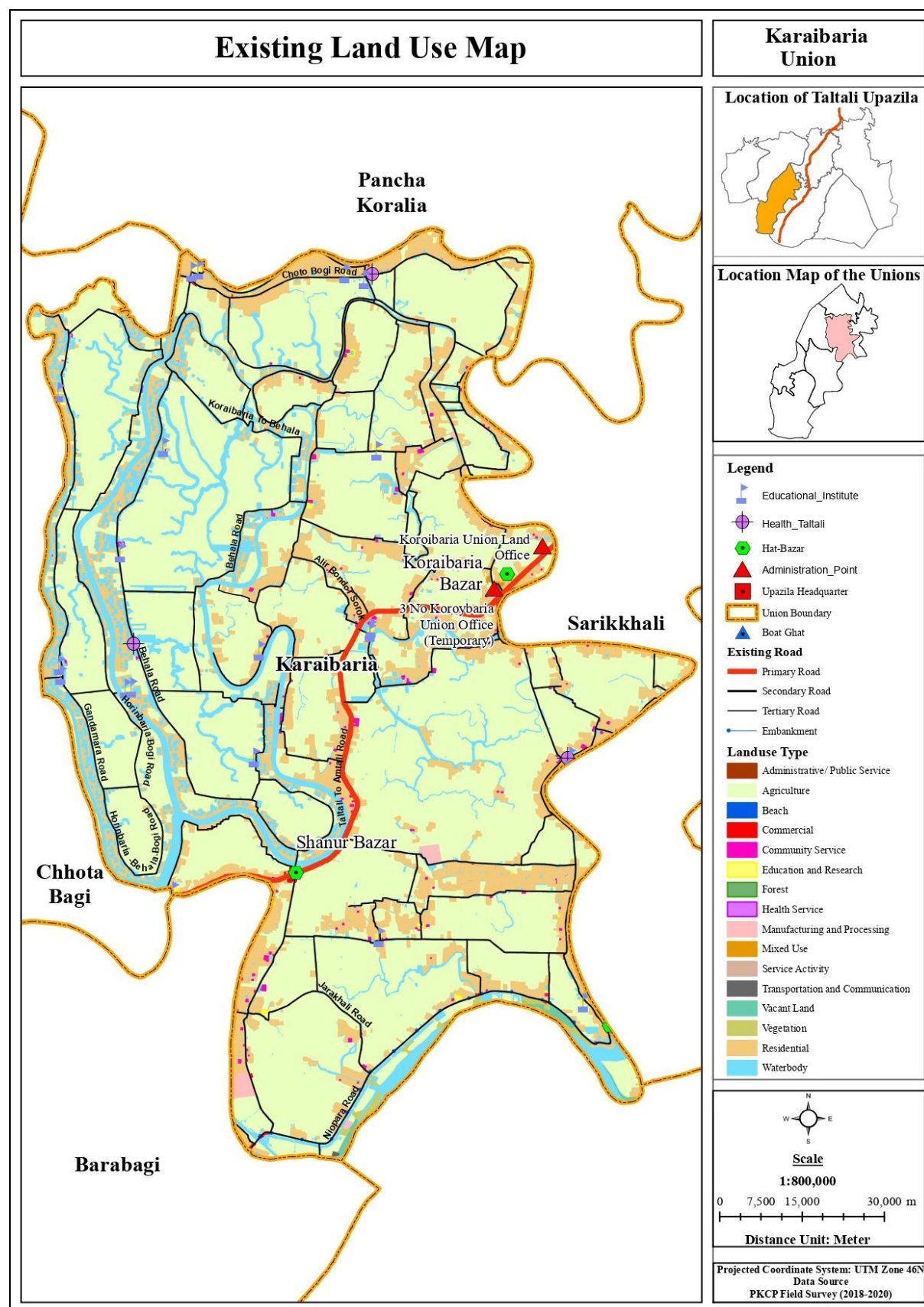


Figure 6: Existing Land Use Map of Karaibnaria Union

Nishanbaria Union

Table 19: Existing Land Use of Nishanbaria Union

Union_Name	Land Use Type	Area (Acre)
Nishanbaria	Administrative/ Public Service	0.96
	Agriculture	2449.72
	Beach	17.69
	Commercial	3.76
	Community Service	8.19
	Education and Research	10.36
	Forest	165.87
	Health Service	0.10
	Manufacturing and Processing	146.79
	Mixed Use	4.18
	Residential	755.75
	Service Activity	2.88
	Transportation and Communication	46.65
	Waterbody	2711.92
Nishanbaria Total		6324.80

Ponchakoralia Union

Table 20: Existing Land Use of Ponchakoralia Union

Union_Name	Land Use Type	Area (Acre)
Pancha Koralia	Administrative/ Public Service	1.46
	Agriculture	4024.19
	Commercial	4.24
	Community Service	17.00
	Education and Research	12.69
	Health Service	0.17
	Manufacturing and Processing	1.65
	Mixed Use	0.56
	Residential	1144.04
	Service Activity	5.07
	Transportation and Communication	52.71
	Vacant Land	6.66
	Vegetation	7.94
	Waterbody	1973.45
Pancha Koralia Total		7251.82

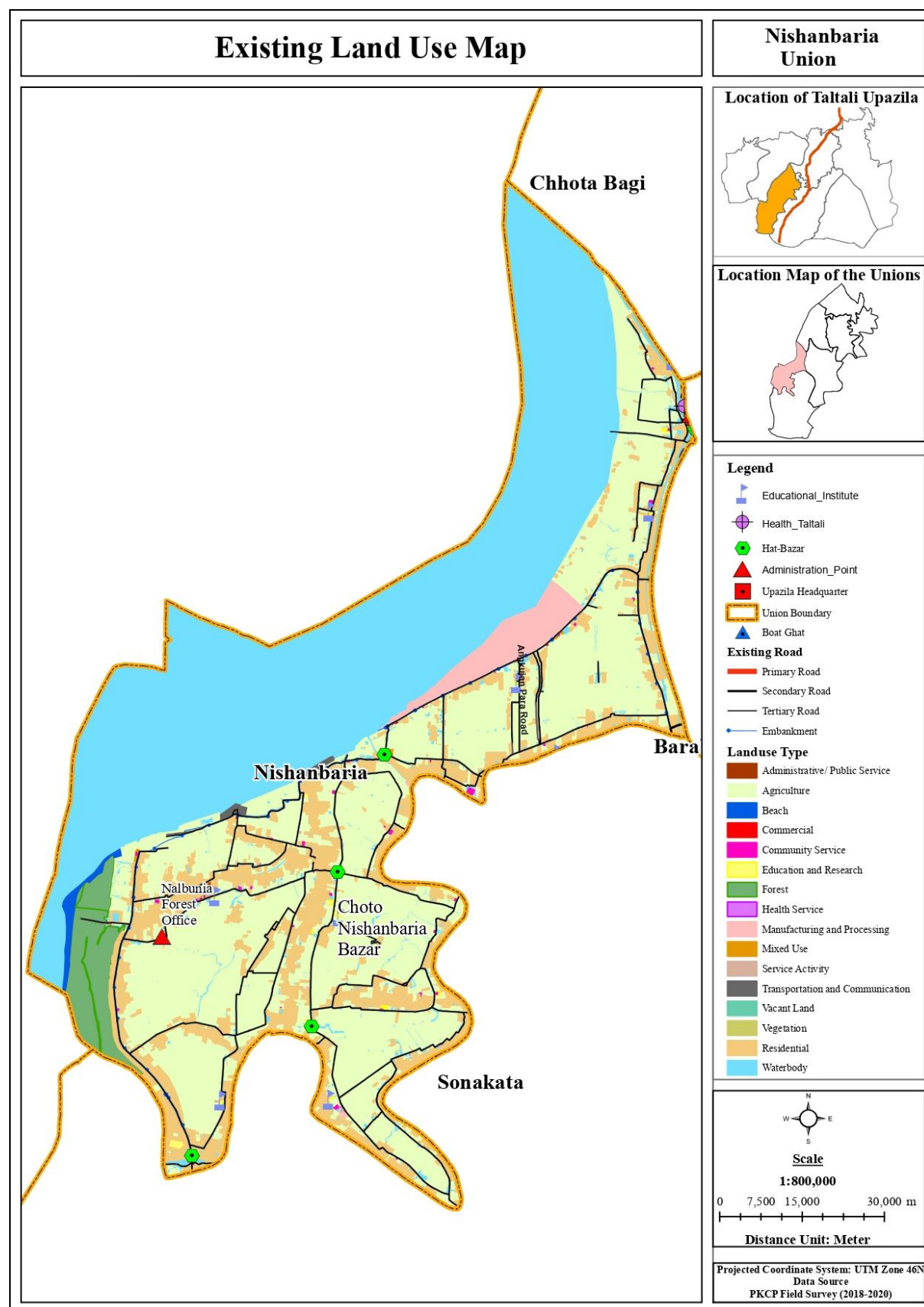


Figure 7: Existing Land Use Map of Nishanbaria Union



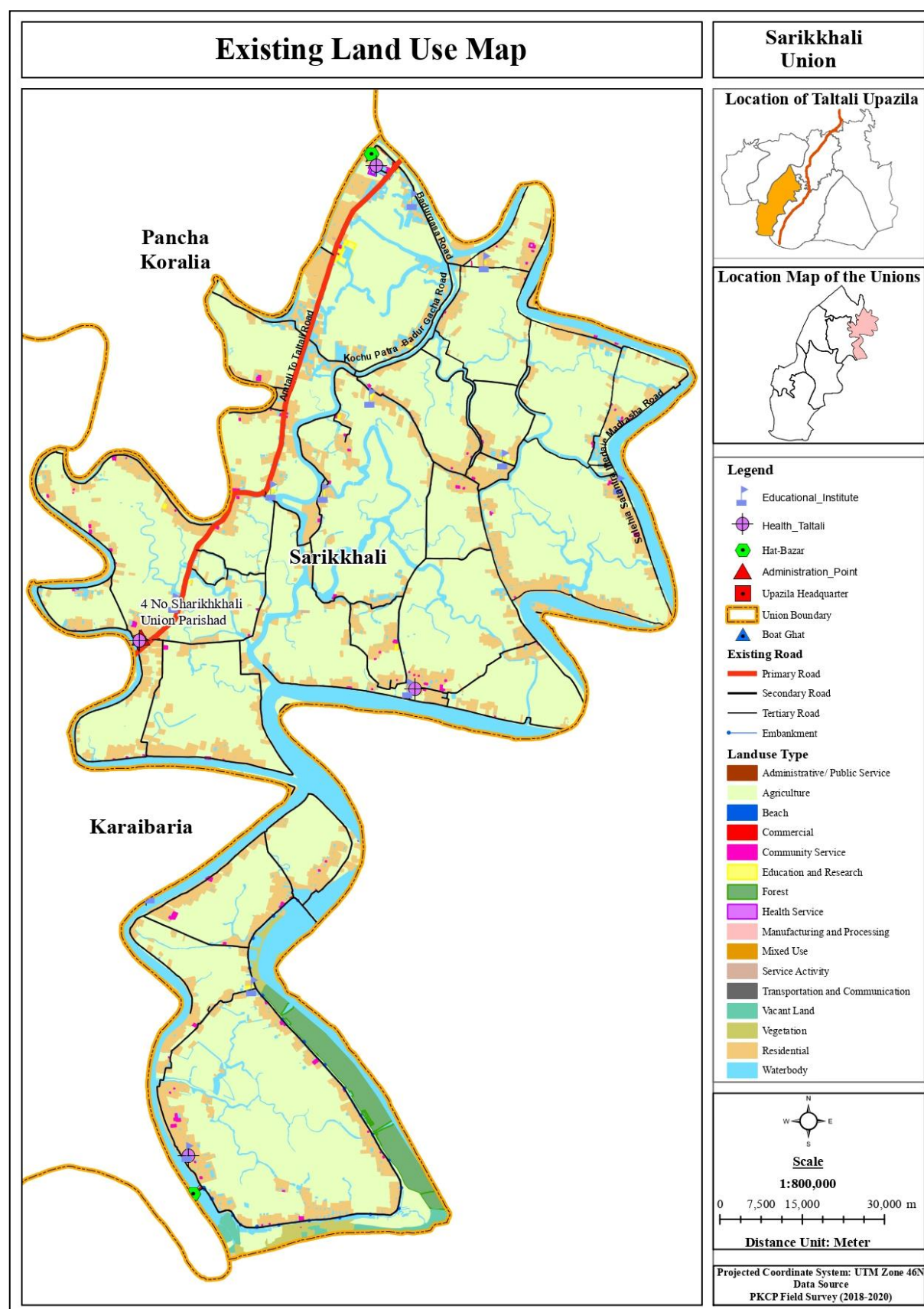


Figure 9: Existing Land Use Map of Sarikkhali Union

Sarikkhali Union

Table 21: Existing Land Use of Sarikkhali Union

Union_Name	Land Use Type	Area (Acre)
Sonakata	Administrative/ Public Service	0.69
	Agriculture	3614.11
	Commercial	3.34
	Education and Research	12.38
	Forest	11.21
	Health Service	95.73
	Manufacturing and Processing	2.33
	Mixed Use	0.59
	Residential	0.80
	Service Activity	715.81
	Transportation and Communication	1.13
	Vacant Land	52.32
	Vegetation	23.42
	Waterbody	27.70
Sarikkhali Total		5633.05

Sonakata Union

Table 22: Existing Land Use of Sonakata Union

Union_Name	Land Use Type	Area (Acre)
Sonakata	Administrative/ Public Service	1.30
	Agriculture	5116.11
	Beach	205.04
	Commercial	9.55
	Community Service	16.68
	Education and Research	15.12
	Forest	6148.69
	Health Service	0.57
	Manufacturing and Processing	5.12
	Mixed Use	5.25
	Residential	1673.78
	Service Activity	5.26
	Transportation and Communication	67.12
	Waterbody	5022.94
Sonakata Total		18292.53

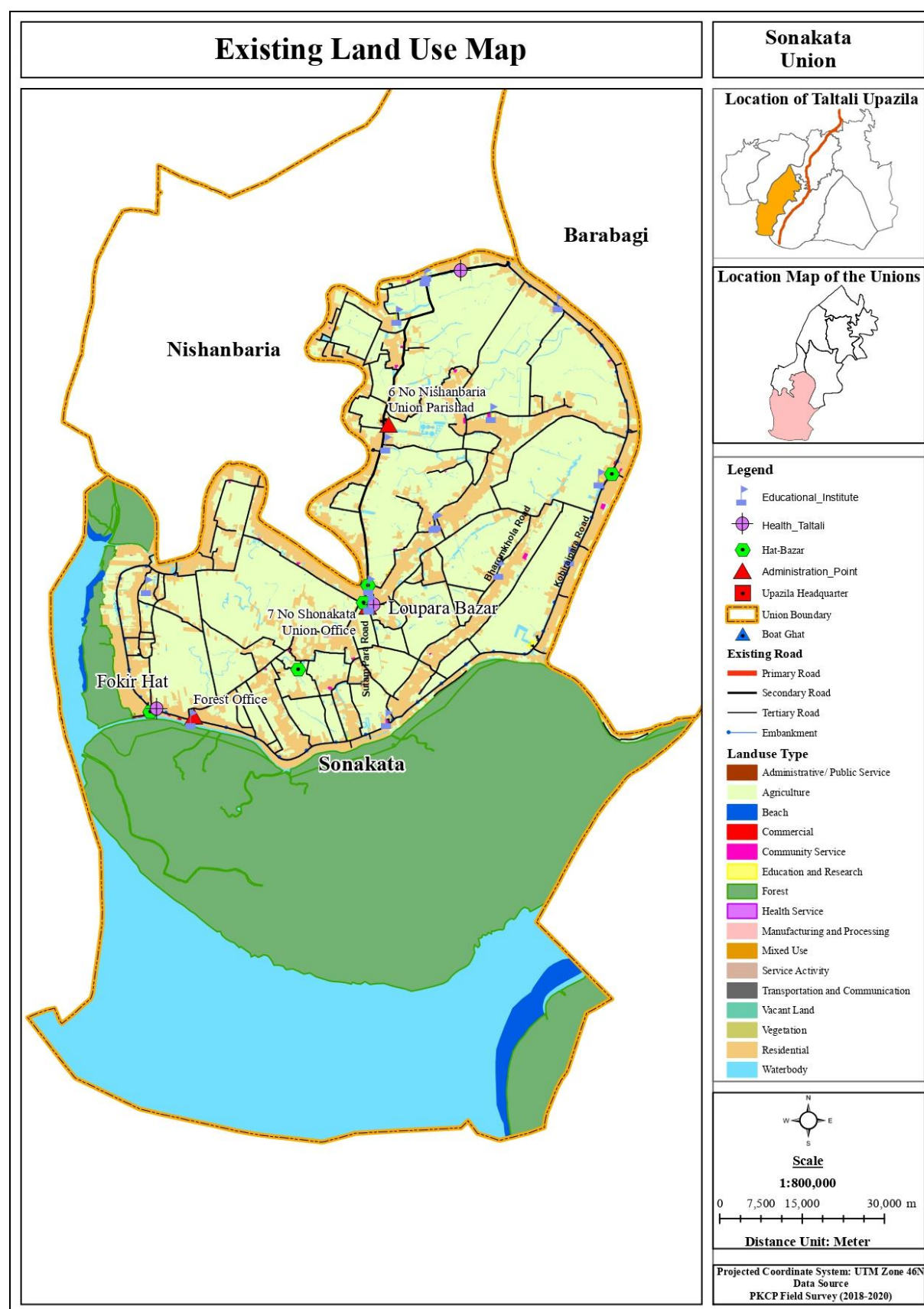


Figure 10: Existing Land Use Map of Sonakata Union

Functional Hierarchy of Taltali Upazila

In this section, an attempt has been made to identify the hierarchical orders of rural services union wise and find out the functional gaps. The existing pattern of rural services in Taltali is the result of economic and political exigencies. In this study, for identifying the functional hierarchy of union wise, several services forming into three orders have been taken consideration (vide Table 2. 1).

Table 2. 1: List of the Rural Services Order wise in Taltali Upazila

Order	Rural Services
1 st Order	Primary School, Tea Stall, Grocery Store, Private Doctor's Chamber, Saloon, Carpenter Shop, Tailor Shop, Katcha Road, Mobile Recharge Store
2 nd Order	Association Office, Blacksmith Shop, Cobbler's Shop, Cycle/Rickshaw Repair Store, Drugstore, Dispensary, Dish's Office, Fertilizer Store, Furniture Shop, Hardware Store, Madrasah, Mobile Shop, Post Office, Pucca Road, Retail Clothing Store, Rice Mill, Secondary School, Stationary Store, Weekly Bazar, Welding Store
3 rd Order	Animal Husbandry Center, College, Family Planning Center, Girls Secondary School, Seed Marketing Center, Telephone Exchange Office, Tafsil Bank

Source: Physical Feature Survey, 2018

After identification of order wise rural services, the questionnaire was prepared and detail data of functional rural services has been collected from field survey. The significance of each rural service differs because its status is determined by the level of services. Beside all the services are not equally distributed throughout the union. The value of each service is determined in terms of the level of services. On the basis of weighted value of each rural service, the score value of each union has been calculated order wise and grouped into five categories of hierarchy based on the total score values scored by them.

2.4 Critical Problems Identified from PRA

Table 23: Representation of Identified Problems With number of Repetition and Rank

Sl No	Problem	Frequency	Percentage	Rank
1	Communication Network Problem	6	7	1
2	Inadequacy of educational institutions	6	7	1
3	Inadequate Health care Facilities	6	7	1
4	Lack of water (for agriculture)	6	7	1
5	Lack of Drinking water	6	7	1
6	Cyclone Centre	6	7	1
7	Canal Encroachment	5	6	2
8	Bridge/Culvert/Sluiceway	5	6	2
9	Embankment Construction or Reforms	6	7	2
10	Hat-Bazar	5	6	2
11	Playground	4	5	3

12	Public Amenities	4	5	3
13	Public Toilet	4	5	3
14	Water Logging	4	5	3
15	Housing crisis	3	4	4
16	Cold Storage and Goddown	1	1	5
17	Rakhine Cultural Centre	1	1	5
18	Entertainment Centers	1	1	5
19	Fish Market	1	1	5
20	Cultural Centers	1	1	5

Composite Scenario from PRA

Extensive union wise interaction was conducted at the union level with public representatives and general people who expressed their perception on the problems of rural areas of Taltali Upazila. There were open discussions about local problems, potentials, and expectations of the people. Open discussion revealed the union wise problems and issues of Taltali Upazila. **Error! Reference source not found.** shows the extracts of problems of rural area compiled from PRA.

By considering all these sectors of the problems an overall index value is calculated for each Union. According to the total value for each Union the following index has driven. By the calculation of the sector-wise problem, Barabagi Union is in the worst condition. Chhota Bagi and Sonakata Unions are comparatively in better condition.

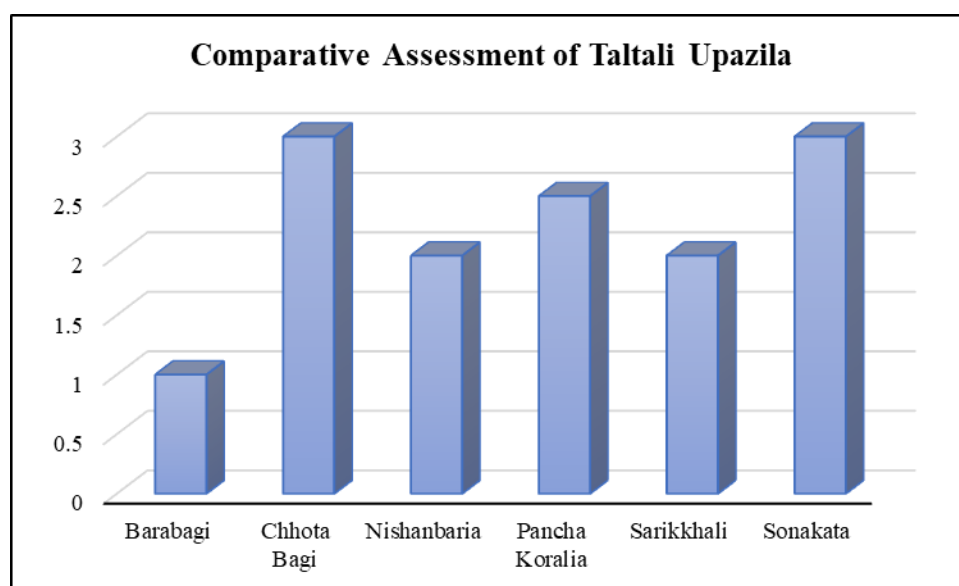


Figure 11: Comparative Assessment of Taltali Upazila on the basis of the problems

According to the comparative analysis, Taltali Upazila has the highest problem with Traffic & Transport Infrastructure. Almost all the roads are in very poor condition with muddy textures and narrow widths. There are also no Bus and Truck Stands. A lot of culverts and Sluice gates are needed in different places. Then the local people claim that they have extreme problems with irrigation water and safe drinking water. Moreover, there are no

Public Toilets in the Upazila. Thus, Utility problems appeared as more problematic after Traffic & Transport Infrastructure problem. Due to the filling up of all the Canals with mud, sand and silt, the natural drainage system is highly destroyed, which is causing water logging problems in several areas. This is also a major problem in this Upazila. However, there are lots of primary schools, but there are lacking of High Schools and Colleges. One high school in every Union, was very high demand. Moreover, the infrastructure of the educational institutions is in a very weak condition, which should be improved. The school building of Kochupatra in Sarikkhali Union should be improved immediately. Though Physical infrastructure has comparatively the highest index value, there still needs a lot of development in this sector. The improvement of the local Hat-Bazars, embankments, construction of the fish processing zones, cold storages, goddown, low-income housing etc. were the major local demands.

2.5 Standards of Land Use Planning and Infrastructure

Planning Standard is a guiding principal that guide the planners and decision makers in providing or allocating required amount of space for different purpose. Present Development Plan intends to provide development guidelines and future land use directions for a period of the whole plan period. The main objective of this plan is not to allocate spaces for all kinds of services for all the areas. Most importantly, the planning team has only proposed those services that have immediate need, possess importance in terms of regional and local context.

As there is no nationally acceptable planning standard, there is always scope for controversy and disagreement. However, the proposed standard should be treated rather flexibly. In doing so, the proposed standard can be used. These standards are adopted from a research conducted by UDD that reviewed the space standards of many planning projects of Bangladesh. Planning standards of the land use planning and infrastructure are shown in **Error! Reference source not found..**

Table 24: Recommended Planning Standards of Land Use and Infrastructure

Land Use Components	Recommended Standard Provision	Remarks
Residential		
General Residential	1 acre/100-150 pop.	
Real Estate- Public/ Private	1 acre/200 pop.	
Government Services		
Union Parishad Office	3-5 acres/Union Parishad	
Police station/Police box	3-5 acres/Paurashava	
Post office	0.50 acre/20,000 pop.	
Fire service	1 acre/20,000 pop.	
Telephone exchange	0.25 acre/20,000 pop.	
Commercial		
Wholesale market	3-5 acres/Paurashava	
Retail sale market	0.5 acre/10,000 pop.	
Neighborhood market	1 acre/Neighborhood market	

Land Use Components	Recommended Standard Provision	Remarks
Cattle Market/Hat	1-1.5 acre/Paurashava	
Industrial		
General/Agro/Cottage Industry	2-5 acre/10,000 pop.	
Educational and Research		
Nursery	0.40 acres/Nursery; 1 Nursery/5000 pop.	
Primary school	1 acre/primary school; 1 primary school/2000 pop.	
Secondary school	2 acres/Secondary School; 1 secondary school/8000 pop.	
College	4 acres/1 college, 1 college/20,000 pop.	
Vocational training center	5-10 acres/Upazila	1 per Upazila
Others	3 acres/20,000 pop.	
Health Facilities		
Upazila health complex	10-20 acres/Upazila HQ	1 per Upazila
General Hospital	5 acres/50 bed hospital/Paurashava	
Specialized Hospital	1 acre/Paurashava	
Community/Maternity clinic	0.60 acre/5000 pop., within 2 km. distance of residents.	
Open Space and Recreation Facilities		
Stadium/Sports complex	5-10 acres/Upazila	1 per Upazila
Central Park	5-10 acres/Upazila	1 per Upazila
Community/Neighborhood Park	1 acre/10,000 pop.	
Playground	3 acres/20,000 pop.	
Cinema hall	1 acre/20,000 pop.	
Community and Social Services		
Eidgah	0.5 acre/20,000 pop.	
Graveyard/Cremation Ground	1 acre/20,000 pop.	
Religious (mosque/temple/church)	0.5 acre/20,000 pop.	
Community center	0.50 acre/20,000 pop.	
Club/Gymnasium	0.10 acre	Optional
Utility Facilities		
Water Supply Treatment Plant	1 acre/20,000 pop.	
Solid Waste Disposal Site	4-10 acres/Upazila	
Sewerage Treatment Plant	As per local requirement	
Waste Transfer Station	0.25 acre/station	
Electric Sub-station	0.50 acre/20,000 pop.	
Transportation Facilities		
Bus terminal	1 acre/Paurashava	1 per Upazila
Bus Stand	0.50 acre/Paurashava	
Truck Terminal	1 acre/Paurashava	1 per Upazila
Launch Ghat	1 acre/Paurashava	
Railway Station	4 acres/station	
CNG/Tempo Stand	0.25 acres/stand	

2.6 Future Land Development Proposal

The Future Land Development Proposal outlines sustainable vision for a comprehensive Rural Area Plan. The proposal focuses on leveraging cutting-edge technologies, promoting environmental conservation, and creating a vibrant and inclusive community. The key components of the proposal include sustainable infrastructure, mixed-use zoning, green spaces and biodiversity conservation, technology integration, community engagement and social well-being, sustainable transportation, and economic opportunities. The proposal emphasizes the importance of sustainable infrastructure, incorporating renewable energy sources and smart grid systems to optimize energy usage and reduce waste. An advanced water management system is also proposed to ensure efficient water use. The development features mixed-use zoning to create a vibrant community with residential, commercial, and recreational spaces, prioritizing walkability and green spaces.

Preserving and enhancing natural habitats is a crucial aspect of the proposal, with extensive green spaces, native plant species, and wildlife corridors incorporated to promote biodiversity and support local ecosystems. The integration of technology is another key element, with smart rural area plan and high-speed internet connectivity provided throughout the community. This enables data analytics, and improved resource usage, transportation systems, and quality of life.

Table 25: Recommended Proposed Facilities for Future Development Area

	Strategic Service Center	Facilities	Facilities description/definition and permission
1.	Trade and Commerce Center	Commerce and Shopping	1. GO & NGO Office 2. Commerce & Trade center 3. Wholesale market 4. Retail sale/Kitchen 5. E-commerce center 6. Cold storage 7. Industrial market/ Market place for miscellaneous products 8. Cattle Market (Hat) 9. Bank/Agent banking service 10. Market/Food Centre/Restaurant 11. Cinema 12. Entertainment 13. Foreign Trade 14. Mission/Chancery 15. Convention/Exhibition Centre 16. Cooperative office 17. Public toilet
		Open Space and Recreation	1. Open space to take shelter in disaster event or fire hazard or earth quake 2. Park 3. Play-grounds (stadium, Play field etc.) 4. Natural and underdeveloped resources areas (critical habitat areas, areas with natural beauty such as river bank or char, heritage sites etc.) 5. Coastal Afforestation

	Strategic Service Center	Facilities	Facilities description/definition and permission
			6. Swamp Area 7. Natural Open Space
		Miscellaneous	As per community requirement, local authority and elected public representative will discuss, sort-out and take decision. With both party consent the community requirement will be implemented
		Utilities	1. Electricity supply 2. Electric substation 3. Primary solid waste collection station 4. Overhead water tank/water purification plant/piped supplied water
		Transportation	1. Bus/truck terminal 2. Rickshaw/tempo/ bike stand 3. Rent a car 4. Launch/boat/steamer terminals 5. Helipad 6. Driving Circuit/Test Centre 7. Fuel Station
2	First order service center		
		Community Facilities	1. Eidgha 2. Graveyard/ cremation ground 3. community center 4. religious places/
		Government Services	Services provided by the government to people such as 1. Prison 2. Police station 3. health care 4. armed forces 5. ambulances 6. paramedics 7. fire brigade 8. public broadcasting etc.
		Health	1. Hospital/clinic/satellite clinic 2. Health services provided by NGO/other organization
		Education	1. Kindergarten 2. Primary School 3. Secondary School 4. College 5. Institute of Technical Education 6. Polytechnic 7. University 8. Religious School/Institute 9. Foreign System School 10. Special Education School (e.g. School for the Disabled

	Strategic Service Center	Facilities	Facilities description/definition and permission
			11. public library 12. research institute 13. skill training center
		Residential	Planner residential
		services market	The services market includes marketing centers operating in rural areas where favorable marketing infrastructure may not be present.
		Utilities	1. Electricity supply 5. Primary/secondary solid waste collection station 6. Overhead water tank/water purification plant/piped supplied water 7. Drug Rehabilitation Centre/Halfway House 8. Reformative Centre 9. Community Institutions 10. Association premises 11. Community Centre/Club 12. Community Hall 13. Welfare Home 14. Child Care Centre 15. Home For The Aged 16. Home For The Disabled 17. Workers' Dormitory 18. Cultural Institutions 19. Television/Filming Studio Complex 20. Museum
3	Second order service center		
		Community Facilities	1. Graveyard/ cremation ground 2. community center 3. religious places
		Health	1. clinic/satellite clinic 2. Health services provided by NGO/other organization
		Education	1. Kindergarten 2. Primary School 3. Secondary School 4. Institute of Technical Education 5. Polytechnic 6. Religious School/Institute 7. Special Education School (e.g. School for the Disabled) 8. skill training center
		Transportation	1. Rickshaw/tempo/ bike stand 2. Launch/boat/steamer terminals 3. Fuel Station
		Open Space and Recreation	1. Open space to take shelter in disaster event or fire hazard or earth quake

	Strategic Service Center	Facilities	Facilities description/definition and permission
			2. Park 3. Play-grounds (mini stadium, Play field etc.) 4. Natural and underdeveloped resources areas (critical habitat areas, areas with natural beauty such as river bank or char, heritage sites etc.) 5. Coastal Afforestation 6. Swamp Area 7. Natural Open Space
		Residential	Spontaneous/Planned residential
		Miscellaneous	As per community requirement, local authority and elected public representative will discuss, sort-out and take decision. With both party consent the community requirement will be implemented
		Utilities	1. Electricity supply 2. Primary/secondary solid waste collection station 3. Overhead water tank/ piped supplied water/rain water harvest facility 4. Drug Rehabilitation 5. Community Institutions 6. Community Centre/Club 7. Community Hall 8. Welfare Home 9. Child Care Centre 10. Home For The Aged 11. Home For The Disabled 12. Workers' Dormitory
4	Third order service center		
		Health	1. satellite clinic 2. Health services provided by NGO/other organization
		Education	1. Kindergarten 2. Primary School
		Community Facilities	religious places
		Transportation	1. Rickshaw/tempo/ bike stand
		Open Space and Recreation	Mainly recreation facilities
		Residential	Spontaneous development
		Miscellaneous	As per community requirement, local authority and elected public representative will discuss, sort-out and take decision. With both party consent the community requirement will be implemented
		Utilities	1. Electricity supply

	Strategic Service Center	Facilities	Facilities description/definition and permission
			2. Secondary/tertiary solid waste collection station 3. Overhead water tank/ piped supplied water/rain water harvest facility 4. Welfare Home 5. Child Care Centre
5	Economic Region		6.
		communication	1. Telephone lines 2. mobile networks 3. Internet connectivity, and 4. Broadcasting networks.
		Transportation	1. Roads, 2. railways, 3. airports, 4. seaports, and 5. Inland waterways.
		Utilities	1. water supply and distribution system, and 2. sanitation drainage system, 3. pollution control devices,
		energy	Light and power station
		health care	1. private clinic
		financial services	1. Banking services such as savings accounts, checking accounts, and loans. 2. Investment services such as stock trading and investment management. 3. Insurance services such as life insurance and health insurance.
		public administration	1. Police station 2. health care/ ambulances 3. armed forces 4. fire brigade
		Miscellaneous	Any services to support growth and development within the capacity of nation/regional/ local authority

Proposals for Rural Area Plan

Taltali Rural Area Plan is a combination of Land use proposals, facilities for ensuring future development and transportation proposals to the year 2031. The proposals are showing in table 25, 26 and 27.

Table 26: Proposed Land use of Taltali Union for the year 2031

Sl. No.	Type	Area (Acre)
1	Administrative and Public Service	21.61
2	Beach	222.73

3	Transportation and Communication	1011.34
4	Commercial	71.16
5	Community Service	107.13
6	Forest	7065.67
7	Economic Region	969.34
8	Education and Research	89.69
9	Health Facilities	5.44
10	Manufacturing and Processing	37.78
11	Rural Settlement	12247.40
12	Strategic Service Center: 1st Order	170.33
13	Strategic Service Center: 2nd Order	130.64
14	Strategic Service Center: 3rd Order	227.67
15	Trade and Commerce Center	159.71
16	Waterbody	13629.68
17	Thermal Energy Plant Site	179.94
18	Rural Settlement	3.63
19	Open Space and Recreation	71.48
20	Costal Afforestation and Foreshore	2745.95
21	Agriculture	26853.37
22	Costal Afforestation and Foreshore	16.69
	Total	66038.37

Source: GIS Database, PKCP (2021-2031)

Table 27: Road Proposals of Taltali Upazila for the year 2031

Functional Category	Status	Proposed Width	Shape Length
Primary Road	New Alignment	60	23.60
		80	3.79
	Widening	60	13.01
		80	22.69
Secondary Road	New Alignment	20	5.82
		40	23.91
	Widening	20	42.42
		40	74.44
Tertiary Road	New Alignment	12	8.16
	Widening	12	91.85
Total			309.71

Table 28: Proposed Facilities of Taltali Upazila for the year 2031

Name	Nos	Name	Nos
Agricultural Reaserch Center	1	Hotel-Motel Center	2
Auto Rickshaw Stand	4	ICT Center	3
Bus Terminal	1	Library	1
Central Graveyard	1	Mosque	1
City Center	1	Open Theater	1

Cold Storage	6	Park	1
College	3	Playground	4
Community Center	14	Police Outpost	1
Fical Sludge Treatment Plant	1	Post Office	3
Ghat	1	Primary School	5
Governmet Oficce	1	Public Toilet	12
Govt. Rest House	2	Rakhain Cultural Center	1
Graveyard	8	Waste Disposal Site	3
Health Center	12	Waste Dumping Site	1
High School	7	Water Treatment Plant	1
Total	63	Total	40
Grand Tota	103		



Figure 12: Map of Proposed Land Use fro Taltali Rural Area Plan

2.7 Union Wise Proposed Land Use

2.7.1 Barabagi Union

Out of the total 12450 acres of land of Barabagi union, the area of 6496 acres (52.18%) land has been proposed for agricultural purpose. Followed by residential use 19.88%, Road network 2.17 %, Water body 13.24%, and educational facilities 0.09% land has been proposed. Below table shows the proposed land use of Barabagi Union.

Table 29: Proposed Land Use of Barabagi Union

Union Name	Proposed Land Use	Area (Acre)	%
Barabagi	Administrative and Public Service	17.00	0.14
	Agriculture	6496.32	52.18
	Commercial	24.38	0.20
	Community Service	15.42	0.12
	Costal Afforestation and Foreshore	819.96	6.59
	Education and Research	11.62	0.09
	Forest	493.06	3.96
	Health Facilities	1.60	0.01
	Manufacturing and Processing	7.37	0.06
	Open Space and Recreation	49.31	0.40
	Rural Settlement	2475.48	19.88
	Strategic Service Center: 2nd Order	9.35	0.08
	Strategic Service Center: 3rd Order	111.98	0.90
	Transportation and Communication	269.72	2.17
	Waterbody	1647.99	13.24
Barabagi Total		12450.58	100.00

Source: GIS Database, PKCP (2021-2031)

Considering the local peoples demand from the PRA and based on the planning standards, several development proposals have been recommended for Barabagi Union.

Table 30: List of Proposed Facilities for Chhota Bogi Union

Proposed Facility	Mouza	JL No	Sheet No	Plot No
Agricultural Reaserch Center	Barabagi	44	2	405,406,407,510,702,704,713
Auto Rickshaw Stand	Barabagi	44	2	510,690,695,696,702,703
			7	2913,2919,2921,3134,3135,3159,3169,3170,3171,3172,9076
Bus Terminal	Barabagi	44	2	391,392,393,409,414
Central Graveyard	Barabagi	44	7	3216,3219,3220,3221,3222,3223,3224,3225

Proposed Facility	Mouza	JL No	Sheet No	Plot No
City Center	Barabagi	44	2	654
			7	3135,3136,3137,3138,3139,3159,3169,3170,3171,3172,9076
College	Barabagi	44	6	1952,1953,2008,2016,2017,2018
Community Center	Barabagi	44	2	607,684,689,690,691,696,697,702
		45	6	1918,1922,1923,1924,1925,1944,1945,1952,2008
		46	15	8888
		47	17	8061,8062,8063,8064,8065
Governmet Oficce	Barabagi	44	2	405,406,407,408,510
Graveyard	Barabagi	44	6	2024,2025,2028
		45	9	4569,4570,4572,4573
		46	15	7136, 7484
Health Center	Barabagi	44	2	687,688,699,700
		45	6	1921, 1922, 1923
		46	7	3145,3146,3147,3148,3159,3161,3163,8888
		47	9	4000, 4007, 4625
		48	14	6658,6665,6713
High School	Barabagi	44	17	7972,7990,7991,8142
ICT Center	Barabagi	44	2	607,688,697,698,699,700,701,702
Mosque	Barabagi	44	2	700,709
		45	7	3147,3148,3149,3150,3159,3160,3161,3162
Open Theater	Barabagi	44	2	405,504,505,506,510,512,691,694,695,696
Playground	Barabagi	44	7	2917,2922,8888
Post Office	Barabagi	44	7	2810,2811,2821,2822,2823,2824,2825
Primary School	Barabagi	44	17	7971,8067
Public Toilet	Barabagi	44	2	585,647,648,649,650,651,652,653,654,655,663,664,665,667
		45	14	6716,6717,6718,6728,6729
		46	15	8888
Rakhain Cultural Center	Barabagi	44	2	510,511,512,513,514,515,516,604,605,606,691,692,693,694

In the road network plan, proper road channelization and widening of narrow roads has been making sure. Total length of 63.69 km road has been proposed in Barabagi Union. About 11

km of new roads has been proposed and about 52 km roads have been proposed for widening. The proposed road network status of Barabagi Union has been shown below

Table 31: Type Wise Proposed Road Network in Barabagi Union

Functional Category	Status	Proposed Width	Length (km)
Primary Road	New Alignment	60	0.32
		80	2.87
	Widening	60	10.40
		80	2.51
Secondary Road	New Alignment	40	5.32
	Widening	20	4.53
		40	23.62
Tertiary Road	New Alignment	12	2.20
	Widening	12	11.93
Total			63.69

Table 32: Type Wise Proposed Road Network in Barabagi Union

Sl. No.	Proposed Facilities	Nos	Sl. No.	Proposed Facilities	Nos
1	Agricultural Reaserch Center	1	11	High School	1
2	Auto Rickshaw Stand	3	12	ICT Center	1
3	Bus Terminal	1	13	Mosque	1
4	Central Graveyard	1	14	Open Theater	1
5	City Center	1	15	Park	1
6	College	1	16	Post Office	1
7	Community Center	3	17	Primary School	1
8	Governmet Oficce	1	18	Public Toilet	2
9	Graveyard	2	19	Rakhain Cultural Center	1
10	Health Center	4			
	Total				28

Source: GIS Database, PKCP

Among those proposals, one college, one graveyard has been proposed for community facilities purpose. Besides, one primary school and one high school for educational facilities purpose, one open theater, one Rakhain Cultural Center and one park for open space and recreational purpose, four community clinics for health facilities purpose, two public toilets and one Bus Terminal for public and utility services have also been proposed for this union. Detail list of proposed facilities for Barabagi Union is presented in table 29.

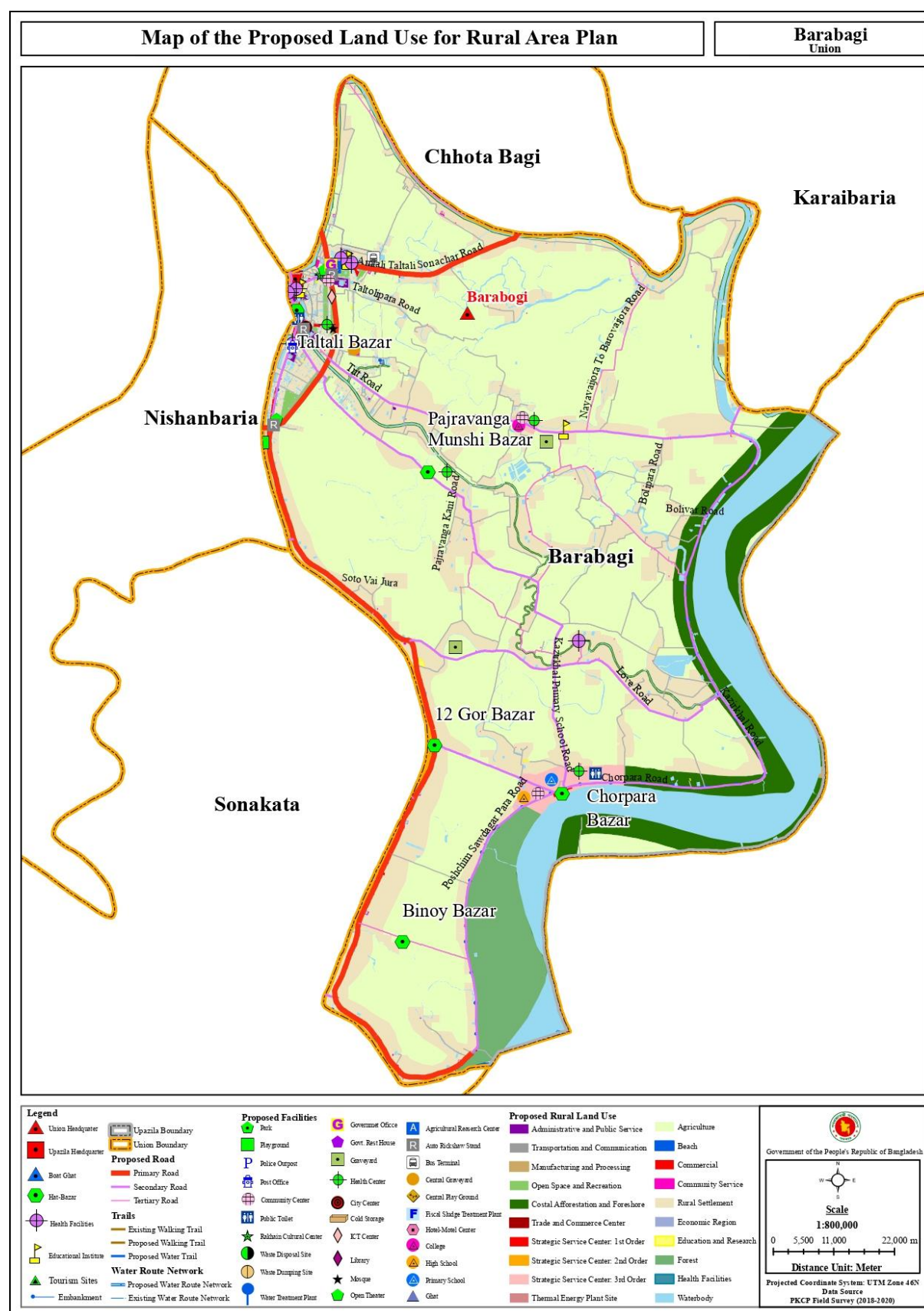


Figure 13: Map of Proposed Rural Land Use of Barabagi Union

2.7.2 Chhota Bogi Union

Chhota Bogi Union is agro-based union. Agricultural land has been given the highest priority while preparing the proposed land use plan of Chhota Bogi Union. Out of total 8284.86 acres of land of this union, 3888.62 acres (46.94%) of land of this union has been proposed for agricultural purpose. Residential area has been proposed which area is 1516.15 acres (18.30%) of land. Followed by waterbody 23.73%, circulation network 1.75%, economic Region 1.51%, commercial 0.12%, educational facilities 0.15%, community facilities 0.14% has been proposed. Table 32 show the proposed land use of Chhota Bogi Union.

Table 33: Proposed Land Use of Chhota Bogi Union

Union Name	Proposed Land Use	Area (Acre)	%
Chhota Bogi	Administrative and Public Service	0.36	0.00
	Agriculture	3888.62	46.94
	Commercial	9.73	0.12
	Community Service	11.72	0.14
	Costal Afforestation and Foreshore	524.80	6.33
	Economic Region	125.47	1.51
	Education and Research	12.50	0.15
	Health Facilities	0.31	0.00
	Manufacturing and Processing	2.65	0.03
	Open Space and Recreation	9.18	0.11
	Rural Settlement	1516.15	18.30
	Strategic Service Center: 3rd Order	53.28	0.64
	Trade and Commerce Center	19.30	0.23
	Transportation and Communication	145.05	1.75
	Waterbody	1965.74	23.73
Chhota Bogi Total		8284.86	100.00

Source: GIS Database, PKCP

Considering the local peoples demand from the PRA and based on the planning standards, number of 16 development proposals have been recommended for Chhota Bogi Union.

Table 34: List of Proposed Facilities for Chhota Bogi Union

Proposed Facility	Mouza	JL No	Sheet No	Plot No
Auto Rickshaw Stand	Char Para	40	3	2104,2105,2188,2189
Central Play Ground	Char Para	40	3	2167,2168,2170,2171,2172,2173,2174,2175,2176,2177,2178,2179,2180,2181,2211,2212
College	Chhota Bagi	36	4	4064,4068,4069,4070,4074,4075,4076,4077,4078
Community Center	Chhota Bagi	36	1	469,470,471,472,476,477,478,575,576
Ghat	Char	40	2	1525

Proposed Facility	Mouza	JL No	Sheet No	Plot No
	Para			
		41	3	2002
Graveyard	Bara Para	35	3	3008,3009,3010,3015,3016,3017,3018,3019,3027,3039,3040,3041,3042,3046,3047,3048,3049,3050,3053
	Char Para	40	1	107,108
	Gabtali	37	1	378
Health Center	Char Para	40	3	2061,2062,2065,2066,2067,2070,2219,2220
	Chhota Bagi	36	3	3258,3259,3260,3261,3262,3263,3328,3434,3439,3440
High School	Char Para	40	3	2051,2052,2053,2054,2055,2060,2061,2217,2218
ICT Center	Chhota Bagi	36	1	435,631,632,633,638,647
Library	Char Para	40	3	2062,2063,2064,2065,2070,2071,2072,2078,2219,2221
Primary School	Bethi Para	39	2	1140,1141,1144,1145,1146,1147,1148,1154
	Char Para	40	3	2046,2052,2053,2054,2055,2056,2057,2058,2060,2061,2217,2218
Waste Disposal Site	Chhota Bagi	36	1	441,442,443,447,448,449,450,451
Waste Disposal Site	Chhota Bagi	36	3	3436,3437,3443,3444
Waste Dumping Site	Char Para	40	3	2045,2053,2055,2056,2057,2058,2059,2061,2062,2218

Source: GIS Database, PKCP

In the road network plan, proper road channelization and widening of narrow roads has been making sure. Total length of 42.26 km road has been proposed in Chhota Bogi Union. About 20 km of new roads has been proposed and about 22 km roads have been proposed for widening. The proposed road network status of Chhota Bogi Union has been shown in table 34.

Table 35: Type Wise Proposed Road Network in Chhota Bogi Union

Functional Category	Status	Proposed Width	Length (km)
Primary Road	New Alignment	60	7.53
		80	0.17
	Widening	60	1.98
		80	2.16
Secondary Road	New Alignment	20	3.72
		40	6.34
	Widening	20	4.76
		40	9.75
Tertiary Road	New Alignment	12	2.44
	Widening	12	3.40

Total			42.26
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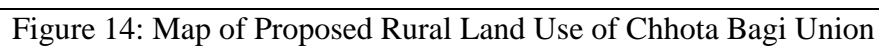
Source: GIS Database, PKCP

Table 36: List of Proposed Facilities for Chhota Bogi Union

Sl. No.	Proposed Facilities	Nos	Sl. No.	Proposed Facilities	Nos
1	Auto Rickshaw Stand	1	8	High School	1
2	Central Play Ground	1	9	ICT Center	1
3	College	1	10	Library	1
4	Community Center	2	11	Primary School	2
5	Ghat	1	12	Waste Disposal Site	1
6	Graveyard	1	13	Waste Dumping Site	1
7	Health Center	2			
	Total				16

Source: GIS Database, PKCP

Among those proposals, two community center and one graveyard has been proposed for community facilities purpose. Besides, two primary schools, one college and one high school and one library for educational facilities purpose, one waste disposal site and one waste dumping site for utility services have also been proposed for this union. Detail mauza wise plot schedule of proposed development facilities for Chhota Bogi Union is presented in table 33. Figure 15 shows proposed land use of Chhota Bogi Union.



2.7.3 Karaibaria Union

Out of total 7860.65 acres of land in Karaibaria Union, around 4810 acres (61.20 %) of land has been proposed for agricultural purpose. Proposed land use in this union followed by Rural Settlement 23.97 %, Water body 6.72 %, Road Network 1.77 %, Strategic Service Center: 2nd Order 0.53 %.

Table 37: Proposed Land Uses of Karaibaria Union

Union Name	Proposed Land Use	Area (Acre)	%
Karaibaria	Administrative and Public Service	0.02	0.00
	Agriculture	4810.53	61.20
	Commercial	7.56	0.10
	Community Service	19.11	0.24
	Costal Afforestation and Foreshore	350.10	4.45
	Education and Research	17.10	0.22
	Health Facilities	0.15	0.00
	Manufacturing and Processing	18.72	0.24
	Rural Settlement	1884.18	23.97
	Strategic Service Center: 2nd Order	41.88	0.53
	Strategic Service Center: 3rd Order	44.20	0.56
	Transportation and Communication	138.76	1.77
	Waterbody	528.35	6.72
Karaibaria Total		7860.65	100.00

Source: GIS Database, PKCP

In the Rural Area Plan about 10 proposed facilities has been incorporated for Karaibaria Union according to the PRA demand and based on the planning standards.

Table 38: List of Proposed Facilities for Karaibaria Union

Proposed Facility	Mouza	JL No	Sheet No	Plot No
Cold Storage	Karaibaria	45	3	1493,1500,1503,1504,1505,1506,1507,1508,1509,1511,1512,1515
Community Center	Jharakhali	80	1	180,181,182,185,186,187,188,191,192,198
	Karaibaria	45	3	1666,1672,1673,1674,1675
Graveyard	Behala	77	2	761,766,767,769,789,790,791,792
	Jharakhali	80	3	1739,1740
		81	4	2189,2193,2265,2266,2267,2268,2269
Health Center	Jharakhali	80	1	282,287,288,289,290,291,294,328,329,333,337
	Karaibaria	45	3	1541,1542,1544,1545,1550,1551,1553,1554,1555,1556,1557,1559,1560,1575
High School	Jharakhali	80	4	2369,2370,2371,2372,2373,2374,2375,2376,2454,2456
Public Toilet	Alir Bandar	79	4	3658
	Jharakhali	80	1	267,269,271,272

Proposed Facility	Mouza	JL No	Sheet No	Plot No
	Karaibaria	45	3	1563,1566,1567,1568,1570,1571

Source: GIS Database, PKCP

In the road network plan, proper road channelization and widening of narrow roads has been making sure. Total length of 54.49 km roads has been proposed in Karaibaria Union. About 1 kilometer of new roads has been proposed and about 53 km roads have been proposed for widening. The proposed road network status of Karaibaria Union has been shown below-

Table 39: Proposed Road Network in Karaibaria Union

Functional Category	Status	Proposed Width	Length (km)
Primary Road	New Alignment	60	0.81
	Widening	80	6.05
Secondary Road	Widening	20	18.45
		40	7.00
Tertiary Road	New Alignment	12	0.08
	Widening	12	22.09
			54.49

Source: GIS Database, PKCP

Table 40: List of Proposed Facilities for Karaibaria Union

Sl. No.	Proposed Facilities	Nos	Sl. No.	Proposed Facilities	Nos
1	Cold Storage	1	11	Health Center	2
2	Community Center	2	12	High School	1
3	Graveyard	2	13	Public Toilet	2
	Total				10

Source: GIS Database, PKCP

Among those proposals, one High school, one cold storage, one community center, One graveyard and two public toilets have also been proposed for this union. Detail mauza wise plot schedule of proposed development facilities for Karaibaria Union is presented in Table 37. The below figure shows proposed land use of Karaibaria Union.

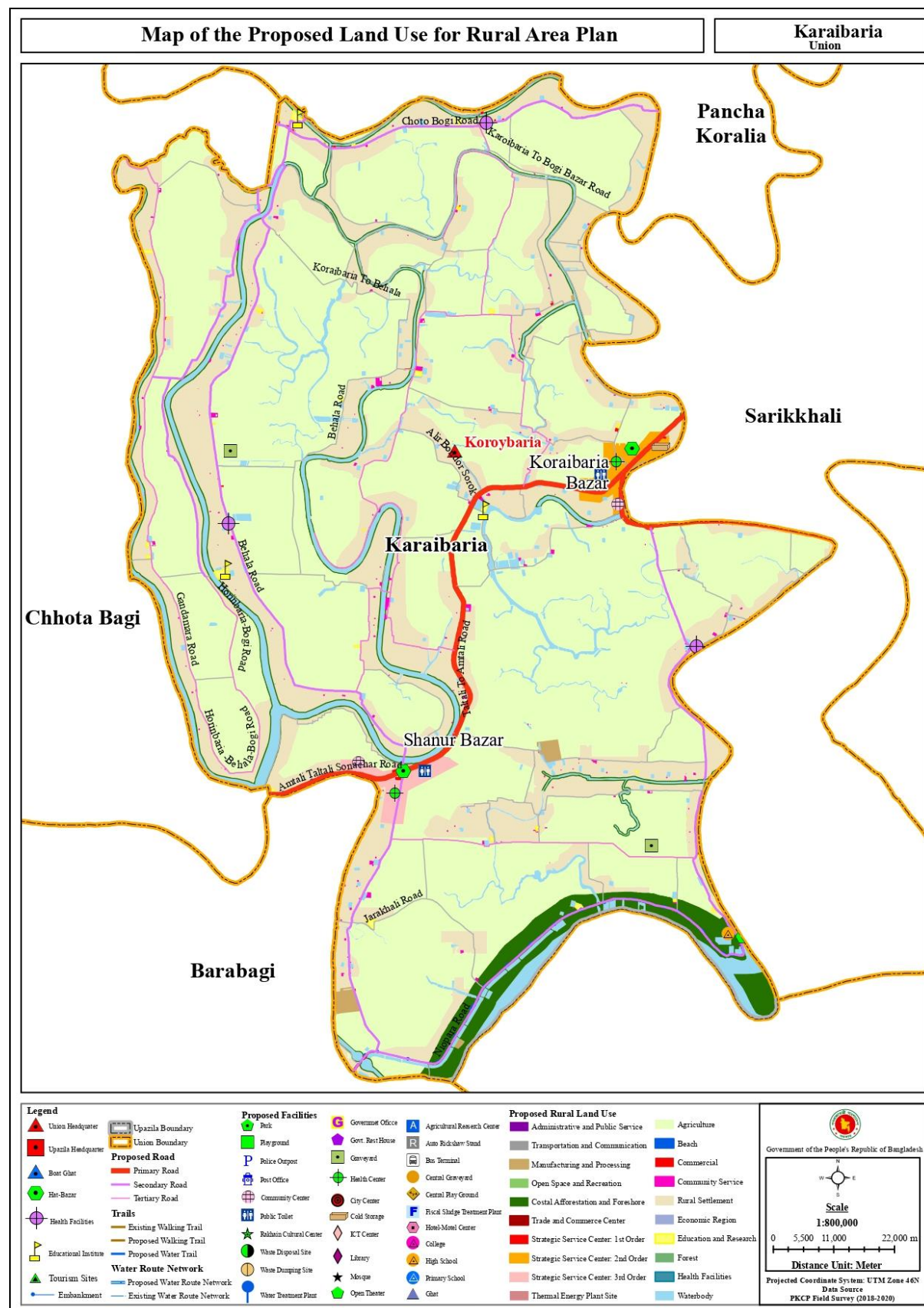


Figure 15: Map of Proposed Rural Land Use of Karaibaria Union

2.7.4 Nishanbaria Union

Agricultural land has been given the highest priority while preparing the proposed land use plan of Nishanbaria Union. Out of the total 6265 acres of land of this union, the area of 1725.38 acres (27.54 %) has been proposed for agricultural purpose. Followed by residential 18.28%, water body 37.60%, forest 5.91%, circulation network 1.80% and commercial 0.11% has been proposed.

Table 41: Proposed Land Use of Nishanbaria Union

Union Name	Proposed Land Use	Area (Acre)	%
Nishanbaria	Administrative and Public Service	0.89	0.01
	Agriculture	1725.38	27.54
	Beach	17.69	0.28
	Commercial	6.72	0.11
	Community Service	16.53	0.26
	Costal Afforestation and Foreshore	224.09	3.58
	Education and Research	11.11	0.18
	Forest	370.43	5.91
	Health Facilities	0.47	0.01
	Manufacturing and Processing	2.22	0.04
	Open Space and Recreation	12.99	0.21
	Rural Settlement	1145.45	18.28
	Thermal Energy Plant Site	179.94	2.87
	Trade and Commerce Center	83.11	1.33
	Transportation and Communication	112.62	1.80
	Waterbody	2355.38	37.60
Nishanbaria Total		6265.01	100.00

Source: GIS Database, PKCP

Considering the local peoples demand from the PRA and based on the planning standards, 15 development proposals have been recommended for Nishanbaria Union.

Table 42: List of Proposed Facilities for Nishanbaria Union

Proposed Facility	Mouza	JL No	Sheet No	Plot No
Community Center	Chhota Nishanbaria Chak	41	2	237,245,248,249
		42	4	1394
		43	7	4150
Fical Sludge Treatment Plant	Chhota Nishanbaria Chak	41	3	529,530,531,532,534,535,536,537,546,871
Govt. Rest House	Chhota Nishanbaria	41	6	2526,2530,2532,2533,2534,2541

	Chak			
Graveyard	Chhota Nishanbaria Chak	41	9	3212, 3226
Health Center	Chhota Nishanbaria Chak	41	2	237,244,245,246,247,248,256,442
		42	7	4261,4262,4263,4264,4265,4266,4267,4268
High School	Chhota Nishanbaria Chak	41	2	248,250
Hotel-Motel Center	Chhota Nishanbaria Chak	41	4	1374,1387,1388,1389,1390
ICT Center	Chhota Nishanbaria Chak	41	2	248,249,250
Playground	Chhota Nishanbaria Chak	41	2	442
Police Outpost	Chhota Nishanbaria Chak	41	6	2558,2581,2582,2583,2584,2585,2597,2759
Public Toilet	Chhota Nishanbaria Chak	41	1	150
		42	4	1278,1279,1280,1281,1398,1399,1401,1405,1409
Waste Disposal Site	Chhota Nishanbaria Chak	41	2	203
Waste Dumping Site	Chhota Nishanbaria Chak	41	1	1
Water Treatment Plant	Barabagi	44	2	585
	Chhota Nishanbaria Chak	41	1	101,103,104,105,106,150

Source: GIS Database, PKCP

In the road network plan, proper road channelization and widening of narrow roads has been making sure. Total length of 23.78 km road has been proposed in Nishanbaria Union. About 7 kilometer of new roads has been proposed and about 16 km roads have been proposed for widening. The proposed road network status of Nishanbaria Union has been shown in table 42-

Table 43: Proposed Road Network in Nishanbaria Union

Functional Category	Status	Proposed Width	Length (km)
Primary Road	New Alignment	60	4.04
		80	0.75
	Widening	80	6.97

Secondary Road	New Alignment	40	1.06
	Widening	20	1.28
		40	4.75
Tertiary Road	Widening	12	4.92
			23.78

Source: GIS Database, PKCP

Table 44: List of Proposed Facilities for Nishanbaria Union

Sl. No.	Proposed Facilities	Nos	Sl. No.	Proposed Facilities	Nos
1	Community Center	2	8	ICT Center	1
2	Fical Sludge Treatment Plant	1	9	Playground	1
3	Govt. Rest House	1	10	Police Outpost	1
4	Graveyard	1	11	Public Toilet	1
5	Health Center	2	12	Waste Disposal Site	1
6	High School	1	13	Water Treatment Plant	1
7	Hotel-Motel Center	1			
	Total				15

Source: GIS Database, PKCP

On the basis of demand as revealed from PRA, one community center and one graveyards has been proposed for community facilities purpose. One high school has been proposed for education and research use purpose. To provide health facilities to the local people two community clinic have been proposed. Besides, one one fical Sludge Treatment Plan, one govt. rest house, one hotel-motel zone, one ICT Center, one playground etc. have also been proposed for this union. Detail mauza wise plot schedule of proposed development facilities for Nishanbaria Union is presented.

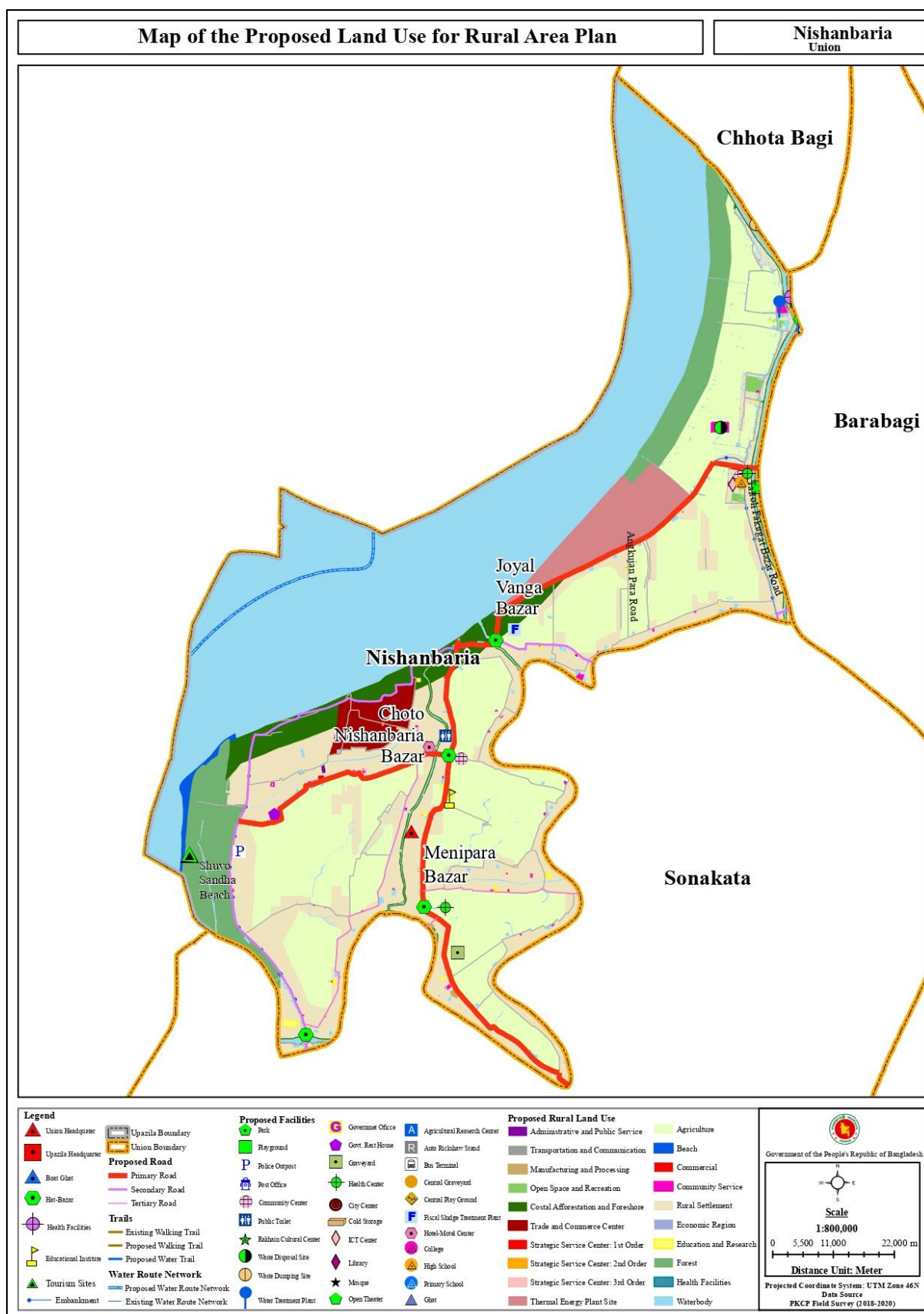


Figure 16: Map of Proposed Rural Land Use of Nishanbaria Union

2.7.5 Pancha Koralia Union

Pancha Koralia Union is agro-based union. Out of total 7251.82 acres of land of this union, 3304 acres (45.56%) of land of this union has been proposed for agricultural purpose. Residential area has been proposed which covers 1607.12 acres (22.16%) of land. Followed by waterbody 23.37%, circulation network 1.49%, commercial 0.11%, community facilities 0.23% and educational facilities 0.17% has been proposed. **Error! Reference source not found.** show the proposed land use of Pancha Koralia Union.

Table 45: Proposed Land Use of Pancha Koralia Union

Union Name	Proposed Land Use	Area (Acre)	%
Pancha Koralia	Administrative and Public Service	1.37	0.02
	Agriculture	3303.94	45.56
	Commercial	7.90	0.11
	Community Service	16.39	0.23
	Costal Afforestation and Foreshore	334.78	4.62
	Economic Region	68.79	0.95
	Education and Research	12.24	0.17
	Health Facilities	0.15	0.00
	Manufacturing and Processing	1.58	0.02
	Rural Settlement	1607.12	22.16
	Strategic Service Center: 1st Order	12.46	0.17
	Strategic Service Center: 2nd Order	34.26	0.47
	Strategic Service Center: 3rd Order	18.20	0.25
	Trade and Commerce Center	29.69	0.41
	Transportation and Communication	107.99	1.49
	Waterbody	1694.95	23.37
Pancha Koralia Total		7251.82	100.00

Source: GIS Database, PKCP

In the Rural Area Plan, according to the PRA demand and based on the planning standards about 10 proposed facilities has been incorporated for Pancha Koralia Union.

Table 46: List of Proposed Facilities for Pancha Koralia Union

Proposed Facility	Mouza	JL No	Sheet No	Plot No
Cold Storage	Pancha Koralia	34	2	944,957,958,959,962,963,964,965
		35	4	3076,3082,3083,3084,3087,3093,3111,3112,3115,3116,3117,3118,3119,3128
Community Center	Pancha Koralia	34	1	91,103,104,105,106,107,108,116
		35	2	168
Health Center	Pancha	34	1	57,58,78,97,98

	Koralia			
			2	158,159,160,161,162
High School	Pancha Koralia	34	1	103
		35	2	168,173,174,175,180,181,182,191
Primary School	Chandkhali	48	4	3302,3469,3581,3584,3585,3586
Public Toilet	Pancha Koralia	34	1	87,88,89,90,91,93,122
		35	4	2934,2935,2936,2937,2938,2939,2941,2942

Source: GIS Database, PKCP

In the road network plan, proper road channelization and widening of narrow roads has been making sure. Total length of 36.74 km road has been proposed in Pancha Koralia Union. About 11 kilometer of new roads has been proposed and about 25 km roads have been proposed for widening. The proposed road network status of Pancha Koralia Union has been shown in Table 46-

Table 47: Proposed Road Network in Pancha Koralia Union

Functional Category	Status	Proposed Width	Length (km)
Primary Road	New Alignment	60	7.17
	Widening	60	0.00
Secondary Road	Widening	20	4.29
		40	10.49
Tertiary Road	New Alignment	12	3.44
	Widening	12	11.35
			36.74

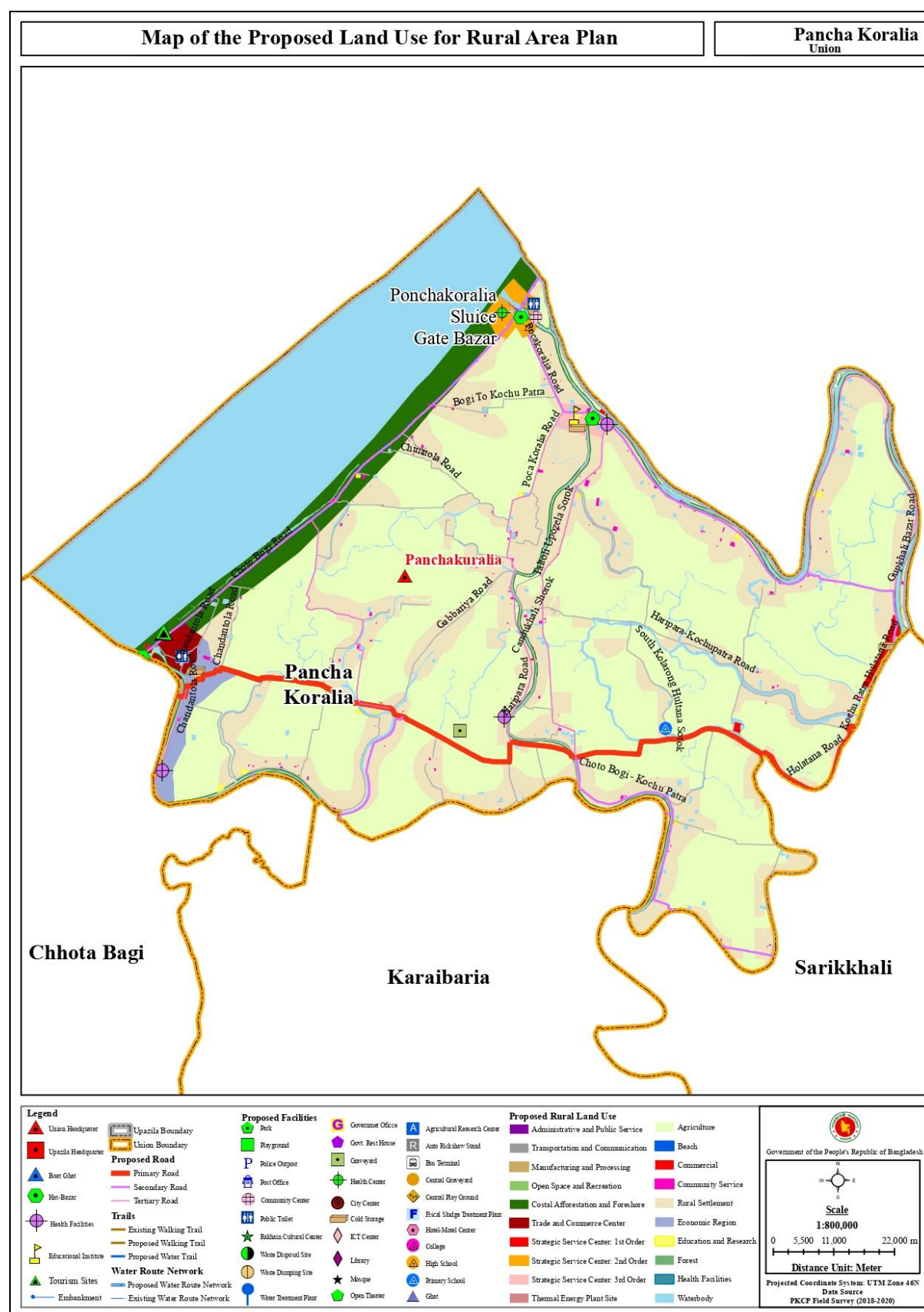
Source: GIS Database, PKCP

Table 48: List of Proposed Facilities for Pancha Koralia Union

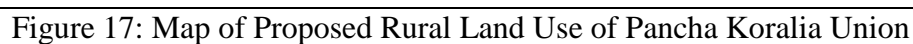
Sl. No.	Proposed Facilities	Nos	Sl. No.	Proposed Facilities	Nos
1	Cold Storage	3	5	High School	1
2	Community Center	1	6	Primary School	1
3	Graveyard	1	7	Public Toilet	2
4	Health Center	1			
	Total				10

Source: GIS Database, PKCP

Among those proposals there are 1 graveyard, 1 primary and high school, 1 Public Toilet, 1 community clinic, 2 public toilets, and 1 Community Center. Detail mauza wise plot schedule of proposed development facilities for Pancha Koralia Union is presented .



shows proposed land use of Pancha Koralia Union.



2.7.6 Sarikkhali Union

Sarikkhali Union is the smallest union. Out of total 5633 acres of land of this union, 2484.44 acres (44.10%) of land of this union has been proposed for Agricultural area purpose. Forest has been proposed which covers 105.94 acres (1.88%) of land. Followed by residential 19.49%, waterbody 13.67%, circulation network 1.91%, commercial 0.05%, community facilities 0.21%, educational facilities 0.19% and health facilities 0.04% has been proposed.

Table 49: Proposed Land Use of Sarikkhali Union

Union Name	Proposed Land Use	Area (Acre)	%
Sarikkhali	Administrative and Public Service	0.69	0.01
	Agriculture	2484.44	44.10
	Commercial	2.59	0.05
	Community Service	11.78	0.21
	Costal Afforestation and Foreshore	356.83	6.33
	Economic Region	636.74	11.30
	Education and Research	10.63	0.19
	Forest	105.94	1.88
	Health Facilities	2.33	0.04
	Manufacturing and Processing	0.45	0.01
	Rural Settlement	1097.86	19.49
	Strategic Service Center: 1st Order	45.04	0.80
	Strategic Service Center: 2nd Order	0.01	0.00
	Transportation and Communication	107.42	1.91
	Waterbody	770.28	13.67
Sarikkhali Total		5633.05	100.00

Source: GIS Database, PKCP

Considering the local people demand, number of 7 development proposals have been recommended for Sarikkhali Union.

Table 50: List of Proposed Facilities for Sarikkhali Union

Proposed Facility	Mouza	JL No	Sheet No	Plot No
Cold Storage	Chandkhali	48	3	2305,2306,2307,2308,2309,2310,2314,2315,2737
	Kachupatra	47	1	360
Community Center	Kachupatra	47	1	52,53,54,65,69,70,94,95,361,363
Graveyard	Kachupatra	47	6	3514,3517,3518,3519,3520,3800
High School	Chandkhali	48	3	2753
	Kachupatra	47	1	178,179,180,181,182,183,184,188,360
		48	5	2998,3054,3055,3056,3057,3058,3059,3060,3061,3062
Post Office	Kachupatra	47	1	38,41,62,67,98
Public Toilet	Kachupatra	47	1	17,18,24,26,99,100,101,102

Source: GIS Database, PKCP

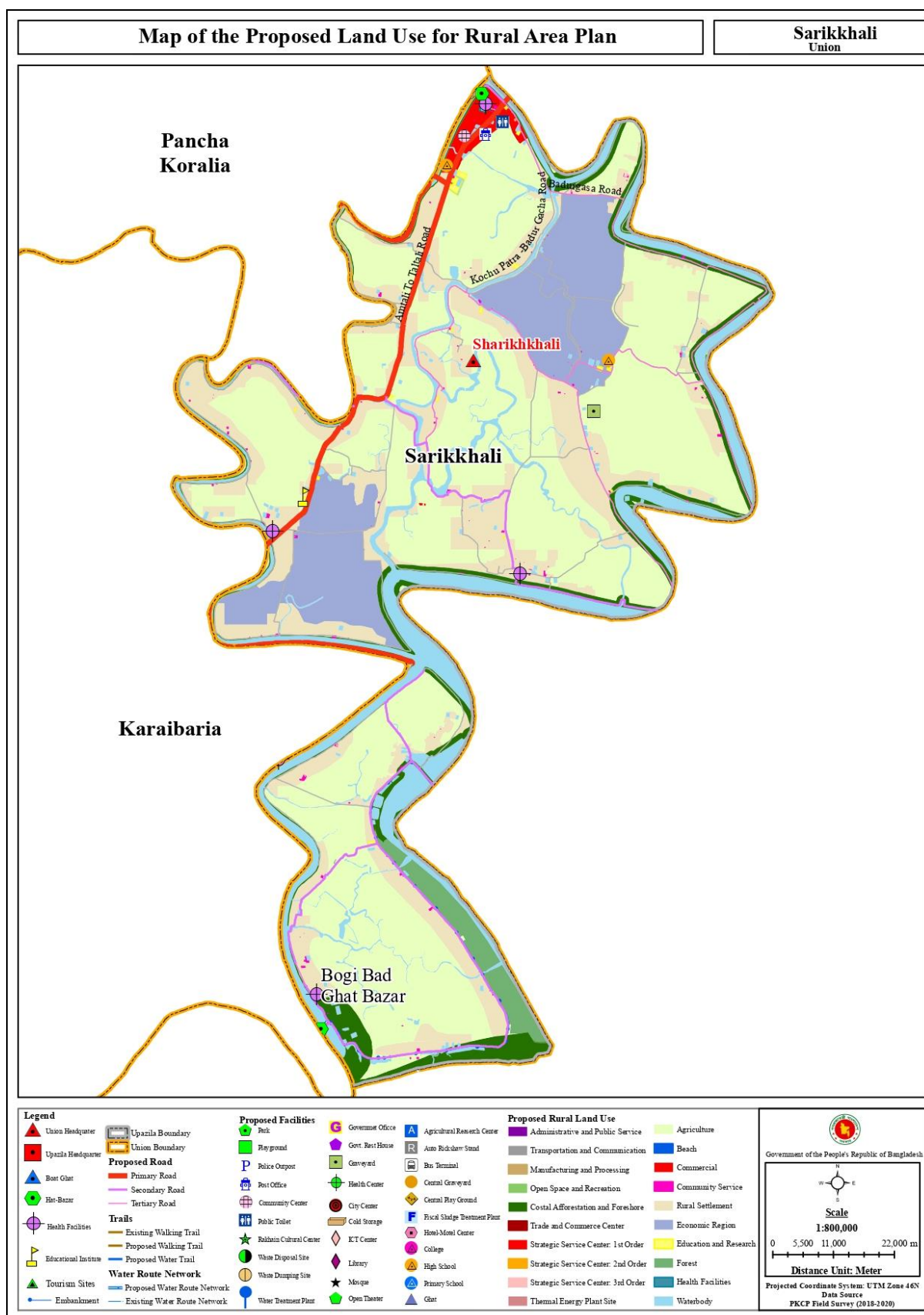


Figure 18: Map of Proposed Rural Land Use of Sarikkhali Union

In the road network plan, proper road channelization and widening of narrow roads has been making sure. Total 35 kilometer length of road has been proposed in Sarikkhali Union. About 9 kilometer of new roads has been proposed and about 26 kilometer roads have been proposed for widening.

Table 51: Proposed Road Network in Sarikkhali Union

Functional Category	Status	Proposed Width	Length (km)
Primary Road	New Alignment	60	2.28
	Widening	60	0.01
		80	4.99
Secondary Road	New Alignment	40	6.39
	Widening	20	7.13
		40	0.55
Tertiary Road	Widening	12	13.65
			35.00

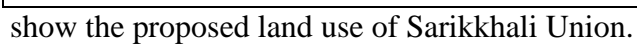
Source: GIS Database, PKCP

Table 52: List of Proposed Facilities for Sarikkhali Union

Sl. No.	Proposed Facilities	Nos	Sl. No.	Proposed Facilities	Nos
1	Community Center	1	4	Post Office	1
2	Graveyard	1	5	Public Toilet	2
3	High School	2			
	Total				7

Source: GIS Database, PKCP

Among those proposals there are 2 high schools, 1 graveyard, 1 Post Office, 2 public toilets, and 1 Community Center. Detail mauza wise plot schedule of proposed development facilities for Sarikkhali Union.



2.7.7 Sonakata Union

Sonakata Union is mainly forest area. Out of total 18292.43 acres of land of this union, 6096.25 acres (33.33%) of land of this union has been proposed for forest purpose. Agricultural area has been proposed which covers 4144 acres (22.65%) of land. Followed by residential 13.80%, waterbody 25.51%, circulation network 0.71%, commercial 0.07%, community facilities 0.09%, educational facilities 0.08% and health facilities 0.002% has been proposed.

Table 53: Proposed Land Use of Sonakata Union

Union Name	Proposed Land Use	Area (Acre)	%
Sonakata	Administrative and Public Service	1.27	0.01
	Agriculture	4144.14	22.65
	Beach	205.04	1.12
	Commercial	12.27	0.07
	Community Service	16.19	0.09
	Costal Afforestation and Foreshore	152.10	0.83
	Economic Region	138.34	0.76
	Education and Research	14.49	0.08
	Forest	6096.25	33.33
	Health Facilities	0.43	0.00
	Manufacturing and Processing	4.78	0.03
	Rural Settlement	2524.86	13.80
	Strategic Service Center: 1st Order	112.83	0.62
	Strategic Service Center: 2nd Order	45.13	0.25
	Trade and Commerce Center	27.62	0.15
	Transportation and Communication	129.69	0.71
	Waterbody	4667.00	25.51
Sonakata Total		18292.43	100.00

Source: GIS Database, PKCP

Considering the local people demand, number of 17 development proposals have been recommended for Sonakata Union.

Table 54: List of Proposed Facilities for Sonakata Union

Proposed Facility	Mouza	JL No	Sheet No	Plot No
Cold Storage	Bara Nishanbaria Chak	42	7	3479,3480,3481,3482,3483,3484,3485,3486,3487,3488,3489,8888
			10	4388
College	Bara Nishanbaria Chak	42	12	5114, 5115
Community Center	Bara Nishanbaria Chak	42	4	1610,1614,1615,1616,8888
		43	7	3437,3438,3465,3466,3467,3470,3471
		44	10	43994400
Govt. Rest House	Bara Nishanbaria Chak	42	10	4411,4412,4413,4431,4449

Health Center	Bara Nishanbaria Chak	42	4	1604,1672,1673,1674,1675
Hotel-Motel Center	Bara Nishanbaria Chak	42	10	4375,4427,4437,4444,4445
		(blank)	11	4770,4771,4795,4801,4802,4803,4804
Park	Barabagi	44	7	2911,2913
Playground	Bara Nishanbaria Chak	42	4	1604,1612,1617,1618,1619,1674
		43	7	3589,3592,3593,3594,3597
		44	12	5040,5068,5070,5071
Post Office	Bara Nishanbaria Chak	42	10	4387,4388
Primary School	Bara Nishanbaria Chak	42	11	4652
		43	12	5296,5297,5298,5299,5300
Public Toilet	Bara Nishanbaria Chak	42	4	1525,1531,1607,1608,8888
		43	7	6204,6205,6206,6207,6208,6209,6211,6212,6213,6214,6215,6216,6217
		44	11	4799,4805,4806,4807,4808,4809
Waste Disposal Site	Bara Nishanbaria Chak	42	10	4388

Source: GIS Database, PKCP

In the road network plan, proper road channelization and widening of narrow roads has been making sure. Total 53.74 km length of road has been proposed in Sonakata Union. About 8 kilometer of new roads has been proposed and about 45 km roads have been proposed for widening. The proposed road network status of Sonakata Union has been shown below-

Table 55: Proposed Road Network in Sonakata Union

Functional Category	Status	Proposed Width	Length (km)
Primary Road	New Alignment	60	1.45
	Widening	60	0.61
Secondary Road	New Alignment	20	2.09
		40	4.80
	Widening	20	1.99
		40	18.28
Tertiary Road	Widening	12	24.53
			53.74

Source: GIS Database, PKCP

Table 56: List of Proposed Facilities for Sarikkhali Union

Sl. No.	Proposed Facilities	Nos	Sl. No.	Proposed Facilities	Nos
1	Cold Storage	2	7	Playground	2
2	College	1	8	Post Office	1
3	Community Center	3	9	Primary School	1
4	Govt. Rest House	1	10	Public Toilet	3
5	Health Center	1	11	Waste Disposal Site	1
6	Hotel-Motel Center	1			
	Total				17

Source: GIS Database, PKCP

Among those proposals there are 2 cold storages, 1 primary school, 1 waste disposal site, 1 eidgah, 1 community clinic, 2 playgrounds, 3 public toilets, 1 post office, 3 community centers. Detail mauza wise plot schedule of proposed development facilities for Sonakata Union is presented in. Figure 20 show the proposed land use of Sonakata Union.

2.8 Prominent Area Stream Line Water Flow

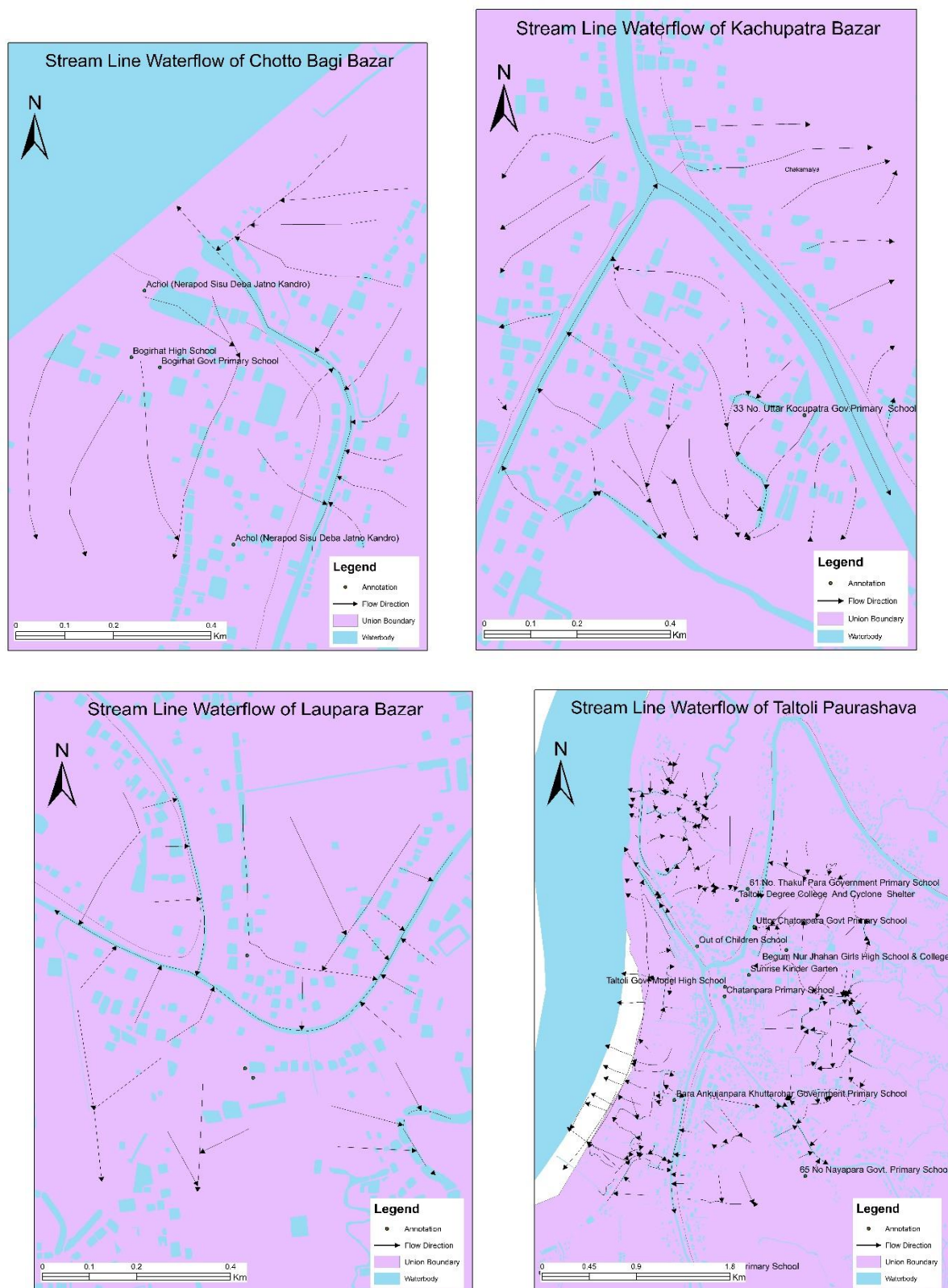


Figure 19 Prominent Area Stream Line Water Flow

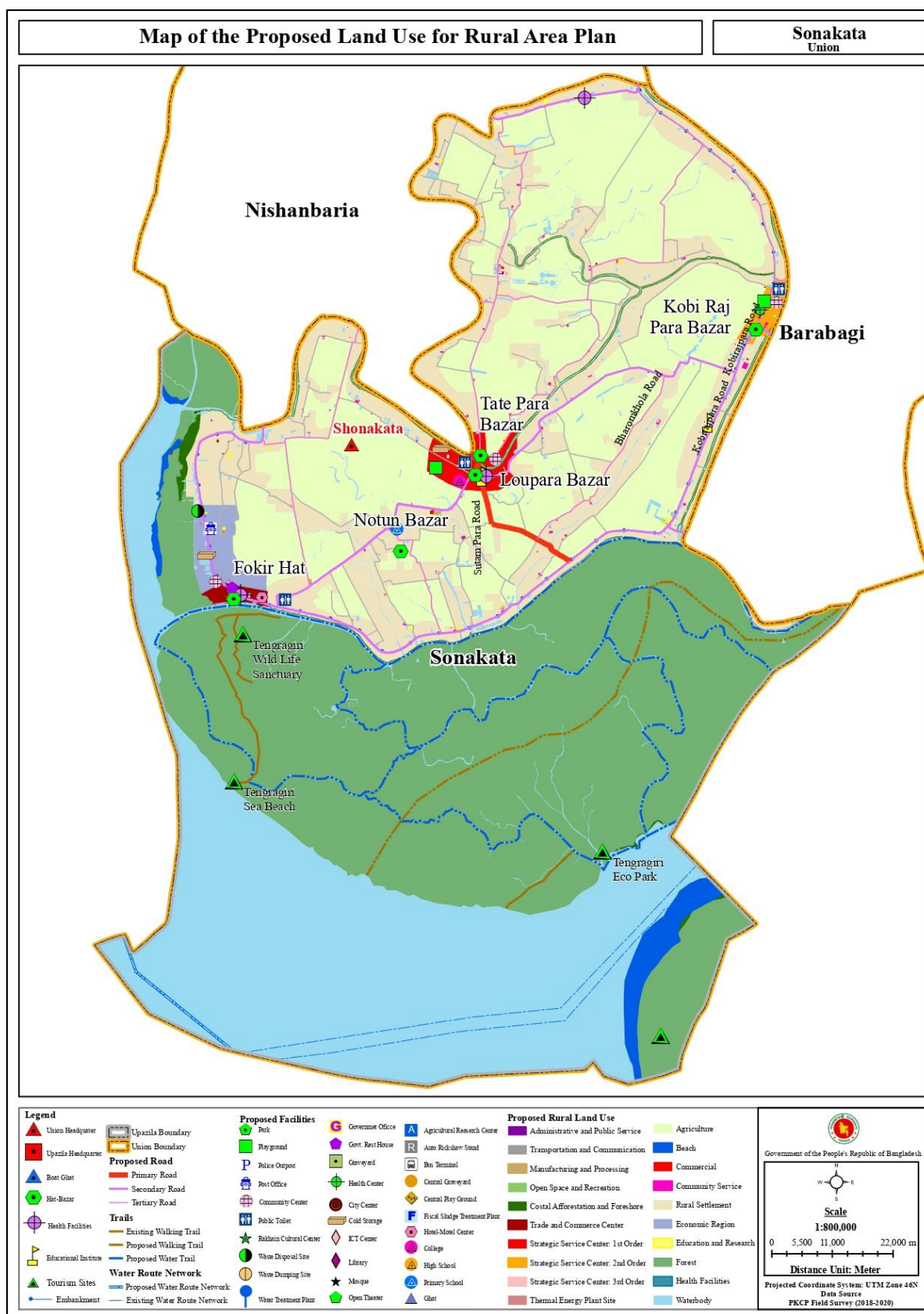


Figure 20: Map of Proposed Rural Land Use of Sonakata Union

CHAPTER 03: PERMITTED AND CONDITIONAL USE

3.1 Introduction

In the current chapter general definition, permitted and conditionally permitted uses under each Land use zone is furnished one by one. The uses not listed here in any of the category shall be treated as Restricted Use for the land zone category and shall not be permitted only except decision by the Planning Authority. In such situations, the use shall get permission in the category of new use.

3.2 Development Control in Rural Area

Development control is an essential part for the development process. For development control, certain procedures have to be followed for approval of designs of various categories of structures, establishments, and land uses. Development control process consists of some individual tasks. The first condition is to secure land use permit according to approved zoning plan followed by approval of the design of proposed building/structure. Land Use permit is given on the basis of Land Use Zoning. Land Use zoning is the base on which development control process is performed. The development control process is performed under some government Act and Rules. These are: Building Construction Rules, 1996 under Building Construction Act, 1952; Bangladesh National Building Code, 1993, Jaladhar Ain and other relevant laws related to development control of Upazila area.

3.3 Land Use Zoning

Land Use Zoning is a form of legal power which is delegated to development authorities/municipalities/upazilas through enabling legislation to ensure the welfare of the community by regulating the most appropriate use of the land. Zoning is a classification of land uses that limits what activities can or cannot take place and what will be prohibited on a parcel of land by establishing a range of development options. To get a Land Use permit from development authorities/municipalities/upazilas, a citizen's prospective use of structure must be compatible with the approved land use zones of an area.

Zoning has been defined as an action through legislation provided to a development authority/municipality to control

- The heights to which buildings/structures may be erected,
- The area of a land parcel that must be kept vacant, and
- The uses to which buildings and land parcels may be put.

Land Use zoning is mainly of three types, area zoning, density zoning and height zoning.

❖ Area Zoning

Area zoning is to specify which types of Land Use are considered appropriate for different areas or 'zones' and it, therefore, indicates the planning control objectives of the authority or municipality or Upazilas for its administrative area. The main objectives of such zoning are done mainly from the environmental point of view that accrues other social benefits.

❖ Density Zoning

The aim of the density zoning is to limit the size of the population in any particular area using density control methods so that the designed facilities and amenities can support the existing size of the population. The size of the population has to bear on the capacity of designed utility facilities and amenities and traffic volume and crowding, especially in the residential areas. Such zoning is practiced to ensure a healthy and enjoyable community living.

❖ Height Zoning

Height zoning restricts the height of buildings and structures in any particular area. This zoning is aimed to promote natural growth of an area to be a proper and sound development of areas. Height zoning has a particular importance in-flight safety around airport areas and another similar purpose.

Considering the existing level of development and development prospects of the Upazila, the consultant recommends following the area zoning and height zoning among the above three. Zoning is only a part of development control regulations. A prospective developer in a Paurashava has to comply with other rules and regulations, like, Building Construction Rules, 1996 under Building Construction Act 1952, Bangladesh National Building Code 1993 and other conditions of construction method, building safety and associated issues.

3.4 Classification of Land Use Zoning

Characteristics of local towns like Upazilas have a clear difference with the traditional large towns of our country. After a detailed consultation between the client and consultants of the project, the consultant recommends following Land Use Zoning classification under current Development Plan of Taltali Upazila.

- a) Administrative Zone
- b) Agricultural Zone
- c) Commercial Zone
- d) Strategic Service Center
- e) Industrial Zone
- f) Heavy Industrial Zone
- g) Mixed Use Zone

- h) Open Space
- i) Rural Settlement
- j) Water body

The following sections deal with the general definition of the use and description of associated permitted and conditionally permitted uses under each Land Use zone one by one. The uses not listed here in any of the categories shall be treated as Restricted Use for the corresponding Land Use category and shall not be permitted only except unanimously decided otherwise by the Nagar Unnayan Committee. In such situations, the use shall get permission in the category of New Use.

3.4.1 Administrative Zone

The administrative zone will allow agglomeration of administrative structures to make a convenient communication among them. This zone houses important government machinery such as the All types of Government Office, Ansar Camp, Bank, BWDB Office, Civil Surgeon Office, DoE Office, Deputy Commissioner's Office, Commercial Group Office, LGED Office, DPHE Office, Jailkhana, Labor Union, Law Chamber, Mercantile & Cooperatives, Money Exchange Center, Paurashava Office, PDB Office, Police Station, Political Party Office, Post office, Private company/Different types of NGO/ CBO/Club, Professional's Association, R&H Office, Private Bank/Insurance Company, Public Works Department Office, Security Service Office, Settlement Office, Statistical Bureau Office, SP Office/ Police Headquarter, Trading Corporation Office, Union Parishad Office, Upazila Headquarter, Zila Parishad Office, etc.

Purpose

The main purpose of this zone is to agglomerate the administrative structures within a certain boundary for the convenience of people.

Land Use Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table 57: Permitted Land Use for Administrative Zone

Permitted Administrative Uses	Permitted Administrative Uses
Accounting, Auditing or Bookkeeping Services	Newspaper Stand
ATM Booth	Outdoor Religious Events
Bus Passenger Shelter	Photocopying and Duplicating Services
Civic Administration	Post Office
Communication Service Facilities	Professional Office
Communication Tower within Permitted Height	Project Office
Confectionery Shop	Public Transport Facility
Construction, Survey, Soil Testing Firms	Satellite Dish Antenna
Cultural Exhibits and Libraries	Scientific Research Establishment

Permitted Administrative Uses	Permitted Administrative Uses
Cyber Café	Shelter (Passers By)
Emergency Shelter	Social Forestry
Freight Transport Facility	Training Centre
General Store	Transmission Lines
Government Office	Utility Lines
Grocery Store	Water Pump \ Reservoir
Guest House	Woodlot

Source: Compiled by the PKCP Project Team

Land Use Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee.

Table 58: Conditionally Permitted Land Use for Administrative Zone

Conditionally Permitted Administrative Uses	Conditionally Permitted Administrative Uses
Amusement and Recreation (Indoors)	Flowers, Nursery Stock and Florist Supplies
Postal Facilities	Freight Handling, Storage & Distribution
Bank & Financial Institution	Freight Yard
Boarding and Rooming House	Gallery \ Museum
Book or Stationery Store or Newsstand	Garages
Coffee Shop \ Tea Stall	Lithographic or Print Shop
Conference Center	Mosque, Place of Worship
Courier Service	Outdoor Café
Daycare Center (Commercial or Nonprofit)	Parking Lot
Detention Facilities	Parking Lot (Commercial)
Doctor \ Dentist Chamber	Pipelines and Utility Lines
Energy Installation	Plantation (Except Narcotic Plant)
Fast Food Establishment \ Food Kiosk	Police Box \ Barrack
Fire \ Rescue Station	Auditorium, Coliseum, Meeting Halls, and Conference Facilities, Convention

Source: Compiled by the PKCP Project Team

Restricted Uses

All use except permitted and conditionally permitted uses.

3.4.2 Agriculture Zone

The agricultural zone is the zone of ‘food production’ where predominantly agricultural production will be encouraged. All types of agricultural activity such as crop production; aquaculture etc. will be dominant and will be permitted to ensure food security. The agricultural zone is intended to prevent the scattered indiscriminate conversion of cropland into settlements.

Purpose

- To safeguard food security by protecting agricultural land from indiscriminate conversion in the name of development.
- To promote farming activity and farming operation in the land especially suitable for the purpose.
- To conserve agricultural lands within urban areas and encourage the long-term viability of agricultural operations and the supporting agricultural industry.

Land Use Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table 59: Permitted Land Use for Agricultural Zone

Permitted Agriculture Uses	Permitted Agriculture Uses
Animal Shelter	Social Forestry
Aquaculture	Shallow Tube Well
Aquatic Recreation Facility (Without Structure)	Horticulture
Arboriculture	Static Transformer Stations
Cash Crop Cultivation	Temporary Structure (Agricultural)
Dairy Farming	Transmission Lines
Deep Tube Well	Tree Plantation (Except Narcotic Plant)
Ducker	Utility Lines
Food Grain Cultivation	Vegetable Cultivation
Irrigation Facilities (Irrigation canal, Culvert, Flood wall)	Woodlot

Source: Compiled by the PKCP Project Team

Land Use Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee.

Table 60: Conditionally Permitted Land Use for Agricultural Zone

Conditionally Permitted Agriculture Uses	Conditionally Permitted Agriculture Uses
Communication Tower Within Permitted Height	Graveyard \ Cemetery
Crematorium	

Source: Compiled by the PKCP Project Team

Restricted Uses

All use except permitted and conditionally permitted uses.

3.4.3 Commercial Zone

Commercial areas generally contain one or more of a wide variety of uses that include business uses, offices, hotel, public houses, and limited forms of retailing. Uses that are particularly appropriate to these areas include wholesale, business service uses, the sale of motor vehicles and limited forms of retailing that involve the sale of bulky goods unsuitable to be carried away by pedestrians. This would allow users that are compatible with or

reinforce the commercial function of the area. As a whole, Commercial Zone is intended to provide all the facilities and services with the commercial Land Use that are designed for basic trade and business.

Commercial zones are classified into two types: office and business predominated zones. Commercial Business Zone is a business pre-dominated commercial zone that mainly supports business. This zone is intended to support large commercial developments in major incorporated areas such as retail distribution, retail warehouse, retail storage and retail logistics facilities. The Commercial Business Zone is intended to provide areas for logistical and retail warehousing activities, including storage, distribution, and packaging of goods and products as well as activities which require a large site and space. The Commercial Zone (Office) is intended to provide all the facilities and services with the commercial Land Use. Commercial Office Zone is an office pre-dominated commercial zone that mainly supports the official works. It supports other types of commercial activities, too. Proposals for these areas involve large-scale buildings and require a high degree of accessibility and parking space for car users and delivery vehicles.

Purpose

- The intent of this zone is to provide commercial nodes inconvenient and strategic locations of the area to meet urban needs and to encourage clustering commercial development as opposed to stripping commercial development and commercial sprawl.
- The main objective for designating this zone is to promote trade and commerce compactly associated with all other facilities.

Land Use Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table 61: Permitted Land Use for Commercial Zone

Permitted Commercial Uses	Permitted Commercial Uses
Accounting, Auditing or Bookkeeping Services	Fruit and Vegetable Markets
Agri-Business	Fitness Centre
Agricultural Sales and Services	General Store
Ambulance Service	Government Office
Antique Store	Grocery Store
Appliance Store	Guest House
Art Gallery, Art Studio \ Workshop	Health Office
ATM Booth	Hotel or Motel
Auction Market	Indoor Amusement Centers, Game Arcades
Auditorium, Coliseum, Meeting Halls, and Conference Facilities, Convention	Television, Radio or Electronics Repair (No Outside Storage)
Auto Leasing or Rental Office	Jewelry and Silverware Sales
Automobile Driving Academy	Market (Bazar) Place
Auto Paint Shop	Mosque, Place of Worship

Permitted Commercial Uses	Permitted Commercial Uses
Auto Parts and Accessory Sales (Indoors)	Motorcycle Sales Outlet
Auto Repair Shop (With Garage)	Multi-Storied Car Park
Automobile Wash	Newspaper Stand
Billboards, advertisements & advertising structure	Outdoor\commercial outdoor recreation
Bakery or Confectionery-Retail	Parking Lot (Commercial)
Bank & Financial Institution	Orphanage
Barber Shop	Pathological Lab
Beauty and Body Service	Pet Store
Bicycle Shop	Photocopying and Duplicating Services
Automobile Sales	Photofinishing Laboratory & Studio
Billiard Parlor \ Pool Hall	Pipelines and Utility Lines
Boarding and Rooming House	Post Office
Inter-City Bus Terminal	Preserved fruits & vegetables facility
Book Stall	Printing, Publishing, and Distributing
Building Material Sales or Storage (Indoors)	Professional Office
Bulk Mail and Packaging	Project Identification Signs
Bus Passenger Shelter	Project Office
Catering Service	Property Management Signs
Chinese Restaurant	Public Transport Facility
Cinema Hall	Real Estate Office
Clinic	Refrigerator or Large Appliance Repair
Coffee Shop \ Tea Stall	Resort
Commercial Office	Restaurant
Communication Service Facilities	Retail Shops \ Facilities
Communication Tower Within Permitted Height	Sales Office of Industries
Computer Maintenance and Repair Shop	Satellite Dish Antenna
Computer Sales & Services Shops	Shelter (Passers By)
Confectionery Shop	Shopping Mall \ Plaza
Conference Center	Slaughter House
Community Center	Social Forestry
Construction Company	Software Development Firm
Construction, Survey, Soil Testing Firms	Stationery Store
Courier Service	Sporting Goods and Toys Sales
Cyber Café	Super Store
Daycare Center (Commercial or Nonprofit)	Taxi Stand
Dental Laboratory	Telephone Exchanges
Department Stores, Furniture & Variety Stores	Book or Stationery Store
Diagnostic Center	Theater (Indoor)
Doctor \ Dentist Chamber	Toys and Hobby Goods Processing and Supplies
Department Stores	Training Centre
Drug Store or Pharmacy	Transmission Lines
Electrical and Electronic Equipment and Instruments Sales	Veterinarian Clinics, Animal Hospitals, Kennels and Boarding Facilities
Fast Food Establishment \ Food Kiosk	Vehicle Sales & Service, Leasing or Rental
Flowers, Nursery Stock and Florist Supplies	Utility Lines
Food Court	Warehousing

Permitted Commercial Uses	Permitted Commercial Uses
Freight Handling, Storage & Distribution	Water Pump \ Reservoir
Freight Transport Facility	Wood Products
Freight Yard	Woodlot

Source: Compiled by the PKCP Project Team

Land Use Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee.

Table 62: Conditionally Permitted Land Use for Commercial Zone

Conditionally Permitted Commercial Uses	Conditionally Permitted Commercial Uses
Agricultural chemicals, pesticides\ fertilizers shop	Broadcast studio\ recording studio (no audience)
Amusement and Recreation (Indoors)	Indoor Amusement Centers, Game Arcades
Bicycle Assembly, Parts and Accessories	Indoor Theatre
Incineration Facility	Lithographic or Print Shop
Craft Workshop	Motor Vehicle Fueling Station \ Gas Station
Coffee Shop \ Tea Stall	Musical Instrument Sales or Repair
Concert Hall, Stage Shows	Optical Goods Sales
Construction, Survey, Soil Testing Firms	Painting and Wallpaper Sales
Container Yard	Paints and Varnishes
Energy Installation	Parking Lot
Fire \ Rescue Station	Patio Homes
Firm Equipment Sales & Service	Plantation (Except Narcotic Plant)
Fitness Centre	Postal Facilities
Flowers, Nursery Stock and Florist Supplies	Poultry
Forest Products Sales	Police Box \ Barrack
Fuel and Ice Dealers	Private Garages
Garages	Professional Office
Garden Center or Retail Nursery	Retail Shops Ancillary to Studio\workshop
Grain & Feed Mills	Stone \ Cut Stone Products Sales
Household appliance\ furniture repair service	Trade Shows

Source: Compiled by the PKCP Project Team

Restricted Uses

All use except permitted and conditionally permitted uses.

3.4.4 Growth Center

According to the location theorists, “Such settlements which are nuclear or central to their influence area are called growth centers”. In the context Bangladesh, Growth Centers are rural marketplaces that have been identified by the Planning Commission on the basis of socio-economic and administrative criteria for making development investment. There are about 8,000 rural marketplaces throughout Bangladesh that are popularly known as 'hat' or 'bazaar'. Realizing their importance in the rural sector, the government felt the need to upgrade them with some infrastructure facilities in order to enhance their efficiency.

However, due to fund constraint, it was not possible to include all the 'hats' or 'bazaars' for development investment. Thus, initially 1,400 of them were selected in 1984 and later in 1993; another 700 'hats' or 'bazaars' were added to this list to take the final number to 2,100. In our planning area, there are some growth centers that contain substantially the following characteristics.

Purpose

- It incorporates a mix of uses that typically include or have the potential to include the following: retail, office, services, and another commercial, civic, recreational, industrial, and residential uses, within a densely developed, compact area;
- It incorporates existing or planned public spaces that promote social interaction, such as public parks, civic buildings (e.g., post office, municipal offices), community gardens, and other formal and informal places to gather;
- It is organized around one or more central places or focal points, such as prominent buildings of civic, cultural, or spiritual significance or a square;
- It results in compact concentrated areas of land development that are served by existing or planned infrastructure and are separated by rural countryside or working landscape

Land Use Permitted

Rural commercial center in the “Growth center” form is one of an important feature for rural economic sustainability. In a growth center, people can find their necessary service activity in an easily accessible distance apart from the urban area. In this sense, the permitted uses for growth center are the following:

Table 63: Permitted Land Use for Growth Center

Permitted Uses	Permitted Uses
Accounting, Auditing or Bookkeeping Services	Garages
Addiction Treatment Center	Garden Center or Retail Nursery
Agricultural chemicals, pesticides/fertilizers shop	General Store
Agricultural Dwellings	Grain & Feed Mills
Agricultural Product Sales	Grocery Store
Dormitory	High School
Furniture Stores	Hotel or Motel
Ambulance Service	Household appliance and furniture repair service
Amusement and Recreation (Indoors)	Housing for Seasonal Firm Labor
Ancillary Dwelling	Indoor Amusement Centers
Animal Husbandry	Indoor Theatre
Antique Store	Jewelry and Silverware Sales
Appliance Store	Katcha Bazar
Auction Market	Loom (Cottage Industry)
Auto Repair Shop (With Garage)	Mosque, Place of Worship

Permitted Uses	Permitted Uses
Bank & Financial Office	Newspaper Stand
Barber Shop	NGO \ CBO Office
Barber Shop	Nursery School
Billboards, advertisements & advertising structure	Communication tower within the permitted height
Blacksmith	Optical Goods Sales
Boarding and Rooming House	Orphanage
Book or Stationery Store or Newsstand	Outdoor Fruit and Vegetable Markets
Bus Passenger Shelter	Outdoor Religious Facility (Eidgah)
Cinema Hall	Paints and Varnishes Shop
Cleaning \ Laundry Shop	Photo Studio
Coffee Shop \ Tea Stall	Photocopying and Duplicating Services
Cold Storage	Postal Facilities
College\Technical Training School \ Centers \ Agro Based Trading	Electrical and Electronic Equipment and Instruments Sales
Communication Service Facilities	Public Utility Stations & Substations
Open Theater	Research organization (Agriculture \ Fisheries)
Community Center	Restaurant
Computer Maintenance and Repair	Retail Shops \ Facilities
Computer Sales & Services	Rickshaw \ Auto Rickshaw Stand
Confectionery	Satellite Dish Antenna
Courier Service	Sawmill
Craft Workshop	Shoe Repair or Shoeshine Shop (Small)
Cyber Café	Signboard \ Billboard
Dairy Farming	Slaughter House
Daycare Center (Commercial or Nonprofit)	Small Workshop
Department Stores	Social Forestry
Doctor \ Dentist Chamber	Specialized School: Dance, Art, Music & Others
Agro-based industry (rice mill, sawmill, cold storage)	Specialized School: Dance, Art, Music, Physically Challenged & Others
Drug Store or Pharmacy	Static Transformer Stations
Primary School	Storage & Warehousing
Emergency Shelter	Taxi Stand
Energy Installation	Television, Radio or Electronics Repair
Fabric Store	Theater (Indoor)
Family Welfare Center	Transmission Lines
Fast Food Establishment \ Food Kiosk	Truck Stand & Freight Terminal
Firm Equipment Sales & Service	Utility Lines
Fish Hatchery	Variety Stores
Fitness Centre	Vehicle, Leasing or Rental Service
Flowers, Nursery Stock	Veterinary Centre
Freight Transport Facility	Veterinary Clinic \ Center
Fuel and Ice Dealers	Wood Products
Funeral Services	Woodlot

Source: Compiled by the PKCP Project Team

Land Use Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee.

Table 64: Conditionally Permitted Land Use for Growth Center

Conditionally Permitted Uses	Conditionally Permitted Uses
Artisan's Shop	Library
Auto Leasing or Rental Office	Motor Vehicle Fueling Station \ Gas Station
Beauty Parlor	Musical Instrument Sales or Repair
Building Maintenance\Cleaning Services (No Outside Storage)	Preserved Fruits and Vegetables Facility \ Cold Storage
Building Material Sales or Storage (Indoors)	Plantation (Except Narcotic Plant)
Carnivals and Fairs	Police Station
Circus	Poultry
Correctional Institution	Pet Store
Fire Brigade Station	Sports and Recreation Club
Freight Handling, Storage & Distribution	Stage Shows
Freight Yard	Temporary Rescue Shed
Guest House	Trade Shows

Source: Compiled by the PKCP Project Team

** All of the commercial activities shall be located at growth center.*

Restricted Uses

All use except permitted and conditionally permitted uses.

3.4.5 Potential Economic Zone

Promoting the development of industrial areas as the primary locations for uses including manufacturing, repairs, warehousing, distribution, open-storage, waste materials treatment and recovery, and transport operating centers, the industrial zone has been earmarked. The development of inappropriate mixes of uses, such as office-based industry and retailing will not normally be encouraged here.

It is an objective to ensure that, normally, new buildings in primarily industrial areas are a single story with high ceilings to provide versatility and adaptability to accommodate a broad range of types of plant, machinery, and delivery vehicles throughout their design life. It is an objective to ensure that the likely demand for car parking and delivery vehicle facilities are fully met within the site, to apply the highest standards of design, hard and soft landscaping and to ensure that pedestrian access is provided and that provision is made for public transport.

Purpose

The intent of this zone is to accommodate certain industrial uses which, based on their operational characteristics, is incompatible with residential, social, medical, and commercial environs. As a result, the establishment of such zones shall be restricted to areas geographically buffered from such environs, and the operations of such uses monitored by performance standards to ensure environmental compatibility.

- The purpose and intent of industrial zone are to provide areas in appropriate locations where various light and heavy industrial operations can be conducted without creating hazards to surrounding land uses. Industrial zones are cohesive, planned tracts, with all elements sharing the same or compatible architectural and landscaping themes within a parcel.
- Areas intended to accommodate a variety of industrial establishments which: 1) employ high environmental quality standards; 2) may function as an integral part of an overall development area; and, 3) have minimal impacts on adjacent uses.
- The purpose and intent of General industrial zone is to provide areas in appropriate locations for certain types of light manufacturing, processing or fabrication, warehousing establishments of non-objectionable products or adjacent uses because they are characterized by a minimum of material, processes, or machinery likely to cause undesirable effects upon nearby or adjacent residential or commercial property.

General Industrial Zone is to accommodate Green, Orange A, Orange B types of industries of Department of Environment (DOE) prepared categories, and Urban Area Plan designated light industries and general industries along with some other new types. Here the industries will not be noxious and heavy.

Land Use Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table 65: Permitted Land Use for General Industrial Zone

Permitted General Industrial Uses	Permitted General Industrial Uses
Aluminum products	Perfumes, cosmetics
Artificial Fiber Production	Pharmaceutical Industry
Assembling and manufacturing of clocks and watches	Assembling and manufacturing of electrical and Electronic home products etc.
Photocopying and Duplicating Services	Photographic Film Factory
Plastic & rubber goods (excluding PVC)	Pipelines and Utility Lines
Assembling and manufacturing of toys (except plastic items)	Production of utensils and souvenirs of brass and bronze
Assembling of motor vehicles	Police Box \ Barrack
Assembling of telephones	Power Loom
ATM Booth	Printing and writing ink manufacturing Industry
Automatic rice mill.	Printing Press
Bakery	Printing, Publishing, and Distributing
Bank & Financial Institution	Processing: fish, meat, and food

Permitted General Industrial Uses	Permitted General Industrial Uses
Manufacture of industrial tools, equipment, and machinery	Processing and bottling of drinking water and carbonated drinks
Blacksmith	Production of artificial leather goods
Bus Passenger Shelter	Production of Comb, hair band, hair clip etc.
Chocolate and lozenge Factory	Production of gold ornaments
Cinema Hall	Production of Pin, board pin, U Pin etc.
Clinic and Pathological lab	Production of powder milk/condensed milk/dairy
Cold storage	Production of shoes and leather goods
Communication Tower within Permitted Height	Production of spectacles frames
Confectionery Shop	Public Transport Facility
Dry-cleaning	Repairing of refrigerators
Edible oil	Restaurant
Effluent Treatment Plant	Retail Shops \ Facilities
Electric cable	Salt Industry
Engineering works	Salt production
Fabric washing Plant	Salvage Processing
Factory for production of chocolate and lozenge	Salvage Yards
Fire \ Rescue Station	Satellite Dish Antenna
Flour (large) Mill	Sawmill, Chipping, and Pallet Mill
Freight Transport Facility	Shelter (Passers By)
Bicycle Assembly, Parts and Accessories	Shoes and leather goods production
Galvanizing	Soap
Garments and sweater Factory	Social Forestry
Glass factory	Sodium silicate Factory
Glue (excluding animal glue)	Spinning mill
Grinding/husking wheat, rice, turmeric, chilly, pulses – machine above 0 Horse Power	Television, Radio or Electronics Repair (No Outside Storage)
Grocery Store	Starch and glucose factory
Hotel, multi-storied commercial building.	Stone grinding, cutting, and polishing
Household appliance and furniture repair service	Sports goods Production
Ice-cream	Tea processing
Jute mill	Tire re-treading
Lime	Transmission Lines
Machine Sheds	Truck Stop & Washing or Freight Terminal
Manufacture of Agricultural tools, equipments and small machinery.	Utensils made of clay and china clay/sanitary wares (ceramics)
Furniture Manufacture of wood/iron/aluminum	Utility Lines
Manufacturing of wooden vessel	Water Pump \ Reservoir
Match Factory	Water Purification Plant
Meat and Poultry (Packing & Processing)	Weaving and handloom
Metal utensils/spoons etc.	Wood Products
Mosque, Place of Worship	Wood treatment
Motor vehicles repairing works	Wood/iron/aluminum Furniture production

Permitted General Industrial Uses	Permitted General Industrial Uses
Newspaper Stand	Woodlot
Packaging Industries	

Source: Compiled by the PKCP Project Team

Land Use Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee.

Table 66: Conditionally Permitted Land Use for General Industrial Zone

Conditionally Permitted General Industrial Uses	Conditionally Permitted General Industrial Uses
Amusement and Recreation (Indoors)	Lithographic or Print Shop
Appliance Store	Manufacturing of Artificial flower
Assembling and manufacturing of clocks and watches	Assembling and manufacturing of electrical and Electronic home products etc.
Medical and surgical instrument production	Motor Vehicle Fueling Station \ Gas Station
Outside Bulk Storage	Motorcycle Sales Outlet
Assembling and manufacturing of toys (except plastic items)	Assembling of motorcycles, bicycles, and toy cycles
Musical instruments	Outdoor Fruit and Vegetable Markets
Assembling of scientific and mathematical instruments	Photographic lab (except ultraviolet and infra-red)
Assembling of telephones	Overhead Water Storage Tanks
Bamboo and cane goods	Painting and Wallpaper Sales
Book-binding	Paints and Varnishes
Candle Production	Parking Lot
Carpet and mat production	Parking Lot (Commercial)
Cork items Production	Pen and ball-pen Factory
Cyber Café	Production of artificial leather goods
Daycare Center (Commercial or Nonprofit)	Plantation (Except Narcotic Plant)
Doctor \ Dentist Chamber	Private Garages
Electrical and electronic equipment and instruments sales	Re-packing of milk powder (excluding production)
Employee Housing	Laundry
Energy Installation	Retail Shops Ancillary to Studio \ Workshop
Fast Food Establishment \ Food Kiosk	Rope and coir mat production
Garages	Sports goods (excluding plastic made items)
Gold ornaments Production	Super Store
Grain & Feed Mills	Tea packing (excluding processing)
Incineration Facility	Washing Plant

Source: Compiled by the PKCP Project Team

Restricted Uses

All use except permitted and conditionally permitted uses.

3.4.8 Conservation Zone

The primary uses in these areas include playgrounds, parks, and other areas for outdoor activities, sports centers, sports pitches, outdoor recreation, and landscaped areas. High standards of accessibility are essential in this zone. Accessibility standard is related to the use of that particular open space. For example, local amenity areas and playgrounds may require emphasis on access for pedestrians and cyclists. Sports Centers serving a wider catchments area will require accessibility by public transport and car users.

Purpose

To provide for the active and passive recreational needs of the city and the protection of its bountiful natural resources as well as to protect the natural and aesthetic qualities of the area for the general welfare of the community. The purpose of this zone is:

- To provide for, protect and improve the provision, attractiveness, accessibility, and amenity value of public open space and amenity areas.
- To provide for, protect, and improve the provision, attractiveness, and accessibility of public open space intended for use of recreational or amenity purposes. The only development that is incidental to, or contributes to the enjoyment of open space, amenity, or recreational facilities will be permitted within this zone.
- To preserve and provide for open space and recreational amenities. The zoning objective seeks to provide recreational and amenity resources for urban and rural populations subject to strict development controls. Only community facilities and other recreational uses will be considered and encouraged by the Planning Authority.

Land Use Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table 67: Permitted Land Use for Conservation Zone

Permitted Open Space Uses	Permitted Open Space Uses
Botanical Garden & Arboretum	Playing Field
Bus Passenger Shelter	Social Forestry
Carnivals and Fairs	Special Function Tent
Circus	Tennis Club
Landscape and Horticultural Services	Transmission Lines
Memorial Structure	Urban-Nature Reserve
Open Theater	Utility Lines
Park and Recreation Facilities (General)	Woodlot
Pipelines and Utility Lines	Zoo
Plantation (Except Narcotic Plant)	

Source: Compiled by the PKCP Project Team

Land Use Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee.

Table 68: Conditionally Permitted Land Use for Conservation Zone

Conditionally Permitted Conservation Zone Uses	Conditionally Permitted Conservation Zone Uses
Communication Tower Within Permitted Height	Motorized Recreation
Fitness Centre	Trade Shows
Flowers, Nursery Stock and Florist Supplies	

Source: Compiled by the PKCP Project Team

Restricted Uses

All use except permitted and conditionally permitted uses.

3.4.9 Rural Settlement

Rural Settlement Zones are the island like isolated clusters of rural homesteads that preserve country's traditional agrarian community beside agricultural zones within development jurisdiction from indiscriminate and insane conversion into urban use so as to safeguard food security; preserve appropriate opening in between mounds that are essential to allow uninterrupted flow of annual flood water and safeguard our complex hydrological system.

The intent of this classification is to preserve, sustain, and protect rural areas and resources, particularly forest and agricultural land from suburban encroachment and maintain a balanced rural-urban environment. The retention of open lands, woodlands, plantations, and farmlands, which make up a large part of this area, are essential to clean air, water, wildlife, many natural cycles, and a balanced environment, among other things. Even more essential from an economic perspective are the agricultural lands and farming operations in this area.

Purpose

The purpose of this zone is to protect the natural environment; promote appropriate compact development and to promote creative developments that provide a range of housing styles and prices that suit the needs of local people. Isolated Rural Homestead will preserve the rural and traditional Character of the area. Isolated Rural Homestead zone will be composed of dwelling, small shops, some special uses, and pure landscaping elements. The cluster uses that are compatible with and complementary to existing facilities, particularly with regard to food processing and warehousing and the markets, including some small-scale food retailing are permitted here.

Land Use Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table 69: Permitted Land Use for Rural Settlement Zone

Permitted Rural Settlement Uses	Permitted Rural Settlement Uses
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Permitted Rural Settlement Uses	Permitted Rural Settlement Uses
Agricultural Dwellings	NGO \ CBO Facilities
Animal Husbandry	Nursery School
Animal Shelter	Orphanage
Child Daycare \ Preschool	Outdoor Religious Events (Eidgah)
Communication Tower Within Permitted Height	Plantation (Except Narcotic Plant)
Cottage	Playing Field
Crematorium	Primary School
Dairy Farming	Satellite Dish Antenna
General Store	Social Forestry
Specialized School: Dance, Art, Music, Physically Challenged & Others	Special Dwelling (E.G. Dorm for Physically Challenged Etc.)
Grocery Store	Graveyard \ Cemetery
Handloom (Cottage Industry)	Static Electrical Sub Stations
Housing for Seasonal Firm Labor	Temporary Shed \ Tent
Memorial Structure	Transmission Lines
Mosque, Place of Worship	Utility Lines
Newspaper Stand	Woodlot

Source: Compiled by the PKCP Project Team

Land Use Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee following appropriate procedure while the application meets the criteria mentioned in the requirement.

Table 70: Conditionally Permitted Land Use for Rural Settlement Zone

Conditionally Permitted Rural Settlement Uses	Conditionally Permitted Rural Settlement Uses
Artisan's workshop (Potter, Blacksmith, Goldsmith Etc.)	Garden Center or Retail Nursery
Emergency Shelter	Research organization (Agriculture \ Fisheries)
Energy Installation	Sports and recreation club, Firing range: Indoor
Fish Hatchery	

Source: Compiled by the PKCP Project Team

Restricted Uses

All use except permitted and conditionally permitted uses.

3.4.10 Waterbody

Waterbody serves the natural flow of water along their alignment.

Purpose

This zone tends to preserve the flow and level of water across all seasons along with their natural alignment. Upazila area is covered by a network of natural water body including river,

canal, and pond. To promote and provide environmentally safe and sound living for the people of the area and for the future generation, water body has an immensely importance. Waterbody should be preserved not only for environmental concern but also for active and passive recreation purposes.

Land Use Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table 71: Permitted Land Use for Waterbody

Permitted Administrative Uses	Permitted Administrative Uses
Aquatic Recreation Facility (Without Structure)	Utility Lines
Fishing Club (Non-structural)	Water Parks

Source: Compiled by the PKCP Project Team

Land Use Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee.

Table 72: Conditionally Permitted Land Use for Waterbody

Conditionally Permitted Administrative Uses	Conditionally Permitted Administrative Uses
Marina \ Boating Facility	Water-based Recreation

Source: Compiled by the PKCP Project Team

Restricted Uses

All use except permitted and conditionally permitted uses.

CHAPTER 04: CONCLUSION

Concluding Remarks

The Rural Area Plan of Taltali Upazila consists of the plans for Union level as identified in the Structure Plan for the Upazila. Since the Rural Area Plan is mainly indicative further measures should be taken during implementation.

In the development process of the Upazila, coordination among all local authorities within Taltali Upazila will be necessary for integrated development encompassing the potentials of both urban and rural areas. There is scope for local government authorities for cooperation and collaboration among themselves for local development in a comprehensive manner. It is expected that the Rural Area Plans prepared under the current project will provide essential tools for integrated development at Taltali Upazila.