APPENDICES
ANNEXURE-I

16 DECISIONS

1. The four principles of Grameen Bank - discipline, unity, courage and hard work - we shall follow and advance in all walks of our lives.

2. Prosperity we shall bring to our families.

3. We shall not live in dilapidated houses. We shall repair our houses and work towards constructing new houses at the earliest.

4. We shall grow vegetables all the year round. We shall eat plenty of it and sell the surplus.

5. During the plantation season, we shall plant as many seedlings as possible.

6. We shall plan to keep our families small. We shall minimize our expenditures. We shall look after our health.

7. We shall educate our children and ensure that they can earn to pay for their education.

8. We shall keep our children and environment clean.

9. We shall build and use pit-latrines.

10. We shall drink tubewell water. If it is not available, we shall boil water or use alum.

11. We shall not take any dowry in our sons' wedding; neither shall we give any dowry in our daughters' wedding. We shall keep the Centre free from the curse of dowry. We shall stay away from the practice of child marriage.

12. We shall not inflict any injustice on anyone, neither shall we allow anyone to do so.

13. For higher income we shall collectively undertake bigger investments.

14. We shall always be ready to help each other. If anyone is in difficulty, we shall all help her/him.

15. If we come to know of any breach of discipline in any Centre, we shall all go there and help restore discipline.

16. We shall introduce physical exercise in all Centres. We shall take part in all social activities collectively.

Source: The Grameen Bank, Mirpur, Dhaka.
ANNEXURE -II

SOCIO-ECONOMIC SURVEY OF HOUSEHOLDS UNDER THE GRAMEEN BANK AND BRAC

Respondent: Wife/Spouse
Household head: Wife/Husband
Interviewer: Wife/Husband
Village: Thana: District:
Name of NGO:

1. Household Identification

1.1 Name of respondent:
1.2 Marital Status: Age:
1.3 Primary occupation of the household head:
   a. self-employment in agriculture and related activities
   b. agricultural wage labourer
   c. trade and shop keeping
   d. transport
   e. cottage industry
   f. raising livestock and poultry
   g. other activities
1.4 Education level of the household head:
   a. illiterate
   b. can sign only
   c. attended primary school
   d. attended secondary school
   e. have more than secondary level education
1.5 Education status of the Children:
   a. no. of children attending primary level
   b. no. of children at secondary level
   c. no. of children at higher secondary and above
   d. no. of children dropped out from primary level
1.6 Education status of girl child:
   a. no. of girl child at primary level
   b. no. of girl child at secondary level
   c. no. of girl child at secondary and above
   d. no. of girl child dropped out from primary level

1.7 Occupation:

1.8 Size of the household:

1.9 Size of land owned (in decimal):

1.10 Extra land in possession (in decimal):
   [share cropping]
   [lease] [mortgaged] [fallow]

1.11 Household income:
   a. upto taka 750
   b. 751 - 1000
   c. 1001 - 1500
   d. 1501 - 2000
   e. 2001 and above

1.12 Access to drinking water:
   Yes or No, If yes:
   a. have own tube well
   b. fetch water from neighbours/nearby village tube well
   c. use pond water and boil
   d. use deep tube well water
   e. use pond water and add alum

1.13 Access to sanitary latrine:
   a. pit latrine
   b. pucca latrine
   c. no latrine

1.14 Access to birth control materials:
   a. yes
   b. no

1.15 Reasons for not adopting family planning measures:
   a. religious factor
   b. newly married and eager to have first child
   c. no children yet
d. want one more child, after which will adopt family planning

e. want a son

f. do not prefer contraceptives

g. not needed (widowed, old, etc.)

1.16 Food security of the hardcore poor:

a. access to Rural Works Programme (RWP)

b. access to Vulnerable Group Development Programme (VGDP)

1.17 Coping distress situation:

a. borrow money from informal sources at high interests

b. borrow money from group fund of the samity

c. sell livestock

d. sell poultry

e. sell homestead plants

f. distress selling of household items

g. borrow money from other sources

1.18 Access to nutritious foods and balanced diet:

a. not sufficient

b. moderate

c. adequate

1.19 Frequency of consumption of certain major food items over a period of a week:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Food items</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>&gt;5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. fish</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>b. meat</td>
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<tr>
<td>c. milk</td>
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<tr>
<td>d. lentil</td>
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<tr>
<td>e. vegetable</td>
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</tr>
</tbody>
</table>

1.20 Facing shortage of foods in the crucial Bengali months:

<table>
<thead>
<tr>
<th>Month</th>
<th>[Y]</th>
<th>[N]</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Ashar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Sravan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Bhadra</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
d. Ashwin
e. Katrik

1.21 Assessment by self in regard to surplus/deficit in food by household;
   a. year round deficit
   b. frequent deficit
   c. more or less balanced
   d. balanced
   e. well balanced
   f. surplus

1.22 Access to Common Property Resources (CPR)
   a. yes
   b. no

1.23 Purpose of depending on CPR
   a. for fuelwood
   b. for fish
   c. fodder for cattle
   d. for house building materials

1.24 Utilization of Homestead area
   a. underutilized
   b. fully utilized

1.25 Vegetables requirement of the households met from:
   a. homestead garden
   b. purchase from market

1.26 Diversity of plants in the homestead
   a. good
   b. moderate
   c. not satisfactory

2. Other information related to NGO activities

2.1 Age of membership:
   a. 1 - 3 years
   b. 4 - 6 years
   c. 7 years and above
2.2 Type of loan preferred by the household:
  a. individual loan
  b. group loan

2.3 Purpose of obtaining group loan:
  a. pond cultivation
  b. share cropping
  c. procure rice husking machine
  d. procure irrigation pump
  e. shrimp cultivation

2.4 Loan repayment capacity:
  a. excellent
  b. good
  c. moderately good
  d. bad

2.5 Major use of individual loan:
  a. handicrafts making
  b. rice husking and puff making
  c. small business
  d. artisanal works
  e. transport

2.6 Uses of loan for activities related to strengthening ecological foundation of the village ecosystem:
  a. cattle rearing
  b. poultry bird
  c. homestead plantation for fuel wood and timber
  d. vegetable cultivation
  e. pisciculture
  f. nursery
  g. organic manure preparation
  h. poultry feed production
2.7 Access to new technology and technology owned by households

<table>
<thead>
<tr>
<th>Technology</th>
<th>[Y]</th>
<th>[N]</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. HYV rice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Hyv vegetables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. HYV poultry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. HYV cattle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Solar panel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Bio-gas stove</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Improved cooking stove</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Rice husking stove</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Irrigation pump</td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. LLP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. Tara pump</td>
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</tbody>
</table>
ANNEXURE -III

HOUSEHOLD SURVEY TO ASSESS THE BIO DIVERSITY

A. Crop Biodiversity
1. Types of rice varieties currently being on use for cultivation:
   a. HYV
   b. local
2. No. of rice varieties is on use for cultivation:
   a. local
   b. HYV
3. No. of traditional varieties previously used by the household:
4. Disadvantages with the HYV varieties faced:
   a. decreasing yield
   b. can not afford to meet growing demand of fertiliser and insecticides
   c. less profitability
   d. decreasing fertility of the crop field
   e. less straw for the cattle
5. Advantages of the local varieties:
   a. steady yield in spite of stress by natural phenomenon
   b. less demands of the standing crop in terms of money, energy and labour
   c. abundant straw for cattle
   d. additional straw can be used for cooking and other purposes
6. Types of varieties are on use for other crops:
   Local/HYV No.
   a. vegetables
   b. pulses
   c. cash crops

B. Plant Biodiversity

1. No. of vegetables planted in the kitchen garden:
2. Types of vegetables: local/HYV
3. No. of creepers and their types are on use in the kitchen garden: local/HYV
4. No. and types of trees are in the homesteads: local/HYV
5. No. and types of fruit bearing plants in the homesteads: local/HYV

C. Animal Biodiversity

1. No. and types of cattle: local/HYV
   - Cow
   - Goat
   - Sheep
   - Buffalo

2. No. and types of poultry birds: local/HYV
   - Chicken
   - Duck
   - Pigeon
   - Other birds

D. Fish Biodiversity

1. Types of fishes are available in closed fisheries:
   - Fish Local HYV
     - Ruhu
     - Carp
     - Silver carp
     - Shrimp
     - Prawn

2. Types of fishes available in open water fisheries in the study areas:
QUESTIONNAIRE TO ASSESS SOCIO-ECONOMIC IMPACT OF THE NGOs

A: Impact on Education

1. State your education level and tick mark on the appropriate one as under:
   a. illiterate
   b. can sign only
   c. attend primary school
   d. attend secondary school
   e. have more than secondary level education

2. Do you send your children to school for receiving education? [Y] [N]

3. If yes, indicate where are they attending to schools as under:
   a. non-formal schools run by NGOs
   b. educational institutions run by government in your locality

4. Do you send your girl child to schools? [Y] [N]

5. If yes, indicate where they receive education?
   a. schools run by NGOs
   b. government schools

6. At which level your girl child receive education?
   a. primary level
   b. secondary level
   c. Higher secondary level

8. Do you know about Food For Education scheme run by the government under which children
   from your economic background may receive free education? [Y] [N]

9. Do you know that education for girl child up to tenth class is free? [Y] [N]

10. Do you have any school drop out children in your family? [Y] [N]

11. If yes, indicate their numbers and sex.
QUESTIONNAIRE - II

QUESTIONNAIRE FOR ASSESSMENT OF RURAL ENERGY NEEDS

Respondent no.

A. Information on Respondent
a. Name of Upazila:

b. Name of village:

c. Name of Household head: Male/Female

d. Name of spouse:

e. Size of the family:

f. Occupation:

g. Age:

h. Educational Qualification:

B. Fuel wood sources

Questions

1. Do you use fuel wood for cooking?

2. What kind of fuel you use?
   i. Wood
   ii. Twigs, branches and leaves
   iii. Bagasse
   iv. Jute stick
   v. Crop residues
   vi. Cow dung
   vii. LPG
   viii. Other fuel (peat soil)

3. Where from do you collect fuel wood?
   i. Homestead woodlot
   ii. Common property resources (CPR)
   iii. Nearby forest
   iv. Out of dividends from social forestry

Answer (Please tick as applicable)

Yes/No (Y/N)
v. from local market

4. Do you scavenge cow dung for meeting your energy needs?

B. Fuel wood production and management

5. Do you grow plants for fuel wood?

6. If yes, where do you grow?
   i. In own homestead
   ii. On marginal land
   iii. On others land on lease

7. What types of plant you grow?
   i. Shrubs
   ii. Timber yielding plants
   iii. Other plants

8. Do you get any help in selecting species for fuelwood plantation?

9. If yes, from where do you get suggestions?
   i. From NGOs
   ii. From local bodies
   iii. From village extension worker
   iv. From none

10. where do you get saplings for plantation?
     v. From Thana nursery
     vi. NGO nursery
     vii. Grow saplings at my own

11. Did you receive training on plantation and nursing of saplings?

12. If yes, where from you receive training?
   i. NGO
   ii. government extension worker

13. Do you cut entire plant for your fuel wood need?

14. Or you cut only the branches?

15. What do you do with the woods of your timber plants?

16. Do you think it is profitable to grow fuelwood plants in the homestead?
C. Availability of fuel wood

17. Is the fuel wood available in your village?
18. Do you collect cow dung for fuel?
19. Do you know that cow dung if burned for fuels need the fertility of the agricultural land will be badly affected?
20. Do you use peat soil for cooking purpose?
21. Who collects fuel for cooking and other domestic purposes?
   i. husband
   ii. Wife
   iii. Children
22. Other than cooking for what other purposes you use fuel wood?
   i. Puffed rice making
   ii. Paddy parboiling
   iii. Bakery
   iv. Bamboo and cane furniture making
   v. Beaten rice making
   vi. Molasses making
   vii. Diary products preparation
   viii. Tobacco curing
   ix. Sweet meats preparation
23. Where do you get additional fuels for above purposes?
   x. Rely on leaves and twigs
   xi. homestead plants
   xii. nearby forests and common property resources
   xiii. purchase fuel woods, leaves and cow dungs from the market

D. Technology Intrusion

24. Do you know about the improved chula?
25. If the NGOs provide you improved chula will you use it?
QUESTIONNAIRE- III

QUESTIONNAIRE TO ASSESS THE IMPACT OF NGOs ON BIOLOGICAL RESOURCES DEVELOPMENT AND LIVELIHOOD SECURITY IN THE RURAL AREAS

A. Livestock

1. Do you have cattle? If yes, which of the livestock you have and mention their numbers:
   a. cow local variety HYV
   b. goat
   c. sheep
   d. buffalo
   e. other animals

2. If not, why don't you own cattle?
   a. high incidence of cattle diseases
   b. non availability of vaccines
   c. high mortality of stockings due to adverse climatic conditions

3. How did you own the cattle?
   a. from own earnings
   b. from NGO money
   c. borrowing money from other sources
   d. supplied by others for rearing on profit-sharing basis.

4. Do you prefer indigenous cattle over hybrid ones? [yes] [no]. If yes, why do you opt for that?
   a. less rearing cost
   b. low mortality of stockings and less disease prone
   c. initial investment is less to own cattle
   d. capacity to withstand adverse climatic conditions

5. Do you face any problems in arranging feeds for your cattle [yes] [no]. If yes, which of the following problems do you face:
   a. no marginal land for grazing of cattle
   b. lack of availability of fodder
   c. no pasture land
   d. reduced access to CPR
6. What problems do you face in livestock production?
   a. prevalence of livestock diseases and surge in mortality
   b. lack of meadows and pasture land for grazing of cattle
   c. lack of adequate feeds and forage

7. How do you cope up the cattle feed problems?
   a. purchase hays at high price
   b. collect fodder from far-flung areas
   c. take the cattle to remote areas for feeding
   d. take the cattle to common grazing land
   e. can not afford to purchase hays

8. Who looks after cattle?
   a. husband
   b. wife
   c. children
   d. all the family members

9. Do you think beef fattening is a profitable venture?

10. In case of epidemics of your cattle how do you obtain vaccinations?
    a. from government sources
    b. NGO vaccinator

11. Do you sell draft power?

12. Have you been able to increase your household income by owning cattle?

13. Do you sell your livestock produces? If yes, indicate the produces you sell:
    a. milk
    b. curd
    c. ghee
    d. other milk produces

14. What do you do with the earnings from the livestock?
    a. meet the expenditure on household core
    b. for purchase of food grain

15. What do you do with your cattle dungs?
    a. apply as fertilizer for vegetable cultivation
    b. burn as fuel for rice cooking and other purposes
    c. sell in the market for fetching additional income.
    d. Apply as bio-fertilizer in the leased land for rice cultivation
16. Did you receive any training for scientific rearing of cattle?
17. If yes, has the training helped you in increasing productivity?

B. Poultry and Duckery
1. Do you have domestic birds? If yes, which of the following you have and mention their numbers: Local variety HYV
   a. duck
   b. chicken
   c. pigeon
   d. other birds
2. How did you own the poultry birds?
   a. from own earnings
   b. from NGO money
   c. borrowing money from others
   d. supplied by others for rearing on profit sharing basis
3. How do you arrange poultry feeds?
   a. purchase from the market
   b. left over grains by self
   c. do not at all provide feeds
4. Do you prefer hybrid birds over native ones? [no] [yes]. If yes, mention the reasons:
   a. rapid growth and weight
   b. profitability
5. Do you know that hybrid birds are prone to diseases?
6. If there is an epidemic in your area how do you procure vaccines? [yes] [no]. If yes, from where do you collect the vaccines?
   a. from thana livestock office
   b. NGO vaccinator
   c. village extension worker
   d. open market
7. Do you find poultry rearing is a profitable venture?
   a. moderately profitable
   b. extremely profitable
   c. not profitable
8. If not profitable, what are the causes:
   a. higher mortality rate of the chicks
   b. shrinkage of homestead lands
   c. shrinkage of living space for movement of poultry birds due to water logging
   d. high vaccine cost
   e. high cost of poultry feeds

9. Do you face epidemics of poultry birds in your village?
   a. not so frequently
   b. frequently
   c. never

10. When there is an epidemic in your area do you find vaccination available?

11. Did you receive any training from NGO for raising poultry birds scientifically?

12. Has the training helped you in increasing the number of poultry birds?

13. Do you sell poultry birds and eggs for meeting your household cores?

14. If yes, how do you sell them?
   a. directly to the local market
   b. with the help of samity

15. What do you do with the incomes from selling of the poultry birds and eggs?
   a. procure food grains
   b. meet other household expenditure
   c. deposit in the bank to meet unforeseen expenditure

16. Do you find the marketing of poultry birds and poultry products in your area is satisfactory?

17. Do you think that samity should have its own marketing mechanism to avoid the middlemen?

18. What do you do with the excreta of the poultry birds?
   a. apply in the homestead garden and agricultural land
   b. apply in the pond as fish feed
   c. produce bio-fertilizer and sell into market
C. Pisciculture

1. Do you have the advantage of fish cultivation? [yes] [no]. If yes, where do you culture fish?
   a. own pond
   b. joint-ownership pond
   c. leased pond
   d. shallow pits in and around homestead

2. If you do not have access to pisciculture how do you meet your protein needs?
   a. common property resources (CPR)
   b. purchase from the market
   c. other sources
   d. do not take fish

3. Do you find it lucrative to get involved in the group pond fisheries?

4. How do you contribute to cultivation of fishes in the group pond?
   a. give labour for clearing of pond and earth work
   b. take care of security aspects of the pond
   c. apply fish feeds
   d. take care of plantations around the pond

5. Do you engage yourself and the family members for fishing?

6. Whom do you engage in your family for catching fishes?
   a. self
   b. spouse
   c. children
   d. all the family members

7. What do you do with the fish catches?
   a. sell in the market
   b. consumption for the family
   c. produces dry fish

8. Do you face any problem in catching fish from the open water bodies?

9. What are the problems you usually face?
   a. shrinkage of open water body
   b. reduction in access to fishing due to encroachment by powerful groups and individuals
c. reduction in fish catch
d. competition for scarce natural resources

10. Do you find pond cultivation in a group is profitable venture?

11. Are you engaged in the activities related to fisheries? [yes] [no]. If yes, indicate which of the followings you undertake:
   a. fishing net production
   b. fish fry production
   c. fish meal production
   d. guarding the ponds/shrimp farm
   e. give labour in pond excavation
   f. boat making

12. Did you receive any training for scientific production of fish?

13. If yes, did the training helped you to increase production of fish biomass?

14. Do you know about integrated fish farming?

15. Do you encounter fish disease?
   a. not frequently
   b. not at all

16. Do you depend on the income from selling fish and fish products?

17. If yes, what do you do with the money?
   a. purchase food grains
   b. meet other household cores

18. How often you consume fish?
   a. once in a week
   b. twice in a week
   c. thrice in a week
   d. once in 15 days
   e. once in a month

D. Homestead Plantations

1. Do you grow plants in your homestead?

2. If yes, which plant you grow?
   a. creepy vegetables
   b. fruit yielding plant
c. timber yielding plant
d. fuel wood
e. bamboo
f. fodder
g. minor food grain and vegetable crops
h. other vegetables
i. spices

3. If not, why do not you grow plants?
   a. dispute over ownership rights
   b. very small size of holding
   c. plants do not survive due to unfavourable edaphic condition

4. In which part of your homestead you grow plant?
   a. backyard
   b. around pond
   c. unutilised areas

5. Who look after the homestead plantations?
   a. myself
   b. spouse
   c. children

6. Where do you collect seed and seedlings for your homestead plantations?
   a. NGO
   b. government department
   c. open market
   d. individual sources

7. Do you face any scarcity of seed and seedlings in your area?

8. Do you get any technical support in selecting plants for homestead cultivation?

9. If yes, from which source you get support?
   a. Thana forest officials
   b. village extension worker
   c. NGO worker
   d. neighbours

10. Do you grow vegetables in your homestead?

11. What are the species you usually grow in your homestead?  Local variety  HYV

12. What are the major plants you grow in the homestead?
12. What do you do with the produces from your homestead garden?
   a. sell entire produces in the market
   b. sell part of the produces for own consumption or own use

13. Do you think that by growing plants in the homestead you can supplement your family income?

14. Do the plants help maintaining the environment?

15. Do you depend on the homestead vegetables and other plants for your livelihood?

16. For growing vegetables in your homestead which of the following fertilizers/manures you use?
   a. cow dung
   b. green manure
   c. chemical fertilizer

17. Where do you get motivation to do homestead plantations and vegetable gardening?
   a. NGO worker
   b. extension worker
   c. from none
   d. habitual urge to grow plants

18. Did you receive any training on scientific plantation?

19. If yes, where do you get the training?
   a. NGO
   b. extension worker

20. What do you do with the income of the produces of your home garden?
   a. purchase food grain during emergency
   b. meet expenses of other household cores

21. What are the problems you are currently facing in homestead plantation?
   a. if planted, saplings started to wilt and die subsequently
   b. non-availability of salt tolerant plants and vegetable species
   c. creeping salinity in the homesteads
QUESTIONNAIRE-IV

QUESTIONNAIRE TO ASSESS THE PARTICIPATION OF NGO MEMBERS IN
SOCIAL FORESTRY

1. Are you involved in the social forestry programme? If yes, who is to give labour in the programme:
   a. husband
   b. wife
   c. children

2. Have you volunteered yourself to get involved in the social forestry programme?

3. If not, Who encouraged you to join in the programme?
   a. NGO
   b. self
   c. neighbours

4. Did your family members and yourself were involved when the project for social forestry programme for your village was undertaken?

5. What type of labour you have to put in the programme?
   a. soil preparation
   b. raising seedlings
   c. erect hedge
   d. protect seedlings from cattle
   e. maintenance of bamboo cage
   f. apply fertilizer

6. What immediate benefit you draw by being involved in the programme?
   a. can grow fodder for the cattle
   b. grow winter vegetables
   c. use leaves and twigs for fuel
   d. can harvest seasonal fruits

7. Are you satisfied with the terms and conditions mentioned in the contract form regarding benefit share of the produces of the programme?
8. Are you aware of environmental benefits of planting trees?

9. Do you and your family members get encouraged in planting trees also in your homestead?

10. Do you think that fuel wood problem of your family has been reasonably solved after you join the social forestry programme?

11. Do you face any problem with the influential people of your village who stand in the way right from putting saplings to management of plants?
   a. uprooting of saplings
   b. demolish fencing
   c. grazing of cattle owned by influential people
   d. create obstructions in every stage of plantation and management

12. Did you receive any training from the NGO on the aspects of tree plantation and social forestry management?

13. Trees and vegetables grown by you in the social forestry programmes:
   Local variety       HYV
ANNEXURE - VI

BANGLADESH
AREAS OF ENVIRONMENTAL CONCERN.

CHITTAGONG

0 20 40 80 100 km

1989