



Government of the people's Republic of Bangladesh

Ministry of Housing and Public Works

Urban Development Directorate

82 Segunbagicha, Dhaka-1000

PREPARATION OF DEVELOPMENT PLAN FOR

REPORT ON ASSIGNMENT- 07

**Assist Urban Planner to Preparation of Rural Area Plan Including
report elaborating all containing sectors and extents**

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Naymah Islam Mim
Junior Urban Planner

1.1 Introduction:

Bagoan Union, under Mujibnagar Upazila of Meherpur District, is a predominantly rural settlement with emerging rural–urban features. According to the Population and Housing Census 2022 (BBS), the union has a population of 2022: 41960 people (Male: 20389; Female: 21571), projected to reach 58,360 by 2047 at an average annual growth rate of 1.27%.

Agriculture forms the backbone of the local economy, with 46.15% of people engaged in farming, while others are involved in business (7.7%), driving and transport-related work (3.85%), labor (5.77%), and smaller proportions in household activities (5.77% housewives) and Govt. Employee (1.92%) and Teacher (3.85%). The employment profile remains largely informal (99.5%), reflecting the subsistence and small-scale nature of the rural economy.

The transport pattern shows a strong dominance of non-motorized modes, with 46.2% of people walking, 26.7% cycling, 7.1% using vans, and 11.6% motorcycles, while motorized public transport like cars and buses is almost absent. This highlights both affordability constraints and the community's reliance on low-cost, short-distance mobility.

According to the Physical Feature Survey, the majority of respondents live in tin-shed houses (32.26%), followed by semi-pucca (21.67%), pucca (22.08%), and katcha houses (12.33%). In terms of building floors, most households have one floor (90.77%), with a small percentage having two floors (2.22%), three floors (0.11%), four floors (0.04%), and five floors (0.01%).

Despite its agricultural strength and active rural economy, Bagoan Union faces critical challenges including poor communication, lack of healthcare and social facilities, and limited economic diversification. This demands a comprehensive rural planning approach, focusing on infrastructure upgrading, preservation of agricultural land, social service provision, and resilience building to ensure sustainable development.

1.2 Existing Situation:

Feature	Existing Condition
Population & Projection	2022: 41960 people (Male: 20389; Female: 21571). Projected 2047: 50720 (average annual growth rate – 1.27%). <i>(Source: BBS 2022)</i>
Occupational Analysis	Over half of the respondents were farmers (54.10%), followed by housewives (11.48%), business (general 9.84%, mudi 8.20%), and unemployed (4.92%). The rest, including drivers, employees, remittance earners, and tea stall owners, each made up only 1.64%. Formal Employment 0.5% and Informal Employment 99.5% <i>(Source: Socio-Economic Survey)</i>
Transportation Analysis	The majority of respondents rely on walking as their primary mode of transportation, accounting for 46.2%. Other common modes include cycling (26.7%), motorcycles (11.6%), and rickshaws (5.1%). A smaller proportion use vans (7.1%), while cars and buses each represent 1.6% of the transportation choices. <i>(Source: Socio-Economic Survey)</i>
Building Type	Katcha: 5173 (12.33%), Pucca: 9263 (22.08%), Semi-Pucca: 9098 (21.67%), Tin Shed: 13963 (32.26%). <i>(Source: Physical Feature Survey)</i>
Building Floor Distribution	1 floor: 38028; 2 floors: 930; 3 floors: 49, 4 floor: 18, 5 floor: 2; <i>(Source: Physical Feature Survey)</i>
Elevation Profile (DEM)	Elevation 16.1-28m for Residential/ Structure, 3- 16m) for Agriculture and waterbody <i>(Source: Physical Feature Survey)</i>

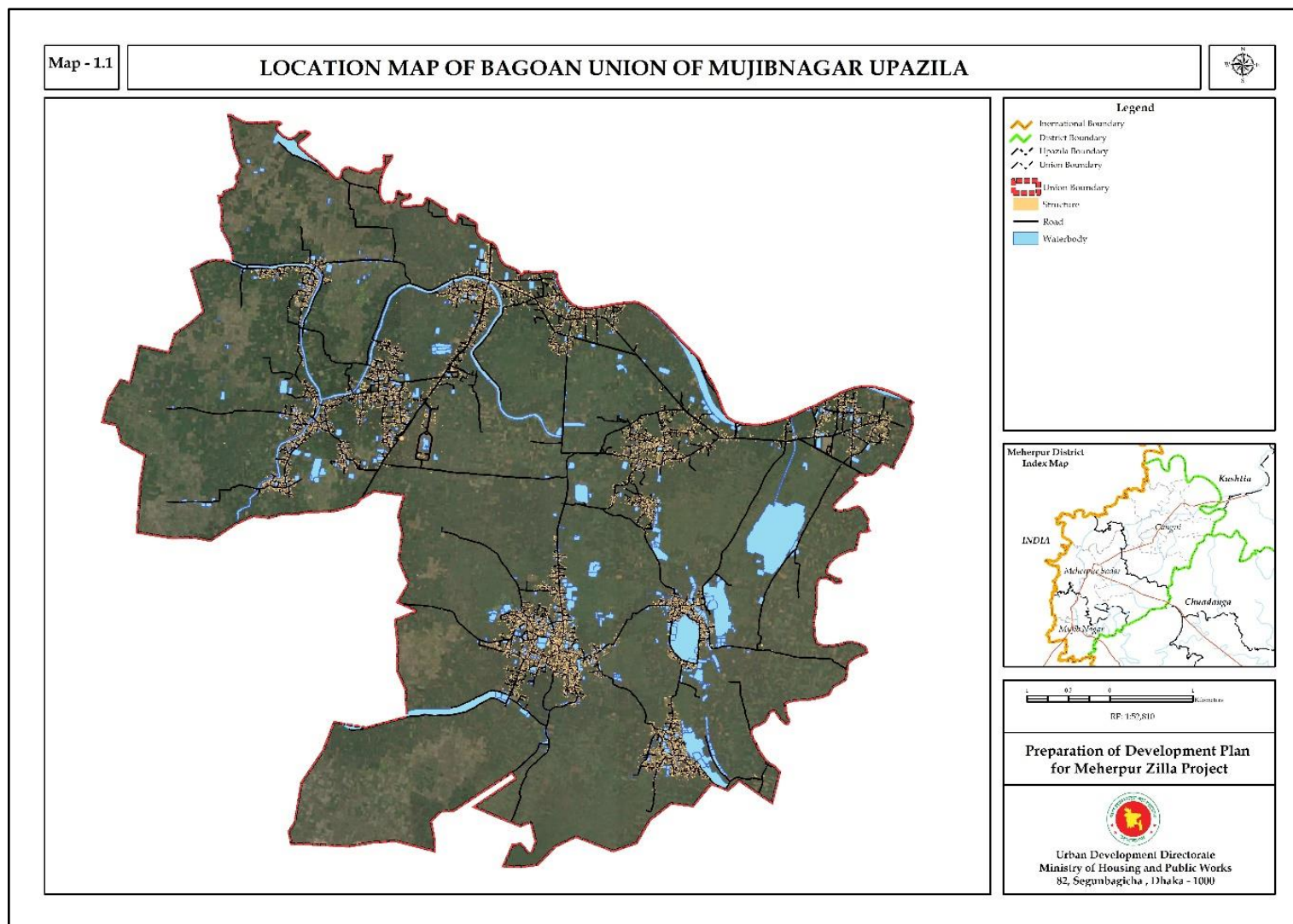
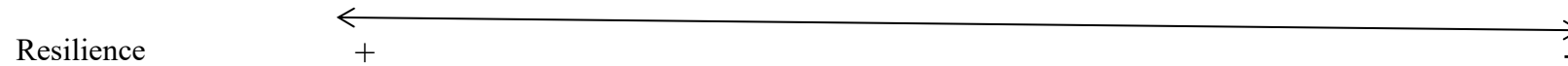


Figure 1: Location Map of Bagoan Union

1.3 Urban Resilience Analysis:



Variable	Reorganization (α)	Growth (r)	Conservation (K)	Release (Ω)
Resilience	+			–
Social System	<ul style="list-style-type: none"> Mixed Group of Profession 	<ul style="list-style-type: none"> Farming dominance, credit dependency 	<ul style="list-style-type: none"> Institutional rigidity, elite control in land/water 	<ul style="list-style-type: none"> Outmigration, local conflict, erosion of trust
Economic System	<ul style="list-style-type: none"> Mixed crops Informal jobs, wage labor restart 	<ul style="list-style-type: none"> Cash crop expansion (jute, tobacco, vegetables) 	<ul style="list-style-type: none"> Market lock-in to tobacco/jute Heavy fertilizer/credit dependency Monocropping 	<ul style="list-style-type: none"> Price collapse, debt trap, sudden migration Pest attack, sudden input cost rise
Environmental System	<ul style="list-style-type: none"> Natural soil fertility regeneration (fallow land) 	<ul style="list-style-type: none"> Irrigation expansion, HYV crop adoption 	<ul style="list-style-type: none"> Groundwater overuse Soil degradation Biodiversity decline 	<ul style="list-style-type: none"> Crop failure from drought/pest
Settlement Pattern	<ul style="list-style-type: none"> Based on housing types (Percentage of pucca, semi-pucca, and katcha) 	<ul style="list-style-type: none"> Cluster housing, infrastructure growth 	<ul style="list-style-type: none"> Land scarcity, congestion, shrinking commons 	<ul style="list-style-type: none"> Migration, peri-urban expansion, land disputes
Results	Lack of Housing and Service <ul style="list-style-type: none"> Houses, roads, and embankments are often damaged. Basic services (water, sanitation, health) are not appropriately rebuilt. 	Land Use and Settlement <ul style="list-style-type: none"> Too much land for cash crops, reducing food crop land. Irrigation and electricity expand, but not always in a planned way. Settlements grow along roads 	Resource and Inequality <ul style="list-style-type: none"> Farmers are locked into one type of crop (monocropping). Overuse of groundwater and soil leads to land degradation. 	Migration and Environmental Issues <ul style="list-style-type: none"> Crop failures force families to leave farmland. Many move to towns, creating unplanned settlements on city edges. Conflicts rise over land ownership and water rights.

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Bagoan Union is largely in the Growth (r) phase, with expanding agriculture, settlements, and livelihoods. However, pressures like land scarcity, monocropping, and environmental degradation indicate emerging Conservation (K), while outmigration, crop failures, and local conflicts suggest potential Release (Ω) risks.

Adaptive Cycle Phase	Problem arises in Bagoan Union	Planning Intervention	Implementation Authority
Growth (r)	<ul style="list-style-type: none"> • Road construction needed in Anandabas, Nazirakona, and Molla Para areas. <i>(PRA)</i> • Road renovation required in Anandabas, Joypur, Ballavpur, Nazirakona, and Taranagar areas. <i>(PRA)</i> • Waterlogging problems identified in Joypur and Anandabas areas. <i>(PRA)</i> • Passenger shed construction at Kedar Ganj Mor. <i>(PRA)</i> • Police camp establishment at Bagoan field. <i>(PRA)</i> • Farmers' sheds construction in Sonapur and Ballavpur. <i>(PRA)</i> • Drainage system required (general). <i>(PRA)</i> • Playground needed beside Ansar Hotel. <i>(PRA)</i> • Restoration of Anandabas canal. <i>(PRA)</i> • Renovation of Dattapukur. <i>(PRA)</i> • Street lights required in Anondobas, Bollovpur, and Maniknagar. <i>(Physical Feature Survey)</i> • Road repair needed in Anondobas, Joypur, and Taranagar. <i>(Physical Feature Survey)</i> • Deep tubewell required in Bagoan. <i>(Physical Feature Survey)</i> • Drain construction needed in Bollovpur, Joypur, and Taranagar. <i>(Physical Feature Survey)</i> 	<ol style="list-style-type: none"> 1. Transport & Connectivity <ul style="list-style-type: none"> • Road construction & renovation: Anandabas, Nazirakona, Joypur, Ballavpur, Taranagar, Molla Para (CC/HBB roads, LGED standard). • Passenger shed: Kedar Ganj Mor. • Street lighting: Anandobas, Ballavpur, Maniknagar (solar-based). 2. Water & Drainage Management <ul style="list-style-type: none"> • Drainage networks: Ballavpur, Joypur, Taranagar (pucca + earthen drains). • Waterlogging solution: Joypur, Anandabas (culverts, canal linkages, rain gardens). • Deep tubewell installation: Bagoan (arsenic-free). • Canal restoration: Anandabas canal re-excavation. • Pond restoration: Dattapukur (rehabilitation + fish culture). 3. Agriculture & Livelihood Support <ul style="list-style-type: none"> • Farmers' sheds: Sonapur, Ballavpur (storage, auctioning, training). • Community co-management through farmers' cooperatives. 4. Health & Social Infrastructure <ul style="list-style-type: none"> • Community clinics: Ballavpur, Maniknagar, Taranagar. • Police camp: Bagoan field. 	<p>In the rural context of Bangladesh, implementing authorities include Union Parishad, Upazila Parishad, LGED with support from NGOs, BWDB and community organizations. Together they address infrastructure, agriculture, health, education, employment, and law-and-order issues.</p>

	<ul style="list-style-type: none"> • Community clinics required in Bollovpur, Maniknagar, and Taranagar. (<i>Physical Feature Survey</i>) • Playground required in Maniknagar. (<i>Physical Feature Survey</i>) 	5. Recreation & Social Cohesion <ul style="list-style-type: none"> • Playgrounds: Ansar Hotel area, Maniknagar. • Tree plantation & boundary walls for safe and green play areas. 	
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