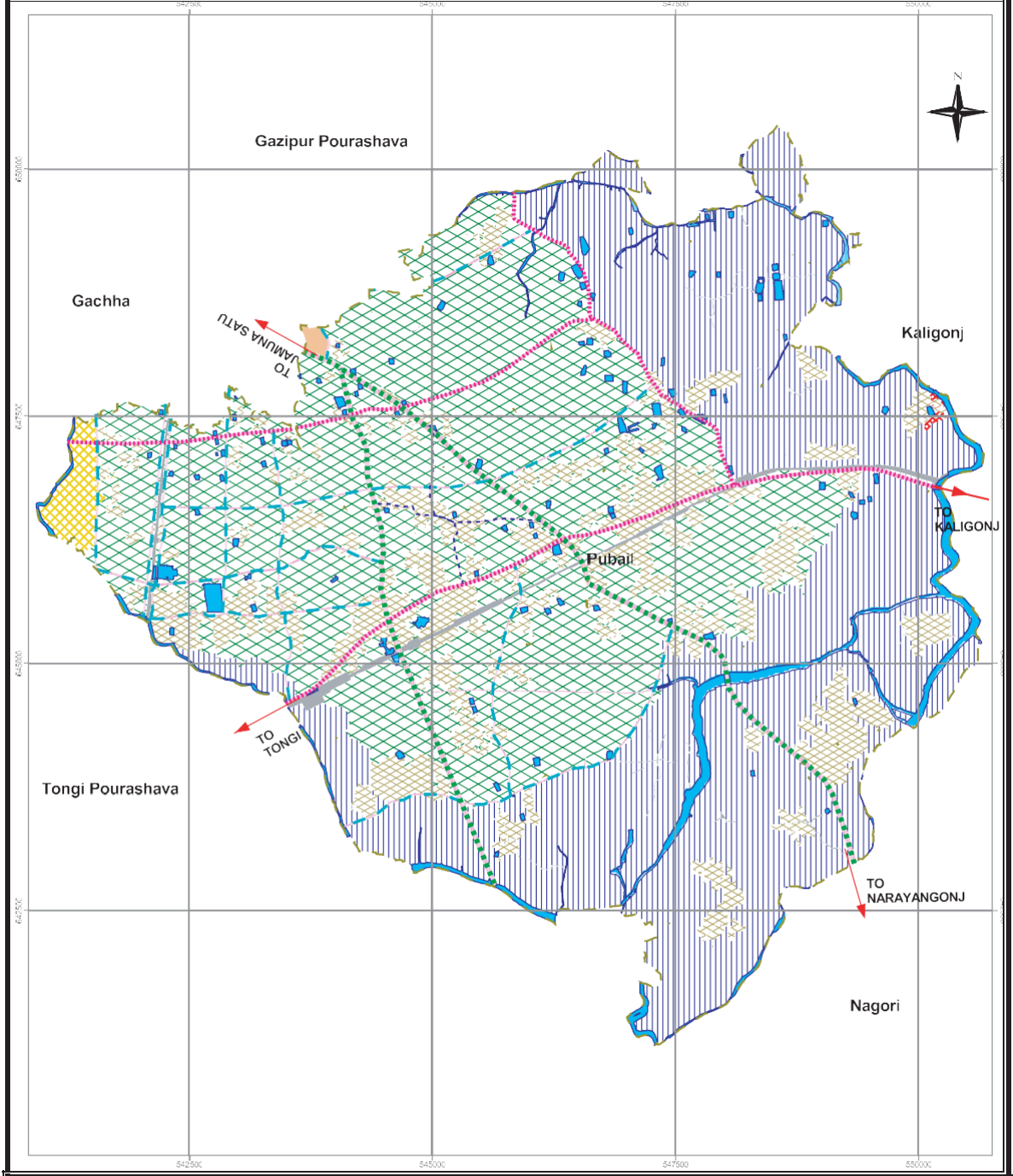


MAP 3.10: PROPOSED LANDUSE PLAN OF DPZ 07



<p><b>CONSULTANT</b>                  Development Design Consultants Ltd.                  27 Mirpur 10A, Dhaka, 1212, Bangladesh                  Divine Associates Limited                  House No. 9, Road No. 4, New Diamond                  House 102, Barisat</p>	<p><b>Detailed Area Plan for DMDP Area, Group-A</b></p> <p>800 0 800 1600 2400 Meters</p>	<p><b>CLIENT</b>                  Government of the People's Republic of Bangladesh                  Ministry of Housing and Public Works                  Rajshahi Unnayan Kartripakha (RAJUK)</p>			
<p>Study area</p>	<p><b>LEGEND</b></p> <table border="0"> <tr> <td> <ul style="list-style-type: none"> <li>UPZ boundary</li> <li>Proposed Road (Feet)                             <ul style="list-style-type: none"> <li>24</li> <li>30</li> <li>40</li> <li>60</li> <li>80</li> <li>100</li> <li>120</li> <li>130</li> <li>160</li> <li>170</li> <li>272</li> </ul> </li> </ul> </td> <td> <p><b>Proposed Landuse</b></p> <ul style="list-style-type: none"> <li>Administrative Zone</li> <li>Agricultural Zone</li> <li>Commercial Zone (Business)</li> <li>Commercial Zone (Office)</li> <li>Transportation &amp; Communication</li> <li>Flood Flow Zone</li> <li>General Industrial Zone</li> <li>Heavy Industrial Zone</li> <li>Institutional Zone</li> <li>Non-Conforming Use</li> <li>Open Space</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>Overlay zone</li> <li>Proposed Road Network</li> <li>Rural Settlement Zone</li> <li>Transportation Facilities</li> <li>Urban Residential Zone</li> <li>Water Retention Area</li> <li>Waterbody</li> <li>Mixed Use Zone (Commercial-General Industrial)</li> <li>Mixed Use Zone (Residential-Commercial)</li> <li>Mixed Use Zone (Residential-Commercial-General Industrial)</li> <li>Mixed Use Zone (Residential-General Industrial)</li> </ul> </td> </tr> </table>		<ul style="list-style-type: none"> <li>UPZ boundary</li> <li>Proposed Road (Feet)                             <ul style="list-style-type: none"> <li>24</li> <li>30</li> <li>40</li> <li>60</li> <li>80</li> <li>100</li> <li>120</li> <li>130</li> <li>160</li> <li>170</li> <li>272</li> </ul> </li> </ul>	<p><b>Proposed Landuse</b></p> <ul style="list-style-type: none"> <li>Administrative Zone</li> <li>Agricultural Zone</li> <li>Commercial Zone (Business)</li> <li>Commercial Zone (Office)</li> <li>Transportation &amp; Communication</li> <li>Flood Flow Zone</li> <li>General Industrial Zone</li> <li>Heavy Industrial Zone</li> <li>Institutional Zone</li> <li>Non-Conforming Use</li> <li>Open Space</li> </ul>	<ul style="list-style-type: none"> <li>Overlay zone</li> <li>Proposed Road Network</li> <li>Rural Settlement Zone</li> <li>Transportation Facilities</li> <li>Urban Residential Zone</li> <li>Water Retention Area</li> <li>Waterbody</li> <li>Mixed Use Zone (Commercial-General Industrial)</li> <li>Mixed Use Zone (Residential-Commercial)</li> <li>Mixed Use Zone (Residential-Commercial-General Industrial)</li> <li>Mixed Use Zone (Residential-General Industrial)</li> </ul>
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## DPZ-08 KALIGANJ

DPZ-8 comprises whole Kaliganj Thana and Tumulia Union with an area of 24359 acres consisted with 88 mouzas and situated in the SPZ-19 of Structure Plan. Estimated population of the DPZ was 144949 (2005) and will be 150419 in 2015. This zone is formed on the basis of rural-agricultural landuse with 3000 hectare of irrigation project. There are pucca and katcha roads, railroads, business centers and educational institutions. Large-scale urban development could be expected in near future for availability of flood free land due to Tumulia irrigation project. The RAJUK satellite town named Purbachal is located in the zone.

**Table-3.34: Administrative boundaries and population of the DPZ-8**

Union Name	Area (acre)	Population				Population Density Per Acre			
		2001	2005	2010	2015	2001	2005	2010	2015
Nagori(p)	8848	30576	39820	40611	40805	3	5	5	5
Tumulia (p)	5843	26901	37869	38623	38806	5	6	7	7
Kaliganj(p)	1194	15809	21480	23787	23897	13	18	20	20
Daudpur(p)	7679	39683	45780	46694	46912	5	6	6	6
<b>Total :</b>	<b>23564</b>	<b>112969</b>	<b>144949</b>	<b>149715</b>	<b>150419</b>	<b>5</b>	<b>6</b>	<b>6</b>	<b>6</b>

Source: BBS, 2001.

### Existing Landuse

As ascertained through field survey, the study area exhibits an admixture of a variety of landuses. This zone is widely dominated by agriculture land. Linear settlements are found along the roads and most of the rural homestead developed mostly in irrigation project. The table below shows existing landuse features of the study area.

**Table-3.35: Existing Landuse of the DPZ-8**

Types	Area in acre	%
Agriculture	17599.73	71.49
Purbachol (P)	4177.36	17.62
Residential	1675.87	7.07
Waterbody	668.57	2.82
Transport & Communication	192.65	0.81
Vacant Land	21.11	0.09
Commercial Activity	14.44	0.06
Open Space	3.89	0.02
Education & Research	1.9	0.01
Community Service	1.41	0.01
Governmental Services	0.34	0.00
Recreational Facilities	0.17	0.00
Service Activity	0.14	0.00
Miscellaneous	0.13	0.00
<b>Total</b>	<b>24359</b>	<b>100.00</b>

Source: Landuse Survey, 2006.

From the landuse survey it is observed that present dominant landuses of the study area are agriculture, residential development and water bodies. Out of the total land agriculture area covers 71.49% while 7.07% land is residential and only 2.82% land is covered by water body. But the Purbachal housing and irrigation project are the major concern in this zone.

## Problems and Opportunities

Poor transportation facilities and predominantly rural nature makes the area unsuitable for urban development. Seasonal flood is the major problem in this area due to the adjacent Sitalakkhya River.

The area comprises high value agriculture land suitable for promotion of agriculture and agro based industry. Present irrigation development project will help to increase agricultural output. Due to its good accessibility with the main city and national highway this zone offers excellent opportunity for urban-based activities. In future the on going Purbachal Model Town and its surrounding area may be developed as a satellite town.

## Detailed Area Development Proposals

Major recommendations consist of area renewal, upgrading, and enhancement, by encouraging provision of community and urban amenity spaces such as open spaces, play grounds, schools, kitchen markets, in the residential and mixed use areas. The aim would also be to develop underused and poorly developed urban land. In all cases however, the policy will be to protect the interests of the existing landowners and protecting and enhancing the urban environment while advancing the economic base of the city. Thus instead of undertaking projects through acquisition powers of the government, the approach will be to develop through government and private sector participation with representation by the landowner.

### Urban Residential Zone *(Implementing Agency: RAJUK/Land owners/Private land and housing Developers)*

**R-08-01:** The core area of the Kaliganj Thana is encouraged for residential development along the Dhaka–Kaliganj road. The existing settlement of the Kaliganj will be improved through guided land development technique. Structures for low and middle income residential use and its local support facilities will continue. Playgrounds and other urban amenities will be incorporated.

### General Industrial Zone *(Implementing Agency: RAJUK/BSCIC/Private landowners)*

I-08-01 : The immediate western part of Sitalakkhya River was used for Muslim Cotton Mill. The industries are not stopped for long time. So it is a high opportunity to developed moderate industry mainly Garments Palli.

### Rural Settlement Zone

Ag-08-01: The existing irrigation project in Tumulia Union must be preserved. Any kinds of physical development should stickle discouraged in this region.

### Drainage

In according with the FAP 8a and FAP 8b, DPZ-10 falls out of these proposals. DAP study has identify some drainage proposals for DPZ-10. These are detailed below:

- Rehabilitation of Sitalakkhya River and to protect the river from encroachment, a green corridor reserve is proposed on both sides.
- Rehabilitation of Ulukhola River up to 200 feet to drainage out water into Balu River.
- existing ponds and marshland proposed for preservation.
- Where not shown specifically in the land use map, Drainage Guiding Principles / guidelines will apply Retaining and preservation of ponds of 0.5 acre and above. The accumulated size of these

**Table-3.36: Proposed landuse of the DPZ-8**

Proposed Landuse Type	Area in acre	%
Agricultural Zone	10529.6	43.2
Flood Flow Zone	5041.1	20.7
Overlay Zone	3174.8	13.0
Rural Settlement Zone	1836.5	7.5
Waterbody	1450.3	6.0
Proposed Road Network	1347.2	5.5
Urban Residential Zone	579.5	2.4
Transportation & Communication	200.2	0.8
Mixed Use Zone (Residential-Commercial)	91.0	0.4
General Industrial Zone	68.4	0.3
Mixed Use Zone (Residential-Commercial-General Ind.)	37.4	0.2
Non-Conforming Use	3.1	0.0
Open Space	0.6	0.0
<b>Total</b>	<b>24359.7</b>	<b>100.0</b>

**Community facilities**

Existing educational institutions include 15 primary schools, 3 secondary schools and 2 madrasas. To facilitate the community, establishment of more 2 primary schools and 2 secondary schools are proposed. There is no provision of college level studies in the DPZ-08; about 3.5 acres are preserved for a college.

At present 2 banks, 2 post offices and an auditorium is found in the DPZ-08 under the category of social service facilities. Establishment of an additional bank is necessary with the existing figures. Absence of graveyard directs to propose 2 new graveyards. For performing community's social and cultural activities in a sound environment, 2 community centers are proposed in the area. The community services like bank, community centre clinic and local government office may be in same compound and in same building. For such type of development, horizontal expansion is discouraging and encourages vertical expansion.

**Environmental Protection and Enhancement** (*Implementing Agency: Forest Department/ Private sector/NGOs*)

**En 08-01:** On both side of the Sitalakkhya riverbank, a narrow 100 m wide belt has to be identified as Special Ecological one. No development activities, particularly physical change of shoreline would be allowed and must strictly control. All existing activities, particularly brickfields and sand mining activities, which are harmful to be stopped and removed.

**En-08-02:** To reduce the current trend of water pollution by industrial, industrial waste treatment plant must be installed immediately. No industry would be allowed to discharge their effluences without treatment.

**Table-3.37: Existing and Proposed Community Facilities of the DPZ - 08**

Type	Existing		Proposed		Total	
	Unit/No	Land (Acre)	Unit/No	Land (Acre)	Unit/No	Land (Acre)
Primary School	15	3.6	2	1.2	17	4.9
Secondary School	3	2.7	2	3.6	5	6.2
College	0	0	1	3.5	1	3.5
Hospital	3	0.6	0	0.0	3	0.6
Post office	2	0	1	0.1	3	0.1
Auditorium	1	0.2	0	0	1	0.2
Community Centre	0	0	2	1.166	2	1
Graveyard	0	0	2	7.7	2	7.7
<b>Total</b>	<b>24</b>	<b>7.1</b>	<b>10</b>	<b>17.266</b>	<b>34</b>	<b>24.2</b>

**En-08-03:** This planning zone is rich in ponds and *dighis*. The community is using water of many of these ponds. Such ponds, under any form of ownership, should not be allowed to be filled up.

**Road Network Proposals**

To promote development in a planned manner, a network of Primary and Secondary roads have been proposed. These roads can be seen in the detailed map.

**T-08-01 Newly Proposed Road:** One new road has been proposed (130 ft) in east-west direction in this DPZ.

**T-08-02 Road Widening:** Tongi Kaligonj Road has been suggested to be 130 feet wide and Dhaka by-pass Road to be 170 feet wide. Another road along the Sitalakhya River has been recommended as 130 feet wide.