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Ministry of Housing and Public Works
Urban Development Directorate
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PREPARATION OF DEVELOPMENT PLAN FOR MEHERPUR ZILLA

REPORT ON ASSIGNMENT-4

**Development of Planning Standards Based on Previous Master Plan and
Other Sources**

December 2024

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Definitions

a. Pourashava

Pourashava is defined as the urban growth center of Bangladesh having population more than 50,000 it serves and at least three-fourth of the population is engaged in the professions other than agriculture (Local Government Act, 2009).

b. Small Town

In this research work, Small Town has been defined as the urban growth center of Bangladesh known as Pourashava but not the part of District Town.

c. Planning standard

Planning standard is defined as the desirable target levels of public facilities, infrastructure or land use development, and of building materials and on-plot provision, for a given area. They are variable in characteristics which may be amended from time to time to suit changing circumstances not withstanding health, safety and environmental interest (DMDP, 1995). Standardization in land use planning creates opportunities in time savings and cost efficiencies whenever certain general standard is applied in different situation.

Types of Standards

There are three types of Standards usually practiced in the countries of Asia region (Guidelines for Rural Centre Planning, ESCAP):

Firstly, one type is concerned with quantified relationships which have been identified in other areas or as national averages which are used for planning in newly developed areas. Their use ignores existing deficiencies in these relationships. Consequently, such standards may not meet future requirements for development.

-Secondly, Targets set by the authorities of a country or a project without identifying and providing the necessary conditions, resources, organization, etc. required for the achievement of these targets. In most cases implementation Capacity (financial and/or organizational) is inadequate to achieve these targets which consequently have to be considered as unrealistic "norms",

Thirdly, thoroughly analyzed and well considered relationships, the applicability and realization of which is feasible within the financial and organizational implementation capacity of a project or of a country. These must comply with future development objective. They have to be considered as the only genuine standards and norms.

Major Field of the Formulation of Standard

The rapid transformation of urban areas, driven by increasing mobility demands, necessitates the development of a variety of planning standards to address key aspects of land use effectively.

Urban planning encompasses a broad spectrum of physical planning issues, many of which are directly or indirectly linked to established standards. While addressing all these issues is beyond the scope of this discussion, the focus has been narrowed to contextual and widely applicable aspects. With this approach, specific fields of land use have been selected to develop targeted planning standards.

a. General Landuses

1. Residential
2. Administrative
3. Commercial
4. Education
5. Industrial
6. Community and Social Services
7. Government Services
8. Open Space and Recreation

b. Utility/Physical Infrastructure Facilities

1. Health
2. Water Supply, Sewerage and Garbage Disposal
3. Electrification
4. Transportation and Communication infrastructure
5. Bus/Truck Terminal
6. Landing Station/Ferry Ghat
7. Launch Ghat

Standards of Different Authorities of Bangladesh for Multiple Plans

To develop effective planning standards for Meherpur Paurashava, it is essential to explore how planning standards are applied in different regions of Bangladesh. Major cities like Dhaka, Chattogram, Rajshahi etc. have established their own localized rules, tailored to their unique challenges and development goals. These rules often reflect a city's population dynamics, land use patterns, economic activities, and environmental considerations.

This study examines the standards proposed in various master plans across the country to gain insights into their practical applications. By analyzing these examples, we can better understand how urban planning standards address key issues such as zoning, infrastructure development, transportation, and public facilities. These insights will serve as a foundation for crafting standards that align with the specific needs and characteristics of Meherpur Paurashava.

The ultimate goal is to create planning standards that promote sustainable growth, enhance livability, and ensure balanced development in Meherpur, while drawing from both national experiences and local context.

Standards of Different Authorities in Several Planning Projects of Bangladesh

	Standards in Metropolitan Plans			DAP for Dhaka	Standards in Recent Metropolitan Plans		UDD	LGED	UDD	LGED
Facilities	RMDP	KMDP	DMDP	DAP	Barisal	Sylhet	Upazila Shahar	UTIDP	Small Town	Meherpur Paurashava
Year	2004	2000	1995	2010	2010	2010	1980		2013	2019
Administrative							Administrative/Judiciary Officers' Residences 12 acres/ Upazila Shahar	Upazila Complex 15 acres	Upazila Complex 10 acres	15 acres/ Upazila HQ
								Paurashava Office 3-5 acres	Paurashava Office 3 acres	3 acres/ Upazila HQ
								Jail/ Sub Jail 10 acres/ Upazila HQ	Jail/ Sub Jail 10 acres	
Residential								Real State 200 pop/ 1 acre	Private/ General 100-150 person/ acre	General 70 person/ acre
								General Residential 50-100 person/ 1 acre	Public/ Govt. 150-200 person/ acre	
Primary School	1 school per 4,000 popn. Area: 1-1.5acre	1 school per 3,400 popn. Area: .5-.7 acre	1 school per 15,000 popn. Area: 1 acre	1 school per 15,000 popn. Area: 1 acre	1 school /7,000 population (approx.); 1 acre of land	(One School) 5000 pop/acre	Primary/ Nursery School 2 acre/5,000 population	Kindergarten / Nursery School 0.5 acre/10,000 population	Elementary / Nursery School 2 acre/10,000 population	Primary/ Nursery School 2 acre/5,000 population
								Primary 2 acre/5,000 population	Primary 5 acre/5,000 population	
Madrasa	--	--	--	1 madrasa per 25,000 popn. Area: 1 acre		1/ 8000 Pop, 2acre				
High School/ Intermediate College	1 school per 6,000 popn. Area: 2-3 acre	1 school per 5,000 popn. Area: 1.5-1.6 acre	1 school per 23,000 popn. Area: 2 acre	1 school per 20,000 popn. Area: 2 acre	1 school / 8,000 population (approx.); 2 acres of land	One College/ 25000 Pop, 3acre	Secondary School/ College 1 acre/5,000 population	Secondary/ High School 5 acre/20000 population	Secondary School 10 acre/20000 population	High School 5 acre/20000 population
College/University	1 college per 30,000 popn. Area: 10 acre	1 college per 36,000 popn. Area: 10 acre	--	1 college per 30,000 popn. Area: 2 acre	1 college/ 30,000 population (approx.); open space equivalent to one football field			College 10 acre/20000 population	College/University 5-10 acre/20000 population	College 5 acre/20000 population
								Vocational/ Training Center 5-10 acre/Upazila	Vocational Training Center 5 acre/Paurashava	5 acre/Upazila
Park/Open Space	1.5 acre per 1,000 popn.	2 acre per 1,000 popn.	0.16 acre per 1,000	0.16 acre per 1,000 popn. or 4	1 acre/ 1000 population	Park/Open space:	Park/Open space: 1 acre/1,000 population	Playfield: 3 acre/20,000 popn.	Playfield/ Playground: 3 acre/20,000 popn.	Playfield: 3 acre/20,000 popn.

	Standards in Metropolitan Plans			DAP for Dhaka	Standards in Recent Metropolitan Plans		UDD	LGED	UDD	LGED
Facilities	RMDP	KMDP	DMDP	DAP	Barisal	Sylhet	Upazila Shahar	UTIDP	Small Town	Meherpur Paurashava
Year	2004	2000	1995	2010	2010	2010	1980		2013	2019
			popn	acre per 25000		3 acre/25000 pop.	Cinema 0.5 acre/20000 population	Park/ Neighborhood Park: 1 acre/ 1000 population	Community/ Neighborhood Park: 1 acre/ 10,000 population Central Park: 5-10 acre/ Paurashava	Park/ Neighborhood Park: 1 acre/ 1000 population
						Playfield: 2 acre/25,000 popn.	Sports Stadium 3 acre/200000 population	Sports Stadium 5-10 acre/Upazila HQ Cinema 0.5 acre/20000 population	Stadium 5-10 acre/ Paurashava Cinema Hall 3 acre/20000 population	Stadium 7 acre/Upazila HQ Cinema 0.5 acre/20000 population
Community Center	1 for each neighbourhood. Area: 0.30 acre	--	1 in each ward. Area: 0.30 acre	1 in each ward. Area: 0.30 acre	Neighborhood Centre: One in Each Ward, 0.30 acre each	0.3acre and 1 for 20000 pop	1 acre/20000 population	1 acre/20000 population	0.5 acre/20000 population	1 acre/20000 population
Health Center	354 person per bed	527 person per bed	Ward basis	Ward basis	1 bed/ 1000 persons	1 bed/ 354 person	Dispensary, Maternity/Child Care: 1 acre/5,000 population Health Center, Hospital: 5 acre/20000 population	Maternity/Health Center 1 acre/5,000 population Upazila Health Complex, Hospital 10-20 acre/Upazila HQ	Maternity/ Child Care: 1 acre/20,000 population Clinic 0.25 acre/20000 population General Hospital 5 acre/ 50 Bed or 1 in each Paurashava Specialized Hospital 1 acre/ Paurashava	Maternity/ Clinic 1 acre/5,000 population Upazila Health Complex, Hospital 10-10 acre/Upazila HQ
Graveyard	1 per 50,000 popn.	--	Ward basis	Ward basis Area: 2		5acre/20000	5 acre/20000 population	1 acre/20000 population	1 acre/20000 population	5 acre/20000 population
Eidgah								0.5 acre/20000 population	2 acre/20000 population	0.5 acre/20000 population
Market	1 in each ward/spz Area: 0.30 acre	1 for 45,000 popn. Area: 0.30 acre	Ward basis Area: 0.30 acre	Ward basis Area: 0.30 acre	Katcha Bazar: One in Each Ward, 0.30 acre each	Kitchen Market: 1 for 50000 with 0.30 acre each	Market, Shop, Office 1.5 acre per 1,000 population	Wholesale/ Retail market 1 acre per 1,000 population Corner Shop 0.25 acre/ shop Neighborhood Market 1 acre/ market	Wholesale market 3-5 acre per Paurashava Cattle Market/Hat 1-1.5 acre/Paurashava Corner Shop 0.25 acre/ shop Retail/ Neighborhood Shops 0.5 acre/ 10,000 population	Wholesale / Retail market 1.5 acres/10000 population Cattle Market/Hat 1-1.5 acre/Paurashava Corner Shop 0.25 acre/ shop Neighborhood Market 1.5 acre/ market

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Facilities	RMDP	KMDP	DMDP	DAP	Barisal	Sylhet	Upazila Shahar	UTIDP	Small Town	Meherpur Paurashava
Year	2004	2000	1995	2010	2010	2010	1980		2013	2019
								Super Market 1.5-2.5 acre/market	Shopping Complex 0.5 acre/20,000 population	Super Market 1.5 acre/market
Industry							Small Scale Industry 1.5 acre per 1,000 population	Small Scale/Cottage/ Agro based industry 1 acre/1000 pop	General/Cottage/ Agro based industry 2-5 acre/10,000 pop Heavy Industry 10-15 acre/ Paurashava	Industry 1.5 acre per 1,000 population
Post Office	1 for 20,000 popn. Area: 0.50 acre	--	--	1 for 35,000 pop, Area: 0.10 acre		0.5 acre/20000 pop	0.5 acre/20000 pop	0.5 acre/20000 pop	0.5 acre/20000 pop	0.5 acre/20000 pop
Fire Station	Area: 1 acre	--	--	1 for every 4 wards Area: 1 acre				1 acre/20000 pop	1 acre/20000 pop	1 acre/20000 pop
Police Out Post	--	--	--	Ward wise Area: 0.10 acre			Police Station 2 acre/20000 pop	Police Station 3-5 acre/Upazila HQ	Police Station 3-5 acre/ Paurashava	Police Station 2 acre/20000 pop
								Police Out Post/ Box 0.5 acre/box	Police Box 0.5 acre/box	
Religious facilities	--	--	1 mosque for 3,000 pop, Area: 0.30 acre	1 mosque for 6,000 popn. Area: 0.30 acre			0.5 acre/20000 population	0.5 acre/20000 population	0.5 acre/20000 population	0.5 acre/20000 population
Transport Facilities							Bus/Ghat/Rail Station 1 acre/20000 population	Bus Station/Ghat 1 acre/20000 population	Bus/Ghat/Truck Terminal 1 acre/ Paurashava	Bus Terminal 1 acre/ 20000 population
								Truck Terminal 0.5 acre/20000 population	Bus Stand 0.5 acre/20000 population	Truck Terminal 0.5 acre/ 20000 population
								Railway Station 2 acre/20000 population	Railway Station 4 acre	Railway Station 1 acre/20000 population
								Baby Taxi/ Tempo/Rickshaw/Van Stand or Passenger Shed 0.25 acre/ stand or Shed acre/20000 population	Tempo/Rickshaw/Van Stand 0.25 acre/ stand	Tempo/Rickshaw Stand 0.25 acre/ stand
									Fuel/Filling Station 0.5 acre/20000 population	
Solid Waste			Solid Waste Processing Yard 3-5 acre						Waste Disposal Ground 2-3 acre	1 acre/20000 pop

Proposed Standards for Meherpur Paurashava

Urban planning is essential for sustainable development, ensuring optimal land use and the equitable distribution of facilities. Meherpur Paurashava, a vital administrative and commercial hub of the district, requires comprehensive planning standards to address its growing population and diverse needs. These standards aim to guide the development of residential, commercial, industrial, and recreational spaces while ensuring adequate infrastructure for transportation, education, healthcare, and public amenities. The standards are suggested by analyzing the present and future settings with several planning standards of different authorities in Bangladesh.

Landuse Components		Standards for Meherpur Paurashava	Remarks
General Landuse	Administrative	Upazila Complex 5-10 acres	At present about 3 acres
		Paurashava Office 1.5-3 acres	At present about 1 acre
		Jail/ Sub Jail 10 acres	At present about 5 acres
	Residential	General Residential 70-120 person/ acre	In 2043, the projected population density will be about 75
		Real State 100-150 person/ acre	According to the standards of UDD for Small Towns of Bangladesh
Education	Primary/ Kindergarten School	Elementary / Nursery/Kindergarten School 1 Acre /5,000 population	According to the standards of UDD for Small Towns of Bangladesh
		1 Primary school/2,000 population, Area 1-1.5 Acre	At present 12 schools, serving almost 4000 population per school
	High School/ Intermediate College	High School/Intermediate College 1 school/10,000 population, Area 2-3 Acre	At present 6 high schools
	College/University	College/University 5-10 acre/20,000 population	At present 5 Colleges
		1 Vocational Training Center, Area 5 acre	At present 1 Vocational Training School
Open Space and Recreation	Park/Open Space	Playfield/ Playground: 0.15 acre/1000 population	According to the standards of UDD for Small Towns of Bangladesh
		Community/ Neighborhood Park: 1 acre/ 10,000 population	According to the standards of UDD for Small Towns of Bangladesh
		1 Central Park, Area 5 acre	According to the standards of UDD for Small Towns of Bangladesh
		Stadium 5-10 acre	According to the standards of UDD for Small Towns of Bangladesh
		Cinema Hall 0.5 acre/20000 population	According to the standards of LGED Meherpur Paurashava MP
Community Services	Community Center	1 for each ward, Area 0.15 Acre	Analyzing Present and Future Status
	Graveyard	1 acre/20000 population	According to the standards of UDD for Small Towns of Bangladesh
	Eidgah	1 acre/20000 population	Analyzing Present and Future Status
	Religious facilities	0.5 acre/10000 population	Analyzing Present and Future Status

Landuse Components		Standards for Meherpur Paurashava	Remarks
Health Care		Maternity/ Child Care: 1-1.5 acre/10,000 population	Analyzing Present and Future Status
		General Hospital 5-10 Acre	At present 1, 250 bed district hospital
		1 Specialized Hospital Area 1.5-2 acre	Analyzing Present and Future Status
Commercial & Industrial	Market	Wholesale market 3-5 acre	According to the standards of UDD for Small Towns of Bangladesh
		Cattle Market/Hat 1-1.5 acre	According to the standards of UDD for Small Towns of Bangladesh
		Katcha Bazar/ Neighborhood Market 0.15 acre/ 5,000 population	At present around 30 acres
		Shopping Complex 0.5acre/20000 population	According to the standards of UDD for Small Towns of Bangladesh
	Industry	Small Scale/Cottage/Agro based industry 2-5 acre/10,000 pop	According to the standards of UDD for Small Towns of Bangladesh
Govt. Services & Utility	Post Office	0.5 acre/20000 pop	According to the standards of LGED Meherpur Paurashava MP
	Fire Station	1 acre/20000 pop	According to the standards of LGED Meherpur Paurashava MP
	Police Out Post	Police Station 3-5 acre	According to the standards of UDD for Small Towns of Bangladesh
		Police Box 0.5 acre/box	According to the standards of UDD for Small Towns of Bangladesh
	Solid Waste	1 Waste Disposal Ground 2-3 acre	Analyzing Present and Future Status
Transport & Communication	Transport Facilities	1 Bus Terminal 1 acre/20000 population	Analyzing Present and Future Status
		1 Truck Terminal, Area 5 acre	Analyzing Present and Future Status
		Leguna/Rickshaw/Van Stand 0.25 acre/ stand	According to the standards of LGED Meherpur Paurashava MP
		Railway Station 4 acre	According to the standards of UDD for Small Towns of Bangladesh

Conclusion

The use of planning standards in land use planning is crucial for densely populated and resource-constrained countries like Bangladesh, particularly for the backward areas such as Meherpur Paurashava. Incorporating authentic and context-specific planning standards can significantly enhance decision-making and ensure efficient land utilization, reducing the risks of resource misallocation. This study emphasizing the critical importance of allocating land appropriately for specific purposes to meet both current and future needs. By adopting these measures, Meherpur Paurashava can establish a sustainable and efficient model for land use planning, contributing to the broader development goals of Bangladesh.