

INITIAL SOCIAL IMPACT OF THE RUPSHA BRIDGE PROJECT IN KHULNA

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Authors

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Abstract

Following a decision by the government to construct a bridge over the river Rupsha in Khulna, a number of preparatory studies were undertaken on different aspects of the bridge project. An initial social impact assessment was a part of these studies. Two alternative sites have been considered for the bridge, and for that two alternative alignments of road have been proposed. Construction of the new road(s) would necessitate acquisition of land, involve displacement of people from their existing habitats, and affect these people in other ways both socially and economically. The study found that a total 454 households (174 in alignment A, and 280 in alignment B) would be affected if roads are constructed as per the proposed alignments. The total population involved is 2,571. Around 60 per cent of these people were born in their existing villages, and the rest migrated from other places at different times. The two road alignments pass through periurban/rural areas where a number of fish farms, small industries and commercial enterprises are located. A very large number of the income earners are involved in 'service' and non-farm vocations. Many women are also participating in income earning activities. Most of these people live quite close to their workplace. In the two alignments 45,847 trees will be affected. The findings incorporated some reactions of the people living in the project area. Their major concerns are loss of land including their ancestral homesteads, loss of current occupations and displacement. Some of the respondents even said that they did not need any more road in their locality.

EXECUTIVE SUMMARY

In pursuance of the request of the Government of the People's Republic of Bangladesh, the Japan International Cooperation Agency (JICA) took initiative to conduct a preparatory study for the possible construction of a bridge over the Rupsha river in Khulna. The Rupsha Bridge Project includes construction of a road-cum-railway bridge and a 65 meter wide highway-cum-railway embankment. An initial impact assessment was considered necessary to examine the extent of losses that are likely to occur due to construction of proposed roads connecting the bridge and the existing road system of Khulna. This is the initial socio-economic impact assessment study on the project.

Two alternative alignments of roads have been proposed for the bridge project. These are alignment A and B. Length of alignment A and alignment B is 26.86 km and 19.10 km respectively. Alignment A is on the west of the Rupsha river and very close to the Khulna-Jessore highway. It runs mostly through low land and touches a part of the Beel Dakatia. Alignment B is on the east side of the river Rupsha and it crosses two smaller rivers, Atharobaki and Atrai, before meeting the alternative bridge site at Gilatala. The nature of land is flat and comparatively high. Some demographic information of the people living in the two alignments are presented below:

Alignment	Household		Population		Housewives		Widows		Household size
	No.	%	No.	%	No.	%	No.	%	
A	174	38.33	886	34.46	166	36.17	9	32.14	5.1
B	280	61.67	1685	65.54	293	63.83	19	67.86	6.0
Total	454	100.00	2571	100.00	459	100.00	28	100.00	-

A total of 454 households (174 in alignment A, and 280 in alignment B) were reported. The average household size in the project area is 5.6 which represents the national average (5.6).

The work force of age group 15-44 make up around 56 per cent of total population in the project area. This section of the population is likely to be affected most due to their displacement, loss of land and other sources of income. The male-female ratio of alignment A is 167 and that of B is 125. Over half of the potentially affected people (PAP) in both the alignments are married. There are more widows in alignment B than in alignment A. They are among the vulnerable groups.

Some information on occupation and other related aspects of the PAPs in alignment A and B are as follows:

Descriptions		Alignment	
		A (%)	B (%)
1.	Length of the proposed road alignments (in kilometer)	26.86	19.10
2.	Economically active labour force of age 15-44 years	67.4	67.6
3.	Major economic activity		
	• Service holder	11	14
	• Agriculture	25	20
	• Housewives	38	25
	• Landless	7	2
	• Others	15	35
4.	Total illiterate population	12	14
5.	Place of work		
	• Near to home	43	52
6.	Item of expenditure		
	• Food	75	77
	• Others	25	23

About 58 per cent of the PAPs of alignment A and 62 per cent of alignment B were born within the village where they are presently living. Rest of the people migrated to the project area at different times. As for education, 12 per cent and 14 per cent of the people of alignment A and alignment B respectively are illiterate. Service or salaried job is one of the main sources of income of the people of both the alignments. Eleven per cent and 14 per cent of the working people of alignment A and alignment B respectively are service holders. Nineteen per cent of the working people of alignment A and 18 per cent of alignment B are housewives. They are substantially contributing to their family income though their contributions are not being evaluated in monetary term. Shrimp farming and related activities are the emerging economic activities in the project area. Most of the people work quite near to their homes. As their income is not sufficient, some of them are pursuing secondary occupations, and these are mainly agriculture and small business.

A comparative view of income and expenditure, affected land, trees, etc., of alignment A and B are as follows:

Alignment	Land Area (sq metre) %	Share croppers		Average Annual		No. of Trees	
		No.	%	Income (Tk.)	Expenditure (Tk.)	No.	%
A	1,340,554	9	47.37	76,400	53,050	7,339	18.09
B	954,198.50	10	52.63	72,670	65,870	38,508	81.01
Total	2,294,752.50	19	100.00	-	-	45,847	100.00

About 71 per cent and 63 per cent of the households of alignment A and alignment B respectively spend their income on food items. It signifies that these people are among the poorer section of the society who have hardly any choice to meet other needs of their lives.

The number of households owning land is higher in alignment B (92%) than in alignment A (85%). There are 7 per cent and 2 per cent landless people in alignment A and alignment B respectively. The number of tenants is small in the project area, and it is smaller in alignment B. The average land holding of the households is 0.48 acre in alignment A and 1.8 acres in alignment B. Average size of homesteads of the people living in alignment B is larger (0.09 acre) than those in alignment A (0.06 acre).

A large number of timber and fruit trees (45,847) is likely to be affected. These include coconut and areca nut trees which are grown widely in the area. Bamboos are also grown in the area which are not included in the said number of trees. A large area of bamboo plantation, estimated to have over 27,000 plants, will be affected due to the project. A few fish farms/ponds, schools and mosques are also among the potentially affected socio-economic set ups. Besides, due to displacement, the PAPs would lose their existing social linkages, samaj, and community relationships which can not be measure through the quantitative methods of survey.

SECTION I

INTRODUCTION

1.1 Background

The issue of construction of a bridge over the river Rupsha to connect Khulna city with Mongla Port, Bagerhat and other parts of the region is a long-standing demand of the people of the area. Construction of the bridge requires construction of additional road on both sides of the river in order to link the bridge with the existing road system. Before actual construction of the proposed road, it was necessary to know the extent of losses that will occur due to land acquisition for the road. In this context, on request from the Government of Bangladesh, the Japan International Co-operation Agency (JICA) took initiative to conduct a preliminary study to assess the socio-economic impact of the losses due to the construction of the bridge. The losses will be of both direct and indirect -- in terms of physical, economic and social. To this effect, an arrangement was made between BRAC and Sheltech Consultants (Pvt.) Ltd., Dhaka to conduct the initial impact assessment study. For the purpose of investigation, the study was divided into two parts: (a) social and (b) physical and economic. Two different teams of investigators conducted study on the two aspects.

This study deals with the social aspect. It is designed to present general information about the project area and contains specific information on demographic, education, occupation and income and expenditure situation of the potentially affected people (PAP). The Research and Evaluation Division of BRAC conducted this study in cooperation with the Urban and Rural Planning Discipline of Khulna University, Bangladesh.

1.2 Objectives of the study

Specific objectives of the study are:

- to assess the extent of possible losses due to acquisition of land; damages/destruction of house and other structures, fish farms, trees and other vegetation;
- to find out the PAPs with particular reference to their age, sex, education, and identify the vulnerable groups such as landless, womenheaded households, indigenous population and scheduled castes; and
- to identify the PAPs in terms of their place of birth, occupation, and land ownership.

1.3 Location of the Rupsha road alignments

Two alignments have been proposed for the construction of new roads connecting the bridge. These are alignments A and B. The proposed alignment A is located on the western side of Khulna metropolitan area as well as of the river Rupsha while alignment B is on the eastern side of the river Rupsha.

Alignment 'A' is divided into five Segments which are located in mouzas Khajura under Fakirhat Thana of Bagerhat district; mouza Jabusha under Rupsha Thana of Bagerhat district; mouza Labanchara under Khulna Thana of the same district; mouza Harintana under Batiaghata Thana of Khulna district; Rayermahal under Khalishpur Thana of Khulna district; mouza Deana under Daulatpur Thana of Khulna district; Moheswarpasha under Daulatpur Thana; mouzas Aronghata, Teligati, Shiromoni and Moshiali under Khan Jahan Ali Thana of Khulna district.

On the other hand, alignment 'B' is divided into four Segments. These are located on mouza Talimpur, Joypur, Aijgati, Durjanimohal, Nandanpur and Mossabarpur under Rupsha of Khulna district; mouza Kola under Tero Khada Thana; and mouzas Chandonimahal; Senhati, Banargati and Barakpar under Digholia Thana of Khulna district.

Further details of the two road alignment 'A' and 'B' are presented in Table A-I at the annexure.

1.4 Scope of work

It is anticipated that the project will cause displacement of many people due to the construction of new approach roads connecting the bridge. This study which is designed to examine the initial socio-economic impact will encompass the following issues:

- assess the extent of losses due to land acquisition. The losses will be of two types-direct and indirect. Direct losses are related to land, building structures, trees, etc. Indirect losses include loss of income from their existing business and agricultural works, other employment opportunities; and
- categorization of the persons affected by direct and indirect loss. Also a broad coverage of people and their socio-economic profile to be determined through a census survey.

SECTION II

THE STUDY APPROACH

2.1 Conceptualisation

In order to conceptualise about the assignment, the principal investigator had discussions with a groups of highly knowledgeable people. The discussions helped in getting some perception of these people about the proposed bridge and preliminary information about the project.

Discussions were held with the following:

Town Planners, Khulna Metropolitan Development Authority;
Team Leader, Aqua-Sheltech Consultants, Khulna Master Plan Project;
Chief Engineer, Khulna City Corporation;
NGOs having projects in the proposed alignments of 'A' and 'B';
Chief Engineer, and Director, Planning and Development, Khulna University;
Thana Nirbahi Officers, Fakirhat, Rupsha, Therokhada, Digholia, Batiaghata of Khulna district;
Deputy Director, Social Welfare Department, Khulna Division; and
Assistant Commissioner of Land, Khulna.

Discussions were also held with a cross-section of people to enlist their views on construction of the bridge. Relevant literature as available were also reviewed to get an idea about the study area. Maps of the road alignment and other documents were collected from various sources for the purpose of this survey.

2.2 Questionnaire design

Based on the objectives of the study, a questionnaire was designed to administer for the survey work at the proposed alignments A and B. The questionnaire covered the following issues/aspects:

demographic features (age, sex, family size), employment pattern, level of education, household income and expenditure, land ownership pattern, and types of affected trees

The draft questionnaire was pre-tested in the field. After pre-testing, the questionnaire was finalised.

2.3 Training of field investigators

Altogether 10 field investigators and 2 (two) field supervisors were recruited for conducting the survey work. A 3-day training cum field orientation programme was arranged to train the field staff about the survey work and methods of data collection. It is to be mentioned here that all the

field staff had previous experience and knowledge to conduct similar survey work. Most of these field investigators were from Khulna city. As such they had also a fair idea about the project site.

2.4 Data collection

The actual work for data collection took 10 days. Their work was closely monitored by two field supervisors. A system was developed to check the filled-in questionnaire by the field supervisors every day. The field work was smoothly done. The field investigators did not encounter any major problems in the field. The local people extended their fullest cooperation in responding to the field investigators.

One BRAC researcher provided the overall supervision and guidance in respect of data collection during the entire period of field work.

2.5 Computerization of data

All the data collected from the field were entered into the micro-computers using micro soft Excel. Altogether six working days were required to complete data computerization. A group of trained computer-operators performed this job.

The data entered in the micro-computers were processed to get desired information. And these information have been presented in tabular forms.

SECTION III

ANALYSIS AND DISCUSSION

3.1 Demographic characteristics of PAPs

3.1.1 Number of affected households

Total number of households likely to be affected in the proposed alignments A and B are 174 and 280 respectively. These households are going to be directly affected. That is, they will lose their land, homestead, house structures, etc., due to the construction of the connecting new road. Total population of the households in alignment A and alignment B are 886 and 1685 respectively. It is apparent that larger number of households will be affected in alignment B than in alignment A. Details of these affected families, according to the segments vis-a-vis mouzas, thanas and districts have been shown in Table-1 (Annexure-I).

3.1.2 Household size

Table 3.2 depicts details of the household sizes in different segments of alignments A and B (Annexure-2).

The average household size in segments I, II, IV and V of alignment A are 5.2, 6, 5.2 and 5.4 respectively. On the other hand, the average household sizes of segments I, II, III and IV of alignment B are 5.3, 5.3, 5.7 and 6.6 respectively. However, the average household size of alignment A is 5.4 and that of B is 5.7. It appears from the survey results that average family size is bigger in alignment B than in alignment A.

3.1.3 Age structure

People in the age group 10 – 44 are active labour force in Bangladesh. They are the economic backbone of a nation. This group is likely to be affected most by the project. They represent 67.4 per cent and 67.6 per cent of the total population in alignments A and B respectively. The percentage of people of age group 15 - 44 is nearly the same in alignment A and in alignment B. Almost similar trend is observed in different segments of the alignments A and B. Table 3.1 shows details of age structure of the people of alignments A and B.

Table 3.1 : Age structure of the affected people

Alignment -A

Age Structure in years	Segment -I		Segment -II		Segment -III		Segment -IV		Segment -V		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No	%
<5	2	7.69	10	9.17	-	-	24	7.3	22	5.2	58	6.55
5-9	2	7.69	12	11.01	-	-	31	9.48	42	9.91	87	9.82
10-14	3	11.54	13	11.93	-	-	37	11.31	52	12.26	105	11.85
15-24	5	19.23	19	17.43	-	-	62	18.96	96	22.64	182	20.54
25-34	6	23.08	19	17.43	-	-	76	23.24	80	18.87	181	20.43
35-44	6	23.08	16	14.68	-	-	47	14.37	60	14.15	129	14.56
45-59	1	3.85	12	11.01	-	-	29	8.87	48	11.32	90	10.16
60+	1	3.85	8	7.34	-	-	21	6.42	24	5.66	54	6.09
Total	26	100.00	109	100.00	-	-	327	100.00	424	100.00	886	100.00

Alignment B

Age Structure in Yrs.	Segment -I		Segment -II		Segment -III		Segment -IV		Total	
	No.	%	No.	%	No.	%	No.	%	No	%
<5	10	5.56	11	3.62	62	6.03	5	2.91	88	5.22
5-9	26	14.44	21	6.91	88	8.55	7	4.07	142	8.43
10-14	29	16.11	27	8.88	150	14.58	13	7.56	219	13.00
15-24	39	21.67	80	26.32	247	24.00	53	30.81	419	24.87
25-34	28	15.56	58	19.08	163	15.84	41	23.84	290	17.21
35-44	18	10.00	52	17.11	127	12.34	14	8.14	211	12.52
45-59	23	12.78	34	11.18	121	11.76	28	16.28	206	12.23
60+	7	3.89	21	6.91	71	6.90	11	6.40	110	6.53
Total	180	100.00	304	100.00	1029	100.00	172	100.00	1685	100.00

Source: Field Survey, November 1998

3.1.4 Sex ratio

The male-female ratio of the people living in alignments A and B are 167 and 125 respectively. In alignment B, the male-female ratio of segment V is significant (168) while in alignment A, the segment II is significant (136). Table 3.2 illustrates sex ratio of alignments A and B by segments.

Table 3.2: Sex ratio

Alignment A		Alignment B	
Segment	Male-Female Ratio	Segment	Male-Female Ratio
I	121:100	I	129:100
II	160:100	II	136:100
IV	168:100	III	121:100
V	172:100	IV	129:100
Total	167:100	Total	125:100

Source: Field Survey, November 1998

3.1.5 Marital status

Table 3.3 shows the marital status of the people of alignments A and B. Altogether more than 50 per cent of the potentially affected people are married. One per cent of the total population in alignment A and 1.1 per cent in alignment B are widows. It is found that there are 8 women (2.4 per cent) of segment IV in alignment A are widow. In alignment B, 7 women (i.e. 3.9 per cent), 6 women (i.e. 2 per cent) of segments I, II and III respectively are widow. In fact, these women are vulnerable groups in the society who are going to be affected by the project. Table 3.3 represents information on marital status of the people of alignments A and B.

Table 3.3: Marital status of the affected people

Alignment –A

Marital Status	Segment -I		Segment -II		Segment -III		Segment -IV		Segment -V		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No	%
Married	16	61.54	59	53.64	-	-	167	50.76	230	54.63	472	53.27
Unmarried	10	38.46	51	46.36	-	-	153	46.50	190	45.13	404	45.60
Widow	0	0.00	0	0.00	-	-	8	2.43	1	0.24	9	1.02
Separate	0	0.00	0	0.00	-	-	1	0.30	0	0.00	1	0.11
Others	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
Total	26	100.00	110	100.00	-	-	329	100.00	421	100.00	886	100.00

Alignment B

Marital Status	Segment -I		Segment -II		Segment -III		Segment -IV		Total	
	No.	%	No.	%	No.	%	No.	%	No	%
Married	83	46.11	168	55.26	516	50.15	102	59.30	869	51.57
Unmarried	89	49.44	128	42.11	505	49.08	69	40.12	791	46.94
Widow	7	3.89	6	1.97	6	0.58	0	0.00	19	1.13
Separate	1	0.56	1	0.33	1	0.10	1	0.58	4	0.24
Others	0	0.00	1	0.33	1	0.10	0	0.00	2	0.12
Total	180	100.00	304	100.00	1029	100.00	172	100.00	1685	100.00

Source: Field Survey, November 1998

3.1.6 Religious status

Most of the affected households (92.5 per cent of alignments A and 96 per cent of B) are Muslim. The other religious groups are Hindu and Christian (Table 3.4). The percentage of Hindu population is quite small (7.47 in alignment A and 3.70 in alignment B). While the Christians have only microscopic presence in the project area (Table 3.4).

Table 3.4: Religious status of the affected people

Alignment A

Religion	Segment -I		Segment -II		Segment -III		Segment -IV		Segment -V		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No	%
Muslim	5	100.00	20	100.00	-	-	59	89.39	77	92.77	161	92.53
Hindu	0	0.00	0	0.00	-	-	7	10.61	6	7.23	13	7.47
Christian	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
Buddist	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
Others	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
Total	5	100.00	20	100.00	-	-	66	100.00	83	100.00	174	100.00

Alignment B

Religion	Segment -I		Segment -II		Segment -III		Segment -IV		Total	
	No.	%	No.	%	No.	%	No.	%	No	%
Muslim	31	91.18	56	98.25	173	96.11	25	96.15	285	95.96
Hindu	3	8.82	1	1.75	7	3.89	0	0.00	11	3.70
Christian	0	0.00	0	0.00	0	0.00	1	3.85	1	0.34
Buddist	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Others	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Total	34	100.00	57	100.00	180	100.00	26	100.00	297	100.00

Source: Field Survey, November 1998

3.2 Migrational status of the PAPs**3.2.1 Place of birth**

It is evident from the survey results that about 58 per cent of the affected persons of alignment A and about 62 per cent of alignment B were born within the villages where they are now living. This clearly indicates that these people have long attachment with their present homesteads which they inherited from their ancestors.

Again in terms of Segments, in alignment A 80.8 per cent of the people in segment I, 19.1 per cent in segment II, 65 per cent in segment IV and 61.5 per cent in segment V were born within their existing villages. In alignment B, 47.8 per cent of the people, 57.2 per cent, 70.5 per cent and 32.6 per cent of segments I, II, III and IV respectively were born with their existing villages (Table 3 at Annexure-3).

People who have been living in the project area for generations and who inherited their homesteads from their ancestors have deep roots in their community. They have long attachment

to the soil, a lot of social ties and relationships which they consider very valuable. Any idea of displacement or evacuation is considered as a loss of these social assets by these people.

3.3 Level of education of the PAPs

3.3.1 Education level

About 12 per cent of the affected people of alignment A and 13.5 per cent of alignment B are illiterate. The percentage of illiteracy is higher in alignment B than in alignment A (Table 3.5). A little over 12 percent of the people in alignment A and 11.3 per cent of alignment B are mere 'literate' which means that they can either write their names or have very preliminary idea about alphabets. High rate of illiteracy of these people who are likely to be affected is an important point to be noted for the purpose of planning for resettlement of the PAPs.

Table 3.5: Level of education of the affected people

Alignment -A

Level of Education	Segment -I		Segment -II		Segment -III		Segment -IV		Segment -V		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No	%
Master degree	0	0.00	0	0.00	-	-	0	0.0	1	0.2	1	0.11
Bachelor degree	0	0.00	1	0.91	-	-	7	2.13	11	2.61	19	2.14
H.S.C	0	0.00	3	2.73	-	-	17	5.17	26	6.18	46	5.19
S.S.C	2	7.69	5	4.55	-	-	22	6.69	29	6.89	58	6.55
Below S.S.C	8	30.77	27	24.55	-	-	96	29.18	115	27.32	246	27.77
Primary	9	34.62	33	30.00	-	-	100	30.40	102	24.23	244	27.54
Vocational	0	0.00	0	0.00	-	-	2	0.61	1	0.24	3	0.34
Literate	4	15.38	18	16.36	-	-	23	6.99	62	14.73	107	12.08
Illiterate	3	11.54	17	15.45	-	-	28	8.51	58	13.78	106	11.96
Others	0	0.00	6	5.45	-	-	34	10.33	16	3.80	56	6.32
Total	26	100.00	110	100.00	-	-	329	100.00	421	100.00	886	100.00

Alignment B

Level of Education	Segment -I		Segment -II		Segment -III		Segment -IV		Total	
	No.	%	No.	%	No.	%	No.	%	No	%
Master degree	0	0	2	0.66	1	0.10	2	1.16	5	0.30
Bachelor degree	4	2.22	10	3.29	16	1.55	10	5.81	40	2.37
H.S.C	15	8.33	21	6.91	24	2.33	15	8.72	75	4.45
S.S.C	15	8.33	31	10.20	72	7.00	29	16.86	147	8.72
Below S.S.C	45	25.00	77	25.33	305	29.64	47	27.33	474	28.13
Primary	61	33.89	72	23.68	316	30.71	26	15.12	475	28.19
Vocational	0	0.00	1	0.33	5	0.49	0	0.00	6	0.36
Literate	19	10.56	46	15.13	108	10.50	18	10.47	191	11.34
Illiterate	18	10.00	33	10.86	152	14.77	24	13.95	227	13.47
Others	3	1.67	11	3.62	30	2.92	0	0.00	44	2.61
Total	180	100.00	304	100.00	1029	100.00	172	100.00	1685	100.00

Source: Field Survey, November 1998

3.4 Occupational pattern of the PAPS

3.4.1 Types of principal occupations

So far as occupational pattern of the affected people is concerned 'service' occupies the prime occupation of people of both the alignments. The findings indicate that about 11 per cent working people of alignment A and about 14 per cent of B are service holders. Business is another important activity of the people of both alignments. It is 8.5 per cent in alignment A and 7.5 in alignment B. Agriculture is the principal occupation of 4.8 per cent in alignment A and 3.5 per cent in alignment B. In alignment B, 19.9 per cent among the working people are 'Drivers'.

Women are among the vulnerable groups of the area who are likely to be affected by the project. In alignment A, 166 (i.e. 18.7 per cent) of the total population and in alignment B, 293 (i.e. 17.4 per cent) are 'Housewives' who generally perform all household activities and agriculture related harvesting, and post-harvest activities such as drying rice, feeding poultry and fishes and cattle rearing etc. These activities performed by the women are not being counted in monetary terms in Bangladesh. However, due to construction of roads along either alignment A or B, economic activities performed by these women are also going to be affected. Table 4 (Annexure-4) shows the various types of principal occupations of the affected working people.

3.4.2 Distances of workplace from home

It can be observed from the survey results that 42.4 per cent of the working people in alignment A and 51.9 per cent in alignment B, have to travel less than one kilometre only which signifies that jobs are available very near to their home. On the other hand, 17.7 per cent and 9.5 per cent of the working people of alignment A and alignment B have to travel as far as 5 to 8 kilometres from their homes for work. The distance of travel from home to workplace is an important issue for the people who will be displaced due to the construction of the road for the Rupsha Bridge project. Table 3.6 shows the distances of workplace from the home of the working people of alignment A and alignment B.

Table 3.6: Distance of workplace from home**Alignment -A**

Distance in Km.	Segment -I		Segment -II		Segment -III		Segment -IV		Segment -V		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No	%
<1	0	0.00	1	3.33	-	-	61	50.0	36	47.4	98	42.42
1-2	2	66.67	12	40.00	-	-	31	25.41	14	18.42	59	25.54
2.1-3	0	0.00	2	6.67	-	-	9	7.38	10	13.16	21	9.09
3.1-4	0	0.00	4	13.33	-	-	3	2.46	3	3.95	10	4.33
4.1-5	0	0.00	4	13.33	-	-	6	4.92	3	3.95	13	5.63
5.1-6	0	0.00	0	0.00	-	-	5	4.10	5	6.58	10	4.33
6.1-7	0	0.00	3	10.00	-	-	0	0.00	1	1.32	4	1.73
7.1-8	1	33.33	4	13.33	-	-	7	5.74	4	5.26	16	6.93
8+	0	0.00	3	10.00	-	-	6	4.92	2	2.63	11	4.76
Total	3	100.00	30	100.00	-	-	122	100.00	76	100.00	231	100.00

Alingment B

Distance in Km.	Segment -I		Segment -II		Segment -III		Segment -IV		Total	
	No.	%	No.	%	No.	%	No.	%	No	%
<1	53	63.86	28	39.44	118	52.0	4	40.0	203	51.92
1-2	16	19.28	11	15.49	40	17.62	2	20.00	69	17.65
2.1-3	4	4.82	11	15.49	35	15.42	1	10.00	51	13.04
3.1-4	3	3.61	6	8.45	12	5.29	0	0.00	21	5.37
4.1-5	0	0.00	6	8.45	3	1.32	1	10.00	10	2.56
5.1-6	1	1.20	2	2.82	1	0.44	1	10.00	5	1.28
6.1-7	2	2.41	1	1.41	4	1.76	0	0.00	7	1.79
7.1-8	1	1.20	0	0.00	3	1.32	0	0.00	4	1.02
8+	3	3.61	6	8.45	11	4.85	1	10.00	21	5.37
Total	83	100.00	71	100.00	227	100.00	10	100.00	391	100.00

Source: Field Survey, November 1998

3.4.3 Involvement in secondary occupations

Some of the working people of the affected potential areas are also involved in secondary occupation. In alignment A, 4.3 per cent and in alignment B, 3.9 per cent of the people have secondary activities. Among these secondary occupations, business and agriculture are prominent ones. According to the survey results 1.5 per cent and 1.3 per cent of the working people of alignment A and while 1.3 per cent 1.6 per cent of alignment B are involved with agriculture and business respectively (Table A-5 at Annexure-5).

Any disruption of the PAPs in their secondary sources of income might deteriorate the overall economic condition of these people.

3.5 Household income and expenditure of the PAP

3.5.1 Annual household income

Average annual income of the potentially affected households of alignment A is estimated to be Tk. 76,400 (US\$ 1550) and that of alignment B is Tk. 72,670 (US\$ 1460). Details of segment wise information on annual income can be seen in Table 3.7.

Table 3.7 Average Annual Income of the PAPs

Alignment -A

Types of Occupation	Segment -I		Segment -II		Segment -III		Segment -IV		Segment -V		Total	
	Taka	%	Taka	%	Taka	%	Taka	%	Taka	%	Taka	%
Agriculture	31000	13.36	0	0.00	-	-	455700	6.4	1068000	21.6	1554700	11.70
Service	197000	84.91	846600	83.96	-	-	5683003	80.03	2715800	54.91	9442403	71.06
Fish Farm	4000	1.72	0	0.00	-	-	688000	9.69	461000	9.32	1153000	8.68
Livestoc/Poultry	0	0.00	29700	2.95	-	-	73000	1.03	166000	3.36	268700	2.02
Others	0	0.00	132000	13.09	-	-	201000	2.83	535200	10.82	868200	6.53
Total	232000	100.00	1008300	100.00	-	-	7100703	100.00	4946000	100.00	13287003	100.00
Average Annual income	46,400.00		50,450.00		-		1,07,600.00		59,600.00		76,400.00	

Alignment -B

Types of Occupation	Segment -I		Segment -II		Segment -III		Segment -V		Total	
	Taka	%	Taka	%	Taka	%	Taka	%	Taka	%
Agriculture	101000	4.33	758000	12.75	2879100	24.2	176400	12.7	3914500	18.14
Professions	1402000	60.16	4921000	82.80	7184000	60.28	762400	54.82	14269400	66.12
Fish Farm	31000	1.33	48500	0.82	625502	5.25	0	0.00	705002	3.27
Livestockpoultry	33000	1.42	39700	0.67	314400	2.64	0	0.00	387100	1.79
Others	763500	32.76	175900	2.96	915200	7.68	452000	32.50	2306600	10.69
Total	2330500	100.00	5943100	100.00	11918202	100.00	1390800	100.00	21582602	100.00
Average Annual Income	68,550.00		1,04,270.00		66,250.00		53,500.00		72,670.00	

Source: Field Survey, November 1998

3.5.2 Annual household expenditure

Average annual expenditure of the affected households of alignment A is Tk. 52,000 (US\$ 1040) and alignment B is Tk. 65,870 (US\$ 1317). Details of annual expenditures of the people living in different segments of the two alignments can be seen in Table 3.12

Table 3.8: Average annual household expenditure of the PAPs

Alignment -A

Items of Expenditure	Segment -I		Segment -II		Segment -III		Segment -IV		Segment -V		Total	
	Taka	%	Taka	%	Taka	%	Taka	%	Taka	%	Taka	%
Food	142000	65.14	610000	61.12	-	-	2182600	68.7	3467600	74.4	6402200	70.71
Clothing	19000	8.72	93000	9.32	-	-	275300	8.66	427300	9.17	814600	9.00
Medical	12000	5.50	31500	3.16	-	-	110700	3.48	224800	4.82	379000	4.19
Transport	7000	3.21	25700	2.58	-	-	87400	2.75	126700	2.72	246800	2.73
Housing	10000	4.59	135500	13.58	-	-	149400	4.70	413900	8.88	708800	7.83
Education	15000	6.88	43600	4.37	-	-	135400	4.26	230900	4.95	424900	4.69
Fuel	13000	5.96	44300	4.44	-	-	199400	6.27	180700	3.88	437400	4.83
Others	0	0.00	14404	1.44	-	-	38300	1.20	86359	1.85	139063	1.54
Total	218000	100.00	998004	100.00	-	-	3178500	100.00	4660300	100.00	9054804	100.00
Average of Alignment Expenditure	43,600.00		49,900.00		-		48,160.00		56,150.00		52,039.00	

Alignment -B

Items of Expenditure	Segment -I		Segment -II		Segment -III		Segment -IV		Total	
	Taka	%	Taka	%	Taka	%	Taka	%	Taka	%
Food	2153600	76.50	2612000	58.73	6685800	61.0	823400	61.3	12274800	62.75
Clothing	125300	4.45	269000	6.05	1032000	9.42	103000	7.67	1529300	7.82
Medical	83400	2.96	116700	2.62	548000	5.00	65700	4.89	813800	4.16
Transport	71000	2.52	114400	2.57	386000	3.52	57860	4.31	629260	3.22
Housing	64500	2.29	299400	6.73	372400	3.40	30400	2.26	766700	3.92
Education	108300	3.85	198000	4.45	1008900	9.21	139100	10.36	1454300	7.43
Fuel	163200	5.80	180000	4.05	410500	3.75	56000	4.17	809700	4.14
Others	46000	1.63	658200	14.80	512160	4.67	67508	5.03	1283868	6.56
Total	2815300	100.00	4447700	100.00	10955760	100.00	1342968	100.00	19561728	100.00
Average of Alignment Expenditure	82,800.00		78,000.00		60,875.00		51,650.00		65,870.00	

Source: Field Survey, November 1998

3.5.3 Household expenditure

It is to be noted here that most of the potentially affected households in alignments A and B are poor. This is reflected through the households' expenditure pattern. About 71 per cent of the people of alignment A and 63 per cent people of alignment B spend their total expenditure on food. However, the very high percentage of expenditure on food item clearly indicates that ability of the PAPs to spend on other items is lesser. Table 3.8 indicates the expenditure on various item by the potentially affected people of alignments A and B.

3.6 Land ownership and land area of the PAPs

3.6.1 Land ownership

So far as land ownership pattern is concerned, 85.1 per cent of the PAPs of alignment A and 91.6 per cent of alignment B own some amount of land. In fact, areas over which alignment A and B pass through are mostly rural in nature and as such most of the residents own some land. Share croppers constitute 5.17 and 3.37 per cent of the total affected households of alignment A and alignment B respectively. And absolutely landless people are 12 (i.e. 6.9 per cent) in alignment A and 7 (i.e. 2.4 per cent) in alignment B (Table 3.13). The number of tenant are insignificant.

Table 3.9: Land ownership of the affected households

Alignment -A

Ownership Type	Segment -I		Segment -II		Segment -III		Segment -IV		Segment -V		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Owned	4	80.00	20	100.00	-	-	58	87.9	66	79.5	148	85.06
Tenant	0	0.00	0	0.00	-	-	0	0.00	1	1.20	1	0.57
Share cropper	0	0.00	0	0.00	-	-	2	3.03	7	8.43	9	5.17
Share cropper + Own Land	0	0.00	0	0.00	-	-	2	3.03	1	1.20	3	1.72
Khash/Others	0	0.00	0	0.00	-	-	0	0.00	1	1.20	1	0.57
Landless	1	20.00	0	0.00	-	-	4	6.06	7	8.43	12	6.90
Total	5	100.00	20	100.00	-	-	66	100.00	83	100.00	174	100.00

Alignment -B

Ownership Type	Segment -I		Segment -II		Segment -III		Segment -IV		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Owned	29	85.29	53	92.98	168	93.3	22	84.6	272	91.58
Tenant	0	0.00	0	0.00	1	0.56	0	0.00	1	0.34
Own+Share cropper	1	25.00	2	3.51	4	2.22	2	7.69	9	3.03
Share cropper	1	2.94	2	3.51	5	2.78	2	7.69	10	3.37
Khash/Others	3	8.82	0	0.00	2	1.11	0	0.00	5	1.68
Landless	1	2.94	5	8.77	1	0.56	0	0.00	7	2.36
Total	34	100.00	57	100.00	180	100.00	26	100.00	297	100.00

Source: Field Survey, November 1998

3.6.2 Land under possession by the affected household

The average land area possessed by an affected household of alignment A is 0.46 acres and that of alignment B is 1.8 acres. It appears that the average land area of the affected households of alignment B is larger compared to alignment A. Table 3.10 illustrates a rough estimate of average area of land possessed of the affected people those who own land.

Table 3.10: Land area under possession

Alignment -A

Aspects	Segment -I	Segment -II	Segment -III	Segment -IV	Segment -V	Total
Total Land Owned (acre)	14	150	-	1509	3290	4963
No. of household Possessing land	4	20	-	61	75	160
Average land area under possession per household (acre)	0.05	0.11	-	0.37	0.66	0.46

Alignment - B

Aspects	Segment -I	Segment -II	Segment -III	Segment -IV	Total
Total land owned (acre)	5109.5	4833.5	21939.5	1395	33277.5
No. of household Possessing land	29	53	175	23	280
Average land area under possession per household (acre)	2.7	3.6	1.8	0.9	1.8

Source: Field Survey, November 1998

3.7 Area of homesteads of the PAPs

3.7.1 Size of homesteads

Size of homesteads of 55 per cent of the affected people located in alignment A is 0.06 acre or less while 57 per cent of the homesteads in alignment B are in the range of 0.09 to 0.15 acre or even more. One of the possible reasons for bigger sizes of homesteads in alignment B is that this area is more rural in character. Generally, homesteads in the rural areas of Bangladesh are bigger in size compared to those in the urban areas. Table 3.11 shows the sizes of homesteads of the affected people of both alignments.

Table 3.11: Homestead size of the affected households

Alignment A

Size (in acre)	Number	Percentage
upto 2	45	25.86
2.1-4	51	29.31
4.1-6	34	19.54
6.1-8	6	3.45
8.1-10	13	7.47
10+	25	14.37
Total	174	100.00

Alignment B

Size (in acre)	Number	Percentage
upto 2	27	9.09
2.1-4	39	13.13
4.1-6	51	17.17
6.1-8	39	13.13
8.1-10	24	8.08
10+	106	35.69
Not available	11	3.70
Total	297	100.00

Source: Field Survey, November 1998

3.8 Trees in the affected homesteads

3.8.1 Types of trees

A large number of timber and fruit trees is likely to be affected due to the project. Number of such trees will be much higher in the alignment B (38,508) than in the alignment A (7,339). Only those trees whose value at the time of data collection were estimated to be Tk. 100 or more per piece have been included in this survey. Details of the trees in each segment of the two alignments are presented in Table 3.12. Among the fruit trees there are coconuts and arecanuts which grow in abundance in the project area. Bamboos also grow plentifully in the area, but it is not included among 'trees'. According to one survey, over 27,000 bamboo plants will be affected due to the project.

Table 3.12: Types and numbers of affected trees

Alignment A

Type of Trees	Segment -I		Segment -II		Segment -III		Segment -IV		Segment -V		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Timber trees	20	28.99	341	46.65	-	-	664	31.9	1335	30.0	2360	32.16
Fruit trees	49	71.01	390	53.35	-	-	1419	68.12	3121	70.04	4979	67.84
Total	69	100.00	731	100.00	-	-	2083	100.00	4456	100.00	7339	100.00
Affected No. of family	4		12		-	-	56		71		143	48.15
Average No. of trees per Household	17		61		-	-	37		73		188	

Alignment B

Type of Trees	Segment -I		Segment -II		Segment -III		Segment -IV		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Timber trees	1518	39.31	3608	37.90	14302	58.2	98	17.1	19526	50.71
Fruit trees	2344	60.69	5911	62.10	10251	41.75	476	82.93	18982	49.29
Total	3862	100.00	9519	100.00	24553	100.00	574	100.00	38508	100.00
Affected No. of family	32		47		132		18		229	77.10
Average No. of trees per household	121		203		186		32		541	

Source: Field Survey, November 1998

3.8.2 Value of the affected trees

Valuation of the trees, both timber and fruits, likely to be affected by the project has been estimated in monetary terms. Price of the trees has been calculated according to the estimations made by the concerned PAPs. According to this estimate, value of all the affected trees will be about Taka 4 million in alignment A and Taka 22.5 million in alignment B. Table 3.13 depicts the details of valuation of trees in alignments A and B.

Table 3.13: Estimated value of affected trees

Alignment A

Type of Trees	Segment -I		Segment -II		Segment - III		Segment -IV		Segment -V		Total	
	Taka	% of Total	Taka	% of Total	Taka	% of Total	Taka	% of Total	Taka	% of Total	Taka	% of Total
Timber Trees	4003	12.91	14200	41.16	-	-	683901	41.9	994400	43.7	1696504	42.67
Fruit Trees	27000	87.09	20300	58.84	-	-	948451	58.10	1283300	56.34	2279051	57.33
Total	31003	100.00	34500	100.00	-	-	1632352	100.00	2277700	100.00	3975555	100.00
Average Est. Values per Household	15502	16.36	3450	3.64	-	-	32007	33.78	43802	46.22	94760	100.00

Alignment B

Type of Trees	Segment -I		Segment -II		Segment -III		Segment -IV		Total	
	Taka	% of Total	Taka	% of Total	Taka	% of Total	Taka	% of Total	Taka	% of Total
Timber Trees	4113200	70.56	1520300	41.94	4034300	31.6	291029	85.0	9958829	44.15
Fruit Trees	1716500	29.44	2104500	58.06	8726101	68.38	51537	15.04	12598638	55.85
Total	5829700	100.00	3624800	100.00	1.3E+07	100.00	342566	100.00	22557467	100.00
Average Est. Values per Household	201024	45.54	97968	22.19	113932	25.81	28547	6.47	441471	100.00

Source: Field Survey, November 1998

3.9 Gender Aspects

Results of the present study show that, both in alignments A and B, a good number of housewives are involved in some income earning activities. Generally they are not counted as income earner for their households. In reality, these women take active part in managing their household tasks and at the same time they are helping the male members' activities such as crop harvesting, husking of paddy, poultry and fish feeding, etc.

It may be noted that lack of information and opportunity, illiteracy and social taboos are the main causes of poor participation of women in the development activities of Khulna city and in the project area. This is true for other areas of the country too.

Existing participation

There are no reliable data on the involvement of women in development activities in Khulna city and its adjacent area. It appears from general observation that direct participation of women in developmental activities in Khulna city area is not much prominent. According to an unverified

estimate, participation of women in the formal sector activities of Khulna city is around 5-10 per cent. However, it can be said that women of poorer households are now participating in the informal sector activities in larger numbers in and around the city. The informal sector activities include working as house maid, day labourers in construction work, small traders, hawkers and peddlers, etc.

It is assumed that with the spread of education among the women, their participation in all socio-economic activities will increase. In Khulna University the male-female student ratio is 120-100. This ratio can be viewed as quite satisfactory considering the gender disbalances prevailing in many fields in the country. At present, the non-governmental organizations (NGOs) are playing a vital role in increasing the participation of women as a strategy of empowerment. The NGOs are also advocating for women's participation in local as well as national elections. Women's role in the mainstream national development in this part of Bangladesh is likely to be more prominent in the coming years.

SECTION IV

SOME OPINIONS OF THE PAPS

Construction of a bridge over the river Rupsha in Khulna has been a long-standing demand of the people in the area. For three decades or so the local people have been awaiting with the expectation that the bridge would be constructed, but it has not happened till date. This survey has stirred the minds of the local people who ventilated some of their feelings during the field investigation.

There are two proposed alignments. Alignment A lies in the western side of the Khulna city and B is in the eastern side of the river Rupsha (Bhairab). A total of 174 households were reported in alignment A whereas it was 280 in alignment B. Alignment A is very close to the main highway (Khulna-Jessore road). Alignment A also touches a part of the Khulna University faculty building. There are some brick fields found in alignment B. When the people living in both the alignment areas were asked if they wanted the project or not, almost all the respondents in the alignment B gave response in positive terms. But in reply to the same question most of the people of the alignment A responded negatively and said that they did not need any road since there was already a highway very close to their residence. There were a number of boatmen engaged in their profession across the rivers along the alignments where there were no ferry service for transportation. Their socio-economic condition could not be captured in this study. These and some other related issues such as displacement, compensation and resettlement of the affected people should find place in future studies.

Some interesting reactions of the people living in the project area were noted during the field work. One villager known to be owning vast landed property in alignment B opined to give his land without any compensation for the proposed road. There were some people who wished to have the road in their area but they were not willing to spare their land even if they get the compensation. Their major concerns were that the proposed alignment would run through their homesteads; they had small quantity of land, and they did not like to be evacuated from their ancestral homesteads. An old man living in the alignment A could hardly believe that implementation of the proposed road would ever take place. Because, he said, he has been hearing such words of hope for years after years.

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Table A-1: Segments and Mouzas covered in the Alignments A and B of the Rupsha Bridge Project

Alignment	Segment	Thana	Mouza	No. of Household
A	I	Fakirhat	Khajura	2
		Rupsha	Jabusha	3
		Sub-Total		5
	II	Khulna	Labanchora	14
		Batiaghata	Harintana	6
		Sub-Total		20
	III	Khalishpur	Rayermahal	44
		Sub-Total		44
	IV	Doulatpur	Aronghata	21
		Daulatpur	Deana	43
		Sub-Total		64
	V	Daulatpur	Moheswaerpasa	06
		Khanjahan Ali	Teligati	19
		Khanjahan Ali	Sheromoni	07
		Khanjahan Ali	Moshiali	09
		Sub-Total		41
	Total			174
B	I	Rupsha	Talimpur	12
		Rupsha	Joypur	22
		Sub-Total		34
	II	Rupsha	Aijgati	14
		Rupsha	Nandanpur	13
		Rupsha	Mossalpur	13
		Sub-Total		40
	III	Terokhada	Kala	02
		Digholia	Chandanimohal	101
		Digholia	Senhati	34
		Digholia	Bramoguti	19
		Digholia	Barakpur	24
		Sub-Total		180
	IV	Khanjahan Ali	Gilatala	26
		Sub-Total		26
	Total			280

Source : Field survey, November 1998

Table A-2: Household Size in the Project Area

Alignment -A

No. of Family Member	Segment -I		Segment -II		Segment -III		Segment -IV		Segment -V		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No	%
1	0	0.00	0	0.00	-	-	0	0.0	0	0.0	0	0.00
2	0	0.00	2	10.00	-	-	4	6.06	4	4.82	10	5.75
3	1	20.00	1	5.00	-	-	7	10.61	11	13.25	20	11.49
4	0	0.00	4	20.00	-	-	15	22.73	13	15.66	32	18.39
5	3	60.00	4	20.00	-	-	20	30.30	27	32.53	54	31.03
6	0	0.00	3	15.00	-	-	8	12.12	13	15.66	24	13.79
7	0	0.00	1	5.00	-	-	7	10.61	7	8.43	15	8.62
8	1	20.00	3	15.00	-	-	2	3.03	4	4.82	10	5.75
9	0	0.00	2	10.00	-	-	1	1.52	3	3.61	6	3.45
10	0	0.00	0	0.00	-	-	2	3.03	1	1.20	3	1.72
Total	5	100.00	20	100.00	-	-	66	100.00	83	100.00	174	100.00
Av. Family Size	5.2		6.0		-		5.2		5.4		5.4	

Alingment B

No. Of Family Member	Segment -I		Segment -II		Segment -III		Segment -V		Total	
	No.	%	No.	%	No.	%	No.	%	No	%
1	0	0.00	0	0.00	3	1.7	0	0.0	3	1.01
2	1	2.94	1	1.75	6	3.33	1	3.85	9	3.03
3	5	14.71	9	15.79	7	3.89	1	3.85	22	7.41
4	8	23.53	13	22.81	24	13.33	4	15.38	49	16.50
5	8	23.53	9	15.79	45	25.00	2	7.69	64	21.55
6	2	5.88	8	14.04	35	19.44	1	3.85	46	15.49
7	4	11.76	10	17.54	28	15.56	8	30.77	50	16.84
8	2	5.88	2	3.51	22	12.22	3	11.54	29	9.76
9	1	2.94	5	8.77	6	3.33	5	19.23	17	5.72
10	3	8.82	0	0.00	3	1.67	1	3.85	7	2.36
11	0	0.00	0	0.00	1	0.56	0	0.00	1	0.34
Total	34	100.00	57	100.00	180	100.00	26	100.00	297	100.00
Average Family Size	5.3		5.3		5.7		6.6		5.7	

Source: Field Survey, November 1998

Table A-3: Place of Birth of the Affected People

Alignment -A

Place of Birth	Segment -I		Segment -II		Segment -III		Segment -IV		Segment -V		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No	%
Within the Village	21	80.77	21	19.09	-	-	214	65.0	259	61.5	515	58.13
Within the Thana	3	11.54	7	6.36	-	-	34	10.33	77	18.29	121	13.66
Greater Khulna	2	7.69	59	53.64	-	-	40	12.16	56	13.30	157	17.72
Greater Faridpur	0	0.00	2	1.82	-	-	8	2.43	7	1.66	17	1.92
Greater Barisal	0	0.00	10	9.09	-	-	23	6.99	11	2.61	44	4.97
Greater Jessore	0	0.00	11	10.00	-	-	8	2.43	8	1.90	27	3.05
Greater Kushtia	0	0.00	0	0.00	-	-	2	0.61	3	0.71	5	0.56
Greater Noakhali	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
Greater Chittagong	0	0.00	0	0.00	-	-	0	0.00	1	0.24	1	0.11
Greater Comilla	0	0.00	3	2.73	-	-	0	0.00	0	0.00	3	0.34
Greater Sylhet	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
Greater Dhaka	0	0.00	0	0.00	-	-	4	1.22	0	0.00	4	0.45
Greater Mymenshingh	0	0.00	0	0.00	-	-	2	0.61	0	0.00	2	0.23
Greater Pabna	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
Greater Bogra	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
Greater Rangpur	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
Greater Dinajpur	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
Greater Rajshahi	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
West Bengal	1	3.85	1	0.91	-	-	0	0.00	0	0.00	2	0.23
Others	0	0.00	2	1.82	-	-	0	0.00	0	0.00	2	0.23
Total	26	100.00	110	100.00	-	-	329	100.00	421	100.00	886	100.00

Alignment B

Place of Birth	Segment -I		Segment -II		Segment -III		Segment -IV		Total	
	No.	%	No.	%	No.	%	No.	%	No	%
Within the Village	86	47.78	174	57.24	726	70.55	56	32.56	1042	61.84
Within the Thana	46	25.56	68	22.37	77	7.48	13	7.56	204	12.11
Greater Khulna	31	17.22	26	8.55	150	14.58	84	48.84	291	17.27
Greater Faridpur	1	0.56	4	1.32	12	1.17	0	0.00	17	1.01
Greater Barisal	15	8.33	14	4.61	36	3.50	10	5.81	75	4.45
Greater Jessore	1	0.56	8	2.63	11	1.07	8	4.65	28	1.66
Greater Kushtia	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Greater Noakhali	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Greater Chittagong	0	0.00	3	0.99	0	0.00	0	0.00	3	0.18
Greater Comilla	0	0.00	0	0.00	8	0.78	0	0.00	8	0.47
Greater Sylhet	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Greater Dhaka	0	0.00	0	0.00	5	0.49	1	0.58	6	0.36
Greater Mymenshingh	0	0.00	1	0.33	0	0.00	0	0.00	1	0.06
Greater Pabna	0	0.00	3	0.99	1	0.10	0	0.00	4	0.24
Greater Bogra	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Greater Rangpur	0	0.00	0	0.00	1	0.10	0	0.00	1	0.06
Greater Dinajpur	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Greater Rajshahi	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
West Bengal	0	0.00	3	0.99	1	0.10	0	0.00	4	0.24
Others	0	0.00	0	0.00	1	0.10	0	0.00	1	0.06
Total	180	100.00	304	100.00	1029	100.00	172	100.00	1685	100.00

Source: Field Survey, November 1998

Table A-4: Primary Occupations of the PAPs

Alignment -A

Types	Segment -I		Segment -II		Segment -III		Segment -IV		Segment -V		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No	%
Service	1	3.85	15	13.64	-	-	33	10.0	47	11.2	96	10.84
Business	3	11.54	13	11.82	-	-	35	10.64	24	5.70	75	8.47
Agriculture	0	0.00	0	0.00	-	-	10	3.04	33	7.84	43	4.85
Shrimp Farmer	0	0.00	0	0.00	-	-	5	1.52	0	0.00	5	0.56
Day Labour	0	0.00	6	5.45	-	-	10	3.04	10	2.38	26	2.93
Hawker	0	0.00	2	1.82	-	-	0	0.00	0	0.00	2	0.23
Driver	0	0.00	2	1.82	-	-	3	0.91	3	0.71	8	0.90
Student	0	0.00	26	23.64	-	-	74	22.49	88	20.90	188	21.22
Pension Holder	0	0.00	0	0.00	-	-	12	3.65	2	0.48	14	1.58
House Wife	0	0.00	26	23.64	-	-	70	21.28	70	16.63	166	18.74
Unemployed	0	0.00	1	0.91	-	-	14	4.26	5	1.19	20	2.26
Profession	0	0.00	0	0.00	-	-	2	0.61	2	0.48	4	0.45
Others	22	84.62	19	17.27	-	-	61	18.54	137	32.54	239	26.98
Total	26	100.00	110	100.00	-	-	329	100.00	421	100.00	886	100.00

Alingment B

Types	Segment -I		Segment -II		Segment -III		Segment -IV		Total	
	No.	%	No.	%	No.	%	No.	%	No	%
Service	16	8.89	39	12.83	154	15.0	26	15.1	235	13.95
Business	15	8.33	41	13.49	59	5.73	12	6.98	127	7.54
Agriculture	2	1.11	7	2.30	43	4.18	7	4.07	59	3.50
Shrimp Farmer	0	0.00	0	0.00	1	0.10	0	0.00	1	0.06
Day Labour	17	9.44	19	6.25	27	2.62	10	5.81	73	4.33
Hawker	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Student	0	0.00	2	0.66	4	0.39	1	0.58	7	0.42
Driver	48	26.67	56	18.42	199	19.34	33	19.19	336	19.94
Pension Holder	3	1.67	3	0.99	12	1.17	5	2.91	23	1.36
House Wife	29	16.11	53	17.43	163	15.84	48	27.91	293	17.39
Unemployed	5	2.78	2	0.66	13	1.26	0	0.00	20	1.19
Profession	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Others	45	25.00	82	26.97	354	34.40	30	17.44	511	30.33
Total	180	100.00	304	100.00	1029	100.00	172	100.00	1685	100.00

Source: Field Survey, November 1998

Table A-5: Types of Secondary Occupations

Alignment -A

Types	Segment -I		Segment -II		Segment -III		Segment -IV		Segment -V		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No	%
Service	0	0.00	0	0.00	-	-	1	0.3	1	0.2	2	0.23
Business	1	3.85	1	0.91	-	-	6	1.82	5	1.19	13	1.47
Agriculture	0	0.00	0	0.00	-	-	8	2.43	4	0.95	12	1.35
Shrimp Farmer	0	0.00	0	0.00	-	-	1	0.30	0	0.00	1	0.11
Day Labour	0	0.00	0	0.00	-	-	3	0.91	5	1.19	8	0.90
Hawker	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
Driver	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
Student	0	0.00	0	0.00	-	-	0	0.00	1	0.24	1	0.11
Pension Holder	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
House Wife	0	0.00	0	0.00	-	-	1	0.30	0	0.00	1	0.11
Unemployed	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
Profession	0	0.00	0	0.00	-	-	0	0.00	0	0.00	0	0.00
Not involved	25	96.15	109	99.09	-	-	309	93.92	405	96.20	848	95.71
Total	26	100.00	110	100.00	-	-	329	100.00	421	100.00	886	100.00

Alingment B

Types	Segment -I		Segment -II		Segment -III		Segment -IV		Total	
	No.	%	No.	%	No.	%	No.	%	No	%
Service	0	0	0	0	4	0.389	0	0	4	0.24
Business	1	0.56	0	0.00	18	1.75	3	1.74	22	1.31
Agriculture	3	1.67	7	2.30	17	1.65	0	0.00	27	1.60
Shrimp Farmer	0	0.00	0	0.00	1	0.10	0	0.00	1	0.06
Day Labour	1	0.56	1	0.33	4	0.39	0	0.00	6	0.36
Hawker	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Student	0	0.00	0	0.00	1	0.10	0	0.00	1	0.06
Driver	1	0.56	0	0.00	3	0.29	0	0.00	4	0.24
Pension Holder	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
House Wife	0	0.00	0	0.00	1	0.10	0	0.00	1	0.06
Unemployed	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Profession	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Not Involved	174	96.67	296	97.37	980	95.24	169	98.26	1619	96.08
Total	180	100.00	304	100.00	1029	100.00	172	100.00	1685	100.00

Source: Field Survey, November 1998