

## **D. RURAL INFRASTRUCTURE**

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### **D-1 MASTER PLAN STUDY**

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## 1. PRESENT CONDITION OF RURAL INFRASTRUCTURE

### 1.1 Rural Communication

Topographical and natural conditions of Char and Haor area have restricted the development of infrastructure in many ways. The roads are limited or in bad conditions, the water transport system also overcome many problems due to the absence of modern/mechanized boats and/or shallow depth of the rivers/canals especially in the dry season. The tele-communication system is also very primitive or never developed in some areas. In order to grasp the exact picture of the existing conditions of the various infrastructure, therefore, extensive field visits and surveys were conducted. The results of the analyses on the existing conditions of the infrastructure are presented in the following paragraphs.

#### (1) Status of Rural Road

##### (a) Categorization of Road

There are two main agencies in the country who are responsible for planning, implementation and O&M of the roads. One is Roads and Highways Department (RHD) which is responsible for the National/Regional highways and Feeder road Type-A (FRA), while LGED the another agency, is responsible for rural communication roads such as Feeder Road Type-B (FRB), Rural Roads (R1, R2 and R3). Various Categories with definition of communication roads are presented in the Table 1.1.

**Table 1.1 Categorization of Communication Roads**

Categories	Jurisdiction	Definition
1. National Highway (NH)	RHD	Highways connecting national capital with divisional headquarters, major regional centers, big cities, sea ports and international highways
2. Regional Highway	RHD	Highways connecting different regions of the country and district headquarters, which are not connected by the national highways
3. Feeder Road Type-A (FRA)	RHD	Roads connecting Upazila parishads with existing RHD road network
4. Feeder Road Type-B (FRB)	LGED	<ul style="list-style-type: none"> <li>• Road connecting Growth centers with the Upazila parishads</li> <li>• Road connecting Growth center with RHD road network</li> <li>• Roads connecting one Upazila with other Upazilas</li> </ul>
5. Rural Road Class (R1)	LGED	Road connecting Union parishad/ Hat bazaars with the Upazila parishads or road system
6. Rural Road Class (R2)	LGED	Roads connecting villages and farm to hat bazaars /Union parishads
7. Rural Road Class (R3)	LGED	Roads within villages
8. Urban Local Road	Municipality	Road within Municipality (Pourashava)

Source: LGED Training Unit

However, at present, jurisdiction of Feeder roads falls under two agencies resulting overlapping and duplication of work in many cases. It was stated that the responsibility of FRBs is going to be taken by LGED in near future with a view to maximize the utilization of limited resources.

##### (b) Road Length

An inventory of road consisting of length of each category in the whole country and eight(8) study

related districts is presented in Table 1.2. From the inventory, it can be understood that the percentages of length of various categories of roads in Char area are almost same as in the whole country, on the other hand, percentages of R3 category in Haor area, are remarkably higher in comparison with the whole country. The table also shows that the important communication road categorized as FRB, R1 and R2 are not developed in the Haor area.

**Table 1.2 Summary of Road Length in Country wise and Study Area**

	Length of Roads (km)							
	NH	RH	FRA	FRB	R1	R2	R3	Total
<b>Bangladesh</b>	<b>2,540</b>	<b>2,670</b>	<b>10,010</b>	<b>14,400</b> (11%)	<b>37,850</b> (29%)	<b>49,540</b> (38%)	<b>29,450</b> (22%)	<b>146,460</b> (100%)
<b>Districts related to Char</b>								
Gaibandha	n.a	n.a	n.a	373 (13%)	996 (35%)	829 (29%)	679 (24%)	2,877 (100%)
Jamalpur	n.a	n.a	n.a	407 (12%)	1,366 (40%)	627 (18%)	1,016 (30%)	3,416 (100%)
Kurigram	n.a	n.a	n.a	308 (11%)	1,223 (42%)	655 (23%)	693 (24%)	2,879 (100%)
Sirajganj	n.a	n.a	n.a	366 (10%)	1,454 (40%)	778 (21%)	1,081 (29%)	3,679 (100%)
<b>sub-total</b>				<b>1,454</b> (11%)	<b>5,039</b> (39%)	<b>2,889</b> (22%)	<b>3,469</b> (27%)	<b>12,851</b> (100%)
<b>Districts related to Haor Area</b>								
Habiganj	n.a	n.a	n.a	252 (9%)	863 (31%)	644 (23%)	1,051 (37%)	2,810 (100%)
Kishoreganj	n.a	n.a	n.a	407 (8%)	1,268 (26%)	963 (20%)	2,160 (45%)	4,798 (100%)
Netrokona	n.a	n.a	n.a	502 (14%)	1,285 (36%)	849 (24%)	906 (26%)	3,542 (100%)
Sunamganj	n.a	n.a	n.a	457 (16%)	844 (29%)	654 (22%)	964 (33%)	2,919 (100%)
<b>sub-total</b>				<b>1,618</b> (12%)	<b>4,260</b> (30%)	<b>3,110</b> (22%)	<b>5,081</b> (36%)	<b>14,069</b> (100%)

Source: RHD and LGED in 1993-95 for Bangladesh; LGED road inventory in 2000 for the Districts

### (c) Road Density

From the collected information/data an analysis has been performed in order to know the road density in the study area. Table 1.3 shows the comparison of road density between Study related districts and only Char and Haor both areas. Indicators of road density were calculated by per capita(population) and per area(km<sup>2</sup>) road length(m). From the table it is clear that the densities of various roads in the Char and Haor areas much lower than that of the study related districts. The analysis also suggests that in general, road communication network in the Study area is under developed.

**Table 1.3 Density of Rural Road in Char and Haor**

	Whole district					Within Char/Haor Area				
	FRB (km)	R1, R2, R3 total (km)	Total (km)	Road Density		FRB (km)	R1, R2, R3 total (km)	Total (km)	Road Density	
				(m/capita)	(m/km <sup>2</sup> )				(m/capita)	(m/km <sup>2</sup> )
<b>Char Area</b>										
Gaibandha	373	2,504	2,877	1.19	1,320	0	106	106	0.53	210
Jalpur	407	3,008	3,415	1.50	1,681	184	250	434	1.15	823
Kurigram	308	2,572	2,880	1.46	1,254	72	325	397	1.18	464
Sirajganj	366	3,312	3,678	1.34	1,472	0	86	86	0.18	110
<b>Total</b>	<b>1,454</b>	<b>11,396</b>	<b>12,850</b>	<b>1.36</b>	<b>1,427</b>	<b>256</b>	<b>767</b>	<b>1,023</b>	<b>0.73</b>	<b>384</b>
<b>Haor Area</b>										
Habiganj	252	2,558	2,809	1.54	1,089	111	170	281	0.38	202
Kishoreganj	407	4,391	4,798	1.72	1,784	206	1,054	1320	1.05	779
Netrokona	502	3,040	3,542	1.68	1,267	44	264	308	1.13	439
Sunamganj	457	2,462	2,919	1.45	795	280	412	692	0.58	255
<b>Total</b>	<b>1,617</b>	<b>12,451</b>	<b>14,067</b>	<b>1.61</b>	<b>1,199</b>	<b>701</b>	<b>1,900</b>	<b>2,601</b>	<b>0.75</b>	<b>400</b>

Source: Road Inventory, LGED and JICA Study Team based on the Rural Infrastructure Survey, 2001

#### (d) Existing flood control embankment

Furthermore, existing Flood Control (FC) embankment constructed and maintained by BWDB plays an important part in the transportation in both Char and Haor areas. A number of Upazila parishads are located along the existing FC embankments, and some Upazilas link to other Upazilas and/or Union parishads through the embankment, and also many launch ghats attached with Growth center or Hat bazaars are existed along FC embankments. Some sections, however, are having breaches or not accessible due to bad condition of embankment crest. Accordingly, improvement of pavement on embankment is likely to bring good results for communication, transportation as well as marketing distribution among Upazilas and Union parishads.

#### (2) Water Transport System in Char and Haor Areas

Water transport is an essential communication means in Bangladesh, and so is in Char and Haor. It is the sole means for Char people to communicate with mainland. In the Haor area, also, communication means is restricted only to water transport in the wet season. In some area in Haor, water transport is more convenient than other communication means even during the dry season. Table 1.4 as presented below shows the number of Launch ghats and Launch routes exist in Char and Haor areas. With higher number of Launch ghats and routes, the district of Kurigram in Char, and Kishoreganj and Sunamganj in Haor depend more on water transport system.

**Table 1.4 Water Transport in Char and Haor**

Within Char Area			Within Haor Area		
District	Nos. of Launch Ghat (nos.)	Launch Route Length (km)	District	Nos. of Launch Ghat (nos.)	Launch Route Length (km)
Gaibandha	7	n.a.	Habiganj	7	11
Jamalpur	4	n.a.	Kishoreganj	56	237
Kurigram	33	n.a.	Netrokona	12	18
Sirajganj	2	n.a.	Sunamganj	52	233
<b>Total</b>	<b>46</b>	<b>n.a.</b>	<b>Total</b>	<b>127</b>	<b>499</b>

Note: n.a.: data not available

Source: JICA Study Team based on the Upazila Base Maps and Rural Infrastructure Survey, 2001

### (3) Tele-communication

Presently, in the study area, only among the Upazila parishads tele-communication network is connected. As for the union level, however, most of Union parishads located in island Chars and Haor area have not been brought under any tele-communication system yet. Offices of those Union parishads communicate with their Upazila headquarters by utilising radio-communication.

## 1.2 Marketing Facilities

### (1) Growth Center/ Hat Bazaar

LGED has been promoting to establish Growth centers since the last decade. A number of Growth centers have been established as the up-graded versions of previous Hat bazaars, aiming to activate marketing and distribution system as well as to promote participation of women in economic activities in the rural areas. A typical Growth center consists of separate sheds according to the marketing goods such as vegetable, fish, meat, etc., and a women's corner where women can sell and buy products without hesitation. Paved roads with side drains and sanitary latrines are provided inside the Growth center. Table 1.5 shows the inventory of the Marketing facilities collected from Upazila LGED offices.



**Table 1.5 Growth Center and Hat Bazaar of Char and Haor**

District	Marketing facilities						Bazaar Area Total (m <sup>2</sup> )	Bazar Density	
	Growth center		Hat bazar		Total			km <sup>2</sup> /bazar	m <sup>2</sup> /capita
	Nos.	share	Nos.	share	Nos.	share			
<b>Char</b>									
Gaibandha	0	0%	12	13%	12	13%	23,252	42.0	0.12
Jamalpur	3	3%	30	33%	33	36%	500,000	16.0	1.33
Kurigram	3	3%	21	23%	24	26%	117,323	35.6	0.35
Sirajganj	0	0%	23	25%	23	25%	29,500	33.9	0.06
<b>Char Total</b>	<b>6</b>	<b>7%</b>	<b>86</b>	<b>93%</b>	<b>92</b>	<b>100%</b>	<b>670,075</b>	<b>29.0</b>	<b>0.48</b>
<b>4 Districts Total</b>	<b>73</b>	<b>20%</b>	<b>290</b>	<b>80%</b>	<b>363</b>	<b>100%</b>	<b>2,151,007</b>	<b>24.8</b>	<b>0.23</b>
<b>Haor</b>									
Habiganj	11	5%	22	10%	33	15%	39,062	40.0	0.05
Kishoreganj	10	5%	45	20%	55	25%	223,172	30.8	0.18
Netrokona	8	4%	21	9%	29	13%	109,435	24.2	0.40
Sunamganj	22	10%	83	37%	105	47%	323,620	25.5	0.27
<b>Haor Total</b>	<b>51</b>	<b>23%</b>	<b>171</b>	<b>77%</b>	<b>222</b>	<b>100%</b>	<b>695,289</b>	<b>28.8</b>	<b>0.20</b>
<b>4 Districts Total</b>	<b>128</b>	<b>23%</b>	<b>420</b>	<b>77%</b>	<b>548</b>	<b>100%</b>	<b>1,707,684</b>	<b>21.4</b>	<b>0.20</b>

Source: JICA Study Team based on the information from LGED Upazila offices

Marketing facilities, both Growth centers and Hat Bazaars, are poorly established in Char area. Merely 7% of the total market facilities are Growth centers in Char area, while 20% in total of four Char districts. Marketing facilities are available one per 29 km<sup>2</sup> on average in Char, which shows a little less density than the relevant Districts as a whole. However, considering the less developed village to market road, it is thought that people in Char find difficulty in accessing the market facility, although the market itself provide wider space per capita.

In Haor area, on the other hand, Growth centers have been established comparable to the Haor Districts as a whole. The number of Growth center accounts for 23% of the total marketing facilities in Haor. As in Char, however, density of marketing facilities is less with one per 28.8 km<sup>2</sup> than the Districts total with 21.4 km<sup>2</sup>, which makes Haor people feel difficult in accessing to markets.

## (2) Growth Center Connecting Road

LGED has also been implementing Rural Development Project (RDP) in various parts of the country. In general, a package of RDP consists of improving of rural roads, but in some cases the package includes Growth Center Connecting Road (GCCR) aiming at developing marketing facilities. Table 1.6 shows the GCCR provided under various completed and on-going RDP projects undertaken by LGED.

**Table 1.6 LGED Project related to GCCR**

Name of Project	Start Year	Char Area				Haor Area			
		Gaib	Jamal	Kuri	Siraj	Habi	Kishr	Netro	Suna
RDP-3	1990								
RDP-17	1989								
RIDP (1st, 2nd, 3rd)	1993								
RDP-11	1996								
RDP-21 including	1995								
RDP WFP	1997								
Union Parishad Complex	1998								
Other projects									

Source: LGED

### 1.3 Rural Water Supply by Hand Tubewell

Hand tubewells play the major role in the rural water supply. Therefore, existing number of the tubewells in the study area was known through a survey. According to the analysis tubewell densities as described by users per tubewell and area per tubewell are much better in Char area in comparison with Haor area.

The government policy mentioned in NWMP states that the number users of per tubewell will be reduced from 105 (average at the present) to 50 in the near future. And the policy of DPHE (Dept. of Public Health Engineering) states the number of users per tubewell be reduced to 105 persons per tubewell as a tubewell density at the end of the fifth five-year plan (1997 July to 2002 June) by calculating with only numbers of tubewell installed by DPHE. The result after DPHE implemented rural water supply program, have already achieved to reduce to 101 persons/tubewell in year 2000. On the other, the private sector also promoted the organizers to implement various hand tubewell projects in rural areas, therefore, the actual coverage is at present assumed by DPHE, 75 persons per tubewell including numbers of private sector's in the country.

**Table 1.7 Numbers of Hand Tubewell in Char and Haor**

District	Nos. of Hand Tubewell (nos.)	Tubewell Density	
		Users /Tubewell (User/tubewell)	Area /Tubewell (ha/nos.)
<b>Within Char Area</b>			
Gaibandha	9,300	22	5.4
Jamalpur	18,300	21	2.9
Kurigram	17,200	20	5.0
Sirajganj	29,900	16	2.6
<b>Total</b>	<b>74,700</b>	<b>19</b>	<b>3.6</b>
<b>Within Haor Area</b>			
Habiganj	13,100	57	17.0
Kishoreganj	16,900	74	10.0
Netrokona	2800	96	25.0
Sunamganj	11,700	103	23.0
<b>Total</b>	<b>44,500</b>	<b>78</b>	<b>14.6</b>

Source: JICA Study Team based on Agricultural Water Use Survey by ACCESS, 2001

According to the above Table 1.7, density of tubewells in Char area has been already achieved the target of the above government policy stated both NWMP and DPHE. It is reported, however, that many tubewell existed at Char area is being inundated during flood, which should be considered for planning.

On the other hand, the number of hand tubewells in Haor area is short from the required number. Another important issue of wide-ranging presence of arsenic in shallow well water in Haor area should also be taken into consideration.

#### 1.4 Rural Electrification

At present, electricity line is connected only in Upazila parishads in the Study area. Most Union parishads located in island char and haor areas are very isolated and electrification has not been implemented yet. Table 1.8 shows rural electrification coverage rate of each district. Rate of coverage within Char area and Haor area are 8% and 11% respectively, compared to 31% and 37% in the respective Districts. In Char, electrification has not been put in place except Jamalpur.

**Table 1.8 Electrification Coverage in Char and Haor**

Char Area			Haor Area		
District	Average in the District (%)	Within Char Area (%)	District	Average in the District (%)	Within Haor Area (%)
Gaibandha	12%	1%	Habiganj	46%	13%
Jamalpur	53%	29%	Kishoreganj	42%	12%
Kurigram	23%	0%	Netrokona	12%	10%
Sirajganj	37%	1%	Sunamganj	34%	8%
<b>Total</b>	<b>31%</b>	<b>8%</b>	<b>Total</b>	<b>37%</b>	<b>11%</b>

Source: JICA Study Team based on the Rural Infrastructure Survey, 2001

#### 1.5 Agricultural Infrastructure

Agricultural infrastructure such as drying yard, rice milling and store house are found very few within Chars and Haors in comparison with figures of District in total, as shown in Table 1.9. There is no drying yard in Char, and in Haor area, average area per yard is smaller with 250 m<sup>2</sup> as compared to the district average with 550m<sup>2</sup>. Those facilities belong to private ownership.

There is no storage facility in the Study area other than some food godowns located in the Upazila parishads, which are used as stockyard for government's food programs. People in the Area have to stock their products in bamboo baskets at home, which is vulnerable to inundation in wet season.

**Table 1.9 Drying Yard/ Milling Facilities in Char and Haor**

District	District in Total		Within Char/ Haor	
	Nos. of Drying Yard (nos.)	Total Area of Drying Yard (m <sup>2</sup> )	Nos. of Drying Yard (nos.)	Total Area of Drying Yard (m <sup>2</sup> )
<b>Char Area</b>				
Gaibandha	71	41,560	0	0
Jamalpur	43	240,250	0	0
Kurigram	140	95,030	0	0
Sirajganj	35	29,700	0	0
<b>Total</b>	<b>289</b>	<b>406,540</b>	<b>0</b>	<b>0</b>
<b>Haor Area</b>				
Habiganj	47	34,780	2	1,500
Kishoreganj	218	68,720	24	1,920
Netrokona	21	48,900	5	330
Sunamganj	26	19,230	14	7,500
<b>Total</b>	<b>312</b>	<b>171,630</b>	<b>45</b>	<b>11,250</b>
<b>(Average yard)</b>		<b>(550 m<sup>2</sup>/no.)</b>		<b>(250 m<sup>2</sup>/no.)</b>

Source: JICA Study Team based on the Rural Infrastructure Survey, 2001

## 1.6 School Facilities

Although there are some districts who have quite a good number of educational institutions, however, some Char and Haor areas lacking behind educational institutions. Shortage of teachers and difficulty in communication have been mentioned as the major problems in the educational sector. In order to the existing number of educational facilities, a survey has been conducted and outcome of the survey is presented in the Table 1.10 below.

**Table 1.10 Schools /Madrasha in Char and Haor**

District	College/ High School		Primary School/ Madrasha		
	Number (nos.)	Capacity (student)	Number of Primary (nos.)	Number of Madrasha (nos.)	Capacity (student)
<b>Within Char area</b>					
Gaibandha	9	3,100	158	14	45,191
Jamalpur	68	28,050	280	37	57,500
Kurigram	19	4,500	224	24	53,310
Sirajganj	29	8,900	223	17	48,240
<b>Total</b>	<b>125</b>	<b>44,550</b>	<b>885</b>	<b>92</b>	<b>204,241</b>
<b>Within Haor Area</b>					
Habiganj	14	7,600	271	12	60,650
Kishoreganj	42	12,850	340	74	79,850
Netrokona	25	9,070	113	17	25,420
Sunamganj	96	36,750	912	40	171,900
<b>Total</b>	<b>177</b>	<b>66,270</b>	<b>1,636</b>	<b>143</b>	<b>337,820</b>

Source: JICA Study Team based on the Rural Infrastructure Survey, 2001

## 2. DEVELOPMENT MASTER PLAN OF RURAL INFRASTRUCTURE

### 2.1 Development Classification on Communication Infrastructure

It is very important that different living environment and life style, which are caused by various natural and topographical conditions are taken into consideration during the selection of development approach for communication infrastructure. It was known that even within the areas of Char and Haor, there are different ways of communication due to topographic conditions. Upazilas within Study area, therefore, have been categorized into two types of development classification. The categories are Type-A and Type-B, and for each category different development approach has been proposed. Details of these categories are described below.

#### (1) Char Area

The Char area may be classified as 1) Island chars, 2) Attached chars, 3) Setback Char is part of the mainland outside a river embankment, and 4) Unprotected main land. Viewed from the accessibility and communication infrastructure of the Chars crossing the Brahmaputra river, the above 2), 3) and 4) are categorized into one type, i.e. during the dry season people in the area can move to and inside the embankment by land. And other type is 1) Island Chars, i.e. people in the area need to rely on water transport throughout a year. On the basis of this categorization, Upazilas in the Study area, furthermore, are brought into various types as described below;

- Type-A: Area of Upazila which is occupied by Island Chars less than 30% of area
- Type-B: Area of Upazila which is occupied by Island chars more than 70% of area
- Type-A+B: Area of Upazila which is intermingled with both types

Development classification of Upazilas in Char area is presented in Table 2.1 and Figure 2.1.

#### (2) Haor Area

In the case of Haor area, water transport is one of the important criteria for categorization of Upazilas in terms of communication infrastructure development. Even during the dry season, villagers in the Haor area are dominant to water transport due to poor road net works. Given the present situation for communication, priority of development measure is to provide improved facilities related to water transportation. Therefore, Upazilas in Haor area have been categorized into the following types for communication infrastructure development.

- Type-A: Upazila of which people is dominant road communication during dry season
- Type-B: Upazila of which people is dominant water transport during dry season
- Type-A+B: Upazila which is intermingled with both types

Development classification of Upazilas in Haor area is presented in Table 2.1 and Figure 2.2.

Table 2.1 Upazila Development Classification on Communication Infrastructure

Char Area (19 Upazilas)			Haor Area (29 Upazilas)		
District	Upazila	Development Classification	District	Upazila	Development Classification
<b>Gaibandha</b> (4 Upazilas)	Fulchhari	B	<b>Habiganj</b> (7 Upazilas)	Ajmiriganj	A
	Gaibandha Sadar	A+B		Bahubal	A
	Saghatta	A+B		Baniachang	A
	Sundarganj	A+B		Habiganj Sadar	A
<b>Jamalpur</b> (4 Upazilas)	Dewanganj	A		Lakhai	A
	Islampur	A+B		Madhabpur	A
	Madarganj	A		Nabiganj	A
	Sarishabari	A	<b>Kishoreganj</b> (8 Upazilas)	Austagram	B
<b>Kurigram</b> (6 Upazilas)	Char Rajibpur	A		Bajitpur	A+B
	Chilmari	B		Itna	B
	Kurigram Sadar	A+B		Karimganj	A
	Nageshwari	A		Kishoreganj Sadar	A
	Raumari	A		Mithamain	B
Ulipur	A+B	Nikli		A+B	
<b>Sirajganj</b> (5 Upazilas)	Belkuchi	A+B		Tarail	A
	Chauhali	A+B	<b>Netrokona</b> (4 Upazilas)	Khaliajuri	B
	Kazipur	B		Kalmakanda	A
	Shahjadpur	A		Madan	A
Sirajganj Sadar	A+B	Mohanganj		A	
			<b>Sunamganj</b> (10 Upazilas)	Bishwambarpur	A
				Chhatak	A
				Derai	B
				Dharampasha	A+B
				Dowarabazar	A
				Jagannathpur	A
				Jamalganj	A+B
				Sulla	B
				Sunamganj Sadar	A
				Tahirpur	A

Figure 2.1 Development Classification on Communication Infrastructure in Char Area

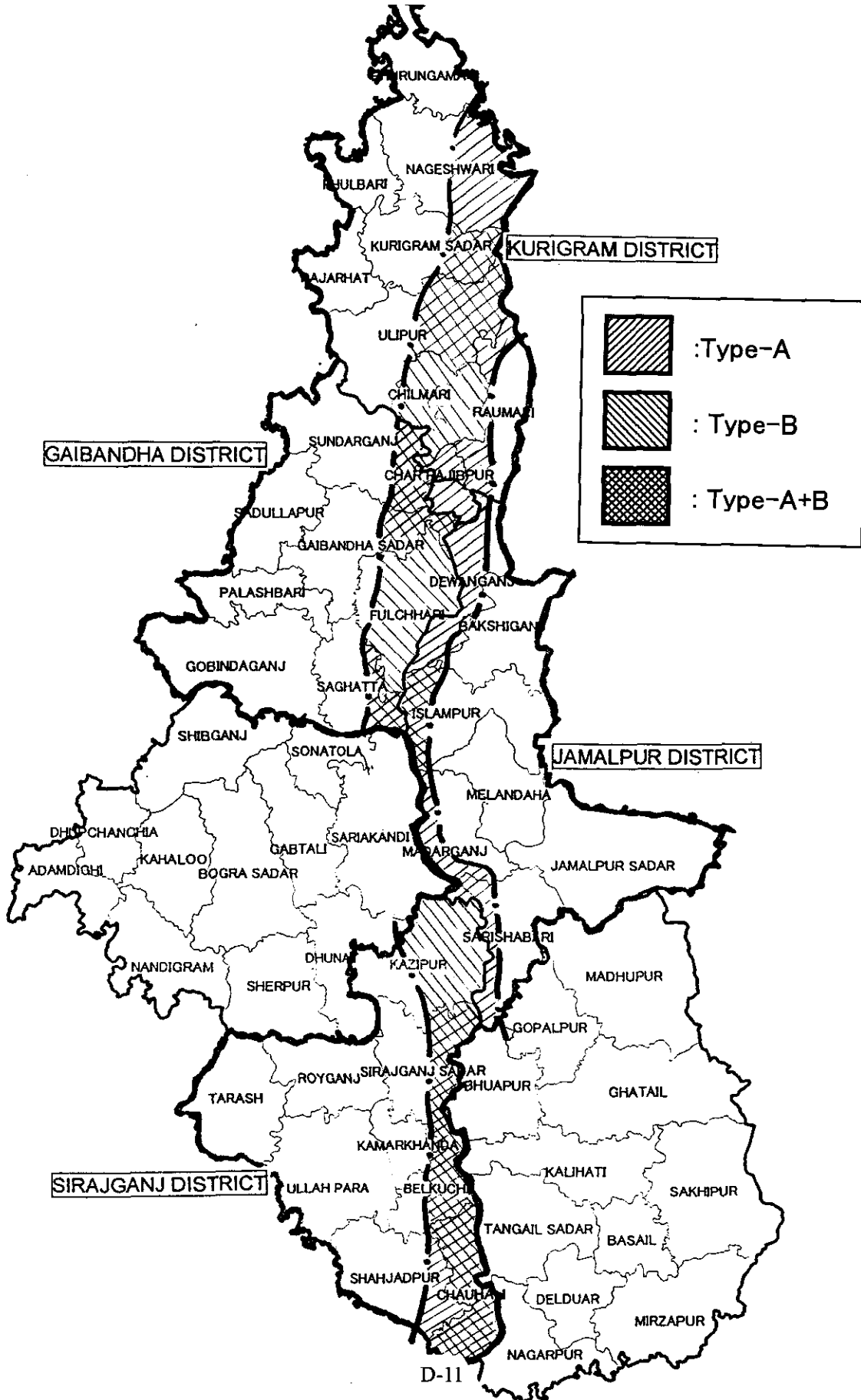
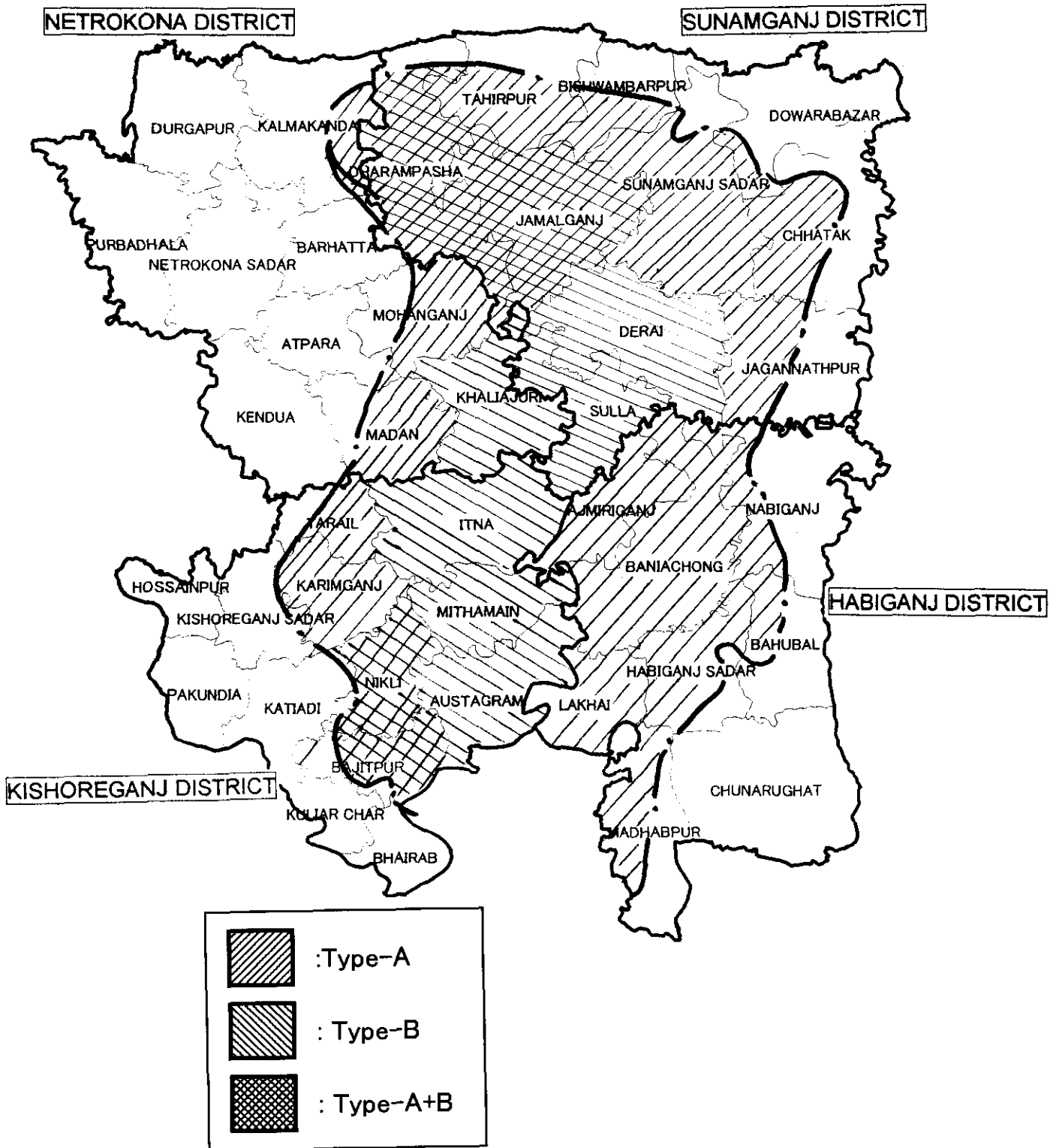


Figure 2.2 Development Classification on Communication Infrastructure in Haor Area





## 2.2 Development Master Plan

### (1) Requirement of Rural Road Length in Char Area

For the development of Char area, provision of proper road communication is a pre-requisite. Table 2.2 shows requirement of rural road length for this M/P. The length has been calculated to achieve an average road density level of 1.36 m/capita in all four Study related districts. The implementation of these required roads is given priority according to the following considerations:

- Taking into account the importance of communication between Upazila parishad and Union parishads, which are generally located along the FC embankments, RCC pavement on the existing FC embankments is suggested as earlier stage.
- Trunk road connecting Union parishads in attached Chars and Set back main land of Type –A category has also been given priority and suggested to implement earlier stage.
- And for Upazilas categorized as Type-B, are given priority for launch ghat improvement, and construction of submersible road is suggested in following stage.

**Table 2.2 Requirement of Rural Road Length in Char**

District	Present Road Density (m/Capita)	Requirement of Length (km)
Gaibandha	1.19	168
Jamalpur	1.50	252
Kurigram	1.46	221
Sirajganj	1.34	557
<b>Total</b>	<b>(Ave.)1.36</b>	<b>1,218</b>

### (2) Requirement of Rural Road Length in Haor Area

Considering the importance of road communication system during the dry season in Haor area, an improved road communication system has been required. Table 2.3 shows the required length in the four districts within the Haor area. The requirement of length has been calculated to achieve the present road density to an average level of 1.61 m/capita. The requirement of required roads is given priority according to the following considerations.

- Taking into account the importance of communication between Upazila and Union parishads, which are generally located along the polder embankments, provision of RCC pavement on the existing embankment is suggested in earlier stage.
- Construction of submersible road, connecting Union parishads in Upazilas under Type-A have been given priority and also suggested to implement in earlier stage.
- As Upazilas categorized as Type-B are given priority for launch ghat improvement, construction of submersible road is suggested the following stage.

**Table 2.3 Requirement of Rural Road Length in Haor**

District	Present Road Density (m/Capita)	Requirement of Length (km)
Habiganj	1.54	987
Kishoreganj	1.72	867
Netrokona	1.68	181
Sunamganj	1.45	725
<b>Total</b>	<b>(Ave.)1.61</b>	<b>2,760</b>

**(3) Requirement of Pontoon Transportation in Haor Area**

In relation to the construction of submersible roads in Haor area, pontoon is required in order to connect the proposed submersible road network. This facility will be installed in the crossings of the canals, streams, small rivers etc. without any disturbance to the traditional water transportation systems. Required number of pontoon transportation proposed in this M/P are figured out from the Upazila base maps. The numbers are shown in Table 2.4. These requirements is given priority according to the following considerations:

- As in the case of submersible road, provision of pontoon transportation should be given priority for the Upazilas under category of Type-A and should be taken up in earlier stage.
- For Upazilas categorized as Type-B and all required numbers of pontoon transportation facilities are suggested to implement in following stage.

In addition, instead of Pontoon installation, Submersible bridges are also required for the small canal/ Khals where people face difficulty to cross due to the severe muddy condition. Installation of the required submersible bridges is also shown in Table 2.4.

**Table 2.4 Requirement of Pontoon and Submersible Bridge in Haor**

District	Required number of pontoon (nos)	Required number of submersible bridge (nos)
Habiganj	8	139
Kishoreganj	14	169
Netrokona	7	70
Sunamganj	23	271
<b>Total</b>	<b>52</b>	<b>650</b>

**(4) Requirement of Launch Ghat in Char and Haor Area**

Improvement and/or construction of Launch ghats has been required for supporting traditional water transport system which ultimately will ease the loading and unloading of commodities/people in both Char and Haor areas. The required numbers of Launch ghats are determined using Upazila base maps. The numbers are shown in following Table 2.5 for Char and Haor areas. These required Launch ghats is given priority according to the following considerations;

- Upazilas categorized as Type-B should be given priority and taken up earlier stage.
- Remaining numbers should be suggested to implement in the following stage.

**Table 2.5 Requirement of Launch Ghat in Char and Haor**

CHAR AREA			HAOR AREA		
District	Present nos. of Launch Ghat (nos.)	Required Launch Ghat (nos)	District	Present nos. of Launch Ghat (nos.)	Required Launch Ghat (nos)
Gaibandha	7	12	Habiganj	7	9
Jalalpur	4	2	Kishoreganj	56	20
Kurigram	33	10	Netrokona	12	3
Sirajganj	2	14	Sunamganj	52	28
<b>Total</b>	<b>46</b>	<b>38</b>	<b>Total</b>	<b>127</b>	<b>60</b>

### (5) Requirement of Tele-communication and/or Radio-communication

Based on the development strategy for strengthening the local government, it is essential to expand tele-and/or radio-communication systems in the Study area. Telephone lines, which already exist in the Upazila Parishads, are proposed to expand for connecting Union Parishads. The line, however, can not be extended to the Island chars due to their isolated locations, so that radio system is proposed for Island chars. It should be noted that the tele-communication is a very important means for the establishment of an effective flood forecasting and warning system and proposed in the measures for flood proofing. Required length of telephone line and numbers of radio-communication are presented in Table 2.6 for Char and Haor areas.

**Table 2.6 Requirement of Tele and Radio-communication in Char and Haor**

CHAR AREA			HAOR AREA	
District	Required Telephone Line (km)	Required Radio-communication (nos.)	District	Required Telephone Line (km)
Gaibandha	75	5	Habiganj	171
Jalalpur	51	3	Kishoreganj	148
Kurigram	69	12	Netrokona	100
Sirajganj	46	9	Sunamganj	225
<b>Total</b>	<b>241</b>	<b>29</b>	<b>Total</b>	<b>644</b>

### (6) Improvement of Marketing System

It is important that appropriate facilities for proper marketing system is established in each important place of the Study area. Taking the existing conditions of the marketing facilities into consideration, required number of Growth centres has been proposed in all districts of the Study area. It is assumed that each union will have a growth center as a part of upgrading the existing Hat -Bazars. Each center will require 6,000m<sup>2</sup> of space involving at least shopping sheds (meat, fish, vegetable), women's corner, multi-purpose shed, sanitary latrine, hand tubewell, etc. Table 2.7 shows the required number of Growth centres proposed in the M/P for Char and Haor areas.

**Table 2.7 Requirement of Growth Center in Char and Haor**

CHAR AREA				HAOR AREA			
District	Present Growth Center (nos.)	Present Hat Bazaar (nos.)	Required Growth Center (nos.)	District	Present growth center (nos.)	Present Hat Bazaar (nos.)	Required Growth Center (nos.)
Gaibandha	0	12	19	Habiganj	11	22	39
Jamalpur	3	30	19	Kishoreganj	10	45	50
Kurigram	3	21	26	Netrokona	8	21	13
Sirajganj	0	23	28	Sunamganj	22	83	48
<b>Total</b>	<b>51</b>	<b>171</b>	<b>92</b>	<b>Total</b>	<b>51</b>	<b>171</b>	<b>150</b>

**(7) Provision of Hand Tubewell**

Based on sample survey on Rural Infrastructure, the number of existing tubewells is shown in the tables below. Taking these numbers into consideration and in line with the NWMP which states that coverage of rural water supply will be brought to 50 persons per tubewell by 2020, the required number of hand tubewells is presented in Table 2.8 for Char and Haor. It is recommended that the depth of each tubewell, especially in Haor area should be more than 800 ft to avoid effect of arsenic. A depth of 800 ft, however, is not the absolute depth for avoiding arsenic, it is strongly proposed that water quality should be examined during the construction of hand tubewell in order to achieve a safe depth.

**Table 2.8 Requirement of Hand Tubewell in Char and Haor**

CHAR AREA				HAOR AREA			
District	Population	Number of existing Tubewells (nos.)	Required Hand Tubewell 50 persons/ tubewell (nos.)	District	Population	Number of existing Tubewells (nos.)	Required Hand Tubewell 50persons/ tubewell (nos.)
Gaibandha	201,051	9,297	23	Habiganj	749,253	13,068	1,917
Jamalpur	377,128	13,319	0	Kishoreganj	1,254,947	16,927	12,197
Kurigram	335,291	17,165	0	Netrokona	271,563	2,841	2,590
Sirajganj	485,710	29,891	0	Sunamganj	1,201,333	11,668	12,493
<b>Total</b>	<b>1,399,180</b>	<b>74,672</b>	<b>23</b>	<b>Total</b>	<b>3,477,096</b>	<b>44,504</b>	<b>29,197</b>

**(8) Requirement of Sanitary Latrine**

According to the policy described in NWMP, one sanitary latrine should be installed in each household in the near future. Based on Rural Living Condition Survey (RLCS), number of required household has been calculated as presented in the following tables. In Char and Haor areas, however, due to limitation of residential areas, it is suggested that one latrine with sewerage system should be constructed for three households. Required number of latrine is shown in Table 2.9 for Char and Haor areas.

**Table 2.9 Requirement of Latrine in Char and Haor**

CHAR AREA				HAOR AREA			
District	H/H	Number of Required households	Required Latrine 3 HH /Latrine (nos.)	District	H/H	Number of Required HH	Required Latrine 3 HH /Latrine (nos.)
Gaibandha	30,931	27,838	9,279	Habiganj	115,270	79,536	26,512
Jamalpur	58,020	50,477	16,826	Kishoreganj	193,069	177,623	59,208
Kurigram	51,583	50,036	16,679	Netrokona	41,779	39,690	13,230
Sirajganj	74,725	65,010	21,670	Sunamganj	184,820	157,097	52,366
<b>Total</b>	<b>215,258</b>	<b>193,361</b>	<b>64,454</b>	<b>Total</b>	<b>534,938</b>	<b>453,947</b>	<b>151,316</b>

**(9) Expanding of Rural Electrification**

Based on the sample survey, present coverage of electricity in both Char and Haor areas is shown in the tables below. According to the REB policy, 100% of the households in Bangladesh will be brought under electrification by the year 2020. For rural electrification, construction of transmission network with 11KV line has been proposed. Due to topo-graphical difficulty in some areas, it is proposed that transmission lines, already exist in the Upazila parishads, will be extended for connecting Union parishads. The required length of transmission line and their phase-wise implementation plan are shown in following Table 2.10 for Char area Haor areas.

**Table 2.10 Requirement of Electricity Line in Char and Haor**

CHAR AREA				HAOR AREA			
District	Char Area Electricity Coverage Rate (%)	District Electricity Coverage Rate (%)	Required Electricity Line (km)	District	Electricity Coverage Rate (%)	District Electricity Coverage Rate (%)	Required Electricity Line (km)
Gaibandha	1 %	12 %	43	Habiganj	13 %	46 %	171
Jamalpur	29 %	53 %	51	Kishoreganj	12 %	42 %	148
Kurigram	0 %	23 %	69	Netrokona	10 %	12 %	100
Sirajganj	1 %	37 %	46	Sunamganj	8 %	34 %	225
<b>Total</b>	<b>8 %</b>	<b>31 %</b>	<b>209</b>	<b>Total</b>	<b>11 %</b>	<b>37 %</b>	<b>644</b>

Table D.1 LGED Completed Projects: Year 1999/2000

SL. No.	No.	Name of project	Duration	Project Expenditure Million TK	AID Source	Char Area				Haor Area			
						Gaibandha	Jamalpur	Kurigram	Sirajganj	Habiganj	Kishoreganj	Netrokona	Sunamganj
1.	1.	RDP-3: Infrastructure, greater Sylhet district (2 <sup>nd</sup> phase)	1990-91 1993-94	483.0	USAID & IDB					RDP-3			RDP-3
2.	13.	RDP-17: Infrastructure and SSWRDSP Natore Rajshahi Kishoreganj Netrokona and Sunamganj district.	1989-90 1993-94	435.6	CIDA						RDP-17	RDP-17	RDP-17
3.	14.	IDA 3 <sup>rd</sup> rehabilitation project.	1989-90 1993-94	1,008.6	IDA	IDA 3rd	IDA 3rd	IDA 3rd	IDA 3rd	IDA 3rd	IDA 3rd	IDA 3rd	IDA 3rd
4.	16.	Slum Developing Project (2 <sup>nd</sup> phase)	1988-89 1994-95	242.3	UNICEF		SDP 2nd		SDP 2nd				
5.	19.	Bridge.Culvert project in financial of selling profit under PL-480, Tangail-3 project.	1993-94 1997-98	1,185.4	USAID	BCP	BCP	BCP	BCP	BCP	BCP	BCP	BCP
6.	20.	Rural Infrastructure Development Project.	1993-94 June.2000	2,159.8	GOB	RIDP	RIDP	RIDP	RIDP	RIDP	RIDP	RIDP	RIDP
7.	21.	Road. Bridge/Culvert construction/reconstruction in rural area by priority 3 <sup>rd</sup>	1993-94 June 2000	4,593.0	GOB	RBC 3rd	RBC 3rd	RBC 3rd	RBC 3rd	RBC 3rd	RBC 3rd	RBC 3rd	RBC 3rd
8.	25.	Rural Infrastructure Development Project:2 <sup>nd</sup> phase.	1994-95 2001-02	2,034.8	GOB	RIDP 2nd	RIDP 2nd	RIDP 2nd	RIDP 2nd	RIDP 2nd	RIDP 2nd	RIDP 2nd	RIDP 2nd
9.	26.	RDP-11: Infrastructure greater Rajshahi. Bogra.Pabna nd Dhaka district	1996-97 2000-01	10,283.9	IDA & SDC				RDP-11				
10.	28.	Construction of Low Cost Bridge/Culverts on Rural Roads (LCBC)	1995-96 2002-03	25,000.0	GOB	LCBC	LCBC	LCBC	LCBC	LCBC	LCBC	LCBC	LCBC
11.	29.	RIDP: Important Roads and Hat Bazar Development (3rd Phase)	1995-96 2000-01	2,592.9	GOB	RIDP 3rd	RIDP 3rd	RIDP 3rd	RIDP 3rd	RIDP 3rd	RIDP 3rd	RIDP 3rd	RIDP 3rd
12.	20.	Rural supervision programme: 3 <sup>rd</sup> phase	1995-96 1998-99	4,767.4	CIDA	RSP 3rd	RSP 3rd	RSP 3rd	RSP 3rd	RSP 3rd	RSP 3rd	RSP 3rd	RSP 3rd
13.	31.	Upazila Complex Development Project	1995-96 2000-01	296.8	GOB	UCDP	UCDP	UCDP	UCDP	UCDP	UCDP	UCDP	UCDP
14.	35.	Rural Infrastructure Development Project.	1996-97 June.2001	1,250.0	GOB	RIDP	RIDP	RIDP	RIDP	RIDP	RIDP	RIDP	RIDP
15.	42.	Steel bailey bridge construction project by the help of DFID.	1997-98 2000-01	799.9	DFID (ODA)		SBBC			SBBC			SBBC
16.	43.	RDP-21:Infrastructure. Greater Rangpur. Dinajpur. Mymensingh and Jffamalpur district	1997-98 June.2005	8,328.4	ADB SIDA IFAD JBIC	RDP-21	RDP-21	RDP-21					
17.	44.	Road Bridge Culvert in rural area by priority	1997-98 2000-01	3,629.3	GOB	RBC	RBC	RBC	RBC	RBC	RBC	RBC	RBC
18.	45.	Construction of Large Bridge/Culverts on important Feeder & Rural Roads Rural Roads (CLBC)	1997-98 2001-02	2,216.0	DRGA			IFGB	IFGB	IFGB			IFGB
19.	48.	Union parishad complex bhaban construction and related road development project.	1998-99 2000-01	500.0	GOB	UPCB	UPCB	UPCB	UPCB	UPCB	UPCB	UPCB	UPCB
20.	50.	Rural Infrastructure Development Project in Sylhet division.	1998-99 2001-02	1,900.0	IDB					RIDP S.			RIDP S.
21.	52.	Damaged rural infrastructure reconstruction in 1998 flood by the help of ADB.	1998-99 June.2001	1,231.9	ADB		DRIR						
23.	55.	Portable steel bridge construction under ORET Program by the donation of Netherlands.	1998-99 2001-02	1,872.2	Netherlands	PSBC	PSBC	PSBC	PSBC	PSBC	PSBC	PSBC	PSBC
24.	62.	Cooperation for implementing the RIDP by the help of ADB 3 <sup>rd</sup> phase.	Sep 96- April.97	21.3	ADB		CI-RIDP						
25.	63.	Workmanship cooperation for increasing the planing and implementing proficiency of Upzila infrastructure program.	1988-89 1993-94	87.0	UNDP & ILO	WCIPI	WCIPI	WCIPI	WCIPI	WCIPI	WCIPI	WCIPI	WCIPI
26.	69.	RDP. World food program expansion-10.Growth Centre related road development program.	Jan.1997 Dec.2000	1,797.3	WFP & Bilateral		RDP-WFP			RDP-WFP	RDP-WFP	RDP-WFP	RDP-WFP
27.	74.	Medium town infrastructure development project-2	Jan.1995 Sep.2001	3,640.0	ADB by wheat	MTID-2	MTID-2		MTID-2				
28.	75.	Arban basic service delivery project (Corrected)	Jan.1996 June.2001	371.7	UNICEF		ABSDP		ABSDP				
29.	79.	3 <sup>rd</sup> Nogar development project.	1998-99 2003-04	3,020.0	ADB					NDP 3rd	NDP 3rd	NDP 3rd	
30.	87.	Workmanship cooperation to implement 3 <sup>rd</sup> Nogar development project.	1997-98 1998-99	25.5	ADB					WC-NDP 3rd	WC-NDP 3rd	WC-NDP 3rd	
31.	89.	Construction of Some Important Feeder Road and Bridge(SIFRB) in Greater Sylhet District	1999-00 2003-04	2,586.1	GOB					SIFRB			SIFRB
32.	91.	Secondary Towns Infrastructure Development Project (STIDP)	May.2000 June.2000	1,335.8	ADB			STIDP		STIDP			
33.	93.	Japan Assisted Portable Steel Bridge Construction Project (JPSB)	Jan.2000 June.2000	318.5	JICA	PSB J.	PSB J.	PSB J.	PSB J.	PSB J.	PSB J.	PSB J.	PSB J.
34.	94.	North-East SSWRDSP:Greater Sylhet.Netrokona.and Kishoreganj district.	1992-93 1998-99	779.5	ADB					SSWRDSP	SSWRDSP	SSWRDSP	SSWRDSP
35.	95.	Netrokona Integrated Agriculture and Irrigation Management Project (NIAIMP)	1994-95 June.2001	211.8	IFAD & WFP							NIAIMP	
36.	99.	Use of Bio-Gas & Organic fertilizer for Environmental Balance (BGOFE)	1997-98 2000-01	57.1	GOB	BGBMP	BGBMP	BGBMP	BGBMP	BGBMP	BGBMP	BGBMP	BGBMP
37.	109.	Registered non government primary school development project.	1992-93 1994-95	4,273.7	GOB	RGPSD	RGPSD	RGPSD	RGPSD	RGPSD	RGPSD	RGPSD	RGPSD
38.	110.	Cyclone damages government primary school rehabilitation project (1 <sup>st</sup> phase)	Jan.1992 Dec.1993	469.1	ADB	CDGPSR	CDGPSR	CDGPSR	CDGPSR	CDGPSR	CDGPSR	CDGPSR	CDGPSR
40.	112.	Registered non government primary school development project (2 <sup>nd</sup> phase)	1995-96 2001-02	3,274.8	GOB	RGPSD 2nd	RGPSD 2nd	RGPSD 2nd	RGPSD 2nd	RGPSD 2nd	RGPSD 2nd	RGPSD 2nd	RGPSD 2nd
41.	113.	3 <sup>rd</sup> rehabilitation project by the help of IDA.	1990-91 1993-94	830.8	IDA	RP 3rd	RP 3rd	RP 3rd	RP 3rd	RP 3rd	RP 3rd	RP 3rd	RP 3rd
42.	116.	Government primary school cum flood shelter project by the help of IDB.	1996-97 1999-00	561.2	IDB				GPSCF	GPSCF	GPSCF	GPSCF	GPSCF
43.	118.	Primary education development project by the help of Jarman.	1995-96 Dec.2000	1,311.8	KFW	PEDP	PEDP	PEDP	PEDP	PEDP	PEDP	PEDP	PEDP
44.	121.	Government primary school in 137 educational budget under Revenue budget.	1994-95	154.3	GOB	GPS	GPS	GPS	GPS	GPS	GPS	GPS	GPS
45.	126.	Infrastructure project under lake digging program	1992-93	186.6	GOB	IPLD	IPLD	IPLD	IPLD	IPLD	IPLD	IPLD	IPLD

Table D.2 LGED On-going Projects: Year 2000/2001

No.	Sl. No.	Duration	AID Source	Related Agency	Project Cost Million TK	ADP Allocation Million TK	Char Area				Haor Area					
							Gaibandha	Jamalpur	Kurigram	Sirajganj	Habiganj	Kishorganj	Netrokona	Sunamganj		
<b>A. Sector: RD&amp; I (LGED)</b>							<b>44,488.6</b>	<b>10,775.1</b>								
<b>On-going</b>																
1.	1.	RDP-3, Infrastructure, Old Sylhet Dist. (Phase-II)	1993-94 2001-02	IDB	1,578.5	236.3					RDP-3	RDP-3				
2.	2.	Integrated Food Assisted Dev. Program (IFADEP)	July 1994 Dec.2000	EU	1,336.8	153.3	IFADEP	IFADEP			IFADEP					
3.	4.	RIDP. Important Roads and Hat Bazar Development (Part-II)	1994-95 2001-02	GOB	2,034.8	150.0	RIDP 2nd	RIDP 2nd	RIDP 2nd	RIDP 2nd	RIDP 2nd	RIDP 2nd	RIDP 2nd	RIDP 2nd		
4.	5.	RDP-11, Infrastructure, Greater Rajshahi, Bogra, Pabna & Dhaka districts	1996-97 2000-01	IDA/ SDC	10,268.6	3,426.0					RDP-11					
5.	7.	Construction of Low Cost Bridge/Culverts on Rural Roads (LCBC)	1995-96 2002-2003	GOB	2,500.0	786.0	LCBC	LCBC	LCBC	LCBC	LCBC	LCBC	LCBC	LCBC		
6.	8.	RIDP. Important Roads and Hat Bazar Development (3rd Phase)	1995-96 2000-01	GOB	2,592.9	52.5	RIDP 3rd	RIDP 3rd	RIDP 3rd	RIDP 3rd	RIDP 3rd	RIDP 3rd	RIDP 3rd	RIDP 3rd		
7.	9.	Maintenance and Extension of Thana Development Building (METB)	1995-96 2000-01	GOB	296.8	51.8	METB	METB	METB	METB	METB	METB	METB	METB		
8.	12.	RIDP (Rural Infrastructure Development Project)	1996-97 June 2001	GOB	1,370.0	320.0	RIDP	RIDP	RIDP	RIDP	RIDP	RIDP	RIDP	RIDP		
9.	15.	Rural Infrastructure & Community Development Project (RICDP)	July 1997 Aug.2001	GTZ	96.5	48.4					RICDP (Ulipur, Nageshari)					
10.	17.	Construction of Steel Baily Bridge (CSBB)under DFID (ODA) Assistance/Bridge/Culverts on Rural Roads	1997-98 2000-01	DFID (ODA)	787.9	152.5	CSBB				CSBB	CSBB				
11.	18.	RDP-21, Infrastructure, Greater Rangpur, Dinajpur, Mymensingh & Jamalpur districts	1997-98 June 2005	ADB SIDA IFAD JBIC	8,328.4	2,000.0	RDP-21	RDP-21	RDP-21							
12.	19.	Construction/Reconst.of Roads, Bridges & Culverts (CRRBC) (including flood damaged infrastructure) in Rural areas on priority basis (Part-II)	1997-98 2000-01	IDB	3,629.3	1,437.3	CRRBC	CRRBC	CRRBC	CRRBC	CRRBC	CRRBC	CRRBC	CRRBC		
13.	20.	Construction of Large Bridge/Culverts on important Feeder & Rural Roads Rural Roads (CLBC)	1997-98 2001-2002	DRGA	2,216.0	350.0	CLBC	CLBC	CLBC	CLBC	CLBC	CLBC	CLBC	CLBC		
14.	23.	Construction of Union Parishad Complex Building and Growth Centre Connecting Road Development Project	1998-99 2000-01	GOB	500.0	181.2										
15.	25.	Sylhet Div. RIDP	1998-99 2001-02	GOB	1,900.0	200.0					RIDP S.	RIDP S.				
16.	27.	ADB assisted 1998 Flood Damaged RIRP	1998-99 June 2001	ADB	1,310.4	86.0	RIRP FD.									
17.	28.	Construction of Steel Baily Bridge (CSBB)under DFID Assistance (2nd Phase) (Flood Rehabilitation)	1998-99 2001-02	DFID	869.5	150.0	CSBB 2nd				CSBB 2nd	CSBB 2nd				
18.	29.	Netherland assisted Construction of Portable Steel Bridge (N.PSB)under ORET Program	1998-99 2001-02	Netherlands	1,872.2	223.8	PSB N.	PSB N.	PSB N.	PSB N.	PSB N.	PSB N.	PSB N.	PSB N.		
19.	33.	Japan Assisted Portable Steel Bridge Construction Project (JPSB)	May 2000 June 2000	JICA	1,000.0	770.0	PSB J.	PSB J.	PSB J.	PSB J.	PSB J.	PSB J.	PSB J.	PSB J.		
<b>New Project</b>																
20.	35.	Construction of 6 nos. Upazila Parishad Complex Bhaban Project	2000-01 2002-03	GOB	244.2	30.0					Fulchhari					
<b>Technical Assistance Project</b>																
<b>On-going</b>																
<b>Food Assisted Project</b>																
21.	38.	RDP-World Food Programme, Extension-10, Growth Centre Connecting Road Development Programme	Jan.1997 Dec.200	WFP & Bilateral	by wheat	2,104.3	683.3	RDP-WFP				RDP-WFP	RDP-WFP	RDP-WFP	RDP-WFP	
22.	39.	RIDP : Earth Work Food for Work (RIDP-EWF)	1997-98 2001-02	GOB	by wheat	1,615.2	559.3	RIDP-EWF	RIDP-EWF	RIDP-EWF	RIDP-EWF	RIDP-EWF	RIDP-EWF	RIDP-EWF		
<b>B. Sector: PPWS &amp; H (LGED)</b>							<b>15,338.6</b>	<b>1,913.3</b>								
<b>On-going</b>																
23.	41.	Secondary Towns Infrastructure Development Project-2 (STIDP-2)	1995-96 Sep.2001	ADB	3,640.0	750.0	STIDP-2	STIDP-2					STIDP-2			
24.	42.	Urban Basic Service Delivery Project (UBSDP)	Jan.1996 June 2001	UNICEF	371.7	75.4	UBSDP				UBSDP					
25.	43.	Municipal Services Project (MSP)	Jan.1999 Dec.2003	IDA	6,751.8	700.0	MSP									
26.	44.	Third Rural Development Project	1998-99 2003-04	ADB	3,020.0	10.5					RDP 3rd	RDP 3rd				
27.	45.	Flood Damaged Urban Infrastructure Rehabilitation Project (FDUIR)	Oct.1998 June 2001	ADB	558.0	70.0	FDUIR	FDUIR	FDUIR	FDUIR	FDUIR	FDUIR	FDUIR	FDUIR		
28.	46.	Urban Poverty Reduction Project (UPRP) trough Local Partnership	1988-99 2002-03	UNDP	997.1	307.4	UPRP				UPRP					
<b>C. Sector: Transportation</b>							<b>2,972.8</b>	<b>25.0</b>								
<b>New Project</b>																
29.	50.	Construction of Some Important Feeder Road and Bridge(SIFRB) in Greater Sylhet District	1999-00 2003-04	GOB	2,761.0	20.0	SIFRB				SIFRB					
30.	51.	Netrokona Integrated Agriculture and Irrigation Management Project (NIAIMP)	1994-95 2000-01	IFAD/ WFP	211.8	5.0					NIAIMP					
<b>D. Sector: Agriculture</b>							<b>1,478.0</b>	<b>230.0</b>								
<b>On-going</b>																
31.	52.	Agriculture Diversification and Intensification Project (ADIP)	1997-98 2000-01	IFAD/ WFP	M. of Agriculture ???	775.3	100.0					ADIP				
32.	53.	Mymensingh, Sherpur and Jamalpur Small Holder Development Project (SHDP)	1999-00 2004-05	IFAD/ WFP	M. of Agriculture ???	645.6	120.0	SHDP								
33.	54.	Use of Bio-Gas & Organic fertilizer for Environmental Balance (BGOFEF)	1997-98 2000-01	GOB	M. of Agriculture ???	57.1	10.0	BGOFEF	BGOFEF	BGOFEF	BGOFEF	BGOFEF	BGOFEF	BGOFEF		
<b>Sub-Sector: Forest</b>																
<b>D. Sector: Water</b>																
<b>New Project</b>																
34.	60.	Char Development and Settlement Project (2nd Phase) (CDSP)	1999-00 2003-04	ADB	<b>345.8</b>	<b>96.0</b>	CDSP				CDSP??					
<b>E. Ministry of Education</b>							<b>10,892.2</b>	<b>1,456.0</b>								
35.	61.	a) Registered Non-Govt. Primary School Development Project (RNGPSD) (2nd Phase).	1995-96 2001-02	GOB	M. of Education	9,580.3	1,196.0	RGPSD 2nd	RGPSD 2nd	RGPSD 2nd	RGPSD 2nd	RGPSD 2nd	RGPSD 2nd	RGPSD 2nd		
36.	61.	c) Development of Primary Education With German Assistance (DPE)	1995-96 Dec.2000	KFW	M. of Education	1,311.9	260.0	DPE	DPE	DPE	DPE	DPE	DPE	DPE		
<b>F. FFW Programme</b>																
<b>G. Revenue Allocation to LGED for Maintenance</b>																
37.	63.	Maintenance Rural Infrastructure (MRI)	1996-97 Running	GOB	<b>1,100.0</b>	<b>1,180.0</b>	MRI	MRI	MRI	MRI	MRI	MRI	MRI	MRI		

RDP :Rural Development Project  
RIDP :Rural Infrastructure Development Project  
RIRP :Rural Infrastructure Rehabilitation Project

**Table D.3 Road Length and Density in Char Area**

No. District No. Upazila	Population		Char Area		Road Length			Road Density			Total (m/km <sup>2</sup> )	Total/Popl. (m/Popl.)				
	Area (ha)	Density (Popl./km <sup>2</sup> )	Area (ha)	Density (Popl./km <sup>2</sup> )	FRB	FRB+R2	R2	R3	R2+R3	Total			FRB+R1/km2 (m/km <sup>2</sup> )	FRB/Popl. (m/Popl.)	R2+R3/km2 (m/km <sup>2</sup> )	R2+R3/Popl. (m/head)
<b>32. Gaibandha Distr</b>	<b>217,935</b>	<b>1,109</b>	<b>50,377</b>	<b>399</b>	<b>373.1</b>	<b>1369.2</b>	<b>829.1</b>	<b>678.7</b>	<b>1507.8</b>	<b>2877.1</b>	<b>628.3</b>	<b>0.57</b>	<b>691.9</b>	<b>6.92</b>	<b>1,320.2</b>	<b>1.19</b>
Char total	1,329,229	1,039	201,051	399	182.0	633.5	507.9	336.7	844.7	1478.1	495.3	0.48	660.4	6.60	1,155.7	1.11
21 Fulchhari	30,654	142,890	26,631	344	5.5	39.0	44.5	43.5	85.9	130.4	145.3	0.31	280.1	2.80	425.4	0.91
24 Gaibandha Sadar	32,026	449,185	6,657	361	55.8	158.5	214.2	99.2	188.3	402.6	668.9	0.48	588.1	5.88	1,257.0	0.90
88 Saghata	22,566	317,750	8,557	714	39.0	104.1	143.1	214.2	307.9	451.0	634.0	0.45	1,364.0	13.64	1,998.4	1.42
91 Sundarganj	42,653	419,405	8,533	285	81.7	149.9	231.6	151.1	262.6	494.2	543.0	0.55	615.6	6.16	1,158.6	1.18
No Char total	90,436	1,088,268	1,088,268	1,209	191.1	544.6	735.8	321.2	342.0	663.2	817.2	0.68	736.6	7.37	1,553.8	1.29
30 Gobindaganj	48,169	534,347	0	-	109.6	287.8	397.4	137.5	163.4	300.9	824.9	0.74	624.6	6.25	1,449.6	1.31
67 Palashbari	19,068	257,981	0	-	30.2	110.5	140.7	135.0	49.0	183.9	737.8	0.55	964.6	9.65	1,702.3	1.26
82 Sadtullapur	22,799	295,940	0	-	51.4	146.3	197.7	48.7	129.7	178.4	867.3	0.67	782.5	7.82	1,649.8	1.27
<b>39. Jamalpur District</b>	<b>203,206</b>	<b>2,281,521</b>	<b>52,760</b>	<b>715</b>	<b>407.1</b>	<b>1366.0</b>	<b>1773.1</b>	<b>626.6</b>	<b>1015.5</b>	<b>1642.1</b>	<b>872.6</b>	<b>0.78</b>	<b>808.1</b>	<b>8.08</b>	<b>1,680.6</b>	<b>1.50</b>
Char total	1,09,852	1,165,761	377,128	715	211.9	724.1	936.0	437.9	683.4	1121.3	852.1	0.80	1,020.7	10.21	1,872.8	1.76
15 Dewanganj	26,661	231,365	20,888	868	37.9	172.9	210.8	49.6	160.8	210.5	790.5	0.91	789.4	7.89	1,579.9	1.82
29 Islampur	34,302	325,839	11,611	570	69.0	128.7	197.7	76.1	98.0	174.0	576.4	0.61	507.3	5.07	1,083.7	1.14
58 Madarganj	22,540	245,989	10,097	734	28.2	137.1	165.4	36.3	69.2	105.5	733.6	0.67	467.9	4.68	1,201.6	1.10
85 Sarishabari	26,350	362,568	10,164	870	76.8	285.4	362.2	275.9	355.5	631.4	1,374.5	1.00	2,396.1	23.96	3,770.6	2.74
No Char total	93,354	1,115,760	1,115,760	1,195	195.2	641.9	837.1	188.7	332.1	520.8	896.7	0.75	557.9	5.58	1,454.5	1.22
07 Bakshiganj	20,431	188,514	0	-	36.7	89.5	126.3	100.0	81.9	181.9	618.1	0.67	890.5	8.90	1,508.6	1.63
36 Jamalpur Sadar	48,959	594,190	0	-	96.3	314.3	410.7	6.0	138.6	144.6	838.8	0.69	295.4	2.95	1,134.2	0.93
61 Melandaha	23,965	333,055	0	-	62.1	238.0	300.1	82.8	111.5	194.3	1,252.3	0.90	810.6	8.11	2,062.8	1.48
<b>49. Kurigram District</b>	<b>229,618</b>	<b>1,971,567</b>	<b>85,483</b>	<b>392</b>	<b>308.1</b>	<b>1223.4</b>	<b>1531.6</b>	<b>655.1</b>	<b>693.4</b>	<b>1348.5</b>	<b>667.0</b>	<b>0.78</b>	<b>587.3</b>	<b>5.87</b>	<b>1,254.3</b>	<b>1.46</b>
Char total	173,033	1,378,344	335,291	392	202.7	796.6	999.4	412.3	511.9	924.2	577.6	0.73	534.1	5.34	1,111.7	1.40
08 Char Rajibpur	11,104	62,243	9,694	490	18.6	105.6	124.2	28.9	13.0	41.9	1,118.3	2.00	376.9	3.77	1,495.2	2.67
09 Chilmari	22,497	113,363	18,607	274	19.4	48.0	67.4	5.7	60.1	65.8	299.5	0.59	292.7	2.93	592.1	1.18
52 Kurigram Sadar	27,647	268,297	7,650	272	35.8	72.7	108.5	94.2	161.2	255.4	392.5	0.40	923.9	9.24	1,316.4	1.36
61 Nageshwari	41,582	332,450	21,060	519	54.1	165.4	219.6	112.2	126.8	239.0	528.1	0.66	574.6	5.75	1,102.7	1.38
79 Raumari	19,781	163,965	7,702	586	23.5	66.4	89.9	69.3	29.3	98.6	454.6	0.55	498.5	4.99	953.1	1.15
94 Ulipur	50,422	438,027	20,769	296	51.3	338.5	389.8	101.9	121.6	223.5	773.1	0.89	443.2	4.43	1,216.3	1.40
No Char total	56,586	593,223	1,048	1,048	105.4	426.8	532.2	242.7	181.6	424.3	940.5	0.90	749.8	7.50	1,690.4	1.61
06 Bhurungamari	23,600	209,289	0	-	20.8	233.1	253.9	64.3	58.7	123.0	1,075.9	1.21	521.3	5.21	1,597.2	1.80
18 Phulbari	16,363	162,299	0	-	38.6	103.2	141.8	109.1	30.0	139.0	866.4	0.87	849.7	8.50	1,716.1	1.73
77 Rajarhat	16,622	221,636	0	-	46.0	90.5	136.5	69.4	92.9	162.2	821.4	0.62	976.0	9.76	1,797.4	1.35
<b>88. Sirajganj District</b>	<b>249,799</b>	<b>2,745,132</b>	<b>77,912</b>	<b>623</b>	<b>365.5</b>	<b>1453.9</b>	<b>1819.4</b>	<b>777.5</b>	<b>1080.7</b>	<b>1858.2</b>	<b>728.4</b>	<b>0.66</b>	<b>743.9</b>	<b>7.44</b>	<b>1,472.2</b>	<b>1.34</b>
Char total	142,690	1,657,621	485,710	623	138.8	585.1	723.9	420.2	206.2	626.4	507.4	0.44	439.0	4.39	946.3	0.81
11 Belkuchi	16,430	320,632	8,315	1,161	11.6	112.2	123.8	52.9	71.7	124.6	753.3	0.39	758.0	7.58	1,511.3	0.77
27 Chauhali	24,367	116,642	24,367	479	19.7	20.7	40.4	38.9	21.1	59.9	165.9	0.35	246.0	2.46	411.9	0.86
50 Kazipur	36,864	257,833	25,836	500	28.9	145.2	174.2	91.4	5.9	97.2	472.4	0.68	263.8	2.64	736.2	1.05
67 Shahjadpur	32,450	517,069	6,942	918	22.5	102.4	124.8	50.4	80.1	130.5	384.6	0.24	402.1	4.02	786.7	0.49
78 Sirajganj Sadar	32,579	445,445	12,452	639	56.1	204.6	260.8	186.7	27.5	214.2	800.5	0.59	657.4	6.57	1,457.9	1.07
No Char total	107,110	1,087,511	1,087,511	1,015	226.6	868.8	1095.5	357.3	874.5	1,231.8	1,022.8	1.01	1,150.0	11.50	2,172.8	2.14
44 Kamarkhanda	9,160	131,379	0	-	13.2	52.4	65.6	44.3	43.2	87.5	716.2	0.50	955.1	9.55	1,671.3	1.17
61 Raiganj	26,784	278,914	0	-	49.7	208.3	258.0	119.4	124.7	244.1	963.2	0.92	911.5	9.12	1,874.7	1.80
89 Tarash	29,720	168,855	0	-	79.1	221.6	300.7	159.1	113.0	272.1	1,011.9	1.78	916.5	9.16	1,927.4	3.39
94 Ullah Para	41,445	508,362	0	-	84.6	386.5	471.1	34.4	593.6	628.1	1,136.8	0.93	1,515.4	15.15	2,652.2	2.16
<b>Total</b>	<b>900,558</b>	<b>9,415,717</b>	<b>266,533</b>	<b>525</b>	<b>1453.8</b>	<b>5039.5</b>	<b>6493.4</b>	<b>2888.3</b>	<b>3468.3</b>	<b>6356.6</b>	<b>721.0</b>	<b>0.69</b>	<b>705.8</b>	<b>7.06</b>	<b>1,426.9</b>	<b>1.36</b>



**Table D.4 Road Length and Density in Haor Area**

No. District No. Upazilla	Population in 2001		Density (Popl./km <sup>2</sup> )	Area (ha)	Haor Area Population (Popl./km <sup>2</sup> )	Road Length			Road Density			Total	FRB+R1/km2 (m/km2)	FRB/Popl. (m/Popl.)	R2+R3/Popl. (m/Popl.)	Total/km2 (m/Popl.)			
	Area (ha)	Density (Popl./km <sup>2</sup> )				FRB	R1	FRB+R2	R2	R3	R2+R3						FRB+R1/km2 (m/km2)	FRB/Popl. (m/Popl.)	R2+R3/Popl. (m/Popl.)
<b>36. Habiganj District</b>	<b>258,079</b>	<b>1,828,178</b>	<b>708</b>	<b>139,389</b>	<b>749,253</b>	<b>538</b>	<b>251.6</b>	<b>862.5</b>	<b>1,141.1</b>	<b>644.2</b>	<b>1,050.8</b>	<b>1,695.1</b>	<b>2,809.1</b>	<b>431.7</b>	<b>0.6</b>	<b>656.8</b>	<b>6.6</b>	<b>1,088.5</b>	<b>1.5</b>
<b>Haor total</b>	<b>214,116</b>	<b>1,557,966</b>	<b>728</b>	<b>139,389</b>	<b>749,253</b>	<b>538</b>	<b>222.4</b>	<b>704.4</b>	<b>926.8</b>	<b>486.5</b>	<b>948.8</b>	<b>1,455.3</b>	<b>2,362.0</b>	<b>432.8</b>	<b>0.6</b>	<b>670.3</b>	<b>6.7</b>	<b>1,103.1</b>	<b>1.5</b>
02 Ajmiriganj	22,399	101,744	454	33.4	22,399	454	33.4	26.9	66.0	45.1	48.5	93.6	153.9	269.2	0.6	417.9	4.2	687.1	1.5
05 Bahubal	25,066	161,833	646	5,915	4,621	78	12.1	106.4	118.5	20.1	110.2	130.4	248.9	472.8	0.7	520.1	5.2	992.9	1.7
11 Baniachang	48,228	272,643	565	42,957	202,586	472	44.7	116.4	161.0	35.0	170.4	305.5	466.5	333.4	0.6	633.4	6.3	967.3	1.7
44 Habiganj Sadar	25,378	284,423	1,121	13,586	90,750	668	23.1	110.0	133.1	57.9	50.8	108.7	241.7	524.9	0.5	428.1	4.3	952.5	0.8
68 Lakhai	19,655	134,742	686	10,655	134,742	686	20.8	25.9	46.7	25.9	51.7	77.5	124.2	237.6	0.3	394.5	3.9	632.1	0.9
71 Madhabpur	29,427	321,048	1,091	10,861	101,243	932	38.1	120.0	158.1	151.2	101.8	253.0	411.1	537.3	0.5	859.7	8.6	1,397.0	1.3
77 Nabiganj	43,963	281,534	640	24,016	113,567	473	50.2	198.8	249.0	51.2	415.5	466.7	715.7	566.4	0.9	1,061.5	10.6	1,627.9	2.5
<b>No Haor</b>	<b>43,963</b>	<b>270,212</b>	<b>615</b>	<b>0</b>	<b>0</b>	<b>-</b>	<b>29.3</b>	<b>158.1</b>	<b>187.3</b>	<b>157.8</b>	<b>102.0</b>	<b>259.8</b>	<b>447.1</b>	<b>426.1</b>	<b>0.7</b>	<b>590.9</b>	<b>5.9</b>	<b>1,017.0</b>	<b>1.7</b>
<b>26. Chunarughat</b>	<b>268,871</b>	<b>2,786,946</b>	<b>1,037</b>	<b>169,377</b>	<b>1,254,947</b>	<b>741</b>	<b>406.6</b>	<b>1,268.1</b>	<b>1,674.7</b>	<b>962.7</b>	<b>2,160.2</b>	<b>3,122.9</b>	<b>4,797.5</b>	<b>622.9</b>	<b>0.6</b>	<b>1,161.5</b>	<b>11.6</b>	<b>1,784.3</b>	<b>1.7</b>
<b>48. Kishoreganj Distri</b>	<b>192,430</b>	<b>1,674,984</b>	<b>870</b>	<b>169,377</b>	<b>1,254,947</b>	<b>741</b>	<b>272.3</b>	<b>773.9</b>	<b>1,046.2</b>	<b>528.2</b>	<b>1,504.3</b>	<b>2,032.6</b>	<b>3,078.8</b>	<b>543.7</b>	<b>0.6</b>	<b>1,056.3</b>	<b>10.6</b>	<b>1,599.9</b>	<b>1.8</b>
02 Austagram	35,555	167,704	472	35,555	167,704	472	7.3	48.0	55.2	50.7	150.1	200.8	256.1	155.4	0.3	564.8	5.6	720.2	1.5
06 Baitupur	19,377	250,807	1,294	14,463	153,786	1,063	18.2	66.0	84.2	47.0	90.2	137.1	221.3	434.6	0.3	707.6	7.1	1,142.2	0.9
33 Ina	40,195	154,901	385	40,195	154,901	385	64.0	100.4	35.2	142.2	177.4	277.8	362.5	249.8	0.6	441.4	4.4	691.2	1.8
42 Karimganj	20,051	281,529	1,404	20,051	281,529	1,404	21.8	143.1	164.9	63.3	303.9	367.2	532.1	822.4	0.6	1,831.3	18.3	2,653.7	1.9
49 Kishoreganj Sadar	19,373	375,182	1,937	7,361	142,554	1,937	32.3	166.6	198.9	102.6	198.5	301.1	500.0	1,026.5	0.5	1,554.1	15.5	2,580.6	1.3
59 Mithaman	22,292	141,788	636	22,292	141,788	636	28.6	40.3	68.9	25.8	151.8	177.6	246.5	308.9	0.5	796.7	8.0	1,105.6	1.7
76 Nikli	21,440	124,100	586	21,168	124,100	586	72.8	176.8	249.5	129.8	365.6	495.4	744.9	1,163.9	1.9	2,310.5	23.1	3,474.4	5.8
92 Tarail	14,147	173,848	1,229	8,291	88,585	1,068	27.5	96.7	124.2	73.9	102.1	176.0	300.1	877.6	0.7	1,243.9	12.4	2,121.5	1.7
<b>No Haor</b>	<b>76,441</b>	<b>1,111,962</b>	<b>1,455</b>	<b>0</b>	<b>0</b>	<b>-</b>	<b>134.3</b>	<b>494.2</b>	<b>628.5</b>	<b>434.4</b>	<b>655.9</b>	<b>1,090.3</b>	<b>1,718.8</b>	<b>822.2</b>	<b>0.6</b>	<b>1,426.3</b>	<b>14.3</b>	<b>2,248.5</b>	<b>1.5</b>
11 Bhanab	13,933	228,681	1,641	0	0	0	26.5	60.3	86.7	25.8	24.0	49.8	136.5	622.5	0.4	357.4	3.6	979.9	0.6
27 Hossainpur	12,130	166,947	1,376	0	0	0	23.3	71.6	94.9	22.4	101.3	123.8	218.7	782.6	0.6	1,020.5	10.2	1,803.1	1.3
45 Kattai	21,923	327,839	1,495	0	0	0	24.9	82.6	107.5	59.6	205.0	264.6	372.1	490.4	0.3	1,207.0	12.1	1,697.4	1.1
54 Kullar Char	10,402	133,327	1,282	0	0	0	25.8	115.2	140.9	257.7	161.2	418.9	559.8	1,355.0	1.1	4,026.9	40.3	5,381.9	4.2
79 Pakundia	18,054	255,167	1,413	0	0	0	33.8	164.5	198.4	68.9	164.3	232.3	431.6	1,098.8	0.8	1,291.8	12.9	2,390.6	1.7
<b>72. Netrokona District</b>	<b>279,634</b>	<b>2,102,384</b>	<b>752</b>	<b>70,122</b>	<b>271,563</b>	<b>387</b>	<b>501.8</b>	<b>1,285.4</b>	<b>1,787.2</b>	<b>849.0</b>	<b>905.8</b>	<b>1,754.8</b>	<b>3,524.0</b>	<b>639.1</b>	<b>0.9</b>	<b>627.5</b>	<b>6.3</b>	<b>1,266.7</b>	<b>1.7</b>
<b>Haor total</b>	<b>114,411</b>	<b>628,090</b>	<b>549</b>	<b>70,122</b>	<b>271,563</b>	<b>387</b>	<b>179.3</b>	<b>303.7</b>	<b>483.0</b>	<b>290.2</b>	<b>203.8</b>	<b>494.0</b>	<b>977.0</b>	<b>422.1</b>	<b>0.8</b>	<b>431.8</b>	<b>4.3</b>	<b>853.9</b>	<b>1.6</b>
38 Khaliajuri	29,764	83,649	281	29,764	83,649	281	37.8	0.0	37.8	1.8	9.0	10.8	48.5	126.8	0.5	36.1	0.4	162.9	0.6
40 Kalmakanda	37,742	256,126	679	12,870	63,992	497	61.3	174.6	235.9	82.5	110.8	193.3	429.3	625.1	0.9	512.2	5.1	1,137.3	1.7
56 Madan	22,586	133,170	590	13,131	61,208	466	46.0	71.7	117.6	82.6	62.2	244.8	362.5	520.8	0.9	1,084.0	10.8	1,604.8	2.7
63 Mohanganj	24,319	155,147	638	14,357	62,714	437	34.3	57.4	91.7	23.3	21.8	45.1	136.8	376.9	0.6	1,854.4	1.9	562.4	0.9
<b>No Haor</b>	<b>165,223</b>	<b>1,474,294</b>	<b>892</b>	<b>0</b>	<b>0</b>	<b>-</b>	<b>322.5</b>	<b>981.7</b>	<b>1,304.3</b>	<b>558.8</b>	<b>702.0</b>	<b>1,260.8</b>	<b>2,565.0</b>	<b>789.4</b>	<b>0.9</b>	<b>763.1</b>	<b>7.6</b>	<b>1,552.5</b>	<b>1.7</b>
04 Alpara	19,515	136,159	698	0	0	0	62.2	88.4	150.6	71.6	54.8	126.5	277.1	771.9	1.1	648.0	6.5	1,419.9	2.0
09 Barhatta	22,150	175,359	792	0	0	0	28.9	124.2	153.1	44.6	111.1	155.6	308.7	691.3	0.9	702.5	7.0	1,393.8	1.8
18 Durgapur	27,930	211,491	757	0	0	0	54.1	150.7	204.8	67.2	59.0	126.2	331.0	733.4	1.0	451.7	4.5	1,183.1	1.6
47 Kendua	30,361	323,165	1,064	0	0	0	56.8	196.6	253.4	152.7	169.8	322.5	575.9	834.6	0.8	1,062.1	10.6	1,896.7	1.8
74 Netrokona Sadar	34,036	323,183	950	0	0	0	82.3	255.4	337.6	102.6	181.0	283.6	621.2	992.0	1.0	833.2	8.3	1,825.2	1.9
83 Purbadhala	31,232	304,937	976	0	0	0	38.3	166.4	204.6	120.1	126.4	246.5	451.1	655.3	0.7	789.3	7.9	1,444.5	1.5
<b>90. Sunamganj Distri</b>	<b>366,970</b>	<b>2,013,988</b>	<b>549</b>	<b>271,302</b>	<b>1,201,929</b>	<b>443</b>	<b>456.5</b>	<b>843.6</b>	<b>1,300.1</b>	<b>654.2</b>	<b>964.2</b>	<b>1,618.4</b>	<b>2,918.5</b>	<b>354.3</b>	<b>0.6</b>	<b>441.0</b>	<b>4.4</b>	<b>795.3</b>	<b>1.4</b>
<b>Haor total</b>	<b>366,970</b>	<b>2,013,988</b>	<b>549</b>	<b>271,302</b>	<b>1,201,929</b>	<b>443</b>	<b>12.3</b>	<b>31.0</b>	<b>43.3</b>	<b>91.8</b>	<b>74.0</b>	<b>165.9</b>	<b>209.1</b>	<b>222.7</b>	<b>0.3</b>	<b>853.7</b>	<b>8.5</b>	<b>1,076.5</b>	<b>1.6</b>
18 Bishwambarpur	19,426	128,802	663	11,057	56,936	515	45.0	130.8	175.8	62.4	134.6	197.0	372.8	404.3	0.5	453.0	4.5	857.4	1.1
23 Chhatak	43,478	337,240	776	22,663	128,939	569	58.2	169.5	227.7	95.7	89.1	184.8	412.5	540.9	1.1	438.9	4.4	979.8	2.0
29 Dherai	42,094	207,114	492	47,342	158,774	335	65.5	84.7	150.2	40.9	175.8	216.7	366.9	302.8	0.8	436.7	4.4	739.6	2.0
33 Dowarabazar	28,142	180,515	641	5,076	28,568	563	53.2	42.2	95.4	111.1	96.1	207.2	302.6	339.1	0.5	736.2	7.4	1,075.3	1.7
47 Jaganmohanpur	36,827	216,628	588	18,992	76,507	403	65.4	101.0	166.4	88.5	118.0	206.5	372.9	451.7	0.8	560.8	5.6	1,012.5	1.7
50 Jamaiganj	33,876	123,115	363	33,876	123,115	363	31.1	36.5	67.6	32.5	67.9	100.4	168.1	199.7	0.5	296.4	3.0	496.1	1.4
86 Sulla	26,073	113,680	436	38.5	48.6	87.1	19.5	133.3	152.8	239.9	333.3	528.0	823.9	335.0	0.8	586.0	5.9	920.0	2.1
89 Sunamganj Sadar	56,077	361,648	645	40,149	211,750	527	52.0	130.2	182.2	80.3	38.1	118.4	300.6	323.9	0.5	211.2	2.1	536.1	0.8
92 Taharpur	31,370	162,501	518	23,982	96,548	403	35.3	69.2	104.5	31.5	37.4	68.8	173.3</						

Table D.5 Area and Population in Char

District Upazila	Whole Districts				Within Char Area				
	Area (ha)	Population	Population	Density	Area		Population		Density
		in 1981	in 2001	Head/km <sup>2</sup>	Area %	Area(ha)	(%)	(nos.)	Head/km <sup>2</sup>
<b>32. Gaibandha District</b>	<b>217,935</b>	<b>1,949,274</b>	<b>2,417,497</b>	<b>1,109</b>					
<b>Char area total</b>	<b>127,899</b>	<b>1,080,865</b>	<b>1,329,229</b>	<b>1,039</b>	<b>23%</b>	<b>50,377</b>	<b>8%</b>	<b>201,051</b>	<b>399</b>
21 Fulchhari	30,654	128,845	142,890	466	87%	26,631	64%	91,547	344
24 Gaibandha Sadar	32,026	359,226	449,185	1,403	21%	6,657	5%	24,049	361
88 Saghatta	22,566	232,118	317,750	1,408	38%	8,557	19%	61,133	714
91 Sundarganj	42,653	360,676	419,405	983	20%	8,533	6%	24,321	285
<b>Out of Char total</b>	<b>90,036</b>	<b>868,409</b>	<b>1,088,268</b>	<b>1,209</b>					
30 Gobindaganj	48,169	414,591	534,347	1,109	0%	0	0%	0	-
67 Palashbari	19,068	210,806	257,981	1,353	0%	0	0%	0	-
82 Sadullapur	22,799	243,012	295,940	1,298	0%	0	0%	0	-
<b>39. Jamalpur District</b>	<b>203,206</b>	<b>1,874,530</b>	<b>2,281,521</b>	<b>1,123</b>					
<b>Char area total</b>	<b>109,852</b>	<b>952,635</b>	<b>1,165,761</b>	<b>1,061</b>	<b>26%</b>	<b>52,760</b>	<b>17%</b>	<b>377,128</b>	<b>715</b>
15 Dewanganj	26,661	193,182	231,365	868	78%	20,888	64%	148,392	710
29 Islampur	34,302	268,352	325,839	950	34%	11,611	20%	66,132	570
58 Madarganj	22,540	201,995	245,989	1,091	45%	10,097	30%	74,161	734
85 Sarishabari	26,350	289,106	362,568	1,376	39%	10,164	24%	88,442	870
<b>Out of Char total</b>	<b>93,354</b>	<b>921,895</b>	<b>1,115,760</b>	<b>1,195</b>					
07 Bakshiganj	20,431	157,403	188,514	923	0%	0	0%	0	-
36 Jamalpur Sadar	48,959	502,014	594,190	1,214	0%	0	0%	0	-
61 Melandaha	23,965	262,478	333,055	1,390	0%	0	0%	0	-
<b>49. Kurigram District</b>	<b>229,618</b>	<b>1,603,034</b>	<b>1,971,567</b>	<b>859</b>					
<b>Char area total</b>	<b>173,033</b>	<b>1,137,896</b>	<b>1,378,344</b>	<b>797</b>	<b>37%</b>	<b>85,483</b>	<b>17%</b>	<b>335,291</b>	<b>392</b>
08 Char Rajibpur	11,104	58,049	62,243	561	87%	9,694	76%	47,550	490
09 Chilmari	22,497	100,516	113,363	504	83%	18,607	45%	51,029	274
52 Kurigram Sadar	27,647	217,311	268,297	970	28%	7,650	8%	20,806	272
61 Nageshwari	41,582	279,775	332,450	800	51%	21,060	33%	109,223	519
79 Raumari	19,781	137,040	163,965	829	39%	7,702	28%	45,109	586
94 Ulipur	50,422	345,205	438,027	869	41%	20,769	14%	61,573	296
<b>Out of Char total</b>	<b>56,586</b>	<b>465,138</b>	<b>593,223</b>	<b>1,048</b>					
06 Bhurungamari	23,600	176,822	209,289	887	0%	0	0%	0	-
18 Phulbari	16,363	129,668	162,299	992	0%	0	0%	0	-
77 Rajarhat	16,622	158,648	221,636	1,333	0%	0	0%	0	-
<b>88. Sirajganj District</b>	<b>249,799</b>	<b>2,263,573</b>	<b>2,745,132</b>	<b>1,099</b>					
<b>Char area total</b>	<b>142,690</b>	<b>1,398,039</b>	<b>1,657,621</b>	<b>1,162</b>	<b>31%</b>	<b>77,912</b>	<b>18%</b>	<b>485,710</b>	<b>623</b>
11 Belkuchi	16,430	245,164	320,632	1,951	51%	8,315	30%	96,576	1,161
27 Chauhali	24,367	108,459	116,642	479	100%	24,367	100%	116,642	479
50 Kazipur	36,864	234,804	257,833	699	70%	25,836	50%	129,180	500
67 Shahjadpur	32,450	420,452	517,069	1,593	21%	6,942	12%	63,750	918
78 Sirajganj Sadar	32,579	389,160	445,445	1,367	38%	12,452	18%	79,561	639
<b>Out of Char total</b>	<b>107,110</b>	<b>865,534</b>	<b>1,087,511</b>	<b>1,015</b>					
44 Kamarkhanda	9,160	105,997	131,379	1,434	0%	0	0%	0	-
61 Raiganj	26,784	225,028	278,914	1,041	0%	0	0%	0	-
89 Tarash	29,720	135,435	168,855	568	0%	0	0%	0	-
94 Ullah Para	41,445	399,074	508,362	1,227	0%	0	0%	0	-
<b>Char Total</b>	<b>553,473</b>	<b>4,569,435</b>	<b>5,530,955</b>			<b>266,533</b>		<b>1,399,180</b>	
<b>Total</b>	<b>900,558</b>	<b>7,690,411</b>	<b>9,415,717</b>	<b>1,046</b>	<b>30%</b>	<b>266,533</b>	<b>15%</b>	<b>1,399,180</b>	<b>525</b>

Table D.6 Rural Communication Road in Char

Information Sheets for Rural Infrastructure Development								
District Upazila	Length of Rural Road			Road Density		Requirement (km)		
	R1+R2+R3 (km)	FRB (km)	Total (km)	(m/capita)	(m/km <sup>2</sup> )	Total (km)	Submersible Road (km)	Paved Road on Embankment
<b>32. Gaibandha District</b>	<b>2,504</b>	<b>373</b>	<b>2,877</b>	<b>1.19</b>	<b>1,320</b>			
Char area total	<b>106</b>	<b>0</b>	<b>106</b>	<b>0.53</b>	<b>210</b>	<b>168</b>	<b>12</b>	<b>20</b>
21 Fulchhari	32	0	32	0.35	120	93	5	4
24 Gaibandha Sadar	23	0	23	0.96	346	10	2	4
88 Saghatta	25	0	25	0.41	292	58	2	8
91 Sundarganj	26	0	26	1.07	305	7	3	4
<b>Out of Char</b>								
30 Gobindaganj	589	110	698	1.31	1,450			
67 Palashbari	294	30	325	1.26	1,702			
82 Sadullapur	325	51	376	1.27	1,650			
<b>39. Jamalpur District</b>	<b>3,008</b>	<b>407</b>	<b>3,415</b>	<b>1.50</b>	<b>1,681</b>			
Char area total	<b>250</b>	<b>184</b>	<b>434</b>	<b>1.15</b>	<b>823</b>	<b>81</b>	<b>55</b>	<b>53</b>
15 Dewanganj	70	21	91	0.61	436	112	30	5
29 Islampur	70	78	148	2.24	1,275	(58)	2	20
58 Madarganj	80	85	165	2.22	1,634	(64)	18	10
85 Sarishabari	30	0	30	0.34	295	91	5	18
<b>Out of Char</b>								
07 Bakshiganj	271	37	308	1.63	1,508			
36 Jamalpur Sadar	459	96	555	0.93	1,134			
61 Melandaha	432	62	494	1.48	2,063			
<b>49. Kurigram District</b>	<b>2,572</b>	<b>308</b>	<b>2,880</b>	<b>1.46</b>	<b>1,254</b>			
Char area total	<b>325</b>	<b>72</b>	<b>397</b>	<b>1.18</b>	<b>464</b>	<b>61</b>	<b>38</b>	<b>48</b>
08 Char Rajibpur	75	40	115	2.42	1,186	(50)	9	-
09 Chilmari	33	0	33	0.65	177	37	3	10
52 Kurigram Sadar	42	2	44	2.11	575	(16)	2	12
61 Nageshwari	50	0	50	0.46	237	99	20	18
79 Raumari	100	30	130	2.88	1,688	(68)	3	-
94 Ulipur	25	0	25	0.41	120	59	1	8
<b>Out of Char</b>								
06 Bhurungamari	356	21	377	1.80	1,597			
18 Phulbari	242	39	281	1.73	1,716			
77 Rajarhat	253	46	299	1.35	1,797			
<b>88. Sirajganj District</b>	<b>3,312</b>	<b>366</b>	<b>3,678</b>	<b>1.34</b>	<b>1,472</b>			
Char area total	<b>86</b>	<b>0</b>	<b>86</b>	<b>0.18</b>	<b>110</b>	<b>577</b>	<b>30</b>	<b>35</b>
11 Belkuchi	14	0	14	0.14	168	118	2	7
27 Chauhali	4	0	4	0.03	16	155	10	-
50 Kazipur	16	0	16	0.12	62	160	14	-
67 Shahjadpur	20	0	20	0.31	288	67	1	18
78 Sirajganj Sadar	32	0	32	0.40	257	77	3	10
<b>Out of Char</b>								
44 Kamarkhanda	140	13	153	1.17	1,671			
61 Raiganj	452	50	502	1.80	1,875			
89 Tarash	494	79	573	3.39	1,927			
94 Ullah Para	1,015	85	1,099	2.16	2,652			
<b>Char Total</b>	<b>767</b>	<b>256</b>	<b>1,023</b>	<b>0.73</b>	<b>384</b>			
<b>District Total</b>	<b>11,396</b>	<b>1,454</b>	<b>12,850</b>	<b>1.36</b>	<b>1,427</b>	<b>886</b>	<b>135</b>	<b>156</b>

Table D.7 Growth Center/ Hat Bazaar in Char

Information Sheets for Rural Infrastructure Development								
District Upazila	Existing numbers			Bazar	Total Upazila		Requirement	
	Growth Center (Nos.)	Hat Bazar (Nos.)	Bazar Total (sq.m)	Density <u>1000sq.m</u> Popilation	Bazar Total (sq.m)	Density <u>1000sq.m</u> Population	Area 389 (sq.m)	Number (Nos.)
<b>32. Gaibandha District</b>					<b>290,019</b>	<b>218</b>		
<b>Char area total</b>	<b>0</b>	<b>12</b>	<b>23,252</b>	<b>116</b>			<b>54,937</b>	<b>11</b>
21 Fulchhari	0	2	3,950	43	29,810	209	31,653	6
24 Gaibandha Sadar	0	3	5,470	227	141,750	316	3,883	1
88 Saghatta	0	4	7,904	129	49,814	157	15,871	3
91 Sundarganj	0	3	5,928	244	68,645	164	3,531	1
<b>Out of Char total</b>								
30 Gobindaganj	5	5						
67 Palashbari	2	8						
82 Sadullapur	2	26						
<b>39. Jamalpur District</b>					<b>1,125,000</b>	<b>965</b>		
<b>Char area total</b>	<b>3</b>	<b>30</b>	<b>500,000</b>	<b>1,326</b>				<b>(61)</b>
15 Dewanganj	1	7	85,000	573	130,000	562	(27,290)	(5)
29 Islampur	1	8	160,000	2,419	390,000	1,197	(134,281)	(23)
58 Madarganj	1	10	190,000	2,562	435,000	1,768	(161,158)	(27)
85 Sarishabari	0	5	65,000	735	170,000	469	(30,605)	(6)
<b>Out of Char total</b>								
07 Bakshiganj	5	5						
36 Jamalpur Sadar	6	24						
61 Melandaha	1	13						
<b>49. Kurigram District</b>					<b>437,488</b>	<b>317</b>		
<b>Char area total</b>	<b>3</b>	<b>21</b>	<b>117,323</b>	<b>350</b>			<b>13,073</b>	<b>3</b>
08 Char Rajibpur	1	2	17,935	377	52,634	846	557	1
09 Chilmari	0	1	6,072	119	99,022	873	13,773	3
52 Kurigram Sadar	1	3	21,375	1,027	60,361	225	(13,283)	(3)
61 Nageshwari	1	4	24,700	226	70,400	212	17,777	3
79 Raumari	0	9	36,432	808	64,768	395	(18,889)	(4)
94 Ulipur	0	2	10,809	176	90,303	206	13,137	3
<b>Out of Char total</b>								
06 Bhurungamari	4	13						
18 Phulbari	5	6						
77 Rajarhat	4	11						
<b>88. Sirajganj District</b>					<b>298,500</b>	<b>180</b>		
<b>Char area total</b>	<b>0</b>	<b>23</b>	<b>29,500</b>	<b>61</b>			<b>159,394</b>	<b>30</b>
11 Belkuchi	0	2	1,000	10	13,000	41	36,559	7
27 Chauhali	0	6	5,500	47	16,000	137	39,862	7
50 Kazipur	0	3	1,000	8	3,500	14	49,239	9
67 Shahjadpur	0	4	6,000	94	210,000	406	18,793	4
78 Sirajganj Sadar	0	8	16,000	201	56,000	126	14,942	3
<b>Out of Char total</b>								
44 Kamarkhanda	3	11						
61 Raiganj	4	22						
89 Tarash	2	23						
94 Ullah Para	2	21						
<b>Char Total</b>			<b>7,283</b> (m2/Bazar)		<b>5,926</b> (m2/Bazar)			
<b>District Total</b>	<b>6</b>	<b>86</b>	<b>670,075</b>	<b>479</b>	<b>2,151,007</b>	<b>389</b>	<b>227,405</b>	<b>(17)</b>

Table D.8 Hand Tubewell/ Launch Ghat in Char

District Upazila	Hand Tubewell						Launch Ghat			
	Sample Area			Char Area			Requirement (nos.)	Launch Ghat (Nos.)	Launch Route (km)	Requirement Ghat (nos.)
	Number (nos.)	User (people)	Area (ha)	Existing number Users/tube (popl./well)	Area/tube (ha/nos.)	Total Tubewell (nos.)				
<b>32. Gaibandha District</b>										
<b>Char area total</b>				<b>22</b>	<b>5</b>	<b>9,297</b>	<b>23</b>	<b>7</b>	<b>8</b>	<b>12</b>
21 Fulchhari	634	15,075	3,390	24	5	3,850	0	2	8	5
24 Gaibandha Sada	383	20,100	1,671	52	4	458	23	2		2
88 Saghatta	1,010	13,811	1,318	14	1	4,471	0	3		2
91 Sundarganj	294	13,805	3,603	47	12	518	0	0		3
<b>Out of Char total</b>										
30 Gobindaganj										
67 Palashbari										
82 Sadullapur										
<b>39. Jamalpur District</b>										
<b>Char area total</b>				<b>21</b>	<b>3</b>	<b>18,319</b>	<b>0</b>	<b>4</b>		<b>2</b>
15 Dewanganj	260	12,469	604	48	2	3,094	0	1		-
29 Islampur	619	12,697	1,862	21	3	3,224	0	1		2
58 Madarganj	1,058	14,280	1,904	13	2	5,495	0	1		-
85 Sarishabari	2,240	30,450	2,173	14	1	6,506	0	1		-
<b>Out of Char total</b>										
07 Bakshiganj										
36 Jamalpur Sadar										
61 Melandaha										
<b>49. Kurigram District</b>										
<b>Char area total</b>				<b>20</b>	<b>5</b>	<b>17,165</b>	<b>0</b>	<b>33</b>		<b>10</b>
08 Char Rajibpur	1,387	27,320	3,446	20	2	2,414	0	6		1
09 Chilmari	592	8,464	4,382	14	7	3,569	0	0		3
52 Kurigram Sadar	479	8,493	3,621	18	8	1,173	0	4		2
61 Nageshwari				20	2	5,545	0	9		2
79 Raumari				20	2	2,290	0	8		-
94 Ulipur	479	13,572	5,477	28	11	2,173	0	6		2
<b>Out of Char total</b>										
06 Bhurungamari										
18 Phulbari										
77 Rajarhat										
<b>88. Sirajganj District</b>										
<b>Char area total</b>				<b>16</b>	<b>3</b>	<b>29,891</b>	<b>0</b>	<b>2</b>		<b>14</b>
11 Belkuchi	1,825	27,128	1,025	15	1	6,497	0	0		2
27 Chauhali	114	4,069	3,638	36	32	3,268	0	1		3
50 Kazipur	2,178	27,611	1,468	13	1	10,190	0	0		5
67 Shahjadpur				16	3	4,109	0	1		1
78 Sirajganj Sadar	596	8,137	1,960	14	3	5,828	0	0		3
<b>Out of Char total</b>										
44 Kamarkhanda										
61 Raiganj										
89 Tarash										
94 Ullah Para										
<b>Char Total</b>				<b>78</b>	<b>16</b>	<b>74,672</b>	<b>23</b>	<b>46</b>	<b>8</b>	<b>38</b>
<b>District Total</b>										

Table D.9 Rural Electrification/ Tele-communication in Char

District Upazila	Char Area		Total Upazila		Requirement			
	Coverage Rate (%)	Population electrified (People)	Average 31% (%)	Population electrified (People)	Transmissi Line (km)	Telephone Line (km)	Radio Station (nos.)	Renewable Energy (nos.)
<b>32. Gaibandha District</b>								
<b>Char area total</b>	<b>1%</b>	<b>2,659</b>	<b>12%</b>	<b>159,675</b>	<b>43</b>	<b>75</b>	<b>5</b>	<b>6</b>
21 Fulchhari	0%	0	5%	7,144	0	21	3	3
24 Gaibandha Sadar	6%	1,443	15%	67,378	9	10	1	1
88 Saghatta	0%	0	7%	22,242	15	16	-	1
91 Sundarganj	5%	1,216	15%	62,911	19	28	1	1
<b>Out of Char total</b>								
30 Gobindaganj								
67 Palashbari								
82 Sadullapur								
<b>39. Jamalpur District</b>								
<b>Char area total</b>	<b>29%</b>	<b>108,411</b>	<b>53%</b>	<b>623,130</b>	<b>51</b>	<b>51</b>	<b>3</b>	<b>1</b>
15 Dewanganj	40%	59,357	50%	115,682	2	2	-	-
29 Islampur	25%	16,533	55%	179,211	21	21	1	1
58 Madarganj	20%	14,832	45%	110,695	23	23	1	-
85 Sarishabari	20%	17,688	60%	217,541	5	5	1	-
<b>Out of Char total</b>								
07 Bakshiganj								
36 Jamalpur Sadar								
61 Melandaha								
<b>49. Kurigram District</b>								
<b>Char area total</b>	<b>0%</b>	<b>0</b>	<b>23%</b>	<b>313,727</b>	<b>69</b>	<b>69</b>	<b>12</b>	<b>5</b>
08 Char Rajibpur	0%	0	1%	622	6	6	2	-
09 Chilmari	0%	0	12%	13,604	10	10	2	2
52 Kurigram Sadar	0%	0	21%	56,342	17	17	1	1
61 Nageshwari	0%	0	30%	99,735	16	16	4	1
79 Raumari	0%	0	10%	16,397	12	12	1	-
94 Ulipur	0%	0	29%	127,028	8	8	2	1
<b>Out of Char total</b>								
06 Bhurungamari								
18 Phulbari								
77 Rajarhat								
<b>88. Sirajganj District</b>								
<b>Char area total</b>	<b>1%</b>	<b>3,187</b>	<b>37%</b>	<b>606,805</b>	<b>46</b>	<b>46</b>	<b>9</b>	<b>9</b>
11 Belkuchi	0%	0	25%	80,158	10	10	2	2
27 Chauhali	0%	0	20%	23,328	-	-	1	1
50 Kazipur	0%	0	30%	77,350	-	-	4	4
67 Shahjadpur	5%	3,187	35%	180,974	18	18	-	-
78 Sirajganj Sadar	0%	0	55%	244,995	18	18	2	2
<b>Out of Char total</b>								
44 Kamarkhanda								
61 Raiganj								
89 Tarash								
94 Ullah Para								
<b>Char Total</b>				31%				
<b>District Total</b>	<b>8%</b>	<b>114,257</b>	<b>31%</b>	<b>1,703,338</b>	<b>209</b>	<b>241</b>	<b>29</b>	<b>21</b>

Table D.10. Schools in Algar Char

Information Sheets for Rural Infrastructure Development								
District Upazila	College/ High School		Primary School/ Madrasha					
	Char Area		Char Area Primary+Madrasha			Total Upazila Primary+Madrasha		
	Number (Nos.)	Capacity (Student)	Number (Nos.)	Capacity (Student)	Rate (%)	Number (Nos.)	Capacity (Student)	Rate (%)
<b>32. Gaibandha District</b>								
<b>Char area total</b>	<b>9</b>	<b>3,094</b>	<b>172</b>	<b>45,191</b>	<b>22%</b>	<b>840</b>	<b>240,429</b>	<b>18%</b>
21 Fulchhari	2	852	88	19,978	22%	121	22,705	16%
24 Gaibandha Sadar	4	1,640	36	10,398	43%	234	97,713	22%
88 Saghatta	0	0	26	7,690	13%	175	45,474	14%
91 Sundarganj	3	602	22	7,125	29%	310	74,537	18%
<b>Out of Char total</b>								
30 Gobindaganj								
67 Palashbari								
82 Sadullapur								
<b>39. Jamalpur District</b>								
<b>Char area total</b>	<b>68</b>	<b>28,050</b>	<b>317</b>	<b>57,500</b>	<b>15%</b>	<b>630</b>	<b>153,182</b>	<b>13%</b>
15 Dewanganj	19	8,200	128	15,050	10%	151	32,500	14%
29 Islampur	13	3,000	71	11,250	17%	138	28,500	9%
58 Madarganj	18	8,300	88	23,200	31%	181	48,682	20%
85 Sarishabari	18	8,550	30	8,000	9%	160	43,500	12%
<b>Out of Char total</b>								
07 Bakshiganj								
36 Jamalpur Sadar								
61 Melandaha								
<b>49. Kurigram District</b>								
<b>Char area total</b>	<b>19</b>	<b>4,498</b>	<b>248</b>	<b>53,310</b>	<b>16%</b>	<b>877</b>	<b>237,025</b>	<b>17%</b>
08 Char Rajibpur	3	852	38	8,392	18%	61	14,009	23%
09 Chilmari	1	295	25	6,304	12%	97	26,251	23%
52 Kurigram Sadar	0	0	10	1,700	8%	131	56,464	21%
61 Nageshwari	9	1,500	49	9,100	8%	204	46,350	14%
79 Raumari	4	1,100	68	16,200	36%	87	24,900	15%
94 Ulipur	2	751	58	11,614	19%	297	69,051	16%
<b>Out of Char total</b>								
06 Bhurungamari								
18 Phulbari								
77 Rajarhat								
<b>88. Sirajganj District</b>								
<b>Char area total</b>	<b>29</b>	<b>8,900</b>	<b>240</b>	<b>48,240</b>	<b>10%</b>	<b>798</b>	<b>186,300</b>	<b>11%</b>
11 Belkuchi	13	4,000	37	7,400	8%	154	32,400	10%
27 Chauhali	0	0	25	3,320	3%	57	19,000	16%
50 Kazipur	7	2,100	99	20,100	16%	230	47,400	18%
67 Shahjadpur	2	700	45	8,400	13%	243	59,000	11%
78 Sirajganj Sadar	7	2,100	34	9,020	11%	114	28,500	6%
<b>Out of Char total</b>								
44 Kamarkhanda								
61 Raiganj								
89 Tarash								
94 Ullah Para								
<b>Char Total</b>	<b>125</b>	<b>44,542</b>	<b>977</b>	<b>204,241</b>	<b>15%</b>	<b>3,145</b>	<b>816,936</b>	<b>15%</b>
<b>District Total</b>								

Table D.11 Area and Population in Haor

District Upazila	Whole Districts				Within Haor Area				
	Area(ha)	Population	Population	Density	Area		Population		Density
		in 1981	in 2001	Head/km <sup>2</sup>	Area %	Area(ha)	(%) (nos.)	(%) (nos.)	Head/km <sup>2</sup>
<b>36. Habiganj District</b>	<b>258,079</b>	<b>1,526,609</b>	<b>1,828,178</b>	<b>708</b>					
<b>Haor Area Total</b>	<b>214,116</b>	<b>1,292,857</b>	<b>1,557,966</b>	<b>728</b>	<b>54%</b>	<b>139,389</b>	<b>41%</b>	<b>749,253</b>	<b>538</b>
02 Ajmiriganj	22,399	86,810	101,744	454	100%	22,399	100%	101,744	454
05 Bahubal	25,066	137,402	161,833	646	24%	5,915	3%	4,621	78
11 Baniachang	48,228	235,855	272,643	565	89%	42,957	74%	202,586	472
44 Habiganj Sadar	25,378	225,469	284,423	1,121	54%	13,586	32%	90,750	668
68 Lakhai	19,655	110,319	134,742	686	100%	19,655	100%	134,742	686
71 Madhabpur	29,427	250,069	321,048	1,091	37%	10,861	32%	101,243	932
77 Nabiganj	43,963	246,933	281,534	640	55%	24,016	40%	113,567	473
<b>Out of Haor Total</b>									
<b>26 Chunarughat</b>	<b>43,963</b>	<b>233,752</b>	<b>270,212</b>	<b>615</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>-</b>
<b>48. Kishoreganj District</b>	<b>268,871</b>	<b>2,306,079</b>	<b>2,786,946</b>	<b>1,037</b>					
<b>Haor Area Total</b>	<b>192,430</b>	<b>1,357,420</b>	<b>1,674,984</b>	<b>870</b>	<b>63%</b>	<b>169,377</b>	<b>45%</b>	<b>1,254,947</b>	<b>741</b>
02 Austagram	35,555	132,295	167,704	472	100%	35,555	100%	167,704	472
06 Bajitpur	19,377	197,081	250,807	1,294	75%	14,463	61%	153,786	1,063
33 Itna	40,195	132,948	154,901	385	100%	40,195	100%	154,901	385
42 Karimganj	20,051	237,155	281,529	1,404	100%	20,051	100%	281,529	1,404
49 Kishoreganj Sadar	19,373	300,337	375,182	1,937	38%	7,361	38%	142,554	1,937
59 Mithamain	22,292	108,204	141,788	636	100%	22,292	100%	141,788	636
76 Nikli	21,440	110,912	129,226	603	99%	21,168	96%	124,100	586
92 Tarail	14,147	138,488	173,848	1,229	59%	8,291	51%	88,585	1,068
<b>Out of Haor Total</b>	<b>76,441</b>	<b>948,659</b>	<b>1,111,962</b>	<b>1,455</b>		<b>0</b>		<b>0</b>	
11 Bhairab	13,933	192,448	228,681	1,641	0%	0	0%	0	-
27 Hossainpur	12,130	148,028	166,947	1,376	0%	0	0%	0	-
45 Katiadi	21,923	264,501	327,839	1,495	0%	0	0%	0	-
54 Kuliar Char	10,402	133,327	133,327	1,282	0%	0	0%	0	-
79 Pakundia	18,054	210,355	255,167	1,413	0%	0	0%	0	-
<b>72. Netrokona District</b>	<b>279,634</b>	<b>1,730,865</b>	<b>2,102,384</b>	<b>752</b>					
<b>Haor Area Total</b>	<b>114,411</b>	<b>532,119</b>	<b>628,090</b>	<b>549</b>	<b>25%</b>	<b>70,122</b>	<b>13%</b>	<b>271,563</b>	<b>387</b>
38 Khaliajuri	29,764	75,801	83,649	281	100%	29,764	100%	83,649	281
40 Kalmakanda	37,742	209,290	256,126	679	34%	12,870	25%	63,992	497
56 Madan	22,586	117,613	133,170	590	58%	13,131	46%	61,208	466
63 Mohanganj	24,319	129,415	155,147	638	59%	14,357	40%	62,714	437
<b>Out of Haor Total</b>	<b>165,223</b>	<b>1,198,746</b>	<b>1,474,294</b>	<b>892</b>		<b>0</b>		<b>0</b>	
04 Atpara	19,515	120,491	136,159	698	0%	0	0%	0	-
09 Barhatta	22,150	142,174	175,359	792	0%	0	0%	0	-
18 Durgapur	27,930	169,135	211,491	757	0%	0	0%	0	-
47 Kendua	30,361	265,628	323,165	1,064	0%	0	0%	0	-
74 Netrokona Sadar	34,036	265,643	323,183	950	0%	0	0%	0	-
83 Purbadhala	31,232	235,675	304,937	976	0%	0	0%	0	-
<b>90. Sunamganj District</b>	<b>366,970</b>	<b>1,708,563</b>	<b>2,009,014</b>	<b>547</b>					
<b>Haor Area Total</b>	<b>366,970</b>	<b>1,708,563</b>	<b>2,009,014</b>	<b>547</b>	<b>74%</b>	<b>271,305</b>	<b>60%</b>	<b>1,201,333</b>	<b>443</b>
18 Bishwambarpur	19,426	106,182	128,802	663	57%	11,057	44%	56,936	515
23 Chhatak	43,478	273,153	337,240	776	52%	22,663	38%	128,939	569
29 Derai	42,094	185,284	207,114	492	100%	42,094	100%	207,114	492
32 Dharampasha	49,606	164,131	182,744	368	95%	47,342	87%	158,774	335
33 Dowarabazar	28,142	157,240	180,515	641	18%	5,076	16%	28,568	563
47 Jagannathpur	36,827	188,139	216,628	588	52%	18,992	35%	76,507	403
50 Jamalganj	33,876	107,771	123,115	363	100%	33,876	100%	123,115	363
86 Sulla	26,073	89,941	113,680	436	100%	26,073	100%	113,680	436
89 Sunamganj Sadar	56,077	303,153	356,674	636	72%	40,149	59%	211,153	526
92 Tahirpur	31,370	133,569	162,501	518	76%	23,982	59%	96,548	403
<b>Haor Total</b>			<b>5,870,055</b>			<b>650,192</b>		<b>3,477,095</b>	
<b>District Total</b>	<b>1,173,554</b>	<b>7,272,116</b>	<b>8,726,522</b>	<b>744</b>	<b>55%</b>	<b>650,192</b>	<b>40%</b>	<b>3,477,095</b>	<b>535</b>



Table D.12 Rural Communication Road in Haor

District Upazila	Length of Rural Road			Road Density		Requirement (km)		
	R1+R2+R3 (km)	FRB (km)	Total (km)	(m/Popul.)	(m/km <sup>2</sup> )	Total (km)	Submersible Road (km)	Paved Road on Embankment
<b>36. Habiganj District</b>	<b>2,558</b>	<b>252</b>	<b>2,809</b>	<b>1.54</b>	<b>1,089</b>			
<b>Haor Area Total</b>	<b>170</b>	<b>111</b>	<b>281</b>	<b>0.38</b>	<b>202</b>	<b>927</b>	<b>148</b>	<b>32</b>
02 Ajmiriganj	12	20	32	0.31	143	132	15	12
05 Bahubal	38	30	68	14.71	1,150	(61)	-	-
11 Baniachang	17	50	67	0.33	156	260	70	20
44 Habiganj Sadar	50	2	52	0.57	383	94	5	-
68 Lakhai	12	2	14	0.10	71	203	35	-
71 Madhabpur	30	5	35	0.35	322	128	10	-
77 Nabiganj	11	2	13	0.11	54	170	13	-
<b>Out of Haor</b>								
<b>26 Chunarughat</b>	<b>418</b>	<b>29</b>	<b>447</b>	<b>1.65</b>	<b>1,017</b>			
<b>48. Kishoreganj District</b>	<b>4,391</b>	<b>407</b>	<b>4,798</b>	<b>1.72</b>	<b>1,784</b>			
<b>Haor Area Total</b>	<b>1,054</b>	<b>266</b>	<b>1,320</b>	<b>1.05</b>	<b>779</b>	<b>703</b>	<b>195</b>	<b>13</b>
02 Austagram	201	48	249	1.48	700	21	45	5
06 Bajitpur	21	14	35	0.23	242	213	10	8
33 Itna	213	64	277	1.79	689	(27)	65	-
42 Karimganj	150	27	177	0.63	883	277	35	-
49 Kishoreganj Sadar	18	60	78	0.55	1,060	152	-	-
59 Mithamain	115	23	138	0.97	619	91	21	-
76 Nikli	181	7	188	1.51	888	12	15	-
92 Tarail	155	23	178	2.01	2,147	(35)	4	-
<b>Out of Haor</b>								
11 Bhairab	110	27	137	0.60	980			
27 Hossainpur	195	23	219	1.31	1,803			
45 Katiadi	347	25	372	1.14	1,697			
54 Kuliar Char	534	26	560	4.20	5,383			
79 Pakundia	398	34	432	1.69	2,390			
<b>72. Netrokona District</b>	<b>3,040</b>	<b>502</b>	<b>3,542</b>	<b>1.68</b>	<b>1,267</b>			
<b>Haor Area Total</b>	<b>264</b>	<b>44</b>	<b>308</b>	<b>1.13</b>	<b>439</b>	<b>130</b>	<b>73</b>	<b>28</b>
38 Khaliajuri	50	2	52	0.62	175	83	32	6
40 Kalmakanda	94	8	102	1.59	793	1	3	-
56 Madan	110	13	123	2.01	937	(24)	25	-
63 Mohanganj	10	21	31	0.49	216	70	13	22
<b>Out of Haor</b>								
04 Atpara	215	62	277	2.04	1,420			
09 Barhatta	280	29	309	1.76	1,394			
18 Durgapur	277	54	331	1.57	1,185			
47 Kendua	519	57	576	1.78	1,897			
74 Netrokona Sadar	539	82	621	1.92	1,825			
83 Purbadhala	413	38	451	1.48	1,445			
<b>90. Sunamganj District</b>	<b>2,462</b>	<b>457</b>	<b>2,919</b>	<b>1.45</b>	<b>795</b>			
<b>Haor Area Total</b>	<b>412</b>	<b>280</b>	<b>692</b>	<b>0.58</b>	<b>255</b>	<b>1,245</b>	<b>284</b>	<b>68</b>
18 Bishwambarpur	17	2	19	0.33	172	73	9	9
23 Chhatak	78	15	93	0.72	410	115	19	-
29 Derai	53	58	111	0.54	264	223	62	13
32 Dharampasha	19	54	73	0.46	154	183	60	20
33 Dowarabazar	53	50	103	3.61	2,029	(57)	-	-
47 Jagannathpur	26	16	42	0.55	221	81	5	9
50 Jamalganj	50	17	67	0.54	198	131	33	17
86 Sullia	52	14	66	0.58	253	117	25	-
89 Sunamganj Sadar	52	26	78	0.37	194	262	32	-
92 Tahirpur	12	28	40	0.41	167	116	39	-
<b>Haor Total</b>	<b>1,900</b>	<b>701</b>	<b>2,601</b>	<b>0.75</b>	<b>400</b>			
<b>District Total</b>	<b>12,451</b>	<b>1,617</b>	<b>14,067</b>	<b>1.61</b>	<b>1,199</b>	<b>3,004</b>	<b>700</b>	<b>141</b>

Table D.13 Growth Center/ Hat Bazaar in Haor

District Upazila	Existing numbers				Bazar Density 1000sq.m capita	Total Upazila		Requirement	
	Growth Center (Nos.)	Hat Bazar (Nos.)	Bazar Total (sq.m)	Bazar Total (sq.m)		Density 1000sq.m capita	Area 389 (sq.m)	Number (Nos.)	
<b>36. Habiganj District</b>					<b>266,985</b>	<b>171</b>			
<b>Haor Area Total</b>	<b>11</b>	<b>22</b>	<b>39,062</b>	<b>52</b>			<b>107,558</b>	<b>20</b>	
02 Ajmiriganj	2	2	6,112	60	5,230	51	13,798	3	
05 Bahubal	1	2	13,000	2,813	80,000	494	(12,096)	(3)	
11 Baniachang	5	4	5,700	28	97,600	358	33,944	6	
44 Habiganj Sadar	0	0	0	0	40,100	141	17,759	3	
68 Lakhai	2	7	8,000	59	11,000	82	18,368	4	
71 Madhabpur	0	1	3,280	32	6,295	20	16,532	3	
77 Nabiganj	1	6	2,970	26	26,760	95	19,254	4	
<b>Out of Haor</b>									
<b>26 Chunarughat</b>									
<b>48. Kishoreganj District</b>					<b>454,789</b>	<b>272</b>			
<b>Haor Area Total</b>	<b>10</b>	<b>45</b>	<b>223,172</b>	<b>178</b>			<b>22,407</b>	<b>7</b>	
02 Austagram	3	11	111,600	665	111,600	665	(78,782)	(14)	
06 Bajitpur	0	3	5,000	33	85,094	339	25,094	5	
33 Itna	0	8	18,000	116	35,000	226	12,312	3	
42 Karimganj	0	3	6,072	22	71,845	255	49,020	9	
49 Kishoreganj Sadar	1	8	27,000	189	58,250	155	896	1	
59 Mithamain	3	7	32,000	226	32,000	226	(4,254)	(1)	
76 Nikli	1	1	9,000	73	28,500	221	15,285	3	
92 Tarail	2	4	14,500	164	32,500	187	2,835	1	
<b>Out of Haor</b>									
11 Bhairab									
27 Hossainpur									
45 Katiadi									
54 Kuliar Char									
79 Pakundia									
<b>72. Netrokona District</b>					<b>368,450</b>	<b>587</b>			
<b>Haor Area Total</b>	<b>8</b>	<b>21</b>	<b>109,435</b>	<b>403</b>				<b>(11)</b>	
38 Khaliajuri	4	8	35,000	418	35,000	418	(18,631)	(4)	
40 Kalmakanda	1	5	36,435	569	230,750	901	(23,912)	(4)	
56 Madan	1	3	16,000	261	49,000	368	(4,022)	(1)	
63 Mohanganj	2	5	22,000	351	53,700	346	(9,728)	(2)	
<b>Out of Haor</b>									
04 Atpara									
09 Barhatta									
18 Durgapur									
47 Kendua									
74 Netrokona Sadar									
83 Purbadhala									
<b>90. Sunamganj District</b>					<b>617,460</b>	<b>307</b>			
<b>Haor Area Total</b>	<b>22</b>	<b>83</b>	<b>323,620</b>	<b>269</b>				<b>(18)</b>	
18 Bishwambarpur	1	4	4,770	84	43,240	336	6,372	2	
23 Chhatak	0	13	26,100	202	138,000	409	(868)	(1)	
29 Derai	4	14	49,520	239	49,520	239	(8,990)	(2)	
32 Dharampasha	3	9	35,430	223	49,220	269	(4,360)	(1)	
33 Dowarabazar	2	10	21,000	735	64,000	355	(15,410)	(3)	
47 Jagannathpur	1	6	27,000	353	26,480	122	(12,028)	(3)	
50 Jamalganj	4	4	46,000	374	46,000	374	(21,908)	(4)	
86 Sulla	3	6	42,000	369	42,000	369	(19,754)	(4)	
89 Sunamganj Sadar	2	12	40,000	189	106,000	297	1,320	1	
92 Tahirpur	2	5	31,800	329	53,000	326	(12,907)	(3)	
<b>Haor Total</b>			<b>3,132</b> (sq.m/Bazar)		<b>3,116</b> (sq.m/Bazar)				
<b>District Total</b>	<b>51</b>	<b>171</b>	<b>695,289</b>	<b>200</b>	<b>1,707,684</b>	<b>196</b>	<b>129,966</b>	<b>(2)</b>	

Table D.14 Hand Tubewell. Launch Ghat in Haor

## Information Sheets for Rural Infrastructure Development

District Upazila	Hand Tubewell						Launch Ghat			
	Sample Area			Char Area			Requirement (nos.)	Launch Ghat (Nos.)	Launch Route (km)	Requirement Ghat (nos.)
	Number (nos.)	User (people)	Area (ha)	Existing number Users/tube popl./well	Total Area/tube (ha/nos.)	Total fubewell (nos.)				
<b>36. Habiganj District</b>										
<b>Haor Area Total</b>				<b>57</b>	<b>17</b>	<b>13,068</b>	<b>1,919</b>	<b>7</b>	<b>11</b>	<b>9</b>
02 Ajmiriganj	59	3,511	1,954	60	33	1,710	326	2	0	3
05 Bahubal				57	17	81	11	0	0	-
11 Baniachang	243	14,401	3,241	59	13	3,418	634	2	0	1
44 Habiganj Sadar				57	17	1,597	218	0	0	-
68 Lakhai	130	7,469	2,337	57	18	2,345	350	1	0	3
71 Madhabpur				57	17	1,782	243	0	0	-
77 Nabiganj	233	12,400	4,001	53	17	2,134	137	2	11	2
<b>Out of Haor</b>										
<b>26 Chunarughat</b>										
<b>48. Kishoreganj District</b>										
<b>Haor Area Total</b>				<b>74</b>	<b>10</b>	<b>16,927</b>	<b>12,198</b>	<b>56</b>	<b>237</b>	<b>20</b>
02 Austagram	156	20,209	5,019	130	32	1,295	2,060	14	78	5
06 Bajitpur	1,383	30,448	3,315	22	2	6,985	0	3	22	3
33 Itna	100	14,867	3,403	149	34	1,042	2,056	15	65	5
42 Karimganj	27	6,400	1,179	237	44	1,188	4,443	2	10	1
49 Kishoreganj Sadar				54	7	2,647	204	0	0	-
59 Mithamain	238	19,651	3,749	83	16	1,717	1,119	21	62	5
76 Nikli	8	6,000	969	750	121	165	2,316	1	0	1
92 Tarail	715	33,556	4,081	47	6	1,888	0	0	0	-
<b>Out of Haor</b>										
11 Bhairab									0	
27 Hossainpur									0	
45 Katiadi									0	
54 Kuliar Char									0	
79 Pakundia									0	
<b>72. Netrokona District</b>										
<b>Haor Area Total</b>				<b>96</b>	<b>25</b>	<b>2,841</b>	<b>2,590</b>	<b>12</b>	<b>18</b>	<b>3</b>
38 Khaliajuri	143	15,920	4,033	111	28	751	921	4	4	2
40 Kalmakanda	147	16,691	2,153	114	15	564	716	1	3	-
56 Madan	334	22,430	2,375	67	7	911	313	3	4	1
63 Mohanganj	203	20,700	3,332	102	16	615	640	4	7	-
<b>Out of Haor</b>										
04 Atpara	39	2,800	431	72	11				6	
09 Barhatta	43	4,500	405	105	9				3	
18 Durgapur									1	
47 Kendua									0	
74 Netrokona Sadar									0	
83 Purbadhala									0	
<b>90. Sunamganj District</b>										
<b>Haor Area Total</b>				<b>103</b>	<b>23</b>	<b>11,668</b>	<b>12,493</b>	<b>52</b>	<b>233</b>	<b>28</b>
18 Bishwambarpur				75	14	757	382	4	0	-
23 Chhatak				75	14	1,714	864	0	0	1
29 Derai	156	14,854	4,733	95	30	2,175	1,967	10	0	6
32 Dharampasha	43	6,356	4,409	148	103	1,074	2,101	5	59	7
33 Dowarabazar				75	14	380	191	19	28	1
47 Jagannathpur				75	14	1,017	514	1	25	1
50 Jamalganj	114	24,721	4,609	217	40	568	1,894	4	36	3
86 Sulla	135	28,740	4,186	213	31	534	1,740	4	65	4
89 Sunamganj Sadar	113	17,241	2,631	153	23	1,384	2,840	4	20	5
92 Tahirpur	307	14,353	3,342	47	11	2,065	0	1	0	-
<b>Haor Total</b>							<b>29,200</b>	<b>127</b>	<b>499</b>	<b>60</b>
<b>District Total</b>										

Table D.15 Rural Electrification and Tele-communication in Haor

District Upazila	Char Area		Total Upazila		Requirement			
	Coverage Rate (%)	Population electrified (People)	Average 31% (%)	Population electrified (People)	Transmission Line (km)	Telephone Line (km)	Radio Station (nos.)	Renewable Energy (nos.)
<b>36. Habiganj District</b>								
<b>Haor Area Total</b>	<b>13%</b>	<b>95,872</b>	<b>46%</b>	<b>710,664</b>	<b>171</b>	<b>171</b>	<b>8</b>	
02 Ajmiriganj	4%	4,070	30%	30,523	24	24	3	-
05 Bahubal	25%	1,155	60%	97,100	4	4	-	-
11 Baniachang	3%	6,078	15%	40,896	72	72	3	-
44 Habiganj Sadar	25%	22,687	55%	156,433	5	5	-	-
68 Lakhai	2%	2,695	15%	20,211	35	35	2	-
71 Madhabpur	45%	45,559	70%	224,733	8	8	-	-
77 Nabiganj	12%	13,628	50%	140,767	23	23	-	-
<b>Out of Haor</b>								
<b>26 Chunarughat</b>								
<b>48. Kishoreganj District</b>								
<b>Haor Area Total</b>	<b>12%</b>	<b>155,238</b>	<b>42%</b>	<b>704,378</b>	<b>148</b>	<b>148</b>	<b>14</b>	
02 Austagram	60%	100,622	60%	100,622	20	20	3	-
06 Bajitpur	10%	15,379	80%	200,646	9	9	1	-
33 Itna	8%	12,392	20%	30,980	50	50	5	-
42 Karimganj	5%	14,076	40%	112,611	22	22	1	-
49 Kishoreganj Sadar	1%	1,426	35%	131,314	4	4	-	-
59 Mithamain	8%	11,343	20%	28,358	18	18	3	-
76 Nikli	0%	0	10%	12,923	13	13	1	-
92 Taraail	0%	0	50%	86,924	12	12	-	-
<b>Out of Haor</b>								
11 Bhairab								
27 Hossainpur								
45 Katiadi								
54 Kuliar Char								
79 Pakundia								
<b>72. Netrokona District</b>								
<b>Haor Area Total</b>	<b>10%</b>	<b>27,748</b>	<b>12%</b>	<b>74,551</b>	<b>100</b>	<b>100</b>	<b>7</b>	
38 Khaliajuri	25%	20,912	25%	20,912	35	35	2	-
40 Kalmakanda	1%	640	7%	17,929	15	15	1	-
56 Madan	5%	3,060	14%	18,644	25	25	2	-
63 Mohanganj	5%	3,136	11%	17,066	25	25	2	-
<b>Out of Haor</b>								
04 Atpara								
09 Barhatta								
18 Durgapur								
47 Kendua								
74 Netrokona Sadar								
83 Purbadhala								
<b>90. Sunamganj District</b>								
<b>Haor Area Total</b>	<b>8%</b>	<b>101,105</b>	<b>34%</b>	<b>677,459</b>	<b>225</b>	<b>225</b>	<b>23</b>	
18 Bishwambarpur	5%	2,847	15%	19,320	5	5	1	-
23 Chhatak	23%	29,656	39%	131,524	11	11	-	-
29 Derai	2%	4,142	37%	76,632	48	48	5	-
32 Dharampasha	3%	4,763	22%	40,204	69	69	6	-
33 Dowarabazar	20%	5,714	35%	63,180	7	7	-	-
47 Jagannathpur	40%	30,603	50%	108,314	5	5	-	-
50 Jamalganj	7%	8,618	50%	61,557	30	30	3	-
86 Sulla	2%	2,274	2%	2,274	17	17	4	-
89 Sunamganj Sadar	5%	10,558	48%	171,204	-	-	1	-
92 Tahirpur	2%	1,931	2%	3,250	33	33	3	-
<b>Haor Total</b>				37%				
<b>District Total</b>	<b>11%</b>	<b>379,963</b>	<b>37%</b>	<b>2,167,051</b>	<b>644</b>	<b>644</b>	<b>52</b>	

Table D.16 Schools in Haor

Information Sheets for Rural Infrastructure Development								
District Upazila	College/ High School		Primary School/ Madrasha					
	Haor Area		Haor Area			Total Upazila		
	Number (Nos.)	Capacity (Student)	Number (Nos.)	Total (Student)	Rate (%)	Number (Nos.)	Total (Student)	Rate (%)
<b>36. Habiganj District</b>								
<b>Haor Area Total</b>	<b>14</b>	<b>7,600</b>	<b>283</b>	<b>60,648</b>	<b>8%</b>	<b>904</b>	<b>205,917</b>	<b>13%</b>
02 Ajmiriganj	2	1,000	27	3,800	4%	61	10,500	10%
05 Bahubal	1	450	6	600	13%	118	27,097	17%
11 Baniachang	3	1,000	103	24,130	12%	217	38,700	14%
44 Habiganj Sadar	1	150	25	6,150	7%	122	37,100	13%
68 Lakhai	4	3,000	38	5,960	4%	69	12,000	9%
71 Madhabpur	0	0	19	4,008	4%	139	36,620	11%
77 Nabiganj	3	2,000	65	16,000	14%	178	43,900	16%
<b>Out of Haor</b>								
<b>26 Chunarughat</b>								
<b>48. Kishoreganj District</b>								
<b>Haor Area Total</b>	<b>42</b>	<b>12,850</b>	<b>414</b>	<b>79,850</b>	<b>6%</b>	<b>712</b>	<b>178,386</b>	<b>11%</b>
02 Austagram	9	2,000	88	11,700	7%	88	11,700	7%
06 Bajitpur	2	1,500	22	6,400	4%	85	25,200	10%
33 Itna	4	700	69	9,600	6%	77	15,878	10%
42 Karimganj	3	950	21	12,700	5%	133	40,070	14%
49 Kishoreganj Sadar	7	2,000	36	5,000	4%	83	25,188	7%
59 Mithamain	10	2,600	121	19,750	14%	121	19,750	14%
76 Nikli	4	1,600	36	6,400	5%	61	19,500	15%
92 Tarail	3	1,500	21	8,300	9%	64	21,100	12%
<b>Out of Haor</b>								
11 Bhairab								
27 Hossainpur								
45 Katiadi								
54 Kuliar Char								
79 Pakundia								
<b>72. Netrokona District</b>								
<b>Haor Area Total</b>	<b>25</b>	<b>9,066</b>	<b>130</b>	<b>25,417</b>	<b>9%</b>	<b>499</b>	<b>96,930</b>	<b>15%</b>
38 Khaliajuri	13	4,500	53	13,418	16%	53	13,418	16%
40 Kalmakanda	1	403	21	2,708	4%	256	46,218	18%
56 Madan	4	1,650	39	5,600	9%	104	18,750	14%
63 Mohanganj	7	2,513	17	3,691	6%	86	18,544	12%
<b>Out of Haor</b>								
04 Atpara								
09 Barhatta								
18 Durgapur								
47 Kendua								
74 Netrokona Sadar								
83 Purbadhala								
<b>90. Sunamganj District</b>								
<b>Haor Area Total</b>	<b>96</b>	<b>36,750</b>	<b>952</b>	<b>171,906</b>	<b>14%</b>	<b>1,428</b>	<b>292,680</b>	<b>15%</b>
18 Bishwambarpur	4	1,080	28	6,120	11%	75	18,377	14%
23 Chhatak	12	5,110	92	23,531	18%	177	53,034	16%
29 Derai	19	7,900	125	30,658	15%	125	30,658	15%
32 Dharampasha	17	4,853	183	12,434	8%	198	15,129	8%
33 Dowarabazar	5	1,500	26	6,565	23%	113	29,446	16%
47 Jagannathpur	4	1,885	51	10,400	14%	161	35,740	16%
50 Jamalganj	8	3,560	116	19,513	16%	116	19,513	16%
86 Sulla	12	3,400	101	14,399	13%	101	14,399	13%
89 Sunamganj Sadar	8	5,612	115	26,022	12%	221	51,409	14%
92 Tahirpur	7	1,850	115	22,264	23%	141	24,975	15%
<b>Haor Total</b>	<b>177</b>	<b>66,266</b>	<b>1,779</b>	<b>337,821</b>	<b>10%</b>	<b>3,543</b>	<b>773,913</b>	<b>13%</b>
<b>District Total</b>								

## **D. RURAL INFRASTRUCTURE**

### **D-2 FEASIBILITY STUDY**

## D. APPENDIX (Feasibility Study)

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#### Information Sheet for Rural Infrastructure Development in Gurai Gram

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**Table D.17 Area and Populaion in Algar Char Gram**

No. Name of Para	Information Sheets for Rural Infrastructure Development														
	Population					Density			Area breakdown						
	Total (no.)	Male (no.)	Female (no.)	HH (no.)	Family size (no./HH)	House number (no.)	Population House (no./house)	Population homestead (no./ha)	Para Total (ha)	Homestead area (ha)	Total (ha)	Farm land lowland (ha)	upland (ha)	Pond area (ha)	River area (ha)
1. Jalal sarker/ Hossain member para	740	368	372	142	5.2	235	3.1	49.7	153.1	14.9	137.0	97.0	40.0	1.2	0.0
2. Mokbul bapari para	262	136	126	51	5.1	59	4.4	87.3	112.4	3.0	109.0	75.0	34.0	0.4	0.0
3. Razzak chairman para	650	350	300	127	5.1	130	5.0	98.5	35.4	6.6	28.0	13.0	15.0	0.8	0.0
4. Aklas member/ Samad fokir para	579	307	272	114	5.1	238	2.4	52.2	92.6	11.1	81.0	58.0	23.0	0.5	0.0
5. Joynal member/ Hassan khalifa para	563	274	289	111	5.1	225	2.5	59.3	153.2	9.5	143.0	84.0	59.0	0.7	0.0
6. Zolil dewani para	158	82	76	31	5.1	52	3.0	38.5	93.1	4.1	34.0	15.0	19.0	0.0	55.0
7. Maher munshi para	187	93	94	35	5.3	36	5.2	64.5	72.9	2.9	30.0	13.0	17.0	0.0	40.0
<b>Target Area</b>	<b>1,749</b>	<b>892</b>	<b>857</b>	<b>342</b>	<b>5.1</b>	<b>610</b>	<b>2.9</b>	<b>57.2</b>	<b>524.2</b>	<b>30.6</b>	<b>397.0</b>	<b>245.0</b>	<b>152.0</b>	<b>1.6</b>	<b>95.0</b>
<b>Total</b>	<b>3,139</b>	<b>1,610</b>	<b>1,529</b>	<b>611</b>	<b>5.1</b>	<b>975</b>	<b>3.2</b>	<b>60.2</b>	<b>712.6</b>	<b>52.1</b>	<b>562.0</b>	<b>355.0</b>	<b>207.0</b>	<b>3.5</b>	<b>95.0</b>



**Table D.18 Rural Road in Algar Char Gram**

No.	Name of Para	Information Sheets for Rural Infrastructure Development																			
		R-2 Katcha road length				R-3 Katcha road length				Total Katcha road length				Density		Construction			Contribution		Maintenance Organization
		Elevated (m)	non-elevated (m)	culvert (no.)	culvert (no.)	Elevated (m)	non-elevated (m)	culvert (no.)	culvert (no.)	elevated (m)	non-elevated (m)	culvert (no.)	culvert (no.)	Road Popul. (m/no.)	Road h.area (m/ha)	Total Road Length (m)	Project	Organizati year	Cost	Reward	
1.	Jalal sarker/ Hossain member para	950	0	1	350	420	2	1,300	420	3	1,720	2.3	115	WFP/ LGED CARE	2000	n.a	Earth work Tk.600/1000cft	UP/ CARE			
2.	Mokbul bapari para	0	0	0	130	270	1	130	270	1	400	1.5	133	WFP	2000	n.a	Earth work Tk.100/day	UP			
3.	Razzak chairman para	810	0	1	330	310	3	1,140	310	4	1,450	2.2	220	WFP	2000	n.a	Earth work Tk.80-100/day	UP/ LGED			
4.	Aklas member/ Samad fokir para	0	0	0	270	880	4	270	880	4	1,150	2.0	104	n.a	1989	n.a	Earth work Tk.80-100/day	Chairman of UP			
5.	Joyal member/ Hassan khalifa para	0	0	0	260	840	1	260	840	1	1,100	2.0	116	WFP	2000	n.a	Earth work Tk.100/day	UP/ CARE			
6.	Zolil dewani para	0	0	0	0	0	0	0	0	0	0	0.0	0	-	-	-	-	-			
7.	Maher munshi para	0	0	0	0	0	0	0	0	0	0	0.0	0	-	-	-	-	-			
<b>Target Area</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>660</b>	<b>1,990</b>	<b>6</b>	<b>660</b>	<b>1,990</b>	<b>6</b>	<b>2,650</b>	<b>1.5</b>	<b>87</b>								
<b>Total</b>		<b>1,760</b>	<b>0</b>	<b>2</b>	<b>1,340</b>	<b>2,720</b>	<b>11</b>	<b>3,100</b>	<b>2,720</b>	<b>13</b>	<b>5,820</b>	<b>1.9</b>	<b>112</b>								

**Table D.19 Hand Tubewell in Algar Char Gram**

No. Name of Para	Exis. numbers of tubewell		1998 flood		Coverage		Existing Tubewell		Requirement		Information Sheets for Rural Infrastructure Development							
	Total (no.)	Govt. (no.)	Private (no.)	Inundated (no.)	Non-inundated (no.)	Population (popl./no.)	Area (ha/no.)	Area (no.)	Newly required (no.)	Rasing (no.)	Total (no.)	Coverage (popl./no.)	Depth (m)	Price (Tk.)	Existing Organization	Condition	Quality	Contribute
1. Jalal sarker/ Hossain member para	20	1	19	10	10	74	1.5	10		10	74	20.0	3,000	private/DPHE/NGO	Fe		750	
2. Mokbul bapari para	5	1	4	0	5	52	0.6	5		5	52	15.0	2,500	DPHE	Fe		750	
3. Razzak chairman para	4	2	2	0	4	163	1.7	4	5	9	72	13.0	2,500	DPHE	good		750	
4. Aklas member/ Samad fokir para	12	8	4	0	12	48	0.9	12		12	48	20.0	3,000	DPHE	Fe		750	
5. Joynal member/ Hassan khalifa para	15	1	14	0	15	38	0.6	15		15	38	17.0	2,000	DPHE	Fe		750	
6. Zolil dewani para	4	0	4	4	0	-	-	0	3	3	53	14.0	3,000	private	Fe		no govt. tubewell	
7. Maher munshi para	2	0	2	2	0	-	-	0	1	2	3	23.0	2,500	private	good		no govt. tubewell	
<b>Target Area</b>	<b>38</b>	<b>10</b>	<b>28</b>	<b>6</b>	<b>32</b>	<b>55</b>	<b>1.0</b>	<b>32</b>	<b>1</b>	<b>5</b>	<b>38</b>	<b>46</b>						
<b>Total</b>	<b>62</b>	<b>13</b>	<b>49</b>	<b>16</b>	<b>46</b>	<b>68</b>	<b>1.1</b>	<b>46</b>	<b>6</b>	<b>5</b>	<b>57</b>	<b>55</b>						

**Table D.20 Latrines in Algar Char Gram**

No. Name of Para	Sanitary Latrine			Coverage Latrine H/H (no./HH)	Information Sheets for Rural Infrastructure Development				
	Total nos. (no.)	Govt. nos. (no.)	Private nos. (no.)		Cost (Tk.)	Organization	Contribution (Tk.)	Maintenance	Community
1. Jalal sarker/ Hossain member para	2	0	2	1.4%	n.a	CARE	n.a	n.a	nil
2. Mokbul bapari para	1	12	8	2.0%	2,000	CARE	labour	n.a	nil
3. Razzak chairman para	0	0	0	0.0%	-	-	-	-	-
4. Aklas member/ Samad fokir para	8	8	0	7.0%	2,500	DPHE	labour	users	nil
5. Joynal member/ Hassan khailifa para	6	0	6	5.4%	1,000	Jono Kallyan Sangstha	n.a	n.a	nil
6. Zolil dewani para	0	0	0	0.0%	-	-	-	-	-
7. Maher munshi para	0	0	0	0.0%	-	-	-	-	-
<b>Target Area</b>	<b>15</b>	<b>20</b>	<b>14</b>	<b>4.4%</b>	<b>1,833</b>				
<b>Total</b>	<b>17</b>	<b>20</b>	<b>16</b>	<b>2.8%</b>	<b>1,833</b>				

**Table D.21 Schools in Algar Char Gram**

No.	Name of Para	School Type	Built year	Cost Tk.	Organization	Space		Student		Teacher (no.)	Facilities (no.)				
						building (sq.m)	ground (m x m)	Total (no.)	boy (no.)		girl (no.)	Hand tubewell Exist	S. Latrine Exist	damaged	damaged
1.	Jalal sarker/ Hossain member para	Primary	2001	402,563	CARE/ SAS	139	19.0x7.3	1,035	45	2	4	1	0	2	0
2.	Mokbul bapari para	nil	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Razzak chairman para	Secondary	2001	1,000,000	CARE	160	20.0x8.0	2,800	n.a	n.a	n.a	1	-	4	-
4.	Akias member/ Samad fokir para	Primary	1993	785,000	LGED	200	25.0x8.0	8,000	136	134	3	1	0	0	-
4.	- do -	Madrasha	2001	n.a	CARE	2,100	60.0x35.0	2,100	n.a	n.a	n.a	1	-	2	-
5.	Joynal member/ Hassan khalifa para	nil	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Zolil dewani para	nil	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Maheer munshi para	nil	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Target Area</b>								<b>10,100</b>				<b>2</b>	<b>-</b>	<b>2</b>	<b>-</b>
<b>Total</b>						<b>2,599</b>		<b>13,935</b>	<b>181</b>	<b>136</b>	<b>7</b>	<b>4</b>	<b>0</b>	<b>8</b>	<b>0</b>

**Table D.22 Area and Population in Gurai Gram**

No.	Name of Para	Information Sheets for Rural Infrastructure Development															
		Population					Density			Area breakdown							
		Total (no.)	Male (no.)	Female (no.)	HH (no.)	Family size (no./HH)	House number (no.)	Population House (no./house)	Population homestead (no./km <sup>2</sup> )	Para Total (ha)	Homestead area (ha)	Total (ha)	Farm land (ha)	lowland (ha)	upland (ha)	Pond area (ha)	River area (ha)
1.	Chila para	148	81	67	21	7.0	21	7.0	29,600	8.6	0.5	8.1	8.1	0.0	0.0	0.0	0.0
2.	Bania para	415	226	189	58	7.2	39	10.6	51,875	11.1	0.8	10.1	10.1	0.0	0.2	0.0	0.0
3.	Atka para	755	410	345	109	6.9	92	8.2	41,944	26.4	1.8	24.3	24.3	0.0	0.3	0.0	0.0
4.	Uttar para	438	235	203	62	7.1	81	5.4	25,765	138.8	1.7	136.9	124.7	12.2	0.2	0.0	0.0
5.	Fakir para	103	56	47	15	6.9	28	3.7	8,583	6.0	1.2	4.5	4.5	0.0	0.3	0.0	0.0
6.	Jal para	597	324	273	85	7.0	136	4.4	15,711	28.0	3.8	23.1	22.7	0.4	1.2	0.0	0.0
7.	Kuna para	272	175	97	39	7.0	73	3.7	19,429	17.2	1.4	15.0	14.2	0.8	0.8	0.0	0.0
8.	Masjid para	1,837	1,001	836	248	7.4	199	9.2	23,551	76.3	7.8	67.0	60.7	6.3	1.5	0.0	0.0
9.	Namasud para	156	84	72	22	7.1	24	6.5	26,000	4.0	0.6	3.0	2.8	0.2	0.4	0.0	0.0
10.	Dakhin para	643	350	293	85	7.6	56	11.5	53,140	18.6	1.2	16.2	16.2	0.0	1.2	0.0	0.0
11.	Purba para	1,833	1,010	823	256	7.2	133	13.8	50,917	95.1	3.6	89.1	87.0	2.0	2.5	0.0	0.0
12.	Ghosh para	555	302	253	81	6.9	67	8.3	18,500	20.2	3.0	16.6	16.2	0.4	0.6	0.0	0.0
13.	Pashchim para	815	444	371	116	7.0	69	11.8	54,333	40.8	1.5	37.3	36.4	0.8	2.0	0.0	0.0
14.	Shibir para	749	411	338	107	7.0	92	8.1	24,967	37.2	3.0	32.4	32.4	0.0	1.8	0.0	0.0
15.	Pal para	841	469	372	121	7.0	87	9.7	22,132	11.8	3.8	6.5	6.1	0.4	1.5	0.0	0.0
16.	Naogaon para	1,346	745	601	205	6.6	230	5.9	28,042	19.4	4.8	13.0	12.2	0.8	1.6	0.0	0.0
17.	Moddon para	629	333	296	90	7.0	129	4.9	23,296	7.2	2.7	4.5	4.1	0.4	0.0	0.0	0.0
	Gurai Bazar									2.4	1.5				0.9		
	<b>Target Area</b>	<b>4,449</b>	<b>2,457</b>	<b>1,992</b>	<b>621</b>	<b>7.2</b>	<b>567</b>	<b>7.8</b>	<b>31,309</b>	<b>323.4</b>	<b>14.2</b>	<b>302.9</b>	<b>287.5</b>	<b>15.4</b>	<b>6.3</b>	<b>0.0</b>	<b>0.0</b>
	<b>Total</b>	<b>12,132</b>	<b>6,656</b>	<b>5,476</b>	<b>1,720</b>	<b>7.1</b>	<b>1,556</b>	<b>7.8</b>	<b>27,135</b>	<b>569.0</b>	<b>44.7</b>	<b>507.3</b>	<b>482.6</b>	<b>24.7</b>	<b>17.0</b>	<b>0.0</b>	<b>0.0</b>

**Table D.23 Rural Road in Gurai Gram**

No.	Name of Para	Information Sheets for Rural Infrastructure Development																		
		R-2 Katcha road length				R-3 Katcha road length				Total Katcha road length		Total Road Length		Density		Farm road		Construction		
		elevated (m)	non-elevated (m)	culvert (no.)	culvert (no.)	elevated (m)	non-elevated (m)	culvert (no.)	culvert (no.)	elevated (m)	non-elevated (m)	culvert (no.)	culvert (no.)	Popul. (m/no.)	Road h.area (m/ha)	Paved submersible (m)	non-elevated (m)	Organization	Contribution	Reward
1.	Chila para	0	0	0	0	190	0	190	0	190	0	0	1.3	380	-	-	n.a	n.a	n.a	
2.	Bania para	0	0	0	0	120	0	120	0	120	0	0	0.3	150	-	-	UP	Earth w.	rice/wheat	
3.	Atka para	0	0	0	0	230	0	230	0	230	0	0	0.3	128	-	-	n.a	n.a	n.a	
4.	Uttar para	0	0	0	0	200	110	200	110	200	0	0	0.7	182	-	-	UP	Earth w.	wheat/money	
5.	Fakir para	0	0	0	0	290	0	290	0	290	0	0	2.8	242	-	-	UP	Earth w.	rice/wheat/money	
6.	Jal para	0	0	0	1	280	90	280	90	280	1	1	0.6	97	-	-	UP	Earth w.	money	
7.	Kuna para	0	0	0	0	320	110	320	110	320	0	0	1.6	307	-	-	n.a	Earth w.	wheat/money	
8.	Masjid para	80	0	0	1	630	90	630	90	710	1	1	0.4	103	-	-	n.a	Earth w.	wheat/money	
9.	Namasud para	0	0	0	0	120	0	120	0	120	0	0	0.8	200	-	-	UP	Earth w.	money	
10.	Dakhin para	0	0	0	2	210	0	210	0	210	2	2	0.3	174	-	-	-	-	-	
11.	Purba para	0	0	0	0	570	0	570	0	570	0	0	0.3	158	-	-	n.a	n.a	n.a	
12.	Ghosh para	210	220	0	0	180	290	290	390	390	0	0	1.6	300	-	-	UP/CARE	Earth w.	money	
13.	Pashchim para	0	0	0	0	120	0	120	0	120	0	0	0.1	80	-	-	UP	Earth w.	rice/money	
14.	Shibir para	230	0	0	0	90	0	90	320	0	0	0	0.4	107	-	-	UP	Earth w.	wheat	
15.	Pal para	190	0	0	1	210	0	210	190	210	1	1	0.5	105	-	-	Private	Earth w.	money	
16.	Naoagon para	470	0	2	0	190	0	190	660	0	2	2	0.5	138	-	-	n.a	Earth w.	money	
17.	Mocdon para	0	0	0	0	310	0	310	0	310	0	0	0.5	115	-	-	LGED	Earth w.	money	
<b>Target Area</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>2,090</b>	<b>400</b>	<b>2,090</b>	<b>400</b>	<b>2,090</b>	<b>3</b>	<b>3</b>	<b>0.6</b>	<b>175</b>						<b>750</b>
<b>Total</b>		<b>1,180</b>	<b>220</b>	<b>2</b>	<b>5</b>	<b>2,270</b>	<b>3,450</b>	<b>2,680</b>	<b>3,450</b>	<b>2,900</b>	<b>7</b>	<b>7</b>	<b>0.5</b>	<b>142</b>	<b>1,500</b>	<b>750</b>				

**Table D.24 Hand Tubewell in Gurai Gram**

No.	Name of Para	Exis. numbers of tubewell		1998 flood		Coverage		Existing Tubewell		Requirement			Existing Condition		Contribute			
		Total	Govt. Private	Inundated	Non-inundated	Population	Area	Area	no.	no.	no.	no.	Price	Quality				
		(no.)	(no.)	(no.)	(no.)	(popul./no.)	(ha/no.)	(no.)	(no.)	(no.)	(no.)	(no.)	(Tk.)		(Tk.)			
1.	Chila para	1	0	1	0	148	0.5	1	1	0	2	74	79.3	4,000	private	good	no	
2.	Bania para	2	2	0	2	-	-	0	0	4	6	69	76.2	4,000	private	Fe	n.a	
3.	Atka para	1	1	0	1	-	-	0	0	11	12	63	76.2	4,000	DPHE	good	1,500	
4.	Uttar para	34	10	24	0	34	0.1	34	34	0	34	13	83.8	4,500	DPHE/P.	good	700	
5.	Fakir para	2	1	1	1	103	1.2	1	1	1	2	52	85.4	6,000	DPHE/P.	good	n.a	
6.	Jal para	4	2	2	0	149	1.0	4	4	4	8	75	76.2	6,000	DPHE/P.	good	1,500	
7.	Kuna para	10	1	9	10	-	-	0	0	10	10	27	79.3	5,000	DPHE/P.	good	1,200	
8.	Masjid para	26	23	3	0	71	0.3	26	26	0	26	71	70.1	7,000	DPHE	good	1,200	
9.	Namasud para	1	1	0	0	156	0.6	1	1	2	3	52	83.8	4,000	DPHE	good	750	
10.	Dakhin para	6	1	5	6	-	-	0	0	3	9	71	79.3	5,000	DPHE	good	1,500	
11.	Purba para	18	10	8	8	183	0.4	10	10	7	25	73	70.1	5,000	DPHE/P.	good	1,500	
12.	Ghosh para	8	3	5	0	69	0.4	8	8	0	8	69	76.2	5,000	DPHE	good	1,200	
13.	Pashchim para	12	2	10	1	74	0.1	11	11	1	12	68	76.2	3,500	DPHE/P.	good	1,200	
14.	Shibir para	6	2	4	2	187	0.8	4	4	2	10	75	76.2	5,000	DPHE/P.	good	1,500	
15.	Pal para	15	4	11	0	56	0.3	15	15	0	15	56	80.0	6,000	DPHE/P.	good	1,500	
16.	Naogaon para	11	5	6	7	337	1.2	4	4	7	18	75	64.0	6,000	DPHE/P.	good	1,500	
17.	Moddon para	30	7	23	6	26	0.1	24	24	6	30	21	76.2	7,000	private	good	1,500	
	Gurai bazar																	
	<b>Target Area</b>	<b>77</b>	<b>27</b>	<b>50</b>	<b>27</b>	<b>89</b>	<b>0.3</b>	<b>50</b>	<b>50</b>	<b>19</b>	<b>27</b>	<b>96</b>	<b>78.7</b>	<b>4,938</b>				
	<b>Total</b>	<b>187</b>	<b>75</b>	<b>112</b>	<b>44</b>	<b>85</b>	<b>0.3</b>	<b>143</b>	<b>143</b>	<b>43</b>	<b>44</b>	<b>230</b>	<b>77.0</b>	<b>5,118</b>				

**Table D.25 Latrines in Gurai Gram**

No.	Name of Para	Sanitary Latrine		Coverage Latrine H/H (no./HH)	Information Sheets for Rural Infrastructure Development		
		Total (no.)	Private (no.)		Construction Organization	Maintenance	Community
					Cost (Tk.)	Contribution (Tk.)	
1.	Chila para	0	0	0.0%	-	n.a	n.a
2.	Bania para	1	0	1.7%	8,000	private	n.a
3.	Atka para	2	1	1.8%	8,000	private	users
4.	Uttar para	8	2	12.9%	6,000	DPHE	n.a
5.	Fakir para	1	0	6.7%	30,000	private	n.a
6.	Jal para	3	0	3.5%	10,000	private	n.a
7.	Kuna para	0	0	0.0%	-	-	n.a
8.	Masjid para	3	1	1.2%	25,000	DPHE/P.	n.a
9.	Namasud para	5	0	22.7%	9,000	private	n.a
10.	Dakhin para	2	0	2.4%	8,000	n.a	n.a
11.	Purba para	2	0	0.8%	8,000	private	n.a
12.	Ghosh para	3	0	3.7%	16,000	DPHE/P.	n.a
13.	Pashchim para	4	1	3.4%	35,000	DPHE/P.	n.a
14.	Shibir para	1	0	0.9%	10,000	private	n.a
15.	Pal para	1	0	0.8%	18,000	private	n.a
16.	Naogaon para	1	1	0.5%	n.a	UP	500
17.	Moddon para	3	0	3.3%	12,000	private	n.a
Gurai bazar							
<b>Target Area</b>		<b>17</b>	<b>2</b>	<b>2.7%</b>	<b>11,667</b>		
<b>Total</b>		<b>40</b>	<b>6</b>	<b>2.3%</b>	<b>14,500</b>		



**Table D.26 Schools in Gurai Gram**

No.	Name of Para	School Type	Built year	Cost (Tk.)	Organization	Space			Student		Teacher (no.)	Facilities (no.)					
						building (sq.m)	ground (sq.m)	Total (no.)	boy (no.)	girl (no.)		Hand tubewell Exist	S. Latrine damaged				
														(m x m)	(m x m)	(no.)	(no.)
1.	Chila para	nil															
2.	Bania para	nil															
3.	Atka para	nil															
4.	Uttar para	Primary	1992	275,000	LGED	125	18.6x6.7	284	18.3x15.6	152	82	70	4	1	2	2	0
5.	Fakir para	nil															
6.	Jal para	nil															
7.	Kuna para	nil															
8.	Masjid para	Madrasha	1998	165,000	LGED/	137	19.5x7.0	0	-	80	80	0	n.a	1	-	1	-
9.	Namasud para	nil															
10.	Dakhin para	nil															
11.	Purba para	Primary	1994	450,000	LGED	116	18.4x6.3	208	26.0x8.0	80	30	50	4	1	-	2	-
12.	Ghosh para	Primary	1980	465,000	LGED	74	12.2x6.1	73	13.3x5.5	150	78	72	4	1	-	3	-
13.	Pashchim para	Primary	1938	n.a	LGED	332	41.5x8.0	193	35.0x5.5	205	100	105	4	2	2	2	-
14.	Shibir para	nil															
15.	Pal para	nil															
16.	Naogaon para	Madrasha	1982	400,000	LGED	144	38.4x3.8	544	32.0x17.0	404	265	139	13	1	-	2	-
17.	Moddon para	Primary	1988	460,000	LGED	205	19.5x10.5	-	-	153	83	70	4	1	-	2	-
<b>Target Area</b>						<b>241</b>		<b>492</b>		<b>232</b>	<b>112</b>	<b>120</b>	<b>8</b>	<b>2</b>	<b>2</b>	<b>4</b>	
<b>Total</b>						<b>1,133</b>		<b>1,302</b>		<b>1,224</b>	<b>718</b>	<b>506</b>	<b>33</b>	<b>8</b>	<b>4</b>	<b>14</b>	<b>0</b>

**Table D.27 Rural Electrification in Gurai Gram**

No.	Name of Para	Information Sheets for Rural Infrastructure Development					Electrified coverage		Electricity charge	
		House number (no.)	H/H number (no.)	Population Total (no.)	Homestead area (ha)	H/H (no.)	Rate (%)	Initial (Tk.)	monthly (Tk.)	
1.	Chila para	21	21	148	0.5	15	71.4%	700	250	
2.	Bania para	39	58	415	0.8	20	34.5% no ability	750	250	
3.	Atka para	92	109	755	1.8	10	9.2% Financial	700	300	
4.	Uttar para	81	62	438	1.7	36	58.1% no ability	800	250	
5.	Fakir para	28	15	103	1.2	15	100.0% no ability	750	200	
6.	Jal para	136	85	597	3.8	27	31.8% no ability	750	200	
7.	Kuna para	73	39	272	1.4	16	41.0% Financial	750	350	
8.	Masjid para	199	248	1,837	7.8	40	16.1% There is no	750	225	
9.	Namasud para	24	22	156	0.6	12	54.5% Poor, No	800	170	
10.	Dakhin para	56	85	643	1.2	63	74.1% no ability	750	300	
11.	Purba para	133	256	1,833	3.6	75	29.3% no ability	800	350	
12.	Ghosh para	67	81	555	3.0	14	17.3% no ability	845	250	
13.	Pashchim para	69	116	815	1.5	40	34.5% no ability	750	200	
14.	Shibir para	92	107	749	3.0	5	4.7% no ability	700	250	
15.	Pal para	87	121	841	3.8	75	62.0% no ability	700	250	
16.	Naogaon para	230	205	1,346	4.8	7	3.4% no ability	800	400	
17.	Moddon para	129	90	629	2.7	21	23.3% no ability	700	131	
<b>Target Area</b>		<b>567</b>	<b>621</b>	<b>4,449</b>	<b>14.2</b>	<b>267</b>	<b>43.0%</b>	<b>753</b>	<b>254</b>	
<b>Total</b>		<b>1,556</b>	<b>1,720</b>	<b>12,132</b>	<b>44.7</b>	<b>491</b>	<b>28.5%</b>			