Date

ETHICAL REVIEW COMMITTEE, ICDDR,B.

Principal Investigator Dr. S. D'Souza

Co-Investigator (if any) Mr. Abbas Bh[illegible]

Application No. 81-050

Supporting Agency (if Non-ICDDR,B)

Title of Study Study on Socio-Economic and Mortality Differentials

Project status:
- (✓) New Study
- ( ) Continuation with change
- ( ) No change (do not fill out rest of form)

Circle the appropriate answer to each of the following (If Not Applicable write NA).

1. Source of Population:
   - (a) Ill subjects — Yes (No)
   - (b) Non-ill subjects — (Yes) No
   - (c) Minors or persons under guardianship — (Yes) No
2. Does the study involve:
   - (a) Physical risks to the subjects — Yes (No)
   - (b) Social Risks — Yes (No)
   - (c) Psychological risks to subjects — Yes (No)
   - (d) Discomfort to subjects — Yes (No)
   - (e) Invasion of privacy — (Yes) No
   - (f) Disclosure of information damaging to subject or others — Yes (No)
3. Does the study involve:
   - (a) Use of records, (hospital, medical, death, birth or other) — (Yes) No
   - (b) Use of fetal tissue or abortus — Yes (No)
   - (c) Use of organs or body fluids — Yes (No)
4. Are subjects clearly informed about:
   - (a) Nature and purposes of study — (Yes) No
   - (b) Procedures to be followed including alternatives used — (Yes) No
   - (c) Physical risks — Yes (No)
   - (d) Sensitive questions — Yes (No)
   - (e) Benefits to be derived — Yes (No)
   - (f) Right to refuse to participate or to withdraw from study — (Yes) No
   - (g) Confidential handling of data — (Yes) No
   - (h) Compensation &/or treatment where there are risks or privacy is involved in any particular procedure — (Yes) No
5. Will signed consent form be required:
   - (a) From subjects — Yes (No)
   - (b) From parent or guardian (if subjects are minors) — Yes (No)
6. Will precautions be taken to protect anonymity of subjects — (Yes) No
7. Check documents being submitted herewith to Committee:
   - ___ Umbrella proposal - Initially submit overview (all other requirements will be submitted with individual studies)
   - ✓ Protocol (Required)
   - ✓ Abstract Summary (Required)
   - ✓ Statement given or read to subjects: nature of study, risks, types of questions to be asked, and right to refuse to participate or withdraw (Required)
   - ___ Informed consent form for subjects
   - ✓ Informed consent form for parent or guardian
   - ✓ Procedure for maintaining confidentiality
   - ✓ Questionnaire or interview schedule

* If the final instrument is not complete prior to review, the following information should be included in the abstract summary:

1. A description of the areas to be covered in the questionnaire or interview which could be considered either sensitive or which would constitute an invasion of privacy.
2. Examples of the type of specific questions to be asked in the sensitive areas.
3. An indication as to when the questionnaire will be presented to the Committee for review.

We agree to obtain approval of the Ethical Review Committee for any changes involving the rights and welfare of subjects before making such change.

Principal Investigator

Co-Investigator

SECTION I - RESEARCH PROTOCOL

1. Title: Study on Socio-economic and Mortality Differentials

2. Principal Investigator: Dr. Stan D'Souza

3. Co-Investigator: Mr. Abbas U. Bhuiya

4. Starting Date: January 15,1982

5. Completion Date: January 15,1983

6. Total Direct Cost: $ 31.850

7. Scientific Program Head:

This protocol has been approved by the Community Services Research Working Group.

*Signature of Scientific Program Head: [signature]

Date: December 1,1981

*This signature implies that the Scientific Programme Head takes responsibility for the planning, execution and budget for this particular protocol.

8. Abstract Summary:

Around the world it has been documented that mortality and socioeconomic status of the household are inversely correlated. By using 1974 SES information from Matlab D'Souza et al (1980) also found similar inverse relationships. The relationship between some demographic and behavioural variables (diarrhea-related) have also been studied. Identification of target groups for better health planning is of vital interest. A minor investigation regarding the relevance of 1974 SES by Huffman et al (1976) in an ICDDR,B internal note indicated that SES of the households have considerably changed within a two year period. An updating of Matlab SES data is urgently felt. As a first step to start the big task of complete SES enumeration in the whole study area a pilot study (no. 80-047(P)) was also carried out in five villages. With the experience gathered from the pilot study--the questionnaire,time schedule, budget etc. for this present study have been designed. Attempts will also be made to study the dynamics of SES over the period of time 1974-1980.

9. Reviews

(a) Ethical Review Committee: _____

(b) Research Review Committee: _____

(c) Director: _____

(d) BMRC: _____

ABSTRACT SUMMARY - PARTICULAR ITEMS

1. Not applicable

2. No risks; not applicable

3. Not applicable.

4. Data will be analysed and published in aggregate and there is no possibility of identifying individuals.

5. A verbal consent form will be approved by the head of household before starting interviewing.

6. Interview will take place at respondents house and questions on socio-economic variables will be asked and it will take half an hour.

7. No direct benefits to individual; will provide a better understanding of the relationship between mortality and socioeconomic status which may be an aid to the planners for a better health planning.

8. Use of death records only, and previous census and DSS records.

Statement about Confidentiality

Verbal consent will be obtained from at least one adult subject in each household--those who will be answering the questions. Implied consent will be assumed for other family members. (See Appendix A).

Identifying information (name, census number) appears on the questionnaire forms (see Appendix B). Because it is necessary to link events using this information which cannot be deleted. However, the staff who have access to these questionnaires is trained and aware of their confidential nature.

After the data is linked, all analysis is done using aggregate information. There is no way that individuals can be identified.

SECTION II - PROJECT PLAN

INTRODUCTION

Mortality rates - especially of infants remain high in less developed countries. Within these countries as well as in affluent ones, demographers and medical professionals have become increasingly aware of the fact that health care is not reaching the various classes of society in an egalitarian manner. Mortality rates tend to be higher in "lower" classes of society. A recent WHO-UN sponsored conference in Mexico (1979) on the socioeconomic determinants of mortality has focused concern in this area. In third-world countries, reliable data do not exist to study the problem of mortality differentials. Indirect estimation procedures are resorted to, based on retrospective surveys.

Beginning in 1963 the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B*) has initiated a Demographic Surveillance System (DSS) in selected villages within and adjacent to Matlab Thana, Comilla District, Bangladesh. The system consists of periodic censuses of the study population with intervening registration of vital events: births, deaths, and migrations. In 1966, a census was conducted in the Matlab Demographic Surveillance Area (DSA**) covering a population of 110,000 residing in 132 villages (OTA**). The DSA was doubled in 1968 with the

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*Formerly known as Cholera Research Laboratory
** DSA - Demographic Surveillance Area
OTA - Old Trial Area
NTA - New Trial Area

addition of another 101 adjacent villages (NTA). At the last census (1974), the population of the total DSA was 264,000 residing in 223 villages. In October 1978, the study area was reduced to 149 villages containing an estimated 1974 population 160,000. All of these retained villages are within Matlab Thana.

The population of the study area is 88 percent Muslim and 12 percent Hindu. The average household consists of six persons. Households of patrilineally related families are grouped in clusters called baris, having a common courtyard. Landholding is skewed, with 18 percent of the households owning 47 percent of the land. About 40 percent of the males and 16 percent of the females over age 15 have completed four years of schooling. About 70 percent of the males and 6 percent of the females are classified as "economically active". Over the past decade, the Matlab Demographic Surveillance System (DSS) has generated an enormous volume of unusually reliable data. Censuses of the population are available in 1966, 1968 (NTA), 1970 (OTA), and 1974 (DSA). Vital events have been registered since 1966 in the OTA and since 1968 in the NTA. Beginning in January 1975, the continuous registration of marital unions and dissolutions was introduced. An update of registered events was undertaken in 1978, aiming for an estimate of the 1 January, 1979 population. Field checking of this updated census has been completed. In progress at this time is the checking, and editing of all registered events in the DSA for computer linkage to the census records.

Socioeconomic status data were collected in the 1974 census. Earlier collection of SES dara on a few items were carried out in 1968 and 1970 on portions of the area under coverage called the old and new trial areas respectively. These data sets form an important resource that can throw light on some of the issues raised recently on the question of mortality.

Some of the implications of socioeconomic differentials in mortality for the health systems have been well developed by Antonovsky (1979) who states "It is incumbent upon us to urge the establishment of a systematic, continuous monitoring programme to assemble appropriate data." He points out that socioeconomic differentials in mortality mean that success has been achieved in one section of the community which is not available to other segments.

As regards the criteria for socioeconomic classification, a paper by Doring-Bradley and Johnston (1979) reviews the situation for several countries. The following are considered to have special relevance to mortality studies.

a) Occupation and status in employment
b) Income
c) Education
d) Industry
e) Housing condition
f) Urban and rural residence
g) National and ethnic groups

However, the authors note that obtaining such data is difficult.

Kitagawa and Hauser (1973) consider education as the most satisfactory of the several indices of socioeconomic status. Education defined by years of schooling is generally reliably reported. In the case of India, Vaidyanathan (1972) has reported mortality differentials by geographical location, rural-urban habitat, religion and caste, occupation, education, type of housing and lighting, landholding, and income.

In India, Vaidyanathan (1972) has collected data from various surveys showing an inverse relationship between occupational class and rtality. Owners and tenant cultivators have lower mortality than agricultural labourers. White-collar workers have lower mortality rates than blue-collar workers. The UN Mysore Population Stusy (1961) uses the type of housing and type of lighting as a proxy for socioeconomic status in urban areas and landholding status in rural areas. Mortality differentials are as described above, with labourers and tenants having an infant mortality rate 59 percent above the rural rate. In the urban area of Bangalore city, the infant mortality rate for the population living in huts or mud houses with thatched roofs and for those without electric lighting was about 11 percent higher than the rate for the whole city population.

In Nigerian data, Caldwell has shown that education, especially that of the mother, is correlated negatively with child mortality rates

(Caldwell, 1979). Preston has studied the changing relation between mortality and economic development (Preston, 1975).

According to a survey of the Committee for the International Cooperation in National Research in Demography, Paris survey, on-going research is listed for 30 centres, and 53 papers on socioeconomic differentials of mortality are cited (Doan 1979).

The Mexico Conference (1979) set of papers include background papers for regions such as Latin America (Behm), Asia and the Pacific (Hashmi) and tropical Africa (Gaisie).

Since independence in 1971, Bangladesh has suffered two severe crisis periods, one linked to the liberation struggle and the other to the 1974 famine. Death rates have been higher during these periods, particularly among poorer groups (Chowdhury and Chen 1977). The 1975 crude death rate among landless families was three times that of families with 3 or more acres (McCord 1976).

The Bangladesh Retrospective Survey on Fertility and Mortality (1974) has documented mortality differentials in childhood by socioeconomic status. Children of women who live in houses with walls of brick had a higher chance of survival than children whose mothers live in houses with walls of mud. Infant and child mortality decreased with the edcutaional level of both husband and wife. These data are based on

indirect estimation procedures, which have their own particular limitations. Vital registration is practically non-existent in Bangladesh and hence the main data sources on mortality differentials have to be obtained from small area surveys. Companiganj thana has been the scene of innovative health interventions, and survey data on mortality rates for a 10% sample exist (Langsten 1976).

Using the Matlab data set, D'Souza and Chen (1979) have focused on sex biases of mortality differentials. Earlier work on the same subject has been recorded in the Matlab area (Ruzicka and Chowdhury 1978). Occupation has been correlated with mortality differentials in the Matlab area (Chowdhury and Aziz 1974). Becker (1978) has studied relationships between seasonality data of deaths with SES.

Chen et.al. (1979) have shown that children under 5 constituted 53.1 percent of all deaths in the period 1975-77. Among infants the most significant cause of deaths was tetanus. Tetanus neonatorum accounted for 26.2 percent of all infant deaths. A significant shift in causes of death occurs for children under 1-4 years. 43.9 percent of deaths were due to diarrhoeal diseases. Measles was the next cause of death with 13 percent. The paper associates under 5 mortality with socioeconomic and nutrition status; children residing in crowded housing (< 242 sq.ft.(had nearly a two-fold higher mortality rates than children residing in less crowded housing (> 242 sq.ft.). Children who were below the 65% cut-off of the Harvard weight-for-age standard or

below 70% of the Harvard weight-for-height standard experience about three-fold higher rates of mortality in comparison to their better-nourished counterparts. D'Souza et al. (1980) have documented mortality differentials and SES characteristics for the 1974 census.

Although malnutrition is known to increase the risk of mortality, past studies have found conflicting results when assessing the relationship between nutrition and socioeconomic status. The national survey of rural Bangladesh, 1975-1976 (Ahmed, 1977) noted significant positive correlations in food and nutrient intake, by income level of the family and landholding but did not observe such an association with the family education score. Studies among rural women in Matlab noted only minimal correlations between maternal nutritional status (weight, height or arm circumference) and either educational level (comparing, women with no education to those with some education) or a scoring of family wealth based on the ownership of certain household goods (Huffman,1977). However, data from a small number of families for whom information on landholding was available, indicated that women from landholding families (2 acres) had higher weights than those from landless families (Chen et al., 1979).

In addition to a benefit to finding an association between SES and nutrition, it would also be helpful to be able to correlate morbidity and socioeconomic status. Those groups at higher risk to illness could be selected for more intensified efforts, either in terms of provision of health services, vaccination programs, or health education. At

present, we have no such indicator that will detect individuals at higher risk to disease.

Two pilot studies have been undertaken at the ICDDR,B this year (1981). Analysis of the data collected is now being undertaken. Over the past ten years some villages in the Matlab area have been included in studies collecting nutritional data. The past correlation between malnutrition and SES can be assessed. The two pilot studies are intended to obtain an up-to-date assessment. In the first study SES variables were collected in five of these villages (Pro.80-047(P)). In the second study anthropometric measures and morbidity data were collected in the same villages for children under 5 years and mothers aged 15-44 years (Pro.81-024(P)). Major embankment projects are now being undertaken in the Matlab area. These will result in different distribution of water and are intended to increase agricultural production. The need for an overall SES baseline in the Matlab study area is then of the highest priority.

SPECIFIC AIMS

The present project submitted for IDRC funding consists of:

1. Extension of the SES survey to all the 149 villages in the DSS area.
2. Mortality analysis of events in the DSS area as related to the new SES update.
3. Assessing the relevance of some of the results obtained from the two pilot studies referred to earlier, when compared with the DSS data and SES update.

METHODS AND MATERIALS

Occupational data were collected for the new trial area in 1968. In 1970, a few SES items were collected for the old trial area (occupation, education of head only, landholding and crops). In the 1974 census SES items--occupation and education were collected for the individual. At the household level, the items collected were house structure, house space, the receipt of remittances, the possession of radio, watch, hurricanes, quilt, cow and boat. Sources of water and latrine use for households were also documented (Table 1).

Since 1974 was a year of crisis, shifting of ownership and economic status took place during the period 1974-75. A small survey taken in 1976 indicated that care should be taken in using the SES data of 1974 since patterns had changed during the years since the census was taken (Huffman et al., 1976).

In the pilot study, five villages in Matlab where information on nutritional status has been collected and recorded over the last 15 years will be selected. In 1970, Sommers et al., (1975) measured heights and arm circumference in children (aged 1-9 in 21 villages of Matlab). During that year, a census of the population was also conducted in the OTA, providing socioeconomic information. In 1974 a subsequent census was taken which can be compared to nutritional status of mothers and children (ages 1-2 years) collected in 1976 in a study of breastfeeding and postpartum amenorrhoea (Huffman et al., 1978).

In 1978-80, data on nutritional status of children aged 1-4 were collected. Tale II summarizes the details of these studies. Comparison of the villages used in these studies illustrate that there are 5 villages (S,U,V10,V24,V28) which were included in all data collection since 1970. These villages were selected for 1981 pilot studies.

Table III gives some changes in characteristics of these villages as assessed from the 1974 Census and 1981 pilot study.

The data collection and processing will be done as outlined below:

Time period:	January 15,1982 - April 15,1982
Items:	SES

The list of SES items to be collected is found in Appendix 1. A few time-consuming items for data collection will be dropped such as area measurements; data from the pilot study will be used to make appropriate decisions for omitting items. Using data obtained from the pilot study it is estimated that about 16-20 households can be interviewed by one team of two persons in a day. Assuming the total number of households to be interviewed as 30,000 using 20 teams each doing about 18 interviews per day, three months' work is estimated.

Data Coding/Entry	March 16 - June 30,1982
Programming	July 1 - September 30,1982
Analysis/Report Writing	July 1 - December 31, 1982

The following tables will be prepared for the analysis for the year 1970-73, related to 1970 SES data, 1974 through 1977 linked to the 1974 SES data, 1978-1981 linked to 1982 data for relevant items for all the villages:

1. Mortality rates by age, sex and education of household head
2. Mortality rates by age, sex and education of mother
3. Mortality rates by age, sex and highest education in the family
4. Mortality rates by age, sex and religion
5. Mortality rates by age, sex and occupation of household head
6. Mortality rates by age, sex and occupation of individual
7. Mortality rates by age, sex and number of boats owned by the household
8. Mortality rates by age, sex and number of cows owned by the household
9. Mortality rates by age, sex and sources of drinking water
10. Mortality rates by age, sex and use of fixed latrine
11. Mortality rates by education of household head and occupation
12. Mortality rates by education of household head and number of cows owned
13. Mortality rates by education of household head and use of fixed latrine

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TABLE 1

SES DATA COLLECTION BY YEAR OF CENSUS

Census Year		OTA	NTA
1966		No SES data	No census
1968		No Census	Occupation of individuals
1970		Occupation and Education of head and ever married individual Landholding Crop yield/ Income of land leasers	No census
1974	Individual	- Education - Occupation	
	Family	- House structure House-space Land yield (5%)	
	Receive remittance possession of radio; watch hurricane, quilt, cow, boat, source of water, latrine		
1980	Same as 1974		

TABLE II

Year	Study	Type of Subjects	Age	Villages
1968	Census/Some SES	All	All	NTA
1970	Census/Some SES	All	All	OTA
1970	Quak Stik	Children	1 - 9	21 (B,C,H,S,U,W V3,V5,V6,V10, V12,V22,V24,V25, V27,V28,V29,V30, V35,VB3,DO)
1974	Census/SES	All	All	All
1976	Postpartum	Lactating mothers	15 1 14	80 (Control villages in contraceptive Distribution Program)
	Amenorrhea	Children	1 - 2	
1978/	Oral Rehydration	Children	1 - 4	
	- Labon gur			9(S,V18,V19,V20, V22,V52,V55,V83, VB12)
	- Packet			11(M,[illegible],O,V10,V28, V31,V39,V59,V62, V88,D101)
	- Control			S(A,J,U,V8,V51,VB9, VB10)

Table III

A. Some Characteristics of Selected Pilot Study Villages for 1974 and 1981

Village	No. of Subjects in Study				
	Total Population		Distance from hospital in miles	Percent Muslim	
	1974	1981		1974	1981
S HS	942	1039	7	47.3	47.5
U	5820	6634	1	84.7	84.4
V10 HS	1169	1272	2	100.0	100.0
V24 HS	2035	2273	6	93.6	93.0
V28 HS	961	1174	7	77.2	78.4

B. Percentage*Comparison by Structure of Houses for Study Villages in 1974 and 1981 (preliminary results)

Village	Structure of House					
	All Tin		Tin Mixed		Other	
	1974	1981	1974	1981	1974	1981
S	4.9	8.3	79.4	75.7	15.7	16.0
U	8.5	10.7	76.0	68.2	15.5	21.1
V10	8.5	22.0	75.4	59.0	16.1	18.9
V24	6.8	7.6	68.0	63.8	25.2	28.6
V28	7.7	21.5	70.3	49.5	22.0	29.0

Note: The annual exponential growth rates for the 5 villages over the 7 years is 1.8%. The religious composition is basically unchanged. Higher socioeconomic status households have "all tin" houses, whereas "others" represents the lowest group. Table III B indicates an increase in the percentages of persons belonging to the highest and lowest SES groups. The low growth rate may be due to net out-migration and high contraceptive use prevalence in these villages. Further analysis is being undertaken.

*percentage of persons

SECTION II

A. DETAILED BUDGET

I. PERSONNEL SERVICES

Position	% Effort	No. of days	Annual Salary	Project Requirements Taka	Dollars
Senior Investigator	15	27	*		
International Fellow	60	108	*		
1 Assistant Scientist	100	180	66,014	33,007	
Field Surveillance Branch					
1 Sr. Field Research Officer	10	90	65,923	1,648	
2 Asstt. Supervisor	30	90	29,822	4,473	
40 Survey interviewers	100	90	12,000	1,20,000	
Data Management Branch					
1 Sr. Statistical Officer	100	180	41,431	20,716	
1 Data Management Officer/FRO	100	180	25,224	12,612	
2 Coding Assistants	100	60	20,436	6,812	
Computer Services					
1 Programmer (national)	50	90	55,718	6,965	
2 Data Entry Technician Gr.1	100	60	24,791	8,264	
SUB-TOTAL				2,14,497	

* Budgeted elsewhere

		Project Requirements	
		Taka	Dollars
II.	SUPPLIES AND MATERIALS		
	Stationary	24,000	
	20 Diskettes (2D)	-	320
III.	EQUIPMENT		
	None		
IV.	PATIENT HOSPITALISATION		
	None		
V.	OUTPATIENT CARE		
	None		
VI.	ICDDR,B TRANSPORT		
	Dacca-Matlab-Dacca - 24 trips (Tk.360 per trip)	8,640	
	Matlab speed boat (2 speedboats 4 hours daily for 66 days)	105 600 ~~33,000~~	
	Country boat 20 at Tk. 25 per day for 66 days	33000	
VII.	TRAVEL AND TRANSPORTATION OF PERSONS		
	None		
	Local Travel		
	None		
	International Travel		
	None		

		Project Requirements	
		Taka	Dollars
VIII.	TRANSPORTATION OF MATERIAL		
	None		
IX	RENT, COMMUNICATION AND UTILITIES		
	Communications	1,500	
X.	PRINTING AND REPRODUCTION		
	Questionnaire cyclostyling (35,000 copies)	17,640	
	Other printing and Reproduction	2,750	
	SUB-TOTAL	20,390	
XI.	OTHER CONTRACTUAL SERVICES		
	Computer Time	96,865	
XII	CONSTRUCTION, RENOVATION ALTERATION		
	None		
XIII	MISC. COMPONENTS		
	None		

B. BUDGET SUMMARY

Category	Takas	Dollars
1. Personnel	2,14,497	-
2. Supplies	24,000	320
3 - 5 Nil Items	-	-
6. ICDDR,B Transport	1,47,240	-
7 - 8 Nil Items	-	-
9. Rent/Communication	1,500	-
10. Printing/Reproduction	20,390	-
11. Other Contractual services	96,865	-
12. Nil Items	-	-
13. Miscellaneous	-	-
TOTAL	5,04,492	320
Total (in US Dollars)	31,530	
Grand Total (in US Dollars)	31,850	

Appendix A

Verbal Consent Statement

The International Centre for Diarrhoeal Disease Research Bangladesh (formerly Cholera Research Laboratory) is planning to collect information on socio-economic status of households of Matlab DSS area. We will collect information on education, occupation and ownership of household members. You will be asked some questions relating to the above variables and it will be treated as confidential. Please note that you will not be paid. You may at any time refuse to answer questions. If you have any questions we will try to answer them.

Do you have any questions now?

Do you agree to participate ?

সৌজন্য সম্মতি পত্র

আন্তর্জাতিক উদরাময় গবেষণা কেন্দ্র (প্রাক্তন কলেরা রিসার্চ ল্যাবরেটরী) গ্রামীণ পরিবারের আয়-আমদানির অবস্থার উপর তথ্য সংগ্রহ করার পরিকল্পনা করছে। আমরা পরিবারের সদস্যদের শিক্ষা, পেশা ও বিষয় সম্পত্তির উপর কিছু প্রশ্ন করব। এবং এ কাজে আধ-ঘন্টা সময় লাগতে পারে। এ ব্যাপারে আপনার দেয়া যাবতীয় তথ্যাবলী গোপন রাখা হবে। এ জন্য আপনাকে কোন টাকা পয়সা দেয়া হবে না। আপনি ইচ্ছা করলে যে কোন সমস্ত প্রশ্নের জবাব দেয়া বন্ধ করতে পারবেন। এ ব্যাপারে আপনার কোন প্রশ্ন থাকলে আমরা জবাব দিতে চেষ্টা করবো।

আপনার কোন প্রশ্ন আছে কি?

আপনি কি আমাদের সঙ্গে সহযোগীতা করতে রাজী আছেন?

1. Card No. 1 (1), 2. Study No. _____ (2-4), 3. Village: _____ (5-7) 4. Bari: _____ (8-10)

5. Family No. _____ (11-14), 6.(74/)Family registration No. _____ (15-18) 7. Religion _____ (19) 8. Date of Interview _____ (20-25)

9. Main sources of water during season (from to):

Drinking: _____ (26), Cooking: _____ (27), Bathe: _____ (28), Washing: _____ (29)

Codes: Tube well (1), Tank (2), River (3), Ditch/Canal (4), Others (5)

10. Structure of the largest room: Wall: _____, Roof: _____ (30)

Codes: Wall tin + Roof tin (1), Wall pucca + Roof tin (2), Wall tin + Roof others, Wall others + Roof tin (3), Others (4)

11. Items Owned: Lep (01), Hurricane (02), Bi-cycle (04), Any watch (08), Radio (16), Remittance (32) _____ (31-32)

12. No. of cows owned: _____ (33), 13. No. of boats owned: _____ (34)

14. Total land owned (excluding homestead) in decimals: _____ (35-38)

If own land: Self cultivated (1)
Renting out (2)
Share cropping (4)
_____ (39)

If no land: Takes rent (1)
Shares crop (2)
Others (specify) (4)
_____ (40)

15. Use of fixed latrine: Male Yes/No _____ (41), Female Yes/No

Within 15 yards from used water sources: Yes/No _____ (42)

16. Highest education of former member now outside DSS/Abroad: _____ (43), Type: _____ (44), Years of schooling: _____ (45-46)

17. Highest education in the family: Type _____ (47), Years of schooling: _____ (48-49)

18. Occupation of household Head: _____ (50-51), 19. Family size: _____ (52-53)

Card No. 2 / 1 , Study No. ____ / 2 4 , Village: _____ / 5 7 , Bari: _____ / 8 10 , Family No. _____ / 11 14 , Religion: _____

B. Individual Information:

Sl. No.	Year of Reg.	Registration No.	Name	Sex	Relation to Head	Marital Status	Sl. No. of spouse	Date of birth	Sl.No.of Mother	Education		Occupation	
										Type	Years of schooling	Primary	Secon
16-17	18-19	20 - 28		29	30-31	32	33-34	35 - 40	41-42	43	44 - 45	46 - 47	48 -
1.													
2.													
3.													
4.													
5.													
6.													
7.													
8.													
9.													
10.													
11.													
12.													
13.													
14.													
15.													

Name of the interviewer: Time taken (in minutes):