

**People's Republic of Bangladesh  
Ministry of Local Government,  
Rural Development and Cooperatives  
Local Government Division  
Local Government Engineering Department**

**People's Republic of Bangladesh**

**Preparatory Survey on  
the Northern Region Rural Development  
and Local Governance Improvement Project**

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## Abbreviations and acronyms

AADT	Annual Average Daily Traffic
ACE	Additional Chief Engineer
ADB	Asian Development Bank
ADP	Annual Development Program
AE	Assistant Engineer
ARAP	Abbreviated Resettlement Action Plan
ARIPO	Acquisition and Requisition of Immovable Property Ordinance
BARD	Bangladesh Academy for Rural Development
BBS	Bangladesh Bureau of Statistics
BC	Bituminous Carpeting
BCR	Benefit Cost Ratio
BDT	Bangladesh Taka
B MDF	Bangladesh Municipal Development Fund
BME	Benefit Monitoring and Evaluation
BOQ	Bill of Quantities
BPC	Bangladesh Planning Commission
BRDB	Bangladesh Rural Development Board
BRTA	Bangladesh Road Transport Authority
CBO	Community-based Organization
CBRS	Community-based Road Safety
CC	Cement-concrete
CE	Chief Engineer
CEO	Chief Executive Officer
CI	Corrugated iron
CIDA	Canadian International Development Agency
CPTU	Central Procurement Technical Unit
CRDP	City Region Development Project
CVD	Commercial Vehicles per Day
DANIDA	Danish International Development Agency
DC	Deputy Commissioner
DFID	Department for International Development
DG	Director General
DMC	District Maintenance Committee
DOC	Department of Cooperatives
DOE	Department of Environment
DPD	Deputy Project Director
DPHE	Department of Public Health Engineering
DPP	Development Project Proposal
DRSC	District Road Safety Committee
DRUC	District Road Users Committee
DSAE	Draftsman cum Sub-Assistant Engineer
DSM	Design, Supervision and Monitoring
DTIDP	District Town Infrastructure Development Project
EA	Executing Agency
ECA	Environment Conservation Act
ECC	Environmental Clearance Certificate
ECF	Extended Credit Facility
ECNEC	Executive Committee of National Economic Council
ECR	Environment Conservation Rules

EE	Executive Engineer
EIA	Environmental Impact Assessment
EIRR	Economic Internal Rate of Return
EMA	External Monitoring Agency
EMAP	Environmental Management Action Plan
EMP	Environmental Management Plan
EOI	Expression of Interest
EPS	Equipment Procurement Support
ERD	Economic Relations Division
ES	Environmental Specialist
FGD	Focus Group Discussion
FY	Fiscal Year
GC	Growth Center
GDP	Gross Domestic Product
GICD	Governance Improvement and Capacity Development
GIS	Geographic Information System
GOB	Government of Bangladesh
GRC	Grievance Redress Committee
GRDP	Gross Regional Domestic Product
GTZ	Gesellschaft für Technische Zusammenarbeit
HBB	Herringbone Bond Brick
HFL	High Flood Level
HIES	Household Income and Expenditure Survey
HILIP	Haor Infrastructure and Livelihoods Improvement Project
HLC	Horizontal Learning Center
HLP	Horizontal Learning Program
HOPE	Head of the Procuring Entity
HQ	Headquarters
IAWG	Inter-agency Working Group
ICB	International Competitive Bidding
IDA	International Development Association
IEE	Initial Environmental Examination
IFAD	International Fund for Agricultural Development
IFT	Invitation for Tender
IMED	Implementation Monitoring and Evaluation Department
IMSC	Inter-ministerial Steering Committee
INGO	Implementing Non-Government Organization
IRI	International Roughness Index
IDB	Islamic Development Bank
JBIC	Japan Bank for International Cooperation
JICA	Japan International Cooperation Agency
JMBP	Jamuna Multipurpose Bridge Project
JPY	Japanese Yen
JVT	Joint Verification Team
KCC	Khash Collection Committee
KfW	Kreditanstalt für Wiederaufbau
KII	Key Informant Interview
LCS	Labor Contracting Society
LGD	Local Government Division
LGED	Local Government Engineering Department
LGI	Local Government Institution
LGSP	Local Governance Support Project
LGSP-2	Second Local Governance Support Project

M/M	Minutes of Meeting
MDGs	Millennium Development Goals
MIDPCR	Market Infrastructure Development Project in Charland Region
MLGRD&C	Ministry of Local Government, Rural Development and Cooperatives
MMC	Market Management Committee
MMT	Mobile Maintenance Team
MOEF	Ministry of Environment and Forest
MPRC	Municipal Performance Review Committee
MSP	Municipal Service Project
MSP-2	Second Municipal Services Project
MSU	Municipal Support Unit
MTBF	Medium Term Budget Framework
NCB	National Competitive Bidding
NEC	National Economic Council
NGO	Non-Government Organization
NILG	National Institute of Local Government
NOC	No Objection Certificate
NPV	Net Present Value
NRDP	National Rural Development Policy 2001
NRRDLGIP	Northern Region Rural Development and Local Governance Improvement Project
NRSC	National Road Safety Council
NRSSAP	National Road Safety Strategic Action Plan
NUP	National Urban Policy
NUSP	National Urban Sector Policy
O&M	Operation and Maintenance
ODA	Official Development Assistance
OJT	on-the-job training
OMC	Other miscellaneous consultants
PAP	Project-Affected Persons
PAS	Project Accounting Support
PBMC	Performance-based Maintenance Contracting
PC	Publicity Campaign
PCU	Passenger Car Unit
PD	Project Director
PDP	Pourashava Development Plan
PEC	Proposal Evaluation Committee
PFMS	Project Financial Management Support
PI	Plasticity Index
PIO	Project Implementation Office
PIOMAP	Pourashava Infrastructure Operation and Maintenance Action Plan
PIU	Project Implementation Unit
PM	Person Month
PME	Performance Monitoring and Evaluation
PMMC	Pourashava Market Management Committee
PMO	Project Management Office
PMRS	Project Monitoring and Reporting Support
POC	Proposal Opening Committee
PPR 2003	Public Procurement Regulations 2003
PPR 2008	Public Procurement Rules 2008
PRAP	Poverty Reduction Action Plan
PRDP	Participatory Rural Development Project
PRDP-2	Second Participatory Rural Development Project

PSC	Project Steering Committee
PVAT	Property Valuation Advisory Team
QCBS	Quality & Cost Based Selection
RAP	Resettlement Action Plan
RCC	Reinforced Cement-concrete
RDA	Rural Development Academy
RDCD	Rural Development and Cooperatives Division
RDEC	Rural Development Engineering Center
RDP	Rural Development Project
RDPD	Regional Deputy Project Director
RDS/2005	Road Design Standards 2005
RERMP	Rural Employment Road Maintenance Program
RFP	Request for Proposal
RFQ	Request for Quotation
RHD	Roads and Highways Department
RIIP-2	Second Rural Infrastructure Improvement Project
RIMMU	Rural Infrastructure Maintenance Management Unit
RMRSU	LGED Road Maintenance and Road Safety Unit
RPF	Resettlement Policy Framework
RPM	Rehabilitation and Periodic Maintenance
RRAP	Revised Resettlement Action Plan
RRRE	Regional Rehabilitation and Resettlement Expert
RRS	Rehabilitation and Resettlement Specialist
RSDMS	Road and Structure Database Management System
RSE	Regional Superintending Engineer
RSEP	Rate Schedule and Estimate Preparation
RTIP	Rural Transport Improvement Project
RTIP-2	Second Rural Transport Improvement Project
RUMSU	Regional Urban Management Support Unit
SA	Statistical Analysis
SAE	Sub-Assistant Engineer
SBCQ	Selection Based on Consultant's Qualifications
SCF	Standard Conversion Factor
SE	Superintending Engineer
SFB	Selection under a Fixed Budget
SFYP	Sixth Five Year Plan FY2011-FY2015
SIC	Slum Improvement Committee
SIDA	Swedish International Development Cooperation Agency
SMO	Supervision and Monitoring Office
SRIIP	Sustainable Rural Infrastructure Improvement Project
SSWRDSP	Small-Scale Water Resources Development Sector Project
STIFPP	Secondary Towns Integrated Flood Protection Project
SWBRDP	South Western Bangladesh Rural Development Project
TA	Technical Assistance
TLCC	Town Level Coordination Committee
TOR	Terms of Reference
TOT	Training of trainers
UCC	Union Coordination Committees
UCCM	Union Coordination Committees Meeting
UE	Upazila Engineer
UGIIP	Urban Governance and Infrastructure Improvement Project
UGIIP-2	Second Urban Governance and Infrastructure Improvement Project
UMMC	Upazila Market Management Committee

UMSU	Urban Management Support Unit
UNDP	United Nations Development Program
UNO	Upazila Nirbahi Officer
UNR	Union Road
UP	Union Parishad
UPPRP	Urban Partnerships for Poverty Reduction Project
URDO	Upazila Rural Development Officer
URSC	Upazila Road Safety Committee
URUC	Upazila Road Users Committee
UTIDP	Upazila Town Infrastructure Development Plan
UZP	Upazila Parishad
UZR	Upazila Road
VAT	Value Added Tax
VOC	Vehicle Operating Cost
WASA	Water and Sewage Authority
WBM	Water-bound Brick Macadam
WLCC	Ward Level Coordination Committee
WMS	Women's Market Section
XEN	Executive Engineer

### List of local terms

Aman	Rice cultivated in the monsoon season
Aus	Rice cultivated in the pre-monsoon season
Beel	Relatively small surface water body such as pond or small lake with static water from internal drainage system lying depression or low land and drying up in winter
Bigha	A unit of area equal to approximately 0.13 hectare
Boro	Rice cultivated in the winter season under irrigated condition
Bundh	Small, often temporary, earthen embankment to keep out water
Char	Island in river
Choukider	Security guard
Country boat	Manually propelled rural boat, usually wooden
Engine boat	Rural boat powered by a small diesel engine, wooden or steel construction
Ghat	A rural boat landing station, often connected to a market
Haor	Surface water body with water from rivers and canals during the rainy season lying bowl-shaped large tectonic depression and drying up in winter
Hat day	Market day
KAIZEN (in Japanese)	Total quality management
Khash	Government-owned communal
Nirbahi	Executive
Parishad	Council
Pucca	Reinforced cement concrete, cement concrete, or brick with cement mortar
Banik Samity	organization of business person

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## Executive Summary

The preparatory survey for the Northern Region Rural Development and Local Governance Improvement Project (hereinafter the “Project”) was conducted in March–October 2012 in collaboration with the Local Government Engineering Department (LGED) and with the support of the Japan International Cooperation Agency (JICA). The main objectives of this survey were to conduct a study on topics that were required for appraisal of the Project, and propose a Project plan to be implemented with the support of JICA.

The main characteristics of the proposed Project are three fold. First, the Project will strengthen rural-urban connectivity and linkages from regional development perspectives. Integrating rural and urban development in one project is new to the LGED, since rural and urban interventions have been undertaken with separate projects in the past. Second, the proposed Project will allocate investment in urban infrastructure based on improvement in urban governance performance. This performance-based approach builds on successful experiences of the Urban Governance and Infrastructure Improvement Projects 1 and 2 (UGIIP-1 and 2) of the LGED. Finally, the Project will enhance sustainability of improved infrastructure by strengthening its operation and maintenance (O&M) systems and processes in rural and urban areas. The explicit incorporation of O&M in this Project reflects the lessons learned from the past projects of the LGED in which O&M of improved infrastructure has not been paid sufficient attention.

**Project Purpose.** The Project Purpose is to expand access to rural and urban infrastructures and services, and improve urban governance in the northern region of Bangladesh. This will be achieved by improving and sustaining: 1) rural infrastructures such as Upazila roads (UZRs) and Union roads (UNRs), and trading facilities such as Growth Centers and rural markets; 2) urban infrastructures, service delivery and governance of target Pourashavas; and 3) linkages between rural and urban areas.

**Project area.** The Project area covers 32,740 km<sup>2</sup> or 32% of the total land area of the country. It consists of 14 Districts, among which eight Districts are located in Rangpur Division, and six in Mymensingh area of Dhaka Division (Figure 1). The target groups of the Project comprise 33 million people or 23.1% of the total population of Bangladesh in 2011. The target group in Rangpur Division is 16 million people whereas that in Mymensingh area of Dhaka Division is 17 million people.

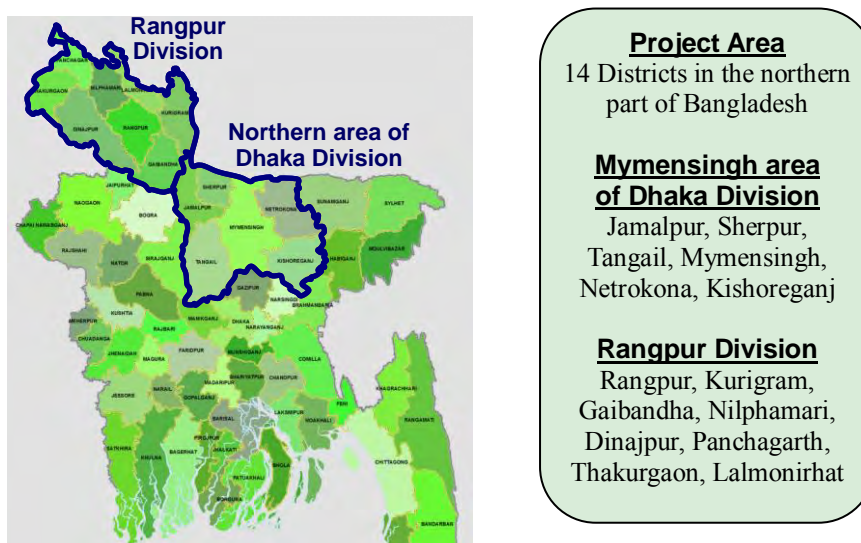


Figure 1 Project area of the NRRDLGIP

**Main beneficiaries.** The main beneficiaries of the Project include: 1) users of rural infrastructures improved in the Project area; 2) urban residents of the target Pourashavas who use basic infrastructures and receive public services; and 3) destitute women who participate in Labor Contracting Societies (LCS) that will carry out off-pavement routine maintenance and tree plantation and caretaking on Project roads.

**Rationale.** The Sixth Five-Year Plan (SFYP) of the Government of Bangladesh (GOB) identifies rural infrastructure development and capacity development of Local Government Institutions (LGIs) as key strategies to achieve its goals. In addition, the draft National Urban Sector Policy stresses the importance of rural-urban linkages and integrated rural-urban development as a key strategy. The proposed Project plan is consistent with that plan and policy, since the Project will improve the condition of infrastructure in rural and urban areas and rural-urban linkages, and local governance and service delivery of urban areas in the Project area.

The Project area is one of the most economically lagging areas of the country. The poverty rate in the Project Districts is 51.1%, much higher than the national average 40.0% in 2005. Access to all-weather standard Upazila roads and Union roads in the Project area are 70% and 28% respectively, which are lower than the respective national averages of 72% and 40%. Although the Project area is predominantly rural, 4.4 million or 13.4% of the population in the Project area lived in the urban area in 2001. The urban population has been increasing rapidly in recent years, and urban infrastructure and public services of LGIs have become increasingly important. In particular, Pourashavas surrounded by rural areas are expected to grow as nuclei of rural-urban linkages that will promote dynamic, integrated rural and urban development in the future.

The average population of Pourashavas in categories B and C in the Project area are 43,100 and 30,500, respectively, which is considerably smaller than 94,800 of Pourashavas in category A (Population Census 2001). The average population density of those Pourashavas reaches nearly 3,000 persons per km<sup>2</sup>. The preparatory survey revealed that the needs of assistance are considerable for basic infrastructure and capacity development in Pourashavas, particularly those in categories B and C, in the Project area.

**Approaches.** First, the Project will further develop rural infrastructure in the Project area by: 1) ensuring consistency with SFYP, Rural Development Policy, and Rural Roads Master Plan of the Government; and 2) building on the achievements and lessons from completed and ongoing projects of LGED such as the South Western Bangladesh Rural Development Project (SWBRDP), the Rural Transport Improvement Projects (RTIP-1 and 2), and the Sustainable Rural Infrastructure Improvement Project (SRIIP).

Second, the Project will improve basic infrastructure, service delivery, and local governance of Pourashavas by: 1) ensuring consistency with the draft National Urban Sector Policy; 2) supporting Pourashavas in categories B and C to grow as nuclei of integrated rural and urban development; and 3) complementing urban sector projects of the LGED such as the UGIIP-1 and 2, the Municipal Support Project (MSP), and the City Region Development project (CRDP).

Finally, the Project will improve rural-urban linkages from regional development perspectives, aiming to generate extra benefits that could not be achieved if rural and urban interventions were implemented separately. To achieve this, the Project will select and improve governance of category-B and C Pourashavas in rural areas, and select subprojects that can improve connectivity between those Pourashavas and adjacent rural areas.

**Project period.** The proposed Project duration is six years, starting from July 2013 and competing in June 2019.

**Components.** The Project supported by the yen-loan scheme of JICA will consist of the following four components: 1) rural infrastructure development; 2) urban infrastructure and governance improvement; 3) project implementation support; and 4) project administration support. In addition to the yen-loan supported Project, technical assistance (TA) will be considered for local governance improvement that will complement and strengthen the yen-loan Project.

**Component 1 (rural infrastructure development).** This component will develop and sustain rural infrastructure in the Project area by implementing eight Subcomponents presented below. Local contractors will be used for works in Component 1 to contribute to the creation of local employment.

The UZR and UNR make up the core rural road network that is given high priority in Rural Roads Master Plan. In addition, high economic returns are expected from investment in Growth Centers and rural markets since these investments directly improve trading and are typically low cost with high economic benefits. Ghats in *haor* areas in Kishoreganj and Netrokona Districts play a prominent role in trading as much as rural roads. For those reasons, the following investments are made under Component 1.

Subcomponent 1-1 will upgrade UZR with bridges and culverts in the Project area. The UZR selected for upgrading are total 69 and 637 km. The numbers of the bridges exceeding 100 m are three.

Subcomponent 1-2 will upgrade UNR with bridges and culverts in the Project area. The UNR selected for upgrading are total 47 and 332 km. The number of the bridges exceeding 100 m is one.

Subcomponent 1-3 will rehabilitate UZR with bridges and culverts in the Project area. The UZR selected for rehabilitation in Phase 1 are total 11 and 152 km. The selection of UZR for rehabilitation in Phase 2 will be done at the implementation stage of the Project.

Subcomponent 1-4 will improve Growth Centers and rural markets in the Project area. The Growth Centers and rural markets selected for improvement are 70 and 74 in total, respectively.

Subcomponent 1-5 will improve ghats in the Project area. 20 ghats in total in Kishoreganj and Netrokona Districts will be selected at the implementation stage by the participatory process.

Subcomponent 1-6 will implement a poverty reduction program through the use of LCS that consists of destitute women in the Project area. The LCS will conduct off-pavement routine maintenance and tree plantation on embankment slopes of Project roads.

Subcomponent 1-7 will implement a participatory Community-based Road Safety (CBRS) program that will help local people mitigate any adverse effects arising from road improvement subprojects, and improve road safety in the Project area. The soft aspects of road safety such as capacity development are included in this subcomponent whereas the hard ones are included in Subcomponents 1-1, 1-2, and 1-3.

Subcomponent 1-8 will implement training and capacity development for agencies and people involved in Component 1, including the LGED officials, members of LCS, Women Market Sections (WMS), and Market Management Committees (MMC), local contractors, and CBRS program participants.

**Component 2 (urban infrastructure and governance improvement).** This component will improve urban infrastructure, service delivery, and local governance, and consist of two subcomponents: Subcomponent 2-1 (urban infrastructure development and service delivery); and Subcomponent 2-2 (governance improvement and capacity development). The Project will support 18 Pourashavas in categories B and C, among which 10 and 8 are located in Rangpur Division and Mymensingh area of

Dhaka Division, respectively.

Subcomponent 2-1 will develop basic urban infrastructures and service delivery in Pourashavas in the Project area. The types of subprojects include the following: 1) Pourashava roads including bridges and culverts; 2) drains; 3) municipal markets; 4) slaughterhouses; 5) water distribution networks and tubewells; 6) public and community toilets; 7) solid waste management; 8) bus and truck terminals; 9) streetlights; 10) parking areas; and 11) basic infrastructures for the poor (e.g., construction and improvement of footpaths, drains, dustbins, tubewells, toilets and streetlights in slums). Local contractors will be used for works to contribute to the creation of local employment.

One of the salient features of this subcomponent is that target Pourashavas will select the subprojects at the implementation stage of the Project. The subprojects will be selected from the investment plan under the Pourashava Development Plan (PDP) that each target Pourashava will formulate through a participatory planning approach under Subcomponent 2-2.

Subcomponent 2-2 will improve governance and develop the capacity of Pourashavas in the Project area. This subcomponent consists of the two main activities: 1) strengthen institutional foundations of Pourashavas; and 2) implement the Urban Governance Improvement Action Plan (UGIAP).

The first activity under Subcomponent 2-2 will assist target Pourashavas in laying institutional foundations for good governance, such as the establishment of a Town Level Coordination Committee (TLCC) and Ward Level Coordination Committees (WLCCs) and the formulation of a PDP. The second activity will improve the following six areas of governance in target Pourashavas: 1) citizen awareness and participation; 2) improvement of urban planning; 3) women's participation; 4) integration of the urban poor; 5) financial accountability and sustainability; and 6) administrative capacity.

**Component 3 (project implementation support).** This component will support project implementation through consultancy services consisting of three subcomponents: 1) design, monitoring and supervision (DSM); 2) governance improvement and capacity development (GICD); and 3) benefit monitoring and evaluation (BME).

Subcomponent 3-1, i.e., DSM, will provide engineering services for design, supervision, and monitoring for the implementation of Component 1 (rural infrastructure development) and Subcomponent 2-1 (urban infrastructure development and service delivery). Subcomponent 3-2, i.e., GICD, will provide a broad range of technical services for the implementation of Subcomponent 2-2 (governance improvement and capacity development). Subcomponent 3-3, i.e., BME, will provide technical services for overall benefit monitoring and evaluation of the entire Project.

**Component 4 (project administration support).** This component will provide administrative support for the Project Management Office (PMO) of the Project at the LGED headquarters, consisting of administrative assistants for: 1) project monitoring and reporting support (PMRS); 2) project accounting support (PAS); 3) equipment procurement support (EPS); 4) project monitoring and evaluation (PME); 5) statistical analysis (SA); and 6) public campaigns (PC).

**Technical assistance.** In addition to the yen-loan Project in Components 1-4, technical assistance (TA) with JICA grant assistance will be considered. This TA will aim to create synergy between the yen-loan Project and the TA. It will strengthen the institutional capacity of the urban wing of the LGED to support capacity development of Pourashavas for improved public service delivery in infrastructure project implementation and good governance.

The main activities of this TA will be to: 1) strengthen the organizational structure of the LGED urban wing; 2) enhance the capacity of the LGED urban wing; 3) establish training modules in key areas of



capacity development in Pourashavas; 4) carry out pilot activities by the urban wing of the LGED to improve the Pourashava capacity in key areas; and 5) enhance the horizontal learning program (HLP) on public service delivery of Pourashavas.

The TA will directly contribute to the yen-loan Project in two main aspects: 1) elaboration of guidelines and manuals; and 2) implementation of pilot activities. These activities will be conducted as part of the development of training modules in the yen-loan Project. In addition, the TA will indirectly contribute to the yen-loan Project through the HLP, in which all Pourashavas in the Project area, targeted and non-targeted ones alike, will learn good practices from their peers to improve their service delivery and governance.

**Implementation schedule.** The Project will start in July 2013 which is at the beginning of FY 2013/14. During the first Project year, the major activities will be the preparation and establishment of the PMO and the UMSU at the LGED headquarters, and other management offices at Regional, District, Upazila, and Pourashava levels, selection and survey of subprojects, selection of consulting firms, procurement of vehicles and equipment, and preparation of capacity development programs for Components 1 and 2. During the second Project year, almost of all the construction works and capacity development programs for Component 1 and 2 will start, and they will reach their peak period during the third and fourth Project years. During the fifth Project year, most of construction works for Component 1 will be completed, while the subproject construction works and capacity development programs for Component 2 will continue. The sixth Project year is reserved for implementation of delayed works caused by unforeseen events for Component 1, and for completion of construction works and capacity development programs for Component 2.

**Selection of subprojects.** A summary of proposed infrastructure subprojects under Component 1 is presented in Table 1. The selection of the subprojects in Component 1 has been undertaken by setting the selection criteria for the upgrading of UZR and UNR (Subcomponents 1-1 and 1-2), the rehabilitation of UZR (Subcomponent 1-3), and the improvement of Growth Centers and rural markets (Subcomponent 1-4). The selection criteria for UZR and UNR emphasize economic return on investment, give high priority to subprojects in poor areas, aim to improve access and connectivity, and minimize land acquisition and resettlement. Those for Growth Centers and rural markets emphasize economic return on investment, put high priority in poor areas, target markets that have not been recently improved under other projects, have or will have all-weather road access, and will generate sufficient funds from leasing to cover subsequent maintenance costs. The ghat improvement subprojects (Subcomponent 1-5) will be selected at the implementation stage through a participatory process that will emphasize local priorities for improve access.

The Project will take a participatory approach for the selection of subprojects under Subcomponent 2-1. The eligible types of infrastructure and the eligibility criteria for selection have been identified. At the implementation stage of the Project, the target Pourashavas under the Project will determine their subprojects from the eligible types and by applying the eligibility criteria in a participatory manner.

Subprojects of Subcomponent 2-1 must be selected and listed in an investment plan that constitutes an integral part of the PDP. The PDP formulation process will be the key for the Project to ensure participation of a broad range of stakeholders of Pourashavas, and enhance transparency and accountability of actions taken by Pourashavas.

**Table 1 Proposed infrastructure subprojects in Component 1**

Districts	UZR Upgrading		UNR Upgrading		UZR Rehabilitation			Growth Centers	Rural markets	Ghats
	No.	km	No.	km	Phase 1		Phase 2			
					No.	km	No.	km	No.	No.
Jamalpur	6	40.05	1	3.00				4	3	
Kishoreganj	3	26.75	10	55.83				9	8	12
Mymensingh	8	83.03	4	29.30				7	16	
Netrokona	4	43.91	6	31.51				2	1	8
Sherpur	4	49.15	1	9.44				6	6	
Tangail	8	89.41	4	28.58				11	5	
Dinajpur	9	68.54	4	27.46	2	19.40		14	11	
Gaibandha	4	48.72	3	19.48				2	1	
Kurigram	3	22.90	6	36.75	2	9.91		2	8	
Lalmonirhat	3	27.77	2	23.25						
Nilphamari	4	32.17	2	15.75	2	37.68		2	7	
Panchagarh	4	35.31	1	6.42	2	32.00		3	6	
Rangpur	5	44.38	2	34.29	3	52.65		3	2	
Thakurgaon	4	25.20	1	10.45				5		
<b>Total</b>	<b>69</b>	<b>637.29</b>	<b>47</b>	<b>331.51</b>	<b>11</b>	<b>151.64</b>	<b>148</b>	<b>70</b>	<b>74</b>	<b>20</b>

**Selection of Pourashavas.** The proposed Pourashavas to be supported under the Project are listed in Table 5. These target Pourashavas fall under categories B and C. They have potentials to grow as nuclei of development and poverty reduction in rural areas, and will enhance linkages and complementarity between rural and urban areas. Among the 48 Pourashavas in categories B and C in the Project area, 18 are proposed for support by the Project. The selection of the target Pourashavas has been undertaken by applying criteria that consider the following: 1) complementarity; 2) regional balance; 3) lagged areas; 4) needs of infrastructure improvement; 5) financial status; 6) urbanization; 7) economic potential; and 8) preparedness.

**Table 2 List of candidate Pourashavas**

No.	Division	District	Pourashava	Category	Final score	Ranking among 44 Pourashavas	Ranking within each District
1	Rangpur	Kurigram	Ulipur	B	30.84	1	1
2	Dhaka	Tangail	Kalihati	B	30.81	2	1
3	Dhaka	Mymensingh	Nandail	C	30.24	3	1
4	Dhaka	Jamalpur	Dewanganj	C	29.59	4	1
5	Dhaka	Sherpur	Sreebardi	C	28.53	5	1
6	Rangpur	Dinajpur	Fulbari	B	27.55	6	1
7	Dhaka	Mymensingh	Phulpur	B	27.46	7	2
8	Rangpur	Nilphamari	Jaldhaka	C	27.29	8	1
9	Rangpur	Rangpur	Haragach	C	27.27	9	1
10	Dhaka	Jamalpur	Melandah	C	26.59	10	2
11	Rangpur	Thakurgaon	Pirganj	B	25.77	13	1
12	Rangpur	Gaibandha	Sundarganj	C	25.25	14	1
13	Rangpur	Dinajpur	Birganj	B	24.51	15	2
14	Rangpur	Kurigram	Nageswari	B	24.50	16	2
15	Dhaka	Tangail	Madhupur	B	24.30	18	2
16	Rangpur	Rangpur	Badarganj	B	22.60	23	2
17	Dhaka	Kishoreganj	Pakundia	C	22.20	24	1
18	Rangpur	Thakurgaon	Ranishankail	C	21.75	25	2

**Economic appraisal.** The infrastructure subprojects in Component 1 and Subcomponent 2-1 are expected to bring benefits in a number of development sectors and for different beneficiaries such as: 1) rural transport—transport operators and passengers; 2) local industry—farmers and fishers; 3) real estate—land owners; 4) trade—producers, traders, consumers and government; 5) employment—local residents and destitute people; and 6) gender—female shopkeepers and rural women in general.



The results of economic appraisals of infrastructure subprojects in Component 1 and Subcomponent 2-1 are presented in Table 3. The reasonably high EIRRs of subprojects in both Component 1 and Subcomponent 2-1 indicate that substantive economic benefits can be expected from the interventions by the Project.

**Table 3 EIRR of subprojects that passed the selection and appraisal procedures**

Infrastructure type	Number	Range of EIRR	Average EIRR
<b>Component 1</b>			
UZR upgrading	69	From 12% to 57%	26%
UZR rehabilitation	18	From 15% to 53%	31%
UNR upgrading	47	From 12% to 41%	21%
Growth Centers	70	From 16% to 2,076%	199%
Rural markets	126	From 12% to 1,580%	115%
<b>Subcomponent 2-1<sup>1</sup></b>			
Pourashava roads	4	From 68% to 150%	107%
Municipal markets	4	From 75% to 254%	175%
Drainage	4	From 53% to 116%	72%

Note: 1. The EIRR of Subcomponent 2-1 are estimated for Pourashava roads, municipal markets, and drainage in four sample Pourashavas—Ulipur in Kurigram District, Haragach in Rangpur District, and Gouripur and Nandail in Mymensingh District.

The Project is expected to generate a synergy effect by coordinating rural and urban subprojects under Component 1 and Subcomponent 2-1, respectively. The economic appraisal of the sample Pourashava markets showed a 3% to 29% increase from the standard EIRR, indicating tangible impacts of synergy effect of Component 1 and Subcomponent 2-1 (Table 4). The range of EIRR is generated by the type of commodities transported via the respective rural roads. The rate of improvement in EIRR is higher when the roads transport high-value, most perishable commodities such as fish, meat, and vegetables. This indicates that strategic selection of roads and market, with consideration of each market and transport demand, is critical to achieving higher economic benefits.

**Table 4 Sample economic appraisal of Pourashava markets**

*Name of Pourashava:* Ulipur

*Name of market:* Ulipur Kacha Bazar

Items	Commodities transported	EIRR	NPV (million BDT)
1. Standard EIRR/NPV		233%	132
2. EIRR/NPV when “Hatia to Ulipur Bazar road” is improved	Rice, paddy	245%	139
3. EIRR/NPV when “Kurigram to Ulipur por Kacha Bazar Road” is improved	Fish, meat, vegetables	270%	154

*Name of Pourashava:* Haragach

*Name of market:* Haragach Pourashava Market

Items	Commodities transported	EIRR	NPV (million BDT)
1. Standard EIRR/NPV		75%	29
2. EIRR/NPV when “Rangpur to Haragach Por Road” is improved	Rice, wheat flour, fish, fruits, poultry, vegetables	94%	39
3. EIRR/NPV when “Sarai to Haragach Por Road” is improved	Paddy	76%	30
4. EIRR/NPV when “Khansama to Haragach Por Road” is improved	Meat	78%	31

**Environmental and social considerations.** The Project will fulfill the requirements of the following: 1) national laws and regulations such as Environment Conservation Act 1995, Environment Conservation Rules (ECR) 1997, and Acquisition and Requisition of Immovable Property Ordinance

1982; and 2) JICA Guidelines for Environmental and Social Considerations 2010.

The types of subprojects classified under Orange B and Red categories as per the ECR and actions to be taken for those subprojects in the Project are summarized in Table 5. The LGED and concerned Pourashavas will conduct Environment Impact Assessment (EIA) and Initial Environmental Examination (IEE) at the implementation stage of the Project, where required. In addition, an Abbreviated Resettlement Action Plan (ARAP) must be prepared for each subproject that is confirmed to cause involuntary resettlement of less than 200 people. The draft Environmental Framework and the draft Resettlement Policy Framework prepared will guide the LGED and concerned Pourashavas to take necessary actions to fulfill requirements of the national laws and regulations and the JICA Guidelines. In addition, the draft EIA, IEE, and ARAPs prepared for sample subprojects will be reference materials when the LGED and concerned Pourashavas prepare those documents.

**Table 5 Categorization of subprojects under the Environmental Conservation Rules 1997**

Type of subprojects	Category	Action	Responsible agencies
<b>Component 1</b>			
• Construction of bridges over 100 m	• Red	• IEE and EIA	LGED
• Upgrading and rehabilitation of UZR and UNR	• Orange B	• IEE	
• Construction of bridges below 100 m			
<b>Component 2</b>			
• Rehabilitation and expansion of water distribution networks	• Red	• IEE and EIA	Pourashavas with support of LGED
• Construction of solid waste management facilities			
• Improvement and rehabilitation of Pourashava roads	• Orange B	• IEE	
• Construction of bridges below 100 m			
• Construction of public and community toilets			

Note: Other subprojects may be categorized as Orange B depending on the type of civil works, e.g., improvement or construction of markets, and bus and truck terminals with toilets.

**Institutional arrangements for implementation.** The LGED will be the executing agency of the Project, and will create the Project Management Office (PMO) at the national level (Figure 2). The Project Director (PD) will head the PMO, and three Deputy Project Directors (DPDs) will support the PD for Component 1, Subcomponent 2-1, and Subcomponent 2-2, respectively. The PMO will coordinate with the Urban Management Support Unit (UMSU) of the LGED to implement Component 2.

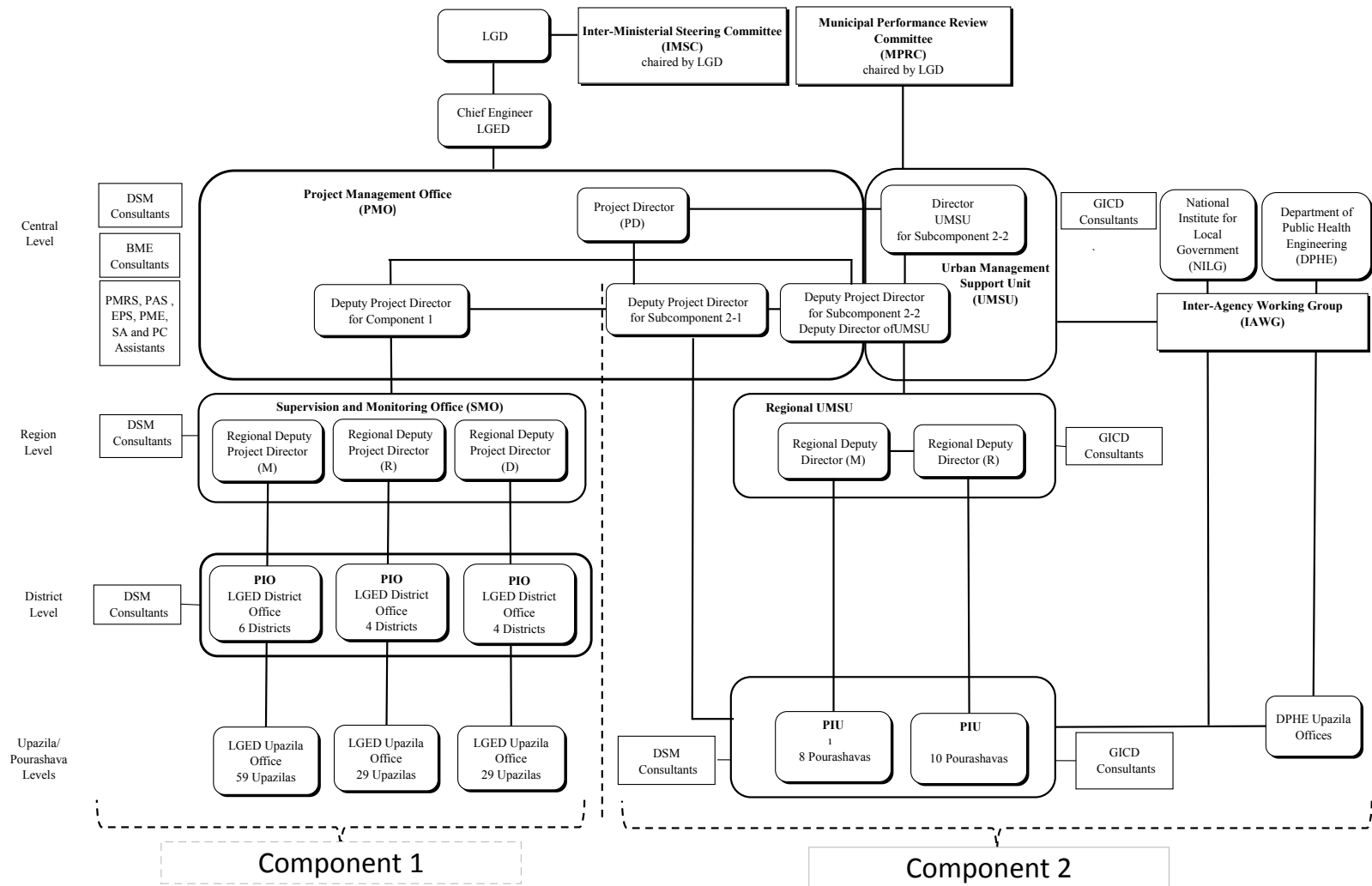
The Inter-Ministerial Steering Committee (IMSC) for the Project, chaired by the Secretary of the Local Government Division (LGD), will be the highest supervisory body of the Project, tasked to review the progress and guide the implementation of the Project. At the working level, the Inter-Agency Working Group (IAWG) for the Project will be responsible for: 1) reviewing implementation of infrastructure development and governance improvement of Pourashava (Component 2); 2) providing necessary consultation for formulation of modules and materials for capacity development of Pourashava; 3) sharing good practices on governance improvement of Pourashava; and 4) collecting recommendations to provide support for Pourashava and proposing them annually to the LGD through the IMSC. Furthermore, the Municipal Performance Review Committee (MPRC) chaired by the Secretary of the LGD will be established as in other LGED urban projects to undertake performance evaluation of the UGIAP with a view to enhancing transparency and accountability of the Project.

At the sub-national level, Components 1 and 2 will be implemented through different institutional arrangements. For Component 1, three Supervision and Monitoring Offices (SMOs) headed by Regional Deputy Project Directors (RDPDs) will be created at LGED Regional offices in Mymensingh, Rangpur, and Dinajpur Regions. The SMOs are tasked to prepare subproject implementation plans in

respective Regions, and design and monitor subproject construction work with stakeholders. Furthermore, 14 Project Implementation Offices (PIOs) will be established at LGED District offices to prepare individual subproject implementation plans in respective Districts, carry out investigations and surveys, and design them with the support of the PMO and the SMOs. The PIOs will also supervise construction activities and make expenditures, and ensure quality of construction works in subprojects. Under the supervision of PIOs, LGED Upazila offices will implement subprojects and ensure participation of stakeholders in respective Upazilas.

Regarding Component 2, a Project Implementation Unit (PIU) will be created at each Pourashava supported by the Project. The PIU will be headed by the Pourashava mayor, and tasked to implement infrastructure subprojects in Subcomponent 2-1 and the UGIAP in Subcomponent 2-2. The PMO will coordinate at the Regional level with Regional Deputy Directors at Regional UMSUs in Mymensingh and Rangpur Divisions in providing support for PIUs.

The PMO, SMOs, PIOs, UMSU, RUMSUs, and PIUs will be supported by consultancy services in the following aspects: 1) design, supervision and monitoring (DSM) for Component 1 and Subcomponent 2-1; 2) governance improvement and capacity development (GICD) for Subcomponent 2-2; 3) benefit monitoring and evaluation (BME) for the Project.



Source: Survey team  
 Legend: BME = Benefit Monitoring and Evaluation, D = Dinajpur Region, DPHE = Department of Public Health Engineering, DSM = Design, Supervision and Monitoring, EPS = Equipment Procurement Support, GICD = Governance Improvement and Capacity Development, M = Mymensingh Region, PAS = Project Accounting Support, PC = Publicity Campaign, PIO = Project Implementation Office, PIU = Project Implementation Unit, PME = Performance Monitoring and Evaluation, SA = Statistical Analysis, R = Rangpur Region, UMSU = Urban Management Support Unit

**Figure 2 Institutional arrangements for implementation of the Project**

**Operation and maintenance (O&M) system and process.** The Project will take a number of measures to enhance sustainability in order to ensure that the benefits to people from investment in improved rural and urban infrastructures are sustained in the long term. In Component 1, the Project will: 1) undertake rehabilitation of UZR with a yen loan; 2) conduct off-pavement routine maintenance by LCS of all roads under the Project; 3) invest in Growth Centers and rural markets that generate lease values high enough to finance routine maintenance. Under Component 2, the Project will: 1) require the preparation of an O&M action plan of urban infrastructure as part of the Pourashava Development Plan (PDP); and 2) adopt partial sub-lending to Pourashavas for revenue-generating infrastructure subprojects such as markets and bus and truck terminals.

Furthermore, the Project will implement a Rural Road Maintenance Action Plan to contribute to improving sustainability of an all-weather core rural road network (= UZR and sealed UNR) in the Project area. This action plan is consistent with the draft Rural Road Maintenance Policy.

The Rural Road Maintenance Action Plan will have the four outputs shown in Table 6.

**Table 6 Outputs of Rural Road Maintenance Action Plan**

Output 1	Project investments in rural road upgrading and rehabilitation sustained
Output 2	Sustainability of the core rural road network in the project area increased
Output 3	Rural roads maintenance policy adopted and implemented
Output 4	Rural road network performance monitoring system developed, tested, and applied

The first output focuses on the investments in improved rural roads under the Project. The second output is broader, addressing rural road maintenance at the Project area level. The third output has a national perspective. The final output is concerned with measuring the LGED's performance as a service provider in sustaining access on the rural road network.

The Road Maintenance and Road Safety Unit (RMRSU) of the LGED will take the lead in implementing this action plan, for which the Project will provide technical assistance through the DSM consultancy services. The Project will also explore the possibility to adopt Performance-Based Maintenance Contracting (PBMC), a new O&M scheme of the LGED that will be used in the Second Rural Transport Improvement Project (RTIP-2) supported by the World Bank.

The target Pourashavas under the Project will prepare and implement Pourashava Infrastructure Operation and Maintenance Action Plans (PIOMAPs) in order to strengthen their O&M capacity and enhance sustainability of benefits from infrastructure investment. They will prepare PIOMAPs as part of Pourashava Development Plans. In the PIOMAP, each Pourashava will set up and operationalize institutional arrangements for O&M, prepare and implement annual and 5-year O&M plans with citizen participation through TLCC and WLCCs, and strengthen technical capacity of concerned O&M personnel.

**Monitoring and evaluation.** The Project will conduct: 1) progress monitoring; and 2) effect monitoring and evaluation. For the progress monitoring, the PMO will prepare and submit the Annual Development Review Format on a monthly basis, the quarterly Project Monitoring Form for the Implementation Monitoring and Evaluation Department (IMED) of the Ministry of Planning, the Quarterly Progress Monitoring Report to JICA, and the Project Completion Report at the end of the Project.

Regarding the effect monitoring and evaluation, the Project will adopt the LGED Guideline 1999 for effect monitoring and evaluation. In accordance with this Guideline, the Project will: 1) conduct a baseline survey in Year 1; 2) finalize the logical framework and methods for effect monitoring and

evaluation in Year 1; and 3) conduct a mid-term assessment and a terminal assessment in line with the methodologies of Benefit Monitoring and Evaluation and Socio-Economic Monitoring and Evaluation taken by all LGED projects.

# 1 Introduction

## 1.1 Background

Bangladesh has made remarkable progress in socioeconomic development since its independence in 1971. Over the last 40 years, the real per capita income of Bangladesh increased by more than 130%, and the poverty rate was reduced by more than half.<sup>1</sup> The country's real Gross Domestic Product (GDP) growth recorded around 6% per annum on average in the 2000s, and reached 6.7% in 2011. This relatively high growth performance was accompanied by a steady decline in the national poverty rate from 56.6% in 1990 to 40% in 2005, and further down to 31.5% in 2010. Based on the robust growth performance, the Government of Bangladesh aims to reduce the national poverty rate to 15% and transform Bangladesh into a middle income country by 2021.<sup>2</sup>

The benefit of the economic growth, however, has not been broadly shared among the people of Bangladesh, and a wide poverty gap between rural and urban areas persists. The poverty rate in rural areas in 2010 was 35.2%, exceeding the poverty rate of 21.3% in urban areas by more than 10% (Table 1-1). Since 100 million people, or 70% of the total population, live in rural Bangladesh, poverty reduction in rural areas is clearly one of the most important policy issues in the country.

**Table 1-1 Headcount poverty rate in Bangladesh (%)**

Division	1995/96			2000			2005			2010		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Total	53.1	56.7	35.0	48.9	52.3	35.2	40.0	43.8	28.4	31.5	35.2	21.3
Barisal	59.9	60.6	47.7	53.1	55.1	32.0	52.0	54.1	40.4	39.4	39.2	39.9
Chittagong	44.9	47.2	29.2	45.7	46.3	44.2	34.0	36.0	27.8	26.2	31.0	11.8
Dhaka	52.0	58.9	33.6	46.7	55.9	28.2	32.0	39.0	20.2	30.5	38.8	18.0
Khulna	51.7	51.5	53.3	45.1	46.4	38.5	45.7	46.5	43.2	32.1	31.0	35.8
Rajshahi	62.2	65.7	33.9	56.7	58.5	44.5	51.2	52.3	45.2	29.7	29.0	32.6
Rangpur										42.3	44.5	27.9
Sylhet				42.4	41.9	49.6	33.8	36.1	18.6	28.1	30.5	15.0

Source: GOB (2011)

A look at poverty by region reveals that the poverty rates in the western part of Bangladesh including Rangpur, Khulna, and Barisal Divisions tend to be higher than those in the eastern part of the country including Dhaka and Chittagong Divisions. In particular, the poverty rate of Rangpur Division recorded 42.3%, the highest among the seven Divisions in 2010. Looking at poverty at the Upazila level, the poverty rate in the Mymensingh Region of Dhaka Division recorded 45.1%, which is much higher than the national average 40.0% in 2005.

In the Sixth Five Year Plan (SFYP), the Government of Bangladesh identifies regional disparities as a major concern. As a response, the SFYP set a strategy to reduce the regional disparities by further developing infrastructure, promoting industrialization, improving agricultural productivity, strengthening local governance by area-based regional development planning systems, and thereby vitalizing regional economies.

Poverty reduction in the rural area is the key to alleviating persistent disparities between urban and rural areas. The prerequisites to achieve this goal are to 1) vitalize rural economies, and 2) improve the quality of public services in rural areas.

First, a strategy to vitalize rural economies should include measures to develop rural towns and markets

<sup>1</sup> GOB (2011).

<sup>2</sup> GOB (2010).

as *nucleus* of rural development, and strengthen *rural-urban linkages*, namely the linkages between the nucleuses and their surrounding rural areas socially and economically. Potential candidates of the nucleuses would include Pourashavas (municipalities), Upazila towns, Growth Centers, and rural markets. By strengthening rural-urban linkages, both rural and urban people would greatly benefit from improved access to transport infrastructure, expanded markets, improved access to education and health services, and more job opportunities. If the rural-urban linkages are strengthened and rural economies are vitalized, this would help alleviate current pressures on rural people to migrate to large cities such as Dhaka and Chittagong.

Second, poverty reduction in rural areas will require significant improvement in the quality and quantity of public goods and services to local residents. This includes not only basic public services such as education, health, and sanitation, but also provision of basic infrastructure such as roads, bridges, and markets. The improvement in basic infrastructure will contribute to vitalizing local economies, improving access to services in health and education, and creating job opportunities.

In Bangladesh, central government has been playing the main roles in formulating policies and providing public goods and services for local people. However, local governments are also mandated by law to provide certain types of public goods and services to local people. As emphasized in the SFYP, Bangladesh aims to move toward a more decentralized governance system in which local governments would play more prominent roles in providing public goods and services to better address local needs.

## 1.2 Objectives

Against this background, the Government of Bangladesh submitted a request for a Preparatory Survey (hereinafter the “Survey”) to formulate a project entitled the Northern Region Rural Development and Local Governance Improvement Project (hereinafter the “Project”). This was followed by an agreement between the Government of Bangladesh and the Japan International Cooperation Agency (JICA) regarding the scope of the Survey as recorded in the Minutes of Meeting (M/M) signed on November 21, 2011.

The objective of the Survey is to conduct a study on topics that are required for appraisal of the Project to be implemented with the support of Japan’s yen-loan scheme. Those topics include the objectives of the Project, target area, scope and cost of the Project, implementation schedule, implementation methods (such as procurement and construction), implementation arrangements of the Project, arrangements of operation and maintenance (O&M), and social and environmental considerations. To study those topics, collect and analyze basic information, formulate the Project plan, examine implementation arrangements of the Project and arrangements of O&M, confirm items concerned with social and environmental considerations, and support preparing Development Project Proposals (DPPs).

Furthermore, the Survey will conduct capacity assessment of Pourashavas in the target area, and examine a technical cooperation project that might be necessary to develop capacity of Pourashavas in project planning, fund management, and other important municipal services.

## 1.3 Terms of Reference

The following are the detailed Terms of Reference (TOR) of the Survey.

### **TOR 1: Collect and analyze basic data and information**

- 1.1. Review the existing report, studies, and development plans, and confirm the background of the Project
- 1.2. Conduct the socioeconomic survey in the target area to assess poverty level and accessibility to services



- 1.3. Review and assess the current situation at the field level and analyze problems related to regional development in the target area
- 1.4. Review the current situation and analyze problems related to public administration mechanisms in the target area

**TOR 2: Prepare the Project plan**

- 2.1. Confirm the target area and select subprojects for the rural infrastructure development component (Component 1), with clarification of selection criteria
- 2.2. Confirm the target Pourashavas, with clarification of selection criteria, whole process and methodology for selection and prioritization of selected subprojects, and make implementation guidelines or manuals for the Pourashava capacity development component (Component 2)
- 2.3. Consider the detailed scope of the Project including the outline of consulting services
- 2.4. Consider the implementation plan of the Project, including the different tier of stakeholders' consultation
- 2.5. Estimate the project cost with different options
- 2.6. Compare the estimated project cost with other similar projects to verify the appropriateness of the project cost
- 2.7. Propose the financing plan of the Project
- 2.8. Prepare a procurement plan, methods, and packages of the Project
- 2.9. Propose an implementation schedule of the Project
- 2.10. Consider the Project effects including establishment of operation and effects indicators, baseline data, and targets, and evaluate qualitative and quantitative effects, including Economic Internal Rate of Return (EIRR) with Net Present Value (NPV) and Benefit Cost Ratio of the Project
- 2.11. Propose an outline of the required technical cooperation project for capacity development of Pourashavas

**TOR 3: Examine and prepare institutional arrangements for implementation, operation and maintenance**

- 3.1. Propose the Project implementation arrangements with definite roles and responsibilities of each concerned section of the Local Government Engineering Department (LGED) and other relevant organizations
- 3.2. Examine the necessary O&M and rehabilitation framework and structure for the Project

**TOR 4: Confirm environmental and social considerations**

- 4.1. Review the environmental and social impacts of the Project including details of land acquisition and resettlement, and prepare mitigation measures and a monitoring plan in accordance with the requirement of JICA's "Guideline for Environmental and Social Considerations"
- 4.2. Prepare: 1) Resettlement Action Plan (RAP) with explanation to the attached people against involuntary resettlement and loss of means of livelihood; and 2) Initial Environmental Examination (IEE) and/or Environmental Impact Assessment (EIA), if required, which also include considerations for the people living in the Project area, in accordance with the laws and regulations of Bangladesh as well as JICA's "Guideline for Environmental and Social Considerations"
- 4.3. Consider vulnerability of the target area and propose adaptation measures against climate change under the Project

**TOR 5: Prepare Development Project Proposal**

- 5.1. Finalize the project proposal document
- 5.2. Assist preparation of DPP based on TOR 5.1

## 2 Institutional framework for rural development and local governance

### 2.1 History and political system in Bangladesh

Bangladesh has gone through a number of changes in political systems since gaining its independence in 1971 (Table 2-1). The new-born country started as a parliamentary democracy with the promulgation of the Constitution of the People's Republic of Bangladesh in 1972. This was, however, followed by an era of autocratic regimes in which the military ruled the country from 1975 to 1990. The year 1991 marked the restoration of parliamentary democracy with general parliamentary elections. Although there was a brief period of a military-backed caretaker (interim) government in 2007-2008, parliamentary democracy was restored again in 2009 after the general parliamentary elections in 2008.

**Table 2-1 Bangladesh political systems from 1971 to the present**

Year	Political system	Dominant political party	End in
1971-1975	Parliamentary democracy	Awami League	Civilian coup d'état
1975	Civilian autocracy	Bangladesh Krishak Sramik Awami League	Military coup d'état
1975-1981	Military autocracy	Bangladesh Nationalist Party	Assassination
1982-1990	Military autocracy	Jatiyo Party	Resignation
1991-1996	Parliamentary democracy	Bangladesh Nationalist Party	Elections
1996-2001	Parliamentary democracy	Awami League	Elections
2001-2006	Parliamentary democracy	Bangladesh Nationalist Party	Take-over by caretaker government
2007-2008	Autocracy	Caretaker government	Elections
2009-present	Parliamentary democracy	Awami League	

Source: Based on a table in Van Schendel (2009), pp. 200-201. The information from 2007 to the present was added by Survey Team.

The 1972 Constitution of Bangladesh states that the country is a unitary, independent, sovereign state, and that trust and faith in the Almighty Allah, nationalism, democracy and socialism constitute the fundamental principles of state policy.<sup>3</sup>

The 1972 Constitution of Bangladesh also stipulates the promotion of Local Government Institutions (LGIs) as one of the fundamental principles of state policy, stating that “the State shall encourage LGIs composed of representatives of the areas concerned and in such institutions special representation shall be given, as far as possible, to peasants, workers and women.”<sup>4</sup>

Furthermore, the Constitution declares that rural development is one of the constitutional mandates of the country, stating that “the State shall adopt effective measures to bring about a radical transformation in the rural areas ... so as progressively to remove the disparity in the standards of living between the urban and the rural areas.”<sup>5</sup>

Finally, the 1972 Constitution stipulates that local governments shall perform functions related to: 1) administration and the work of public officers; 2) the maintenance of public order; and 3) the preparation and implementation of plans for public services and economic development, for which they are granted powers to impose taxes for local purposes, prepare their budgets, and maintain funds.<sup>6</sup>

<sup>3</sup> Article 8 (1), 1972 Constitution of Bangladesh

<sup>4</sup> Article 9, 1972 Constitution of Bangladesh

<sup>5</sup> Article 16, 1972 Constitution of Bangladesh

<sup>6</sup> Articles 59 and 60, 1972 Constitution of Bangladesh

## 2.2 Policies on rural development and local governance

### 2.2.1 National development policies

Since its independence in 1971, five-year plans have been the main national development policy of the Government of Bangladesh (GOB). The government has formulated six five-year plans as of the point of this writing. Under the present government, the *Outline Perspective Plan of Bangladesh 2010-2021: Making Vision 2021 a Reality* (Perspective Plan), the *Sixth Five Year Plan FY2011-FY2015* (SFYP), and *Millennium Development Goals* (MDGs) constitute the national development policies of this country.

#### (1) Outline Perspective Plan

The Perspective Plan is a ten-year plan that articulates the government's development vision, mission, and the goals and objectives to be achieved by 2021.<sup>7</sup>

According to the Perspective Plan, the government's *Vision 2021* for national development is to "build Bangladesh into a resilient, productive, innovative and prosperous nation with a caring society consisting of healthy, happy, and well-educated people."<sup>8</sup>

The Perspective Plan identifies rural development as "a process that encompasses the entire gamut of techno-economic and socio-political changes to relevant public and private efforts designed to increase the wellbeing of rural people."<sup>9</sup> A strategy for rural development in the Perspective Plan is "to establish a powerful autonomous local government body that is imperative to initiate and provide coordination among private and public rural development institutions."<sup>10</sup> Here, LGIs are expected to engage a wider range of institutions in collaboration with each other, including cooperatives, non-government organizations (NGOs), local financial institutions, and the private sector.

The Perspective Plan identifies rural transport infrastructure and more efficient functioning of rural markets as important in supporting rural economies. Construction and maintenance of rural road networks, in particular Upazila roads, Union roads, and village roads along with waterways, Growth Centers, and rural markets, are stressed in the plan.

The strategies for rural infrastructure in the Perspective Plan are to: 1) implement the Rural Roads Master Plan; 2) adopt a Maintenance Plan with priority on maintenance over new construction; and 3) involve LGIs more actively to ensure utilization and maintenance of constructed facilities.<sup>11</sup>

#### (2) Sixth Five Year Plan

By its design, the Perspective Plan is expected to be implemented through two successive five-year plans in the periods FY2011-FY2015 and FY2016-FY2020. The current government formulated the SFYP and put it into operation in July 2010.

The main objective of the SFYP is to reduce and ultimately eradicate poverty to ensure a "Sonar Bangla." Two specific paths were set to achieve this objective: 1) accelerate economic growth and create productive employment opportunities; and 2) ensure distributive justice.

The SFYP provides a comprehensive set of strategies to achieve the objective of the SFYP. The

<sup>7</sup> The Perspective Plan was approved on 10 May 2012 by the National Economic Council.

<sup>8</sup> Page 8, GOB (2010).

<sup>9</sup> Page 52, GOB (2011).

<sup>10</sup> Page 53, GOB (2011).

<sup>11</sup> Page 75, GOB (2011).

following are the areas of the strategies covered in the SFYP:<sup>12</sup>

- Accelerate growth and employment
- Benefit from higher labor force growth (“demographic dividend”) and ensure labor quality
- Improve factor productivity through information technology
- Reduce population growth
- Ensure food security
- Address land constraints
- Manage the special dimension of growth
- Reduce income inequality
- Ensure social protection for the under-privileged population
- Ensure gender parity
- Improve governance

The SFYP devotes an entire chapter to the issue of managing regional disparities in Bangladesh.<sup>13</sup> In the SFYP, the government expressed its concern about regional disparities in terms of poverty, income, and human development, and therefore its strong commitment to taking the necessary steps to reduce disparities.

The factors affecting regional disparities identified in the SFYP are: 1) access to Growth Centers; 2) natural disasters and weather factors; 3) access to energy; 4) availability of transport and communication systems; 5) availability of financial infrastructure; and 6) access to international migration and foreign remittances.

To address those factors affecting regional disparities, the SFYP sets out the following strategies: 1) develop infrastructure; 2) industrialize lagging regions; 3) develop agriculture and rural economic activities; 4) create opportunities for international migration; and 5) promote human development and social protection policies.

In particular, the strategy 1) above emphasizes that both inter-District and intra-District road communication systems would be developed to increase economic mobility within the lagging regions, whereas the strategy 3) stresses strengthening LGIs to conduct the government’s rural development activities through these institutions.

### **(3) Millennium Development Goals**

Bangladesh adopted the Millennium Development Goals (MDGs) during the UN Millennium Summit in September 2000. Since the end of the SFYP coincides with the terminal year for the MDGs in 2015, the MDGs have been integrated in the SFYP.

Bangladesh’s progress towards achieving the MDGs is on track for most of the targets, including poverty reduction, expansion of primary and secondary education, infant and child mortality rates, containing the spread and fatality of malaria and tuberculosis, reforestation, access to safe drinking water and sanitation latrines, especially in urban areas, and gender parity in primary and secondary education.

However, challenges remain in improving maternal health, forest cover and maintaining protected areas, especially wetlands, for bio-diversity, and access to safe drinking water and sanitary latrines particularly in rural areas. It is also a challenge to address certain pockets of poverty that are lagging far behind the

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<sup>12</sup> Pages 23-33, GOB (2011).

<sup>13</sup> Chapter 6 (Managing regional disparities for shared growth and poverty reduction), GOB (2011).

national averages—areas for which it is particularly important that the benefits of attaining MDGs reach, such as urban slums, the hill tracts, coastal belts, and other ecologically vulnerable areas.

The Perspective Plan, the SFYP, and the MDGs identify a set of indicators to measure overall achievements of the plans, and set key targets to be achieved in the respective planning periods. Table 2-2 below summarizes the key targets of the SFYP, the MDGs, and the Perspective Plan.

**Table 2-2 Key targets of SFYP, MDGs and Perspective Plan**

Targets	Current level (2005-2010)	SFYP 2015	MDGs 2015	Vision 2021
<b>A. Production, Income Generation and Poverty</b>				
1. Real income growth (%)	6.1	8.0		10
2. Head count poverty (%)	31.5	22	29	14
3. Industrial sector employment (%)	17	25		30
4. Contribution of productivity to economic growth (%)	8	10		20
5. Overseas employment of skilled labor (%)	35	50		20
<b>B. Human Resource Development (Education, Health, Population)</b>				
6. Net enrollment at primary level (%)	91	100	100	
7. Enrollment rate in 12 <sup>th</sup> grade (%)		60		100
8. Percentage of cohort reaching 5 <sup>th</sup> grade (%)	55	100	100	
9. Total fertility rate reduction	2.7	2.2		1.8
10. Increase in contraceptive prevalence rate (%)	60	72		80
11. Under-five mortality rate (per 1000)	62	50	50	
12. Immunization, measles (% of children under 12 months)	87	100	100	
13. Maternal mortality ratio (per 100,000 live births)	194	143	143	
14. Births attended by skilled health staff (percent of total)	24	50	50	
<b>C. Water and Sanitation</b>				
15. Proportion of urban population with access to safe drinking water	99.9	100	100	100
16. Proportion of rural population with access to safe drinking water	79	96.5	96.5	100
17. Proportion of urban population with access to sanitary latrines	88.0	100	85.5	100
18. Proportion of rural population with access to sanitary latrines	85.0	90	55.5	100
<b>D. Energy and Infrastructure</b>				
19. Electricity generation (MW)	5,803	15,457		20,000
20. Electricity coverage (%)	47	68		100
<b>E. Gender Equality and Female Empowerment</b>				
21. Ratio of girls to boys in tertiary education (%)	32	60	100	
22. Ratio of literate females to males (% in those aged 20-24)	85	100		100
23. Female overseas employment rate (%)	5	10		20
<b>F. Environment Sustainability</b>				
24. Productive forest coverage (%) (70% tree density)	13	15	20	20
<b>G. Information and Communication Technology (ICT)</b>				
25. Research and development spending/GDP (%)	0.6	1.0		1.4
26. Compulsory ICT education (education level-class)		12		5
27. Tele-center/community e-center with Internet facilities at Unions (%)		100		100
28. Computer laboratory at the primary government school		5		20
29. Increase tele-density (%)		70		90
30. Expansion of broadband coverage (%)		30		40

Source: Table I.4 in GOB (2011), Part I.

#### (4) Annual Development Program

The Annual Development Program (ADP) is a list of public investment projects that are financed through the government's annual development budget. It also includes estimates of allocations and expenditure of donor-supported projects, including associated counterpart contributions by the

government. The ADP is issued every year. The ADP in FY2011-2012 lists 1,039 projects with a total cost of BDT 460 billion.

The public investment projects in the ADP are categorized into 17 sectors. Since each sector is categorized based on project outputs, ministries and divisions could be responsible for projects in many sectors. Each project in the ADP is formulated by divisions, departments, or implementing agencies under the guidance of ministries or divisions. The projects are categorized based on the following types of status:

- Approved investment projects that have budget allocations (“white pages”)
- Approved technical assistance projects that have budget allocations (“yellow pages”)
- Projects financed by the Annual Japan Debt Cancellation Fund (“red pages”)
- Unapproved investment projects that are accepted for listing in the ADP, but do not have budget allocation (“green pages”)

## 2.2.2 Rural development policy

### (1) National Rural Development Policy 2001

The National Rural Development Policy 2001 (NRDP) is the national policy on rural development in Bangladesh. The overall objective of the NRDP is “to meet the constitutional obligations to develop human resources and bring about positive changes in the standard of living of the people who live in the rural areas of Bangladesh and are dependent on the natural resources therein.”<sup>14</sup> The main section of the NRDP consists of 30 programs (Table 2-3).

**Table 2-3 Thirty programs under NRDP 2001**

1. People’s participation	11. Rural capital flow and financing	21. Law and order
2. Poverty alleviation	12. Empowerment of rural women	22. Culture and heritage
3. Rural infrastructure development	13. Rural child and youth development	23. Games and sports
4. Agro-based rural economy	14. Development of disadvantaged rural people	24. Power and energy
5. Education for rural areas	15. Area-specific development programs	25. Research and training
6. Rural health services and nutrition development	16. Employment generation for self-reliance	26. Information dissemination and data base
7. Rural population control	17. Creation of skilled manpower in rural areas	27. Awards for contributions to rural development
8. Development of rural housing	18. Cooperatives for rural development	28. Contributions by NGOs and other actors
9. Land use and development	19. Rural environment promotion	29. Support for elderly people
10. Growth of rural industries	20. Dispute settlement/Salish system	30. Regional and international cooperation

Source: RDCD (2001).

Under Program 3 (Rural infrastructure development), the following six priority areas are identified, of which rural road networks linking Growth Centers, Union Parishads, Upazila Parishad, the nearest Districts, and highways are emphasized:

- By prioritizing infrastructure development needs and outlines for every area of the country, the village plan book, the Union plan book, and the Upazila plan book will be prepared and kept updated.
- When undertaking and implementing infrastructure development projects in every development area, priorities indicated in the periodical rolling plan will be followed.

<sup>14</sup> Page 5, RDCD (2001).



- Use of agricultural land, especially land with irrigation facilities, for non-agricultural purposes will be discouraged.
- In case of new establishment and development of rural communication, priority will be given to roads linking to Growth Centers, Union Parishads, and Upazila Parishads, as well as roads connecting the nearest Districts and highways.
- The implementation and financing of projects aiming to control floods and all other natural calamities and agricultural infrastructure development projects will get priority over other projects.
- Scheduled periodic maintenance of roads and other physical infrastructure will be emphasized.

In Program 15 (area specific, special development programs), the following six points are identified as the priority, among which area-specific development planning is emphasized and the important roles of LGIs are noted:

- For comprehensive development of particular regions with varying socioeconomic characteristics, e.g., the Barind Tract, *char* areas (islands in rivers), coastal areas, island, hill tracts, and *haor* areas (water bodies such as ponds or lakes that dry up in winter), sustainable integrated programs will be adopted and implemented with priority to ensure the development of education, human resources, family planning, agriculture, water resource, physical infrastructure, and housing in these areas.
- The LGIs will be involved and assigned coordinating roles to implement integrated development programs for the above-mentioned locations.
- Social movements will be conducted to organize and unite people socially with a view to unleashing their potential and creativity.
- A proper management system will be devised to strengthen and integrate rural development activities to be taken in the above-mentioned areas and responsibility will be given to the District level government authority for coordination.
- Area-specific integrated development programs will be formulated through assessment of local needs with the active participation and involvement of local people.
- Arrangements will be made to coordinate the activities of government and NGOs in the respective areas to avoid misuse, overlapping, and unequal and unhealthy competition among the government and NGOs in all spheres of rural development, as well as to ensure proper use and distribution of resources.

### 2.2.3 Urban development policy

According to the SFYP, urbanization is one of the major problems facing the country. Currently, urbanization is directly related to the country's economic growth, an increase in urban poverty, and deteriorating urban environment. In response to the growing concern over urbanization, the government formulated the draft National Urban Policy in 2006 (NUP 2006) and the draft National Urban Sector Policy in 2011 (NUSP 2011). The urban policy is aimed at improving the role of urban areas in the country's socioeconomic development, and minimizing adverse socioeconomic and environmental consequences through a multi-dimensional process. The LGED started the formulation of the Pourashava Master Plans to accelerate the process of decentralization in the country in line with NUSP 2011.

This section attempts to review the above-mentioned two national policies and explore effective use for local urban planning in the Northern Region Rural Development and Local Governance Improvement Project (NRRDLGIP).

## **(1) National Urban Policy in 2006 (draft)**

In Bangladesh, cities and towns play a crucial role in the country's socioeconomic development, despite the adverse socioeconomic and environmental consequences resulting from rapid growth of these urban centers. At present, urban dwellers constitute about 26% of the total population of the country, but their contribution to Gross Domestic Product (GDP) is more than 45%, indicating that labor productivity in urban areas is much higher than that in rural areas. Such gains in productivity, however, cannot be sustained if Bangladesh does not take appropriate steps to combat the negative consequences of urbanization.

If Bangladesh aims to strengthen the beneficial aspects of urbanization and at the same time effectively deal with its negative consequences so as to achieve sustainable urbanization, the country needs to formulate policies, bearing in mind the multi-dimensional nature of the urbanization process. Urban sector policies, therefore, should cover economic, social, and environmental aspects of urban life and should be directed towards achieving an urban environment that can ensure “freedom from hunger; capacity to live a healthy life; access to education, shelter, and basic services; and a secure and livable environment at home and in the workplace.”

The ten major objectives of draft NUP 2006 are shown in Figure 2-1, including the first objective: “to facilitate economic development, employment generation and poverty eradication through appropriate regulatory framework and infrastructure provisions.”

An effective response to the challenges posed by rapid urbanization will require giving priority to the dimensions shown in Figure 2-2, while formulating national urban sector policies.

## **(2) National Urban Sector Policy in 2011 (draft)**

The draft NUP 2006 was revised in 2011 to formulate the draft NUSP 2011. The NUSP 2011 has five sections, namely, “1.0 Objectives of National Urban Policy” of NUP 2006, which is subdivided into five sections: 1) background; 2) future vision; 3) objectives; 4) major dimensions of the policy; and 5) national urban policy recommendations. In the NUSP 2011, newly emerging issues, measures, and dimensions were added to cope with rapid acceleration of urbanization and changing global economic and environmental circumstances.

### **a) Future vision**

The NUP 2006 envisions strengthening the beneficial aspects of urbanization and at the same time effectively dealing with its negative consequences so as to achieve sustainable urbanization, keeping in mind the multi-dimensional nature of the urbanization process. The policy also envisions a decentralized and participatory process of urban development in which the central government, local governments, private sector, civil society, and people have their own respective roles to play. The policy, therefore, should cover spatial, economic, social, cultural, aesthetic, and environmental aspects of urban life directly to achieve an urban reality that can ensure “freedom from hunger and poverty; capacity to live a healthy life; access to education, shelter, and basic services; and a secure and livable environment at home and at the workplace.” The policy will be gender-sensitive, and friendly to children, the aged, and disadvantaged.

### **b) Objectives**

The twelve major objectives of NUSP 2011 are shown in Figure 2-1, including the first objective: “to ensure regionally balanced urbanization through decentralized development and a hierarchically structured urban system.”





**Figure 2-1 Comparison of the draft National Urban Policy 2006 and the draft National Urban Sector Policy 2011 – (1)**

**c) Major dimensions of the Policy**

An effective response to the challenges posed by rapid urbanization and fulfillment of the stated objectives will require giving priority to the dimensions shown in Figure 2-2.

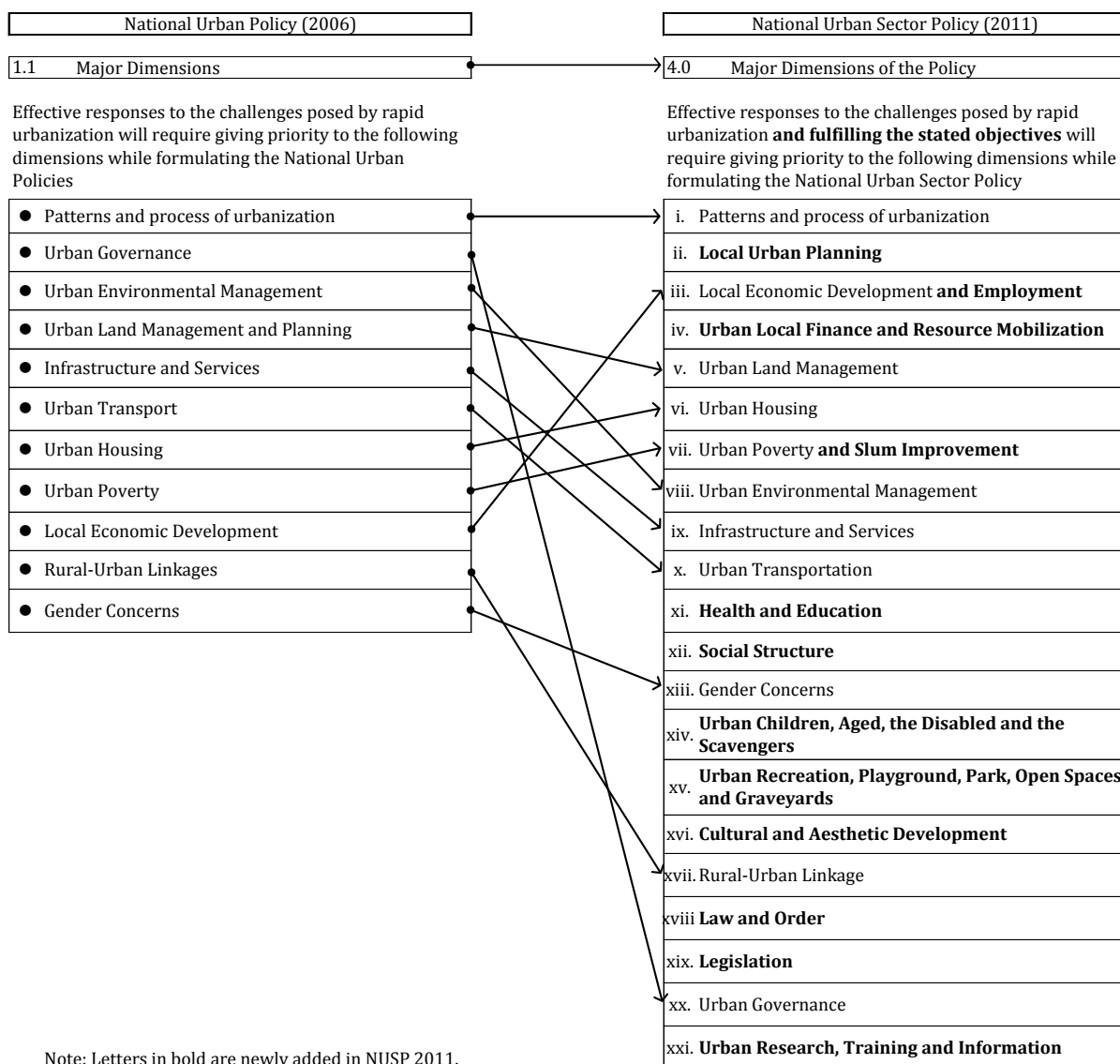


Figure 2-2 Comparison of the draft National Urban Policy 2006 and the draft national Urban Sector Policy 2011 – (2)

**d) National Urban Sector Policy recommendations**

The NUSP makes the recommendations that enable the proper implementation of the vision and objectives along the dimensions shown in Figure 2-2. Among these recommendations, “ii) Local Urban Planning” is directly related to the NRRDLGIP. Its outline, therefore, is provided below.

**Local Urban Planning**

There are the strong needs for planned development of urban areas, but the ineffectiveness of local governments in urban planning has been brought up in institutional development forums repeatedly. Although Ministry of Local Government, Rural Development and Cooperatives (MLGRD&C) is in charge of both urban and rural local governments, there are also many other agencies under the Ministry of Works, Ministry of Land, and Ministry of Communications which work on the urban sector with overlapping mandates (see Section 2.3.1). There are also serious overlaps of functions and responsibilities between different levels of governments, although local urban planning should essentially be the function of urban local authorities.

### **(3) Summary of draft National Urban Policy 2006 and draft National Urban Sector Policy 2011**

The main objective of draft NUP 2006 is to strengthen the beneficial aspects of urbanization and, at the same time, effectively deal with its negative consequences, such as an increase in the urban poor and a degraded urban environment, through a multi-dimensional process, as shown in Figure 2-1 and Figure 2-2.

The following issues and countermeasures are raised in draft NUSP 2011:

- Accelerated, rapid urbanization, especially by limited capital and premier cities, causes spatially unbalanced patterns for the land use of the whole country.
- To avoid this, urban policy claims to introduce decentralization of the land use pattern in the country and promotes stakeholder participation, including central government, local governments, and other stakeholders in the urban development process.
- Urban policy should also cover not only economic, social, cultural, aesthetic and environmental aspects, but also spatial aspects of urban life directly related to achieving urban reality.
- Urban policy strongly recommends the formulation of “rural urban planning,” including spatial aspects and urban-rural linkage. In this way, the concentration of the population in large cities can be prevented, and well-balanced land use can be achieved in the nation. This strengthens the beneficial aspects of urbanization and, at the same time, effectively deals with its negative consequences.

### **(4) Pourashava Master Plan**

#### **a) Background**

As of September 30, 2012, there are 315 Pourashavas in Bangladesh. Pourashavas are also categorized into three groups based on their annual revenues, namely, category A, B, and C.

Pourashavas in category A have relatively large populations mostly ranging from 50,000 to 200,000, and most of them are located in the centers of Districts. Because of the relatively good financial conditions, Pourashavas in category A have relatively sufficient personnel and better-developed infrastructure facilities, such as roads and markets. On the other hand, these Pourashavas have been experiencing negative impacts due to the growing number of the urban poor, leading to deterioration in the urban environment, traffic jams, and other problems that are seen in large cities.

By contrast, Pourashavas in categories B and C have smaller populations than those in category A, mostly ranging from populations of 20,000 to 50,000 and located in the centers of Upazilas. These Pourashavas have a small number of personnel and poor infrastructure such as roads and markets. Figure 2-3 shows the classification of Pourashavas from their different aspects.

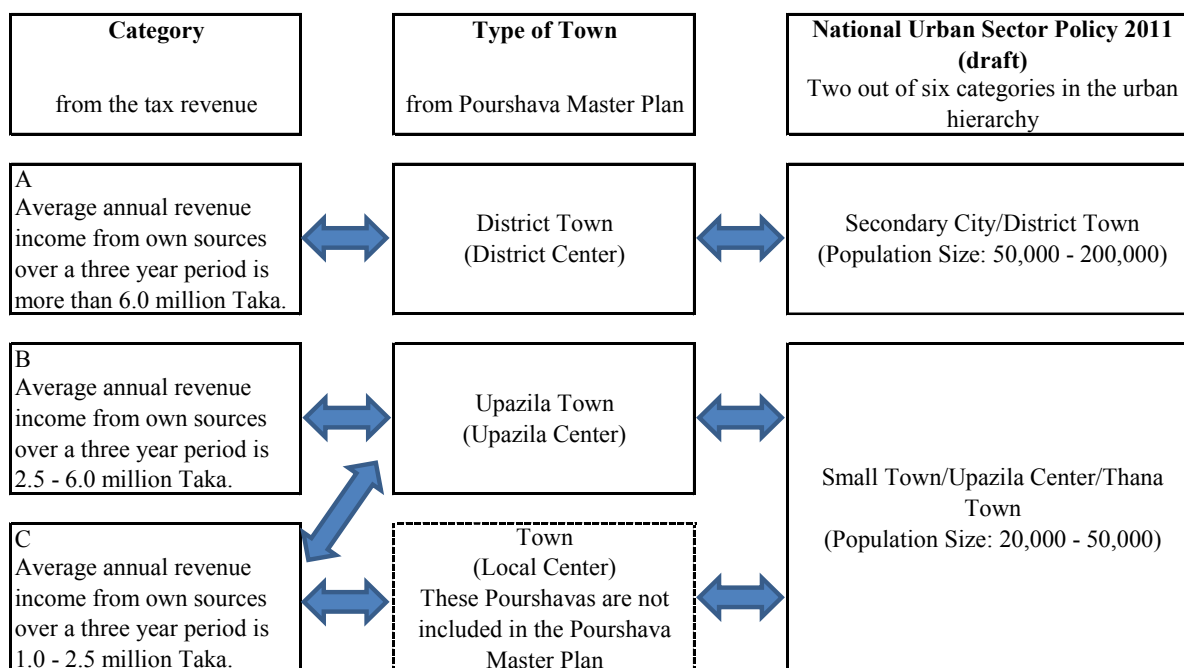


Figure 2-3 Pourashava classification

**b) Outline of Pourashava Master Plan under DTIDP and UTIDP**

In line with the draft NUP 2006, the government provided funds to formulate the Pourashava Master Plan. The LGED has been the executing agency to support the preparation of Pourashava Master Plan in the following two projects since 2004: 1) District Town Infrastructure Development Project (DTIDP); and Upazila Town Infrastructure Development Project (UTIDP). The outline of a Pourashava Master Plan is shown in Table 2-4. Although the formulation of Pourashava Master Plan started in 2004, most Pourashavas are still in the process of the formulation.

**Table 2-4 Preparation of Pourashava Master Plan and Pourashava Development Plan**

Item	Pourashava Master Plan		Pourashava Development Plan (PDP)
	DTIDP	UTIDP	UGIIP-2
Objectives	<ol style="list-style-type: none"> <li>1) Preparation of Master Plan for sustainable urban development</li> <li>2) Improvement of environment</li> <li>3) Provision of infrastructure to meet basic human needs</li> <li>4) Improvement of communication facilities and creation of immediate and long-term employment opportunities for the poorer section of the urban area by setting up new infrastructure as well as reconstructing/rehabilitating existing infrastructure</li> <li>5) Rehabilitation of 2007 flood-damaged urban infrastructure to restore normal levels of economic growth and social activities through creation of direct/indirect employment opportunities for the people in the Project area</li> </ol>	<ol style="list-style-type: none"> <li>1) Prepare a Master Plan in line with a 20-year vision for the Pourashava, including updating provisions for better transport network, housing, infrastructures such as roads, markets and bus terminals, sanitation, water supply drainage, and solid waste management, electricity, and education</li> <li>2) Include disadvantaged groups for a better quality of life</li> <li>3) Prepare multi-sector short- and long- term investment plan through participatory process</li> <li>4) Involve private-sector participation in future development and promote growth of the city in line with the guiding principles of the Master Plan and control any unplanned growth</li> </ol>	<ol style="list-style-type: none"> <li>1) To achieve the ability of combined-development by vision, development plan and making short-term/ midterm plans</li> <li>2) To ensure proper deployment of resources by making disciplined monetary plan, following same measures in determining priorities for taking development plan, reforming administration system, improving organizational proficiency, setting measure for performing activities and initiating monitoring system</li> <li>3) To let Pourashavas make their own plan, implement projects, initiate monitoring system and to improve proficiency of Pourashava by getting technical and monetary aid</li> <li>4) To develop infrastructures and services, initiating sustainable development by combining socio-economic development and environment-management</li> <li>5) To determine priorities according to collective demand of community, focusing on women and poor people, and constructing sector-based working groups (where people and officers of Pourashava will have the opportunity to work together)</li> <li>6) To include gender activities in the mainstream of development activities by making and implementing gender action plan combining gender issues in each level of development</li> <li>7) To combine under-privileged people in taking decisions about administration of Pourashavas by making and implementing PRAP, along with ensuring participation of those under-privileged people in TLCC and WLCC</li> </ol>
Components	<ul style="list-style-type: none"> <li>• Strategic Plan</li> <li>• Structure Plan</li> <li>• Urban Area Plan</li> <li>• Detailed Area Plans</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic Plan</li> <li>• Structure Plan</li> <li>• Urban Area Plan</li> <li>• Ward Area Plans</li> </ul>	<ul style="list-style-type: none"> <li>• Town infrastructure and services</li> <li>• Improvement of city administration system and organizational proficiency</li> <li>• Project management and aid for Implementation</li> </ul>
Target Pourashava	21 District-level Pourashavas and two City Corporations	223 Pourashavas	35 Pourashavas
Project schedule	July 2004 - June 2012	July 2004 - June 2014	January 2009 - December 2014
Project cost	BDT 2,103.6 million	BDT 2,141.5 million	BDT 11,485.4 million
Status as of May 2012	16 Pourashavas (76%) completed final interim reports. Eight Pourashavas (38%) completed draft master plans.	120 Pourashavas (54%) completed final interim reports. Only ten Pourashavas (4%) completed draft master plans.	35 Pourashavas (100%) completed the PDP.

Source: Based on the pamphlets of Pourashava Master Plans of the LGED, Pourashava Development Plan (PDP) of Rangpur Pourashava, and data collected by local consultants.

### **c) Pourashava Master Plan under DTIDP and UTIDP and Pourashava Development Plan under UGIIP-2**

Many Pourashavas are in the process of formulating their respective Pourashava Master Plan, and they have yet to complete their Plans.

In the case of the Second Urban Governance and Infrastructure Improvement Project (UGIIP-2), the formulation of the Pourashava Development Plan (PDP) is one of the requirements to improve Pourashava infrastructure facilities. The concept of the PDP is the same as that of the Pourashava Master Plan, in terms of envisioning on a scale from Pourashava to Ward level, and adopting the stakeholder participation process to the planning and formulation of development plan.

The field visit in May 2012 to Mirzapur Pourashava located in the northern area of Dhaka Division revealed that the Pourashava had started formulating its 20-year Pourashava Master Plan in 2006, but the planning work remained at the stage of the situation analysis.<sup>15</sup> By contrast, the same Pourashava started preparation of its PDP under the UGIIP-2 in 2008, and completed its preparation. The PDP was not coordinated with the Master Plan in the process of drafting in this Pourashava. In addition, the officials of Mirzapur Pourashava did not have a full grasp on the status of drafting since the consultants assigned by the LGED mainly worked on the drafting of the Master Plan. At the time of the field visit, many subprojects in the PDP were being implemented in Mirzapur Pourashava.

The challenges facing Mirzapur Pourashava include: 1) the lack of coordination between the Pourashava Master Plan and PDP, namely, the lack of harmony between the 20-year long-term plan and the five-year short-term plan; and 2) the preparation of spatial plans such as land use plans, which have yet to be completed.

#### **2.2.4 Rural infrastructure policy**

##### **(1) Strategy for Rural Development Projects (1984)**

In the early 1980s, the Bangladesh Planning Commission (BPC) designated the locations of about 1,400 rural local assemblies and secondary markets as Growth Centers, to be focal points for rural economic and social development where investments in rural infrastructure and services should be concentrated. They were selected from more than 8,000 rural markets in Bangladesh based on revenue potential and volume of trade, population served, and the distances between adjacent Growth Centers.

In 1984, the GOB adopted a new strategy for Rural Development Projects (RDPs) (BPC 1984). This took into account the policy of developing Growth Centers as foci for rural development. The strategy aimed to reduce poverty and improve the life of rural people by emphasizing critical aspects of the rural development process – agricultural development, improved physical infrastructure, and income-generation for the poor. The strategy defined that RDPs should comprise one or more of three investments components:

- Development of physical infrastructure including roads, storage, and rural markets
- Development of irrigated agriculture, minor drainage, and flood control works
- Production and employment programs for the rural poor

In terms of infrastructure, the strategy emphasized the development of a network of all-weather roads to provide access to and from Growth Centers (at that time termed Feeder Roads Type-B, now Upazila Roads); the improvement of rural roads, including provision of cross-drainage structures to span gaps on them, to provide rural people with better access to markets and to social and administrative services; and

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<sup>15</sup> The Master Plan was not completed as of September 2012.

improvement of physical facilities at Growth Centers for efficient trading.

The 1984 strategy has continued to guide the formulation, financing, and implementation of RDPs. Following the adoption of the strategy, the Works Program Wing of the MLGRD&C was upgraded to become the Local Government Engineering Bureau, the predecessor of the LGED. The strategy has been applied through a series of rural infrastructure development projects in different parts of Bangladesh with strong support from international financing agencies. In 1993, an additional 700 rural market locations were designated as Growth Centers - bringing the total to 2,100 - in accordance with changes in spatial distribution of agricultural production and marketing potential, and in order to meet the demands of population and regional growth.

## **(2) Bangladesh Rural Infrastructure Strategy (1996)**

In 1996, the LGED and the BPC, in association with the World Bank, jointly conducted a study to review the outcomes and impacts of the 1984 strategy in respect of the development of rural transport and trading infrastructure (LGED and BPC, 1996). The study found that the strategy had provided a valid framework for investment in rural infrastructure and that the investments had generated positive socioeconomic impacts and contributed to reducing poverty. The approach of boosting local economic development by targeting public investments to Growth Centers with high potential was found to be effective. The designation of an additional 700 Growth Centers had re-set targets for the spatial distribution of infrastructure development in line with the agricultural potential of the different regions of Bangladesh. The study argued for the need to continue and increase investment in rural infrastructure and provide an efficient transport and trading system.

The study recommended adjusting, or fine-tuning, the strategy in the following ways:

- To give more emphasis to user and community participation in planning, implementation, and monitoring
- To improve the use of local resources, such as local materials
- To continue the use of labor-intensive techniques supported by appropriate construction equipment
- To recognize and expand the role of the private sector, strengthening the capacity of local contractors to provide cost-effective and labor-intensive skills
- To develop the role of labor contracting societies (LCS) as a mechanism to create additional paid employment for the poor, including disadvantaged women, on construction and maintenance works.
- To establish, and fund, a sustainable system for the maintenance of roads and markets in rural areas so that the economic and social benefits of improved infrastructure continue to flow
- To coordinate the development of the rural road network with the use of rural waterways
- To continue the institutional strengthening of the LGED, at headquarters and at the local level, with an emphasis on community participation

These findings and recommendations were substantively adopted, and have subsequently been reflected in the NRDP, the 2005 Poverty Reduction Strategy Paper (Planning Commission, 2005) and 2009 National Strategy for Accelerated Poverty Reduction (Planning Commission, 2009), and the SFYP (GOB, 2011). All of these have emphasized the importance of continuing to develop and sustain an efficient and employment-generating rural transport and trading infrastructure.

The LGED has evolved into a large and efficient rural engineering organization represented in every District and Upazila of Bangladesh and employing over 10,000 engineers and other staff, with nearly 90% working at the local level (see Chapter 3 for more detail). It has continued to receive substantial support from the international financing agencies to develop an efficient rural transport and trading



infrastructure. The LGED works closely with beneficiaries, communities, and other stakeholders at the local level through various committees and user groups. It has developed its capacity to plan and implement rural infrastructure development, including integrating rural road and waterway transport, and to apply cost-effective technical standards appropriate to local conditions and availability of construction materials. It is capable of managing local contractors, whose skills and capacities have increased over time. The LGED receives an annually increasing recurrent budget allocation from the GOB for maintenance of rural roads. It applies targeted measures to generate employment opportunities for the poor through, for example, LCS and Women's Market Sections (WMS), and to meet access needs in specific environmental conditions in different parts of the country.

### (3) Rural Roads Master Plan (2005)

In 2005, the LGED prepared a rural roads master plan with a 20-year time horizon up to 2025. Despite its title, the document presents a long-term plan for developing rural markets and Union Parishad complex buildings as well as rural roads. The overall objectives of the plan are as follows:

- Identify and prioritize the most useful and effective rural road networks throughout the country
- Provide all-weather access to all Growth Centers, all Union Parishads, rural markets, and other service delivery centers
- Improve rural accessibility to facilitate agricultural production and marketing of products
- Reduce poverty through employment generation and accelerating economic activities
- Strengthen LGI and promote local governance

The higher classes of roads in Bangladesh – National Highways, Regional Highways, and Zila Roads - are the responsibility of the Roads and Highways Department (RHD). The 2005 master plan confirms the latest definitions and classes of rural roads which come under the responsibility of the LGED, as stipulated in the Bangladesh Gazette Volume I dated November 6, 2003 and shown in Table 2-5.

**Table 2-5 Rural road network classification**

Class of rural road	Definition	Ownership and responsibility
Upazila Road	Roads connecting Upazila Headquarter with Growth Centers; or one Growth Center to another Growth Center by a single main connection; or connecting a Growth Center to the higher road system (i.e., RHD roads), through the shortest distance route	LGED/LGI
Union Road	Roads connecting Union headquarters with Upazila headquarters, Growth Centers or local markets or with each other	LGED/LGI
Village Road Type A	Roads connecting villages with Union headquarters, local markets, farms and <i>Ghats</i> or with each other	LGED/LGI
Village Road Type B	Roads within a village	LGED/LGI

Source: LGED 2005

The master plan defines the extent, standard, and condition of the rural road network, including cross-drainage structures as of 2004, summarized in Table 2-6.

**Table 2-6 Extent, standard, and condition of rural road network, 2004**

Road class	Total length (km)	Length by pavement type (km)				Span of structures (m)	Span of gaps (m)
		Flexible bitumen	Rigid concrete	Brick	Earthen		
Upazila	36,166	17,664	225	3,388	14,889	270,060	112,233
Union	42,329	8,320	193	3,267	30,551	205,142	125,267
Village A	94,059	6,322	179	4,363	83,195	230,439	216,957
Village B	77,276	1,025	57	1,371	74,824	92,703	156,226
<b>Total</b>	<b>249,830</b>	<b>33,331</b>	<b>654</b>	<b>12,389</b>	<b>203,459</b>	<b>798,344</b>	<b>610,683</b>

Source: LGED 2005

Of the paved roads, 56.4% were assessed to be in good condition, 29.3% fair, and 14.3% poor or bad. The data highlight a characteristic of the rural road network in Bangladesh, namely, the presence of many “gaps” where water flows across the road but there is no bridge or culvert. These gaps are a consequence of the flood plain terrain of the country, and of the fact that many rural roads were originally built as earthen embankments under food-for-work programs, with no resources available to construct cross-drainage structures.

The master plan sets the following criteria to prioritize rural roads for improvement to an all-weather standard:

- The route selection shall extend the road network; no scattered road links should be selected.
- The priority rural road network should consist of Upazila Roads.
- All these road links should be the shortest route and not necessarily limited within Upazila or District boundaries, and should maximize community benefits.
- Road links connecting Union headquarters to Upazila headquarters, Union headquarters to a Growth Center, Union headquarters to a rural market, and Union headquarters to Union headquarters – i.e., Union Roads - shall be included.
- The road links connecting the maximum number of rural markets, villages, and other socioeconomic infrastructure such as schools and hospitals shall be prioritized.
- Routes that have already been partially developed shall be prioritized over a completely new route.

The master plan sets the following targets for developing the rural road network, which as of mid-2012 is behind schedule:

- All remaining Upazila Roads to be bitumen surfaced or concrete paved, and all gaps spanned by bridges and culverts, by FY2014/15 – estimated cost BDT 153,893 million.
- All remaining Union Roads to be bitumen surfaced or concrete paved, and all gaps spanned by bridges and culverts, by FY 2019/20 – estimated cost BDT 245,746 million.
- All gaps on Village Roads Type A to be spanned by bridges and culverts by FY2024/25 – estimated cost BDT 120,678 million.

The master plan also assessed the need for funding of road maintenance, but this has now been superseded by the draft Rural Road Maintenance Policy 2012 (see below).

The master plan gives higher figures for the numbers of rural markets than earlier documentation, a total of 17,363 rural markets in Bangladesh, of which 12,863 are primary, 1,000 local assembly, and 3,500 secondary markets. 1,059 of the total of 2,100 Growth Centers were defined as improved in 2005, with a target set to improve the remaining 1,041 by FY 2009-10 at a cost of BDT 4,146 million. Only about 950 of the other rural markets had been improved as of 2005, with a target to improve the remaining 14,307 by FY 2024/25 at a cost of BDT 69,314 million.

#### (4) Draft Rural Road Maintenance Policy 2012

The LGED has prepared a new rural road maintenance policy (LGED, 2012). This has been developed in parallel with the formulation of the forthcoming World Bank-financed Second Rural Transport Improvement Project (RTIP-2), with support from the World Bank. The current status of the policy is that it has been approved internally by the LGED and submitted to the MLGRD&C. It now awaits approval by the Cabinet to be adopted as official Government policy. The World Bank has been encouraging the prompt adoption of the policy by the GOB.

The proposed policy represents the LGED's recognition of the need for sustainable management of rural road assets. Since the adoption of the Strategy for RDPs in 1984, great progress has been made, and continues to be made, in developing an improved all-weather rural road network in Bangladesh. This is illustrated in Table 2-7, which summarizes the increase in the length of all-weather rural roads (defined as roads with a flexible bitumen carpet or rigid concrete pavement) and in the provision of cross-drainage structures from 2004, at the time the Rural Roads Master Plan 2005 was being prepared, to November 2011. During this period, the length of all-weather roads increased by nearly 30,000 km, and the total span of bridges and culverts by about 356,000 m.

**Table 2-7 Increase in all-weather rural roads and cross-drainage structures (from 2004 to 2011)**

Class of rural road	% all-weather road, 2004	% all-weather road, 2011	% increase in cross-drainage structures, 2004-2011
Upazila road	49.5	72.1	36.9
Union road	20.1	39.7	48.9
Village road Type-A	6.9	12.8	40.7
Village road Type-B	1.4	4.1	67.3
<b>Total</b>	<b>13.6</b>	<b>21.2</b>	<b>44.6</b>

Sources: LGED 2005 and LGD 2012

The total length of all classes of rural roads with all-weather pavements is currently about 63,350 km, and the total span of bridges and culverts is about 1,154,000 m. The continuing development of rural roads, and the spanning of gaps through the construction of bridges and culverts, provides more efficient, all-weather and uninterrupted access for rural people to markets, social facilities, and administrative services, generating economic and social benefits. However, in order to sustain the improved access and the benefits generated, an annually increasing recurrent budget is required for planned maintenance in order to keep the roads in their improved condition – if the improved roads are not maintained, their condition, and the level of access they provide, will deteriorate and the economic and social benefits will progressively diminish. Sustainable management of the improved road asset through effective, planned maintenance is proven to be economically efficient. It comprises the following:

- Continuing **routine maintenance** of the improved road pavements, shoulders, embankments, cross-drainage structures, and road safety measures in order to address minor damage before it develops into major damage
- **Periodic maintenance** of the improved roads, at intervals of several years, to re-seal pavements, and repair any significant damage to shoulders, embankments, cross-drainage structures, and road safety measures that are beyond the scope of routine maintenance
- Budgetary provision for **emergency maintenance** in order to repair, at short notice, damage caused by severe climatic events, road accidents, or overloaded vehicles

The LGED has faced two fundamental constraints in applying this kind of sustainable management strategy to the rural roads it has improved:

- Insufficient financial resources for planned maintenance. Since FY1992/93, the LGED has

received an annual revenue budget allocation from the GOB for road maintenance. This has increased year-by-year to BDT 6,250 million, but it remains far from sufficient to meet the increasing requirement for planned maintenance, particularly with high annual inflation rates. The LGED estimates that the current budgetary need is BDT 27,230 million, which means that the current revenue budget only meets 23% of the need.

- The LGED still lacks the maintenance planning and management systems and capacity to apply available maintenance funds efficiently in order to optimize the overall level of access and service provided by the rural road network.

The proposed rural road maintenance policy addresses these deficiencies. Its goal is to facilitate safe, comfortable, and fast transport; minimize periods when road access is limited or not available; reduce vehicle operating costs; and reduce road accidents. Its key features are as follows:

- The LGED will take sole responsibility for planned maintenance of Upazila roads, Union roads, and paved Village roads, including their cross-drainage structures.
- The annual GOB revenue budget allocation for rural roads should increase by at least 20% per annum until the gap between need and available financing comes down to 25%. Three-year projections of maintenance budget requirements will be prepared.
- The GOB should allow the LGED to earmark a portion of development project funds for maintenance of Upazila and Union roads in the Project area during its implementation period.
- Because of inadequate maintenance resources over an extended period of time, the condition of many Upazila and Union roads which have previously been improved to all-weather standard has deteriorated significantly. These roads now require rehabilitation, or “backlog maintenance” work, to bring them back into good condition before a regime of planned maintenance can be applied. A portion of development project funds should be allocated to rehabilitation of such roads in the project area, particularly those previously improved with foreign financing.
- Mechanisms are proposed for LGIs and the private sector to contribute to funding for rural road maintenance.
- Regulations to prevent overloading of vehicles on rural roads should be strictly enforced.
- The LGED needs to strengthen the capacity and manpower skills of its Road Maintenance and Road Safety Unit (RMRSU) – formerly the Rural Infrastructure Maintenance Management Unit (RIMMU) – to manage a road maintenance database and plan the utilization of the maintenance budget. The LGED will develop a more comprehensive inventory database of rural roads and cross-drainage structures linked to Geographic Information System (GIS) spatial data. This will provide the information needed to prioritize the use of annual maintenance budget allocations based on clearly defined standards to be achieved and rational prioritization criteria.
- Routine and periodic maintenance of roads will ensure environmental sustainability and improved road safety, involve local stakeholders, including women, in planning and implementation, and maximize employment generation for the poor.

The LGED will expand the ongoing trials of Performance-based Maintenance Contracting (PBMC), and conduct research on cost-efficient labor-based maintenance techniques.

## **2.2.5 Technical standards for infrastructures**

### **(1) Design standards for roads and cross-drainage structures**

#### **a) Rural roads**

In 2005 the LGED, with assistance from JICA, prepared design standards for rural roads, based on the re-classification of roads and the delineation of responsibilities issued by the Planning Commission in 2003 (LGED & JICA, 2005). The design standards provide the basis for planning and construction of

improved, all-weather UZR and UNR. The standards are based on LGED's accumulated experience in the construction of rural roads and take account of the environmental and terrain conditions in the country. They also reflect the limited local availability of basic construction materials in Bangladesh. In particular, rock suitable for producing aggregate is only available in Sylhet District, and the country is very reliant on imports from India.

The LGED design standards are comprehensive. They cover design life; alignment geometry, super elevation and gradients; construction materials; road safety; and embankment, pavement and shoulder cross-sections and specifications. They include specific cross-section standards for hilly areas. They also define specific design features for intersections, bus bays, and road cross-sections in the vicinity of market places and in built-up areas.

There are seven cross-section design standards for UZR and UNR, with different embankment crest and carriageway widths and pavement and shoulder specifications. In all cases, the embankments are to be constructed with 1:1.5 (vertical:horizontal) side slopes, which may be increased in terrain that is low-lying and/or vulnerable to erosion. In circumstances where it is not possible to achieve the full embankment toe width, e.g., where there are water bodies on one or both sides of the road, the design standards include specifications for palasiding and toe walls. As examples, Figure 2-4 and Figure 2-5 present the standard cross-sections for Type 4A and Type 6 UZR. The cross-sections for all seven Types of UZR and UNR are in Annex 1. The choice of standard for a particular road is determined based on two criteria of traffic level, peak hour maximum passenger car units (PCU) and commercial vehicles (i.e., trucks and buses) per day (CVD), as shown in Table 2-8.

**Table 2-8 Design standards and traffic criteria for Upazila and Union Road**

Class of road	Cross-section and pavement type	Embankment crest width (m)	Carriageway width (m)	Traffic criteria	
				Peak hour maximum PCU	Maximum CVD
Upazila Road	Type 4A	9.8	5.5	530	600
	Type 4B	9.8	5.5	530	600
	Type 5A	7.3	3.7	290	300
	Type 5B	7.3	3.7	290	300
	Type 6	7.3	3.7	210	200
Union Road	Type 7	5.5	3.7	130	100
	Type 8	5.5	3.0	90	50

Source: LGED and JICA (2005)

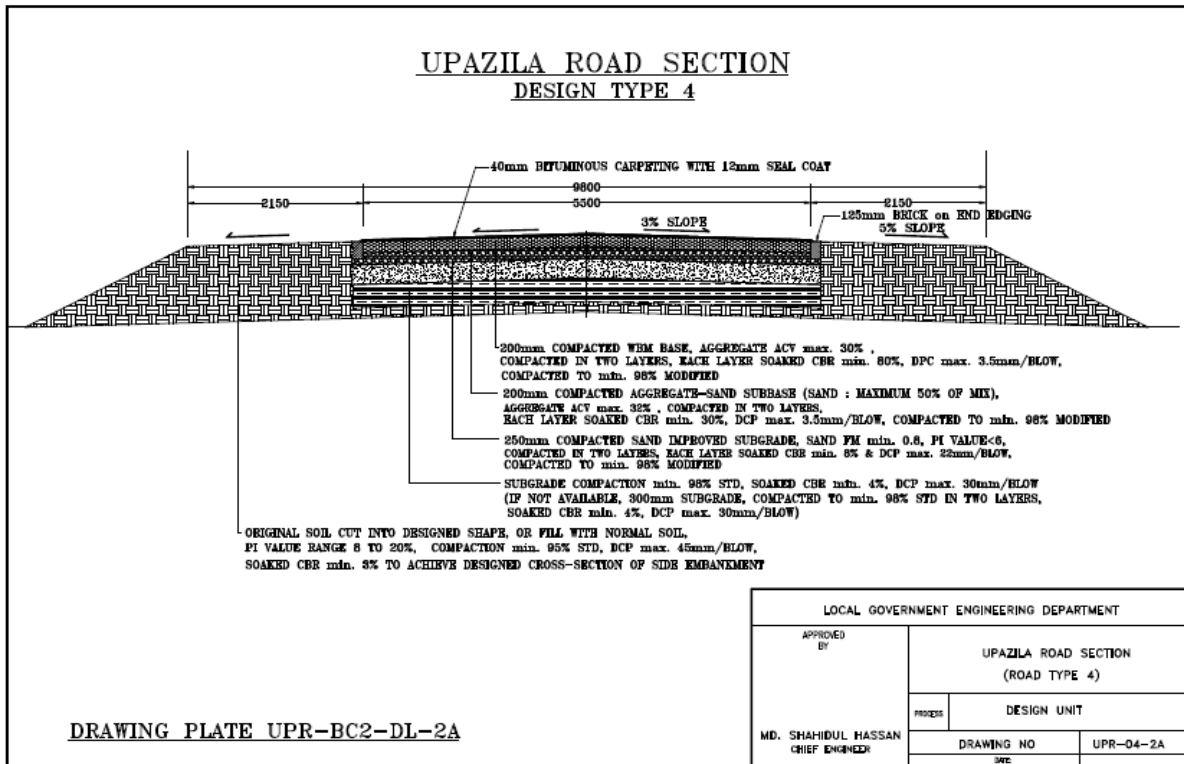


Figure 2-4 Type 4A Upazila Road

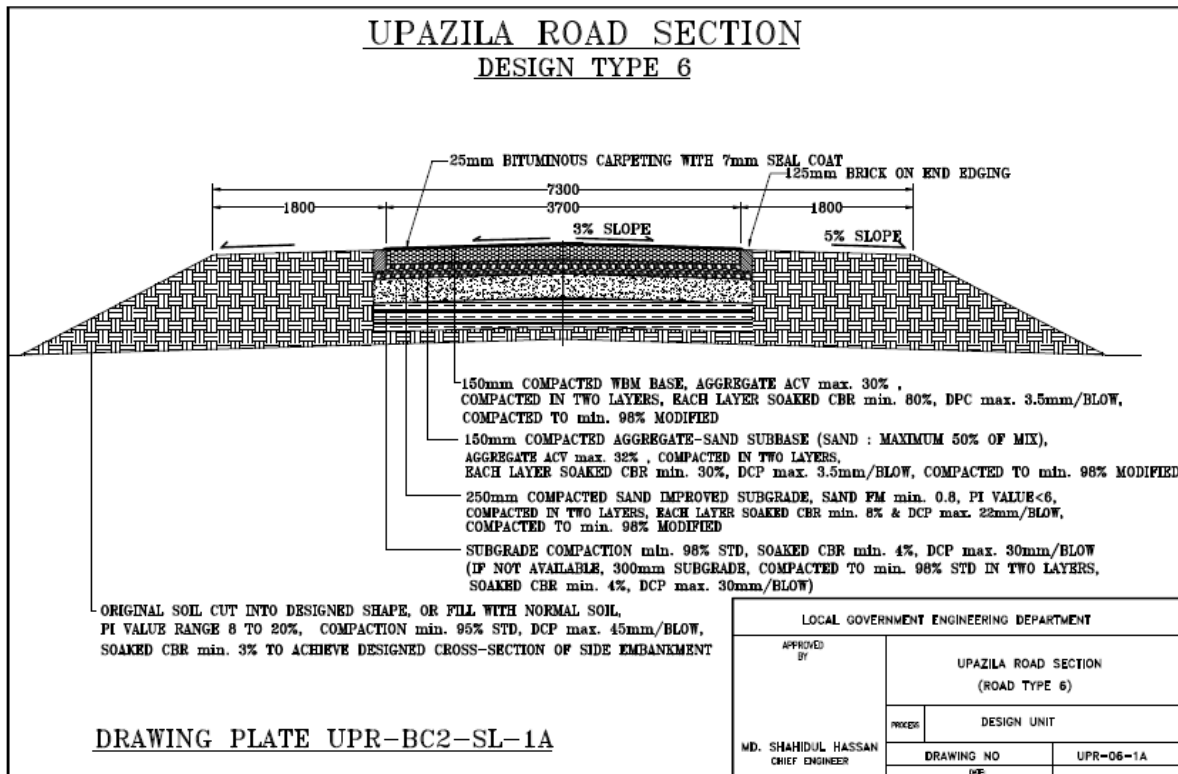


Figure 2-5 Type 6 Upazila Road



The pavement specifications, which are summarized in Table 2-9, reflect the expected traffic loading measured by the forecast number of equivalent standard axles, 8.2 ton. In all cases the pavement is to be constructed on a subgrade compacted to a minimum of 98% standard soaked California Bearing Ratio, and the surface treatment is retained within the embankment by brick-on-end edging.

**Table 2-9 Pavement standards for Upazila and Union Road**

<b>Pavement Type</b>	<b>Improved Sub-grade</b>	<b>Sub-base</b>	<b>Base</b>	<b>Surfacing</b>
Type 4A	250 mm compacted improved sand-soil mix	200 mm compacted brick aggregate and sand mix	200 mm compacted water bound brick macadam (WBM)	40 mm bituminous carpeting (BC) with 12 mm seal coat
Type 4B	As Type 4A	150 mm compacted brick aggregate and sand mix	150 mm compacted water bound brick macadam (WBM)	As Type 4A
Type 5A	As Type 4A	As Type 4B	As Type 4B	40 mm bituminous carpeting (BC) with 7 mm seal coat
Type 5B	As Type 4A	As Type 4B	As Type 4B	25 mm bituminous carpeting (BC) with 7 mm seal coat
Type 6	As Type 4A	As Type 4B	As Type 4B	As Type 5B
Type 7	As Type 4A	As Type 4B	As Type 4B	As Type 5B
Type 8	As Type 4A	As Type 4B	As Type 4B	As Type 5B

Source: LGED and JICA (2005)

Type 4A and 4B roads have 2.15 m wide soft shoulders on each side of the pavement. Type 5 roads have 0.9 m hard shoulders on either side of the pavement, then 0.9 m soft shoulders. However, for Type 5A the hard shoulder is sealed with a 12 mm bitumen seal coat, for Type 5B it is herringbone bond brick (HBB). Type 6, 7, and 8 roads have soft shoulders on each side of the pavement, 1.8 m, 0.9 m, and 1.25 m wide respectively.

The LGED design standards are considered appropriate to be applied to the improvement of UZR and UNR under NRRDLGIP to provide all-weather access. However, certain issues need to be addressed.

It will be essential to ensure that the road embankment crests are at least 0.6 m above the 10-year return high flood level (HFL), and that sufficient cross-drainage capacity is provided to avoid water congestion during the monsoon period. This is particularly important in view of the possible longer-term impacts of climate change in rural Bangladesh.

The improvement of UZR and UNR to provide all-weather access will, as far as possible, follow existing alignments. No new road alignments will be constructed, but some minor re-alignments will be required on specific roads:

- For safety reasons, to provide safe bridge approaches and to widen very tight curves and ensure sight-lines
- To avoid encroaching on cultural sites such as cemeteries
- To by-pass permanent buildings

Other safety measures will be incorporated into the detailed design of each road. These will include: 1) proper warning signage of potential hazards at education and health facilities, religious buildings, junctions, and congested areas; 2) safe design of junctions, bus bays, and access to and from education, health, and religious facilities; and 3) specific safety features around market places and in other built-up areas, including provision for off-road parking and traffic calming measures.



Section 2.2.5(15) of this report presents estimated costs for the seven different UZR and UNR pavement types. There are significant variations in the costs, excluding embankment works, of the different pavement standards:

- For UZR, the Type 4A pavement is almost twice as costly as the Type 6, about BDT 6,000,000 (USD 70,000) per km more.
- For UNR, the Type 7 pavement is about 13%, or about BDT 700,000 (USD 8,500) per km, more costly than Type 8.

It will therefore be very important to pay careful attention to the selection of the pavement standard for each of the UZR and UNR to be improved by the Project. Cost-effectiveness must be balanced with the need to ensure that the roads are durable and provide sustained improved access with the expected levels of traffic. There is also a safety consideration. Type 5 pavements have hard shoulders alongside the 3.7 m carriageway, while the Type 6 pavement does not. The provision of hard shoulders improves the safety for slow-moving vehicles such as rickshaws and rickshaw vans on roads which carry larger volumes of larger, faster moving traffic, since they can move off the carriageway when such vehicles approach. It is very risky for these slow-moving vehicles to move on to a soft shoulder, particularly during the monsoon season.

In many cases, the existing embankments of the UNR and UZR to be improved will be narrower, more steeply sloped, and lower than required by the design standard. Improving these to the design standard will result in significantly wider embankment toe widths, and hence the need to acquire additional land. Acquiring land under the Bangladesh legal procedure, and paying compensation to affected persons, is time-consuming and costly, and key steps in the process are outside the control of the LGED. It is important to note that measures to reduce the need for land acquisition by, for example, compromising on carriageway width, shoulder width or embankment height, should be avoided wherever possible. They will put at risk the durability of the roads, and create an undesirable road safety hazard. On the other hand, there will be circumstances where compromise on the cross-section standard will be unavoidable. This will be the case where there are significant numbers of permanent buildings and other structures already existing adjacent to the unimproved road, and the options of compulsory acquisition and compensation, or of re-aligning the road, are both unacceptably costly. In these circumstances, the embankment cross-section standard, but not the carriageway width, must be compromised to “squeeze” the improved road between the existing buildings.

Under the existing design standards, the road pavement is constructed by box-cutting the completed embankment, and then “inserting” the successive pavement layers, each of which is the same width. This method could be improved by the following:

- Constructing the pavement and the adjacent compacted embankment layer-by-layer, with each pavement layer extended 250 mm on either side beyond the layer above
- Inserting sub-grade sand drains at 7.5 m intervals along each side of the embankment to take away water that would otherwise penetrate into the pavement. Sub-grade drains were used in the past, but were abandoned because it was difficult to prevent them becoming blocked. However, this problem can now be overcome by covering the drains with geotextile material.

These possible changes to the pavement specification are illustrated for a Type 5A road in Figure 2-6. It is estimated that they would increase the cost of 1 km of Type 5A pavement by about BDT 260,000, or approximately USD 3,200 (Annex 1). This matter requires further discussion with the LGED.

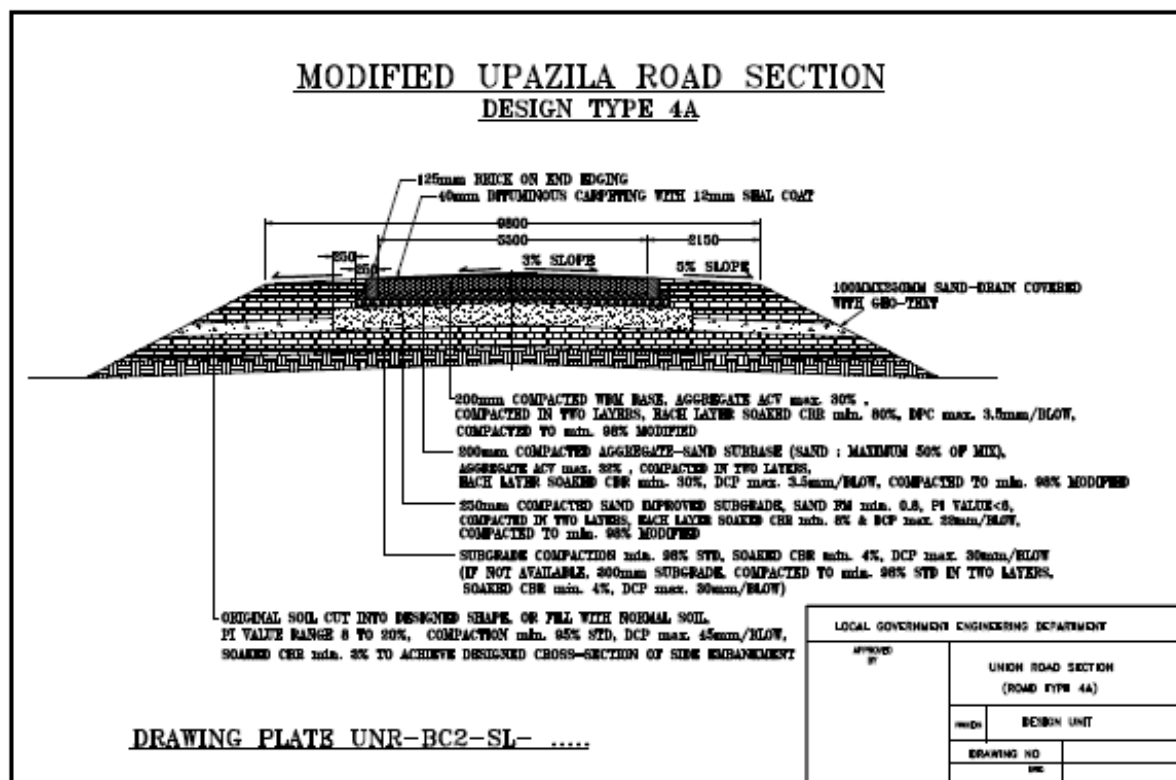


Figure 2-6 Possible modified pavement design, Type 5A

**b) Bridges and culverts**

The LGED rural road standards provide some guidance on design standards for bridges and culverts, but the most comprehensive documentation is in the more recent manuals for double lane bridges and single lane bridges (LGED 2008b,c,d, and LGED 2011c,d). These later documents provide comprehensive standards covering pipe, slab, box culverts, and bridges. They present standard designs for different types of culvert, and typical designs for bridges of 12 to 30 m span. Bridges larger than 30 m span must be purpose-designed, following the guidance in the manuals and based on detailed site investigations. All piling designs must be based on soil bore tests.

The 2005 rural road standards state that culverts should only be used for spans up to 6 m, but it is conventional practice to use multiple-vent box culverts for larger spans, sometimes longer than 12 m where, depending on the site conditions, they can be more economical than small bridges. Culverts should always be constructed to the full embankment crest width so that they do not in future become a constraint to growth of traffic on the roads. They should be clearly marked by warning signs, and fitted with guard rails.

The LGED Design Unit has provided guidance on current bridge design practices for all projects set out in Table 2-10:

**Table 2-10 Latest guidance on bridge design**

Design loading criterion	AASHTO-LFRD-HL-93 – this supersedes the H20S16 loading specified previously
Carriageway width	5.5 m, i.e., double lane, is standard to allow for future growth of traffic. 7.32 m to be used for more important roads with higher traffic levels
Footpath	0.65 m width on each side of the carriageway. Increased to 1.0 m width on each side of the carriageway for more important roads
Girder web width	450 mm
Deck slab thickness	200 mm
Railings	1,050 mm height, posts 200 mm x 200 mm reinforced cement-concrete (RCC), bars 150 mm x 150 mm RCC
Cast-in-situ piles	Minimum diameter 500 mm, maximum diameter 1,200 mm Minimum pile depth 15 m, maximum pile depth 55 m Pile cap should be 500 mm above the lowest water level
Pier geometry	For normal water flow, two circular columns Where skewed, one column For height greater than 12 m, single H type
Concrete strength	25 MPa, except for pre-stressed girders 35 MPa
Mild steel reinforcement rod	60 grade

Source: LGED Design Unit

The LGED bridge and culvert standards are comprehensive, and applicable to the Project. An important consideration in the design of larger bridges is that the cost can often be reduced by making the span larger than the gap to be crossed. The reduced cost of piers located on solid, dry ground often more than offsets the higher cost of a longer deck.

More details of bridge and culvert design standards are provided in Annex 1.

### c) Urban roads

Unlike rural roads, there are no specific design standards for urban roads within Pourashavas. The road network in Pourashavas can be characterized as comprising three categories of road:

First, most Pourashavas have one or more RHD roads passing across their boundaries, or connecting them to higher levels of the road network. These roads of course fall under the responsibility of RHD and will be built and maintained to their standards.

Second, most category-B and C Pourashavas are located at Upazila headquarters, and by definition will therefore have a section of UZR which connects a rural Growth Center to the Pourashava. For the sections of such roads that are within the Pourashava boundary, the relevant LGED rural road design standard will apply, but with the following considerations:

- The urban sections of these roads will often have high levels of traffic, including heavy bus and truck traffic. For such roads it is necessary: 1) to apply the 5.5 m rather than the 3.7 m carriageway width standard; and/or 2) if they are expected to carry high levels of heavy axle-load traffic, to specify a strengthened pavement in order to avoid rapid deterioration.
- Pourashavas are by their nature very densely populated. The need to compromise on embankment width in order to avoid excessive demolition of buildings and other structures and associated compensation payments is likely to be greater than in the rural situation discussed earlier. However, 1) it is highly desirable to avoid compromise on pavement width in view of the expected relatively high traffic levels; and 2) it is essential that these roads are improved above the 10-year return HFL, and with sufficient cross and side-drainage capacity, to ensure that their

improvement does not exacerbate the urban drainage problems. Ideally, their design should be integrated with the master drainage plan for the Pourashava.

- In situations where UNR cross Pourashava boundaries, the same considerations apply as for UZR.

The LGED rural road design standards do include specific recommendations for shoulder treatment of UZR and UNR at market places and in built-up areas. These specify 150 mm brick-bonded cement-concrete (CC) hard shoulders, and side drains adjacent to the shoulders. The side drains are 150 mm x 150 mm square cross-section with a 75 mm CC base and brick side walls. The capacity of these side drains seems very small to cope with intense monsoonal rainfall.

The third category comprises **internal roads** within the Pourashava boundary or connecting to local places close to the urban center. It is proposed that for these roads the LGED UNR or Village Type-A standards should be applied, according to the function of and expected level of traffic on each link. The same considerations of compromise on embankment width and ensuring proper drainage will apply as for urban UZR and UNR. However, for these internal roads the construction of physical barriers to prevent their use by heavy trucks and buses, which would rapidly cause significant damage, should be considered. Restricting selected internal roads to use by lighter, slower-moving vehicles will make them more sustainable.

## (2) Submersible roads and flash flood refuges

Two Project Districts, namely Kishoreganj and Netrokona, contain *haor* areas. Haors are deep natural depressions which are deeply flooded during the monsoon season, but drain and dry out after the rains end. Environmentally they play a crucial role in controlling the drainage of annual flood waters by acting as seasonal reservoirs, and they must be protected. However, transport is very problematic for rural people living in haor areas. During the monsoon season they have good access using boats. However, in the dry season, after the haors have drained, there are no roads for people to move themselves and their goods. It is impractical to build conventional road embankments in haor areas. First, the very high embankments required would be unrealistically costly, and they would be very vulnerable to damage from wave action. Second, such embankments would represent a serious environmental risk, since they would interrupt the natural flow of water when the haors are flooded.

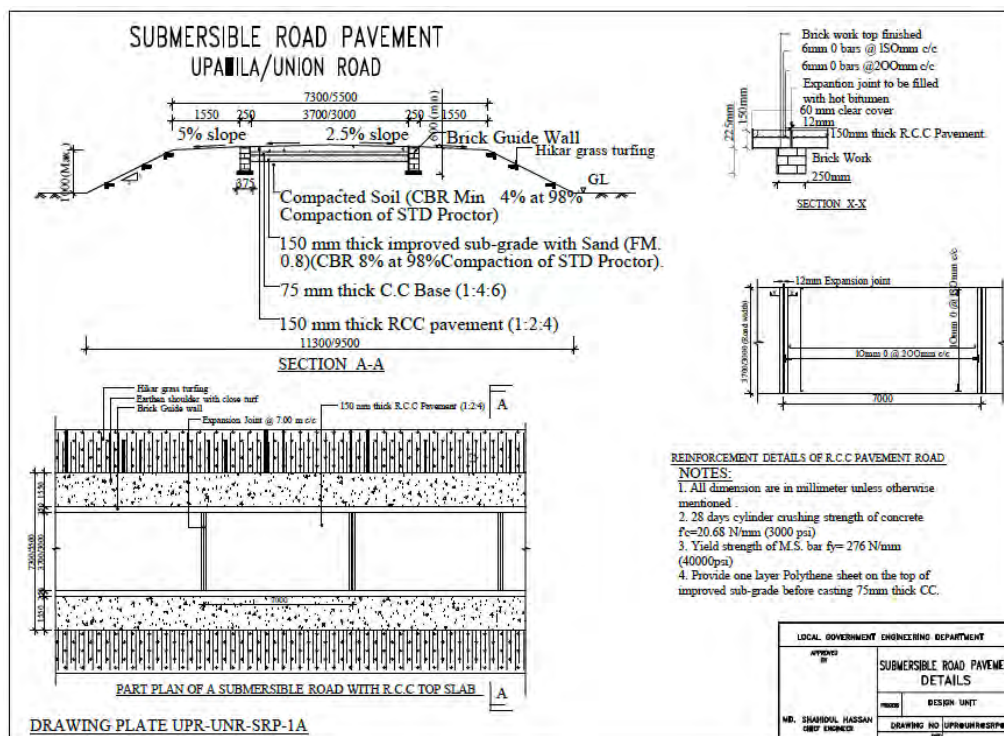
The LGED has therefore developed, and successfully applied, the innovative concept of **submersible roads** for haor areas. These submersible roads are built on low-level embankments with adequate cross-drainage. They are designed, with embankment protection, to be over-topped with water during the flood period, but to emerge when the haors drain and provide efficient dry-season vehicular access for local people.

A standard design for a submersible road is included in the rural road design standards document (LGED and JICA 2005) and shown in Figure 2-7. The cross-section standards are the same as for conventional rural roads: UZR, 3.7 m pavement, 7.3 m crest width; UNR, 3.0 m pavement, 5.5 m crest width. A concrete pavement is used, retained within the embankment by brick guide walls and with expansion joints at 7 m intervals. It comprises three layers above the compacted formation:

- 150 mm improved sub-grade, compacted soil and sand mix
- 75 mm CC base
- 150 mm RCC pavement

The earthen shoulders are planted with close turfing, and the embankment slopes with Hikar grass, in both cases to protect the embankment even when the water level is rising and falling. In circumstances where the embankments are particularly vulnerable to damage from wave action, they can be protected

with CC slabs or with brick and geotextile matting. All cross-drainage culverts along the roads are to be constructed to full crest width, and can be used as vehicle passing bays.



Source: LGED and JICA (2005)

Figure 2-7 Submersible road

Bangladesh is subject to three different types of flooding: 1) the normal annual flooding of large areas caused mainly by the snow melt from the Himalayas flowing through the country; 2) flooding from the sea of coastal areas caused by cyclones moving up the Bay of Bengal, from which affected people can now seek protection in cyclone shelters; and 3) flash-flooding in some border areas caused by the run-off from heavy rainfall in the adjacent Indian hills.

Several of the Project Districts border on hill areas of India are vulnerable to flash-flooding which is typically localized and short-lived but can be intensive and cause injury and loss of life and damage to buildings, crops, household possessions, and livestock. The LGED has developed and successfully applied a technology for providing **flash-flood refuges** on rural roads in vulnerable areas. The embankment is widened and compacted on either side of the road over a length of 250–750 m. Secure flood shelters for people, and cattle sheds, are constructed on the widened embankment area, together with a tubewell water supply and hygienic latrines. Each flood shelter includes a private women's emergency area, and separate latrines are provided for men and women.

These facilities allow people to shelter in safety, with their livestock and essential possessions, for a limited period of time until the flash flood passes and the water level goes down. The size of each refuge, and of the flood shelters, has to be determined on a case-by-case basis based on assessment of the catchment area of the flash-flood prone location. The refuges have proved to be very effective, and are much appreciated by affected persons. They are most effective when they are located close to a concentration of population and a market, from which emergency supplies can be obtained. The flood shelter buildings are often also used by local NGOs and Community-based Organizations (CBOs) for community development activities.



Typical designs of flood shelters and cattle sheds are in Annex 1. The flood shelters are constructed on a concrete platform with brick walls, windows, steel roof trusses, and corrugated iron (CI) or CC roof sheet.

### **(3) Technical specifications for roads and structures works**

Technical specifications form part of the contract documentation for rural infrastructure civil works, and are the main tool for operationalizing design standards, defining and controlling quality, and specifying payments due to contractors. In order to harmonize the construction procedures and quality requirements under various projects, in 1999 the LGED prepared and issued standard technical specifications for the construction of what are now defined as UZR and UNR (LGED 1999). The specifications were prepared by a working group, drawing on best practices used in different rural infrastructure development projects.

The 1999 LGED specifications are applicable to the construction, improvement, upgrading, rehabilitation, and periodic maintenance of UZR and UNR, including bridges and culverts. They cover all aspects of road and cross-drainage structure works. The specifications describe each activity and the work methods to be applied. They define the materials specifications, the quality standards to be achieved and the associated inspection, field and laboratory testing and approval procedures. They also specify the methods of work measurement and the pay items. The contents of the specifications are summarized in Table 2-11.

**Table 2-11 Technical specifications for road and structures works**

Specification for road works
<ul style="list-style-type: none"> <li>• Traffic maintenance, site facilities and testing</li> <li>• Earthworks</li> <li>• Pavement works</li> </ul>
Specification for bridges
<ul style="list-style-type: none"> <li>• Specification of structure works</li> </ul>
General
<ul style="list-style-type: none"> <li>• Specification of environmental mitigation works</li> <li>• Specification of social impacts</li> <li>• Specification of incidental works (including road safety measures)</li> </ul>

There have been refinements and improvements since the specifications were first issued. The LGED updated the specifications for bridges on UZR and UNR with assistance from JICA (LGED 2004). The specifications have been modified to be consistent with the 2005 rural road design standards. Additions have been made over time to the sections dealing with environmental mitigation and health and safety matters, social measures and road safety as these have emerged as more important issues in the LGED.

These technical specifications are now used for all rural road infrastructure projects in the LGED including SWBRDP, and are proposed for the forthcoming Second Rural Transport Improvement Project (RTIP-2). They are comprehensive and technically sound and consistent with the rural road design standards, although the LGED Design Unit is currently reviewing details of some items to ensure internal consistency with their standard Bill of Quantities and Schedules of Rates. The specifications have been prepared for rural road works, but are equally applicable to urban road works in Pourashavas. The specifications provide all the information required to achieve the defined technical and quality standards, and for proper engineering supervision of works. However, for the Project, it will be important that adequate laboratory facilities and sufficient trained staff are available in order to ensure that the defined material specifications and quality standards are achieved.

#### **(4) Design standards for Growth Centers and rural markets and ghats**

##### **a) Growth Centers**

Unlike roads, the layout of each improved Growth Center must be individually planned and designed: 1) to fit the available government or *khas* land area, shape, and connection into the road network; and 2) to provide the priority facilities needed by users to suit the characteristics of trading in the particular market. Only then can detailed designs be prepared for each of the specific improved facilities to be provided in the market. There are therefore three components to the design standards for Growth Centers:

- The detailed layout plan for the improved market
- Design standards for each of the improved facilities
- Contract drawings for each of the improved facilities, since the standard designs often have to be adapted, e.g., in terms of their dimensions, to fit into the layout plan

The Manual for Growth Center Planning sets out comprehensively the procedure for preparing a detailed layout plan for an improved market (LGED 1995). It sets out the framework of the role of markets in rural development, defines the planning process, presents planning guidelines, and provides a standard format for preparing, and gives examples of, a detailed layout plan. Annex 2 presents an example of an improved Growth Center market layout plan.

The process for preparing the layout plan should be participatory, involving different categories of market buyers and sellers, transport operators, members of the Market Management Committee (MMC), representatives of women and local NGOs and CBOs, and other local stakeholders. Starting with a layout of the existing market, consultation with and participation by these beneficiaries in preparing the plan will ensure that the improved market design will meet local priorities and incorporate the knowledge of the users in respect of the numbers and types of different facilities to be provided and the location of these facilities within the market area.

There is a standard “menu,” included in the Manual, from which the improved facilities are selected, as set out in Table 2-12.

The Growth Center planning Manual defines the design standards for each of these facilities. This is complemented by detailed technical drawings prepared by the LGED Design Unit. Examples of these standard designs, which are more up-to-date than the Manual, are in Annex 2. As noted above, contract drawings are also prepared for each facility in each market. However, some innovations have been made since the Manual was prepared. Notably, it is now the established practice in the LGED to provide a Women’s Market Section (WMS) at each market. This structure comprises 6-12 permanent and secure shops exclusively targeted at female shopkeepers. This facility is aimed at increasing business opportunities for women, particularly poor women, and encouraging them to utilize the market for income-generating activities. An example of a WMS is in Annex 2. The provision of the facility should be complemented by targeted social development and capacity-building work in order to achieve the full potential of these WMS to improve the lives of poor rural women. Another recent innovation is to provide solar-powered lighting in the markets, which will serve to mitigate the potential future impacts of climate change.



**Table 2-12 Improved facilities at Growth Centers**

Raised and paved market area	To bring the market above the flood level, to ensure free-drainage and that the market area remains dry during the monsoon season. The area is paved with brick flat soling or CC.
Paved parking area	Adjacent to the market and the road that serves it, but off-road for safety, where vehicles can wait, and be loaded and unloaded. Accompanied if necessary by road safety measures on the section of UNR that passes by the market.
Paved internal roads and pathways	HBB or RCC paved, these improve access and facilitate maintenance in the market
Market drainage system	CC lined drains to take water away from the market and keep it dry at all times
Tubewell pump water supply	For use by all market users. Separate supplies may be provided for fish and meat selling sheds and for slaughter slabs.
Flush toilet facilities	With waste disposal tanks and partitioned by stalls with doors - separate toilet facilities for men and women
Concrete garbage bins	With sufficient capacity to serve the needs of the market - located remote from the selling areas to avoid attracting flies to these areas and so that incineration does not negatively affect market operations
Multi-purpose selling sheds	With a raised concrete platform and CI or CC sheet roofing, for the selling of products such as rice, milk, vegetables, spices and household goods
Fish and meat selling sheds	Purpose designed, provided according to need, and located close to a water supply
Covered slaughter slab	Provided if animals will be slaughtered in the market - constructed away from the crowded selling areas and close to waste disposal bins, and served with a water supply
MMC office	To facilitate and stimulate the activities of MMC and encourage participatory and transparent management of the facility. Each office should include a storage room, meeting room, and toilet.
Notice board	Prominently located, displaying the names of the leaseholders and MMC members and the tolls charged in the market.

The technical guidance provided by the Manual and the detailed design drawings is comprehensive and applicable to the NRRDLGIP. However, it should be noted that proper management and maintenance of improved Growth Centers remains problematic, in respect of cleaning, keeping water supplies and toilets in working order, taking good care of the market structures, and serving the needs of the users. The Manual provides detailed guidance on proper management and maintenance but in many cases this is not practiced.

## **b) Rural markets**

Although the Manual, and the associated technical standards for specific facilities, were prepared for the development of improved Growth Centers, they are equally applicable to the improvement of other, smaller rural markets. The menu of possible improved facilities at a rural market is the same as for a Growth Center. The same process of developing a market layout plan through a participatory process, and then designing the specific improved facilities in accordance with the standards, also applies.

However, because rural markets are typically smaller, and have a lower volume of trading, than Growth Centers, the investment in improved facilities will be lower. Careful choices therefore have to be made about the real priorities for improvement. For certain facilities, lower (and therefore cheaper) standards can be applied, particularly for: 1) internal roads, which may be herringbone bond brick (HBB) rather than reinforced cement-concrete (RCC); and 2) paved areas which may be brick flat soled rather than cement-concrete (CC). However, the trading efficiency and hygiene of the market must not be compromised by applying lower standards. Thus, for example, the improved rural market must be

free-draining and apply durable and reliable water supply and sanitation standards. A WMS can be incorporated into an improved rural market, according to the local demand, but the size of the facility is likely to be smaller than in a Growth Center.

### c) Ghats

Historically, river transport has always played an important role in the rural marketing and trading system of Bangladesh. There are numerous unclassified and unimproved ghats where rural country boats and engine boats moor and discharge and load passengers and goods. They are important locations for inter-modal transfer between river and road transport in rural areas. Some also function as ferry ghats for cross-river transport services. Unimproved ghats typically have primitive and unsafe arrangements for loading and unloading of goods and people, and lack any hygiene, sanitation, or safe storage facilities. Many of the ghats are located at or near rural markets, including Growth Centers.

The technical requirements for improved ghat infrastructure are in two parts as shown in Table 2-13.

**Table 2-13 Ghat improvement measures**

<b>Improved riverbank facilities</b>	
Landing station	For boats to land, and to unload and load their passengers and/or goods efficiently and in safety
Mooring area	Large numbers of boats may turn up on a hat day at important ghats connected to markets. A separate mooring area is provided so that waiting boats do not block the landing station
<b>Improved land-side facilities</b>	
Internal roads	To provide access within the ghat area and to connect into the road that serves the ghat
Paved parking area	So that road vehicles serving the ghat can park off-road and avoid congestion
Paved ghat area	Above the flood level, and free-draining so that the ghat facilities remain dry throughout the year
Hygiene facilities	Tubewell water supply, latrines with separate facilities for men and women, garbage bins
Covered passenger shed on CC base	To provide ghat users with protection from sun and rain
Storage shed on CC base	To provide secure storage for cargo held at the ghat, protected from sun and rain
Ghat offices	For collection of fees, to facilitate effective management of the ghat, and for use by local boat operators' associations

The planning of an improved ghat, within the available government or *khas* land area, requires the same participatory process as for a market, to define the improved facilities to be provided and their locations and to prepare a detailed layout plan. It is essential to ensure that the ghat is efficiently connected to the road network. Where a ghat serves a market, the improvements should be planned together to provide an integrated improved market and ghat facility. This will include providing common facilities for water supply, toilets, waste disposal, and access roads.

Hydrological conditions vary very substantially between different ghat sites, in particular the degree of seasonal change in the level and width of the river or canal between wet and dry seasons. The specific conditions at each site will determine the type of **riverbank landing station** required. There are three options:

- A jetty projecting from the riverbank out into the waterway
- Landing steps built out from the riverbank down into the water
- A floating pontoon which rises and falls with the water level, connected to the riverbank by a gangway

These civil works involve specialized construction, but the LGED has experience of the design of each of the different types of landing station, and has standard or “typical” designs which can be adapted to local site conditions. In the case of landing steps, standard designs are included in the LGED rural road design standards (LGED & JICA, 2005), and an example is shown in Figure 2-8. The improved **land-side facilities** are essentially the same as those provided at markets. The design standards embodied in the Growth Center planning manual and in the detailed technical drawings for different facilities are therefore applicable.

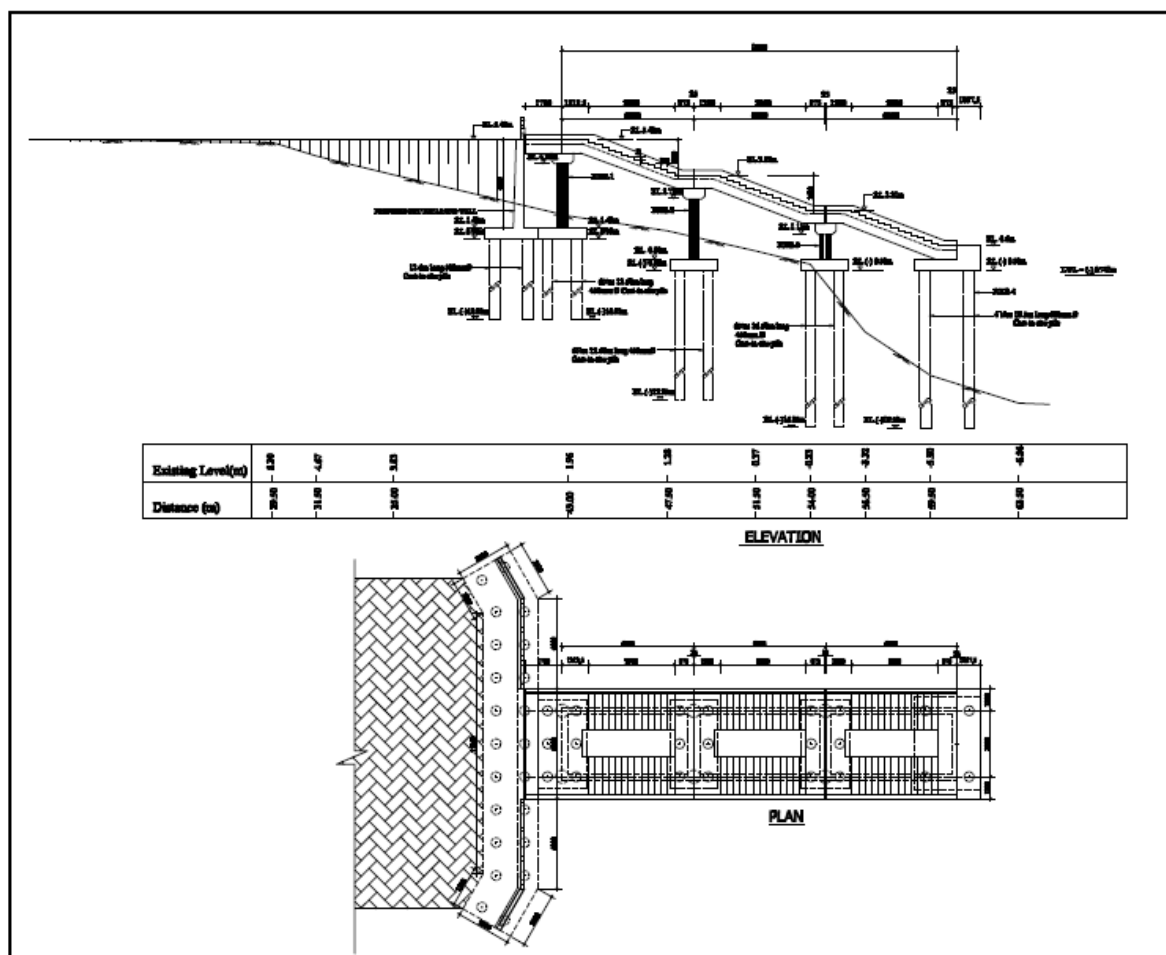


Figure 2-8 Example of standard LGED design for landing steps

### (5) Technical specifications for market and ghat works

As for roads, the technical specifications form part of the contract documentation for market and ghat improvement works, in this case accompanied in the contract by detailed design drawings for each of the specific improved facilities to be built. The specifications and drawings together operationalize the design standards. They are the main tool to define and control quality, and specify payments due to contractors, during the implementation of the contracts.

Unlike roads and cross-drainage structures, the LGED does not yet have harmonized, standard technical specifications for market and ghat improvement contracts that are used on all its projects. The LGED has issued standard technical specifications for buildings, parts of which are relevant to market and ghat works (LGED 2005). The proposed capacity-building technical assistance under the forthcoming World

Bank financed RTIP-2 includes support to prepare harmonized and updated technical specifications for market and ghat works. However there has already been a significant degree of harmonization through the preparation and adoption of comprehensive technical specifications for the previous World Bank financed Rural Transport Improvement Project (RTIP-1), which will also be used by RTIP-2 and are being applied on SWBRDP.

These technical specifications cover all aspects of market and ghat improvement works and describe each activity and the work methods to be applied. They define the materials specifications, the quality standards to be achieved and the associated inspection, field and laboratory testing and approval procedures. They also specify the methods of work measurement and the pay items. The contents of the specifications are in Table 2-14.

These specifications are quite comprehensive and technically sound, and consistent with the design standards set out in the Manual for Growth Center Planning. They provide all the information required to achieve the defined technical and quality standards, and for proper engineering supervision of works. The specifications are applicable to the construction of improved Growth Center and rural markets and ghats under the NRRDLGIP, and to Pourashava market works. However, the following refinements will be needed: 1) ensure that all work items are consistent with the items in the Bill of Quantities (BOQ) for market and ghat works; 2) update them in respect of recent innovations such as solar-powered lighting; and 3) expand the coverage of health, safety, and social aspects. For the NRRDLGIP, it will be important that adequate laboratory facilities and sufficient trained staff are available in order to ensure that the defined material specifications and quality standards are achieved.

**Table 2-14 Contents of technical specifications for market and ghat improvement works**

<b>Section 1: General Specifications</b>
Location of works, general requirements, description of works, site information, quality control of materials and workmanship, materials testing, measurement of work, basis of payment, contractor's general obligations
<b>Section 2: Specifications for Structures</b>
Demolition and removal of existing structures, excavation and backfill for structures, earthen ring and cross bundh, brick masonry works, brick soling and HBB, RCC piles, load testing of piles, concrete for structures, reinforcement for RCC, slope protection
<b>Section 3: Specifications for Building Works</b>
<i>a. Civil Works</i> Steel works in roof trusses, CI roofing, plastering and painting, woodwork for doors and window shutters, septic tanks
<i>b. Sanitary and Plumbing Works</i> Plumbing and piping, overhead tanks, ferrule connections and toilet fittings
<i>c. Electrical Works</i> Circuit wiring in a building, pipe work, cable work, wire and cable installation, feeders, lighting and appliance circuits, electrical fittings and accessories, ceiling and exhaust fans, water pumps and motors, electrical cable, control wiring, certification
<i>d. Miscellaneous</i> Lime terracing and twin-pit water-seal latrines
<b>Section 4: Specifications for Roads and Incidental Works</b>
<i>a. Road Works</i> General requirements, removal of existing structures, embankments, pavement works, drainage repair, surface repair
<i>b. Incidental Works</i> Clay covers, brick-lining of side-drains, kilo meter and guard posts, boundary pillars, road signs
<b>Section 5: Environmental Specifications</b>
Pre-construction stage, construction stage, post-construction stage, certification of completed works for payments, Environment Management Action Plan (EMAP) and Environmental Codes of Practice (ECP)

## **(6) Guidelines and practices for rural road maintenance**

Section 2.2.4 refers to the issues faced by the LGED in maintaining in good condition the progressively increasing network of all-weather UZR and UNR, and the proposed policy to address these. Inspections of roads during field visits indicate significant problems (Figure 2-9). Although these issues remain, the LGED has already done much to develop procedures for the planning, implementation, and management of rural road maintenance. The latest practices are set out in its Rural Roads and Culverts Maintenance Implementation Manual (LGED 2010). This manual covers routine, periodic, and emergency maintenance of UZR and UNR and of small cross-drainage structures on those roads – an example of periodic maintenance is shown in Figure 2-10. The manual is detailed, and suitable for use by field-level staff. The contents of the manual are summarized below:

- Definition and objectives
- Road maintenance categories
- Re-classification of roads
- Routine maintenance
- Periodic maintenance
- Emergency maintenance
- Maintenance of bridges and culverts
- Road appurtenant structure inventory
- Condition assessment of pavement and classification for maintenance
- Maintenance needs and preparation of priority scheme list
- Finalization of District annual road maintenance program
- District-wise allocation of maintenance fund
- District maintenance committee
- Scheme preparation and cost estimation

It is now established practice in the LGED to contract directly with LCS for the off-pavement routine maintenance of UZR and UNR, and for tree-caretaking (Figure 2-11). Contracting with LCS has proved to be effective in reducing embankment erosion, keeping small cross-drainage structures free of obstructions, and growing mature trees along road embankment slopes. At the same time, poor women are given an opportunity to earn a regular income and improve their livelihoods.

Finally, brief reference should be made to Performance-based Maintenance Contracting (PBMC). Currently, apart from works undertaken by LCS, UZR and UNR routine, periodic, and emergency maintenance works are carried out by local contractors under conventional BOQ contracts. Under PBMC a contract is given for maintenance of one or more roads for an extended period of time, typically three to five years. The contractor is paid monthly, not on the basis of works carried out (activities) but on the condition of the road (the outcome), as determined by monthly inspections. The LGED has carried out initial PBMC trials under a Danish International Development Agency (DANIDA) -supported project. RTIP-2 proposes to extend the use of PBMC to about 450 km of planned routine and periodic road maintenance in ten Districts under five-year contracts. The contracts will also include a provisional sum which can be applied for the contractor to carry out emergency works. There is much still to be learnt about the effectiveness of, and systems and procedures for, PBMC of UZR and UNR in Bangladesh. However, it offers the prospect of providing a mechanism to utilize maintenance funds more efficiently to sustain the level of service provided by an improved rural road network.





**Figure 2-9 Need for routine pavement maintenance**



**Figure 2-10 Periodic maintenance**



**Figure 2-11 Labor Contracting Society at work**

## (7) Technical standards for drains

Technical standards for drains in urban areas are specified in LGED (1998), *Urban Drainage Manual*. Pourashavas have constructed drains in line with the manual in LGED projects such as the UGIIP-1&2, the STIDP-2, and the STIFPP-2. This section reviews the technical standards specified in the manual.<sup>16</sup>

### a) Design standard

#### *Design procedure*

The design procedure according to LGED (1998) is as follows:

- **Mapping of existing and proposed drains:** Topographic and land use maps are to be scrutinized. Existing drains and new drains are to be marked on the maps.
- **Preparation of a schematic plan and coding of drains:** A schematic plan of a drainage network in a Pourashava is prepared. It is a simplified plan, aiming to visualize the network. The plan codes each drain in the network.
- **Assessment of contributing area:** Contributing area or catchment area is to be identified and measured. This assessment is aimed to determine suitable sizes of drains.
- **Estimation of time of entry:** Time of entry, which is the time for run-off to flow across a contributing area into a drain, is estimated for each drain based on ground slope and maximum distance of the overland flow.
- **Confirmation of water levels:** The average, highest annual 10-day water level at a downstream water body or in a drain, to which a new drain will be connected, needs to be assessed. This is to ensure that the level of the new drain be above the water level at its outlet.
- **Calculation of rainfall intensity and peak flow:** Rainfall intensity and design peak flow are calculated. This calculation is worked out mostly based on the modified rational method, which is suitable for an area of less than 60 ha. For a larger area, the hydrograph routing method is to be applied.
- **Design of drain:** The shape, type, hydraulic gradient, and size of a drain are determined, and a design drawing is prepared.

#### *Standard designs*

The standard types of drains are summarized in Table 2-15. The shapes of drains are determined, given the available land size and possible slope. The most common shape for *pucca* drains (drains of reinforced concrete, cement concrete, or brick with cement mortar) in urban areas is a rectangle. Rectangular standard drains are Types A to H specified in the manual. Trapezoidal drains (Types J, K, and Z) are recommended where available land is large enough, because they are bigger in size but more efficient at flowing water than rectangular drains. With regard to materials, brick is to be used for drains of 1,350 mm or less depth, while RCC is for deeper ones. RCC is also used where space is relatively small. Type A drain and RCC rectangular drain are illustrated in Figure 2-12 and Figure 2-13, respectively.

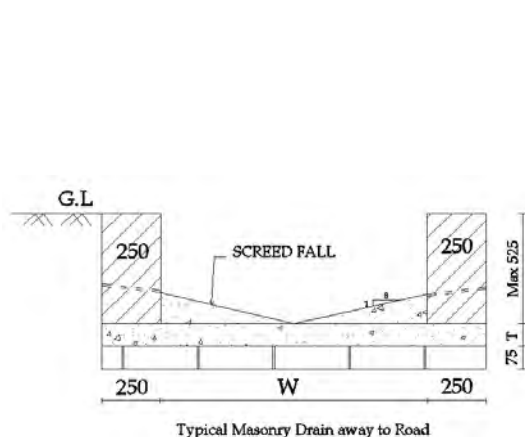
<sup>16</sup> The manual describes a methodology primarily for small- or middle-size drains such as secondary and tertiary ones. When drains are larger than those, like primary drains, they should be designed on an individual basis.



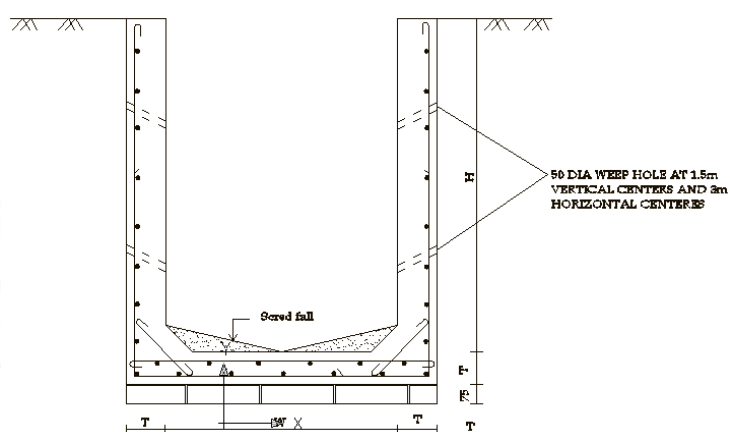
**Table 2-15 Standard types of drains**

No. Drain type	Application (locations, way of utilization, etc.)
A. Standard open brick drain	• Generally used where roads are away
B. Open brick roadside drain	• Used where roads are adjacent
C. Standard brick drain with footpath top slab	• Used when a footpath is necessary
D. Brick roadside drain with footpath top slab	• Used as a footpath next to roads • Slab needs to be at least 0.15 m higher than an adjacent road to keep vehicles away.
E. Brick road cross drain with road top slab	• Designed for vehicles to cross over
F. Brick roadside drain with road top slab	• Designed for vehicles to run along
Z. Trapezoidal brick drain	• Same as Type A to F except for its shape
G. Reinforced concrete drain	• Designed on an individual basis • Used where available space is too small to apply brick drains or when the depth of a drain is over 1.35 m
H. Box culvert	• Designed on an individual basis • Used where top slab is required
I. Pipe drain	• Used where space is available and close drain is needed
J. Trapezoidal lined drain (in-situ concrete)	• Used where space is available but a pucca drain is needed
K. Trapezoidal lined drain (concrete slabs)	• Used where space is available but a pucca drain is needed
L. Market drain	• Used in markets and similar areas

Source: LGED (1998)



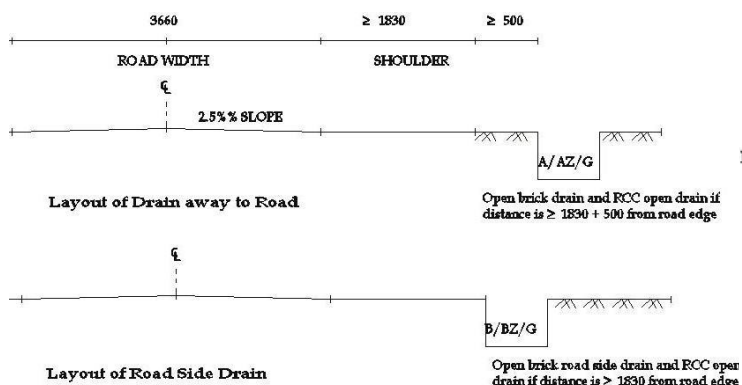
Source: LGED (1998)

**Figure 2-12 Open brick drain (Type A)**

Source: LGED (1998)

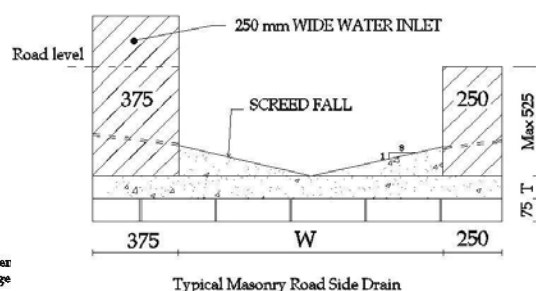
**Figure 2-13 RCC rectangular drain**

Whether to apply roadside drains (Types B to F) is determined by considering adjacent roads. For instance, Type A, which is not roadside drain, is applicable if a drain is more than 0.5 m away from the nearest road shoulder because pressure from vehicles running the road is negligible. Otherwise, Type B (open brick roadside drain, Figure 2-15) should be constructed. Figure 2-14 illustrates this application condition of Types A and B. When a road is narrow, Type F (roadside drain with road top slab) is to be applied.



Source: LGED (1998)

**Figure 2-14 Application of normal drain and roadside drain**



Source: LGED (1998)

**Figure 2-15 Brick roadside drain (Type B)**

Survey Team confirmed that the technical standards specified in the manual are basically adequate. However, the team offers the following recommendations:

- Although the manual stipulates that brick should be used for drains of 1,350 mm or less depth and that RCC for deeper ones, the use of brick or RCC should be carefully reviewed and determined. This is because there are many cases in which brick drains have collapsed, as the team's field investigation found. Learning from the lessons, brick drains were not allowed to be used in STIFPP-2 due to comparatively fragile nature of bricks. It is therefore recommended that RCC be the first choice in NRRDLGIP, and that brick can be used for drains of 1,200 mm or less depth only where pressure on drains is sufficiently small.
- The field investigation undertaken by the team revealed that outfalls of drains had been eroded and destroyed by running water. It is therefore recommended that outfalls of drains should be designed to be tolerant of running water. For example, in order to slow down the flow of water, outfalls are to be kinked, and blockages are to be installed on drain beds.

#### **Auxiliary substructure**

Auxiliary substructures are necessary for the main structures of drains mentioned above. The LGED (1998) specifies the following substructures:

- **Top slabs:** Top slabs, or cover slabs, cover drains, particularly roadside drains and road cross drains. From the maintenance viewpoint, it is important to make entries into drains covered by top slabs. Intervals between the entries should be 15 m for drains of less than one meter width, while they can be 50 m for wider ones.
- **Manholes:** For maintenance, manholes are necessary to be installed to all pipe drains and rectangular culverts of less than one meter width, if any of the following conditions prevails: 1) the length of drains exceeds 20 m; 2) there is a change in size, direction, or gradient of drains; 3) there is a junction of drains. With regard to materials for walls of manholes, bricks are applied when top slabs are 1.575 m above the inverts of drains. Otherwise, RCC should be used.
- **Trash racks:** Where a significant amount of solid wastes are floating, trash racks or bar screens are necessary to keep the wastes out.
- **Drop structures:** Drop structures such as blockages on drain beds are installed to slow down speed of running water. From a viewpoint on safety, their height should be less than 0.45 m.

## b) Operation and maintenance

The LGED has prepared manuals on O&M of urban drains such as LGED (1998, and unknown year). According to LGED (unknown year), the O&M includes regular maintenance, seasonal maintenance, and emergency maintenance. The regular maintenance is merely cleaning, unless physical damage is found. The seasonal maintenance is required during and after the rainy season, as intensive rain causes siltation and physical damage. Emergency maintenance is conducted when physical damage and significant siltation occur.

The responsibility to clean drains is taken by the Health, Family Planning, and Cleaning Division of a Pourashava. The Conservancy Inspector of the Division is the person in charge. The Engineering Division of a Pourashava is in charge of physical work of drains.

## (8) Technical standards for solid waste management

As stipulated in Pourashava Act 2009, Pourashavas are responsible for solid waste management. Solid waste management of Pourashavas has been supported in the STIDP-1&2, the STIFPP-2, and the UGIIP-1&2. Solid waste management undertaken by Pourashavas comprises the installation of storage facilities, collection of garbage from storage facilities, transport of garbage, and final disposal. Some Pourashavas provide house-to-house collection service, which gathers garbage directly from houses.

### a) Design and technical specifications

#### *Dustbins*

Dust bins, or storage bins, are installed to store garbage temporarily. In principle, they are placed near the places where wastes generate. In actuality, they are found at roadsides or in the places where people gather such as markets. The types of dustbins vary and are determined based on the characteristics of locations and the volume of garbage. A typical design for dustbins suitable for markets is illustrated in Figure 2-16.

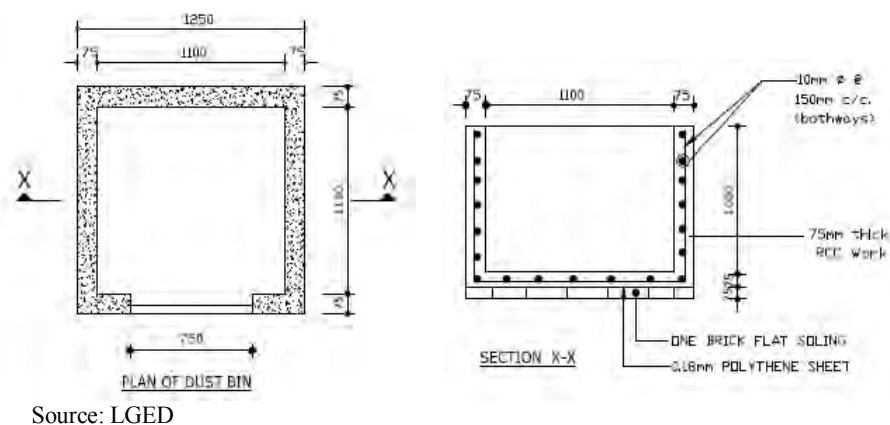


Figure 2-16 Typical design of dustbin

#### *Transfer station*

Transfer stations are used to transfer garbage from small vehicles to big ones. At a specified time, rickshaw vans, push carts, and trolleys bring garbage to transfer stations where garbage trucks stand by. Then, garbage is unloaded from small vehicles onto trucks, and brought to final disposal facilities. Transfer stations enhance efficiency of garbage transport, as it is difficult for human-powered vehicles with limited collection capacity to transport garbage for a long distance from central towns to final disposal places. Figure 2-17 shows a typical design of transfer stations practiced by the LGED.

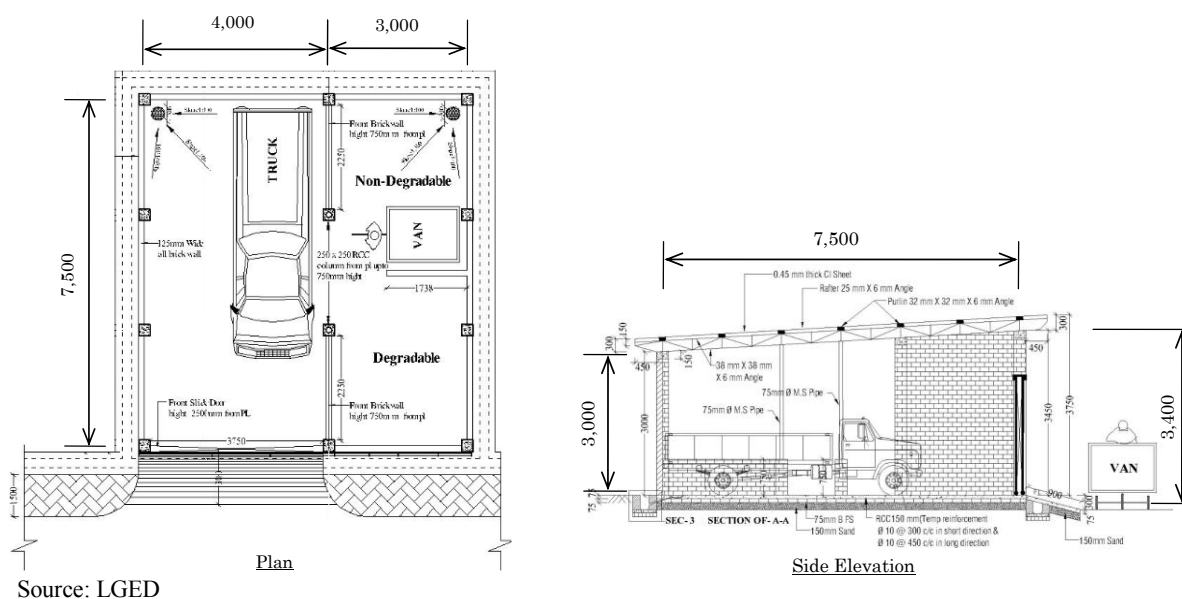


Figure 2-17 Typical design of transfer station

### Landfills

Landfills are the final stage of solid waste disposal. Some Pourashavas do not have landfills that are artificially constructed. They dump wastes into natural dips, which are likely to create environmental hazard. On the other hand, donor-funded projects such as the STIDP-2, the STIFPP-2, and the UGIIP-1&2 have supported construction of landfills. The designs and layout of landfills are simple as they are mere earthen trenches. The most important aspect to be considered at planning is site selection. The site selection should: 1) avoid floodplains and wetlands; 2) avoid areas where the groundwater level is high; 3) avoid residential areas; and 4) have a buffer zone within 500 m distance from landfills. In addition, it is recommended to construct an embankment around landfills that is higher than 3 m.

### Sanitary landfills

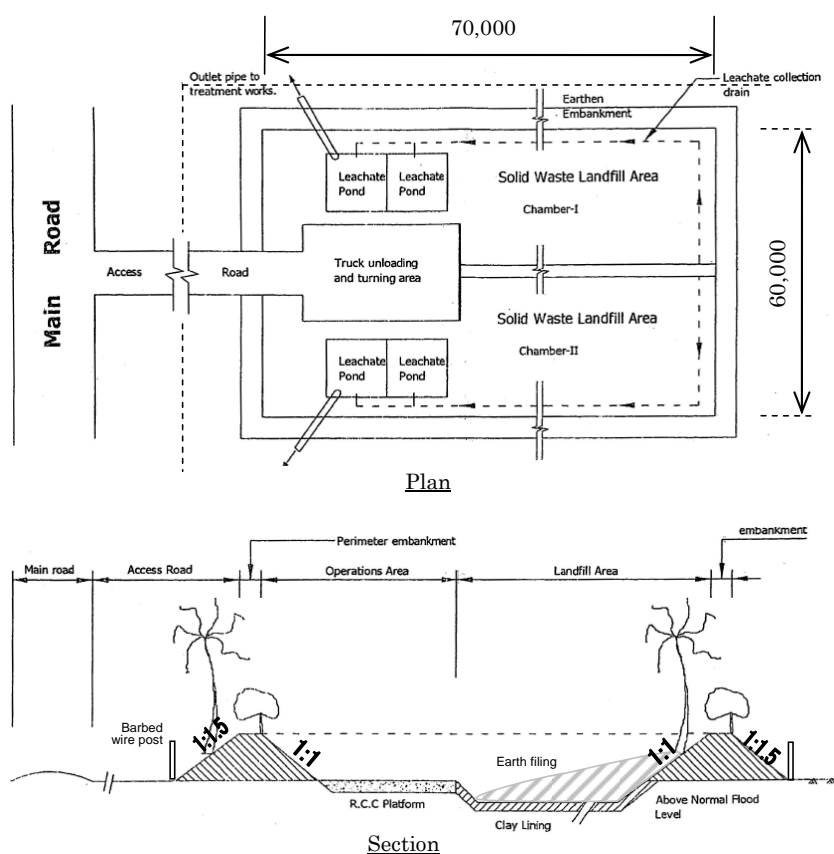
Sanitary landfills are designed to minimize environmental pollution caused by wastes, particularly leachate from wastes. They are not yet common in Pourashavas, however, because their construction cost is high. Only a few Pourashavas constructed them in donor-funded projects such as STIDP-2.

Figure 2-18 shows a typical design for sanitary landfills which was prepared for STIFPP-2. The most important function of sanitary landfills is control and treatment of leachate. Sanitary landfills contain leachate ponds, where leachate is stored, treated, and finally discharged into outside drains or river. To leak leachate from trenches into the ponds, drains are constructed between the ponds and trenches. In order to prevent permeation of leachate, the surface of ponds and trenches is covered with non-permeable lining such as impervious clay liner or high-density polyethylene sheet.

The following are other technical specifications on sanitary landfills:

- A drainage system for storm water is to be constructed to quickly drain water away from trenches. This helps prevent internal flooding, mitigate marshy conditions of dumped waste, and minimize the volume of leachate.
- The base of landfills is to be at least 3 m above the level of groundwater table.
- Wastes are covered periodically by soil of 75-100 mm thickness to reduce odor and vectors.
- Wastes dumped into the landfills are compacted by equipment items such as bulldozers and compactors to reduce their volume.

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Source: LGED

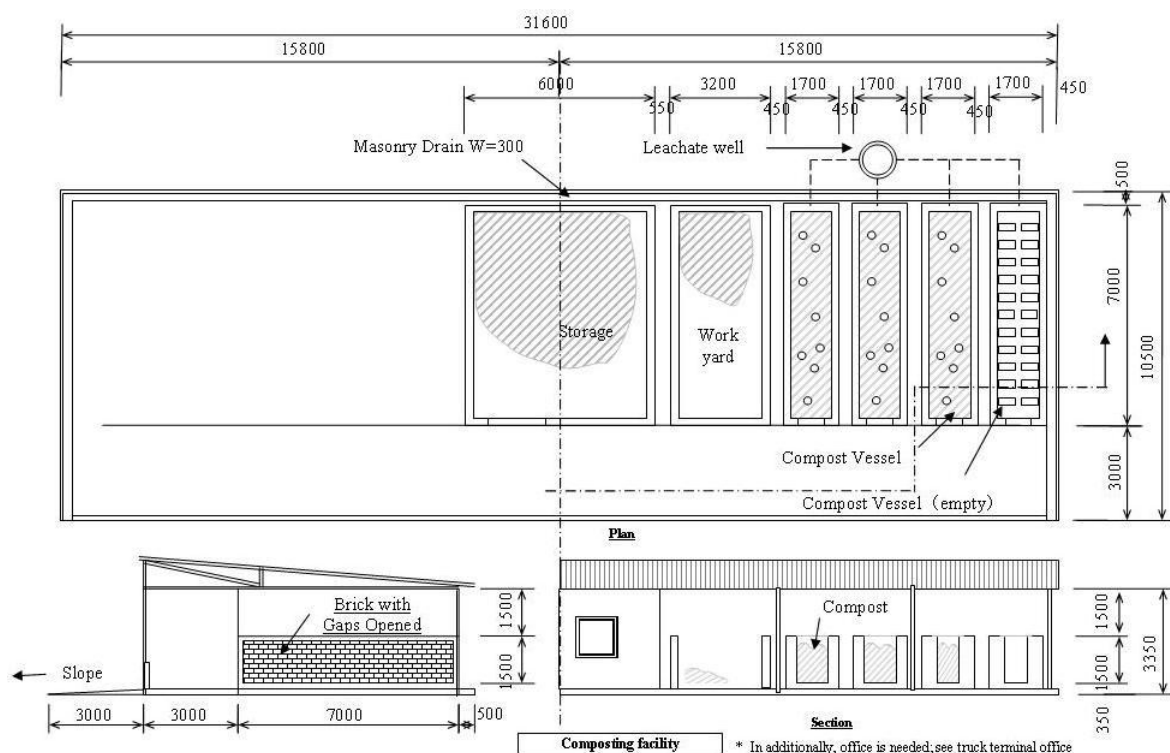
**Figure 2-18 Design of sanitary landfill*****Composting plant***

Composting is biological transformation of organic materials into compost that is brought about by microorganisms and invertebrates. Composting of wastes is environmentally friendly and generates revenue. It is being practiced by Pourashavas on a pilot basis. Figure 2-19 shows a composting plant of Mymensingh Pourashava. The process practiced by Mymensingh Pourashava is as follows:

- Remove recyclable and non-biodegradable materials from garbage manually.
- Shred garbage into small sizes to increase the surface of garbage so that biological decomposition accelerates.
- Hasten aerobic composting by controlling moisture, oxygen, and carbon-nitrogen ratio.
- Process compost in the form of final product by screening out impurities, blending with additives, and packaging.

An advantage of composting plants is the potential for revenue generation from, for instance, vegetable cropping nearby Pourashavas. In the case of Mymensingh Pourashava, the composting plant, which was initiated as a pilot a few years ago, has recently attained the breakeven point of profitability.

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**Figure 2-19 Layout of composting plant in Mymensingh Pourashava**

## b) O&M

The Cleaning Section in the Health, Family Planning, and Cleaning Division of a Pourashava holds responsibility to handle O&M of solid waste management. The Conservancy Inspector of this Section executes direct control of O&M, and workers are contracted for the collection and transport of garbage.

In most cases, Pourashavas collect wastes from dustbins by such means as rickshaw van, power trolley, and dump trucks. Residents are required to bring and dump their wastes into the bins. The collection is to be carried out every day or more frequently depending on requirement. In some Pourashavas, house-to-house collection service is performed, where small vehicles such as rickshaw vans and pushcarts pick up wastes directly from the houses. In some cases, the operation of house-to-house collection is contracted out to NGOs or delegated to CBOs that employ vehicle pullers and collect service charge from residents.

With regard to disposal facilities, landfills are directly operated by Pourashavas in most cases. Since composting plants create revenues but require substantial human resources and several areas of expertise on composting and marketing, it is recommended to lease out the management.

## (9) Technical standards for piped water supply and tube wells

Water supply in Pourashavas is categorized into: 1) piped water supply; and 2) low-cost water supply, mainly hand tubewells. As for the piped water supply, the Department of Public Health Engineering (DPHE) executes major construction works, and Pourashavas performs their operation and maintenance. Therefore, Pourashavas in the previous LGED projects mostly rehabilitated and expanded piped water supply systems. As for the tubewells, Pourashavas constructed them in several projects with technical support from the DPHE.

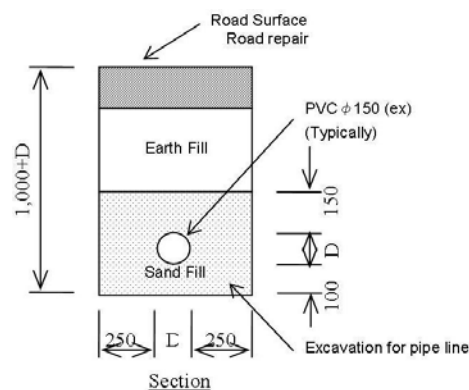


### a) Piped water supply

The piped water supply system is composed of the following: 1) collection system; 2) water treatment system; and 3) distribution system. The collection system is required for water intake. Its forms are dependent on water sources, but the most common type is tubewells, or called “production tubewells,” because groundwater is abundant and less costly in comparison to other sources such as surface water and rainwater.

The type and degree of water treatment hinge on the quality of water. Although groundwater is relatively free of disease bacteria, it is rich in mineral substances compared with surface water. Therefore, it may require removal of arsenic, iron, fluoride, and so forth. The most common methods for the treatment include screening, sedimentation, aeration, chemical treatment, filtration, and demineralization. As for arsenic removal, the most common technologies are co-precipitation and adsorption onto coagulated flocs, lime treatment, adsorption onto sorptive media, ion exchange resin, membrane techniques, and microbial processes.

The distribution system includes pipes, pumping devices, storage reservoirs, overhead tanks, hydrants, and service connections. A single pipeline which conveys bulk amounts of water is called transmission main, while pipes arranged to distribute the conveyed water to consumption points are called distribution mains. Figure 2-20 illustrates a section of a typical pipeline. House connections are water service pipes connecting water distribution mains and in-house water pipes with taps. The distribution system is to be designed for peak water demand.



Source: LGED

**Figure 2-20 Section of water pipe**

### b) Tubewells

Tubewells can be grouped into: 1) shallow tubewells; and 2) deep tubewells. A popular type of shallow tubewells is No. 6 hand pump tubewell. Its name comes from its barrel diameter in inches. Generally, it is composed of hand pump, blind pipe, strainer, and sand trap. It performs average discharge of 30 to 40 liters per minute and is usable for 15 to 20 years. Deep tubewells withdraw water from deep aquifers that are usually more than 75 m below ground. As the groundwater table has been declining and shallow aquifers are more likely to contain iron and arsenic, deep tubewells are an option preferred to shallow tubewells. A typical design for deep tubewells is illustrated in Figure 2-21. When they are constructed, it is important to install tubewells straightly and vertically.



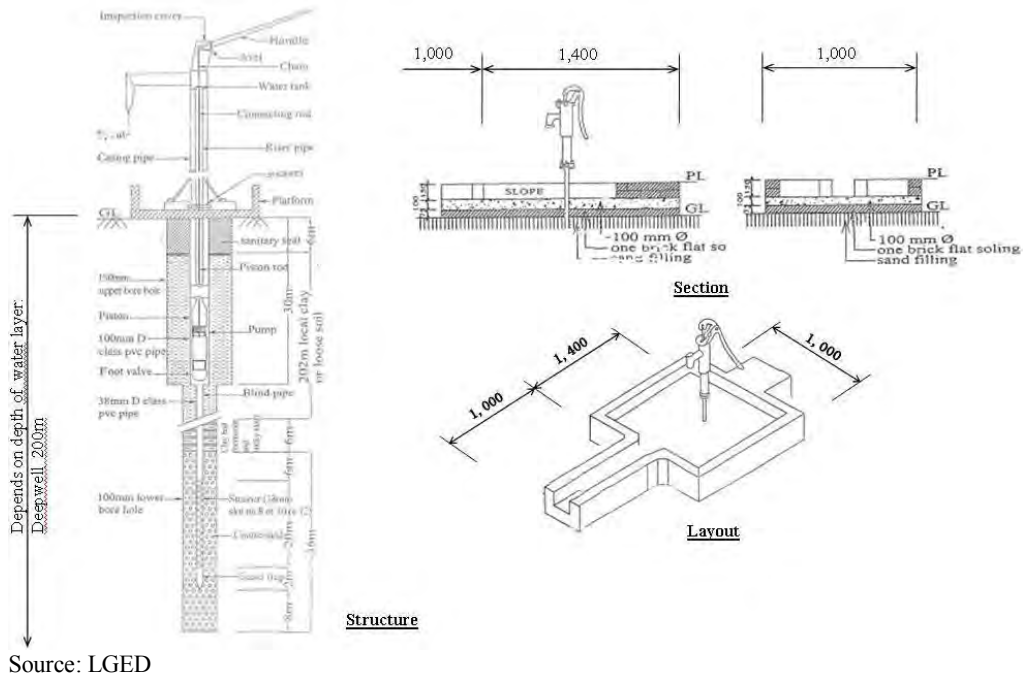


Figure 2-21 Design for deep tubewell

Site selection for tubewells should ensure the acceptable level of dissolved mineral substances in groundwater. However, if no place is found free from the contamination of the minerals, installation of mineral removal plants to tubewells is an option to address the contamination. Figure 2-22 shows a small-scale arsenic and iron removal plant installed to hand tubewells at the community level.

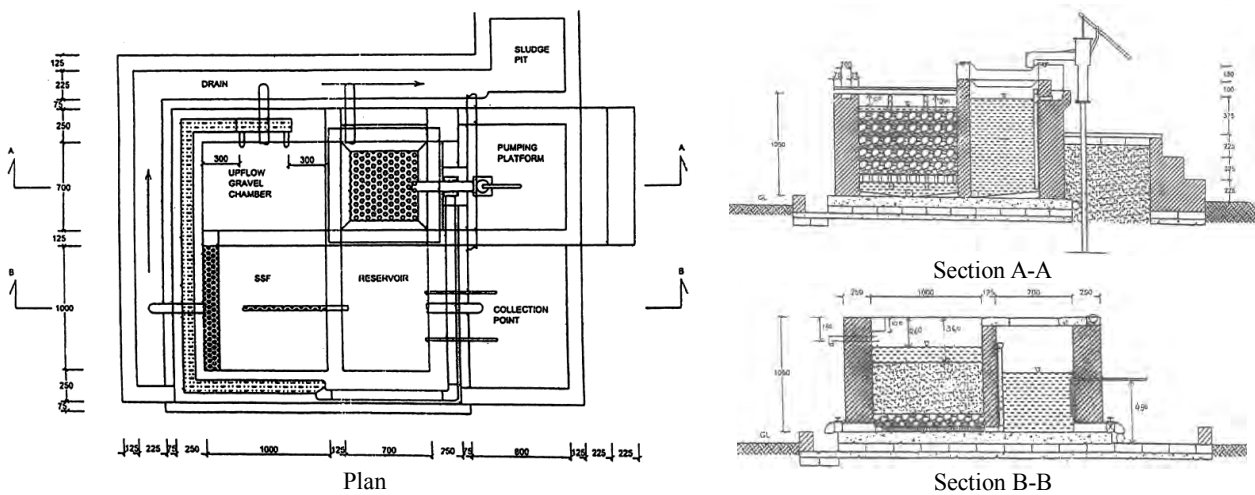


Figure 2-22 Small-scale arsenic and iron removal plant

**(10) Technical standards for sanitary toilets**

The LGED does not establish rigid technical standards for sanitary toilets, but has supported Pourashavas in constructing sanitary toilets in LGED projects. Toilets can be categorized into community toilets and public toilets. The former is provided in residential areas for people having no toilet in their houses, whereas the latter is located in public spaces such as markets and bus terminals.

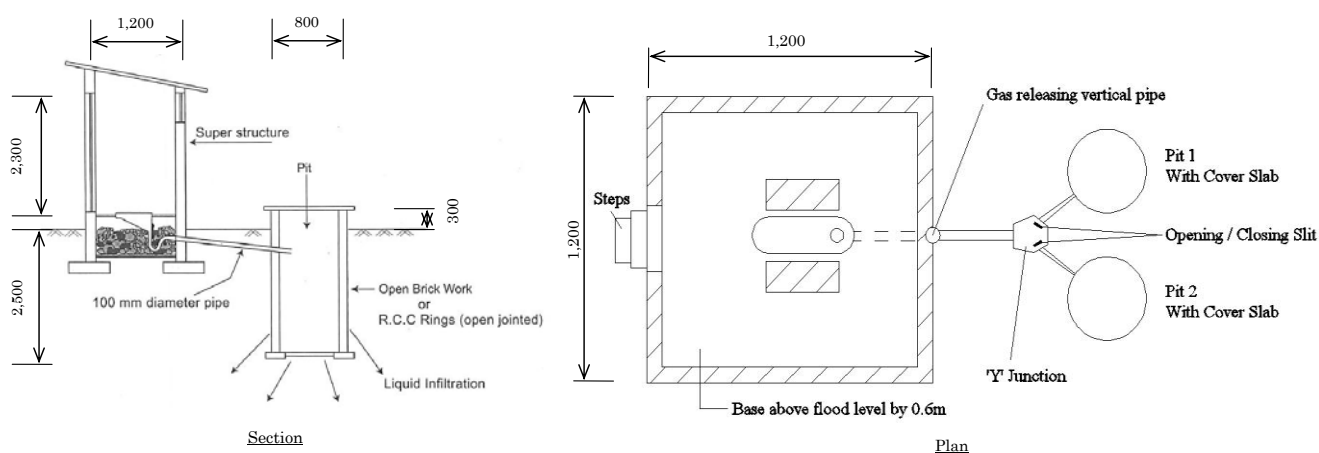
### a) Community toilets

The twin off-set-pit pour-flush toilet, or simply called “twin-pit toilet,” is recommended as a community toilet in urban areas. It consists of four major parts: 1) superstructure; 2) toilet pan with water seal; 3) Y-junction; and 4) twin leach pits (Figure 2-23). Water seal between pan and pits prevents generation of odors and insects. Y-junction directs excreta to one of the two pits until the pit is full. When the first one becomes full, Y-junction changes direction of the excreta flow to the other one so that the first one is left for decomposition for one to two years. The decomposition lessens toxicity of human excreta and enables manual removal of sludge inside the pit. After the removal, the pit can be reused.

The single-pit toilet is more affordable than the twin-pit toilet, but not able to reduce pathogens inside a pit by decomposition. It is applicable in urban areas when equipment for mechanical de-sludging such as vacuum tankers is available. It is also possible to install only one pit at the initial construction of a toilet, but install another one when the first one becomes full.

Pit toilets are a potential source of groundwater pollution, as liquid in the pits soaks into the ground. Thus, careful considerations should be made to avoid the pollution. The following points should be considered:<sup>17</sup>

- It is desirable that pits are shallow in depth.
- It is desirable to keep the gap between the pit bottom and the water table more than 2 m.
- The bottom of pits should remain undisturbed and unsealed if it is 2 m above the water table.
- If a serious risk of aquifer pollution is anticipated, the base of pits should be sealed with concrete and sand should be placed underneath the base. This considerably reduces pollutants reaching groundwater.
- Pits should be constructed on elevated earthen mounds with at least 1.5 m-radius earth covering all around pits.
- The distance between pits and tubewells should be at least 10 m.



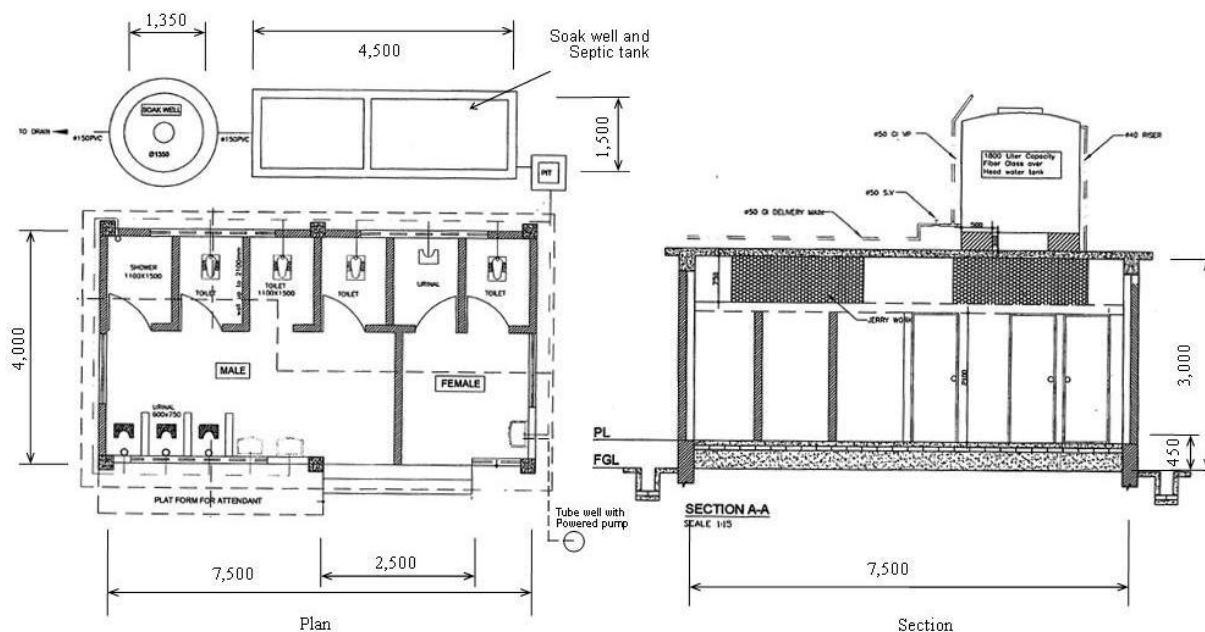
Source: Ahmed & Rahman (2010) (left), LGED (right)

**Figure 2-23 Design of twin pit toilet (twin off-set-pit pour-flush toilet)**

<sup>17</sup> Ahmed & Rahman (2010)

## b) Public toilets

A typical design for public toilets is presented in Figure 2-24. Public toilets are equipped with flush toilets, a suitable number of urinals, pans, and washbasin. They should have separate sections for men and women. It is important to ensure sufficient water supply. If piped water is not available, tubewells and electrical pumps should be installed to pump up water to overhead water tanks. It is also important to dispose excreta properly. If there is no sewerage system, septic tanks and soak wells should be installed. Capacity of septic tanks should be determined in accordance with the volume of discharge. Otherwise, discharge cannot be stored in the tanks until pathogens get decomposed.



Source: LGED

Figure 2-24 Typical design for public toilets

## c) O&M

The Cleaning Section in the Health, Family Planning, and Cleaning Division of a Pourashava holds the mandate for O&M of toilets. The Conservancy Inspector in the Section shall perform direct management of O&M. Under the overall responsibility of the Section, there are several forms of institutional arrangements for O&M. In the case of community toilets, the responsibility of daily maintenance is usually devolved to beneficiaries. The beneficiaries bear daily cleaning tasks, whereas Pourashavas bear responsibility to remove sludge in pits and physical rehabilitation. In the case of public toilets, it is common to lease out their operation to private companies in which the lessees shall perform operation and daily maintenance. They raise revenue by levying charges for use, unless toilets are leased out together with facilities such as municipal markets and bus terminals. When they are leased out as part of such facilities, the charge may not be imposed upon toilet users, but the lessees raise revenue from tenants in markets and bus owners.

### (11) Technical standards for bus and truck terminals

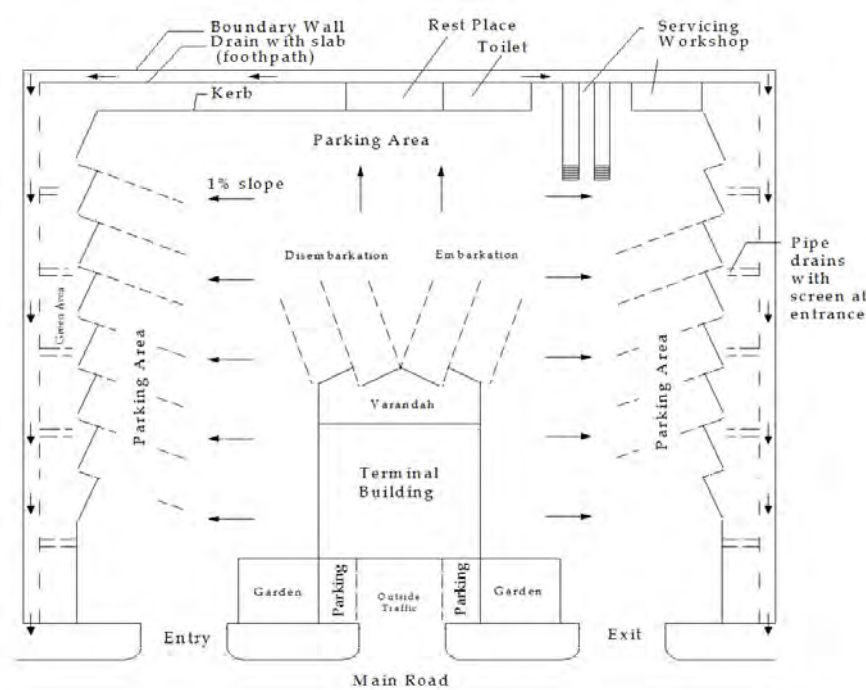
In the STIDP-1&2 and the UGIIP-1, bus and truck terminals have been designed for specific locations and needs and available budgets, whereas paving and drains in those terminals follow respective standards.

A layout plan for bus terminals is illustrated in Figure 2-25. Desirable facilities in bus and truck terminals include gas filling stations, servicing places, and terminal buildings. Facilities for terminal buildings include ticket counters, toilets, waiting spaces with chairs, prayer rooms, general stores, and food corners, although they vary depending on respective situations.

The size of the terminals should be determined based on the present and future volumes of traffic. A recommended location is outskirts of Pourashavas to avoid traffic congestion, noise, and air pollution. The sites with availability of adjacent land for future expansion are preferable.

Parking areas should be designed to carry off rainwater. They should have at least 1% slope from center toward outside. Storm water drains should be constructed around parking areas and be connected to outside drains.

With regard to O&M of terminals, Pourashavas usually lease it out to private companies. Lessees should take responsibility of daily operation and maintenance in return for the collection of charges from drivers that follow the governmental schedule of rates.



Source: Survey Team

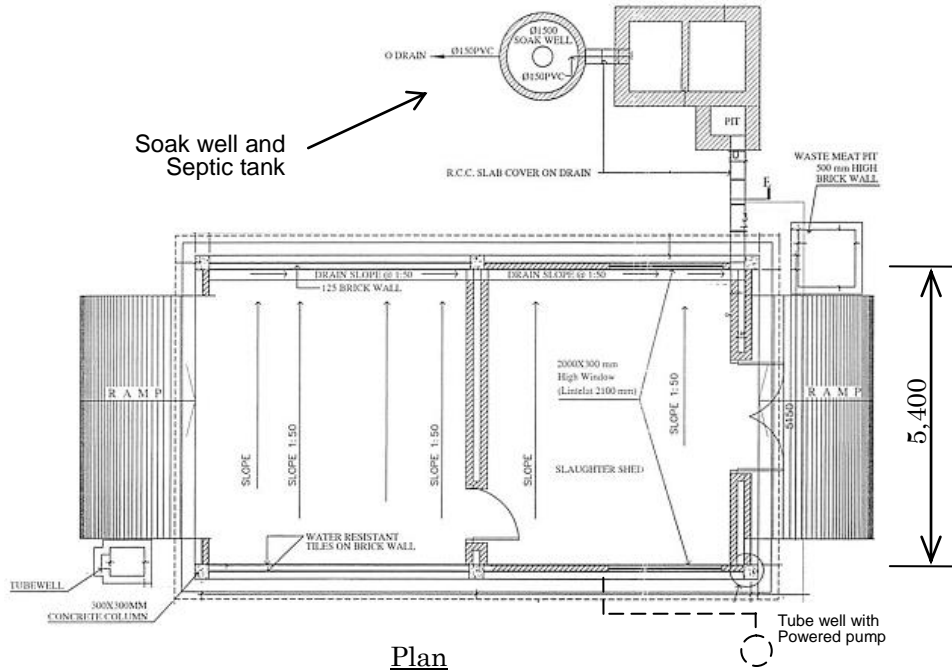
**Figure 2-25** Layout plan of bus terminal

## (12) Technical standards for slaughterhouses

According to the Pourashava Act, Pourashavas are responsible for establishment and management of slaughterhouses. Many Pourashavas have constructed slaughterhouses under donor-funded projects and block grants from the GOB. Currently there is no established standard of slaughterhouse in the LGED. The slaughterhouses are therefore designed on an ad hoc basis.

A typical design for slaughterhouses is shown in Figure 2-26. As carcasses and blood are strong pollutants and impose high environmental burden, adequate attention should be paid to prevent an adverse impact on the environment. Sufficient water supply, drains, septic tanks, soak wells, and waste storage facilities should be installed to gather and treat carcasses and blood.

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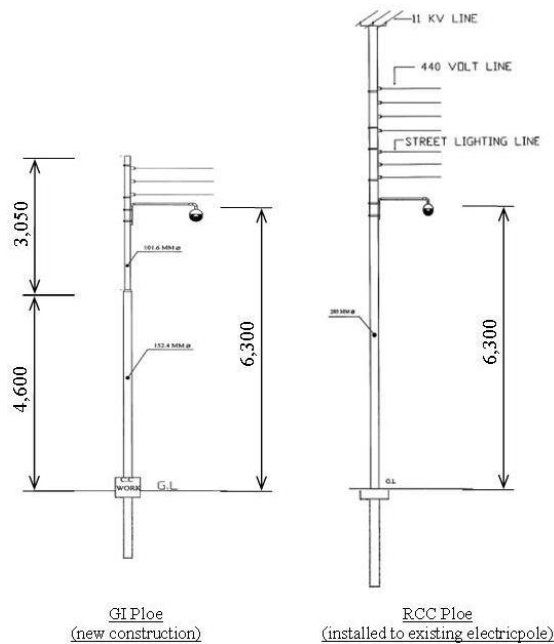


Source: LGED

Figure 2-26 Typical design for slaughterhouses

(13) Technical standards for streetlights

As of today there are no technical standards of the LGED for streetlights in Pourashavas. Streetlights are usually installed to streetlight poles of Pourashavas or electric poles of the Power Development Board. Materials for poles are RCC or galvanized iron. Streetlights are equipped with light control boards, circuit breakers, and earthing devices.



Source: LGED

Figure 2-27 Typical design for streetlights



## (14) Technical standards for slum improvement activities and small-scale infrastructure in slums

The LGED started slum improvement activities on a pilot basis with the support of UNICEF in 1985, and has since then supported slum improvement in several projects such as the STIDP-1&2, the STIFPP-1&2, and the UGIIP-1&2. The slum improvement activities have been implemented in line with guidelines developed by the LGED such as LGED (1997, 2011b). This section summarizes slum improvement activities specified in the guideline prepared for the UGIIP-2 (LGED, 2011b).

### a) Main component of slum improvement activities

The standard slum improvement activities under LGED projects consist of the following five main components: 1) community mobilization and participation; 2) infrastructure development; 3) support for self-employed economic activities; 4) primary health care; and 5) satellite school. Brief descriptions of respective components are given in Table 2-16.

**Table 2-16 Main components of slum improvement activities**

Components	Descriptions
Community mobilization and participation	<ul style="list-style-type: none"> <li>• Formation of Primary Groups, each of which comprises 10 to 15 poor households</li> <li>• Formation of a Slum Improvement Committee (SIC) in each identified slum</li> </ul>
Infrastructure development	<ul style="list-style-type: none"> <li>• Tubewell installation</li> <li>• Sanitary toilet installation</li> <li>• Footpath construction</li> <li>• Drain construction</li> <li>• Dustbin installation</li> <li>• Streetlight installation</li> </ul>
Support for self-employed economic activities	<ul style="list-style-type: none"> <li>• Support for income generation activities</li> <li>• Education on saving</li> <li>• Support for group saving and credit</li> </ul>
Primary health care	<ul style="list-style-type: none"> <li>• Selection of community health workers from slum dwellers</li> <li>• Training for community health workers on primary health care</li> <li>• Supply of equipment and medicine for primary health care</li> </ul>
Satellite school	<ul style="list-style-type: none"> <li>• Selection and training of female teachers from slum dwellers</li> <li>• Establishment of satellite schools for children not going to primary school</li> <li>• Provision of free education up to the first grade</li> <li>• Supply of books, education materials, and school uniforms</li> <li>• Assistance for children to enroll in primary school</li> </ul>

Source: LGED (2011b)

### b) Concerned organizations

#### *Slum Improvement Committee*

The Slum Improvement Committee (SIC) plays a vital role in slum improvement activities. An SIC is formed in each slum, consisting of a chairperson, a vice chairperson, a secretary, and other members selected from leaders of beneficiary groups, named Primary Groups. All the committee members except the secretary are chosen from beneficiaries. It is worth noting that either a chairperson or a vice chairperson should be female, and that at least two thirds of the members should be female. The SIC is expected to take initiative and ownership for slum improvement activities, and hold responsibility for planning and implementation of all activities in its slum, including financial management.

The process to establish an SIC is as follows:

- Slums are identified by a Pourashava and certified by PMO.
- A Pourashava, land holders, and representatives of slum dwellers enter into agreements on land use, holding tax, tenancy, and so forth.
- A Pourashava identifies and registers beneficiaries by conducting a household survey.
- Primary Groups consisting of 10 to 15 beneficiaries are formed. Each Primary Group selects a leader and a secretary from its members, either of which shall be female.
- An SIC is formed consisting of leaders of Primary Groups and Community Field Workers.

#### ***Pourashava and PRAP Steering Committee***

A Pourashava holds overall responsibility for slum improvement activities and all other works related to poverty reduction. It provides training courses and instructions to SICs, and also facilitates coordination between SICs and other organizations. It is also responsible for preparing a Poverty Reduction Action Plan (PRAP), which specifies long-term plans to alleviate poverty through improving infrastructure and public services. For PRAP-related works including slum improvement activities, a Pourashava forms a PRAP Steering Committee comprising: 1) councilors; 2) key officials including Slum Development Officer; and 3) representatives from SICs, Primary Groups, CBOs, and Gender Committee.

#### ***Slum Development Officer and Community Field Worker***

A focal official for slum improvement activities is Slum Development Officer who is responsible for managing all activities related to slum improvement. The position is presently placed only in category-A Pourashavas. In the case of category-B and C Pourashavas and even category-A Pourashavas with the position vacant, Pourashava mayors assign the responsibility of Slum Development Officer to other officials.

Community Field Workers are another group of key staff for slum improvement. They are recruited on a project basis by PMO for every three wards. They work mostly at the community level. They have closest communication with, and provide daily support for, beneficiaries, Primary Groups, and SICs. They assist SICs as member secretaries.

### **c) Process for small-scale infrastructure development**

Small-scale infrastructure development under slum improvement activities follows the process different from usual infrastructure development undertaken by Pourashavas. The small-scale infrastructure development is directly constructed by SICs without contracting out. Beneficiaries living in slums contribute part of required funds and their labor for unskilled work. The process is as follows:

- ***Preparation of a development plan:*** Each SIC prepares a development plan of basic infrastructure with the support of Assistant Engineer of a Pourashava. The development plan shows locations of basic infrastructure to be constructed.
- ***Fund transfer:*** PMO releases and transfers fund to a bank account of the Pourashava, then the Pourashava transfers the fund to a bank account of an SIC as deposit for physical work.
- ***Implementation:*** The SIC implements physical work under the guidance of engineers of the Pourashava. It purchases materials and carries out the construction. Engineers and Slum Development Officer of the Pourashava visit sites to monitor the work.
- ***Expenditure settlement:*** After completion of the work, the SIC prepares and submits expense vouchers to the Pourashava for expenditure settlement.



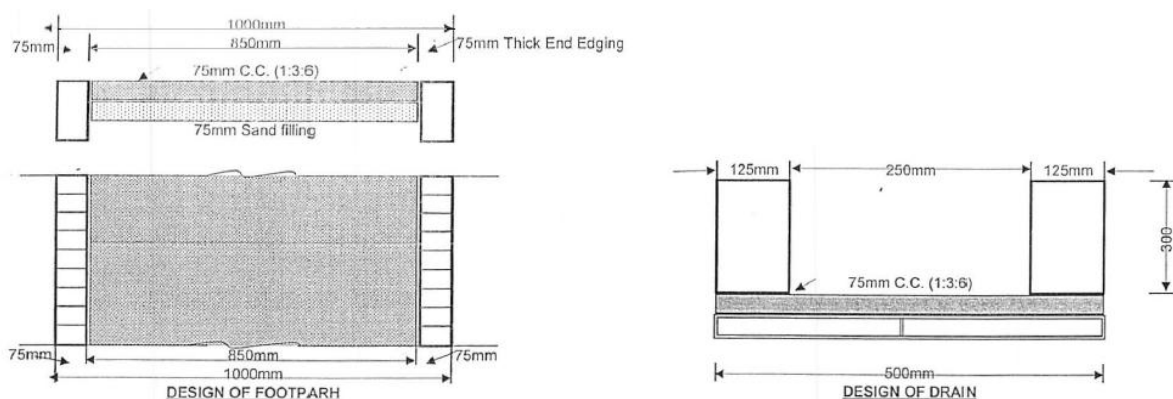
In the UGIIP-2, a PRAP is to be prepared prior to the first step above. The PRAP specifies: 1) objectives and program/schemes in the areas of economic activities, infrastructure, education, health, and equity and governance; 2) target communities; 3) estimated budget; 4) schedule; and 5) responsible persons. Then, in the first step, Community Action Plans (CAPs) are prepared by SICs as the development plans of basic infrastructure. CAPs specify current conditions and problems in slum, actions to address problems, locations and description of proposed infrastructures, lists of beneficiary households, and so on.

#### d) Technical specifications for small-scale infrastructure

Small-scale infrastructure in slums typically includes footpaths, drains, dustbins, tubewells, toilets, and streetlights.

##### *Footpath and drain*

A standard design for footpaths and drains in slums stipulated by the guideline is illustrated in Figure 2-28. The size of footpaths and drains is adjusted for site conditions. The design for drains is the same as that described in Section 2.2.5(7), although the size is relatively small. Footpaths near main roads are to be given high priority for construction, while drains connecting isolated drains are given high priority. The cost is estimated based on schedules of rates of the LGED. Beneficiaries are required to contribute their labor to the construction and undertake periodical maintenance, while maintenance requiring substantial physical work is conducted by Pourashavas.



Source: LGED (2011b)

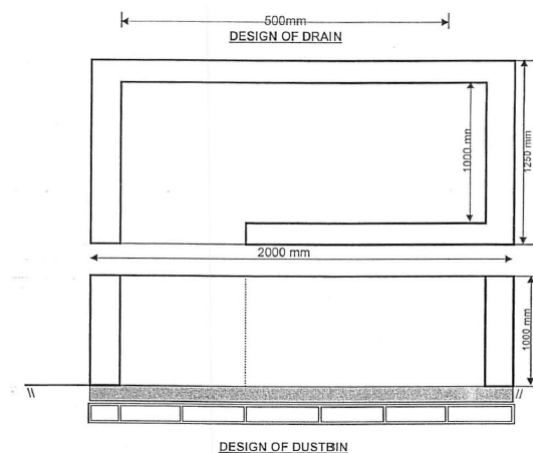
**Figure 2-28 Standard design for footpaths and drains in slums**

##### *Dustbin*

A standard design for dustbins in slums is presented in Figure 2-29. The design does not significantly differ from ordinary designs.<sup>18</sup> A dustbin is installed for every 50 to 100 households. Dustbins are located ideally at places where garbage trucks can have access.

<sup>18</sup> See Section 2.2.5(8).

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Source: LGED (2011b)

**Figure 2-29 Standard design for dustbins in slums**

***Tubewell***

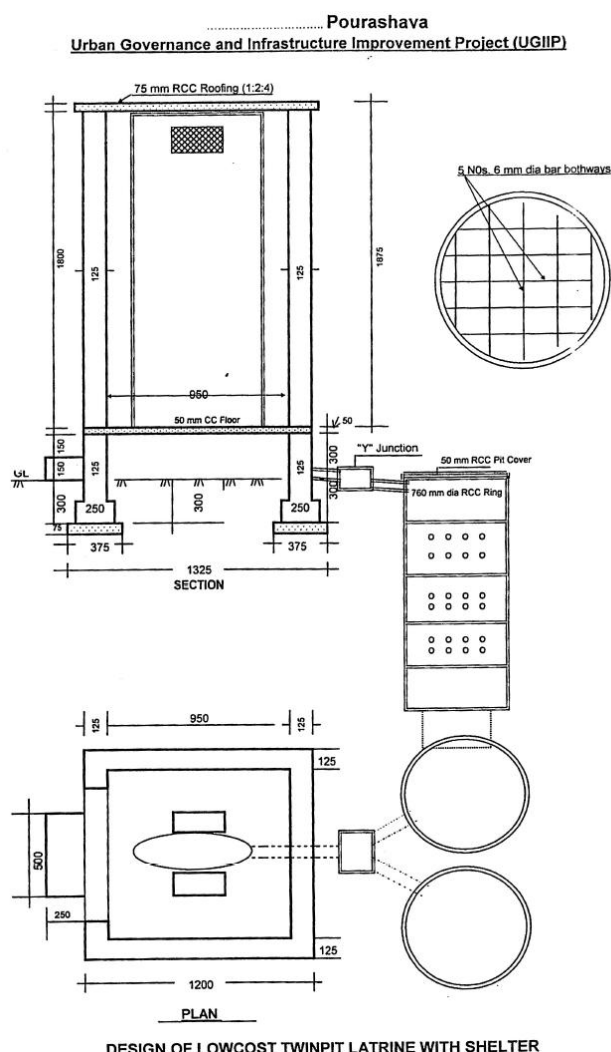
A standard design for tubewell in slums is similar to that presented in Section 2.2.5(9). A shallow tubewell is to be provided for one Primary Group consisting of about 15 households, while a deep tubewell is for two Primary Groups. Beneficiaries are required to contribute fund for the construction. The maintenance is under the responsibility of the Primary Group. A female beneficiary is to be appointed to maintain the tubewell and is given training on maintenance when necessary.

### Toilet

A standard type of sanitary toilets in slums is twin off-set-pit pour-flush toilet (Figure 2-30). It is essentially the same as the typical community toilets described in Section 2.2.5(10), although its soak wells are relatively small. A toilet is to be shared by three households in slums. Materials for toilet construction such as ring and pit-cover are provided by Pourashavas, whereas beneficiaries provide labor for construction as their in-kind contribution. The maintenance is carried out by the beneficiaries.

### Streetlight

A standard design for streetlights in slums is the same as presented in Section 2.2.5(13). A streetlight is installed for every 35 to 40 households. The Primary Groups are responsible for maintenance and bear the cost of light bulbs for replacement.



Source: LGED (2011b)

**Figure 2-30 Standard design for sanitary toilets in slums**

## 2.2.6 Other laws and regulations

### (1) Public procurement regulations

The government introduced the Public Procurement Regulation in 2003 (PPR 2003), Public Procurement Act in 2006, and Public Procurement Rules in 2008 (PPR 2008) for public procurement of goods and related services, works and physical services, and intellectual and professional services. The outlines of procurement procedures stipulated in these documents are provided in Annex 3.

#### a) Procurement of goods and works

The following methods are applicable for the procurement of goods and related services, works and physical services. The procuring entity can select the following methods of procurement as per appropriate regulations and procedures:

- Open tendering method

- Limited tendering method
- Direct procurement method
- Two-stage tendering method
- Request for quotation method

These procurement methods are applicable for national and international procurement. However, additional conditions for selecting international procurement (e.g., the time allowed for submission of foreign tenders, and international standards of technical specifications) are stipulated in the procurement guidelines.

The standard process of tendering starts from the preparation of a procurement plan and bid documents followed by a pre-qualification if applicable, or an invitation for tender. After closing the tender, the tenders shall be opened and evaluated by a designated committee. When the successful tenderer is notified of the award, the contract shall be signed by the concerned parties.

### **b) Procurement of intellectual and professional services**

The prime consideration in the selection of consultant is the quality of a consultant's technical proposal. Depending on the nature and complexity of assignment, the following two methods may be used for selection of consultants:

- Quality and cost-based selection
- Selection under fixed budget

The following procedures are a standard flow of selection for procurement of intellectual and professional services guided by PPR 2008 and regulations:

- 1) Submission, opening, and assessment of Expression of Interest (EOI), and preparation of a shortlist
- 2) Preparation of the terms of reference, and issuance of request for proposal
- 3) Opening and evaluation of technical and financial proposals
- 4) Negotiation and signing of contract

These procedures are similar to the procedures of the procurement of goods and works. However, potential tenderers are selected from the shortlist prepared through assessment of EOI by the procuring entity for the procurement of services.

### **(2) Leasing procedures for government-owned markets**

The leasing procedures of Pourashava, City Corporation, and Upazila controlled hat-bazars are stipulated in the Market Management and Leasing Manual 2011 (LGED). The authority for giving leases shall provide notification for invitation of tender, receive sealed tenders, evaluate proposed rates submitted by tenderers, inform the successful tenderer, and finalize the agreement.

The lease of hat-bazar shall be given for one year. The desired lease value of the hat-bazar shall be mentioned in the lease advertisement, and the money received from leasing can be spent for expenditures incurred in connection with the leasing. The lease money shall be distributed according to the designated allocation for each purpose, e.g., maintenance, development, deposit in a bank, and revenue income.

Detailed leasing procedures stipulated in the document above are shown in Annex 4.

### **(3) National Road Safety Strategic Action Plan**

The National Road Safety Council (NRSC) approved the National Road Safety Strategic Action Plan 2011-2013 (NRSSAP 2011-2013) in 2011, which is the sixth NRSSAP in Bangladesh. The NRSSAP 2011-2013 is composed of the following nine activities:

- Planning, management, and co-ordination of road safety
- Road traffic accident data system
- Road safety engineering
- Road and traffic legislation
- Traffic enforcement
- Driver training and testing
- Vehicle safety
- Road safety education and publicity
- Medical services for road traffic accident victims

The vision for road safety and the goal of the NRSSAP 2011-2013 are as follows:

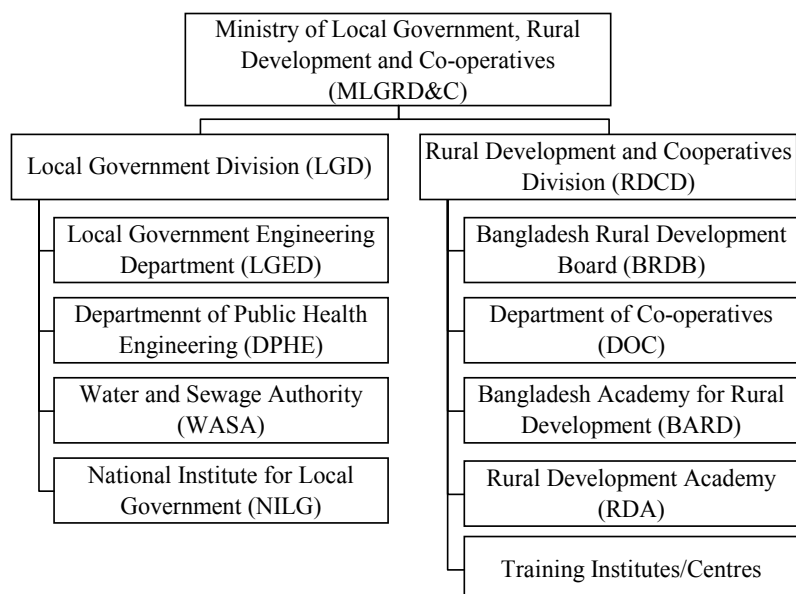
- **Vision:** To achieve nearly 50% reduction in road accident fatalities within the next ten years and to reduce the frequency of road accidents to nearly 30%
- **Goal:** To achieve a 15-20% reduction in the annual number of road accident fatalities by the end of the year 2013

## **2.3 Public organizations for rural development and local governance**

### **2.3.1 Ministry of Local Government, Rural Development and Cooperatives**

#### **(1) Overview of the ministry**

The MLGRD&C is the primary government body supervising local governments and rural development and cooperative initiatives in the country.



Source: Adopted and modified from JBIC (2008) and websites of LGD and RDCD

**Figure 2-31 Organizational structure of the MLGRD&C**

The MLGRD&C has two Divisions, i.e., the Local Government Division (LGD) and the Rural Development and Cooperative Division (RDCD). Under the Divisions, technical departments and institutions are established. Figure 2-31 shows the organizational structure of the MLGRD&C.

The organizations most relevant for the NRRDLGIP are as follows: the LGD including the LGED, the DPHE, and the National Institute for Local Government (NILG); and the RDCD including the Bangladesh Rural Development Board (BRDB) and the Department of Cooperatives (DOC).

## **(2) Local Government Division**

The LGD is mandated to plan and implement development programs and projects at the local level, conduct surveys and research on local government, and enhance capacities of local governments, in particular elected representatives. The activities of LGD cover all levels of LGIs, i.e., Union Parishad, Upazila Parishad, Pourashava, City Corporation, and District. The LGED, the DPHE, the Water and Sewage Authorities (WASA) in four metropolitan cities (Dhaka, Chittagong, Khulna, and Rajshahi), and the NILG are established under the LGD, and the LGD is responsible for monitoring and supervising programs and projects implemented by these organizations. Through the activities of these departments and authorities, the LGD delivers various development activities and services for poverty alleviation, enhances good governance at the local level, develops rural and urban infrastructure development, and provides drinking water supply and sanitation services and other public services for the local population.

The major mandates of the LGD related to LGIs include the following: 1) financing, regulation, and inspection of authorities established for local government and village administration; and 2) management, monitoring, and supervision of all activities carried out by the LGED, DPHE, WASAs, and NILG.

## **(3) Local Government Engineering Department**

### **a) Mission**

The LGED is a public sector organization under the MLGRD&C. The mission of the LGED is

“development and management of local infrastructure for increasing farm/non-farm production, generating employment, improving socioeconomic conditions, promoting local governance, reducing poverty and acting as an agent of change at the local level.”<sup>19</sup>

## b) Main functions and activities

The main functions of the LGED can be categorized in three broad programs: 1) rural infrastructure development; 2) urban infrastructure development; and 3) small-scale water resources development. In addition, the LGED is extensively involved in rural infrastructure maintenance program throughout the country. Table 2-17 summarizes the main functions and activities of the three main programs and rural infrastructure maintenance program.

**Table 2-17 Programs, functions, and activities of LGED**

Programs	Main functions	Activities
Rural infrastructure development	<ul style="list-style-type: none"> <li>Develop rural road transport network to improve accessibility to Growth Centers (GCs)<sup>20</sup> and important social and administrative points</li> <li>Develop GCs to expand marketing facilities of farm and non-farm products of the rural areas.</li> <li>Plan, monitor, and support routine, periodic, and emergency maintenance of rural infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Construct: 1) Upazila and Union roads and bridge/culverts on those roads; 2) GCs; 3) Union Parishad complexes and primary schools; 4) jetty and boat landing ghats; and 5) cyclone shelters and killas (elevated earthen places for the shelter of livestock during flood)</li> <li>Develop and update: 1) technical specifications and manuals for construction of rural infrastructures; 2) rural road master plans, infrastructure database, and digital maps; 3) Upazila and Union Plan Books to facilitate local-level planning and participation</li> <li>Provide technical support for Zila and Upazila Parishads</li> <li>Plant trees on the slope of roads and embankments</li> <li>Update and maintain roads and structure database</li> <li>Prepare annual maintenance plan and budget</li> <li>Develop maintenance guidelines and manuals</li> <li>Conduct traffic and road condition surveys</li> </ul>
Urban infrastructure development	<ul style="list-style-type: none"> <li>Provide technical and management support for urban local government institutions (City Corporations, Pourashavas) to implement urban infrastructure development projects</li> </ul>	<ul style="list-style-type: none"> <li>Plan and implement projects on: 1) integrated town centers such as bus terminals and markets; 2) municipal roads, bridges/culverts, drainage, water supply, and sanitation facilities; 3) solid waste management; 4) slum upgrading</li> <li>Develop and update: 1) land use plan, survey and digital mapping; 2) District and Upazila town master plans; 3) database and software for the use of municipalities to improve planning &amp; management capacity and resources mobilization &amp; management; 4) technical specifications and manuals for construction of urban infrastructures</li> <li>Provide technical support for institutional development of municipalities through training and computerization</li> </ul>
Small-scale water resource development	<ul style="list-style-type: none"> <li>Develop small-scale water resources infrastructure up to the area of 1,000 ha</li> </ul>	<ul style="list-style-type: none"> <li>Construct flood protection embankments</li> <li>Conserve water for irrigation and improve irrigation systems</li> <li>Construct water control structures and Rubber Dams</li> <li>Excavate and re-excavate canals</li> <li>Train stakeholders and Water Management Cooperatives Association members<sup>21</sup></li> </ul>

Source: LGED website

LGED provides technical and management support to urban Local Government Institutions (City Corporations and Pourashavas) to implement urban infrastructure development projects. It should be noted that there are some overlapping or similar mandates among ministries and agencies in urban

<sup>19</sup> LGED website (<http://www.lged.gov.bd/>)

<sup>20</sup> Growth Centers are economically important markets which play an important role as the economic nucleus of rural areas. There are 2,100 Growth Centers and 18,000 small markets across the country.

<sup>21</sup> LGED involves stakeholders during the preparation and implementation stages of water resource management projects. This was aimed at ensuring that operation & maintenance (O&M) of the projects are taken up by stakeholders through the Water Management Cooperative Association, a committee elected by stakeholders.



planning and development, as pointed out in the National Urban Sector Policy 2011 (draft) (see Section 2.2.3). The overall activities of the LGED and concerned ministries and agencies regarding urban planning and development are shown in Table 2-18.

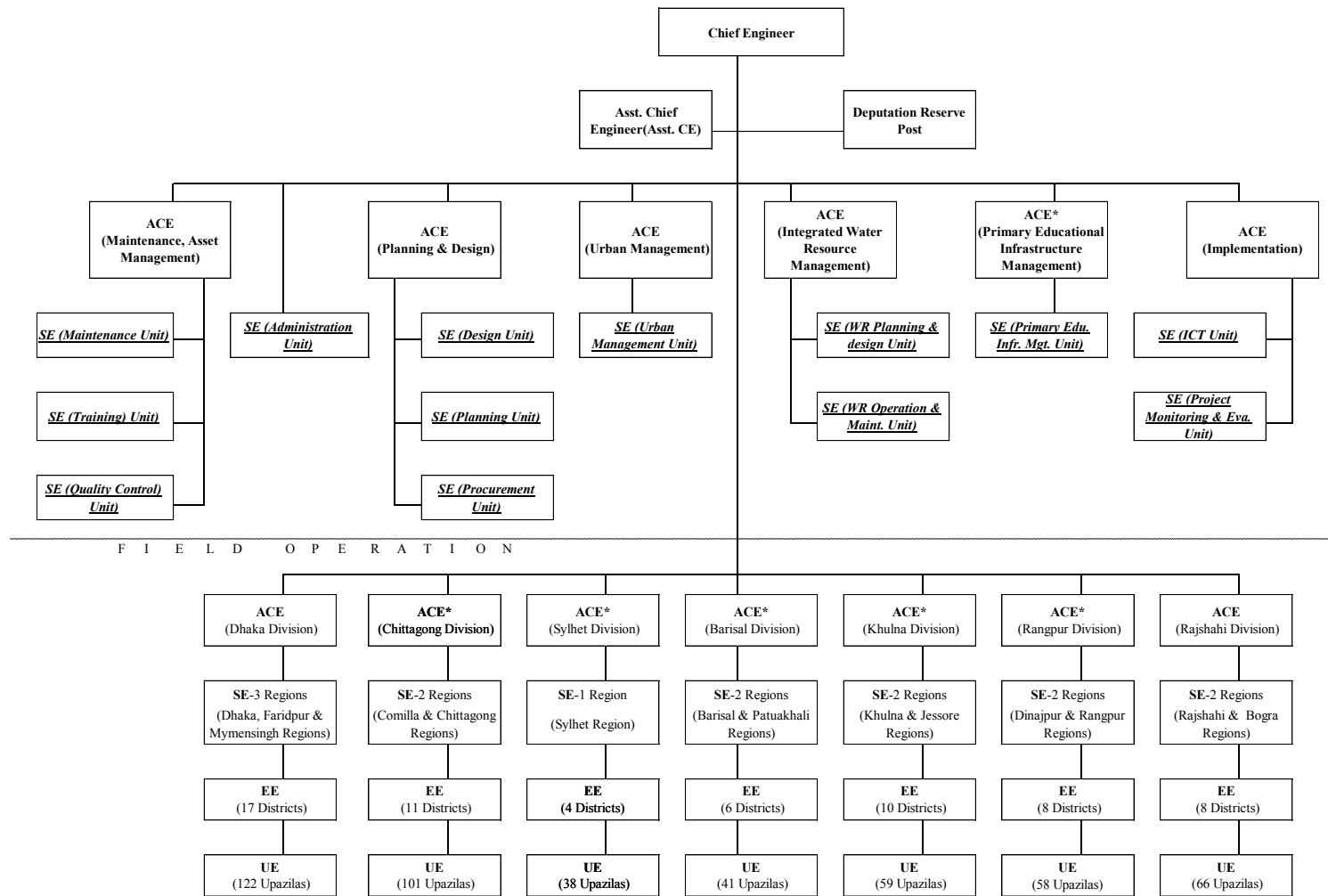
**Table 2-18 Overall activities of the LGED and concerned ministries and agencies regarding urban planning and development**

Ministry and Agency	Overall activities
LGED	<ul style="list-style-type: none"> <li>• Planning and implementation of integrated town center (bus terminals, markets etc.)</li> <li>• Planning and implementation of municipal roads, bridges/culverts, drainage, water supply and sanitation projects.</li> <li>• Planning and implementation of solid waste management projects</li> <li>• Planning and implementation of slum upgrading projects</li> <li>• Development of land use plan, survey and digital mapping</li> <li>• Development of database and software for the use of municipalities to improve planning &amp; management capacity and resources mobilization &amp; management.</li> <li>• Institutional development of municipalities through training and computerizations</li> <li>• Preparation of District and Upazila Town Master Plans</li> <li>• Development of technical specifications and manuals for construction of urban infrastructures</li> </ul>
Ministry of Housing and Public Works	<ul style="list-style-type: none"> <li>• Preparation of design of government buildings and other infrastructure</li> <li>• Planned development and extension in the four big cities</li> <li>• Construction of road, bypass etc. for development of communication in the town area</li> <li>• Advise government for planned urbanization, land utilization and land development</li> <li>• Participate to prepare master plan for each District and Upazila</li> </ul>
Ministry of Communication	<ul style="list-style-type: none"> <li>• Preparation of policy on roads and road transport</li> <li>• Create integrated road and transport management system</li> <li>• Development, extension and maintenance of important roads, bridges, culverts including national, Regional and District roads</li> <li>• Determine and implement specification of road safety</li> </ul>
Urban Development Directorate	<ul style="list-style-type: none"> <li>• To advise the Government on matters of policies relating to urbanization, land use and land development</li> <li>• To prepare and co-ordinate regional plans, land use/master plans and detailed layout and site plans for the existing as well as the new urban centers (already formulated 50 District Towns/Pourashava and 392 Upazila Towns' land use/master plans) excluding the areas covered by the present town development authorities of Dhaka, Chittagong, Khulna and Rajshahi;</li> <li>• To undertake socio-economic research and collection of data for determination of the location and pattern of future urban development;</li> </ul>

Source: Survey Team based on website of each ministry and agency

### c) Organizational structure and staffing

The organization structure of the LGED is presented in Figure 2-32.



Source: LGED

Note: The seven positions of ACE\* are not yet to be approved by the GOB as of October 2012.

Legend: ACE = Additional Chief Engineer; CE = Chief Engineer; EE = Executive Engineer; SE = Superintending Engineer; UE = Upazila Engineer

**Figure 2-32 Organization structure of LGED**

The LGED, which is headed by a Chief Engineer (CE), is a relatively large public sector agency with 10,838 staff members in total (Table 2-19). One of the notable characteristics of the LGED is its decentralized organizational structure, in which 98% of the total staff members are posted at the sub-national levels—Division (0.2%), Regions (1.1%), Districts (10.9%), Upazilas (84.9%), and deputation reserve (1.9%). Staff members at the headquarters comprise only 2% of the total staff numbers.

**Table 2-19 Deployment of LGED staff members**

Location of posts	Number of staff members	Percentage (%)
Headquarters	214	2.0
Divisions (Lab & Training)	22	0.2
Regions	118	1.1
Districts	1,074	10.9
Upazilas	9,204	84.9
Deputation reserve posts <sup>1</sup>	204	1.9
Total	10,838	100.0

Source: Superintending Engineer (Administration), LGED, April 2012

Notes: 1. Including Zila Parishad and three Hill Districts.

At the headquarters level, the CE is supported by five Additional Chief Engineers (ACEs) who are respectively in charge of: 1) maintenance and asset management; 2) planning and design, 3) urban management; 4) integrated water resource management; and 5) implementation. Under the supervision of the ACEs, 13 Superintending Engineers (SEs) manage their respective Units to perform the specialized functions assigned to them.

At the field level, as of October 2012, seven ACEs are attached to seven Division offices and 14 SEs to Regional offices in Barisal, Bogra, Chittagong, Comilla, Dhaka, Dinajpur, Faridpur, Jessore, Khulna, Mymensingh, Patuakhali, Rajshahi, Rangpur, and Sylhet. At the District and Upazila levels, the LGED attaches 64 Executive Engineers (EEs) to manage District offices, and 485 Upazila Engineers (UEs) to Upazila offices. Out of 486 Upazila, only Taltuli Upazila under Barisal Division is not yet posted UE by the LGED. Table 2-20, Table 2-21, and Table 2-22 show the staff composition of the LGED field offices at Regional, District, and Upazila levels, respectively.

A Regional office has two senior-class engineers, two assistant-class engineers, and staff for supervision and coordination of entire activities in the respective Region. A District office has six assistant-class engineers with staff to conduct supervision and coordination of District activities. This office has a sociologist and an assistant engineer for maintenance to deal with social issues including land, gender, and environmental matters and infrastructure maintenance issues.

An Upazila office has three-assistant class engineers and a draftsman, surveyor, and electrician to conduct field works required for project implementation. In addition, a community organizer is assigned for this office to manage community based activities such as organizing local NGOs and LCS.

**Table 2-20 Staff composition of LGED Regional office**

Position	Number	Position	Number
Superintending Engineer	1	Executive Engineer	2 to 3
Assistant Engineer	1	Sub Assistant Engineer	1
Account Assistant	1	Stenographer Typist/Computer Operator	1
Driver	1	MLSS	2
Total number: 10 to 11			

Source: LGED

**Table 2-21 Staff composition of LGED District office**

Position	Number	Position	Number
Executive Engineer	1	Senior Assistant Engineer	1
Assistant Engineer	1	Assistant Engineer-Maintenance	1
Sociologist	1	Foreman	1
Sub Assistant Engineer	2	Accountant	1
Upper Division Assistant	1	Account Assistant	1
Steno Typist/ Computer Operator	1	Electrician	1
Driver	1	Roller Driver	1
MLSS	1	Truck Driver	1
Total number: 17			
Source: LGED			

**Table 2-22 Staff composition of LGED Upazila office**

Position	Number	Position	Number
Upazila Engineer	1	Upazila Assistant Engineer	1
Sub-Assistant Engineer	2	Draftsman cum Sub-Assistant Engineer	1
Works Assistant	4	Surveyor	1
Community Organizer	1	Electrician	1
Accountant Assistant	1	Accountant	1
Office Assistant/ Typist	1	Office Assistant	1
MLSS	2	Chowkider	1
Total number: 19			
Source: LGED			

The descriptions of duties of LGED field offices are summarized in Table 2-23.

**Table 2-23 Summary of functions and duties of LGED field offices**

Main functions	Duties of Regional office	Duties of District office	Duties of Upazila office
Planning and implementation of development schemes	<ul style="list-style-type: none"> <li>Assist LGED headquarters in the preparation of Development Project Proposals (DPPs)</li> <li>Assist implementation of national government programs at the Regional level</li> <li>Supervise and monitor the updating of road inventory and road map in the Region</li> </ul>		<ul style="list-style-type: none"> <li>Prepare and update the database of roads and other infrastructures of Upazila</li> <li>Assist Upazila Parishad in the preparation of development plans of roads and other infrastructures of the Upazila</li> <li>Assist the preparation, maintenance and update of Upazila Plan Book</li> <li>Plan and implement small scale water resource schemes such as canal excavation, embankment, drain and water infrastructure in the Upazila</li> </ul>
Preparation and procurement of construction projects	<ul style="list-style-type: none"> <li>Supervise procurement activities undertaken by the LGED District and Upazila offices</li> </ul>	<ul style="list-style-type: none"> <li>Direct Upazila Engineers in the preparation of all projects in the District</li> </ul>	<ul style="list-style-type: none"> <li>Prepare planning and cost estimation of civil works directed by Upazila Parishad and the LGED</li> <li>Accomplish procurement activities of Upazila Parishad and LGED projects</li> <li>Arrange material collection and preservation of civil works</li> <li>Be responsible for timely preparation of store and goods</li> </ul>

**Table 2-23 Summary of functions and duties of LGED field offices (continued)**

<b>Main functions</b>	<b>Duties of Regional office</b>	<b>Duties of District office</b>	<b>Duties of Upazila office</b>
Implementation, supervision, and quality control of construction	<ul style="list-style-type: none"> <li>Supervise, inspect, and control quality of all civil works in the Region</li> <li>Monitor environment and gender issues in the LGED activities in the Region</li> <li>Supervise and monitor road safety activities</li> <li>Ensure proper utilization of District quality control laboratory</li> <li>Order transfer of construction equipment between Districts in the Region</li> <li>Monitor land use issues in LGED activities</li> <li>Manage material stock of LGED projects</li> <li>Visit District and Upazila offices and activity sites, and prepared and send field visit reports to LGED headquarters and all other offices concerned</li> </ul>	<ul style="list-style-type: none"> <li>Implement projects in the District</li> <li>Send progress reports of activities at the District and Upazila levels to LGED headquarters</li> <li>Visit projects and submit report to Superintending Engineers at District offices</li> <li>Resolve disputes with contractors</li> <li>Ensure laboratory tests for quality control of projects under District and Upazila</li> <li>Arrange payment of contractor's bill</li> <li>Ensure utilization, and update inventory list, of all equipment belonging to the District</li> </ul>	<ul style="list-style-type: none"> <li>Supervise civil works as directed by Upazila Parishad and the LGED</li> <li>Review the progress of development activities</li> <li>Implement civil works related to primary education as directed by Upazila Parishad and the LGED</li> <li>Submit implementation progress reports of civil works under the jurisdiction of Upazila Parishad and respective authority</li> </ul>
Technical assistance and capacity development	<ul style="list-style-type: none"> <li>Provide technical assistance, supervise and coordinate activities of local government institutions (LGIs)</li> <li>Assist District and Upazila offices in design of large bridges</li> <li>Supervise and monitor training, workshops, seminar, and so on at the Regional and District levels</li> <li>Take necessary actions to utilize Information and Communication Technology (ICT) in official activities</li> </ul>	<ul style="list-style-type: none"> <li>Initiate disciplinary actions against third and fourth class LGED employees within the District</li> <li>Assist Upazila offices in activities related to Upazila Plan Book</li> <li>Arrange training for all LGED officials within the District</li> </ul>	<ul style="list-style-type: none"> <li>Render technical advice and assistance to Upazila Parishad and Union Parishad in civil works</li> <li>Coordinate utilization of ICT at the Upazila office</li> </ul>
Coordination among stakeholders	<ul style="list-style-type: none"> <li>Invite District Executive Engineers for monthly coordination meetings to review and update all LGED works</li> <li>Coordinate and supervise activities of consultants, NGOs, and so on who have been deployed under projects and programs of LGED</li> <li>Coordinate among concerned stakeholders to address issues related to disaster management and land acquisition in the Region</li> </ul>	<ul style="list-style-type: none"> <li>Coordinate and supervise various activities and stakeholders at the Upazila level</li> </ul>	<ul style="list-style-type: none"> <li>Ensure participation of local government institutions (LGIs) in management committees of Growth Center markets and Ghats (River jetties)</li> </ul>

Source: LGED Charter of Duties (2010 and 2012) and LGED website

#### **d) Units and MSU/ UMSU**

Among 13 units at the headquarters of the LGED, Design Unit, Road Maintenance and Road Safety Unit (RMRSU), Training Unit, and Urban Management Unit are particularly important for the

implementation of the NRRDLGIP. The functions of those four units are described as follows:

#### ***Design Unit***

- Prepare plan, design, and bill of quantities of different infrastructures
- Provide design support to different local government institutions (LGIs) such as Zila Parishad, Upazila Parishad, Pourashava, and so on
- Develop manuals, design catalogue, technical specifications, and construction methodology
- Support field engineers on design and related planning issues
- Organize training program on structural analysis, design, and construction methodology
- Carry out innovative research activity to find cost effective and sustainable options for different infrastructure under prevailing situations in different regions of the country

#### ***Road Maintenance and Road Safety Unit (RMRSU)***

- Formulate maintenance policy and annual maintenance program
- Take initiative to accomplish different types of survey and update road database
- Collect and organize data
- Assess annual maintenance needs
- Prepare priority scheme list
- Allocate District-wise fund
- Approve annual maintenance scheme
- Supervise and provide quality control
- Follow the policy and guidelines of the NRSC
- Activate and facilitate the District and Upazila Road Safety Committees as per GOB guidelines and instruction
- Work closely with BRTC and other agencies
- Protect LGED roads with appropriate and approved road signs and related notifications
- Undertake necessary training and motivate concerned persons like drivers, public, school/college students and others
- Gradually develop the road safety norms within LGED activities

#### ***Training Unit***

- Assess training needs
- Prepare annual training calendar under LGED at the beginning of each financial year
- Prepare training manual, modules, handouts, and so on
- Prepare training budget for different training courses
- Update and preserve detailed data bank information on training
- Select participants, trainers, and resource persons for different training courses
- Implement, manage, coordinate, and evaluate different training courses
- Prepare monthly, semi-annual, and annual progress reports on training

#### ***Urban Management Unit***

- Construct, extend, and maintain pucca market, kitchen market, auditorium, and community center to enhance self generating income, marketing, and commercial activities of Pourashavas
- Meet needs of basic infrastructure for slum dwellers and displaced persons
- Improve environment through appropriate waste management
- Create employment opportunities through construction and reconstruction, and increase economic activities by extension and maintenance of physical infrastructure
- Enhance the capacity of Paurashava to run local government business
- Integrate urban population and ensure better participation
- Computerize and improve tax records, water records, and accounts records of City Corporations



and Pourashavas

- Computerize trade license records and non-motorized vehicles management
- Carry out inventory assessment and mapping of municipal infrastructure
- Support community mobilization in municipalities

The Urban Management Unit is funded by revenue budget of the LGED. By contrast, the Municipal Support Unit (MSU) and the Urban Management Support Unit (UMSU) under supervision of the Urban Management Unit have been formed and funded by projects to provide capacity building support for City Corporations and Pourashavas.

Under the supervision of the MSU/UMSU, the Rural Municipal Support Unit (RMSU) and the Rural Urban Management Support Unit (RUMSU) have been created in ten Regions. Table 2-24 summarizes the covered Regions of RMSU/RUMSU. RMSUs and the RUMSU cover nine and five Regions, respectively.

**Table 2-24 Coverage Regions of RMSU and RUMSU**

Division	Region	Unit in charge
Dhaka	Dhaka	RMSU
	Mymensingh, Faridpur	RUMSU
Chittagong	Chittagong	RMSU
	Comilla	RUMSU
Sylhet	Sylhet	RMSU
Barisal	Barisal, Patuakhali	RMSU
Rajshahi	Rajshahi, Bogra	RMSU
Rangpur	Rangpur, Dinajpur	RUMSU
Khulna	Khulna, Jessore	RMSU

Source: LGED

The Superintending Engineer in the Urban Management Unit acts as the Director of the MSU/UMSU. The LGED officials are allocated as MSU/UMSU members as shown in Table 2-25. The Director and four Deputy Directors are permanent staff of the LGED, and the Assistant Directors are contract staff for the UGIIP-2.

**Table 2-25 Composition of MSU/UMSU members**

Position	No.
1 Director	1
2 Deputy Directors (Urban Planning & Management)	2
3 Deputy Directors (Finance, Monitoring & Evaluation)	2
4 Assistant Director (Urban Planning & management)	1
5 Assistant Director (Municipal Finance & Accounting)	1
6 Assistant Director (Monitoring & Evaluation).	1
Total	8

Source: LGED

Each RMSU and RUMSU is headed by the Deputy Director (Urban Management), consisting of the other LGED officials as shown in Table 2-26.

**Table 2-26 Composition of RMSU/UMSU members**

Position	No.
1 Deputy Director (Urban Management)	1
2 Assistant Director (Urban Planning & Management)	1
3 Assistant Director (Municipal Accounting)	1
4 Assistant Director (Municipal Finance)	1
5 Assistant Director (Community Mobilization)	1
Total	5

Source: LGED

Since the Municipal Service Project (MSP-1) completed in June 2009, no officials have been deployed for MSU or RMSU. On the other hand, UMSU and RUMSU officials for the UGIIP-2 have been allocated since January 2008, and will continue their works until the end of the project in December 2014. The UMSU and RUMSU officials are responsible for monitoring and reporting of the Pourashavas in the ten Regions.

Thus MSU and UMSU have contributed to capacity development of urban sector since the MSP-1 started in 1999. Those units depend on funds from the MSP and the UGIIP-2 substantially and this fact raises a question about sustainability of the MSU and UMSU. It is suggested that a permanent unit funded by revenue budget should be established for Pourashavas to receive continuous supports from the LGED.

Regarding the consultants for the UMSU and RUMSU, they have already finished their 18-month assignments for the UGIIP-1 in December 2010. The ADB allocated five consultants to UMSU for one year from the third quarter in 2012, who take responsibility for technical support to Pourashavas such as troubleshooting on software. Those five consultants consist of: 1) team leader; 2) municipal finance and accounting specialist; 3) urban planning and management specialist; 4) system analyst; and 5) mid-level programming/hardware specialist.

The training programs for Pourashavas conducted by UMSU and RUMSU in the third year of the UGIIP-2 are presented in Table 2-27.

**Table 2-27 Training programs for Pourashavas conducted by UMSU and RUMSU in the third year of UGIIP-2**

No.	Location	Theme	Course Title	Major contents	Participants	No. of participants	Duration (days)
1	Central	Training for computerization	Training & troubleshooting on water billing software (diameter system) for the employees of water section of Pourashavas	Installation procedure, data entry (save, edit, delete, report, view), bill generation, all reports, data backup	Bill clerk and cashier	2 persons x 20 Pourashavas	3
2	Central	Training for finance and account	Training course on municipal accounting system for accounts officer and accountant	Municipal account management, double entry accounting system, municipal budget	Account Officer/ Accountant and Assistant Accountant	2 persons x 20 Pourashavas	4
3	Central	Training for finance and account	Training course on budget preparation for Pourashava account officer and staff	Municipal account management, budget preparation, budget exercise, Pourashava finance related with Local Government (Pourashava) Act 2009	Account Officer/ Accountant and Assistant Accountant	2 persons x 20 Pourashavas	2

**Table 2-27 Training programs for Pourashavas conducted by UMSU and RUMSU in the third year of UGHP-2 (continued)**

No.	Location	Theme	Course Title	Major contents	Participants	No. of participants	Duration (days)
4	Central	Training on Engineering work	Training on public procurement rules (PPR) rules 2008 and contract management	Public procurement rules	Mayor, Executive Engineer, and Assistant Engineer	3 persons x 20 Pourashavas	2
5	Central	Training on Engineering work	Training on quality control and supervision of civil works of Pourashava	Quality control and supervision of civil works, and cost estimation	Assistant Engineer, Sub Assistant Engineer, and Work Assistant	4 persons x 20 Pourashavas	3
6	Central	Training on Engineering work	Training course on estimating for Pourashava work assistant	Estimate of HBB Road, CC road, iron concrete beam, box culvert and 10 estimates of bleedings' slab and exercise, and group wise practical session	Estimator	1 person x 20 Pourashavas	5
7	Central	Training for UMSU	Orientation on accounts, trade, tax and water billing updated software	Installation procedure, data entry (save, edit, delete, report, view), bill generation, all reports, data backup	Assistant Director in charge of Finance of UMSU, Consultants in charge of Finance	1 person x 20 Pourashavas	3
8	Central	Training of Trainers (developing a group of trainers)	TOT for selected Pourashava and RMSU officials	Training concept, qualities of a good trainer, facilitation skill, principals of use training materials use of manual	Executive Engineer/ Assistant Engineer, Secretary, Town Planner of Pourashava, and Assistant Director of RUMSU	5 persons x 20 Pourashavas	5
9	2 Regions	Training for computerization	Basic computer training for Pourashava officials	Introduction of basic computer, Microsoft Office, advance MS Word technique, Microsoft Excel, and overview of MS Access	Assistant Engineer, Subassistant Engineer, Accountant, Assistant Accountant, Tax Assessor, Tax Collector, Trade License Officer, Assistant Collector, Bill Clerk, and Cashier	10 persons x 20 Pourashavas	5
10	2 Regions	Training for computerization	Training on tax billing, municipal accounts, and trade license	Installation procedure, data entry (save, edit, delete, report, view), bill generation, all reports, data backup	Accountant, Assistant Accountant Tax assessor, Tax Collector, Trade license officer, Assistant Collector, Bill Clerk, and Cashier	6 persons x 20 Pourashavas	5

**Table 2-27 Training programs for Pourashavas conducted by UMSU and RUMSU in the third year of UGHP-2 (continued)**

No.	Location	Theme	Course Title	Major contents	Participants	No. of participants	Duration (days)
11	2 Regions	Training for urban planning	Training on Infrastructure database and base map preparation	Survey, infrastructure data collection using format, and computerized database preparation	Assistant Engineer, Sub-Assistant Engineer, Surveyor, and Estimators	5 persons x 20 Pourashavas	5
12	2 Regions	Training for urban planning	Training on Pourashava base map preparation using Auto CAD	Auto CAD operation, data review, base map preparation method	Assistant Engineer, Sub-Assistant Engineer, Surveyor, and Estimators	5 persons x 20 Pourashavas	5
13	2 Regions	Orientation on community mobilization	Orientation workshop on community mobilization for Pourashava officials	Community mobilization, CBO formation, preparation of social development	Executive Engineer/ Assistant Engineer, Secretary, and Slum Development Officer	3 persons x 20 Pourashavas	1
14	2 Regions	Orientation on community mobilization	Orientation workshop on community mobilization for chairman & secretary of CBO and steering committee	Community mobilization, roles of chairman & secretary of CBO and steering committee, preparation of social development	Chairman and Secretary of CBO	4 persons x 20 Pourashavas	1
15	20 Pourashavas	Training on community mobilization	Orientation for CBO members on performing CBO activities	Members roles & responsibilities, active participation in WLCC, preparation of social development	CBO members	12 persons x 20 Pourashavas	1
16	20 Pourashavas	Sensitization Workshop	Sensitization workshop for TLCC members at Pourashava Level	Responsibilities of TLCC members, group work on citizen participation	TLCC members	50 persons x 20 Pourashavas	1

#### (4) Department of Public Health Engineering

The DPHE is a public sector agency under the MLGRD&C. The DPHE is responsible for water supply and sanitation in rural and urban areas of the country. The urban areas covered by the DPHE include all City Corporations, Pourashavas, Upazila headquarters, and Growth Centers, except Dhaka, Chittagong and Narayanganj cities.

The main functions of the DPHE are summarized in Table 2-28.

**Table 2-28 Main functions of DPHE**

No.	Type	Functions
1	Water supply and sanitation services	Provide water supply and sanitation services in rural and urban areas (in the case of urban areas, DPHE works solely or jointly with Pourashavas) and assist City Corporations and Pourashavas through infrastructure development and technical assistance
2	Assistance to LGIs	Assist LGIs (City Corporations, Pourashavas, Union Parishads) in the operation and maintenance of water supply and sanitation infrastructure and services, including technical assistance
3	Training of manpower	Ensure an adequate supply of trained and skilled manpower in the water supply and sanitation sector through human resource development of personnel and institutions for proper and sustainable management of infrastructure and services
4	Water testing facilities	Strengthen water testing facilities by establishing laboratories at different levels in order to institutionalize the Water Quality Monitoring and Surveillance Program in rural and urban areas of the country to ensure safe water for people
5	Hydro-geological investigation	Carry out hydro-geological investigations in search of safe sources of surface and ground water supply
6	Social mobilization	Carry out social mobilization for awareness-raising toward proper management of water supply and sanitation infrastructure and promotion of personal hygiene practices
7	Safe water supply technology	Develop safe water supply technologies in arsenic-affected and other hydro-geologically difficult areas (e.g., saline belt, areas with stony soil, hilly regions and areas likely to be affected by other micro-pollutants)
8	Research and development	Conduct research and development activities in search of appropriate and affordable options, including indigenous options for water supply and sanitation in the country
9	Services during natural calamities	Ensure water supply and sanitation services and facilities during and after natural disasters and calamities
10	Sectoral information management	Establish National Water Supply & Sanitation Information Center as a center of excellence for sectoral information management
11	Capacity building	Conduct capacity building for the community, LGIs, private entrepreneurs and NGOs on technical know-how and information regarding water supply and sanitation
12	Monitoring and evaluation	Conduct monitoring and coordination of activities of stakeholders, including NGOs and private operators working in water supply and sanitation sectors
13	Overall management	Implement overall management of Water Supply & Sanitation Sector Development Program

Source: Retrieved from DPHE website: <http://www.dphe.gov.bd/>

## **(5) National Institute of Local Government**

The NILG was originally established in 1969 as the Local Government Institute, and renamed as the NILG later. Its current legal basis is the National Institute of Local Government Act 1992. The NILG is administered by the LGD.

### **a) Functions of NILG**

The major objectives and functions of the NILG are to provide training to elected representatives, officials, and staff of LGIs. In relation to Pourashavas, newly elected mayors and councilors of Pourashavas receive orientation training on the roles and responsibilities of Pourashavas, basic administration, and management issues. The NILG also provides capacity development opportunities for government officials on issues related to LGIs.

The functions of NILG are described below:

- Conduct training of elected representatives and appointed officials of both urban and rural local government
- Conduct training of government officials who are concerned with LGIs
- Hold national and international seminars, workshops, conferences, and other meetings
- Conduct research on issues of local governments
- Publish books, research reports, and journals on local government and related subjects
- Provide consultancy services to the LGD and LGIs
- Collect information, and conduct monitoring and evaluation on the activities of LGIs
- Provide facilities for documentation, and build up a national documentation center on LGIs
- Coordinate training and research programs, and develop an institutional network on local government training and research
- Conduct collaborative programs on local government with international organizations with the approval of the government
- Introduce a certificate course on subjects related to local government

## **b) Organizational structure of NILG**

### ***Board of Governors***

The NILG is managed by the Board of Governors which is composed of the following members:

- 1) Minister for Local Government, Rural Development and Cooperatives: Chairperson
- 2) State Minister for Local Government, Rural Development and Cooperatives: Vice Chairperson
- 3) Secretary of LGD
- 4) Director General of Bangladesh Academy for Rural Development (BARD)
- 5) Director General of the Bangladesh Institute of Management
- 6) Chief Engineer of the LGED
- 7) Chief Executive Officer of the Dhaka City Corporation
- 8) Representatives from each of the following government organizations: Bangladesh Public Administration Training Center, Ministry of Public Administration, Finance Division of the Ministry of Finance, Rural Development and Cooperatives Division
- 9) Four representatives from local government bodies nominated by the government
- 10) Director General of NILG: Member Secretary

### ***Administrative body***

The Director General acts as Chief Executive Officer of the NILG as per the decisions and guidance of the government and the Board of Governors. The NILG has four departments that are headed by directors, respectively: 1) Training and Consultancy; 2) Research and Planning; 3) Administration and Coordination; and 4) Programming and Evaluation. The NILG does not have any field offices outside Dhaka. The total manpower of the NILG is 113, among which 21 are assigned for the Training and Consultancy Department, and 28 for the Research and Planning Department.<sup>22</sup>

The NILG also hosts the Horizontal Learning Center (HLC), the coordination mechanism of the Horizontal Learning Program (HLP). The HLP is a platform to facilitate mutual learning of good practices among Union Parishads and other LGIs. The HLC is currently a project-specific task force in the NILG and not funded by the revenue budget. However, the institutionalization of the HLC in the NILG is also in progress.<sup>23</sup>

<sup>22</sup> The latest organizational chart issued on January 29, 2006.

<sup>23</sup> The Director General of the NILG expressed the view to institutionalize the HLC on July 16, 2012.



### **c) Training courses provided by NILG**

The NILG held a total of 235 training courses in FY 2010-2011, and the number of participants accounted for 11,690 in total.<sup>24</sup> The major areas of training are:

- laws and policies including local government acts, ordinances, rules, and regulations;
- financial management including taxation, budgeting, accounting, and auditing;
- office and personnel management;
- local planning and development;
- social and economic development in relation to the Poverty Reduction Strategy Paper and the Millennium Development Goals;
- child rights, and birth and death registration; and
- gender, environmental and disaster management, sanitation, anti-corruption, anti-terrorism, and smuggling prohibition laws.

The training programs for elected representatives of LGIs and staff members on legal and policy framework and administrative management are conducted with the revenue budget. The NILG also provides special training programs designed for projects funded by the government and international donors.

### **(6) Rural Development and Cooperatives Division**

The RDCD aims to reduce poverty and improve living conditions in rural areas. The RDCD is responsible for policy formulation and implementation, as well as coordination among rural development-related activities of the government. More specifically, the RDCD is mandated to: 1) formulate policies, laws, rules, and plans regarding rural development and cooperatives; 2) formulate and implement programs and projects to reduce rural poverty; 3) support entrepreneurs by providing micro-credit and agricultural credit, enhancing cooperative-based small businesses and cooperative insurance, and promoting other rural and cooperative related activities; 4) provide capacity development support for members of cooperatives; 5) conduct research on rural development and cooperatives; 6) conduct action research to develop innovative approaches related to rural development; and 7) support rural women in socioeconomic development and empowerment by organizing formal and informal groups under cooperative programs.

The BRDB, DOC, RDA, and BARD are under the jurisdiction of the RDCD. The following subsections give a brief explanation of these organizations.

#### **a) Bangladesh Rural Development Board**

The BRDB is a government organization working on rural development and poverty alleviation under the RDCD. It is mandated to promote rural development and poverty alleviation activities, focusing on small and marginal farmers and poor people in rural areas, by mainly increasing agricultural production. Organizing such farmers and people into cooperative societies and providing them with technical and financial supports and trainings are the main tasks of the BRDB. The BRDB is managed by a Board of Directors comprising representatives from ministries and government agencies. The Board is chaired by the Minister for Local Government, Rural Development and Cooperatives. The BRDB consists of five divisions: 1) Administration; 2) Field Services; 3) Planning, Evaluation and Monitoring; 4) Finance, Accounts and Audits; and 5) Training.

<sup>24</sup> The Annual Report of the LGD FY 2010-2011

## **b) Department of Cooperatives**

The DOC is mandated to facilitate economic growth and poverty reduction through enhancing activities of cooperatives. At the central level, the Registrar, an Additional Secretary level, is the head of the DOC. At the local level, there are Divisional Joint Registrars, District Cooperative Officers, and Upazila Cooperative Officers, and they are responsible for the registration of cooperatives at the respective local level.

The major mandates of the DOC include 1) registration, liquidation, auditing, and inspection of cooperatives; 2) settlement of disputes related to the operation of cooperatives; 3) training and education of cooperatives for management and business skills; 4) advice and assistance to cooperative members in arranging finances; and 5) sensitization of other government agencies in favor of activities of cooperatives.

## **c) Rural Development Academy**

The RDA, located in Bogra District of Rajshahi Division, is a government institution in charge of training, research, and policy formulation regarding rural development. It pursues an innovative approach in the field of rural development. The major domains of RDA activity include: 1) developing irrigation by using buried pipes and deep tube wells; 2) supplying arsenic-free water; 3) enhancing marginal labor productivity in rural areas through irrigation and water management, and development of technical protocol for the production of hybrid maize seed; 4) promoting women's seed businesses; 5) promoting water-saving technology for rice production; and 5) a rural development program in cooperation with the BARD and DOC.

The RDA is managed by the Board of Governors headed by the Minister for Local Government, Rural Development and Cooperatives.

## **d) Bangladesh Academy for Rural Development**

The BARD, located in Comilla District of Chittagong Division, is an autonomous institute for research and training of local people and field staff in the field of rural development. The BARD was established in 1959, and is famous for implementing the Comilla Model, widely known as a model for rural development, in the 1960s. The BARD provides training for local people and other private sector persons as well as officials working for rural development. It also conducts research activities, aiming to collect basic data for planning and preparation of various projects and programs, and evaluate national rural development programs.

The BARD is governed by the Board of Governors whose chair is the Minister for Local Government, Rural Development and Cooperatives.

### **2.3.2 Ministry of Finance**

The Ministry of Finance consists of four Divisions: 1) Finance Division; 2) Economic Relations Division (ERD); 3) Bank and Financial Institutions Division; and 4) Internal Resources Division. Among them, Finance Division and ERD are the organizations that will require coordination for the formulation and implementation of the NRRDLGIP. Therefore, the functions of these two Divisions and their involvement in the NRRDLGIP are discussed below.

The main function of the Finance Division is budget and financial management of the GOB. The Finance Division has been formulating the Medium-Term Budget Framework (MTBF), a tool for linking policy, planning, and budgeting of the government over a medium term (five years). The MTBF includes all government ministries, divisions, and agencies, including the LGD, LGED, DPHE, and

other agencies concerned with the NRRDLGIP. The Finance Division also prepares and allocates the annual revenue budget of the government in coordination with all other ministries, divisions, and agencies. It issues *budget call circulars*, which shows the indicative budget ceiling based on MTBF, in September and December for the preparation of the government's annual budget.

The main function of the ERD under the Ministry of Finance is mobilization of external resources for the socioeconomic development of the country. The ERD serves as the focal point of the government in interacting with development partners and coordinating all inflows of external assistance. It also assesses the need for external assistance, and formulates strategies for negotiating and mobilizing external assistance. The ERD signs loans and grant agreements with development partners as the representative of the GOB.

### 2.3.3 Planning Commission

The Planning Commission is the central policy organization that oversees public investment management in Bangladesh. The Planning Commission advises the National Economic Council (NEC) chaired by the Prime Minister, and assumes critical functions, i.e., the formulation of development plans such as the Perspective Plan, Five Year Plan, and ADP, and the appraisal of public investment and technical assistance projects proposed by ministries, divisions, and agencies in the process of the ADP.

The ADP plays the central role in public investment management in Bangladesh. The Planning Commission is responsible for overall management of the ADP process. The Finance Division sets annual budget ceilings for the ADP with budget call circulars, which are based on the MTBF. Ministries, divisions, and agencies are responsible for the preparation of the Development Project Proposal (DPP) and Technical Assistance Project Proposal and the implementation of approved projects.

Since the NRRDLGIP is a new development project, the LGED needs to prepare a DPP for appraisal by the Planning Commission and final approval by Executive Committee of National Economic Council (ECNEC). The structure and contents of a DPP are presented in Table 2-29.

**Table 2-29 Structure and content of Development Project Proposal (DPP)**

Structure	Content
Part A: Project Summary	16 items related to the basic information of the project, including its cost resources and breakdown. Signature of officer(s) responsible for the preparation of the DPP with seal and date is required at the end of Part A.
Part B: Project Details	16 items mostly related to the background of the project, and its relevance, effectiveness, efficiency, impact, risk management and sustainability. Signature of the officer.
Annex 1	Cost breakdown by location (cost breakdown by Division/District and Sub-District/Upazila)
Annex 2	Project management setup (organizational setup of the project management team)
Annex 3	Total procurement plan for development project/program (divided into three forms; goods, work and services)
Annex 4	Financial and physical target plans by year (breakdown by revenue/capital components)
Annex 5	Detailed annual phasing of cost
Annex 6	Amortization schedule

Source: Ministry of Planning (2008a)

### 2.3.4 Ministry of Environment

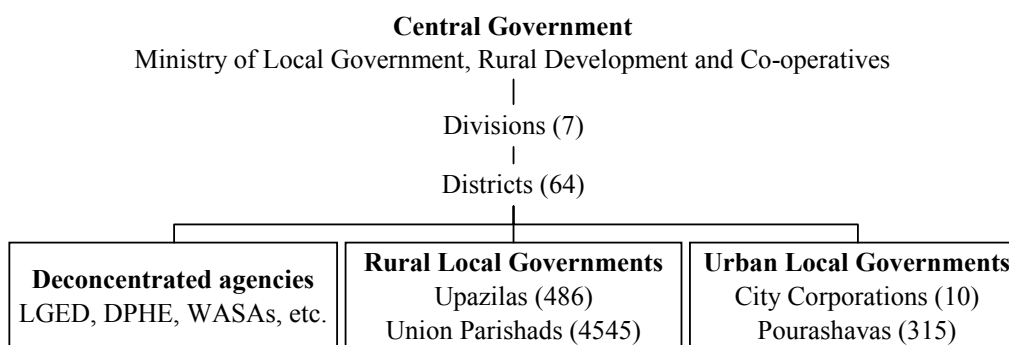
The Ministry of Environment and Forest is the primary government organization for the environmental conservation of Bangladesh. The Department of Environment of the Ministry is in charge of the issuance of the Environmental Clearance Certificate that all development projects need to obtain. The mandates

and responsibilities of the Ministry and the Department are detailed in Chapter 8.

### 2.3.5 Local governments

#### (1) Structure of local government system

Local governments are the basic administrative and political units in Bangladesh. There are now seven Divisions, 64 Districts, ten City Corporations, and 315 Pourashavas in the urban areas, and 486 Upazila and 4,545 Unions in the rural areas as of the end of September 2012.<sup>25</sup> Figure 2-33 presents the basic structure of the local government system in Bangladesh.



Source: Adopted and modified from the World Bank (2010), and interview with the Senior Assistant Secretary of the LGD

**Figure 2-33 Structure of local government system**

The Divisions are the sub-national administrative units formed for administrative convenience. Many government agencies, including the LGED, have their extension offices at the Divisional level, but a Division per se is not a local government. A Division is headed by a Commissioner, who normally has the rank of Joint Secretary under the Ministry of Public Administration.<sup>26</sup> Major responsibilities of a Divisional Commissioner include monitoring, coordinating, and supervising the implementation of policy decisions of the central government at the divisional level.

A Division is divided into Districts. A District is the largest political and administrative structure comprising urban and rural areas. A District is further divided into Upazilas or Sub-Districts, and then into Unions. In urbanized areas, City Corporations and Pourashavas are the basic political and administrative units. The following sections briefly describe the City Corporation, District, Pourashava, and Union. Councils are established in City Corporations, Pourashavas, Upazilas, and Unions, and their mayors/chairmen and councilors/members are directly elected by the local population.

#### (2) District

##### a) Mandates

The Zila Parishad Act 2000 is the legal basis for the establishment and operation of Districts. Section 2.7 (2) and 2.7 (3) of the Act mandates Districts to perform the two types of functions, i.e., compulsory and optional. The major compulsory functions cover the following:

- Review all development programs implemented in the District

<sup>25</sup> The numbers of Division and District is based on BBS (2010d), and those of Upazila and Union, City Corporation, and Pourashavas are based on the interview with the Senior Assistant Secretary of the LGD.

<sup>26</sup> The Divisional Commissioners of Dhaka and Khulna Division have the rank of the Additional Secretary.

- Review implementation progress of development projects initiated by Upazila and Pourashava
- Construct and maintain highways, roads, culverts, and bridges that are not under the jurisdiction of Upazila and Pourashava, and the government
- Develop and maintain general libraries
- Plant and maintain trees alongside the road used by the public
- Develop and maintain garden, playground and open space for public use
- Manage and control ferry services not covered by the government, Upazila and Pourashava
- Develop and maintain guest houses, bungalows, and rest houses
- Implement the government's development plan for the Zila Parishad

On the other hand, the optional functions cover the field of education, culture, social welfare, economic welfare, public health, and public works.

### **b) Organizational structure of Districts**

Section IV of the Zila Parishad Act determines the organizational structure of a District. Each District council consists of a Chairman (presently an administrator appointed by the government), and 18 members, including five women members in a reserved list.

As for the administrative organization, a District is headed by the Deputy Commissioner (DC), who is appointed by the government and belongs to the Ministry of Public Administration. The DCs are basically Revenue Collectors of 64 Districts in Bangladesh, and they are also known as District Magistrates. In the context of the administrative unit, a District has five departments, i.e., 1) district magistracy, 2) general, 3) revenue, 4) land acquisition, and 5) education and science, which are headed by Additional Deputy Commissioners below the rank of DC.

### **(3) City Corporation**

City Corporations are the self-governing organizations governing the big municipal areas of Bangladesh. There are ten City Corporations in Bangladesh, i.e., Barisal, Chittagong, Comilla, Dhaka North, Dhaka South, Khulna, Narayanganj, Rajshahi, Rangpur, and Sylhet. To be declared as City Corporation, Section 3 of the Local Government Act (City Corporation) 2009 (hereinafter referred to as the "City Corporation Act") stipulates the following criteria:

- Population size of existing Pourashava
- Density of population
- Sources of permanent income
- Economic importance of the area
- Existing infrastructure facilities and scope for their expansion
- Annual income of the existing Pourashava
- Public opinion

### **a) Mandates**

The mandates, functions, and responsibilities of a City Corporation are stipulated in Section 41 of the City Corporation Act. The major mandates and functions of the City Corporations cover the following areas:

- Public health, including preventing infectious diseases, providing health and maternal welfare, operating hospitals and dispensary services, and medical care, assistance and health education
- Development of infrastructures, including roads, private and general market, water supply, and

- drainage system
- Town planning, building regulation, and traffic control
- Trees, park, garden, and forest
- Disaster management
- Other administrative and development activities including registration of births, deaths and marriages, education and culture, social welfare, livestock management, and public security

## **b) Organizational structure of City Corporation**

A City Corporation consists of a Mayor and councilors, who are directly elected by local people. The number of councilors is specified based on the government gazette notification for each corporation. The administrative structure of City Corporations is presented in Section 5 of the City Corporation Act.

A City Corporation has seven departments including the secretariat, but Dhaka City Corporation has 16 departments. The departments in all City Corporations except for Dhaka City Corporation are Secretariat, Engineering, Health, Education, Revenue, Conservancy, and Accounts. In contrast, the departments in Dhaka City Corporation are Secretariat, Accounts, Chief Executive Officers (CEO) office, Conservancy, Engineering, Establishment, State, Health, Information Technology, Internal Audit, Law, Public Relation, Revenue, Slum Development, Social Welfare, Transport, and Urban Planning.

## **(4) Pourashava**

### **a) Overview**

Pourashava is one of the LGIs established in the urban area. Its legal basis is the Local Government (Pourashava) Act 2009 (hereinafter referred to as the “Pourashava Act”). Section 3 of the Pourashava Act stipulates that the government can express the intention to declare any rural area to be a Pourashava by a gazette notification, taking into account: 1) population; 2) density of population; 3) local income sources; 4) percentage of non-agricultural profession; and 5) economic importance of such area. The following are the four specific conditions to be declared as Pourashavas:

- Three-fourths of the people are involved in non-agricultural professions.
- Thirty-three (33) % of the total land area is non-agricultural.
- Density of population is no less than 1,500/km<sup>2</sup>.
- Population is no less than 50,000.

The number of Pourashavas has been increasing over time as a result of continuous urbanization of the country. There are 315 Pourashavas in Bangladesh as of July 31, 2012.

### ***Category of Pourashava***

Pourashavas are categorized as A, B, or C under two criteria: 1) revenue income; and 2) the rate of holding tax collection (Table 2-30).



**Table 2-30 Categorization of Pourashavas and their numbers**

Category	Criteria	Number
A	<ul style="list-style-type: none"> <li>Revenue of last 3-year average should be BDT 10 million or more.</li> <li>Rate of holding tax collection should be 75 % or more.</li> </ul>	110 <sup>1</sup>
B	<ul style="list-style-type: none"> <li>Revenue of last 3-year average should be BDT 6 million or more.</li> <li>Rate of holding tax collection should be 75 % or more.</li> </ul>	104
C	<ul style="list-style-type: none"> <li>Revenue of last 3-year average should be BDT 2 million or more.</li> </ul>	101

Source: LGD Memo No.46.064.028.28.07.015.2011/811 dated May 31, 2011, and the information from the UMSU of the LGED as of July 2012

Note: 1. Inclusive a special case of Pourashava Tongi.

## b) Mandates

Section 50 of the Pourashava Act stipulates the main responsibilities and functions of Pourashava. The main responsibilities include: 1) providing all municipal services as stipulated in the Pourashava Act; 2) coordinating among Pourashava administration and government officials and undertaking coordinated programs; 3) formulating and implementing town development planning, including infrastructure development and building regulations; and 4) maintaining citizens' security and public order. To fulfill these responsibilities, Pourashavas shall provide the following basic services as per Section 50 (2) of the Pourashava Act:

- Water supply for residential, industrial and commercial use
- Water and sanitation
- Waste management
- Formulation of plans to ensure economic and social justice
- Construction of roads and footpaths to develop a communication system and construct terminals for the benefit of people's movement and goods
- Activities under the Birth and Death Registration Act 2004
- Traffic management planning for better transport management, passenger shade, road lighting, parking places, bus stands and bus stops for walkers
- Public health and environment conservation, tree planting and conservation
- Market and slaughter house setup and management
- Create and spread the opportunity for and support to sports, games, and amusement, and increase beautification of the locality
- Any other functions under ordinance, rules, regulations, or any order from the government

In addition, the Second Schedule of the Pourashava Act details the functions of Pourashavas. They include the areas of public health, water supply and drainage, food and beverage control including public and private market management, animal management including livestock improvement, town planning, building control, street management, public safety, parks and forest management, education and culture, social welfare, and development planning. Furthermore, Section 51 of the Pourashava Act states that Pourashavas, with the approval from the Government of Bangladesh (GOB), can perform functions including, but not limited to, primary education, health care, transport, fire control and safety, and poverty reduction. Thus, Pourashavas are mandated to perform broad areas of socioeconomic development.

However, the extents to which Pourashavas execute those functions and deliver the services greatly vary. According to the sample survey, birth and death control and health care services are relatively well performed, whilst infrastructure development cannot sufficiently meet the people's needs.

Education services are not effectively provided, either. The education section under the Administration Division of Pourashava is responsible for the schools and other educational institutes established by Pourashava, and yet no such section has been found in sampled Pourashavas. The survey on sample Pourashavas revealed that almost all schools located in those Pourashavas were operated by Upazila Education Office under the Ministry of Primary and Mass Education for primary schools, or the Upazila Secondary and Higher Education Office under the Ministry of Education for the other education institutes. It was also found that only a few Pourashavas had established schools by themselves, and sometimes even such schools established by Pourashavas had been taken over by the GOB due to the lack of financial capacity of the Pourashavas to operate those schools. Thus, the institutional setup for the education sector in Pourashavas, in particular category-B and C, is considered insufficient to perform their mandates effectively.

Moreover, the functions of Pourashavas stipulated by the Pourashava Act do not necessarily cover all the development areas. For instance, agricultural services do not fall under the jurisdiction of Pourashavas, although it is crucial for socioeconomic development in Pourashavas. The Department of Agriculture Extension under the Ministry of Agriculture provides agricultural services, and farmers living in Pourashavas have direct access to those services. However, Pourashavas sometimes collaborate with the Department of Agriculture Extension in agricultural services delivery. For instance, it was reported in the sample survey that the Pourashavas had assisted the Department of Agriculture Extension in identifying farmers, and distributing seeds or other agricultural materials at the Pourashava office, responding to the request from the Department. Such collaboration between the Department and Pourashavas emerge on ad hoc basis, and no permanent coordination mechanism has been established so far. One way to address this issue might be to use Upazila Parishad meetings for such coordination.

### **c) Organizational structure of Pourashava**

Section 6 of the Pourashava Act determines the organizational structure of a Pourashava. Each Pourashava consists of a mayor and councilors, including female councilors. The mayor and councilors are directly elected by local residents. The number of councilors is the same as the number of wards defined by the government. One-third of the defined number of the councilors shall be reserved for females (Section 7). The term of mayors and councilors is five years (Section 8).

The executive powers of Pourashavas are vested in mayors and councilors. Key officers of Pourashavas also exercise such powers under the guidance of mayors and councilors. The decisions of Pourashavas are basically made in the Pourashava Parishad, which is called by a mayor and must be held at least once a month (Section 63 of the Pourashava Act). Critical issues such as budgets, projects under the ADP, master plan, and employee appointments are first discussed at committees of Pourashavas (Section 64). The decisions of the committees are to be discussed in the general assembly meeting of the Pourashava Parishad.

#### ***Standing committee***

The standing committees to be established under a Pourashava are presented below (Section 55 (1) of the Pourashava Act):

- Establishment and finance
- Tax fixation and collection
- Accounts and audit
- Town planning, identification and development of services for citizens
- Law and order and public security
- Communication and physical infrastructure development

- Women and children
- Fisheries and livestock
- Information and culture
- Market price supervision, monitoring and control

In addition, a Pourashava can form additional committees, with the participation of NGOs, especially on the areas of disaster management, market management, poverty reduction and slum development, health, water and sanitation, and waste management (Section 55 (2)). The Ward Level Coordination Committees (WLCCs) and the Town Level Coordination Committee (TLCC) are also formed, as described later.

A standing committee consists of five members who are councilors. The chairperson of the committee shall be a councilor, but a mayor will chair the law and order and public security committee (Section 55 (3) and (6)). In each committee, there shall be no less than 40% of female members. If separate committees cannot be formed due to the shortage of councilors, a committee dealing with more than one issue can be formed. In addition, an expert of the respective issues can be the co-opt member of the committee. However, the co-opt member does not have voting rights in decision making.

In each standing committee, specific issues assigned to each committee are discussed. The committee will elaborate a recommendation on particular issues, and the recommendation will be conveyed to and discussed in the General Meeting of the Pourashava Parishad. If the General Meeting of the Pourashava Parishad does not accept the recommendation, the reason shall be informed to the concerned standing committee (Section 56 of the Pourashava Act).

The sample survey revealed that this standing committee system had not been well functioning in Pourashavas. Only one out of four sampled Pourashavas have established standing committees. Furthermore, even in the Pourashava where they have been established, the standing committees are neither held regularly, nor functioning effectively.

#### ***Administrative organization***

With respect to the administrative organization, a Pourashava consists of: 1) Engineering Division headed by an Executive Engineer; 2) Administrative Division headed by a Secretary; and 3) Health Division headed by a Health Officer. The authorized number of staff is indicated in Table 2-31. Category-A Pourashavas are authorized to employ more staff members than category-B and C.

**Table 2-31 Authorized numbers of Pourashava staff**

Category	Division	Staff numbers
A	Engineering Division	57
	Administration Division	42
	Health Division	28
	Total	127
B	Engineering Division	32
	Administration Division	35
	Health Division	22
	Total	89
C	Engineering Division	27
	Administration Division	26
	Health Division	16
	Total	69

Source: LGED (2011c)

The principal executive officer of a Pourashava is a CEO who assists the mayor in the Pourashava affairs (Section 74 of the Pourashava Act). The CEO is a senior administrative post, and shall be appointed by

the government (LGD). The CEO oversees the overall activities of Pourashavas and is deputized with the authority of the mayor. However, as described later in this report, the post of the CEO is often vacant in many Pourashavas.

The functions of respective divisions are not defined by the Pourashava Act and thus, will be determined by Pourashavas based on Section 121, and the item 11 of the Schedule 7 of the Pourashava Act. This implies that actual functions of each division could be different from one Pourashava to another. The typical functions of each division, based on the information of sample Pourashavas, are presented below.

#### 1) Engineering Division

- Construct and maintain infrastructures such as public markets, public roads, drains, bridges and culverts in the jurisdiction of Pourashava
- Implement necessary programs for the watering of public streets, and planting trees on public streets and other public places
- Maintain public garden and open space in the municipal area
- Prepare a master plan for the area of Pourashava
- Implement all kinds of development plans
- Issue building approval within Pourashava
- Supply drinking water for Pourashava people
- Provide public services including traffic signaling and public latrines
- Maintain vehicles and other equipment of Pourashava

#### 2) Administration Division

- Execute administrative works to operate Pourashava smoothly
- Prepare budget, and manage financial and accounting issues
- Assess holding tax by investigating building and other assets
- Collect holding tax, market rents, trade license fees and other fees
- Issue trade licenses to Pourashava people
- Promote and organize social activities and celebrate the national and other special days
- Execute and undertake relief activities during natural disaster or famine
- Other services including but not limited to cemetery management, promotion of commercial activities

#### 3) Health Division

- Control infectious diseases
- Establish, maintain, and contribute to hospitals, health centers, and dispensaries
- Register all births and death within Pourashava
- Promote family planning program
- Promote public health, including education in health
- Control of animals including stray animal management, illegal and disease animal for slaughtering, and dangerous animals for detention and disposal

The Administration Division is in charge of overall management of Pourashavas. It is responsible for financial and accounting matters including the preparation of budget, and decision making on actual budget allocation, in close collaboration with the other divisions. The Administration Division is also in charge of the operation of TLCC and WLCCs. All divisions are involved in development planning, but the Engineering Division usually takes a lead role since such plans typically contains civil works.

## d) Coordination mechanism

### *Coordination with stakeholders of Pourashava*

There are several coordination mechanisms within Pourashavas. Although the general assembly of the Pourashava Parishad and its permanent committees are considered a key coordination mechanism among various stakeholders, a system pursuing direct engagement of local population and civil society is also statutorily installed, i.e., the TLCC and the WLCC. Section 115 of the Pourashava Act requires Pourashavas to form a committee for the dialogue with community people, and Section 14 stipulates that every ward can form a ward committee to promote local people's participation in development and administrative activities of Pourashavas.

The Memo No: 46.063.022.01.00.001.2011-258 issued on March 9, 2011 by the LGD requires Pourashavas to form the TLCC and the WLCC, and describes the detailed structures and Terms of Reference (TOR) of the TLCC and the WLCC. Table 2-32 shows the composition of the WLCC. The WLCC shall not contain more than 10 people in total. The formation of the WLCC and its TOR shall be approved by the Pourashava Parishad.

**Table 2-32 Composition of Ward Level Coordination Committee**

Respective Ward Counselor	Chairperson
Respective (Reserve) Female Counselor	Co-Chairperson
Poor Representative (Total 3 including 1 female)	Member
Civil Society Representative (Total 2 including 1 Female)	Member
Occupational Organization (Total 2 including 1 Female)	Member
Assistant Engineer or Sub-Assistant Engineer	Member-Secretary

Source: LGD Memo No: 46.063.022.01.00.001.2011-258 dated March 19, 2011

Below is the major part of the TOR for the WLCC stipulated in the Memo by the LGD.

- Discuss the progress, quality, and problems of the ongoing development work at the Ward level
- Organize an open discussion meeting for citizens to engage in Pourashavas governance and development activities
- Discuss problems and issues regarding infrastructures and public services in Ward to be discussed at the TLCC
- Conduct a public awareness program in the Ward for taxes and user charges
- Involve the WLCC in operation and management for extending specific services such as water supply and waste management
- Work on other issues of the Ward related to the environment, health, law and order, and birth and death registration
- Hold a meeting at least quarterly, prepare minutes of the meeting, and review the implementation of decisions in the previous meeting, and continue the same process
- Arrange an open discussion meeting with about 150 Ward-level citizens at least once every six months on the overall activities of the Ward, list the needs of the citizens, and submit the list to the Pourashava Parishad for implementation

Table 2-33 shows the composition of the TLCC whose members shall be as follows: 1) one to three members from each Ward shall be chosen; and 2) at least one-third of the total members must be female.

**Table 2-33 Composition of Town Level Coordination Committee**

Mayor	Chairperson
Counselors (12 members selected by Mayor)	Member
Associate institutional representatives, including District Administration, LGED, DPHE, and Departments of Roads and Highways, Public Works, Social Services, Cooperatives, and Telephone and Telegraph (Total: 8)	Member
Occupational representatives, including Education, Cultural, Advocate, Businessman, and Physician (Total: 5)	Member
NGO representatives (Total: 4)	Member
Civil society representatives (Total: 12)	Member
Town level poor representatives (Total: 7)	Member
Chief Executive Officer/Secretary	Member-Secretary

Source: LGD Memo No: 46.063.022.01.00.001.2011-258 dated March 19, 2011

The major part of the TOR for the TLCC is prescribed in the Memo by the LGD:

- Take initiative in preparing the overall development plan of Pourashava, including awareness raising to ensure people's participation in various development planning
- Monitor, supervise and coordinate the progress of preparation of the overall development plan of Pourashava
- Discuss tax collection including Pourashava tax assessment in the committee meeting
- Discuss public services that Pourashava provides to the citizens
- Organize the first meeting of the TLCC within 15 days of the formation
- Hold at least one meeting in each quarter, and prepare the minutes of each meeting
- Discuss the progress, quality, and problems of development activities being implemented by the Pourashava
- Discuss the improvement of operational management of Pourashava
- Discuss citizens' participation in Pourashava development activities
- Discuss the progress of Pourashava standing committees' activities
- Document all decisions of the TLCC, and discuss the implementation status of the decision

The TLCC and WLCC shall be held at least once in every three months as per the Memo by the LGD. This is the minimum requirement of the TLCC, however, and the frequency of the meeting may need to be increased when necessary. For instance, during the field survey, it was reported that the investment plan within the PDP under the UGIIP-2 had been revised by the Pourashava Parishad instead of the TLCC. This is because the TLCC was held only once per three months and thus it was too late for the Pourashava to make the revision. Such situation, however, can be avoided if the frequency of the meeting is increased.

Discussion topics in the TLCC and WLCCs are basically within the mandates of Pourashavas, thus agriculture-related issues, for instance, had been rarely discussed at the sample Pourashavas. However, it should be ensured that any discussion topics, as far as they relate to development of the Pourashavas, can be raised by participants of the TLCC and WLCCs.

#### ***Coordination with stakeholders outside Pourashava***

As a coordination mechanism with other organizations, each Upazila holds an Upazila Parishad meeting monthly. This meeting consists of Upazila Chairman, mayors of all Pourashavas and chairpersons of all Union Parishads. Chaired by Upazila Chairman, Upazila Parishad discusses all related issues of the Upazila, including agriculture and irrigation, primary education, health and family planning, rural water supply and sanitation, and other matters.

No official and structured coordination mechanism was observed among Pourashavas and Regional



offices of government agencies during the sample survey conducted in the following 12 Pourashavas: Dhanbari, Madhupur, Kalihati, Parbotipur, Hakimpur, Birampur, Jaldhaka, Patgram, Tangail, Mohonganj, Kendua, and Durgapur Pourashavas. Details will be described later. Pourashavas and such coordination mechanism are meant to interact, e.g., to implement a joint development project.

## **(5) Upazila**

### **a) Mandates**

Upazila is the second lowest tier of the local government system in Bangladesh. The mandates, functions and responsibilities of Upazila Parishad are provided by the Upazila Parishad Act 2011. Functions at the Upazila level can be divided into two categories, i.e., retained and transferred subjects (As-Saber and Rabbi, 2009). Retained subjects include issues related to law and order, justice, central revenues, large-scale irrigation, large-scale industries, and higher and technical education, and they are controlled by the government. On the other hand, all development activities which are considered local in nature are transferred subjects, and are the responsibility of Upazila Parishad. Transferred subjects include agriculture and irrigation, primary education, health and family planning, rural water supply and sanitation, rural works, disaster management, and others. More specifically, the major functions of Upazila Parishad are as follows:

- Preparation of five-year and other development plans
- Implementation of programs under various government departments at the Upazila level and supervision and coordination of activities of such departments
- Construction, repair and maintenance of inter-Union linked roads
- Implementation of small irrigation projects to ensure optimal utilization of surface water as per government guidelines
- Services in terms of health, nutrition, and family planning
- Improvement of sanitation and drainage system, and supply of safe drinking water
- Motivation and assistance in expansion of education at Upazila level
- Assistance and coordination of activities of cooperative societies and NGOs
- Assistance and implementation of women, children, social welfare and youth, sports and cultural activities
- Implementation of activities for improvement of agriculture, livestock, fisheries, and forest resources
- Review of the law and order situation of Upazila
- Implementation of programs for the creation of self-employment and poverty eradication
- Coordination and monitoring of Union Parishad development activities
- Safeguard activities including creation of public awareness against crimes
- Preventive measures including creating public awareness against violence, thieving, robbery, smuggling, use of drugs, etc.
- Undertaking environmental conservation programs, including social forestry
- Any other activities as directed by the government

### **b) Organizational structure of Upazila**

The Upazila Parishad consists of a Chairman who is directly elected by the local people; two Vice Chairmen, including one female, directly elected by the local people; women members of the reserved seats; ex-officio representative members; and official members of selected government departments. Standing committees are formed to perform the activities of the Upazila Parishad smoothly, covering the following themes: 1) Law and order; 2) Health and family planning; 3) Agriculture, fisheries, livestock, irrigation, and environment; 4) Education; 5) Social welfare, women, and child development; 6) Sports,

culture, and youth development; 7) Communication and development of infrastructure; 8) Establishment, finance, and accounts; and 9) Audit and evaluation. In addition, the Upazila Parishad can form additional standing committees in accordance with the Upazila Parishad Act. All decisions of the standing committees shall be discussed at the general meeting of the Parishad.

In terms of the administrative structure, the government deposes several officers to the Parishad. The Upazila Nirbahi Officer acts as the Chief Executive Officer of the Upazila. Other officers that the government may depute include the 1) Assistant Director by the LGD; 2) Upazila Engineer and his subordinate officials and employees by the LGED, and 3) Upazila-level Sub-Assistant Engineer and his subordinate staff by the DPHE. Other ministries that can deploy their staff include the Ministry of Agriculture, Health and Family Welfare Ministry, Ministry of Education, Ministry of Primary and Mass Education, Fisheries and Livestock Ministry, Social Welfare Ministry, Rural Development and Social Welfare Department, Youth and Sports Ministry, Ministry of Women and Children Affairs, Ministry of Food and Disaster Management, and Ministry of Home Affairs.

## **(6) Union**

### **a) Mandates**

A Union Parishad is the lowest rural LGI in Bangladesh. The Local Government (Union Parishads) Act 2010 (hereinafter referred to as the “Union Parishads Act”) provides the legal framework for the Unions Parishads. Section 47 of the Union Parishads Act provides the overall functions of Union Parishad, namely 1) administration and establishment issues; 2) maintaining law and order; 3) services for public welfare; and 4) planning and implementing local economic and social development. The major specific functions of Unions include the following (the Second Schedule):

- Preparation of five-year plan and development plans of various terms
- Development, protection and maintenance of rural infrastructures
- Education and primary & mass education activities
- Health and family planning related-activities
- Activities on agriculture, fisheries, livestock and other economic development
- Activities on epidemic control and disaster management
- Assessment and collection of taxes, fees, tolls, etc.
- Actions for development and conservation of environment
- Duties given by the government to maintain law & order and take necessary actions
- Registration of births and deaths
- Preservation of government land, open space, gardens, and playground
- Provision of lights on Union roads and on government land
- Tree plantation and caretaking and protecting the trees from thieves and destruction by mischief
- Preservation of public streets from any mislays, destruction and damage
- Control construction/reconstruction of new houses and buildings and prevention of the construction of risky buildings
- Management and preservation of wells, tube wells, water bodies, ponds, and the sources of water supply
- Prevention of contamination of drinking water sources
- Any other responsibilities as directed by the government time to time

### **b) Organizational structure of Union**

A Union Parishad consists of a Chairman and 12 members including three members exclusively reserved for women. They are directly elected by local people. There are standing committees in the

Parishad for dealing with important themes, including 1) finance and establishment; 2) audits and accounts; 3) tax assessment and collection; 4) education, health, and family planning; 5) agriculture, fisheries, livestock, and other economic development work; 6) rural infrastructure development, protection, and maintenance; 7) maintenance of law and order; 8) birth and death registration; 9) sanitation, water supply, and drainage; 10) social welfare and disaster management; 11) environmental conservation and tree planting; 12) resolution of family conflicts, women and children welfare; and 13) culture and sports. Furthermore, the Union Parishad may, with the approval of the DC, establish additional standing committees. The recommendations of the standing committees are discussed in the subsequent general meeting of the Parishad.

Decisions of Union Parishad are usually made in the general meeting of the Union Parishad. Section 42 of the Union Parishad Act requires each Union Parishad to hold a meeting at least once a month. All the decisions shall be taken upon the vote of the majority of the members attending in the meeting. The officers of line ministries may, by invitation, attend the meeting and participate in the discussion, but they hold no right to vote.

As for the administrative structure of Union Parishads, Section 62 of the Union Parishad Act stipulates that every Union Parishad shall have a Secretary and an Accounts Assistant cum Computer Operator. However, the latter has never been assigned to Unions to date. They are to be appointed by the LGD or any other authority as directed by the government. The Union Parishad, on prior approval of the government, may employ additional staff if necessary. Salaries and allowances of such staff shall be incurred by the Parishad. In addition, certain line ministries may deploy government officers to Union Parishads to perform general and special work under the supervision of the Parishads concerned. Such ministries include LGD for sub-assistant engineers and tube well mechanics, Ministry of Agriculture for sub-assistant agriculture extension officer, Ministry of Health and Family Planning for health inspectors and family welfare inspectors, and others.

### **2.3.6 User's committees and beneficiary groups**

#### **(1) Road Users Committee**

The District Road Users Committee (DRUC) and the Upazila Road Users Committee (URUC) are formed in accordance with the circular/instruction letter issued by the LGD in 2000. The members of the Committee are shown in Table 2-34 and Table 2-35, respectively. The objective of establishing the DRUC and URUC is to ensure proper utilization and maintenance of all Upazila, Union, and Village roads in the Districts and Upazilas.

**Table 2-34 Composition of District Road Users Committee**

1. Chairperson	DC
2. Member Secretary	LGED Executive Engineer
3. Member	RHD Executive Engineer
4. Member	Police Superintendent
5. Member	Civil Surgeon
6. Member	Assistant Director, Bangladesh Road Transportation Association
7. Member	Chairperson, District Truck Owners Association
8. Member	Chairperson, District Bus Owners Association
9. Member	Chairperson, Bus and Truck Drivers Association
10. Member	Chairperson, Rickshaw/Van Owners Association
11. Member	Chairperson, Rickshaw/Van Drivers Association
12. Member	Chairperson, Auto-rickshaw Owners Association
13. Member	Chairperson, Auto-rickshaw Drivers Association
14. Member	Chairperson, District Merchants Association

Source: LGD (2000)

**Table 2-35 Composition of Upazila Road Users Committee**

1. Chairperson	UNO (Upazila Nirbahi Officer)
2. Member Secretary	LGED Upazila Engineer
3. Member	Officer in charge, Police
4. Member	Concerned Union Parishad Chairperson
5. Member	Upazila representative from the Association of Industries and Traders
6. Member	Upazila representative from the Association of Bus/Truck Owners
7. Member	Upazila representative from the Association of Bus/Truck Drivers
8. Member	Upazila representative from the Association of Rickshaw/Van Owners
9. Member	Upazila representative from the Association of Rickshaw/Van Drivers
10. Member	Upazila representative from the Association of Drivers
11. Member	Representative from a local non-governmental organization (NGO)

Source: LGD (2000)

According to the 2000 circular, the DRUC is requested to have meetings at least twice a year to discuss District-specific issues regarding road safety, traffic movement and management, and road development and maintenance. When the recommendations from the DRUC are appropriate under its jurisdiction, the LGED executes follow-up activities. URUC also holds meetings to share and discuss Upazila- and Union-specific road-related issues in order for the LGED to consider follow-up activities.

However, according to field observations, the DRUC and URUC are not functioning as expected. In most cases, the issues which should be considered by the DRUC and URUC are instead discussed in the Upazila Parishad meetings at which Union Parishad Chairpersons, UNO, and line department officials are present.

The coordination and communication between the Pourashava and the LGED offices are limited. As per the Upazila Parishad Act 2009, all Mayors of the Pourashavas under the jurisdiction of the Upazila are also present at the Upazila Parishad meetings, as the member of the Upazila Parishad, and can discuss specific issues regarding road safety, traffic movement and management, and road development and maintenance related to their Pourashavas.

## **(2) Road Safety Committee**

Currently, two core organizations are responsible for preparing national policies on road safety and ensuring its implementation: the National Road Safety Council (NRSC) and the Road Safety Cell

(RSC). The NRSC acts as the main body for approving and executing the national policies and plans. The RSC is established at the Bangladesh Road Transport Authority (BRTA), preparing plans, and coordinating and carrying out monitoring and evaluation on planned activities assigned to different agencies and implementation of some programs assigned to it. Besides the NRSC, the District Road Safety Committee (DRSC) and the Upazila Road Safety Committee (URSC) are formed as stipulated by the 2003 circular of the BRTA. Their compositions are shown in Table 2-36 and Table 2-37, respectively.

**Table 2-36 Composition of DRSC**

1. Chairperson	DC
2. Member Secretary	Officer from Bangladesh Road Transport Authority (nominated by the Chairperson, Bangladesh Road Transport Authority)
3. Member	All members of Regional Transport Committee
4. Member	Chairperson of URSC
5. Member	Information Officer
6. Member	Civil Surgeon
7. Member	RHD Executive Engineer
8. Member	LGED Executive Engineer
9. Member	One representative from Chamber and Commerce
10. Member	Four representatives (one from each) from school, college, university, polytechnic institute (nominated by DC)
11. Member	One representative from the organization named "Want Safe Road"

Source: BRTA (2003a)

**Table 2-37 Composition of URSC**

1. Chairperson	UNO
2. Member Secretary	LGED Upazila Engineer
3. Member	Upazila Health and Family Planning Officer
4. Member	Officer in charge, Police
5. Member <sup>1</sup>	Head of Trauma Care Center
6. Member	Representative of RHD Executive Engineer
7. Member	Union Parishad Chairperson from Union where national highways, Regional highways, and other accident-prone roads exist (nominated by UNO)
8. Member	One representative from roadside schools/colleges/vocational institutes (nominated by UNO)
9. Member	One representative from transport organizations
10. Member	One representative from NGOs working in the road safety sector
11. Member	(nominated by UNO) Officer from Bangladesh Road Transport Authority

Note: 1. The member is chosen only when applicable.

Source: BRTA (2003b)

Although the roles and responsibilities of the DRSC and URSC are very similar, the DRSC is responsible for coordinating road safety activities at the District level, reporting on these activities, and making recommendations to the NRSC. The URSC is in charge of dealing with the unidentified dead in traffic accidents as per prevailing law and rules, taking care of the injured, including first-aid treatment, reporting on accident-prone areas to the DRSC, and raising awareness on road safety issues and measures. (BRTA, 2003a,b)

However, these committees do not yet function as stipulated in the circular 2003. Field observations revealed that road safety issues and management are discussed at the monthly Upazila Parishad meetings in which most URSC members participate. When undertaking road safety management activities, the LGED Upazila offices collaborate with the LGED Central Road Safety Unit, the Regional

Road Safety Unit, and Upazila Parishad rather than the URSC. The LGED's activities include the following: collection of information and analysis of road accidents that occur on roads developed by the LGED, identification of accident-prone sites, and implementation of road safety measures and mass awareness programs in collaboration with local governments, line departments, and the private sector.

### (3) Road Operation and Maintenance Committee

After road construction works are completed, Road Operation and Maintenance Committees are voluntarily formed with eight to ten beneficiaries, including the Union Parishad Chairperson. As the LGED has responsibility for the maintenance of UZR and UNR, the functions of the committees are limited to reporting on the damage and repair of roads to Union Parishads and Upazila Engineers when necessary.

### (4) Market Management Committee

The UNO on behalf of an Upazila Parishad is responsible for initiating the process for leasing all rural markets within the jurisdiction of the Upazila. Similarly, the Chief Executive Engineer/Secretary on behalf of a Pourashava Parishad is responsible for processing the leasing of markets within the Pourashava jurisdiction as stipulated in the Market Management and Leasing Manual 2011 (LGED). The markets are leased every year through an open tendering process. Lessees are responsible for cleaning the leased market area, displaying the approved toll rates in the market, and collecting tolls from permanent shopkeepers and vendors. To oversee market management, the Upazila Market Management Committee (UMMC) and Market Management Committee (MMC) are formed at the Upazila level and the market level, respectively. According to the Manual 2011, an UMMC is formed by the DC with seven members who supervise and advise the MMC at the market level. The members of UMMC are presented in Table 2-38. The composition of MMC at each market is listed in Table 2-39.

**Table 2-38 Composition of UMMC**

1. Chairperson	UNO
2. Member	One Government Officer at Upazila level (nominated by the Deputy Commissioner)
3. Member	LGED Upazila Engineer
4. Member	Respective Union Parishad Chairman
5. Member	One elite person of Upazila level (nominated by Upazila Parishad Chairman)
6. Member	Two representatives from Member Secretaries of all MMC under the Upazila (nominated by Upazila Parishad)
7. Member Secretary	Assistant Commissioner (Land)

Source: LGD (2011b)



**Table 2-39 Composition of MMC**

1. Chairperson	Concerned Union Parishad Chairperson
1. Chairperson	Concerned Union Parishad Chairperson
2. Member	Union Parishad member of the respective Ward
3. Member	Union Parishad female member of the respective Ward
4. Member	Union Land Officer/Assistant Land Officer
5. Member <sup>1</sup>	One elected/nominated representative from female shopkeepers (if applicable)
6. Member	Community Organizer of Upazila Engineer Office
7. Member	One representative elected/nominated from the temporary traders with at least six months of business experience
8. Member	One representative elected/nominated from van/rickshaw pullers
9. Member <sup>1</sup>	One representative nominated from the bus/truck owners association
10. Member Secretary	One representative elected from the permanent shopkeepers of the concerned market

Source: LGD (2011b)

Note: 1. The member is chosen only when applicable.

The Manual 2011 designates that the Union Parishad Chairperson serves concurrently as the MMC Chairperson to make MMC operations accountable and transparent. Since Union Parishad Chairpersons are accountable to higher authorities and their constituencies, they have the legitimate responsibility for maintaining the proper operation of public markets. In order to increase transparency of toll collection, the Manual 2011 requests that MMC, for example, ensure that lessees display the list of toll rates set by the government at the market.

As per the manual, the Pourashava Market Management Committee (PMMC) is also formed. The composition of PMMC is shown in Table 2-40.

**Table 2-40 Composition of PMMC**

1. Chairperson	Pourashava Mayor/Administrator
2. Member	Representative of DC in case of A class Pourashava
3. Member	LGED Upazila Engineer in case of Upazila level Pourashavas
4. Member	All Ward Commissioners of respective Pourashava
5. Member	Two elite persons of Pourashava area, including one teacher nominated by DC
6. Member	Two representatives from shopkeepers/businessmen of each market under Pourashava
7. Member	Executive Engineer/Assistant Engineer of respective Pourashava
8. Member Secretary	Chief Executive Officer/Secretary of respective Pourashava

Source: LGD (2011b)

The Manual 2011 states that the PMMC is responsible for preparation and implementation of the overall development plan in consultation with the respective DC in order to ensure collection of tolls as per rate schedule to be displayed at public places in the market, to ensure law and order and the cleanliness of the market, and to provide market facilities, e.g., latrines and urinals.

The PMMC may form MMC at each market level located within the jurisdiction of Pourashava. The Manual 2011 also outlines the provision of “Khash Collection” (toll collection by the government itself through Khash Collection Committee (KCC) for the markets), which could not be leased-out, if the tender value quoted by the bidders even in the third tender is lower than the government value.<sup>27</sup> The KCC comprises nine members, headed by UNO for markets under Upazila and five to seven members, headed by the mayor/administrator for markets under Pourashava.

<sup>27</sup> The government value will be the average value of the value in the last three years.

## **(5) Banik Samity**

Local permanent shopkeepers form Banik Samity as informal traders' associations. The Chairperson and Member Secretary of a Banik Samity are elected by the permanent shopkeepers of each market. Members of Banik Samity pay the membership fee as per the rules and regulations. The number of members in each Banik Samity ranges from 20 to 500, depending on the size of the market. The objectives of the Banik Samity are to look after the interest of the traders of the respective market, to improve the business of their members, and to mitigate disputes and security problems in the concerned market.

## **(6) Women's Market Sections and their shopkeepers**

WMSs are established as a special component of market infrastructure development in RDPs undertaken by the LGED. In WMS, five to 12 shops are constructed exclusively for women shopkeepers in Growth Centers. The Guidelines 2001 (LGD) lays out the rules and procedures for the operation of WMS.

Based on the criteria set by the Guidelines 2001, the women shopkeepers are selected by a committee consisting of the Union Parishad Chairperson, Union Parishad Members, and MMC members in collaboration with the Upazila Engineer. Initially, destitute women were allocated shops on a lottery basis in many RDPs. The arrangement has changed so that interested women with at least some capital are allocated shops in WMS to increase the success rate of their businesses. The shops are leased out for five years with a rental rate of BDT 120-150 per month. The selected women shopkeepers are given training in business skills such as shop management and accounting. Toilet and water facilities for women shopkeepers are also built in WMS by a number of RDPs.

As a result of the WMS initiatives, increased access to economic activities, increased income, and improved social status are observed among women shopkeepers. However, the performance of shops in WMS varies widely in the competitive business environment.

## **(7) Labor Contracting Society**

A LCS is composed of destitute landless and asset-less people, particularly disadvantaged women, and is involved in undertaking unskilled or semi-skilled construction tasks. The LCS scheme is a standard practice in rural infrastructure development projects implemented by the LGED. The main reason is that the scheme is able to provide scarce employment opportunities to disadvantaged people in rural areas through direct contracting. The LGED has developed the LCS Management Guidelines 2004 (LGED, 2004) to be applied in all rural infrastructure development projects. The Guidelines 2004 allows individual projects to develop their own manuals on LCSs to meet the specific needs of the projects. LCSs have been involved not only in earthworks but also routine maintenance, tree-planting and caretaking, pipe casting, and culvert installation.

An Upazila Engineer prepares a work plan and estimates for LCS contracts in consultation with the LGED District office. The Upazila Engineer then informs the Upazila Parishad and Union Parishads at their meetings of the plan's approval and the estimates made by the LGED, and explains the details of the plan and the number of LCS groups to be hired. LCS members are selected and proposed for approval by the Upazila Engineer and relevant project staff based on the criteria defined in the Guidelines 2004. For earthen road maintenance and tree-planting and caretaking, only female LCS members can be assigned. Destitute women and widows are given first priority in selecting the female members. The size of the group depends on the characteristics of each project. For example, in water resource projects, the LCS for earthwork in rivers and canal beds could be comprised of 45 members.

A contract with LCS group members is made without competitive bidding. Their wages are fixed in

accordance with the volume of work involved. The total cost of a contract with an LCS shall not exceed BDT 0.1 million for a normal LCS and BDT 0.5 million for a pre-qualified LCS (LGED, 2004). Large schemes which exceed the aforementioned cost need to be divided into several separate contracts. A contract agreement is signed by an Upazila Engineer of the LGED, the LCS Chairperson, and LCS Secretary. LCS is required to open a joint bank account with the Chairperson and Secretary as signatories. LCS receives full payment after the work is completed in line with the specifications and quality levels stipulated in the agreement. Payment is usually made in three to five installments. The first installment is to be in the form of an advance payment for the start of work, i.e., purchasing and carrying materials to the construction site. The remaining installments are to be paid upon satisfactory progress and completion of the work. In the case of earthen road maintenance and caretaking of trees, the mode of payment is different from the above in that advance payments are not made. Fixed wages, defined by the rate schedule issued by the LGED, are paid fortnightly or monthly to LCS members based on their attendance.

Before the work commences, LCS group members receive training which covers awareness-raising and technical issues regarding group formation and execution of work. While the work is being carried out, on-the-job training is also provided. They are encouraged to accumulate savings for the purpose of improving their living conditions. While some savings are made voluntarily by LCS members, others are imposed by LGED projects. In the latter case, LCS members jointly deposit BDT 10-20 per person per day from their wages. In several donor-financed projects, socio-economists and/or local NGOs promote the saving activities of LCS members and provide training on income generation, entrepreneurship, and marketing.

The LGED has been using the LCS system since the 1990s and it has had a substantial nationwide impact on providing employment, increasing incomes and improving the living conditions of poor rural people, particularly disadvantaged women. In the case of routine road maintenance, the LCS system provides long-term employment for poor women (see Annex 6 for detail).

## **2.4 Government budget and donor assistance**

### **2.4.1 General government budget**

In the period of fairly high GDP growth in the first decade of the twenty-first century, both public revenues and expenditures of Bangladesh government have increased steadily with similar rates of GDP. As a result, total revenues hovered between 9.6% and 11.4% of GDP in FY01-FY10, whereas total expenditures were between 14.1% and 17.2% in the same period (Table 2-41).

It should be noted, however, that ADP expenditure has been declining in the last decade, from 6.4% in FY01 to 3.7% in FY10. This is alarming because the ADP is the primary instrument of public investment in Bangladesh, which includes most development projects.

Bangladesh has experienced annual budget deficits in eight out of the ten years in FY01-FY10. The deficits were financed by both external sources (loans and grants from overseas) and internal sources (banks and non-bank institutions) (Table 2-41). The proportion of external and domestic financing does not appear to have changed much, although there were some fluctuations in FY01-FY10.

**Table 2-41 Fiscal components**

(Unit: as % of GDP)										
Components	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
<b>Total revenue</b>	<b>9.6</b>	<b>10.2</b>	<b>10.3</b>	<b>10.3</b>	<b>10.4</b>	<b>10.6</b>	<b>10.4</b>	<b>11.4</b>	<b>10.4</b>	<b>10.9</b>
Tax revenue	7.8	7.8	8.3	8.2	8.5	8.5	8.3	9.1	8.7	9.0
Non-Tax revenue	1.8	2.4	2.1	2.1	2.0	2.1	2.2	2.3	1.8	1.9
<b>Total expenditure</b>	<b>14.8</b>	<b>14.9</b>	<b>14.5</b>	<b>14.8</b>	<b>15.0</b>	<b>14.7</b>	<b>14.1</b>	<b>17.2</b>	<b>14.3</b>	<b>14.6</b>
Revenue expenditure	8.1	8.3	8.4	8.6	9.4	9.2	9.6	10.6	11.2	11.0
ADP expenditure	6.4	5.2	5.1	5.1	5.1	4.6	3.8	3.1	3.2	3.7
<b>Overall balance (excluding grant)</b>	<b>-5.2</b>	<b>-4.7</b>	<b>-4.2</b>	<b>-4.2</b>	<b>-4.4</b>	<b>-3.9</b>	<b>3.7</b>	<b>5.7</b>	<b>-3.9</b>	<b>-3.7</b>
<b>Overall balance (including grant)</b>	<b>-4.1</b>	<b>-3.7</b>	<b>-3.4</b>	<b>-3.4</b>	<b>-3.7</b>	<b>-3.3</b>	<b>4.6</b>	<b>6.6</b>	<b>-4.2</b>	<b>-4.3</b>
<b>Financing</b>	<b>4.8</b>	<b>4.8</b>	<b>3.5</b>	<b>3.3</b>	<b>3.5</b>	<b>3.8</b>	<b>3.5</b>	<b>4.4</b>	<b>3.9</b>	<b>3.7</b>
<b>External</b>	<b>2.0</b>	<b>2.1</b>	<b>2.2</b>	<b>1.1</b>	<b>1.8</b>	<b>1.6</b>	<b>1.6</b>	<b>1.9</b>	<b>0.8</b>	<b>1.4</b>
Grants	1.1	1.0	1.0	0.6	0.4	0.8	0.8	0.8	0.3	0.6
Loan	1.8	2.0	2.1	1.2	2.1	1.7	1.5	1.8	1.6	
Amortization	0.9	0.9	0.9	0.7	0.7	0.8	0.8	0.7	0.8	0.7
<b>Domestic</b>	<b>2.8</b>	<b>2.7</b>	<b>1.3</b>	<b>2.2</b>	<b>1.8</b>	<b>2.2</b>	<b>1.9</b>	<b>2.6</b>	<b>3.1</b>	<b>2.3</b>
Bank	1.1	0.9	-0.3	0.8	1.0	1.5	0.9	2.0	2.2	-0.3
Non-bank	1.7	1.7	1.6	1.4	0.8	0.7	1.0	0.6	0.9	2.6
Memorandum:										
Nominal GDP (billion BDT)	2,535	2,732	3,005	3,330	3,707	4,157	4,725	5,458	6,148	6,943

Source: Table 27, GOB (2011), Part II.

Looking at public expenditures by public sector entity, the LGD and RDCD have been increasing their expenditure shares in total ADP expenditures in FY05-FY11 (Table 2-42). The amount of expenditures of the LGD and RDCD combined increased from BDT 42.79 billion in FY05 to BDT 86.47 billion in FY11, and its share in total ADP expenditure increased steadily from 22.1% in FY05 to 24.8% in FY11. This perhaps reflects the heightened priority of local government and rural development in the policies of Bangladesh.

**Table 2-42 Public expenditures of LGD and RDCD**

Organizations	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Expenditure amount (BDT 10 million)							
LGD	4,185	3,803	4,668	4,290	4,856	6,295	8,178
RDCD	93	144	150	244	249	385	469
LGD and RDCD combined	4,279	3,948	4,819	4,534	5,105	6,681	8,647
Total ADP expenditures	19,365	17,905	19,108	18,270	19,590	26,200	34,801
Share in total ADP expenditures (%)							
LGD	21.6	21.2	24.4	23.5	24.8	24.0	23.5
RDCD	0.5	0.8	0.8	1.3	1.3	1.5	1.3
LGD and RDCD combined	22.1	22.0	25.2	24.8	26.1	25.5	24.8
Total ADP expenditures	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percentage change from previous fiscal year (%)							
LGD		-9.1	22.7	-8.1	13.2	29.6	29.9
RDCD		54.7	4.3	62.0	2.4	54.5	21.7
LGD and RDCD combined		-7.7	22.1	-5.9	12.6	30.9	29.4
Total ADP expenditures		-7.5	6.7	-4.4	7.2	33.7	32.8

Source: Survey Team calculation based on Table 36, GOB (2011), Part II

The amount of the total public debt in Bangladesh has more than doubled from BDT 1,104 million in FY00 to BDT 2,444 million in FY09 (Table 2-43). However, the debt-GDP ratio has in fact declined from 46.6% in FY00 to 39.7% in FY09, reflecting relatively high economic growth, sound macroeconomic management, and prudent debt management in this period. It is also important to

observe that the ratio of external debt relative to GDP has declined considerably from 34.4% in FY00 to 24.5% in FY09, whereas that of internal debt relative to GDP has increased 12.2% to 15.3% in the same period. The structure of public debt has been shifting away from external toward internal debt in the last decade.

In the SFYP, the government expressed its commitment to continuing sound macroeconomic management and prudent debt management in FY11-FY15. In the macroeconomic scenario presented in the SFYP, the government would maintain a debt-to-GDP ratio of 39.8%, and an average debt service ratio of 2.6% in FY11-FY15.<sup>28</sup>

However, more recently in 2011 and 2012 macroeconomic pressures on the Bangladesh economy have been intensified due to significant external shocks, such as an adverse terms-of-trade shock, increasing oil imports, and increasing oil prices. As a result, Bangladesh's balance of payment reverted to a deficit in FY11, and the country's foreign currency reserves declined. Facing this challenge, the government reached agreements to receive a three-year Extended Credit Facility (ECF) of USD 987 million in April 2012. Under the ECF-supported program, the government is required to implement "upfront macro-tightening measures buttressed by greater exchange and interest rate flexibility, sound debt management, and complementary reforms to tax policy and administration, public financial management, and the financial sector."<sup>29</sup>

**Table 2-43 Trend of public debt**

Component	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09
<b>Amount (billion BDT)</b>										
Total public debt	1,104	1,211	1,314	1,415	1,540	1,684	1,821	1,961	2,234	2,444
Of which:										
External debt (in USD)	16	15	16	17	19	19	19	21	21	22
External debt (in BDT)	816	813	935	1,008	1,091	1,184	1,303	1,430	1,461	1,503
Domestic debt	289	398	379	407	449	499	518	531	773	940
<b>Percentage of GDP (%)</b>										
Total public debt	46.6	47.8	48.1	47.1	46.3	45.4	43.8	41.5	40.9	39.7
of which:										
External debt	34.4	32.1	34.2	33.6	32.8	31.9	31.3	30.3	26.8	24.5
Domestic debt	12.2	15.7	13.9	13.6	13.5	13.5	12.5	11.2	14.2	15.3
<b>Memorandum:</b>										
Nominal GDP (billion BDT)	2,371	2,536	2,732	3,005	3,330	3,707	4,157	4,725	5,458	6,149

Source: Table 39, GOB (2011)

### 2.4.2 Donor assistance

A total of USD 17 billion in foreign aid has been disbursed in FY01/02-FY10/11 (Table 2-44). The following points can be observed in the breakdown of foreign aid disbursement.

First, foreign aid has shifted away from food and commodity aid toward project aid. The share of the project increased from 86.8% in FY01/02 to 96.9% in FY10/11. Today project aid is a dominant purpose of foreign aid for Bangladesh.

Second, the share of grants and loans in total foreign aid hovered around 32% and 68% on average, respectively, in the last decade. The share of loan disbursement in total foreign aid fluctuated widely between 58% and 84%, and yet no clear trend of decline or increase can be observed in the last decade.

<sup>28</sup> Page 96, Part I, GOB (2011).

<sup>29</sup> IMF (2012).

**Table 2-44 Disbursement of foreign aid FY01/02 – FY10/11**

Fiscal Year	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	Total
<b>I. Amount (Million USD)</b>											
By purpose:											
Food aid	36	48	32	33	97	60	111	52	93	55	617
Commodity aid	155	175	-	22	0	0	0	0	0	0	352
Project aid	1,251	1,362	1,002	1,434	1,470	1,571	1,951	1,795	2,134	1,722	15,692
Total	1,442	1,585	1,034	1,489	1,568	1,631	2,062	1,847	2,228	1,777	16,661
By type:											
Grant	479	510	339	244	501	590	658	658	639	745	5,363
Loan	963	1,075	695	1,244	1,067	1,040	1,403	1,190	1,589	1,032	11,298
Total	1,442	1,585	1,034	1,488	1,568	1,631	2,062	1,847	2,228	1,777	16,661
<b>II. Percentage (%)</b>											
By purpose:											
Food aid	2.5	3.0	3.1	2.2	6.2	3.7	5.4	2.8	4.2	3.1	3.7
Commodity aid	10.7	11.1	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	2.1
Project aid	86.8	85.9	96.9	96.3	93.8	96.3	94.6	97.2	95.8	96.9	94.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
By type:											
Grant	33.2	32.2	32.8	16.4	31.9	36.2	31.9	35.6	28.7	41.9	32.2
Loan	66.8	67.8	67.2	83.6	68.1	63.8	68.1	64.4	71.3	58.1	67.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: ERD (2011), Table 3.8

Regarding the disbursement of foreign aid by development partners, the International Development Association (IDA) of the World Bank Group is the largest multinational development partner, with USD 12.5 billion, or 23% of the total foreign aid in FY71/71-FY10/11 (Table 2-45). Among bilateral development partners, Japan is the largest, providing USD 7.2 billion or 13% of total foreign aid in the same period. The amount provided by the top five development partners (IDA, Japan, ADB, USA, and Canada) exceeds 60% of the total foreign aid for Bangladesh since 1971.

**Table 2-45 Disbursement of foreign aid by development partners FY71/72-FY10/11**

Development Partners	Amount (Million USD)			Share (%)		
	Grant	Loan	Total	Grant	Loan	Total
1 IDA	448	12,044	12,492	1.9	38.8	23.0
2 Japan	3,342	3,860	7,202	14.3	12.4	13.2
3 ADB	155	8,514	8,669	0.7	27.4	15.9
4 USA	2,787	764	3,550	11.9	2.5	6.5
5 Canada	2,118	16	2,134	9.1	0.1	3.9
All development partners	23,347	31,027	54,374	100.0	100.0	100.0

Source: ERD (2011), Table 5.0

## 2.5 Relevant projects

### 2.5.1 Projects for rural infrastructure development

A number of development partners have been supporting the rural infrastructure sector in Bangladesh. Those development partners include ADB, Canadian International Development Agency (CIDA), Danish International Development Agency (DANIDA), Department for International Development (DFID), Government of the Netherlands, GTZ, International Fund for Agricultural Development (IFAD), Islamic Development Bank (IDB), JICA (JBIC), Kreditanstalt für Wiederaufbau (KfW), Swedish International Development Cooperation Agency (SIDA), Swiss Agency for Development and Cooperation, United States Agency for International Development, World Bank, and World Food Programme.

Among them, JICA, the ADB, and the World Bank are the three largest development partners for rural



infrastructure development through the LGED. JICA- (JBIC-) financed projects in recent years include: 1) Northern Rural Infrastructure Development Project; 2) Greater Faridpur Rural Infrastructure Development Project; 3) Eastern Bangladesh Rural Infrastructure Development Project; and 4) SWBRDP (ongoing). ADB/KfW/GTZ co-financed three projects in recent years: 1) Rural Infrastructure Improvement Project (RIIP-1); 2) Second Rural Infrastructure Improvement Project (RIIP-2); and 3) Sustainable Rural Infrastructure Improvement Project (SRIIP) (ongoing). Finally, the World Bank financed: 1) Rural Transport Improvement Project (RTIP-1); and 2) RTIP-2 (ongoing).

In the following, three ongoing or forthcoming projects by JICA, the ADB, and the World Bank are highlighted as relevant projects for the NRRDLGIP.

### **(1) South-Western Bangladesh Rural Development Project**

The LGED started the implementation of the SWBRDP in 2010. The objectives are to increase economic opportunities for the rural poor, improve their accessibility to social services, and promote recovery from damage by natural disasters in rural areas in the south-western part of Bangladesh by the construction and rehabilitation of rural infrastructure, thereby contributing to poverty reduction and alleviating economic disparities in the South-West. This project is expected to be completed in 2014. The total project cost is covered by JICA (JPY 14,264 million) and the GOB (BDT 4,095.984 million).

The project will achieve the objectives by implementing the following seven components:

- Upgrading of Upazila roads (88 roads; 723 km of paved roads; 2,730 m of bridges and culverts; road safety measures such as bus bays, guard posts, and sign boards)
- Upgrading of Union roads (19 roads; 69 km of paved roads; 2 m of bridges and culverts)
- Upgrading of Growth Centers and RMs (58 Growth Centers; 18 rural markets)
- Procurement of vehicles & equipment
- Poverty reduction interventions (Mobilization of LCS; tree-planting and caretaking on 759 km of roads; maintenance of 1,400 km of village roads)
- Capacity development (Training of LGED officials and stakeholders)
- Upgrading of Upazila roads to be financed by GOB (18 roads; 158 km of paved roads; 705 m of bridges and culverts; road safety measures such as bus bays, guard posts, and sign boards)

The target areas of the project include 14 Districts: Barisal, Patuakhali, Pirojpur, Faridpur, Madaripur, Shairatpur, Bagerhat, Khulna, Bhola, Jhalakati, Barguna, Gopalganj, Rajbari, and Satkhira in Barisal Division, Greater Faridpur of Dhaka Division, and Greater Khulna of Khulna Division.

### **(2) Sustainable Rural Infrastructure Improvement Project**

The LGED started implementing the SRIIP in 2011. This project is expected to be completed in 2016. Total project cost is USD 108.4 million, which is co-financed by ADB (USD 60 million), KfW (USD 15.9 million) and GOB (USD 32.5 million).

This project is aimed to reduce poverty and raise incomes in 21 Districts of northwest and southwest Bangladesh by fostering economic growth, capacity development, and gender equity. The impact of the project will be reduced poverty in intervention areas. The key performance target is a 6% point reduction in the percentage of the population in project areas living in poverty from 42.7% in 2010. The project outcome will be widened access to economic opportunities and social services for the poor and women.

The impact and outcome will be achieved by delivering three outputs:

- **Improved road connectivity:** upgrade 700 km of Upazila roads and 100 km of Union roads to

- bitumen-surfaced standard, mainstreaming climate proofing and greening of roads
- **Upgraded marketing facilities:** develop up to 92 Growth Center market infrastructures, including women market sections consisting of 6-12 shops dedicated to women in 50 of those markets
- **Improved rural infrastructure management:** upgrade rural infrastructure management capacity of the LGED and LGIs by providing training to LGED staff, and functionaries and staff of LGIs; on a pilot basis, providing access to Union Parishads to infrastructure funds, based on women's participation level in LGIs; prepare a sustainable road maintenance plan based on pilot activities in three high traffic volume roads, and mainstream climate risk reduction into policy formulation and infrastructure development

The SRIIP supports 21 Districts in northwest and southwest Bangladesh: 1) Kushtia, Chuadanga, Meherpur, Jessore, Jhenidah, Narail, and Magura in Khulna Division; 2) Rajshahi, Natore, Joypurhat, Bogra, Naogaon, and Chapai Nawabgonj in Rajshahi Division; and 3) Panchagarh, Thakurgaon, Nilphamari, Dinajpur, Rangpur, Gaibandha, Kurigram, and Lalmonirhat in Rangpur Division.

### (3) Second Rural Transport Improvement Project

The LGED has recently completed the formulation of RTIP-2, and is expecting to start this project from sometime soon. The duration of this project is six years from 2012 to 2018. The total project cost is USD 417 million, of which financing of IDA and GOB comprise USD 302 million and USD 115 million, respectively.

The Project Development Objective of this project is to improve rural accessibility in project areas (covering 26 Districts) and strengthen institutional capacity for sustainable rural road maintenance. The project rationale is to scale up the accomplishments in the rural roads infrastructure under the RTIP-1 and further expand on it by adding improvements in the inland water transportation and introducing performance-based (routine and periodic) maintenance contracts of the rural roads. The objective will be achieved by implementing the following components of the project:

- **Accessibility improvement:** rural road improvement; rural road rehabilitation and maintenance; rural waterways and *Ghats*; Growth Center; project supervision and monitoring
- **Institutional building, capacity building and governance enhancement:** institutional development and governance; improving project performance monitoring and management
- **Rural transport safety:** strengthen road safety capacity of the LGED; upgrade LGED design standards, codes, and practices in road safety engineering; develop a comprehensive Road Safety Training Program for the LGED; improve rural road accident data collection process, database and analysis capacity; provide training for representatives of participating LGIs and communities, police, school teachers, members of the (rural) rickshaw drivers' associations, other local road transport operators and local-level works contractors and associated advocacy, and monitoring and survey activities in the concerned project Districts.

The target area of the project includes 26 Districts, among which 2 and 24 are located in the west and east of the Jamuna River, respectively. Chittagong Hill Tracts are excluded from the project.

#### 2.5.2 Projects for local governance improvement

Regarding local governance improvement, several projects have been implemented in Bangladesh. The experiences of those projects indicate that infrastructure development would not be able to ensure sustainability successfully without necessary institutional arrangements and capacity development. Learning from the lessons, the Municipal Service Project (MSP), the Urban Governance and Infrastructure Improvement Project (UGIIP-1) and the UGIIP-2 were designed to incorporate

institutional reform and capacity building into infrastructure development. The participatory approach for planning and implementation is another key aspect of their approaches to improve effectiveness of the projects.

Under the UGIIP-1 and the UGIIP-2, TLCC, WLCC, and CBOs were organized to enhance awareness of and participation in the project. The Participatory Rural Development Project Phase II (PRDP-2) utilized the “Link Model” to facilitate vertical and horizontal dialogue and improve coordination mechanisms. The Link Model was developed through PRDP-1 and PRDP-2 as well as their predecessors. The Secondary Town Water Supply and Sanitation Sector Project (STWSSP) and the Urban Partnerships for Poverty Reduction Project (UPPRP) provide ample information regarding development of water supply and sanitation, and slum improvement for the urban poor and extremely poor. Regarding capacity enhancement of Union Parishads, the Local Governance Support Project (LGSP-1) has contributed to strengthening local governance through provision of the block grant and training to Union Parishads. Based on the success of LGSP-1, LGSP-2 started recently. Brief information is given below.

### **(1) Municipal Service Project**

This project was initiated in June 1999 to finance four components: 1) urban infrastructure construction and rehabilitation through the Bangladesh Municipal Development Fund (BMDF); 2) urban infrastructure construction and rehabilitation in about 20 municipalities planned and carried out before the establishment of BMDF; 3) rehabilitation of urban infrastructure damaged by floods; and 4) institutional development for creation and operation of BMDF and Municipal Support Unit (MSU) under the LGED. The project was extended twice with additional credits, and closed in June 2012. The credit of USD 208 million is totally financed by IDA. The project has contributed urban infrastructure subprojects in 167 municipalities and capacity building activities in 142 municipalities through the MSU.

The MSU of the project and Urban Management Support Unit (UMSU) of the UGIIP-2 were set up to provide hardware and software support continuously. The main activities of the MSU and the UMSU are: 1) computerization and improved management of tax records; 2) computerization and improved management of water supply records; 3) computerization and improved reporting of accounting records; 4) computerization of trade license management; 5) computerization of non-motorized vehicles management; 6) inventory and assessment and mapping of municipal infrastructure; and 7) community mobilization support to Pourashavas.

### **(2) Urban Governance and Infrastructure Improvement Project**

The project was implemented from October 2002 to December 2010. The project area includes 22 Pourashavas. The total cost of the project was BDT 5,141.7 million (USD 87 million). This was co-financed by the ADB (69%), the GOB (26.1%), Pourashavas (4.5%), and beneficiaries (0.4%). The project consists of three components. The first component is urban infrastructure improvement for urban roads and bridges, storm-water drainage, sanitation, solid waste management, water supply, municipal facilities, and slum upgrading. The second component is urban governance improvement that includes microcredit, community poverty reduction activities, institutional reform and capacity building. The third component is capacity building and implementation support, including: 1) strengthening Urban Management Wing of the LGED; 2) providing consulting services for subproject design and supervision; and 3) institutional strengthening of Pourashavas.

### **(3) Second Urban Governance and Infrastructure Improvement Project**

The project started in January 2009 and will be closed in December 2014. The target Pourashavas are 35 Pourashavas, including eight Pourashavas in the Project area of NRRDLGIP. The total estimated cost is

BDT 11,485.4 million (USD 167.5 million), which is funded by the GOB (18.94%), Pourashavas (4.36%), beneficiaries (0.42%), a grant from GTZ (2.81%), KfW (21.53%), and ADB loan (51.94%).

The project has three components: A) urban infrastructure and services delivery; B) urban governance improvement and capacity development; and C) project management and implementation support. The output of Component A is developed infrastructure and improved service delivery, including municipal transport, drainage, solid waste management, water supply, sanitation, and municipal facilities. The output of Component B is improved governance and developed capacity in Pourashavas. Pourashavas carry out a series of reform activities in six key areas defined in the Urban Governance Improvement Action Program: 1) citizen awareness and participation; 2) urban planning; 3) women's participation; 4) integration of the urban poor; 5) financial accountability and sustainability; and 6) administrative transparency. Under Component C of the project, a Project Management Office (PMO) in the LGED headed by a Project Director and a Project Implementation Unit (PIU) in each Pourashava headed by a Pourashava Mayor with assistance from a Chief Executive Officer and other staff are set up. The PMO is responsible for overall project implementation, while PIUs implement activities for governance improvement and physical infrastructure development with the support from consultants and facilitators.

The project involved consultants using procurement guidelines on the use of consultants under the ADB to support the PMO and PIUs to strengthen the institutional, administrative and financial capacities of the Pourashava and LGED. The major packages for consultancy services are "Package-1: Governance Improvement and Capacity Development" and "Package-2: Management Design and Supervision."

The process of selecting Pourashavas was guided by the Project Steering Committee (PSC) and finalized before commencement of the project implementation through the following process. First, three Pourashavas (Bhanga, Rangpur, and Cox's Bazar) were selected by the PSC as pilot Pourashavas to assess development and financial needs of Pourashavas, examine feasibility of the project implementation in Pourashavas, and design mechanisms for the project implementation. Then, 35 Pourashavas were selected. Six category-C Pourashavas were selected, covering six administrative divisions and considering socioeconomic aspects, economic growth potential, and services delivery gaps. In selecting the remaining 26 category-A and B Pourashavas, a number of parameters were considered with regional balance such as: 1) demographic factors; 2) economic growth potential of Pourashava; 3) infrastructure and service delivery deficiency; 4) investment received in recent years; 5) incidence of poverty; 6) capability of Pourashavas for effective implementation; and 7) its creditworthiness.

Considering methods promoting citizen's participation in development activities undertaken by Pourashavas, the committees, i.e., TLCC, WLCC, CBO, and Gender Committee, are formed as a coordination forum. To ensure effective participation, the selection of members follows a bottom-up approach to the extent possible.

#### **(4) Urban Partnerships for Poverty Reduction Project**

The project commenced in March 2008 and will continue until March 2015. The project covers seven City Corporations and 23 Pourashavas. The initial total cost of the project, USD 120 million, is shared by DFID and the United Nations Development Program (UNDP). UN Human Settlements Program, International Labour Organization, UN Children's Fund (UNICEF), and CARE participate in the project as implementing partners. The project aims to improve the livelihoods and living conditions of three million urban poor and extremely poor, especially women and children. In 2010 alone, the project formed over 6,000 new Primary Groups with over 125,000 members to plan and implement physical improvement activities for their healthy and secure living environments. More than 1,700 community contracts were approved for more than 1,000 community development committees providing 12,700 block grants to extremely poor women and over 13,000 apprenticeships. Some 14,000 high-school age

girls continue to stay in school as a result of education grants and over 250,000 people have benefited from social development activities.

Comparison on characteristics of MSP, UGIIP-2, and UPPRP is shown in Table 2-46.

**Table 2-46 Comparison of characteristics of MSP, UGIIP-2, and UPPRP**

Item	MSP	UGIIP-2	UPPRP
Project period	June 1999 to June 2012	January 2009 to December 2014	March 2008 to March 2015
Number of target City Corporation and Pourashavas (PSs)	- 2 City Corporations - 14 PSs - 3 Hill PSs - Flood Damaged Rehabilitation works: (a) Flood 1998: 147 PSs; (b) Flood 2000: 19 PSs; (c) Flood 2004: 119 PSs; and (d) Flood 2007: 65 PSs	- 35 PSs (Phase 1 and 2) - 47 PSs (Phase 3) Among 35 PSs in Phase 1 and 2, four PSs dropped out from the UGIIP-2. Three PSs could not fulfill performance requirements of Phase 2, whereas one PS became a City Corporation. In addition to the original 31 PSs, 16 PSs newly joined in the UGIIP-2 from Phase 3.	- 7 City Corporation - 23 PSs
Subcomponents on basic infrastructure	(a) water supply; (b) drainage; (c) urban roads; (d) sanitation; (e) solid waste management; (f) bus and truck terminals; (g) markets; (h) slum upgrading; (i) landing ghat; (j) twin pit latrine; (k) water supply components; and (l) rehabilitation works of urban infrastructures damaged in 1998, 2000, 2004 and 2007 floods	(a) water supply; (b) sanitation; (c) solid waste management; (d) drains and roads; (e) municipal services; (f) basic services for the urban poor	(a) water supply; (b) sanitation; (c) drainage; (d) electricity and public lighting; (e) waste management (f) road access; and (g) community facilities
Subcomponents on governance improvement and capacity development	- Strengthening institutional and financial capacity - Computerization and improved management of holding tax bills and records, trade license records: development of infrastructure inventory and preparation of base maps; and support community mobilization	- Governance improvement: (a) citizen awareness and participation; (b) urban planning (c) women's participation; (d) integration of the urban poor; (e) financial accountability and sustainability; and (f) administrative transparency - Computerization and improved management of tax records; computerization and improved management of water billing; computerization of tax assessment / re-assessment; improved reporting of budget and accounting records; inventory, assessments and mapping of municipal infrastructure; and community mobilization	- Mobilizing of urban poor communities and groups: (a) formation of the Primary Groups and Community Development Committees (CDCs); and (b) CDC clusters and federation - Acquirement of resources, knowledge and skills to increase income and assets by urban poor - Capacity building of local government officials and elected representatives for poverty reduction including town to town and international exchange programs and the establishment of town networks

Source: Adopted and modified from LGED (2010d, 2012b) and GOB & UNDP (2008)



## **(5) Participatory Rural Development Project Phase II**

This project was implemented with support from JICA from 2005 to 2010 after the Joint Study on Agriculture and Rural Development (1986-1990), Joint Study on Rural Development Experiment (1992-1995), and Participatory Rural Development Project (PRDP) (2000-2004). The project covered 20 Unions under five Upazilas in three Districts. The succeeding project started in 2010 and is being implemented by the BRDB until June 2014, involving 200 Unions under 85 Upazilas in 64 Districts.

The objective of the project is to make Link Models function in the project area and establish the extending system of the Link Model. The Link Model has been introduced through: 1) vertical linkages between Union and village and 2) horizontal linkages among Union Parishad members, national government departments, and village representatives to establish effective mechanisms of coordination, and to strengthen local governance at the Union and village level to promote rural development. The Link Model has proven to be an effective mechanism to strengthen the dialogue and coordination among Union Parishad functionaries, government and NGO extension workers at the Union level, and village representatives through organizing Union Coordination Committees (UCCs). UCCs hold monthly meetings, called the Union Coordination Committee Meeting (UCCM), at the Union Parishad Complex conference hall with the participation of Union Parishad functionaries, field workers of national government departments, NGOs, and representatives of villages. In the UCCM, government and NGO field workers report the progress of their programs and formulate their work schedule of the following month, and coordinate with village representatives who are the recipients of the services. All the participants in the UCCM discuss extension activities and performance. At the Upazila level, Union Rural Development Officers (URDOs) are assigned under the BRDB, and Union Development Officers work under the supervision of URDOs at the Union level.

Based on the experiences and lessons learned from the UCCM, the National Institute of Local Government (NILG) proposed the draft on Union Development Coordination Committee (UDCC) to the LGD with support from JICA. After discussions, the circular on Union Development Coordination Committee (No 46.018.031.00.00.002.2011-74) was issued in February 2011.

## **(6) Secondary Towns Water Supply and Sanitation Sector Project**

The project started in August 2006 and terminated in June 2012, covering 17 Pourashavas. The total cost of the project is BDT 5,176 million. This is shared by the ADB (66.2%), the GOB (27.6%), and Reimbursable Project Aid (6.2%). The DPHE is the executing agency and is responsible for the overall technical supervision and execution of the project. The objectives are: 1) to increase the water supply coverage; 2) to increase the sanitation coverage; 3) to improve the capacity of Pourashavas to plan, implement, operate, manage, maintain, and finance water supply and sanitation investments; and 4) to improve capacity of the DPHE to plan, design, supervise, monitor, and provide technical assistance to local water utilities and sanitation units.

## **(7) Local Governance Support Project (1&2)**

The LGSP-1 was launched in January 2007 by the LGD and ended in September 2011, covering all 4,504 Union Parishads in the country. The total cost of the project, USD 189.9 million, is shared by IDA (58.7%) and GOB (41.3%). LGSP-1 became the first nationwide initiative to strengthen local governments. Through the project, Union Parishads are provided direct block grants and full discretion in deciding their spending priorities through a participatory process. Based on the success of LGSP-1, LGSP-2 started recently to further strengthen the local government system in the country. The project period of LGSP-2 is from FY2011/12 to FY 2015/16. The total cost of the LGSP-2 is USD 534.86 million co-financed by IDA (54.6%) and the GOB (45.4%).



### 2.5.3 Good practices and lessons of relevant projects

Through a series of local governance projects in the LGED, a number of good practices and lessons learned have been accumulated to date.

First of all, institutional strengthening and financial capacity building are an integral part of management and sustainability of the project. MSP is one of leading projects which focuses on infrastructure development and governance improvement, supporting the creation and operation of MSU. MSP has provided technical assistance and training for the information systems on management and revenue enhancement. These activities are followed by the UGIIP-1 which set up UMSU. All Pourashavas under the UGIIP-2 have substantially increased their revenues and improved their tax efficiency. According to the Performance Evaluation Report of the UGIIP-2 (LGED 2012b), aggregate holding tax collection in 35 Pourashavas during FY 2009/10 was BDT 297 million with the collection efficiency of around 46% for all Pourashavas. The same for FY 2010/11 was respectively BDT 389 million with collection efficiency of 55%, while the figures for FY 2011-2012 were BDT 621 million and 85%, respectively.

Governance reform can be effectively achieved by connecting it to infrastructure improvement and creating proper incentive mechanism. Performance-based allocation of investment funds under the UGIIP-1&2 has proven to be an effective mechanism to create incentives for Pourashavas to improve their governance and management. The UGIIP-1&2 adopted this mechanism and defined performance criteria on governance improvement. Most of the Pourashavas have met the performance requirements of the Urban Governance Improvement Action Program (UGIAP) (Phase 2) and improved their governance. However, in the field survey and interviews with concerned persons under the NRRDLGIP, it was reported that the facilitators and consultants often worked hard to achieve the requirements instead of Pourashavas officials. This raises questions about sustainability of project activities after completion of the project. Based on actual capacity of Pourashavas, there is a need to assess and set up an adequate level of performance requirements under the UGIAP.

People's participation including women and the poor in planning, implementation, and O&M of infrastructure development is one of key success factors of the project. The UPPRP aims to mobilize urban poor communities and extremely poor groups. For this purpose, Community Development Committees that represent the whole of the community have been formed. The project supports activities based on a Community Action Plan which was prepared using participatory research and analysis method, identified and prioritized the needs of the community. The UGIIP-2 introduced participatory urban planning to Pourashavas through the development of the Pourashava Development Plan (PDP). According to the Performance Evaluation Report of the UGIIP-2 (LGED, 2012b), the participatory formulation of the PDP made Pourashavas officials and elected representatives more accountable to communities and increased transparency on the use of resources and achievements in improving service delivery.