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PREPARATION OF DEVELOPMENT PLAN FOR MEHERPUR ZILLA

REPORT ON ASSIGNMENT-6

Preparation of Rural Area Plan Map containing sectors and extents

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Summary of Assignment-6

A. Summary of Assignment-6

This report summarizes Assignment-6 according to the ToR by the Junior GIS Consultant (Individual Consultant) for the “Preparation of Development Plan for Meherpur Zilla "project. The assignment has done by me is “Preparation of Rural Area Plan Map containing sectors and extents”. The detailed process is also summarized in the Report. The Gangni Upazila Plan reviews current transport systems, service facilities, and utility networks while projecting future needs up to 2047. It analyzes existing travel patterns and proposes improved road connectivity to strengthen links between rural areas and major centres. The assessment of services shows that education, health, and community facilities will require significant expansion to meet future population demands. Future water needs will require more deep tube wells and better distribution, while irrigation systems must be upgraded to support agriculture. Power distribution will also need major improvements to meet rising electricity demand. The plan identifies existing and potential growth centres to guide balanced development across the upazila.

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Preparation of Rural Area Plan Map containing sectors and extents

4. Traffic and Transportation Management

4.1 Major Modal Choice in Gangni Upazila

Bamondi Union

Travel is dominated by bicycles (46.10%), reflecting short, low-cost mobility. Motorcycles (27.92%) support medium-distance trips, while walking (18.83%) shows strong local accessibility. Shared motorized modes such as Leguna/Tempo (3.90%) and easy bikes (1.95%) have limited presence. Bus use (1.30%) remains minimal due to short intra-union travel distances.

Table-4.19: Major Modal Choice of Bamondi Union

Mode	Percentage
Auto/Battery Easy Bike	1.95%
Bicycle	46.10%
Bus	1.30%
Leguna/Tempo/Human Hauler	3.90%
Motorcycle	27.92%
Walking	18.83%

Dhankhola Union

Mobility is led by walking (35.38%) and bicycles (30.77%), showing strong dependence on non-motorized travel. Motorcycles (25.38%) enable medium-distance movement. Easy bikes (5.38%) and buses (1.92%) play minor roles, while Leguna/Tempo (0.77%) and rickshaw (0.38%) serve niche trips.

Table-4.20: Major Modal Choice of Dhankhola Union

Mode	Percentage
Auto/Battery Easy Bike	5.38%
Bicycle	30.77%
Bus	1.92%
Leguna/Tempo/Human Hauler	0.77%
Motorcycle	25.38%
Rickshaw	0.38%
Walking	35.38%

Kathuli Union

A motorized transport-dominated union, with easy bikes (44.74%) and motorcycles (40%) accounting for most trips. Non-motorized modes are minimal: bicycles (11.05%) and walking (4.21%). The pattern reflects strong road access and high use of mechanized vehicles.

Table-4.21: Major Modal Choice of Kathuli Union

Mode	Percentage
Auto/Battery Easy Bike	44.74%
Bicycle	11.05%
Motorcycle	40.00%
Walking	4.21%

Kazipur Union

Shows a diversified modal mix. Motorcycles (32.58%) and easy bikes (29.21%) dominate. Non-motorized modes remain significant: walking (17.42%) and bicycles (12.36%). Higher-order modes like buses (4.49%), cars (2.25%), and microbus (1.69%) appear in small shares.

Table-4.22: Major Modal Choice of Kazipur Union

Mode	Percentage
Auto/Battery Easy Bike	29.21%
Bicycle	12.36%
Bus	4.49%
Car (Private Car)	2.25%
Microbus/NOAH	1.69%
Motorcycle	32.58%
Walking	17.42%

Motmura Union

A balanced mobility structure led by walking (32.14%), followed by motorcycles (29.46%). Bicycles (16.37%) and easy bikes (13.39%) support short and medium trips. Leguna/Tempo (4.17%), buses (3.27%), and rickshaws (1.19%) have limited but notable roles.

Table-4.23: Major Modal Choice of Motmura Union

Mode	Percentage
Auto/Battery Easy Bike	13.39%
Bicycle	16.37%
Bus	3.27%
Leguna/Tempo/Human Hauler	4.17%
Motorcycle	29.46%
Rickshaw	1.19%
Walking	32.14%

Raipur Union

Highly personal-mobility dependent: motorcycles (50%) dominate, supported by strong bicycle use (42.11%). Easy bikes (6.14%) and Leguna/Tempo (1.75%) have minor shares. Walking and buses are nearly absent, suggesting widely spaced settlements and preference for powered travel.

Table-4.24: Major Modal Choice of Raipur Union

Mode	Percentage
Auto/Battery Easy Bike	6.14%
Bicycle	42.11%
Leguna/Tempo/Human Hauler	1.75%
Motorcycle	50.00%

Shaharbarati Union

Extremely motorized: motorcycles (75.58%) overwhelmingly dominate. Non-motorized modes are low—walking (14.53%) and bicycles (2.33%). Shared and formal transport, including easy bikes (2.91%), buses (1.74%), and Leguna (0.58%), contribute insignificantly.

Table-4.25: Major Modal Choice of Shaharbarati Union

Mode	Percentage
Auto/Battery Easy Bike	2.91%
Bicycle	2.33%
Bus	1.74%
Leguna/Tempo/Human Hauler	0.58%
Motorcycle	75.58%
Rickshaw	0.58%
Ride- Hailing Car Service; Uber	0.58%
Utility/4 Wheel Drive/Jeep	1.16%
Walking	14.53%

Sholotaka Union

Local mobility relies on walking (36.09%) and motorcycles (26.63%). Easy bikes (20.12%) play a strong shared-transport role. Bicycles (7.69%), CNG/3-wheelers (3.55%), buses (2.37%), rickshaws (2.37%), and microbus (1.18%) appear with small shares.

Table-4.26: Major Modal Choice of Sholotaka Union

Mode	Percentage
Auto/Battery Easy Bike	20.12%
Bicycle	7.69%
Bus	2.37%
CNG/3-Wheelers	3.55%
Microbus/NOAH	1.18%
Motorcycle	26.63%
Rickshaw	2.37%
Walking	36.09%

Tentulbaria Union

Short-distance travel dominates: walking (37.20%) and motorcycles (36%) make up most trips. Bicycles (10.40%), easy bikes (5.60%), and buses (6.80%) support additional movement. Cars (1.60%), CNGs (0.40%), and rickshaws (2%) serve limited needs.

Table-4.27: Major Modal Choice of Tentulbaria Union

Mode	Percentage
Auto/Battery Easy Bike	5.60%
Bicycle	10.40%
Bus	6.80%
Car (Private Car)	1.60%
CNG/3-Wheelers	0.40%
Motorcycle	36.00%
Rickshaw	2.00%
Walking	37.20%

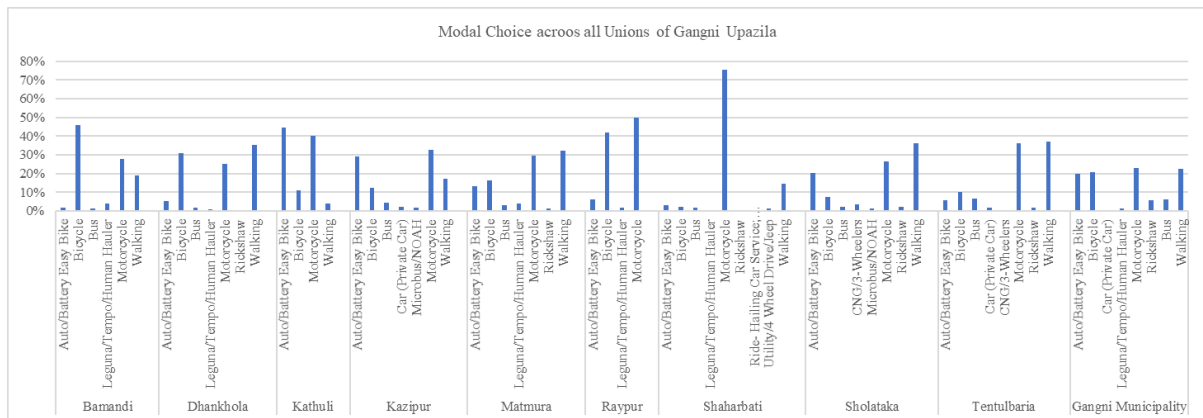


Figure 4.10: Modal Choice of Gangni Upazila

4.4 Transport Development Plan

4.4.1 Proposed Road Connectivity for Gangni Upazila

The proposed road connectivity in Gangni Upazila is strategically designed to enhance transportation between key markets, raw material loading points, haat locations, and tourist sites, thereby stimulating economic growth and boosting the local tourism industry. Key Arot locations such as Dulal Enterprise, Saharbat, Mutaleb Counter, Anis Banijjaloy, and Club Bazar play a crucial role in local trade and commerce. These markets are directly connected to significant raw material loading points, including Vatpara (Kuthi), Tentulbaria, Kumaridanga West-Kumaridanga, and Rajapur, where goods are loaded onto trucks, 3-wheelers, and other vehicles for distribution across the region. This connectivity will streamline the transportation of agricultural products and goods, ensuring that local businesses have better access to broader markets and enabling faster distribution of products to urban areas.

In addition to the markets, the Haat locations such as Malshadha, Chengara, Sholotaka, Garadob, Dhankhola, Gangni, and Bamondi are critical for the local agricultural trade, where farmers, retailers, and wholesalers exchange goods like rice, wheat, vegetables, fruits, fish, meat, and clothing. The proposed road infrastructure will ensure that these haat locations are well-connected to larger urban centers, facilitating the smoother movement of agricultural products between rural and urban areas. Different types of transport vehicles, such as vans, cycles, motorcycles, and trucks, will be used depending on the size and nature of the goods, ensuring efficient and timely transportation.

Furthermore, the infrastructure development will enhance access to key tourist sites in the region, including the Church of Bangladesh, the Mujibnagar Liberation War Memorial

Complex, and Amrakanan, which are important historical and cultural landmarks. Improving access to these sites through better road connectivity will not only make it easier for visitors to explore these areas but also support the local tourism economy by attracting more tourists, both domestic and international. The development of these roads will thus contribute significantly to the cultural and economic vitality of Gangni Upazila.

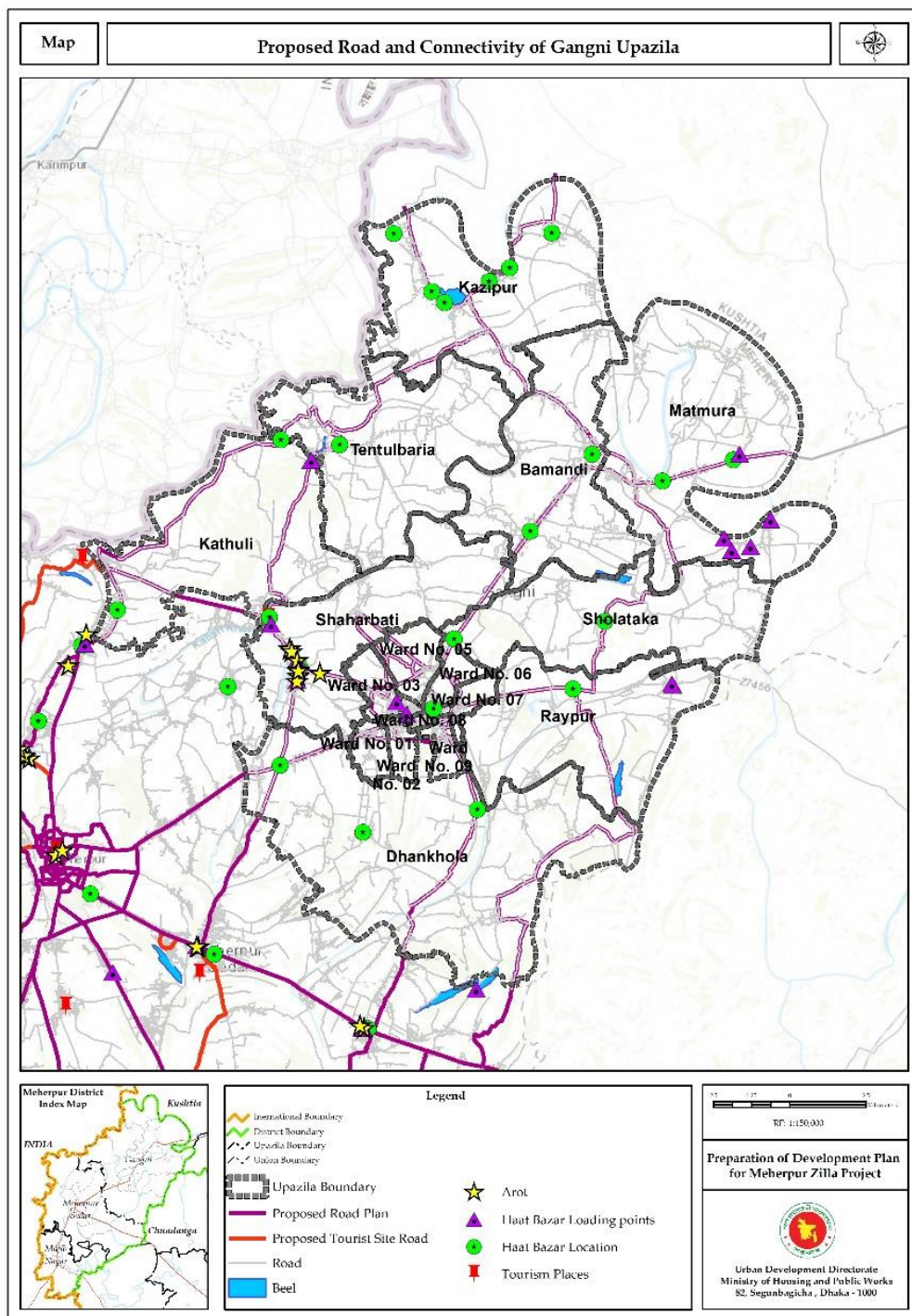


Figure 4.21: Proposed Road and Connectivity of Gangni Upazila

The road network comprises a combination of highways, internal roads, and tourist-specific roads, each designed to accommodate different traffic volumes and vehicle types. Highways, such as those with a width of 100 feet, will provide major routes for long-distance travel, ensuring smooth and efficient movement of both goods and passengers across the region. The Gangni Municipality Internal Roads, with widths ranging from 30 feet to 80 feet, will cater to local traffic within the municipality, connecting residential areas, trade hubs, and critical commercial zones. The Internal Ring Road, which ranges in width from 22 feet to 100 feet depending on the specific location, will help manage the flow of traffic around key urban areas, improving overall traffic circulation and reducing congestion.

In addition to the internal roads, the Gangni Dhankhola Baradi Linked Road (30 feet wide) will enhance the connectivity between local communities and urban hubs, improving access to markets and other essential facilities. Proposed roads, such as the Gangni Municipality Proposed Road (40 feet wide), will enhance internal connectivity. The Gangni Outer Road (40 feet wide) will serve as a vital access route for rural areas, facilitating transportation for larger vehicles, including trucks and buses. The proposed infrastructure also includes roads designed for tourist spots, such as the Herring-Bone-Bond design roads, which have widths ranging from 20 feet to 30 feet, ensuring easy access for visitors to cultural landmarks and contributing to the region's tourism sector.

The road widths are specifically chosen to accommodate the varying traffic loads expected on each road. The wider roads will be able to handle larger trucks and buses, while the narrower roads will cater to local traffic and smaller vehicles. This design will improve mobility, accessibility, and transportation efficiency, supporting the overall development of Gangni Upazila.

The proposed road network in Gangni Upazila will significantly improve the region's transportation infrastructure by connecting key markets, haat locations, tourist destinations, and raw material loading points. This development will streamline trade, improve access to goods and services, enhance local tourism, and facilitate better connectivity between rural and urban areas. With a variety of road types and widths, the infrastructure plan is designed to accommodate different traffic volumes, ensuring the roads can handle both local and long-distance transportation needs, ultimately fostering economic growth and regional development.

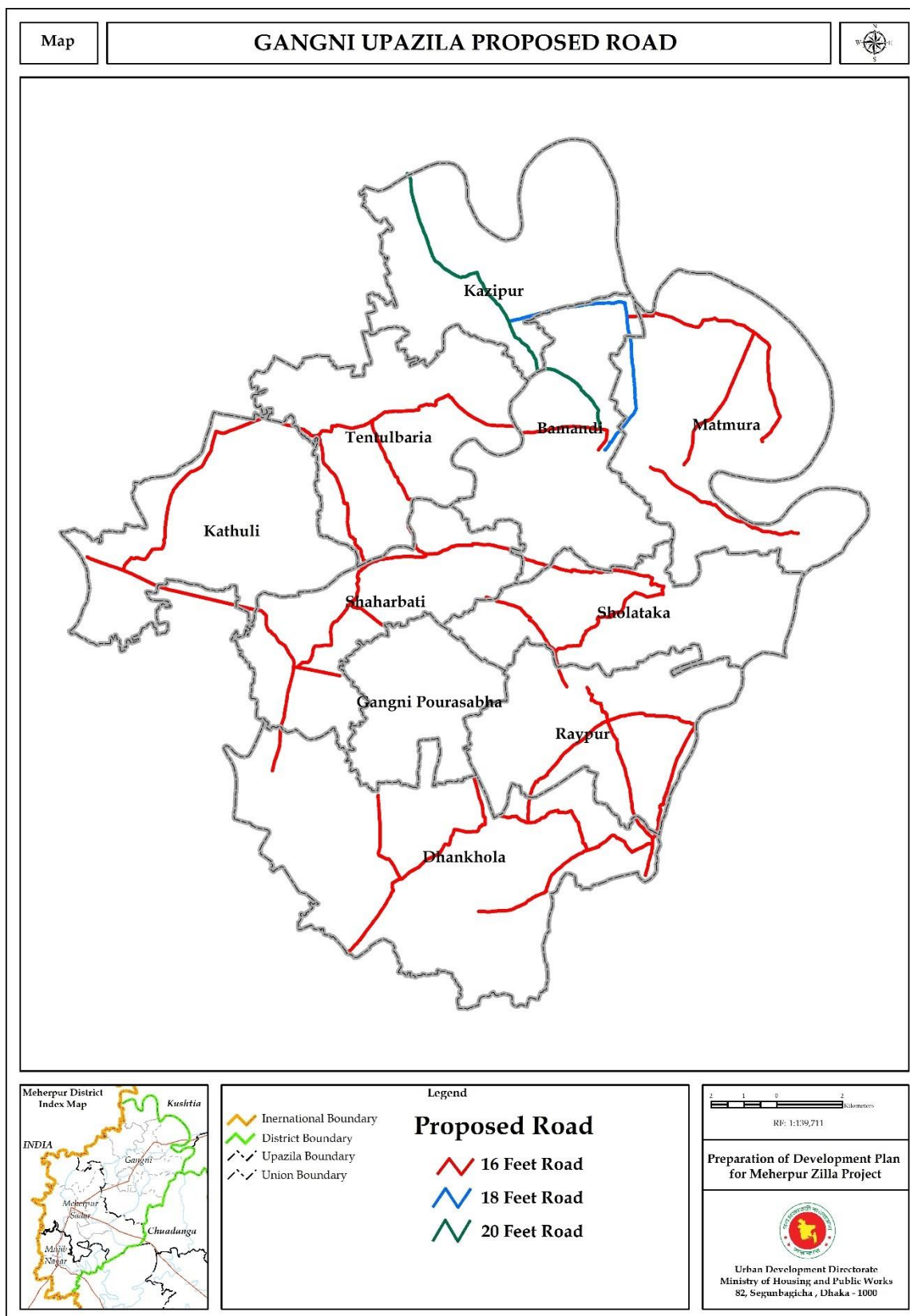


Figure 4.22: Proposed Road of Gangni Upazila from LGED

The Local Government Engineering Department (LGED) has proposed a set of road width standards for different unions under Gangni Upazila to enhance connectivity, improve transportation efficiency, and support rural development. According to the proposed plan, three categories of road widths have been recommended—**16 feet**, **18 feet**, and **20 feet**—based on the functional importance of each route. These proposed roads aim to strengthen access between unions, trading centers, educational institutions, healthcare services, and agricultural production zones.

Most unions—including Tentulbaria, Kathuli, Sholotaka, Saharbati, Raypur, Dhankhola, and areas around Gangni Pourashava—have been recommended for **16-foot roads**, reflecting the need to improve basic rural accessibility and internal movement. A few strategic corridors in **Kazipur and Bamandi** have been selected for **20-foot roads**, highlighting their significance as major mobility routes connecting key settlement clusters. Additionally, some short but important stretches in the Kazipur–Bamandi area have been proposed as **18-foot roads** to support medium-capacity traffic flows.

Overall, LGED’s union-wise recommendation aims to establish a balanced rural road hierarchy across Gangni Upazila. Wider roads are planned where higher movement demand is expected, while standard-width roads are designed to ensure all communities can access essential services. The proposed network will play a vital role in improving socio-economic activities, ensuring safe mobility, and supporting future growth across the upazila.

5. Rural Services and Utility Management Plan

The Rural Services and Utility Management Plan of Gangni Upazila presents a detailed and structured overview of the existing rural infrastructure and service facilities across the upazila. It encompasses key sectors such as education, healthcare, community facilities, transportation networks, and essential utilities, offering a clear understanding of how these services are distributed within Gangni. The plan outlines the current status, capacity, and spatial organization of schools, madrasas, colleges, health centers, mosques, graveyards, and other community institutions, alongside the allocation of land for residential, commercial, industrial, agricultural, and service-related uses. By documenting the present service facilities and land-use characteristics, this plan provides an essential foundation for assessing the quality and accessibility of rural services in Gangni Upazila and serves as a strategic guide for future planning, management, and systematic development of rural infrastructure and utilities.

5.1 Evaluation of Existing and Projected Land Use Demand in Gangni Upazila

Table-4.28: Existing and Projected Land Use Demand in Gangni Upazila

Features	Population 2022	Land Use 2022	Existing Land Use 2025	Populati on 2047	Land for Services 2047
Administrative	292634	20	52.86	391239	20
Agricultural			119404.90		
Commercial		410	488.16		548
Community Facilities		73	108.13		98
Education & Research		424	367.61		567
Historical Landmark			0		

Health Facilities		78.5	15.79		98
Industrial		585	711.79		782.5
Mixed Use			131.44		
Open Space and Recreational		102	7.38		137
Residential		1951	20619.53		2608
Service Activity			55.45		
Transportation and Communication		44	1640.26		59
Vacant Land			488.68		
Vegetation			13010.27		
Waterbody			6845.72		

Based on the 2022 population of **292,634**, land requirements were estimated using national planning standards and then compared with both the existing land-use distribution of **2025** and the projected service land demand for **2047**, when the population is expected to reach **391,239**. The comparison clearly shows that for almost all major land-use categories, the existing land stock in 2025 is already sufficient—and in many cases significantly higher—than the estimated requirements for both 2022 and 2047. This indicates that Gangni Upazila will not require additional land acquisition to accommodate future population growth and service expansion.

The **Residential** land category illustrates this trend most prominently. While the projected land requirement for the 2047 population is **2,608 acres**, the existing residential land available in 2025 is already **20,619.53 acres**, which is nearly eight times higher than the future demand. This substantial surplus indicates that Gangni’s current settlement footprint has ample reserve capacity to support population growth without necessitating outward expansion or new land conversion.

A similar capacity surplus is observed in **Commercial, Industrial, Education & Research, Community Facilities, Health Facilities, and Open Space & Recreational** land categories. For example, **Commercial** land demand for 2047 is **548 acres**, yet the existing stock in 2025 is **488.16 acres**, which is very close to the projected requirement and can be easily managed through minor internal adjustments. The **Industrial** category also reflects this balance, with **711.79 acres** available in 2025 against a projected need of **782.5 acres** in 2047—indicating that the shortfall can be accommodated through efficient land reallocation within the existing footprint. Likewise, **Education & Research** land stands at **367.61 acres** in 2025, which aligns reasonably with the anticipated requirement of **567 acres** for 2047.

The **Transport and Communication** sector shows an especially strong surplus, reflecting robust infrastructural capacity. While the projected requirement for 2047 is just **59 acres**, Gangni Upazila already possesses **1,640.26 acres** of transportation and communication land in 2025, ensuring more than adequate provision for future mobility, connectivity, and logistics-related services.

Several categories—**Agricultural Land, Historical Landmark, Vacant Land, Vegetation, and Waterbody**—were intentionally kept unchanged in the analysis, as these represent protected, resource-based, or environmentally significant zones. Their 2025 extents, such as **119,404.90 acres of agricultural land, 13,010.27 acres of vegetation, and 6,845.72 acres of waterbodies**, are essential for ecological balance, groundwater recharge, food production, and

natural resource management. Maintaining these land covers without major alteration helps preserve environmental stability and long-term sustainability.

Overall, the comparative assessment between 2022, 2025, and 2047 clearly demonstrates that the existing land-use structure of Gangni Upazila—particularly the large surpluses in residential, transportation, commercial, and industrial land—already meets all projected future service-land needs. Even without additional expansion, the 2025 land-use distribution provides sufficient capacity to support long-term population growth, service delivery standards, and rural development targets. Therefore, **no new land acquisition is required**, and the present land-use framework is fully capable of sustaining the upazila’s future socio-economic and infrastructural needs.

5.2 Assessment of Service Infrastructure Requirements for Future Population (2047)

Table-4.29: Service Infrastructure Requirements for Future Population (2047)

	Service and Utility	Existing- 2025	For 2047
Education	Nursery	18	39
	Primary School	131	78
	High School	64	19
	College	9	19
Health	Govt. Hospital	4	1
	Non-Govt. Hospital	4	1
	Health Center	28	78
Community Facilities	Mosque	404	19
	Graveyard	40	19
	Eid Gah	17	19

The assessment of service and utility facilities in **Gangni Upazila** indicates that the existing (2025) supply of facilities is largely adequate—and in several categories significantly exceeds—the projected requirements for the year 2047. Based on national service provision standards, Gangni Upazila will require 39 nursery schools, 78 primary schools, 19 high schools, and 19 colleges by 2047. In contrast, the existing inventory includes 18 nursery schools, 131 primary schools, 64 high schools, and 5 colleges. While the number of nursery schools and colleges will need to increase to meet future demand, the upazila already has a substantial surplus in primary and secondary education facilities. The deficit in nursery and college facilities can be addressed efficiently by upgrading existing infrastructures and repurposing surplus educational land rather than acquiring new land.

A similar pattern emerges in the health sector. The projected requirement for 2047 includes 1 government hospital, 1 non-government hospital, and 78 health centers. Currently, Gangni Upazila has 4 government hospitals, 4 non-government hospitals, and 28 health centers. This demonstrates a significant surplus in hospital-level facilities, meaning no additional hospitals will be needed in the future. Although the number of health centers must increase to reach the required standard, this expansion can be accommodated within existing service land due to the substantial surplus in overall community land use.

Community facilities also show an overwhelming surplus. Existing facilities include 404 mosques, 40 graveyards, and 17 Eidgah grounds, compared to the 2047 requirements of only

19 facilities in each category. This clearly indicates that the upazila’s community infrastructure far exceeds future needs, ensuring long-term adequacy without any further expansion. The surplus also allows flexibility to improve quality and accessibility without needing additional land.

Overall, the analysis shows that the service and utility facilities available in Gangni Upazila in 2025 are more than sufficient to meet the projected population demand for 2047. Except for a few categories requiring moderate expansion—such as nursery schools, colleges, and health centers—the existing service network already surpasses most future requirements. Therefore, large-scale land acquisition or new service infrastructure is unnecessary. The existing institutional and community service provisions are fully capable of supporting the upazila’s long-term development in a sustainable and resource-efficient manner.

5.3 Future Water Demand and Deep Tube Well Requirements

In **Gangni**, the population in **2022** is **292,634**, and it is projected to increase to **391,239** by **2047**. Based on the assumption that each person uses **80 liters of water per day** for household and drinking purposes, the total water demand for the district in **2022** would be approximately **23,410,720 liters per day**. By **2047**, with the expected population growth, the demand would rise to **31,299,120 liters per day**.

Currently, there are **18 government deep tube wells** in Gangni, each providing **45,000 liters of water per day**. Additionally, according to the physical feature database, an additional 58,930,000 liters are available from **23,572 sources**. If all these sources contribute to the supply, the total water supply capacity would be well above the projected demand.

Given these figures, the existing deep tube wells and additional sources appear more than sufficient to meet both current and future water demand, even with projected population growth by **2047**. Therefore, there would be **no need for additional deep tube wells** to meet household and drinking water requirements through 2047, assuming the current supply infrastructure remains intact and reliable. This conclusion relies on the assumptions that per capita water use remains at **80 liters per day** and that the existing wells continue to provide their full capacity.

Table-4.30: Deep Tube Well Requirements

Year	Population	Daily Water Requirement (liters)	Number of Deep Tube Wells Needed
2022	292634	23410720	Sufficient
2047	391239	31299120	Sufficient

5.4 Irrigation Status

Gangni Upazila’s irrigation system relies primarily on **Deep Tube Wells (DTWs)** and **Shallow Tube Wells (STWs)**, each serving different purposes in water supply management. DTWs constitute **30.88%** of the tubewell infrastructure and have a high discharge capacity of **2.0 cusec**, making them suitable for large-scale irrigation. Each DTW covers approximately **24 hectares**, resulting in a total irrigated area of **504 hectares** or **1,245 acres**. This highlights the

crucial role of DTWs in supplying sufficient water for intensive cropping and maintaining crop productivity during dry periods.

STWs, on the other hand, account for **69.12%** of tubewells and operate at a lower capacity of **0.5 cusec**. Each STW irrigates about **6 hectares**, collectively covering **282 hectares** or **697 acres**. While individually smaller in coverage, the higher number of STWs ensures more widespread irrigation for smaller farms across the upazila.

Together, DTWs and STWs currently irrigate **1,942 acres**, which is only a small fraction of the **58,327 acres** of total agricultural land in Gangni Upazila. This demonstrates that the majority of farmland still relies on rainfall or seasonal surface water for irrigation. To fully cover the upazila's agricultural land, an estimated **950 additional Deep Tube Wells** would be required, highlighting the significant gap between current irrigation infrastructure and potential agricultural water demand.

Table-4.31: Area Cover calculation

Types of Tubewell	Percentage	Area Covered (each Tubewell) (Source: Ministry of Agriculture)	Total Area Covered
Deep Tube Well (DTW) (2.0 Cusec)	30.88%	24 Hector	504 Hector (1245 Acre)
Shallow Tube Well (STW) (.5 Cusec)	69.12%	6 Hector	282 Hector (697 Acre)
Total Area (Acre)			1942 Acre

Source: Prepared by Consultant

Overall, while the existing tubewell network provides essential support for irrigation, it is insufficient to meet the full agricultural potential of Gangni Upazila. Expanding the number of DTWs, optimizing water management practices, and adopting efficient irrigation technologies will be critical to enhance crop productivity and ensure sustainable agriculture in the coming decades.

5.5 Current Power Distribution, Future Demand, and Infrastructure Expansion

Meherpur District is served by five substations: two in Meherpur Sadar, two in Gangni, and one in Mujibnagar. The West Zone Power Distribution Company manages the electricity distribution. According to the latest data, Meherpur has 202,198 customers. These customers collectively consume 23,884,364 kilowatt-hours (kWh) of electricity per year. On average, each customer uses between 118 and 120 units of electricity per month.

The table provides details about the electricity substations in various regions, including their number, capacities, and locations. Each substation provides "33/11 kV," which refers to the substation's voltage capacity. The substations are distributed across Meherpur, Gangni, and Mujibnagar, with each area having its own substations to serve its local population. These substations are essential for efficiently distributing electricity to meet the district's needs.

The district's total consumption reflects the growing energy demands of the population and the increasing reliance on electricity for both household and commercial purposes. With the current

infrastructure of five substations, the region is working to meet the rising power demand. The capacity of each substation is crucial for understanding how much electricity it can handle to satisfy the needs of the surrounding areas. This information is vital for efficiently managing and distributing electricity, especially as demand continues to grow. The data helps plan future upgrades and ensure that the electrical infrastructure can support increasing power requirements, maintaining a steady, sufficient electricity supply for all customers in the district.

Looking ahead to 2047, projections indicate that Meherpur will require additional substations to meet the growing demand for a 24-hour, uninterrupted electricity supply. Specifically, it is estimated that **seven additional substations** will be necessary. Each of these substations will require **1 acre of land** for installation. This expansion is essential to sustain the district's growing energy needs and ensure a reliable, continuous power supply for the population.

5.6 Solar Power as a Supplement for Meherpur District

According to local perceptions of Meherpur District, Solar power could be a viable supplement to the existing electricity grid. With sufficient sunlight, solar panels can efficiently meet household and community electricity needs. For households, a 1 kW solar panel can provide around 118–120 units of electricity per month, enough for lighting, fans, and small appliances. For larger areas, **solar micro-grids** can be established to meet the energy demand without relying entirely on the grid.

6. Growth Centre of Gangni upazila:

Gangni Upazila plays a vital role in the vegetable trade network of Meherpur District, supplying produce to both national markets and emerging international destinations. Similar to Meherpur Sadar, Gangni maintains consistent shipments to major wholesale hubs in Dhaka—particularly Karwan Bazar—using the district's established domestic distribution channels.

Beyond national supply, Gangni has strengthened its presence in export-oriented vegetable production. High-value crops like Chinese cabbage grown in the upazila are exported through Chattogram Port to Malaysia and other Southeast Asian markets, showcasing the district's rising contribution to Bangladesh's international agri-supply chain.

Regionally, Gangni's vegetables flow through key wholesale markets in the Khulna Division, including Jashore and Khulna, which serve as redistribution centers for surrounding districts.

Major loading and collection points in the upazila include:

Gangni Bazar, Bamundi Bazar, Akubpur, Patkelpota, Chowgacha, Kumaridanga West, Charcharia Bazar, and Arath, Tentulbaria.

Key production hubs are located in villages around Gangni Bazar and Charcharia Bazar, where farmers focus on cabbage, brinjal, tomatoes, and leafy vegetables.

Main transport corridors supporting the vegetable trade:

- Gangni–Meherpur Road
- Gangni–Kushtia Road

Primary shipment destinations include:

- **Dhaka** – major wholesale markets such as Karwan Bazar
- **Jashore** – an important regional hub for redistribution and export facilitation
- **Chattogram Port** – used for exporting crops like Chinese cabbage
- **Khulna and Barishal** – key regional retail and distribution centers

Overall, Gangni Upazila showcases a strong and diversified market system that connects local production with both domestic and international supply chains, significantly enhancing the agricultural economy and market influence of Meherpur District.

Potential Growth Centers of Gangni Upazila

Within Gangni Upazila, two emerging rural nodes—Bamundi Union and Saharabati Union—exhibit strong characteristics of future growth centers due to their improving housing conditions, educational facilities, agricultural commercialisation, and growing connectivity. These unions show signs of semi-urban transition and hold significant potential to drive balanced socio-economic development across surrounding villages.

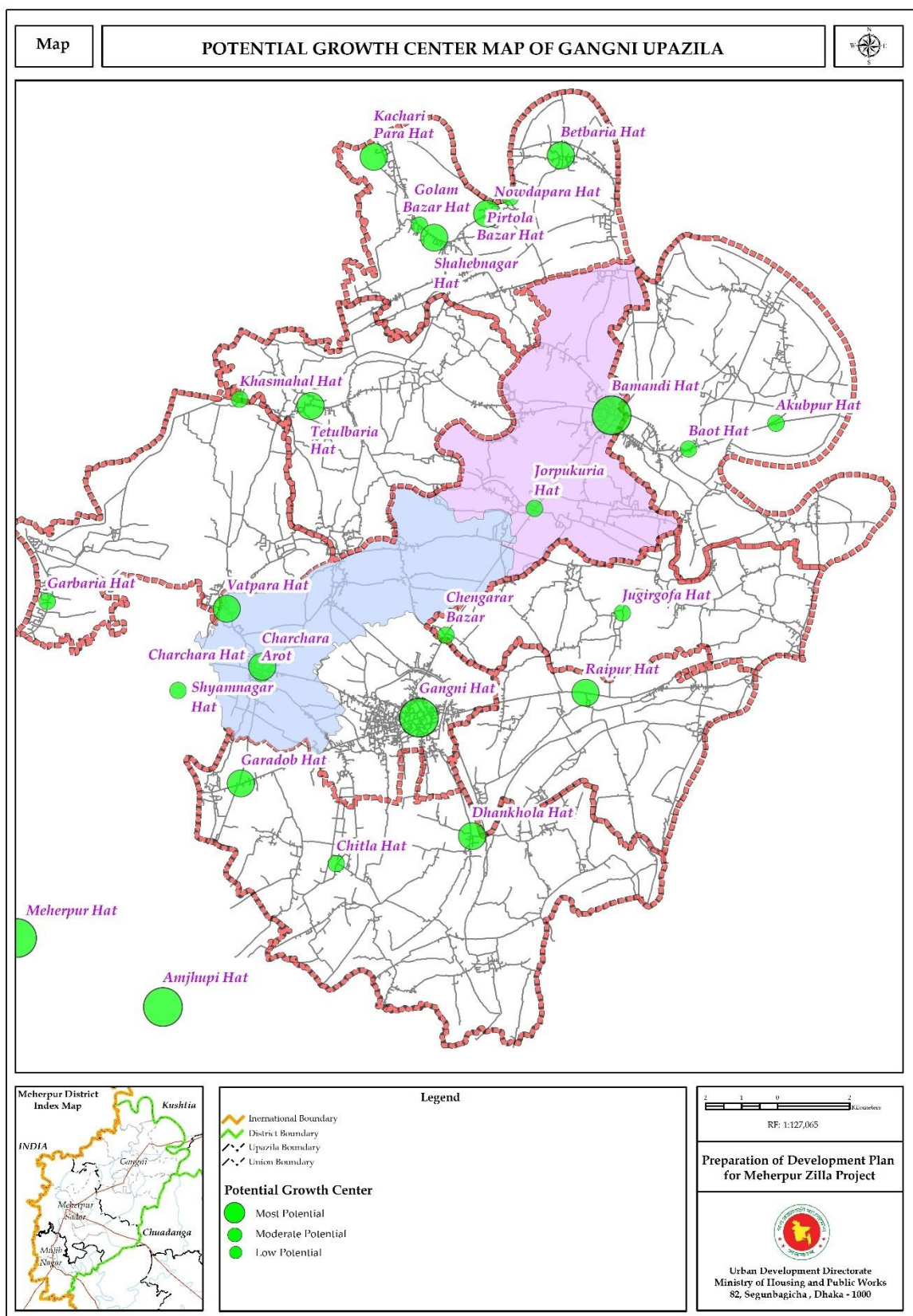


Figure 4.23: Potential Growth Center Map of Gangni Upazila

1. Bamundi Growth Center

Bamundi Union, comprising 13 villages, has Bamundi village as its most developed settlement, displaying notable improvements in housing, education, mobility, and local economic activities.

Key Drivers of Growth

- **Improved Housing Conditions**

Around 85% of residents in Bamundi village live in pucca and semi-pucca homes, while the remainder occupy katcha houses.

Majority of the pucca houses are single-storey, with a very small number of two-storey units and only a few three-storey structures.

Joraghat village remains the least developed area, where most residents are day labourers and housing conditions vary from katcha to semi-pucca.

- **Expanding Educational Facilities**

Bamundi Union hosts two colleges, one in Bamundi and another in Terail, serving as educational anchors for relatively weaker communities.

Students frequently travel to Gangni municipality, Kushtia, and even Dhaka for higher studies, strengthening educational mobility.

- **Agricultural Dominance and Limited Migration**

Most households depend on agriculture and maintain a moderate economic profile.

The number of expatriate workers is low, and very few are engaged in salaried jobs.

Business activity exists but is relatively limited compared to agriculture.

- **Internal and External Mobility Patterns**

For business and work, residents travel to Dhaka and other districts, but in-migration into the union is almost nonexistent.

Motorcycles serve as the main mode of transport, particularly for business-related movement.

- **Transport and Road Conditions**

Inter-village movement mostly depends on katcha roads.

The main road from Bamundi Bazar to Joraghat is entirely katcha, leading residents to use an alternative bypass route for mobility.

Growth Potential

With strong educational facilities, moderate agricultural earnings, improving housing conditions, and its central role in local trade, Bamundi can evolve into a primary rural growth center, linking remote villages such as Joraghat with the wider Gangni Upazila economy.

2. Saharabati Growth Center

Saharabati Union, consisting of 10 villages, has Saharabati village as its most developed settlement, despite the Union Parishad being located in Hijolbaria, which remains moderately developed. The union demonstrates promising economic and agricultural dynamism.

Key Drivers of Growth

- Strong Housing Infrastructure

About 80% of residents live in pucca houses, with another 10% in semi-pucca and 10% in katcha structures.

Both single-storey and two-storey houses are present, indicating semi-urban settlement characteristics.

Underdeveloped villages—Durlovpur, Charpukuria, Bhromordah, and Dhormochaki—have a high concentration of labourer households with mixed housing conditions.

- Improving Education System

Literacy stands at 75% in the union.

A college located in Bhatpara supports local education, while many pursue higher studies in Kushtia and Dhaka.

- Agriculture-Driven and Export-Oriented Economy

The union has a high number of expatriates, contributing to income diversity.

Most residents are farmers, while Saharabati village is well-known for vegetable cultivation, especially cabbage (badhakopi), which is exported internationally.

A growing share of the community is engaged in agricultural business enterprises, with a notable presence of salaried employees.

- Low Out-Migration but No In-Migration

Migration to Dhaka and other districts is limited.

No notable inflow of outside residents, preserving the union's traditional demographic structure.

- Efficient Local Transport System

Motorcycles are the primary mode of transport, enabling fast mobility for both trade and daily commuting.

Growth Potential

With export-oriented agriculture, strong housing conditions, high expatriate presence, and an emerging service economy, Saharabati has the capacity to develop into a secondary growth center, supporting business, tourism, and agro-based trade for surrounding low-income villages.