



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 MEHERPUR ZILLA

REPORT ON ASSIGNMENT-04

Assist the Urban Planner in the Preparation of the Rural Area Plan,
including a report elaborating all containing sectors and extent

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Assist the Urban Planner in preparing the Rural Area Plan, including a report that elaborates on all sectors and their extent.

Existing Condition

Monakhali, located in the Meherpur district, presents a unique demographic and socio-economic profile that highlights the potential for sustainable development through targeted interventions. The union's existing condition, assessed through various indicators such as the Physical Quality of Life Index (PQLI), Quality of Life Index (QLI), Community Capability Index (CCI), and Integrated Quality of Life Index (IQLI), demonstrates a blend of moderate and high levels across these metrics. Specifically, Monakhali's PQLI stands at 72.46 (Moderate), QLI at 87.07 (High), CCI at 68.00 (Moderate), and IQLI at 75.84 (High), reflecting a relatively well-balanced community with room for growth in specific areas.

A key feature influencing the area's development potential is the purpose of daily travel. The majority of travel is linked to education, marketing, and business, suggesting an active population with a need for enhanced mobility infrastructure. This can be leveraged in the formulation of local development policies aimed at fostering socio-economic advancement.

In terms of basic sanitation and waste management, Monakhali has both formal and informal waste disposal systems, comprising a total of two formal dustbins, eight informal disposal points, and one public toilet. This highlights the need for infrastructure improvements to ensure better waste management and sanitary conditions, which are essential for maintaining public health and promoting environmental sustainability.

The literacy rate in Monakhali shows a promising trend, with 66.14% of the population above the age of 5 being literate. The breakdown shows a slightly higher literacy rate among females (66.70%) compared to males (65.54%) within the same age group, indicating ongoing progress in gender parity in education. However, there remains a need for continuous efforts to enhance educational attainment, especially among individuals aged 15 and above, where the literacy rate stands at 61.12%.

The population projection for Monakhali reveals steady growth, with the total population expected to increase from 21,745 in 2025 to 29,287 by 2045. This demographic growth presents both opportunities and challenges, as infrastructure, services, and employment opportunities must be scaled accordingly to meet the demands of an expanding population.

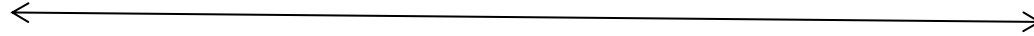
This Action Area Plan for Monakhali aims to address the critical aspects of education, waste management, infrastructure development, and population growth through a comprehensive set

of interventions designed to foster sustainable growth and improve the quality of life for its residents. The plan will focus on enhancing infrastructure, promoting educational initiatives, improving sanitation, and addressing the growing demand for public services and amenities in alignment with the projected population increase.

Feature	Existing Condition
Building Type	Katcha: 3451 (16.11%), Pucca: 6202 (28.95%), Semi Pucca: 5458 (25.47%), Tinshed: 6315 (29.47%) (Source: Physical Feature Survey 2025)
Building Floor Distribution	Floor 1: 17151 (96.53%), Floor 2: 585 (3.29%), Floor 3: 21 (0.12%), Floor 4: 8 (0.05%), Floor 5: 3 (0.02%) (Source: Physical Feature Survey 2025). Soil Type: Type D, stiff soil, a low LPI range (0.126–2.295)
Elevation	Higher Elevation (17.1-28m) Lower Elevation (3-17m) Residential/Structure and Agricultural (Source: Physical Feature Survey, Gangni Upazila Masterplan by UDD)
Occupation Analysis	Farmer 40.32%, Business (General) 29.03%, Driver 4.84%. Govt. Employee 3.23%, Labour 3.23%, Self-Employed 14.52%, Students 1.61%, Van Driver 1.61%, Unemployed 1.61% (Source: Socio-Economic Survey 2025).
Transportation Analysis	Walking 46.2%, Rickshaw 5.1%, Van 7.1%, Cycle 26.7%, Motorcycle 11.6%, Car 1.6%, Bus 1.6% (Source: Socio-Economic Survey 2025)

Issue Identification

Source	Issues Found
PRA	<ul style="list-style-type: none"> • The main problem in Gopalnagar, Ramnagar, Shibpur, and Monakhali villages is waterlogging. • Development of Rashidpur High School. • Proposal for establishing a park beside Rashidpur Switch Gate. • Development and expansion of Shibpur market. • Proposal for a cold storage facility at the entrance of Gopalnagar Road.
Socio-Economic Data	<ul style="list-style-type: none"> • Need Community Clinic • Need to repair the Road • Need Drain (Monakhali) • Need Street Light



Variable	Reorganization (α)	Growth (r)	Conservation (K)	Release (Ω)
Resilience	+ —			
Social System	<ul style="list-style-type: none"> Mixed Group of Professions 	<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	<ul style="list-style-type: none"> Houses, roads, and embankments are often damaged, making recovery slow. 	<ul style="list-style-type: none"> Too much land converted to cash crops, reducing food crop land. 	<ul style="list-style-type: none"> Farmers are locked into one type of crop (monocropping). 	<ul style="list-style-type: none"> Crop failures force families to leave farmland.

	<ul style="list-style-type: none"> • People depend on temporary shelters or rebuild weak houses. • Work is irregular, with people moving around for jobs. • Basic services (water, sanitation, health) are not appropriately rebuilt. 	<ul style="list-style-type: none"> • Irrigation and electricity expand, but not always in a planned way. • Settlements grow along roads (ribbon development), creating scattered villages. • Access to markets, storage, and roads is unequal—some areas benefit, others are left out. 	<ul style="list-style-type: none"> • Overuse of groundwater and soil leads to land degradation. • Land becomes scarce, and common lands (grazing, wetlands) shrink. • Wealthy groups control land and water, creating inequality. • Land rules and zoning become rigid, stopping new solutions. 	<ul style="list-style-type: none"> • Falling prices and rising debt push people to sell land. • Many move to towns, creating unplanned settlements on city edges. • Conflicts rise over land ownership and water rights. • Floods, salinity, and desertification damage land, forcing relocation.
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Urban Resilience Analysis for Monakhali:

The "Growth" phase in the adaptive cycle represents a period of expansion and development, where a system begins to thrive after overcoming earlier stresses or disruptions. In the context of Monakhali, this phase is characterized by several key developments across economic, social, and environmental systems. Economically, Monakhali has witnessed the diversification of agricultural production with the introduction of cash crops, including jute, tobacco, and vegetables, which have opened up new markets and increased income opportunities for farmers. This is complemented by a rise in informal jobs and wage labor, creating diverse employment opportunities for the population. Socially, there is an improvement in education, as literacy rates continue to rise, particularly among females, which enables the workforce to participate in more skilled and varied economic activities. Moreover, the expansion of irrigation systems and the adoption of High-Yield Variety (HYV) crops have significantly boosted agricultural productivity, ensured food security, and contributed to economic growth. Infrastructure development, including the creation of roads, markets, and storage facilities, further supports economic activities by enhancing access to resources and markets. At the same time, urban growth is observed, as infrastructure improvements lead to the development of new settlements along roads and transportation routes. However, this growth comes with challenges, such as land scarcity and congestion, which need careful planning to avoid negative consequences. In summary, the Growth phase in Monakhali is marked by an increase in economic opportunities, social mobility, and agricultural productivity, setting the foundation for long-term prosperity. However, ensuring that this growth is sustainable and well-managed is critical to prevent overexploitation of resources and social inequalities.

Adaptive Cycle Phase	The problem arises in Monakhali	Planning Intervention	Implementation Authority
Growth	<ul style="list-style-type: none"> • The main problem in Gopalnagar, Ramnagar, Shibpur, and Monakhali villages is waterlogging. • Development of Rashidpur High School. • Proposal for establishing a park beside Rashidpur Switch Gate. • Development and expansion of Shibpur market. • Proposal for a cold storage facility at the entrance of Gopalnagar Road. • Need Community Clinic • Need to repair the Road • Need Drain (Monakhali) • Need Street Light 	<ul style="list-style-type: none"> • Waterlogging: Construct roadside drains and culverts in all significant areas (Gopalnagar, Ramnagar, Shibpur, and Monakhali). • Shibpur Market Expansion: Upgrade market facilities to accommodate a greater number of vendors and customers. • Community Clinic: Establish a fully operational community clinic in Monakhali, offering maternal and child healthcare services. • Road Repair: Repair damaged roads in Monakhali for improved accessibility. • Drain Construction: Build drainage systems in Monakhali to prevent waterlogging. • Street Lighting: Install street lights in Monakhali to improve safety and mobility 	<ul style="list-style-type: none"> ✓ LGED, Union Parishad, BWDB ✓ UDD, Union Parishad ✓ LGED, Union Parishad ✓ DPHE, Upazila Health Complex, Union Parishad

