

POVERTY ALLEVIATION AND EMPOWERMENT

The Second Impact Assessment Study of BRAC's
Rural Development Programme

Edited by:

A. M. Muazzam Husain

Study Team:

A. M. Muazzam Husain, Shantana R Halder, Debdulal Mallick,
Fehmin Farashuddin, Altaf Hossain, Nurul Amin, Dilruba Banu,
Shahnuj Akter, Sadiqun Nabi Chowdhury and Rita Sen

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**Research and Evaluation Division
BRAC Centre, 75 Mohakhali
Dhaka-1212, Bangladesh**

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E-mail : bracamr@bdmail.net
Fax : 880-2-883542, 883614
Telex : 632327 BRAC BJ
Cable : BRAC Dhaka
Telephones : 884180, 884051, 9881265

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FOREWORD

With the primary goals of alleviating poverty and empowering the poor, BRAC has been working in Bangladesh since its independence. In pursuance of these goals a nation-wide women-focused target group oriented multi-dimensional programme has been undertaken for the rural poor. Under its Rural Development Programme (RDP) women are organized into groups, offered awareness and skill development training, and are provided with credit, necessary technical services, inputs and marketing facilities. Social and human development components of BRAC programmes include health and family planning services and non-formal primary education. Currently, over 2.5 million rural households are covered by RDP.

The evolution of this integrated approach of development is the result of BRAC's conscious efforts to learning by doing. In this context monitoring and evaluation of its programmes have always been a high priority. The Research and Evaluation Division (RED) provides research support to our development programmes and many of its study findings have helped BRAC in formulating policy guidelines in moulding its programmes. This approach has contributed to the flexibility and dynamism in our development programme framework and subsequent scaling up. Sustainability of different BRAC programmes and their impact on the participants are vital concerns which also require constant monitoring and evaluation.

Though isolated studies on assessing the impact of BRAC programmes were initiated earlier, the first comprehensive impact assessment study (IAS) of RDP was undertaken in 1993 to gain a more detailed and extensive understanding of the socio-economic impact in both quantitative and qualitative terms. The IAS was repeated in 1996-97 and this report presents the findings of the second impact assessment study. It measures the impact of RDP on its participants in terms of their socioeconomic well-being, overall reduction in poverty level and empowerment. Some special features of the study include a further refinement in its methodology, measurement of poverty and its correlates and analysis of panel data. An added dimension of the study is analysis of member performance and identification of factors that influence performance. BRAC plans to carry out such impact assessments on a regular basis in the future.

We hope this report will provide policy makers and development practitioners with new insights on impact of rural development programmes aimed at alleviating poverty and empowering rural women. We congratulate the members of the study team for conducting the study.

Fazle Hasan Abed
Executive Director

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GLOSSARY OF TERMS

Abbreviations

AO	Area Office
BRAC	Present name of organisation previously known as Bangladesh Rural Advancement Committee and Bangladesh Rehabilitation Assistance Committee
EHC	Essential Health Care programme
EIG	Employment and Income Generation programme
GO	Governmental Organization
HH	Household
HPD	Health and Population Division
IAS-I	First Impact Assessment Study of RDP
IAS-II	Second Impact Assessment Study of RDP
ICDDR,B	International Centre for Diarrhoeal Disease Research, Bangladesh
IGA	Income Generating Activity
IGVGD	Income Generation for Vulnerable Group Development programme (BRAC)
LFA	Logical Framework Analysis
NFPE	Non-Formal Primary Education Programme (BRAC)
NGO	Non-governmental Organization
NTG	Non Target Group Members
PA	Programme Assistant (a front-line field level staff of BRAC)
PO	Programme Organizer (a field level managerial staff of BRAC)
RDP	Rural Development Programme (BRAC)
RED	Research and Evaluation Division (BRAC)
RRA	Rapid Rural Appraisal
SLDP	Small-holder Livestock Development Programme
TARC	Training and Resource Centre
TG	Target Group Members (based on selection criteria for BRAC membership)
Tk.	Taka (Unit of Bangladesh currency)
UNICEF	United Nations Children's Fund
UP	Union Parishad (a tier of the Bangladeshi local government structure)
VGD	Vulnerable Group Development (a programme operated by the Ministry of Disaster Management and Relief, funded by the World Food Programme and others)
VO	Village Organization (organized by BRAC)

Bangla words

<i>Alna</i>	Wooden rack for hanging clothes
<i>Bari</i>	Cluster of households in most cases linked by kinship ties
<i>Bazaar</i>	Rural small market
<i>Bhai</i>	Brother (BRAC field staffs are called as <i>brothers</i> by VO members)
<i>Dhenki</i>	Wooden husking pedal
<i>Ghomta</i>	Part of women's dress used as a veil to cover the head and forehead
<i>Gram Sobha</i>	Village level VO meeting on social issues held once a month (also called issue-based meeting)
<i>Haat</i>	Weekly rural market
<i>Kantha</i>	Quilt
<i>Khat</i>	Bed made from wooden planks
<i>Kisti</i>	Loan instalment
<i>Lakri</i>	Firewood
<i>Madrassa</i>	A religious educational institution for Muslims
<i>Majar</i>	Grave of a Muslim saint or a shrine
<i>Milad</i>	A Muslim religious congregation to show respect to the holy prophet to seek the blessings of Allah
<i>Mohajan</i>	Traditional money lender
<i>Mushti chaal</i>	Handful of rice saved by rural women before cooking
<i>Pitha</i>	Traditional rice cake
<i>Purdah</i>	Seclusion of women (also used to mean veil worn by them)
<i>Ramadan</i>	Muslim month of fasting
<i>Samity</i>	Organization
<i>Shashthyo Shebika</i>	Female health worker (trained by BRAC)
<i>Shongsharer shompod</i>	Household assets
<i>Shuponno</i>	Rural shop managed by female BRAC members
<i>Taka</i>	Unit of currency in Bangladesh
<i>Thana</i>	Sub-district (with an average population of about 2,30,000)

EXECUTIVE SUMMARY

1. Introduction and Methodology

1.1 BRAC has been working since early 1990's to evolve an impact assessment system (IAS) for its rural development programme (RDP). The first impact assessment study was conducted in 1993-94. Assessing the impact of RDP is necessary not only to measure the success of the programme in raising the socio-economic status of the participants but also to identify the shortcomings of the programme and to assess its sustainability.

1.2 The RDP phase IV (1996-2000) stipulated that the second phase of the IAS would be planned and implemented to provide a benchmark for phase IV and to further develop an impact assessment system. Accordingly, the present study has been initiated. First round data collection started in October 1996 and the second round was completed in March 1997.

1.3 The broad objectives of IAS-II are to measure the material and social well-being of RDP participants with an added focus on the poverty reduction impact of the programme by measuring poverty and its correlates. Other objectives include measurement of seasonal economic vulnerability and coping capacity of participants and analyses of women's empowerment, panel data, membership performance and coverage of the programme.

1.4 The study design uses three study approaches viz., the household survey, the qualitative and case studies and the village profile. The household survey covered social and economic aspects of well-being while the qualitative studies mainly covered empowerment, member performance and RDP coverage of the rural poor.

1.5 The total sample population for household survey consisted of 1,700 households with 1250 BRAC participants and 250 comparison households selected at random and 200 'success' households purposively selected. Twenty five area offices (AOs) were selected at random, with 10 panel AOs for IAS-I and 15 non-panel AOs. The comparison households were selected from the 10 panel AOs.

1.6 Chapters One and Two discuss the above in details, present a brief review of relevant literature and provide notes on the concepts of poverty and empowerment.

2. Material and Social Well-being

2.1 To determine the impact of RDP on socio-economic well-being of participants, RDP inputs like credit, training and other technical assistance

have been considered. Among other explanatory variables amount of land, sex and occupational status of the household head, and women's involvement in IGAs were considered. Their impact on changes in asset holding, savings and net worth, household expenditure and improvements in housing, health and family planning status have been measured.

2.2 Findings show that amount of BRAC loan increased with increasing membership length. Amount of loan received depended on amount of savings in the BRAC account, length of membership, size of the household, BRAC training received and annual income from member's running IGA. 85% of BRAC members received BRAC loan. Most of those (87%) who have not received any loan are new members.

2.3 Eighty percent of BRAC loan were used for productive investment, asset purchase and for housing. Only 3% loan were used for household consumption. About 52% of loan were used for the purposes they mentioned in their loan application form. BRAC members also received loan from other institutions and informal sources. The comparison households also received a considerable amount of loan from different sources. But the absolute amount of average loan received is significantly higher for BRAC members.

2.4 Only twenty six percent of BRAC members received training. Proportion of members with training increased with increasing membership length. Eighty percent trainees responded positively on the usefulness of training. However, perception of members on usefulness of training was not very much positive.

2.5 Since joining BRAC, nearly four percent of member households graduated from landlessness and shifted to different landholding groups. Proportion of households with more than 50 decimals of land also increased from 17.5% to 20% due to acquisition of more land after joining BRAC.

2.6 Occupational status of the household heads shows that proportion of self employed households was highest among newest and lowest among oldest member groups. The result is opposite in terms of wage employed households. These results indicate that there may be some bias in member selection.

2.7 About 45% of BRAC members are now themselves directly involved in any IGA. Before joining BRAC, proportion of members involved in such activities was 28%. Significant positive relationship was found between the net change in members' involvement in IGA and increase in membership length. Result also shows that the ratio of pre-BRAC IGA involvement is higher among the new member group which again indicates a selection bias.

2.8 BRAC member households owned 380% higher non land assets than the comparison ones. Among BRAC members, value of total non-land asset

increased with increase in membership length up to 84 months. After that a downward trend is noticed.

2.9 Factors determining the value of non land asset accumulation are level of household education, present amount of land, total amount of savings, age of the household head, household dependency and village level economic vibrancy. Amount of institutional loan irrespective of sources also made significant contribution to the outcome variable.

2.10 Net-worth is the sum of assets and savings less loans outstanding. BRAC member households owned 50% higher net-worth than the comparison ones. Among BRAC member households the youngest members were in a better position.

2.11 BRAC member households had two times more savings than the comparison households. Among BRAC members the amount increased with increasing membership length. Amount of institutional loan irrespective of sources made significant contribution to increase savings. For BRAC member households BRAC loan amount and membership length significantly contributed to increase in savings.

2.12 Average per capita calorie consumption and total food and non food expenditures were significantly higher for BRAC member households. Ratio of non food to total expenditure was also higher for BRAC which mainly increased with increase in the household income. BRAC members are also consuming more nutritious food items such as vegetables, fish and meat.

2.13 Among BRAC members the oldest member households are consuming relatively more calorie and nutritionally rich food items.

2.14 More than half of the respondent households (both BRAC and comparison) owned living houses with tin as roofing materials. In terms of value of living houses and per capita floor space of living houses BRAC members were significantly better off than the comparison ones. Among BRAC member households number of living houses with tin roofing increased with the increase in membership length.

2.15 Level of education includes level of education of the household head, average level of household education, adult literacy and primary school enrolment. With respect to each of these indicators BRAC member households' performance was significantly better than the comparison ones. Results do not show any consistent relationship between the level of education and length of BRAC membership.

2.16 School-going children of 18% of BRAC and 8% of comparison households were attending BRAC NFPE schools. The contribution of NFPE to total enrolment was 24.4% and 10.2% respectively. Percentage of children attending non-BRAC schools was more than two times higher for BRAC and

more than seven times higher for comparison households. Among NFPE students 63% of BRAC and 75% of comparison children were girls.

2.17 Health indicators of a household's well-being include the use of tubewell water for different purposes, type of latrine used and the rate of contraceptive use. More BRAC households than comparison use tubewell water for washing utensils, clothes and for bathing. Around 24% of BRAC and 9% of comparison households are using sanitary latrine. The rate of contraceptive use is 40% and 27% respectively for BRAC and comparison households.

2.18 Irrespective of occupational status of the household head BRAC members were better off than the comparison ones. BRAC members with 1-50 decimals of land were also better off than the comparison households within the similar landholding groups. Within the landless and households with above 50 decimals of land differences between BRAC and comparison households were minimal which indicate that households with 1-50 decimals of land benefited more from BRAC RDP intervention.

2.19. The overall findings show that with increasing membership length household savings has increased and household dependency has gradually reduced for households of different landholding and occupational groups. The latter has occurred due to increased involvement of female household members in different IGAs. But the impact of BRAC intervention is highest for 1-50 decimals of land and lowest for the absolute landless.

3. Measuring Well-being : Panel Data Analysis

3.1 Survey data for two periods, 1993 and 1996 on both BRAC and comparison households have been used to measure performance of BRAC households overtime. Progress of the comparison households over time shows what would have been the progress of the BRAC households without BRAC intervention. Comparing this progress with that of BRAC members, BRAC's impact on the material well-being of its participants have been measured. The major indicators of well-being used are changes in value of assets, savings, housing and non-institutional cash loan. Variables like age, sex, education and occupation of the household head and landholding have been considered as non-impact variables since these variables in the short run influence but are not influenced by economic performance of a household. Poverty comparison has not been made because the IAS-I questionnaire did not cover this aspect. We have compared only those variables which appeared in both IAS questionnaires.

3.2 An increasing trend was found for BRAC household heads to switch their occupation to farm sector from non-farm sector. BRAC loan use also increased in the farm sector and decreased in some areas of non-farm activities.

3.3 Value of assets was significantly higher for BRAC households both in 1993 and 1996 than comparison households. The rate at which this value increased was higher for the latter group (84%) compared to the former (22%) but absolute amount of increase was higher for the former category. This was due to their higher level of asset holding in 1993. Among other variables rural infrastructure was found to be very crucial for the pace of productive asset accumulation.

3.4 Dependence on non-institutional cash loan decreased for BRAC households (31%). But households with self-employed head increased their borrowing from non-institutional sources as they were more enterprising and BRAC loan was inadequate for productive investment. The amount of such loan remained the same for comparison households.

3.5 BRAC households enjoyed better housing facilities in terms of both quality of living houses and per capita floor space than comparison households. But the rate of increase of the value of houses was higher for the latter group. The same explanation as in the increase in asset value can be applied here to explain the higher rate of growth for the comparison households.

3.6 BRAC members who joined in 1993 demonstrated comparatively better performances than older ones in terms of value of living houses, per capita floor space, saving, asset etc. These new members joined BRAC with higher level of initial endowment than the older ones. Even household heads of the former group are more enterprising at the time of joining BRAC. This selection bias, to some extent, is responsible for their better performance. But older members enjoy better health and sanitation facilities.

4. Measurement of Poverty and its Correlates

4.1 In measuring poverty its economic aspects based on household expenditure on food and non-food durable goods and services were considered. Data were collected in both peak and lean periods and averaged to overcome seasonal differences.

4.2. The poverty line expenditure was determined by the cost of basic needs (CBN) method. A normative consumption bundle of food items that gives a per capita intake of 2112 kilo calories (Kcal) and 58 grams of protein was considered. The actual percentage of non-food to total expenditure as a constant mark up for non food allowance was used which was around 35%.

4.3. The upper poverty line expenditure has been estimated at TK. 6896 per person per annum and the lower poverty line expenditure at Tk. 5289. Those below the lower poverty line consume 1800 kcal or less per person per day.

4.4 Results of data on incidence of poverty, poverty gap and severity of poverty show that 52% of BRAC and 69% of comparison households were below the upper poverty line. The incidence of poverty was 32% higher for comparison households. Percentage of households living in extreme poverty was 22% for BRAC and 37.2% for comparison households whereas 25% BRAC and 31% comparison households were moderately poor. The poverty gap and intensity of poverty are 41% higher among the comparison households.

4.5. Analysis of poverty correlates which mainly includes sex, age and occupational status of the household head, average household education level, amount of land, amount of credit, training, material well-being, expenditure pattern, net-worth, village level vibrancy and empowerment shows that many of them influenced the incidence, gap and severity of poverty. With respect to each of these indicators BRAC members' performance was better in terms of lower poverty incidence, lower poverty gap and its lower intensity.

4.6 Study found some positive correlation between length of membership and reduction of poverty for small and medium size households and also female headed ones. For households with low and high level of education the impact of BRAC was also positive. As a whole BRAC inputs made positive contribution in reducing poverty for all households except the wage employed and the landless. For the latter the impact was negative.

4.7 Households with BRAC members directly involved in different IGAs and those who received BRAC training were the poorer households since joining. Although BRAC inputs contributed positively in reducing their poverty status still now they own less assets and net-worth compared to others. Study found some correlation between empowerment and poverty.

4.8 In the study perception of the respondents regarding their cereal deficit status during the previous one year has been considered as an alternative method to assess the incidence of poverty. Findings revealed that BRAC members faced less food deficit than the comparison group households. The wage employed group of both BRAC and comparison households faced more deficit and the self employed group faced it less frequently. Among BRAC members those who received higher amount of loan faced less deficit.

4.7 Perception of the respondents on the impact of BRAC intervention on their economic well-being after joining BRAC has been considered as an alternative way to measure the impact. Results show that members receiving more loans and the self employed group gave more positive responses in terms of BRAC's impact in improving their material well-being.

5. Vulnerability and Crisis Management

5.1 The concept of poverty has been studied in a wider dimension. Analysis of the BRAC members' coping capacity and economic security in terms of vulnerability to seasonal fluctuation in consumption, food stock and mechanisms employed to confront unforeseen disaster have been made by integrating both quantitative and qualitative information. Unlike quantitative approach, the VO as a whole has been taken as an unit of qualitative analysis.

5.2 Seasonal fluctuations in per capita monthly food expenditure was much lower for BRAC households than comparison ones (3% and 18% respectively). But per capita monthly non-food expenditure increased much in the peak season for the former category. However, BRAC households spent higher amount on food and non-food items in both lean and peak seasons than the comparison households. Marginal fluctuation in food expenditure and large increase in non-food expenditure in the peak season indicate BRAC members' better economic strength.

5.3 BRAC households had more food stock in both lean and peak seasons than comparison households and this stock increased with amount of BRAC loan indicating positive impact of BRAC inputs.

5.4 BRAC households demonstrated their strong resolution in coping with crises as higher percentage of them than comparison ones who faced any crisis managed to withstand them without recourse to informal money lenders. This implies BRAC households are less vulnerable to sudden shocks.

6. Empowerment of Women

6.1 Two instruments were used to measure RDP impact on empowerment of women. One is the Chen and Mahmud's conceptual framework from which the three pathways viz. material, perceptual and relational pathways were selected. The other is a continuum developed on the basis of study findings.

6.2 Analysis of data on material pathways showed that participation in BRAC enabled women either to become involved in new IGAs or to expand the size of operation of the previous IGAs. Many have become involved in non-traditional activities. However, results show that majority of women (53%) handed over their loan money to their male household members for use instead of investing the amount by themselves. Existing socio-economic conditions create this dependence of women on male in terms of loan utilization.

6.3 BRAC membership increased IGA involvement from 28% to 45%. Husband's opposition especially in better off households does not allow

women to be involved in IGA. Income from IGAs increased with membership length. Women used their income from IGAs for a wide variety of personal and household expenses. Seventy eight percent used income for food consumption and 58% spent for other non-food household expenses. About ten and two percent used it for asset accumulation and investment purposes respectively.

6.4 About 91% of all RDP women owned either productive or non-productive assets. But ownership was often partial. Apart from owning poultry and livestock, group members also owned such assets as sewing machines, rickshaw/vans, trees, *dhenkis* and handlooms. Among non productive assets owned were jewellery and brass utensils. Ownership increased with increase in length of membership.

6.5 Control over assets was also found to be quite encouraging which increased over time to some extent. However, women's control over assets is still limited since they tend to consider many assets as household owned rather than personal assets.

6.6 Women spend their savings mainly to purchase assets, contribute to household expenditure and purchase personal items and make instalment payments and cope with crises. Household's economic security has increased the credit worthiness of the members to the community.

6.7 Participation in BRAC sponsored activities helped women to acquire positive self perceptions of their own personal interests. Their self-confidence has increased along with reduction in dependence on male members. The husbands also now give them more importance than before. They share more in decision making at family level. Their increased mobility has enabled them to communicate better with the outside world.

6.8 Relationship with husband has been improved because they provide them with credit for investment purposes.

6.9 The results of two 'empowerment' continua seem to indicate that women experience the above changes over time according to their length of membership.

6.10 With existing socio-cultural norms, values, beliefs and practices much can not be expected without changing the mind set of the society.

7. Member Performance

7.1 The performance of BRAC participants differ widely - some attain high success, some do fairly well, while some show poor performance. The factors responsible for differences in the performances of BRAC member households were analysed. Both qualitative and quantitative data were used.

7.2 A comparative analysis of well-being status of success households and other BRAC households using 24 explanatory variables shows that on the whole the success households are better off than the other BRAC households. The quality of life in terms of housing facilities, quality of housing and average level of household education of the former was better. They received more inputs from BRAC and other institutions, owned more than twice non-land assets, 50% more savings and 87% higher net worth. They also had higher income from IGAs and spent more both on food and non-food items.

7.3 A comparative analysis between the two groups were made both by ignoring membership length and by disaggregating members by membership length. The results were similar.

7.4 The difference in the poverty status of the two groups shows that proportion of extremely poor households is more than four times higher for other BRAC than success households. The poverty gap and FGT index also indicate 260% higher depth and 330% higher severity of poverty among other BRAC households.

7.5 In identifying factors which influenced the differences in the level of success between the two groups it was found that 61% of the success household members were involved in VO management against only 14% for the other BRAC members. Seventy nine percent of the success cases were involved in IGAs against 45% for others with the former receiving eight times higher return from such activities. The success cases were also engaged in multiple IGAs and rate of increase in the number of IGAs they are involved in was also higher than that of other BRAC members. They demonstrated better entrepreneurship.

7.6 The success households also had better kinship ties in the VOs and had enjoyed special loan privileges. They were found to have been utilizing the loans of several other VO members in violation of existing rules. They also received more training (41%) than the other BRAC members (11%).

8. Member Dropout

8.1 The study analyses results of 143 sample households randomly selected from the IAS-I samples who had dropped out from VOs during the last three years to measure their material well-being and reasons behind their membership discontinuation. Analysis of dropout members shows that there was no significant differences between them and other BRAC members in terms of initial endowment, present land holding, dependency, quality of housing, level of household education, expenditure, consumption, and average value of assets and net-worth. But they received much lower credit during the last three years, and hence accumulated less savings.

8.2 However, the dropouts were not found to be a homogeneous group. There were wide differences in the performances and well-being indicators among themselves. Number of households with net worth less than Tk. 5000 and at the same time number of households with net worth more than Tk. 50000 were also higher for dropouts than among other members. A part of them have low initial endowment, face more food deficits and are more wage employed.

8.3 Eighty five percent of members dropped out on their own and 15% were forced to leave. The main reasons for dropout include loss in IGAs and inability to repay loan regularly, adjustment of savings by BRAC staff for collecting overdue loan instalments, objections raised by in-laws to move outside home, restrictions of savings withdrawal, misbehaviour of BRAC staff, misunderstanding among VO members and involvement in other NGOs.

9. Membership Coverage

9.1 Analysis of data on membership coverage collected by carrying out wealth ranking exercises show that 50% of the total households were covered by various NGOs. Sixty six percent of the total sample households belong to the TG population of which 59% were covered by NGOs leaving 41% outside NGO coverage. The percentage of households excluded would be reduced significantly if we consider those households which had VO membership in the past but have no members at present in any organization. Among the NTG population 33% were covered by NGOs.

9.2 BRAC coverage of the poorest group of rural population appears to be better than other NGOs since the poorest are more or less proportionately covered by BRAC.

9.3 Reasons for non-involvement of the poor in NGOs include lack of capacity to save regularly, apprehension about misappropriation of funds by NGO's, absence of adult males in the households, restriction on withdrawal of savings, low interest rate on savings, hampering of prestige, and obstructions created by VO members in increasing enrolment.

9.4 Qualitative data show that on an average 83% of the BRAC VO members were among the TG and 17% NTG though for the oldest membership age group the percentages were 80 and 20 respectively. The respondents provided certain reasons for enrolment of NTG population in BRAC which include family crises, poor quality of land providing low yield and consequent food deficit, and their expectations that they should also be eligible for membership along with the TG.

10. Policy Implications

10.1 The present eligibility criteria for BRAC membership need to be revised to ensure more effective representation of the rural poor. The study suggests the use of wealth ranking technique in identifying the target group in a more reliable and effective manner.

10.2 The recent trend in selection bias towards the less poor also needs to be corrected to ensure coverage of the target group households. For the poorest households special interventions may be introduced to suit their needs.

10.3 The credit programme may be made more flexible and the upper ceiling may be raised to better satisfy the needs of the more enterprising members and to cope with increasing competition from other NGOs.

10.4 The present system of recording the purpose of loan need to be streamlined to avoid misconception about diversion of loan.

10.5 A flexible savings withdrawal policy should be introduced as soon as possible to help reduce member dropout. This may also help better mobilisation of member savings.

10.6 The effectiveness of BRAC training may be increased by considering specific needs of programme participants and by determining its scope and nature on the basis of different infrastructural conditions and market factors.

10.7 Empirical evidence shows a shift in occupation of household heads from non-farm to farm sector which justifies BRAC's increased thrust on agricultural development projects in the near future. This may include adoption of improved production technology, expansion of agro-based industries and strengthening of related support services including marketing.

10.8 Any radical change in the empowerment of women can not be expected without changing the existing socio-economic and cultural norms of rural society. Handing over loan money to male household members should not cause serious concern since this is very often directed by economic rationale and cultural norms. Even under such cases women have been able to improve their status within the household.

10.9 The multidimensionality of the BRAC programme is justified since the study suggests that only credit does not bring any major change in the well-being of the poor.

CHAPTER ONE : INTRODUCTION

A M Muazzam Husain

1.1 The Context

1.1.1 BRAC and its programmes: BRAC was established in 1972 as a small organization to provide relief and rehabilitation to war ravaged victims of Sulla in the Sylhet district of Bangladesh. Soon it turned into a rural development organization. Learning from its own experience and making necessary changes in the programme strategy and contents, the scope of its activities expanded gradually. Today, after over a quarter century of its operation, BRAC is the largest multidimensional rural development organization in Bangladesh. Its main goals are to alleviate poverty and empower the rural poor, especially the women.

BRAC first adopted the community approach in its development endeavour and then changed over to the target group approach bringing the rural poor in its fold to make its programme more effective under the given rural socio-economic power structure in Bangladesh. The three main programmes of BRAC are its Rural Development Programme (RDP), the Non-formal Primary Education (NFPE) Programme and the Health and Population (HPD) Programme. Besides, it has its technical support services and a few revenue generating enterprises to help finance its development programme.

BRAC's health programme started from its earliest days and has expanded the scope and breadth of its activities since then. The HPD programme not only covers both curative and preventive health services but also family planning, immunization, child care and other related services. The Essential Health Care (EHC) services attached to the RDP receive technical support from the HPD programme and provides a package of health and sanitation services through trained village level health workers known as *Shastho Shebikas*.

The NFPE programme was initiated in 1985 to provide basic education to the rural poor, especially for those who are not enrolled in formal schools or have dropped out mainly due to poverty. Today, there are more than thirty

four thousand NFPE schools all over Bangladesh enrolling over a million children, seventy percent of whom are girls.

To provide support and strengthen its programmes, BRAC has a few support services. One is the Training and Resource Centre (TARC). There are 12 TARCs and a Centre for Development Management (CDM) which provide training to BRAC staff and group members. The Training Division looks after all training activities. The Monitoring Department is another organ that regularly monitors different programme activities and provides feedback that facilitates policy decisions. The Research and Evaluation Division (RED) provides research support to BRAC programmes by evaluating them. RED has developed into a strong research organization with multi-disciplinary teams capable of conducting a wide range of research activities. The commercial enterprises of BRAC includes the BRAC Printers and the Cold Storage Plants.

1.1.2 The rural development programme (RDP): RDP, the core programme of BRAC, was launched in 1986 by amalgamating the Outreach Programme and the Rural Credit and Training Programme (RCTP). Under the RDP the rural poor are organized into village organizations (VOs) and are provided with credit, skill development and awareness education and other necessary support for raising their income and employment opportunities and their level of empowerment.

For organizational development and to provide group motivation, the members have to attend weekly meetings, orientation courses and issue-based meetings. Members also have to deposit weekly savings regularly. The social development component of the RDP includes the Human Rights and Legal Education (HRLE) programme, provision of EHC services and steps taken for the institutional development of VOs. The major sectors of the programme for employment and income generation of VO members include poultry, livestock, sericulture, agriculture, fisheries and the enterprise development related activities. RDP provides technical support to these activities through provision of training, input supply, technical know-how, marketing and infrastructure development services. To ensure the success of these income generation activities, RDP has also established some programme support enterprises which include poultry hatchery, fish hatchery, feed mill, seed production units, grainage, reeling centres, and agro processing plants.

For addressing needs of those who belong to the very bottom of the poverty bracket, there is a special programme, viz., the Income Generation for Vulnerable Group Development (IGVGD) Programme under the RDP. This programme is specifically designed to link this disadvantaged group with the mainstream development activities.

The RDP has been placing special focus on the rural women. By the end of 1996, 93% of all VOs were women's organizations (BRAC, 1996) and 94% of all VO members were women.

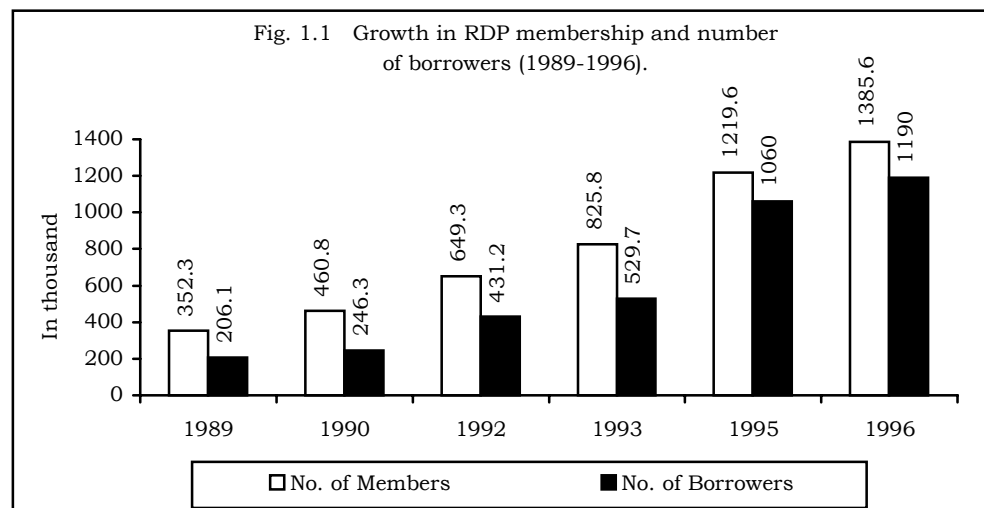
The RDP had an impressive growth during the first decade of its operation. The number of area offices increased from 45 in 1986 to 282 in June 1996. The number of VOs increased from 2,401 to 37,806 during the same period. The cumulative amount of loan disbursed and savings increased from Taka 97 million to Taka 10,907 million and from Taka 15 million to Taka 944 million respectively during the period (Table 1.1). Figures 1.1 and 1.2 show the growth in membership, number of borrowers, outstanding loans and savings from 1989 to 1996.

Table 1.1: Growth of RDP (1986-1996)

	Phase-I		Phase-II		Phase-III		Phase-IV
	1986	1989	1990	1992	1993	1995	1996*
Area office (No.)	45	81	100	140	165	235	282
VOs (No.)	2,401	6,434	8,263	13,967	20,141	33,194	37,806
Membership ('000)	121.7	352.3	460.8	649.3	825.8	1,219.6	1,385.6
Credit disbursed (Million Taka)	97	517	943	2,390	3,672	8,866	10,907
Total Outstanding (Million Taka)	-	213**	368	691	1,004	2,048	2,428
No. of O/S borrowers ('000)	-	206.1	246.3	431.2	529.7	1,060	1,190
Savings (Million Taka)	15	69	127	225	305	757	944

* Up to June, 1996 ** Principal Outstanding.

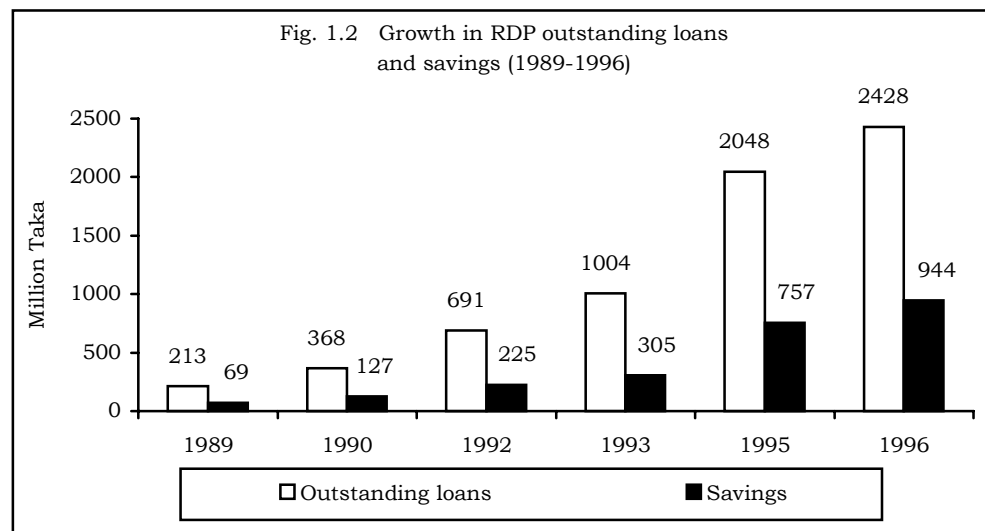
Source: MIS/RDP, BRAC



The programme has been expanding in different phases. The first phase covers the period 1986-89, the second phase 1990-92, the third phase 1993-95 and the fourth phase 1996-2000. The five year Phase-IV of RDP is

an extension of the existing programme but has some distinguishing features and is designed to fulfill certain specific goals.

The main features of RDP-IV include its emphasis on women as VO members; its greater emphasis on attaining programme sustainability and development of logical frameworks (LFAs) to measure levels of performance and sustainability of different components of the programme; further expansion and consolidation of the programme with emphasis on institutional development of VOs; and a new focus on environmental aspects of the programme.



The strategic directions of the programme envisage the following key outcomes of RDP-IV :

- The development of appropriate, effective and functional organizations of participating households
- Self-sustaining credit entity functioning
- Increased income and employment generation in poultry, livestock, fisheries, sericulture, social forestry and vegetable production
- Increased knowledge and action by villagers with respect to their legal and human rights
- Increased income for the poorest women in the poverty group
- Improved health of participating households.

1.1.3 Impact assessment of RDP – The IAS-I: BRAC is concerned about the sustainability of its development programmes. This, among other things, presupposes the need for evaluating the impact of its programmes. With this aim in view, BRAC’s programmes are monitored by its Monitoring Cell. The Research and Evaluation Division (RED) is an independent unit within

BRAC which provides research support to its programmes including their evaluation. The first comprehensive study on the impact of RDP on its participants was conducted in 1993-94. The two basic objectives of the study were (Mustafa, et al., 1996):

- (a) to gain a more extensive understanding of the socio-economic impact of RDP, in both quantitative and qualitative terms, and
- (b) to assist BRAC in the development of its ongoing capacity to assess socio-economic impact of RDP, including identifying the most appropriate methodologies to assess different aspects of BRAC's impact.

The study, henceforth designated as IAS-I, used four broad indicators to determine the impact of RDP on poverty alleviation of its participants viz. (a) material well-being, (b) vulnerability to seasonality and economic security, (c) changes in women's lives, and (d) development of VOs as institutions. The IAS-I used an integrated methodology involving three study approaches:

- (a) the *household survey* of BRAC and non-BRAC households using a structured pre-coded questionnaire, part of which was conducted in two rounds to capture seasonal variations in economic well-being. The questionnaire collected data on household features, inputs received from BRAC, economic assets, food stocks and variables for social attitudes and behaviours.
- (b) *qualitative and case studies* of selected VOs using rapid and participatory (RRA/PRA) approaches to collect mainly qualitative data to help provide an analysis of community wise factors e.g., wealth differentials, gender relations, group development and cohesion. Semi-structured check lists were used for the purpose.
- (c) *village profiles* of both BRAC and non-BRAC sample survey areas to assess the significance of BRAC inputs in relation to other socio-economic variables, e.g., infrastructure, presence of other programmes and access to public facilities and institutions. It used semi-structured check lists for the purpose.

The Main Findings Report on IAS-I was made available in February 1995, the Draft Final Report in August 1995 and the Final Report was published in February, 1996. The findings of the study showed positive economic impact of RDP on its participants. Their wealth and expenditures consistently improved with increase in membership age and loan size. The impact was relatively higher for less well-off households while female members gained relatively more than their male counterparts. Improvement in the nature of household assets and investment in housing structures suggest both greater economic security and improved standard of living for older members than newly admitted members. Enhanced security was also confirmed by reduced seasonal fluctuation in income, expenditure, food consumption and stocks of RDP members having a membership age of two and a half years or more

and receiving cumulative RDP credit of Taka. 7,500.00 or more. The coping capacity of the participants to deal with crisis also improved.

There were some positive evidences of gradual changes in female members' lives such as improvement in their status within the household, mobility, control over income and ability to decide about savings and spending their income. But the overall impact was not found to be very high in these areas. Again, the results of the IAS-I on institution building were not very encouraging. Discipline and enthusiasm were found to be better among newer and female VOs. The development of autonomy and cohesion among members was not satisfactory.

The IAS-I also came up with some findings on the impact of the NFPE programme especially in respect of VO member children's participation in schools, and VO members' participation in school management. The results were found to be favourable. The IAS also dealt briefly with member dropout from VOs and its underlying reasons.

1.1.3 Developing an impact assessment system for RDP: At the time of initiating the IAS-I BRAC decided to evolve an impact assessment system for RDP. Assessing the impact of RDP is not only necessary to measure the success of the programme in raising the socioeconomic status of the target population but also to identify the shortcomings of the programme and to assess its sustainability.

While initiating the phase IV of RDP (1996-2000) it was stipulated that the second phase of the IAS would be planned and implemented providing a benchmark for RDP phase IV and an attempt would be made to further develop an impact assessment system for RDP (BRAC, 1996).

It was proposed that the IAS would be repeated twice during RDP IV and these would be timed in such a way that the findings of the first one should be available for a mid-term review due at the end of 1997 and the second for the final review of RDP IV. The study is also expected to further investigate the critical mass theory developed by the IAS-I. Accordingly, the present study has been initiated (henceforth called IAS-II).

Preliminary work in preparation for this mid-term study commenced from June 1996. These include review of IAS-I to assess data utilization and to make necessary revision in the questionnaire, a field survey to assess the present status of the IAS-I sample population and development of a tentative time frame for the study. Formal initiation of the study was started during August-September, 1996 with the determination of the main objectives of IAS-II, design of the study approaches for data collection and drawing up the plan of work. These were done considering the needs of the RDP programme, the resources available for the study and the time frame allowed by the need to prepare the results before the mid-term review of RDP-IV scheduled for September, 1997.

The first round of data collection for the study was conducted in October-November, 1996 and the second round in February-March, 1997.

1.2 The Main Features of the Present Study

The broad objectives of the IAS-II remain more or less the same as its predecessor. It measures the material well-being of RDP participants. An additional dimension which has been added in this new IAS is its focus on the poverty reduction impact of the programme by measuring poverty and its correlates. The impact of the programme on seasonal economic vulnerability and coping capacity of participants has also been measured. The study further analyses membership performances, member dropout and coverage of the programme.

An analysis of women's empowerment has also been made but with a specified focus. Econometric analysis has been made to further test the notion of "critical mass" developed by IAS-I by decomposing participants according to length of membership and volume of credit received. Some panel data from IAS-I have also been used to compare changes in some common indicators over time. Analysis of VO performance was not included in IAS-II because the results of some new initiatives in this direction, as suggested by programme personnel, would require more time to show results. It was agreed that this would better be assessed during a subsequent impact study.

The study design for IAS-II uses the same three study approaches as in the IAS-I. These are the household survey, the qualitative and case studies and the village profile. However, the size of the study has been reduced. The total sample size is one fourth less than that of IAS-I. The field work has also been reduced by carefully relating data to the needs of analysis and streamlining the questionnaire accordingly.

On assessment of RDP impact, a "donor concern has been to view the IAS as a system for continuing inputs from RED to RDP rather than as a study or a series of studies" (Greeley, 1996). There are evidences of some IAS-I results influencing some elements and emphases within the RDP IV proposal. But it is doubtful whether IAS functions as a management tool the way the work of the monitoring division does (Ibid.). Again, there are also other channels for feedback on field performance to RDP senior management.

In the above context, whether we call the IAS a system or not, it can serve three purposes. First, it can provide a scientific evidence of BRAC's achievement in poverty reduction and other goals allowing comparison both over time and with other non-BRAC studies on performance of rural development programmes. Secondly, it may provide a comparative analysis of the characteristics of households between those which are benefiting from BRAC inputs and those which are not. Thirdly, it may provide an assessment of impact in relation to the overall dimensions of poverty in a study area on both BRAC members and non-members (Ibid.). Accordingly, to enlarge the scope of coverage and satisfy the above requirements, attempt has been

made to integrate findings of other studies on RDP and to use longitudinal data on different components in RDP.

1.3 Review of Literature

Some of the available literature on assessment of impact of micro-credit programmes for the poor, empowerment of women, measurement of poverty and related issues have been reviewed in this section. The context of rural Bangladesh has been given exclusive priority in the selection of studies reviewed.

A comprehensive impact assessment study on BRAC's RDP was conducted in 1993-94 (Mustafa et al., 1996) using four broad indicators, viz.: (a) material well-being, (b) vulnerability to seasonality, (c) changes in women's lives and (d) development of VOs as institutions. Both 'before-after' and 'with-without' analyses were made in the study. An integrated methodology was used comprising household survey, village profiles and qualitative and case studies (using RRA/PRA techniques). Fifteen AOs were selected from which a total of 2,250 samples were selected for survey, taking 1,500 BRAC households and 750 comparison households.

The findings of the study showed positive impact of RDP on material well-being of its member households though impact on women's empowerment and institution building were less well pronounced¹. The study focused mainly on material well-being of participants and did not measure poverty and its related aspects.

A number of other studies were conducted by BRAC on different aspects of RDP's impact on participants. Ahmed's (1988) study on economic empowerment of the rural poor found significant gain in income and other household conditions of members over those of comparison households. Chowdhury, Mahmud and Abed (1991) evaluated four earliest RDP branches which showed that per capita income was 26% higher and employment creation was 19% higher for programme households than those of control households. Ownership of household goods and assets were also assessed to be higher for programme households.

Zaman (1997) explored the impact of BRAC's rural development programme on consumption based poverty of the participants by using household food expenditure data for 14 villages in Matlab *thana*. The socio-economic status of BRAC members was compared with that of non-members by constructing poverty lines. The status of members was also analyzed by membership length, types of inputs received and loan size. Results show evidence of positive contribution of BRAC programme on poverty reduction but the benefits were not found to be evenly distributed among different socio-economic groups. Results appear to suggest that the poorest members did not benefit much from BRAC interventions.

¹ See section 1.1.2 for more details

Wood and Sharif (1997) edited a book on poverty and finance in Bangladesh which examines micro-credit programmes and models in the context of borrower sustainability, reaching the poorest and removal of poverty. The three credit models viz. credit-only, credit-plus and 'credit with social development' are considered. Some empirical evidences were provided and the current achievements and constraints of various micro-credit models were analyzed. Arguments were placed in favour of a 'credit with social development' model and suggestions were made to improve the efficiency of the micro-credit system.

During 1994-95 a survey was conducted (Proshika, 1995) to assess the impact of Proshika's development programme on participants. A cross-sectional two stage cluster random sampling approach was used and Proshika households with at least three years of membership were compared with a control group of non-participant households. The survey findings show that among eight social empowerment indicators better results of Proshika were found in case of literacy, infant mortality and participation in local institutions. Among five economic indicators used results of Proshika households were better in possession of assets, indebtedness, income and savings. The study suggested further in-depth studies in five different areas.

In 1997 ASA conducted (ASA, 1997) a study on constraints of reaching the hard-core poor. Besides programme participants, different programme personnel were also interviewed. The study identified socio-economic, physical, and mental status of the hard-core poor, their negligible employment opportunity, seasonal migration, neighbourhood relationships and the influence of the local elite on their livelihood as the major constraints of reaching the hard-core poor. Moreover, infrastructural conditions such as inadequate marketing and banking facilities and backward communication and transportation systems were also identified as constraints.

Ravallion's paper is one of the classic papers (Ravallion, 1992) on methodological issues of poverty where he has presented a concrete and clear guideline for empirical study on poverty assessment in different situations. On the other hand, Ravallion and Sen (1996), drawing examples from different literature on poverty in Bangladesh context, show how results differ drastically if different methodologies are employed.

Khandaker and Chowdhury's paper on targeted credit programmes and rural poverty in Bangladesh (Khandaker and Chowdhury, 1995) assesses the poverty alleviation impact of three programmes viz. BRAC, Grameen Bank (GB) and Bangladesh Rural Development Board's RD-12 project by comparing participants with non-participants in each case. They considered consumption as a better indicator of poverty than income since the former is more stable. In determining the poverty line the approach used was to estimate the cost of a bundle of goods that assures basic consumption

needs. To examine the sustainability of well-being of the households three economic indicators, viz. savings, assets and net-worth were studied. These measures were evaluated against programme exposure and loans outstanding. Social indicators such as health environment were also considered as a dimension of poverty. The study findings indicate positive contributions of the programmes in poverty reduction and sustaining household welfare. They estimated that it takes five years for the poor participants to cross the poverty line and eight years for economic graduation. They also found a shift from farm to non-farm investment as a result of programme intervention. They suggest necessary policy interventions to create a dynamism in the rural economy.

Based on experiences of GB and other NGO programmes in Bangladesh on the impact of microcredit programmes in poverty alleviation Khandaker (undated) discusses, among other things, the measurement tools and methodological issues involved in the impact analysis of micro-credit programmes. He uses economic indicators like reduction in poverty, increase in income and employment and social indicators like changes in contraceptive use, fertility and children's schooling. His paper also discusses methodological issues and externalities that influence programme outcomes.

Hye (1996) presents a synthesis of available literature on poverty, its measurement, the strategies for poverty alleviation and the government and NGO programmes and finally develops a theoretical framework to explain the poverty situation in Bangladesh. In measuring poverty he advocates uniformity in the use of concepts, methodology and assumptions. The poverty alleviation strategies followed in Bangladesh during the last 25 years are critically reviewed and the various programmes are analyzed on the basis of which he develops his theoretical framework to explain the mass poverty situation in the country. Finally he makes some policy prescriptions for poverty alleviation in Bangladesh.

Several studies have been conducted by BRAC's Research and Evaluation Division (RED) on impact of RDP on women's lives and their empowerment such as Ahmed, Chowdhury and Hassan (1990), Ahmed and Hassan (1990), Huda and Hossain (1994) and Khan (1995) which found positive impact of RDP on women's status within the household, mobility, their reduced economic dependence and increased control over income and participation in decision making. As loanees, the status of women has become enhanced within the households and some of them have even experienced greater mobility and gained more control over their incomes (Goetz and Sen Gupta, 1996). Impact of RDP on women's lives is included among the several areas of inquiry under the Matlab Study. Hossain and Huda (1995) tried to understand the problems of women headed households and found out poverty and lack of access to employment as their key problems. Such households prefer employment to credit programmes while the *purdah*

remains a constraint to their income earning opportunities. BRAC members, however, were found to be relatively better off than non-members.

Chen and Mahmud (1995) have prepared a conceptual framework to assess women's status and to measure the impact of development interventions on their lives. It sets out five matrices to categorize the variables and a sequence for considering them is also suggested. The framework includes an input matrix, a classification of women matrix, a pathway matrix, an indicator matrix and a status ranking matrix.

Hashemi, Schuler and Riley (1996) in a study conducted on BRAC and GB participants using eight quantitative and qualitative indicators tried to show that involvement in credit programmes empowers women by providing them with the impetus to make economic contributions to their households, gain a voice in familial decision-making, make large and small purchases, increase their interactions with the outside world, as well as protest political and legal injustices. According to study findings, participation in both BRAC and GB has significant positive effects on the above mentioned areas of women's lives. The length of time a woman spends in either programme was also seen to be a contributing factor to empowering women. The study further revealed that GB membership has a stronger effect than BRAC in empowering women, as even non-member women in GB villages had experienced significant positive effects in their lives. The authors have pointed out that perhaps a 'selection bias' may have influenced the results in favour of GB rather than BRAC. Other study findings (Huda, et al., 1996) also show that women who participate in BRAC make greater contributions to household income at aggregate level than do non-members, own greater number of assets and have significantly more savings than do non-members.

CHAPTER TWO : METHODOLOGY

A M Muazzam Husain
Debdulal Mallick

2.1 Considerations in Designing the Study

IAS -II is a mid-term study to provide benchmark information on RDP-IV, and to assess impact of RDP on its participants in terms of measuring changes in their material well-being, reduction in poverty level and women's empowerment. Other considerations that influenced the study design include the use and limitations of panel data to measure changes in impact over time and an assessment of RDP coverage and member performance differences. Both quantitative and qualitative data were collected. In analyzing the data efforts were made to integrate the quantitative and qualitative data to arrive at results.

Unlike IAS-I which covered both male and female VO members in the sample, IAS-II has exclusively focused on female VO members. This was due to the recent change in RDP policy which contemplates disbursing loans to only female VOs and gradually closing down male VOs.

2.2 The Study Approach

Similar to the IAS-I, an integrated approach was used for the study which included the household survey, the qualitative and case studies, and the village profile.

2.2.1 Household survey: A household survey was conducted covering all the sample households using pre-coded questionnaires. The data included demographic and other household characteristics, housing status, landholding and other assets, health, sanitation and family planning, food stock, credit and savings, household consumption and expenditures, coping with crisis, ownership and control over assets, access to income generating activities, mobility, receipt of training from BRAC, and reasons for dropout from VO.

Data on variables affected by seasonal factors were collected in two rounds to capture seasonal variation. Two different sets of household survey questionnaires were used for this purpose with the consumption part remaining unchanged.

The main focus of the household survey was to collect quantitative data to determine the impact of the RDP on its participants with special reference to their material well-being in general and their level of poverty in particular. The social aspects of well-being mainly considered were literacy and educational level of households, housing status, and some aspects of health, sanitation and family planning. Economic well-being covered aspects like landholding, occupation, accumulation of assets, and food security. Another aspect included was the analysis of the dropout members from relevant data collected through the household survey.

A very important focus in the survey was on the household level impact of the RDP as measured through per capita expenditure. Data on household level consumption expenditure were analyzed to explain the poverty situation.

2.2.2 Qualitative and case study work: The focus of the qualitative and case study work was on the broad areas in which RDP could be expected to have some impact on women's empowerment, at the levels of the individual member and her family. Qualitative indicators were selected based on three pathways to empowerment (material, perceptual and relational) to assess changes in women's lives (Chen and Mahmud, 1995). Issues covered include women's involvement in income generating activities, their ownership and control over assets, perceptions of own well-being, reduced economic dependency on their husbands and their mobility.

Information on these indicators was obtained through semi-structured questionnaires from 25 VOs. There were at least 6 - 10 key informants in each discussion session held in each VO and they provided us with information on the whole VO. Where possible, quantitative data from the household survey was used to substantiate the qualitative findings. But it should be noted that since the 6-10 key informants of each VO were not necessarily the same as the 10 sample members covered by the household survey, in many cases, quantitative data could not be used to substantiate the qualitative findings. Since the focus of the qualitative and case study work was on the BRAC affected changes experienced by programme participants and their households, no comparison group was included, given the difficulty of determining a 'cut-off' point of time from which to ask questions. Also, even though there were five VOs that were common to both IAS I and II, given the different scope of the two studies, a panel analysis of the changes experienced by programme participants could not be carried out.

Rapid rural appraisal (RRA) techniques were used to analyze programme impacts on participant households and determine whether these households' overall situations had improved, declined or remained the same as a result of BRAC interventions. Physical mapping was used to identify the location of all members and non-members in the sample areas. Secondary sources including member lists and village census forms (completed by RDP) were also used for this purpose. Wealth ranking was used to categorize the total number of villagers according to their landholding situations. The number of eligible school going children in these households was also identified to determine NFPE coverage and reasons for not attending school (NFPE and otherwise). BRAC members' landholding, membership status and poverty reduction performances were identified using wealth ranking and pile sorting techniques. After the TG group had been identified, it was seen how many of them were in BRAC and how many were not. Reasons for non-involvement were also explored.

Semi-structured checklists were used to obtain data for 10 individual case studies. Five were of members whose situations improved as a result of BRAC interventions and 5 were of those whose situations deteriorated to the extent that they dropped out of BRAC. These individual cases were randomly selected from the 200 'success cases' and 143 dropout/decline cases included in the household survey sample.

2.2.3 Village profile: To provide useful background information for the research and a basis for creating a variable on economic vibrancy, village profiles were created by collecting some benchmark data using a structured form and deriving the data by interviewing key informants in each village covered by the household survey. The data include distance of the village from nearest city and metalled road, number of households, existence of socio-economic infrastructure such as *haats*, *bazaars*, educational institutions, health centres, NGOs, electricity, etc., and access to various socio-economic institutions.

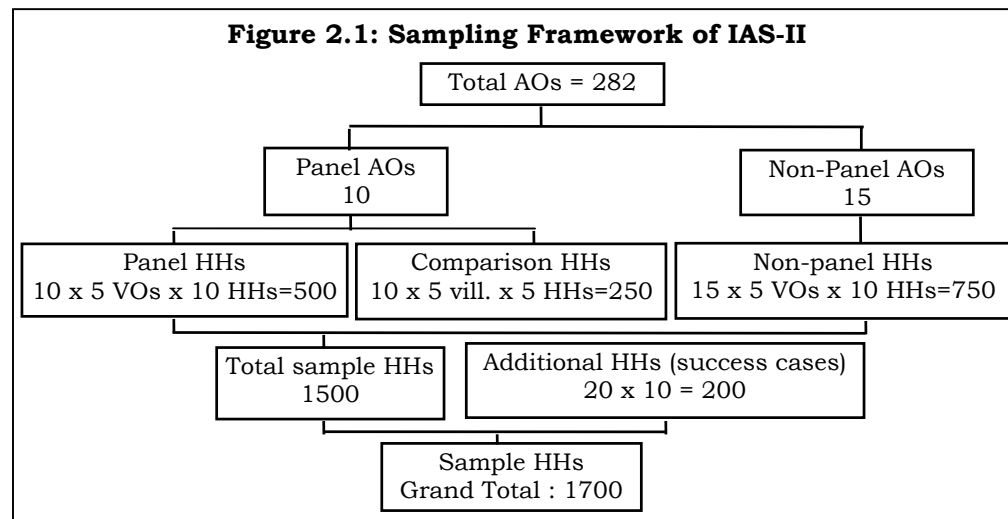
The data from village profiles have been used to determine the economic vibrancy of different sample areas which is an important indicator of household level material well-being outcomes. The profiles were constructed for 176 villages (126 RDP and 50 non-RDP). Data were collected during October-November, 1996. Local market prices were collected also in February, 1997.

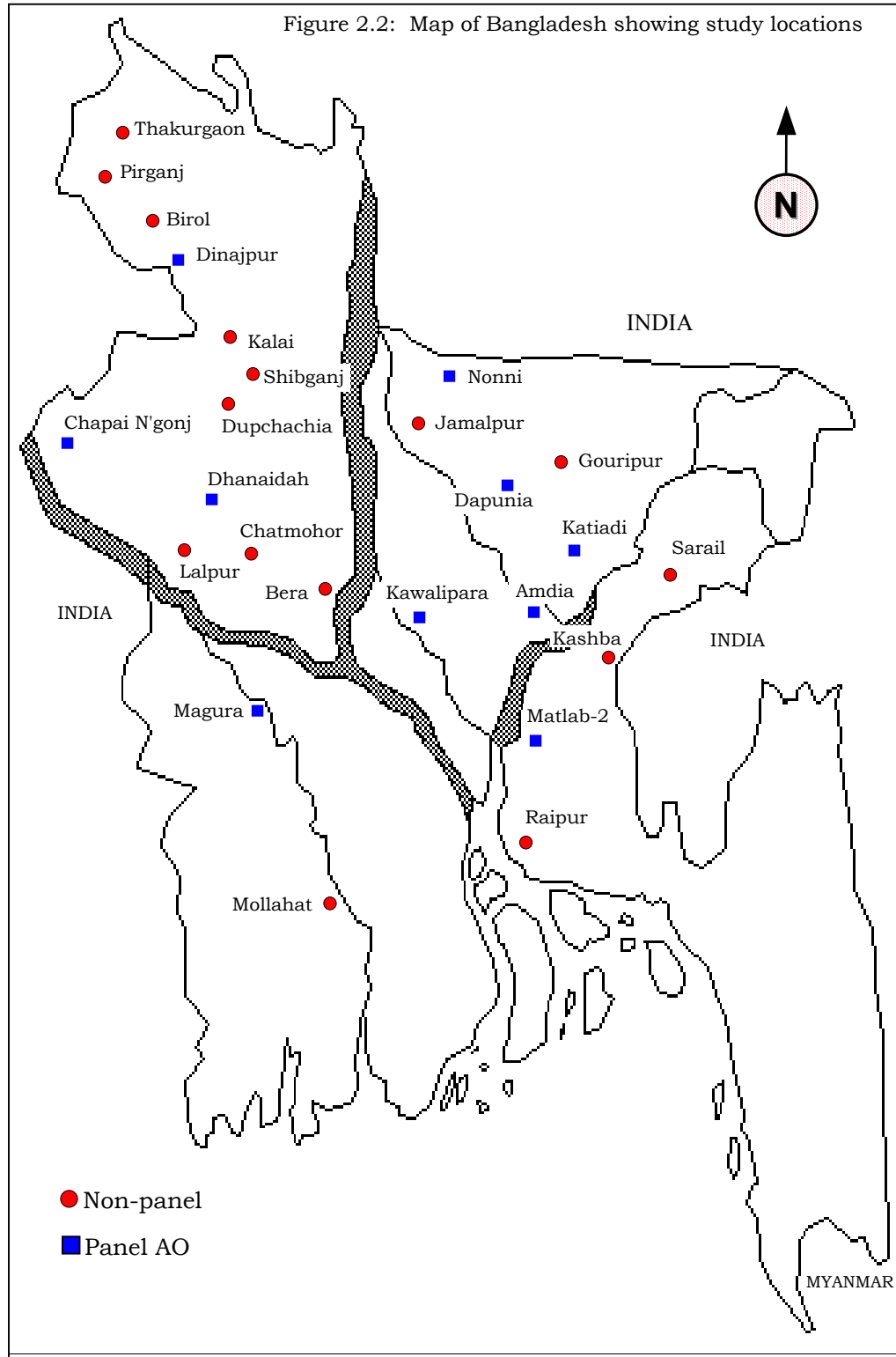
2.3 Sample Plan

In designing the sample plan, considerations were given to the need for linking IAS-I with IAS-II, providing a benchmark for RDP-IV and representing a much wider RDP area due to expansion taking place during the intervening period between IAS-I and IAS-II. It may be noted here that the total number of AOs had increased from 167 in 1993 to 282 in June, 1996.

The sample plan also needed to ensure that sample sizes in each category of sub-population were sufficiently large to meet the requirements of statistical analysis. The total sample population was thus decomposed into five sub-sets: i) IAS-I BRAC sample members (panel members), ii) IAS-I non-members (panel comparison group), iii) pre-IAS-I non-panel BRAC members (covering RDP phase I and II VOs), iv) post-IAS-I BRAC members (covering RDP-III VOs), and v) RDP-IV BRAC members. The sampling proportion was broadly determined according to the respective proportions of each sub-set in the total population based on the assumption of homoscedasticity i.e., equal variance of the mean for the variables being examined.

Out of 15 AOs selected as sample during IAS-I, ten AOs were chosen at random for IAS-II. The IAS-I selected ten VOs from each AO. Excluding three male VOs from the ten IAS-I sample VOs in each selected AO, five VOs were selected on a random basis from the seven female VOs in each selected AO for IAS-II. With ten panel members in each VO, the total panel BRAC member sample was 500. In case of the comparison group, the IAS-II selected five panel households from each of the five non-BRAC villages under each of the ten selected AOs. The total number selected was thus 250. For the last three categories of sub-population, five VOs from each AO and ten households from each of those five VOs were selected randomly providing a total of 750 samples. In addition, 200 BRAC member households who demonstrated very high economic performance after joining BRAC were chosen purposively in consultation with the local RDP field staff from 20 AOs taking ten from each. It may be noted here that out of 25 selected AOs, five RDP-IV AOs were excluded for this purpose since they were new ones unsuitable for assessing economic performance of VO members. The total sample size for the IAS-II was thus 1700. The sample size and its distribution is shown in Fig.2.1 and the geographical distribution of the selected sample areas in Figure 2.2.





For qualitative and case study work, the IAS-II sample consisted of 25 VOs. One VO was randomly selected from each of the 25 IAS-II sample AOs. Ten VOs were from the Panel areas and qualitative case study data had previously been collected from 5 of them during IAS-I. The other 15 VOs were from non Panel areas.

2.4 Instruments of Data Collection

Questionnaires, both structured and unstructured, and checklists were used to collect data from the field. Besides, different RRA/PRA techniques were used to collect qualitative data.

2.4.1 The questionnaire: Considering the needs of the IAS-II, the IAS-I questionnaire was reviewed by assessing its data utilization and a thoroughly revised and restructured draft questionnaire for IAS-II was prepared. This was extensively pre-tested in five different RDP areas and necessary revisions were made. The questionnaire was finalized after field tests during the training of Field Investigators for the household survey.

2.4.2 Semi-structured checklists: Semi-structured checklists were used to collect data for the qualitative aspects and for case studies. Qualitative data were collected to assess the impact of RDP on the empowerment of the participants. A separate checklist was also used to collect data for ten individual VO member case studies.

2.4.3 RRA/PRA techniques: Different RRA/PRA techniques were also used to collect data during qualitative and case studies. Among these were physical mapping, wealth ranking and pile sorting techniques. Additional group discussions were also held to elicit qualitative data where necessary.

2.5 Collection of Data

A large group of over sixty field enumerators were selected and trained for collection of household survey data. A seven-day training session was organized which included both theoretical lessons and field exercises including review of their field test performances. A large number of small survey teams were sent to different survey areas so as to minimize the time gap in the collection of data, especially on consumption data and other variables that might have seasonality effects. Each team had one member specially responsible for supervision of field work done by other members of the team. Each supervisor had previous experience in field data collection. For qualitative data collection and case study work, two teams were formed consisting of highly experienced IAS-II study team members.

The collection of data for the study commenced in October, 1996 and was completed in early March, 1997. The first round of the household survey for the collection of quantitative data was conducted in October, 1996. Data for constructing the village profile were also collected during the same period.

Field work for the qualitative studies including the selected case studies were conducted during December, 1996 and January, 1997. The second round of the household survey was conducted in February, 1997 which was done to offset seasonal variation in certain types of data such as consumption, savings, food stock, expenditure on some items, etc. The questionnaire on household survey was revised for the purpose. Data on local market prices were also collected twice, once during October and again in February. October represented the lean season while February represented the peak season.

2.6 Problems Faced in Data Collection

Some problems were faced in the collection of field data. One is a non-response problem due to non-availability of some respondents during the survey period. Among panel member samples there were 35 such samples and among panel non-members 12, making a total of 47 samples. The size of total effective panel samples was thus reduced from 750 to 703. In case of non-panel samples, such absentees were replaced by new samples from the random sample list which contained names of additional samples to cope with such a situation. During the second round data collection, there were a few cases of non-response due to non-availability of respondents or, as in case of consumption data, because the household members ate outside, partly or wholly, during the survey period. Such missing data were replaced by the mean of the distribution so that they do not affect the data set for analysis.

Field work for collecting second round data to cover the peak season was delayed to some extent due to the *Ramadan*, the month of fasting. Data were collected in February instead of January. It may be recalled that peak season data for IAS-I were also collected during February.

Scattered location of sample households, poor communication facilities and the necessity to make repeated visits to many households often created heavy pressure on the work load of the field survey team members.

2.7 Inclusion of the Comparison Group

The IAS-I sample included a comparison group of households in addition to BRAC households for making a 'with' and 'without' analysis in measuring the impact of RDP. Comparison or non-member households selected from adjoining BRAC villages included those households which had similar socio-economic condition but were not associated with BRAC or any other poverty alleviation programme.

The retention of a comparison group is associated with two main problems. *Firstly*, it is very difficult to identify non-member households which are truly similar to the member households in terms of their socioeconomic status. *Secondly*, it is also difficult to find non-member households which do not

have any access to development inputs either from government or non-government sources or from both. Therefore, questions were raised on the justifiability of retaining the comparison group in measuring the impact of RDP.

The third report of the external consultants on the IAS-I puts forward the following suggestions on this:

.... the selection of an appropriate comparison group, which can be used as a statistical control, has proved problematic. Logistically it is now highly difficult to randomly sample rural households (a) with similar socioeconomic status of RDP members, and (b) without involvement in development programmes.....It may, therefore, be appropriate to abandon the present comparison group (and rely on base line data from stage one as a comparison basis for some households during later resurvey/s) (Brustinow, et. al., 1994, 8).

The Review Report of the Consultants on the draft final report of IAS-I also suggested the dropping of the control group altogether (Brustinow, *et al.*,1995). The consultants felt that by dropping the control group BRAC should concentrate on (a) the before and after type comparisons of member situations over time, and (b) the different experiences of different subsections of the BRAC membership. They agreed that if the aim of the IAS is to improve the impact of BRAC's work then

what is needed is further differentiation of its own performance, not more comparisons between BRAC assisted and other villages. A generalization about BRAC villages versus non-BRAC villages is of limited use in improving performance, though it may be of value for public relations purposes (*ibid.* p.19).

The final report on the IAS-I also expresses a note of caution on the inclusion of the comparison group, based on the findings of the study.

...Because of these results the validity of retaining the comparison group as a control group is questioned but not conclusively rejected. These results suggest that the comparison group is to be treated with caution" (Mustafa, et al., 1996, 32).

It may be noted here that the findings on comparison group showed a lower average value in all economic well being indicators than the recently joined BRAC households. Thus the two comparison groups were not really identical in their baseline socioeconomic characteristics.

Again, another problem that arose in retaining the comparison group for the IAS-II is that during the period of three years between the two IASs, many of the comparison group households had changed their status by joining BRAC

or any other NGO. Their exact number was determined through a field survey. Results showed that 39% of the comparison group households had either joined an NGO or GO or were no longer available (due to migration or death) for inclusion in the sample.

Ideally, if an appropriate comparison group could be identified, the 'with' and 'without' analysis could better represent the impact of RDP by making a comparative analysis between changes in socioeconomic conditions of the two respective groups of households. However, the issue was thoroughly discussed and considering both the advantages and disadvantages it was decided to include a sample of comparison group households, though on a limited scale.

2.8 Quality Control

The questionnaire for the household survey was thoroughly revised and simplified to facilitate quality data collection and reduce enumeration problems and errors. Due emphasis was given on extensive training of field investigators and supervisors on both theoretical and practical aspects of the survey. The eligibility of field investigators was re-confirmed by field tests and screening out those who had shortcomings in this respect. Each household survey team had one member with specific supervisory functions to ensure high quality of data. Besides, members of the IAS-II research team based in Dhaka made frequent field visits to cover all sample areas for monitoring and supervising data collection activities.

Initial editing was done in the field regularly by supervisors which helped improve the quality of data collected. In this connection, spot checks by research team members helped a lot in identifying and resolving special enumeration problems that arose in some locations.

On completion of data collection, all the filled-in questionnaires were duly edited and coded at the head office level. The data were entered into computer for processing. Data cleaning was done by making a hundred percent print check, and consistency check on selected data files.

2.9 Data Processing and Analysis

Different statistical tools and methods have been applied to analyze quantitative data. Bi-variate analysis, which has widely been used for our purposes, shows *ceteris paribus* the influence of one variable on another. But this influence may be different in the presence of other variable(s). Therefore, emphasis has been given on results of the multivariate analysis to explain the interaction of several explanatory variables. We have tried to choose appropriate regression models in those cases and have tested them. Since we had to deal with both cross-section and time series data at the same time we often employed sophisticated statistical models, e.g., Fixed Effects Model, to measure and compare over time performances of different cross-sectional units. Statistical techniques have also been applied to

analyze some qualitative data collected through RRA techniques. For each indicator used in analyzing qualitative data, the responses received were given scores for quantification and brought into tabular forms. Analysis was based on the results of these scores. SPSS computer package has been used to analyze both quantitative and qualitative data.

2.10 Some Concepts

2.10.1 Concept of Poverty: The term ‘poverty’ is a complex one with its various dimensions. In defining this multi-dimensional term, some put stress on the lack of certain basic capabilities of human beings while some consider the various aspects of human deprivations. Different indicators are required to be considered to deal effectively with different dimensions of poverty. However, in defining poverty one common factor comes to the forefront, and this is the concept of well-being. Poverty is said to “exist in a given society when one or more persons do not attain a level of material well-being deemed to constitute a reasonable minimum by the standards of the society” (Ravallion, 1992). For better understanding of the concept of poverty some aspects of its measurement need to be addressed. Any measurement of poverty can be split into two distinct operations, i) the identification of the poor and ii) the aggregation of their poverty characteristics into an overall measure. The identification exercise is clearly prior to the aggregation (Sen, 1981). Although much efforts have been exerted by economists to solve the aggregation problem, there are also a large number of difficult issues unresolved concerning the identification problem in applied economic research.

Analysis of poverty is directly related to the concept of well-being at the individual level. Sen (1981) has explained two different approaches for measuring well-being—welfarist and non-welfarist. The former approach compares well-being based on individual “utility” level as assessed by the individuals themselves while the latter approach does not (Sen, 1979). For example if poverty comparison is made in terms of nutritional attainment as frequently done in the developing countries, one need not believe that individuals themselves are always good judges of the nutrition to well-being. A non-welfarist poverty comparison, therefore, asserts that the poor are better off even if they do not agree. Views differ widely on the relative merit of both approaches (for details see Sen, 1979, 1987).

Poverty comparison in terms of the materialist notion of “standard of living”, which may also be seen from both welfarist and non-welfarist point of view, is more popular in development literature. In measuring standards of living the welfarist approach typically emphasizes aggregate expenditure on all goods and services consumed, valued at appropriate prices, and including consumption from own production. On the other hand, a non-welfarist approach emphasizes specific commodity form of deprivation, such as inadequate food consumption or even more narrowly, inadequate nutrition. But in either way a person’s standard of living is generally taken to depend solely on individual consumption of privately supplied goods.

Another line of thought regards 'opportunity for consumption' rather than actual consumption as the main criteria for the measurement of well-being. Following this approach data on wealth is needed for measurement which is rare or unreliable. In that case income is used as a proxy for 'opportunity for consumption' when savings are positive. Otherwise wealth is used when savings are negative since past savings also influence the opportunities for consumption at a given date. This approach fails to provide a fully compelling argument for preferring income to consumption as the welfare indicator of the households (Ravallion, 1992) because incomes of the poor often vary over time which is particularly true in underdeveloped rural economies depending on rain-fed agriculture. Since opportunities for smooth consumption and insurance through saving and community based risk-sharing is available to them, comparison of poverty based on consumption has some clear advantages over income. This approach also has far reaching implication in the sense that current consumption is not only a better indicator of current standard of living but also this may be a good indicator of long term well-being as it reveals information about incomes at other dates, in the past and future. This argument does not necessarily mean that comparison based on current consumption is free from any criticism (for details see Sen, 1981; Townsend, 1990; Deaton, 1991).

The most common route to identification is through specifying a set of 'basic' or 'minimum' needs and regarding the inability to fulfill these needs as the test of poverty (Sen, 1981). But a clear distinction should be made between the concept of undernutrition and poverty. The former measures well-being in terms of nutrient intakes (food energy) while the latter encompasses a broader concept of 'consumption' which includes other attributes of food besides their nutritional value. A practical advantage of food energy intake method is that during higher rate of inflation the price data need not be adjusted over time. But this method suffers from other serious drawbacks. The most important one is that one can change his food habit and therefore may substitute cheaper but high calorie food by expensive but low calorie food. In this case expenditure may even increase while amount of calorie intake may substantially fall depending on the elasticity of demand. Moreover, food consumption constitutes only a part of total consumption. Though food staple consumption have a high weight in any demand-consistent welfare indicator, it will rarely have a weight of one. Therefore, poverty comparison based on total consumption expenditure rather than nutritional attainment has some advantages.

Given the above limitations of different approaches a sensible solution is to monitor selected non-welfarist indicators side by side with welfarist ones which have been followed in our present study.

After identifying the poor, we move from description of the poor to some overall measure of poverty as such. Before going into details we need to draw the poverty line. The method used to calculate the poverty line in our present study is "cost of basic needs (CBN) method". The poverty line has

been estimated by first calculating the cost of a bundle of goods deemed to assure that basic consumption needs are met in the domain of the poverty comparison. The bundle of goods has been taken from the list of per capita normative daily requirement presented in the paper of Ravallion and Sen (1996). Thirty five percent non-food expenditure has been added to the amount derived by earlier estimate. The most compelling argument in favour of the CBN method for making poverty comparisons is that it explicitly aims to control for differences in purchasing power over basic consumption needs (Ibid.).

The most commonly practiced method for poverty estimation is the head count ratio (H) defined as the proportion of the total population that happens to be identified as the poor e.g. the proportion falling below the poverty line expenditure (or income).

$$H = \frac{q}{n}$$

where q = population below the poverty line
 n = total number of population

Poverty measure based on the estimate of H has been severely criticized by Sen (Sen, 1981). Suppose a person below the poverty line have increased his income or expenditure but not sufficiently enough to cross the line. This is an improvement in terms of lowering the poverty level but the head count index remains unchanged. A better measure is the poverty gap (PG), based on the aggregate poverty deficit of the poor relative to the poverty line which gives a good indication of the depth of poverty in that it depends on the distance of the poor below the poverty line.

$$PG = \frac{1}{n} \sum_{i=1}^q \left[\frac{z - y_i}{q} \right]$$

This index can be expressed as the percentage short fall of the average income of the poor from the poverty line which can be termed as income gap ratio (I).

$$PG = I.H$$

where $I = \frac{z - y^p}{z}$ and y^p denotes the mean consumption of the poor.

This method has also been criticized by Sen (Sen, 1981) for being “completely insensitive to transfers of income among the poor so long as nobody crosses the poverty line by such transfers”. “It also pays no attention whatever to the number or proportion of people below the poverty line, concentrating only on the aggregate short-fall, no matter how it is distributed and among how many” (Sen, 1981). The measure proposed by Sen (Sen, 1976, 1981) though a very good one to measure the severity of poverty, does not satisfy “additivity” property (for details see Ravallion, 1992). A measure of the severity of the poverty taking “additivity” into

consideration is Foster-Greer-Thorbecke (FGT) measure whereby the poverty gaps of the poor are weighted by those poverty gaps in assessing aggregate poverty.

$$\text{FGT} = \frac{1}{n} \sum_{i=1}^q \left[\frac{z - y_i}{q} \right]^2$$

A review of the studies on poverty measurement in the case of Bangladesh over the last two decades shows considerable variation in the results. Discrepancies in estimates are found even for studies in the same year when researchers were different (Hye, 1996). The basic problem lies in the methodology applied by the different researchers as different methods of estimation produce significantly different results (Ravallion and Sen, 1996). The most crucial point that raises the debate about the methods of poverty measurement is how to set up a poverty line and what poverty measures are used. Taking all these things into consideration we have applied a method which we hope would best suit our purposes as mentioned earlier.

2.10.2 Empowerment: BRAC's activities are geared towards empowering rural women. Embodied within the phrase of 'empowerment' is the concept of change. What this study proposes to do is to investigate the changes that have taken place in the lives of women who participate in BRAC. The areas in which we expected to find changes were identified and on the basis of this the present study identifies 'empowerment' as the capacity of women to reduce their socio-economic vulnerability and their dependency on their husbands or other male counterparts, in terms of their ability to become involved in income generating activities and freely spend the income generated from these activities; their ability to accumulate assets over which they can have rights of sale and profits; increase their contributions to household expenditures and thereby acquire a greater role in household decision-making matters and finally, increase their self confidence and awareness of social issues.

To investigate women's empowerment, this study has made use of two instruments. One is the Chen and Mahmud Conceptual Framework (Chen and Mahmud, 1995), and the other is a continuum which was developed based on study findings. There are alternative models such as the Hashemi, Schuler and Riley model which could be used to measure empowerment. However, we did not use that model mainly because we considered that the indicators in the model were too arbitrary in measuring women's empowerment²

Chen and Mahmud's conceptual framework for assessing changes in women's lives consists of five matrices with which to investigate the impacts of development interventions on women's lives. For the purpose of this study, we have selected the Pathways Matrix, which tries to track the actual

² See Chapter 7, Sec. 7.1.1

processes through which BRAC inputs affect changes in women's lives. There are four pathways of change in this matrix: Material, Cognitive, Perceptual, and Relational. We have chosen to focus on the Material, Perceptual and Relational pathways of change. These pathways can be experienced not only by the women themselves, but by many other agents/actors in their lives: family, community, elite, officials. Changes that occurred under these pathways will be considered at the level of the 'self', i.e., woman in her individual capacity or as member of BRAC-organized group, and at the level of the 'family', i.e., woman's natal and marital families: both nuclear and extended (*bari*). As we have not discussed the various aspects of empowerment in detail but have limited our analysis to the RDP affected changes that can be experienced by the women themselves and by their families, across three pathways in the matrix, we call our examination of empowerment a partial analysis. A brief description of each pathway is provided below.

Material Pathway of Change: In the material pathway to empowerment, women should experience changes in their access to and control over material resources and also in their ability to become involved in income generating activities. This will ensure that they can lead more productive lives, free from their traditional socio-economic dependence on their husbands and other male kin. In this particular case, the agent which will help bring about these changes is BRAC.

Ownership and control over resources/assets: Asset and resource ownership helps women's empowerment as it gives them power to take decisions about the use and management of those specific assets and resources.

Possession of resources play an important role in determining a person's bargaining power within the household as well as its fall back position in the community, in the market and with the state. Usually ownership is closely linked with access and decision-making power. (Mishra and Dale, 1996).

In the present study, control over assets has been defined as the ability to sell assets without the permission of husbands or other male family members.

Perceptual Pathway of Change: Under this perceptual pathway, we have chosen to look at women's perceptions of the changes that have occurred in their well-being since their BRAC involvement, as well as male perceptions of the positive and negative aspects of women's BRAC involvement. Perceptions play an important role in one's conceptualization of his/her own well-being. How others perceive oneself and how the individual perceives his/her own individual interests are also key factors in determining one's well-being.

Traditionally, rural Bangladeshi women are conditioned to consider family interests as their own well-being interests (Kabeer, 1991). Involvement in BRAC brings about wide scale changes in the lives of such women. Within the household they are able to enjoy an improved status, thanks to their monetary IGA contributions. Outside the household, they gain exposure to new ideas and knowledge through their attendance of issue-based meetings (*Gram Shobhas*), participation in awareness building and legal education training sessions. These changes will assist them in acquiring clear perceptions of their own well-being.

Relational Pathway of Change: Under this pathway we have chosen to look at women's reduced economic dependency on their husbands and the changes in their mobility since they have become involved with BRAC. Traditionally, rural Bangladeshi women engage in household activities that are non-economic in nature which render them economically dependent on their male kin. At the same time, the dictates of *purdah* and patriarchy severely restrict their employment opportunities. In instances where women do work outside their households, such employment, is often sporadic (working as agricultural day labourers in wealthy homesteads, for example), and as such, the income earned from it is also sporadic.

Social and cultural norms associated with *purdah* and patriarchy also restrict women's mobility in rural Bangladesh. This confinement restricts women's involvement in market transactions, as well as their opportunities to meet different people and gain new knowledge (Farashuddin, 1995). Through involvement in BRAC generated employment opportunities, women acquire the means of earning their own income, as well as increase their mobility and interactions with the outside world.

2.10.2.1 Continuum to Measure Women's Empowerment: In another attempt at analyzing women's empowerment, the study team developed a continuum, similar to that used in IAS-I, to measure the changes that have occurred in women's lives due to their involvement in BRAC. The continuum was based on the following hypothesis: empowerment is a continuous process of change that is greatly influenced by the length of time a woman has been involved in BRAC. Thus, the more time a woman spends in BRAC and receives BRAC inputs, the more changes she is likely to experience in her life and the more empowered she is likely to become. Two empowerment continua were developed, both consisting of 9 indicators each. One was based on qualitative information (QI). For the other continuum, relevant data were taken from the household survey (HHS) on all the sample members of the 25 VOs that were randomly selected for qualitative and case study work. Scores were given for each indicator with a range of 1 to 5 and the combined scores were then compiled in three cells for analysis. The indicators used in the two continua are enumerated below.

From Qualitative Information	From Household Survey Data
------------------------------	----------------------------

1. Use of Loan	1. Value of the sample member's own house
2. Loan repayment sources	2. Average loan size
3. Use of savings	3. Savings situation (amount)
4. Accumulating assets from own income	4. Ownership of assets
5. Ownership and control over assets	5. Control over assets
6. Involvement in IGAs	6. Amount of IGA generated income
7. Use of IGA generated income	7. Use of IGA generated income
8. Own well being (changed status in the HH)	8. Contribution to HH's yearly non-food expenditures
9. Mobility	9. Contribution to HH's daily food expenditures

The QI continuum relied on verbal statements provided by the key informants on the relevant issues, which were then reclassified and given weights between 1 and 5. For the HHS continuum, these weights were given to responses received on pre-determined issues in the survey. This is why, even though there are indicators that are common to both continua, the scores may vary. It may also be noted that the scores for the two continua have been presented as percentage figures. Since the three cells of analysis do not have the same number of VOs, the combined scores the VOs received were converted into percentages, so that their results could be more easily compared.

CHAPTER ONE : INTRODUCTION

A M Muazzam Husain

1.1 The Context

1.1.1 BRAC and its programmes: BRAC was established in 1972 as a small organization to provide relief and rehabilitation to war ravaged victims of Sulla in the Sylhet district of Bangladesh. Soon it turned into a rural development organization. Learning from its own experience and making necessary changes in the programme strategy and contents, the scope of its activities expanded gradually. Today, after over a quarter century of its operation, BRAC is the largest multidimensional rural development organization in Bangladesh. Its main goals are to alleviate poverty and empower the rural poor, especially the women.

BRAC first adopted the community approach in its development endeavour and then changed over to the target group approach bringing the rural poor in its fold to make its programme more effective under the given rural socio-economic power structure in Bangladesh. The three main programmes of BRAC are its Rural Development Programme (RDP), the Non-formal Primary Education (NFPE) Programme and the Health and Population (HPD) Programme. Besides, it has its technical support services and a few revenue generating enterprises to help finance its development programme.

BRAC's health programme started from its earliest days and has expanded the scope and breadth of its activities since then. The HPD programme not only covers both curative and preventive health services but also family planning, immunization, child care and other related services. The Essential Health Care (EHC) services attached to the RDP receive technical support from the HPD programme and provides a package of health and sanitation services through trained village level health workers known as *Shastho Shebikas*.

The NFPE programme was initiated in 1985 to provide basic education to the rural poor, especially for those who are not enrolled in formal schools or have dropped out mainly due to poverty. Today, there are more than thirty

four thousand NFPE schools all over Bangladesh enrolling over a million children, seventy percent of whom are girls.

To provide support and strengthen its programmes, BRAC has a few support services. One is the Training and Resource Centre (TARC). There are 12 TARCs and a Centre for Development Management (CDM) which provide training to BRAC staff and group members. The Training Division looks after all training activities. The Monitoring Department is another organ that regularly monitors different programme activities and provides feedback that facilitates policy decisions. The Research and Evaluation Division (RED) provides research support to BRAC programmes by evaluating them. RED has developed into a strong research organization with multi-disciplinary teams capable of conducting a wide range of research activities. The commercial enterprises of BRAC includes the BRAC Printers and the Cold Storage Plants.

1.1.2 The rural development programme (RDP): RDP, the core programme of BRAC, was launched in 1986 by amalgamating the Outreach Programme and the Rural Credit and Training Programme (RCTP). Under the RDP the rural poor are organized into village organizations (VOs) and are provided with credit, skill development and awareness education and other necessary support for raising their income and employment opportunities and their level of empowerment.

For organizational development and to provide group motivation, the members have to attend weekly meetings, orientation courses and issue-based meetings. Members also have to deposit weekly savings regularly. The social development component of the RDP includes the Human Rights and Legal Education (HRLE) programme, provision of EHC services and steps taken for the institutional development of VOs. The major sectors of the programme for employment and income generation of VO members include poultry, livestock, sericulture, agriculture, fisheries and the enterprise development related activities. RDP provides technical support to these activities through provision of training, input supply, technical know-how, marketing and infrastructure development services. To ensure the success of these income generation activities, RDP has also established some programme support enterprises which include poultry hatchery, fish hatchery, feed mill, seed production units, grainage, reeling centres, and agro processing plants.

For addressing needs of those who belong to the very bottom of the poverty bracket, there is a special programme, viz., the Income Generation for Vulnerable Group Development (IGVGD) Programme under the RDP. This programme is specifically designed to link this disadvantaged group with the mainstream development activities.

The RDP has been placing special focus on the rural women. By the end of 1996, 93% of all VOs were women's organizations (BRAC, 1996) and 94% of all VO members were women.

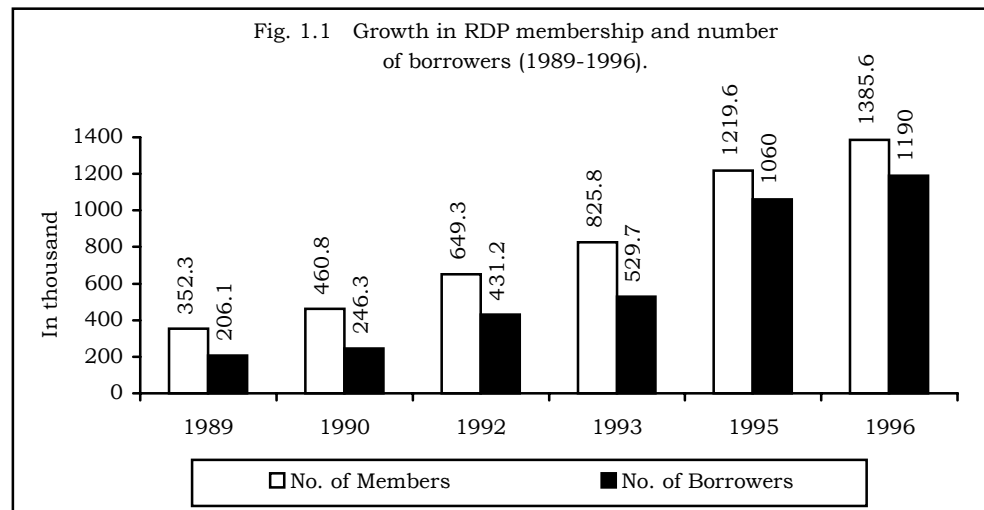
The RDP had an impressive growth during the first decade of its operation. The number of area offices increased from 45 in 1986 to 282 in June 1996. The number of VOs increased from 2,401 to 37,806 during the same period. The cumulative amount of loan disbursed and savings increased from Taka 97 million to Taka 10,907 million and from Taka 15 million to Taka 944 million respectively during the period (Table 1.1). Figures 1.1 and 1.2 show the growth in membership, number of borrowers, outstanding loans and savings from 1989 to 1996.

Table 1.1: Growth of RDP (1986-1996)

	Phase-I		Phase-II		Phase-III		Phase-IV
	1986	1989	1990	1992	1993	1995	1996*
Area office (No.)	45	81	100	140	165	235	282
VOs (No.)	2,401	6,434	8,263	13,967	20,141	33,194	37,806
Membership ('000)	121.7	352.3	460.8	649.3	825.8	1,219.6	1,385.6
Credit disbursed (Million Taka)	97	517	943	2,390	3,672	8,866	10,907
Total Outstanding (Million Taka)	-	213**	368	691	1,004	2,048	2,428
No. of O/S borrowers ('000)	-	206.1	246.3	431.2	529.7	1,060	1,190
Savings (Million Taka)	15	69	127	225	305	757	944

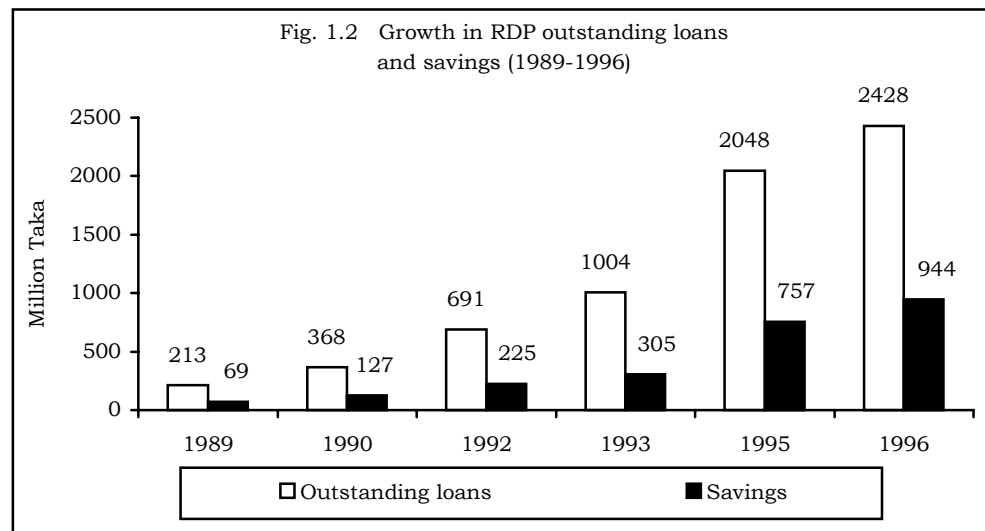
* Up to June, 1996 ** Principal Outstanding.

Source: MIS/RDP, BRAC



The programme has been expanding in different phases. The first phase covers the period 1986-89, the second phase 1990-92, the third phase 1993-95 and the fourth phase 1996-2000. The five year Phase-IV of RDP is an extension of the existing programme but has some distinguishing features and is designed to fulfill certain specific goals.

The main features of RDP-IV include its emphasis on women as VO members; its greater emphasis on attaining programme sustainability and development of logical frameworks (LFAs) to measure levels of performance and sustainability of different components of the programme; further expansion and consolidation of the programme with emphasis on institutional development of VOs; and a new focus on environmental aspects of the programme.



The strategic directions of the programme envisage the following key outcomes of RDP-IV :

- The development of appropriate, effective and functional organizations of participating households
- Self-sustaining credit entity functioning
- Increased income and employment generation in poultry, livestock, fisheries, sericulture, social forestry and vegetable production
- Increased knowledge and action by villagers with respect to their legal and human rights
- Increased income for the poorest women in the poverty group
- Improved health of participating households.

1.1.3 Impact assessment of RDP – The IAS-I: BRAC is concerned about the sustainability of its development programmes. This, among other things, presupposes the need for evaluating the impact of its programmes. With this aim in view, BRAC’s programmes are monitored by its Monitoring Cell. The Research and Evaluation Division (RED) is an independent unit within BRAC which provides research support to its programmes including their evaluation. The first comprehensive study on the impact of RDP on its

participants was conducted in 1993-94. The two basic objectives of the study were (Mustafa, et al., 1996):

- (a) to gain a more extensive understanding of the socio-economic impact of RDP, in both quantitative and qualitative terms, and
- (b) to assist BRAC in the development of its ongoing capacity to assess socio-economic impact of RDP, including identifying the most appropriate methodologies to assess different aspects of BRAC's impact.

The study, henceforth designated as IAS-I, used four broad indicators to determine the impact of RDP on poverty alleviation of its participants viz. (a) material well-being, (b) vulnerability to seasonality and economic security, (c) changes in women's lives, and (d) development of VOs as institutions. The IAS-I used an integrated methodology involving three study approaches:

- (a) the *household survey* of BRAC and non-BRAC households using a structured pre-coded questionnaire, part of which was conducted in two rounds to capture seasonal variations in economic well-being. The questionnaire collected data on household features, inputs received from BRAC, economic assets, food stocks and variables for social attitudes and behaviours.
- (b) *qualitative and case studies* of selected VOs using rapid and participatory (RRA/PRA) approaches to collect mainly qualitative data to help provide an analysis of community wise factors e.g., wealth differentials, gender relations, group development and cohesion. Semi-structured check lists were used for the purpose.
- (c) *village profiles* of both BRAC and non-BRAC sample survey areas to assess the significance of BRAC inputs in relation to other socio-economic variables, e.g., infrastructure, presence of other programmes and access to public facilities and institutions. It used semi-structured check lists for the purpose.

The Main Findings Report on IAS-I was made available in February 1995, the Draft Final Report in August 1995 and the Final Report was published in February, 1996. The findings of the study showed positive economic impact of RDP on its participants. Their wealth and expenditures consistently improved with increase in membership age and loan size. The impact was relatively higher for less well-off households while female members gained relatively more than their male counterparts. Improvement in the nature of household assets and investment in housing structures suggest both greater economic security and improved standard of living for older members than newly admitted members. Enhanced security was also confirmed by reduced seasonal fluctuation in income, expenditure, food consumption and stocks of RDP members having a membership age of two and a half years or more and receiving cumulative RDP credit of Taka. 7,500.00 or more. The coping capacity of the participants to deal with crisis also improved.

There were some positive evidences of gradual changes in female members' lives such as improvement in their status within the household, mobility, control over income and ability to decide about savings and spending their income. But the overall impact was not found to be very high in these areas. Again, the results of the IAS-I on institution building were not very encouraging. Discipline and enthusiasm were found to be better among newer and female VOs. The development of autonomy and cohesion among members was not satisfactory.

The IAS-I also came up with some findings on the impact of the NFPE programme especially in respect of VO member children's participation in schools, and VO members' participation in school management. The results were found to be favourable. The IAS also dealt briefly with member dropout from VOs and its underlying reasons.

1.1.3 Developing an impact assessment system for RDP: At the time of initiating the IAS-I BRAC decided to evolve an impact assessment system for RDP. Assessing the impact of RDP is not only necessary to measure the success of the programme in raising the socioeconomic status of the target population but also to identify the shortcomings of the programme and to assess its sustainability.

While initiating the phase IV of RDP (1996-2000) it was stipulated that the second phase of the IAS would be planned and implemented providing a benchmark for RDP phase IV and an attempt would be made to further develop an impact assessment system for RDP (BRAC, 1996).

It was proposed that the IAS would be repeated twice during RDP IV and these would be timed in such a way that the findings of the first one should be available for a mid-term review due at the end of 1997 and the second for the final review of RDP IV. The study is also expected to further investigate the critical mass theory developed by the IAS-I. Accordingly, the present study has been initiated (henceforth called IAS-II).

Preliminary work in preparation for this mid-term study commenced from June 1996. These include review of IAS-I to assess data utilization and to make necessary revision in the questionnaire, a field survey to assess the present status of the IAS-I sample population and development of a tentative time frame for the study. Formal initiation of the study was started during August-September, 1996 with the determination of the main objectives of IAS-II, design of the study approaches for data collection and drawing up the plan of work. These were done considering the needs of the RDP programme, the resources available for the study and the time frame allowed by the need to prepare the results before the mid-term review of RDP-IV scheduled for September, 1997.

The first round of data collection for the study was conducted in October-November, 1996 and the second round in February-March, 1997.

1.2 The Main Features of the Present Study

The broad objectives of the IAS-II remain more or less the same as its predecessor. It measures the material well-being of RDP participants. An additional dimension which has been added in this new IAS is its focus on the poverty reduction impact of the programme by measuring poverty and its correlates. The impact of the programme on seasonal economic vulnerability and coping capacity of participants has also been measured. The study further analyses membership performances, member dropout and coverage of the programme.

An analysis of women's empowerment has also been made but with a specified focus. Econometric analysis has been made to further test the notion of "critical mass" developed by IAS-I by decomposing participants according to length of membership and volume of credit received. Some panel data from IAS-I have also been used to compare changes in some common indicators over time. Analysis of VO performance was not included in IAS-II because the results of some new initiatives in this direction, as suggested by programme personnel, would require more time to show results. It was agreed that this would better be assessed during a subsequent impact study.

The study design for IAS-II uses the same three study approaches as in the IAS-I. These are the household survey, the qualitative and case studies and the village profile. However, the size of the study has been reduced. The total sample size is one fourth less than that of IAS-I. The field work has also been reduced by carefully relating data to the needs of analysis and streamlining the questionnaire accordingly.

On assessment of RDP impact, a "donor concern has been to view the IAS as a system for continuing inputs from RED to RDP rather than as a study or a series of studies" (Greeley, 1996). There are evidences of some IAS-I results influencing some elements and emphases within the RDP IV proposal. But it is doubtful whether IAS functions as a management tool the way the work of the monitoring division does (Ibid.). Again, there are also other channels for feedback on field performance to RDP senior management.

In the above context, whether we call the IAS a system or not, it can serve three purposes. First, it can provide a scientific evidence of BRAC's achievement in poverty reduction and other goals allowing comparison both over time and with other non-BRAC studies on performance of rural development programmes. Secondly, it may provide a comparative analysis of the characteristics of households between those which are benefiting from BRAC inputs and those which are not. Thirdly, it may provide an assessment of impact in relation to the overall dimensions of poverty in a study area on

both BRAC members and non-members (Ibid.). Accordingly, to enlarge the scope of coverage and satisfy the above requirements, attempt has been made to integrate findings of other studies on RDP and to use longitudinal data on different components in RDP.

1.3 Review of Literature

Some of the available literature on assessment of impact of micro-credit programmes for the poor, empowerment of women, measurement of poverty and related issues have been reviewed in this section. The context of rural Bangladesh has been given exclusive priority in the selection of studies reviewed.

A comprehensive impact assessment study on BRAC's RDP was conducted in 1993-94 (Mustafa et al., 1996) using four broad indicators, viz.: (a) material well-being, (b) vulnerability to seasonality, (c) changes in women's lives and (d) development of VOs as institutions. Both 'before-after' and 'with-without' analyses were made in the study. An integrated methodology was used comprising household survey, village profiles and qualitative and case studies (using RRA/PRA techniques). Fifteen AOs were selected from which a total of 2,250 samples were selected for survey, taking 1,500 BRAC households and 750 comparison households.

The findings of the study showed positive impact of RDP on material well-being of its member households though impact on women's empowerment and institution building were less well pronounced³. The study focused mainly on material well-being of participants and did not measure poverty and its related aspects.

A number of other studies were conducted by BRAC on different aspects of RDP's impact on participants. Ahmed's (1988) study on economic empowerment of the rural poor found significant gain in income and other household conditions of members over those of comparison households. Chowdhury, Mahmud and Abed (1991) evaluated four earliest RDP branches which showed that per capita income was 26% higher and employment creation was 19% higher for programme households than those of control households. Ownership of household goods and assets were also assessed to be higher for programme households.

Zaman (1997) explored the impact of BRAC's rural development programme on consumption based poverty of the participants by using household food expenditure data for 14 villages in Matlab *thana*. The socio-economic status of BRAC members was compared with that of non-members by constructing poverty lines. The status of members was also analyzed by membership length, types of inputs received and loan size. Results show evidence of positive contribution of BRAC programme on poverty reduction but the

³ See section 1.1.2 for more details

benefits were not found to be evenly distributed among different socio-economic groups. Results appear to suggest that the poorest members did not benefit much from BRAC interventions.

Wood and Sharif (1997) edited a book on poverty and finance in Bangladesh which examines micro-credit programmes and models in the context of borrower sustainability, reaching the poorest and removal of poverty. The three credit models viz. credit-only, credit-plus and 'credit with social development' are considered. Some empirical evidences were provided and the current achievements and constraints of various micro-credit models were analyzed. Arguments were placed in favour of a 'credit with social development' model and suggestions were made to improve the efficiency of the micro-credit system.

During 1994-95 a survey was conducted (Proshika, 1995) to assess the impact of Proshika's development programme on participants. A cross-sectional two stage cluster random sampling approach was used and Proshika households with at least three years of membership were compared with a control group of non-participant households. The survey findings show that among eight social empowerment indicators better results of Proshika were found in case of literacy, infant mortality and participation in local institutions. Among five economic indicators used results of Proshika households were better in possession of assets, indebtedness, income and savings. The study suggested further in-depth studies in five different areas.

In 1997 ASA conducted (ASA, 1997) a study on constraints of reaching the hard-core poor. Besides programme participants, different programme personnel were also interviewed. The study identified socio-economic, physical, and mental status of the hard-core poor, their negligible employment opportunity, seasonal migration, neighbourhood relationships and the influence of the local elite on their livelihood as the major constraints of reaching the hard-core poor. Moreover, infrastructural conditions such as inadequate marketing and banking facilities and backward communication and transportation systems were also identified as constraints.

Ravallion's paper is one of the classic papers (Ravallion, 1992) on methodological issues of poverty where he has presented a concrete and clear guideline for empirical study on poverty assessment in different situations. On the other hand, Ravallion and Sen (1996), drawing examples from different literature on poverty in Bangladesh context, show how results differ drastically if different methodologies are employed.

Khandaker and Chowdhury's paper on targeted credit programmes and rural poverty in Bangladesh (Khandaker and Chowdhury, 1995) assesses the poverty alleviation impact of three programmes viz. BRAC, Grameen Bank (GB) and Bangladesh Rural Development Board's RD-12 project by comparing participants with non-participants in each case. They considered

consumption as a better indicator of poverty than income since the former is more stable. In determining the poverty line the approach used was to estimate the cost of a bundle of goods that assures basic consumption needs. To examine the sustainability of well-being of the households three economic indicators, viz. savings, assets and net-worth were studied. These measures were evaluated against programme exposure and loans outstanding. Social indicators such as health environment were also considered as a dimension of poverty. The study findings indicate positive contributions of the programmes in poverty reduction and sustaining household welfare. They estimated that it takes five years for the poor participants to cross the poverty line and eight years for economic graduation. They also found a shift from farm to non-farm investment as a result of programme intervention. They suggest necessary policy interventions to create a dynamism in the rural economy.

Based on experiences of GB and other NGO programmes in Bangladesh on the impact of microcredit programmes in poverty alleviation Khandaker (undated) discusses, among other things, the measurement tools and methodological issues involved in the impact analysis of micro-credit programmes. He uses economic indicators like reduction in poverty, increase in income and employment and social indicators like changes in contraceptive use, fertility and children's schooling. His paper also discusses methodological issues and externalities that influence programme outcomes.

Hye (1996) presents a synthesis of available literature on poverty, its measurement, the strategies for poverty alleviation and the government and NGO programmes and finally develops a theoretical framework to explain the poverty situation in Bangladesh. In measuring poverty he advocates uniformity in the use of concepts, methodology and assumptions. The poverty alleviation strategies followed in Bangladesh during the last 25 years are critically reviewed and the various programmes are analyzed on the basis of which he develops his theoretical framework to explain the mass poverty situation in the country. Finally he makes some policy prescriptions for poverty alleviation in Bangladesh.

Several studies have been conducted by BRAC's Research and Evaluation Division (RED) on impact of RDP on women's lives and their empowerment such as Ahmed, Chowdhury and Hassan (1990), Ahmed and Hassan (1990), Huda and Hossain (1994) and Khan (1995) which found positive impact of RDP on women's status within the household, mobility, their reduced economic dependence and increased control over income and participation in decision making. As loanees, the status of women has become enhanced within the households and some of them have even experienced greater mobility and gained more control over their incomes (Goetz and Sen Gupta, 1996). Impact of RDP on women's lives is included among the several areas of inquiry under the Matlab Study. Hossain and Huda (1995) tried to understand the problems of women headed households and found out poverty and lack of access to employment as their key problems. Such

households prefer employment to credit programmes while the *pardah* remains a constraint to their income earning opportunities. BRAC members, however, were found to be relatively better off than non-members.

Chen and Mahmud (1995) have prepared a conceptual framework to assess women's status and to measure the impact of development interventions on their lives. It sets out five matrices to categorize the variables and a sequence for considering them is also suggested. The framework includes an input matrix, a classification of women matrix, a pathway matrix, an indicator matrix and a status ranking matrix.

Hashemi, Schuler and Riley (1996) in a study conducted on BRAC and GB participants using eight quantitative and qualitative indicators tried to show that involvement in credit programmes empowers women by providing them with the impetus to make economic contributions to their households, gain a voice in familial decision-making, make large and small purchases, increase their interactions with the outside world, as well as protest political and legal injustices. According to study findings, participation in both BRAC and GB has significant positive effects on the above mentioned areas of women's lives. The length of time a woman spends in either programme was also seen to be a contributing factor to empowering women. The study further revealed that GB membership has a stronger effect than BRAC in empowering women, as even non-member women in GB villages had experienced significant positive effects in their lives. The authors have pointed out that perhaps a 'selection bias' may have influenced the results in favour of GB rather than BRAC. Other study findings (Huda, et al., 1996) also show that women who participate in BRAC make greater contributions to household income at aggregate level than do non-members, own greater number of assets and have significantly more savings than do non-members.

CHAPTER TWO : METHODOLOGY

A M Muazzam Husain
Debdulal Mallick

2.1 Considerations in Designing the Study

IAS -II is a mid-term study to provide benchmark information on RDP-IV, and to assess impact of RDP on its participants in terms of measuring changes in their material well-being, reduction in poverty level and women's empowerment. Other considerations that influenced the study design include the use and limitations of panel data to measure changes in impact over time and an assessment of RDP coverage and member performance differences. Both quantitative and qualitative data were collected. In analyzing the data efforts were made to integrate the quantitative and qualitative data to arrive at results.

Unlike IAS-I which covered both male and female VO members in the sample, IAS-II has exclusively focused on female VO members. This was due to the recent change in RDP policy which contemplates disbursing loans to only female VOs and gradually closing down male VOs.

2.2 The Study Approach

Similar to the IAS-I, an integrated approach was used for the study which included the household survey, the qualitative and case studies, and the village profile.

2.2.1 Household survey: A household survey was conducted covering all the sample households using pre-coded questionnaires. The data included demographic and other household characteristics, housing status, landholding and other assets, health, sanitation and family planning, food stock, credit and savings, household consumption and expenditures, coping with crisis, ownership and control over assets, access to income generating activities, mobility, receipt of training from BRAC, and reasons for dropout from VO.

Data on variables affected by seasonal factors were collected in two rounds to capture seasonal variation. Two different sets of household survey questionnaires were used for this purpose with the consumption part remaining unchanged.

The main focus of the household survey was to collect quantitative data to determine the impact of the RDP on its participants with special reference to their material well-being in general and their level of poverty in particular. The social aspects of well-being mainly considered were literacy and educational level of households, housing status, and some aspects of health, sanitation and family planning. Economic well-being covered aspects like landholding, occupation, accumulation of assets, and food security. Another aspect included was the analysis of the dropout members from relevant data collected through the household survey.

A very important focus in the survey was on the household level impact of the RDP as measured through per capita expenditure. Data on household level consumption expenditure were analyzed to explain the poverty situation.

2.2.2 Qualitative and case study work: The focus of the qualitative and case study work was on the broad areas in which RDP could be expected to have some impact on women's empowerment, at the levels of the individual member and her family. Qualitative indicators were selected based on three pathways to empowerment (material, perceptual and relational) to assess changes in women's lives (Chen and Mahmud, 1995). Issues covered include women's involvement in income generating activities, their ownership and control over assets, perceptions of own well-being, reduced economic dependency on their husbands and their mobility.

Information on these indicators was obtained through semi-structured questionnaires from 25 VOs. There were at least 6 - 10 key informants in each discussion session held in each VO and they provided us with information on the whole VO. Where possible, quantitative data from the household survey was used to substantiate the qualitative findings. But it should be noted that since the 6-10 key informants of each VO were not necessarily the same as the 10 sample members covered by the household survey, in many cases, quantitative data could not be used to substantiate the qualitative findings. Since the focus of the qualitative and case study work was on the BRAC affected changes experienced by programme participants and their households, no comparison group was included, given the difficulty of determining a 'cut-off' point of time from which to ask questions. Also, even though there were five VOs that were common to both IAS I and II, given the different scope of the two studies, a panel analysis of the changes experienced by programme participants could not be carried out.

Rapid rural appraisal (RRA) techniques were used to analyze programme impacts on participant households and determine whether these households' overall situations had improved, declined or remained the same as a result of BRAC interventions. Physical mapping was used to identify the location of all members and non-members in the sample areas. Secondary sources including member lists and village census forms (completed by RDP) were also used for this purpose. Wealth ranking was used to categorize the total number of villagers according to their landholding situations. The number of eligible school going children in these households was also identified to determine NFPE coverage and reasons for not attending school (NFPE and otherwise). BRAC members' landholding, membership status and poverty reduction performances were identified using wealth ranking and pile sorting techniques. After the TG group had been identified, it was seen how many of them were in BRAC and how many were not. Reasons for non-involvement were also explored.

Semi-structured checklists were used to obtain data for 10 individual case studies. Five were of members whose situations improved as a result of BRAC interventions and 5 were of those whose situations deteriorated to the extent that they dropped out of BRAC. These individual cases were randomly selected from the 200 'success cases' and 143 dropout/decline cases included in the household survey sample.

2.2.3 Village profile: To provide useful background information for the research and a basis for creating a variable on economic vibrancy, village profiles were created by collecting some benchmark data using a structured form and deriving the data by interviewing key informants in each village covered by the household survey. The data include distance of the village from nearest city and metalled road, number of households, existence of socio-economic infrastructure such as *haats*, *bazaars*, educational institutions, health centres, NGOs, electricity, etc., and access to various socio-economic institutions.

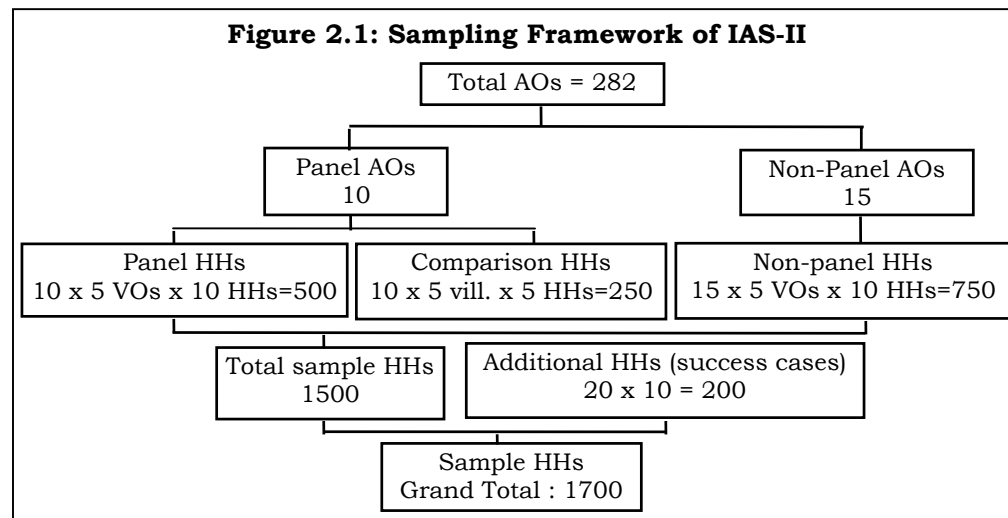
The data from village profiles have been used to determine the economic vibrancy of different sample areas which is an important indicator of household level material well-being outcomes. The profiles were constructed for 176 villages (126 RDP and 50 non-RDP). Data were collected during October-November, 1996. Local market prices were collected also in February, 1997.

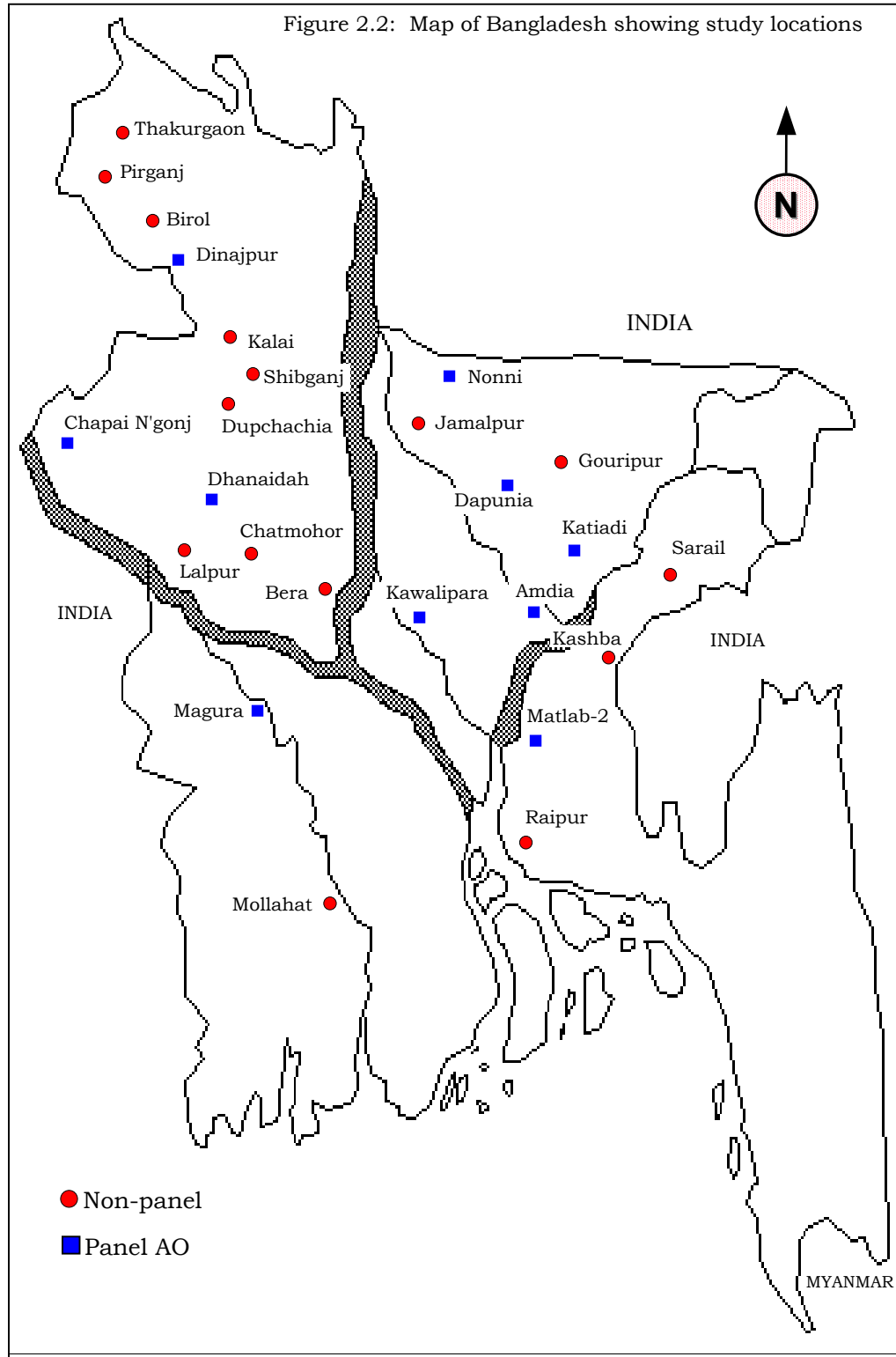
2.3 Sample Plan

In designing the sample plan, considerations were given to the need for linking IAS-I with IAS-II, providing a benchmark for RDP-IV and representing a much wider RDP area due to expansion taking place during the intervening period between IAS-I and IAS-II. It may be noted here that the total number of AOs had increased from 167 in 1993 to 282 in June, 1996.

The sample plan also needed to ensure that sample sizes in each category of sub-population were sufficiently large to meet the requirements of statistical analysis. The total sample population was thus decomposed into five sub-sets: i) IAS-I BRAC sample members (panel members), ii) IAS-I non-members (panel comparison group), iii) pre-IAS-I non-panel BRAC members (covering RDP phase I and II VOs), iv) post-IAS-I BRAC members (covering RDP-III VOs), and v) RDP-IV BRAC members. The sampling proportion was broadly determined according to the respective proportions of each sub-set in the total population based on the assumption of homoscedasticity i.e., equal variance of the mean for the variables being examined.

Out of 15 AOs selected as sample during IAS-I, ten AOs were chosen at random for IAS-II. The IAS-I selected ten VOs from each AO. Excluding three male VOs from the ten IAS-I sample VOs in each selected AO, five VOs were selected on a random basis from the seven female VOs in each selected AO for IAS-II. With ten panel members in each VO, the total panel BRAC member sample was 500. In case of the comparison group, the IAS-II selected five panel households from each of the five non-BRAC villages under each of the ten selected AOs. The total number selected was thus 250. For the last three categories of sub-population, five VOs from each AO and ten households from each of those five VOs were selected randomly providing a total of 750 samples. In addition, 200 BRAC member households who demonstrated very high economic performance after joining BRAC were chosen purposively in consultation with the local RDP field staff from 20 AOs taking ten from each. It may be noted here that out of 25 selected AOs, five RDP-IV AOs were excluded for this purpose since they were new ones unsuitable for assessing economic performance of VO members. The total sample size for the IAS-II was thus 1700. The sample size and its distribution is shown in Fig.2.1 and the geographical distribution of the selected sample areas in Figure 2.2.





For qualitative and case study work, the IAS-II sample consisted of 25 VOs. One VO was randomly selected from each of the 25 IAS-II sample AOs. Ten VOs were from the Panel areas and qualitative case study data had previously been collected from 5 of them during IAS-I. The other 15 VOs were from non Panel areas.

2.4 Instruments of Data Collection

Questionnaires, both structured and unstructured, and checklists were used to collect data from the field. Besides, different RRA/PRA techniques were used to collect qualitative data.

2.4.1 The questionnaire: Considering the needs of the IAS-II, the IAS-I questionnaire was reviewed by assessing its data utilization and a thoroughly revised and restructured draft questionnaire for IAS-II was prepared. This was extensively pre-tested in five different RDP areas and necessary revisions were made. The questionnaire was finalized after field tests during the training of Field Investigators for the household survey.

2.4.2 Semi-structured checklists: Semi-structured checklists were used to collect data for the qualitative aspects and for case studies. Qualitative data were collected to assess the impact of RDP on the empowerment of the participants. A separate checklist was also used to collect data for ten individual VO member case studies.

2.4.3 RRA/PRA techniques: Different RRA/PRA techniques were also used to collect data during qualitative and case studies. Among these were physical mapping, wealth ranking and pile sorting techniques. Additional group discussions were also held to elicit qualitative data where necessary.

2.5 Collection of Data

A large group of over sixty field enumerators were selected and trained for collection of household survey data. A seven-day training session was organized which included both theoretical lessons and field exercises including review of their field test performances. A large number of small survey teams were sent to different survey areas so as to minimize the time gap in the collection of data, especially on consumption data and other variables that might have seasonality effects. Each team had one member specially responsible for supervision of field work done by other members of the team. Each supervisor had previous experience in field data collection. For qualitative data collection and case study work, two teams were formed consisting of highly experienced IAS-II study team members.

The collection of data for the study commenced in October, 1996 and was completed in early March, 1997. The first round of the household survey for the collection of quantitative data was conducted in October, 1996. Data for constructing the village profile were also collected during the same period.

Field work for the qualitative studies including the selected case studies were conducted during December, 1996 and January, 1997. The second round of the household survey was conducted in February, 1997 which was done to offset seasonal variation in certain types of data such as consumption, savings, food stock, expenditure on some items, etc. The questionnaire on household survey was revised for the purpose. Data on local market prices were also collected twice, once during October and again in February. October represented the lean season while February represented the peak season.

2.6 Problems Faced in Data Collection

Some problems were faced in the collection of field data. One is a non-response problem due to non-availability of some respondents during the survey period. Among panel member samples there were 35 such samples and among panel non-members 12, making a total of 47 samples. The size of total effective panel samples was thus reduced from 750 to 703. In case of non-panel samples, such absentees were replaced by new samples from the random sample list which contained names of additional samples to cope with such a situation. During the second round data collection, there were a few cases of non-response due to non-availability of respondents or, as in case of consumption data, because the household members ate outside, partly or wholly, during the survey period. Such missing data were replaced by the mean of the distribution so that they do not affect the data set for analysis.

Field work for collecting second round data to cover the peak season was delayed to some extent due to the *Ramadan*, the month of fasting. Data were collected in February instead of January. It may be recalled that peak season data for IAS-I were also collected during February.

Scattered location of sample households, poor communication facilities and the necessity to make repeated visits to many households often created heavy pressure on the work load of the field survey team members.

2.7 Inclusion of the Comparison Group

The IAS-I sample included a comparison group of households in addition to BRAC households for making a 'with' and 'without' analysis in measuring the impact of RDP. Comparison or non-member households selected from adjoining BRAC villages included those households which had similar socio-economic condition but were not associated with BRAC or any other poverty alleviation programme.

The retention of a comparison group is associated with two main problems. *Firstly*, it is very difficult to identify non-member households which are truly similar to the member households in terms of their socioeconomic status. *Secondly*, it is also difficult to find non-member households which do not

have any access to development inputs either from government or non-government sources or from both. Therefore, questions were raised on the justifiability of retaining the comparison group in measuring the impact of RDP.

The third report of the external consultants on the IAS-I puts forward the following suggestions on this:

.... the selection of an appropriate comparison group, which can be used as a statistical control, has proved problematic. Logistically it is now highly difficult to randomly sample rural households (a) with similar socioeconomic status of RDP members, and (b) without involvement in development programmes.....It may, therefore, be appropriate to abandon the present comparison group (and rely on base line data from stage one as a comparison basis for some households during later resurvey/s) (Brustinow, et. al., 1994, 8).

The Review Report of the Consultants on the draft final report of IAS-I also suggested the dropping of the control group altogether (Brustinow, *et al.*,1995). The consultants felt that by dropping the control group BRAC should concentrate on (a) the before and after type comparisons of member situations over time, and (b) the different experiences of different subsections of the BRAC membership. They agreed that if the aim of the IAS is to improve the impact of BRAC's work then

what is needed is further differentiation of its own performance, not more comparisons between BRAC assisted and other villages. A generalization about BRAC villages versus non-BRAC villages is of limited use in improving performance, though it may be of value for public relations purposes (*ibid.* p.19).

The final report on the IAS-I also expresses a note of caution on the inclusion of the comparison group, based on the findings of the study.

...Because of these results the validity of retaining the comparison group as a control group is questioned but not conclusively rejected. These results suggest that the comparison group is to be treated with caution" (Mustafa, et al., 1996, 32).

It may be noted here that the findings on comparison group showed a lower average value in all economic well being indicators than the recently joined BRAC households. Thus the two comparison groups were not really identical in their baseline socioeconomic characteristics.

Again, another problem that arose in retaining the comparison group for the IAS-II is that during the period of three years between the two IASs, many of the comparison group households had changed their status by joining BRAC

or any other NGO. Their exact number was determined through a field survey. Results showed that 39% of the comparison group households had either joined an NGO or GO or were no longer available (due to migration or death) for inclusion in the sample.

Ideally, if an appropriate comparison group could be identified, the 'with' and 'without' analysis could better represent the impact of RDP by making a comparative analysis between changes in socioeconomic conditions of the two respective groups of households. However, the issue was thoroughly discussed and considering both the advantages and disadvantages it was decided to include a sample of comparison group households, though on a limited scale.

2.8 Quality Control

The questionnaire for the household survey was thoroughly revised and simplified to facilitate quality data collection and reduce enumeration problems and errors. Due emphasis was given on extensive training of field investigators and supervisors on both theoretical and practical aspects of the survey. The eligibility of field investigators was re-confirmed by field tests and screening out those who had shortcomings in this respect. Each household survey team had one member with specific supervisory functions to ensure high quality of data. Besides, members of the IAS-II research team based in Dhaka made frequent field visits to cover all sample areas for monitoring and supervising data collection activities.

Initial editing was done in the field regularly by supervisors which helped improve the quality of data collected. In this connection, spot checks by research team members helped a lot in identifying and resolving special enumeration problems that arose in some locations.

On completion of data collection, all the filled-in questionnaires were duly edited and coded at the head office level. The data were entered into computer for processing. Data cleaning was done by making a hundred percent print check, and consistency check on selected data files.

2.9 Data Processing and Analysis

Different statistical tools and methods have been applied to analyze quantitative data. Bi-variate analysis, which has widely been used for our purposes, shows *ceteris paribus* the influence of one variable on another. But this influence may be different in the presence of other variable(s). Therefore, emphasis has been given on results of the multivariate analysis to explain the interaction of several explanatory variables. We have tried to choose appropriate regression models in those cases and have tested them. Since we had to deal with both cross-section and time series data at the same time we often employed sophisticated statistical models, e.g., Fixed Effects Model, to measure and compare over time performances of different cross-sectional units. Statistical techniques have also been applied to

analyze some qualitative data collected through RRA techniques. For each indicator used in analyzing qualitative data, the responses received were given scores for quantification and brought into tabular forms. Analysis was based on the results of these scores. SPSS computer package has been used to analyze both quantitative and qualitative data.

2.10 Some Concepts

2.10.1 Concept of Poverty: The term ‘poverty’ is a complex one with its various dimensions. In defining this multi-dimensional term, some put stress on the lack of certain basic capabilities of human beings while some consider the various aspects of human deprivations. Different indicators are required to be considered to deal effectively with different dimensions of poverty. However, in defining poverty one common factor comes to the forefront, and this is the concept of well-being. Poverty is said to “exist in a given society when one or more persons do not attain a level of material well-being deemed to constitute a reasonable minimum by the standards of the society” (Ravallion, 1992). For better understanding of the concept of poverty some aspects of its measurement need to be addressed. Any measurement of poverty can be split into two distinct operations, i) the identification of the poor and ii) the aggregation of their poverty characteristics into an overall measure. The identification exercise is clearly prior to the aggregation (Sen, 1981). Although much efforts have been exerted by economists to solve the aggregation problem, there are also a large number of difficult issues unresolved concerning the identification problem in applied economic research.

Analysis of poverty is directly related to the concept of well-being at the individual level. Sen (1981) has explained two different approaches for measuring well-being—welfarist and non-welfarist. The former approach compares well-being based on individual “utility” level as assessed by the individuals themselves while the latter approach does not (Sen, 1979). For example if poverty comparison is made in terms of nutritional attainment as frequently done in the developing countries, one need not believe that individuals themselves are always good judges of the nutrition to well-being. A non-welfarist poverty comparison, therefore, asserts that the poor are better off even if they do not agree. Views differ widely on the relative merit of both approaches (for details see Sen, 1979, 1987).

Poverty comparison in terms of the materialist notion of “standard of living”, which may also be seen from both welfarist and non-welfarist point of view, is more popular in development literature. In measuring standards of living the welfarist approach typically emphasizes aggregate expenditure on all goods and services consumed, valued at appropriate prices, and including consumption from own production. On the other hand, a non-welfarist approach emphasizes specific commodity form of deprivation, such as inadequate food consumption or even more narrowly, inadequate nutrition. But in either way a person’s standard of living is generally taken to depend solely on individual consumption of privately supplied goods.

Another line of thought regards 'opportunity for consumption' rather than actual consumption as the main criteria for the measurement of well-being. Following this approach data on wealth is needed for measurement which is rare or unreliable. In that case income is used as a proxy for 'opportunity for consumption' when savings are positive. Otherwise wealth is used when savings are negative since past savings also influence the opportunities for consumption at a given date. This approach fails to provide a fully compelling argument for preferring income to consumption as the welfare indicator of the households (Ravallion, 1992) because incomes of the poor often vary over time which is particularly true in underdeveloped rural economies depending on rain-fed agriculture. Since opportunities for smooth consumption and insurance through saving and community based risk-sharing is available to them, comparison of poverty based on consumption has some clear advantages over income. This approach also has far reaching implication in the sense that current consumption is not only a better indicator of current standard of living but also this may be a good indicator of long term well-being as it reveals information about incomes at other dates, in the past and future. This argument does not necessarily mean that comparison based on current consumption is free from any criticism (for details see Sen, 1981; Townsend, 1990; Deaton, 1991).

The most common route to identification is through specifying a set of 'basic' or 'minimum' needs and regarding the inability to fulfill these needs as the test of poverty (Sen, 1981). But a clear distinction should be made between the concept of undernutrition and poverty. The former measures well-being in terms of nutrient intakes (food energy) while the latter encompasses a broader concept of 'consumption' which includes other attributes of food besides their nutritional value. A practical advantage of food energy intake method is that during higher rate of inflation the price data need not be adjusted over time. But this method suffers from other serious drawbacks. The most important one is that one can change his food habit and therefore may substitute cheaper but high calorie food by expensive but low calorie food. In this case expenditure may even increase while amount of calorie intake may substantially fall depending on the elasticity of demand. Moreover, food consumption constitutes only a part of total consumption. Though food staple consumption have a high weight in any demand-consistent welfare indicator, it will rarely have a weight of one. Therefore, poverty comparison based on total consumption expenditure rather than nutritional attainment has some advantages.

Given the above limitations of different approaches a sensible solution is to monitor selected non-welfarist indicators side by side with welfarist ones which have been followed in our present study.

After identifying the poor, we move from description of the poor to some overall measure of poverty as such. Before going into details we need to draw the poverty line. The method used to calculate the poverty line in our present study is "cost of basic needs (CBN) method". The poverty line has

been estimated by first calculating the cost of a bundle of goods deemed to assure that basic consumption needs are met in the domain of the poverty comparison. The bundle of goods has been taken from the list of per capita normative daily requirement presented in the paper of Ravallion and Sen (1996). Thirty five percent non-food expenditure has been added to the amount derived by earlier estimate. The most compelling argument in favour of the CBN method for making poverty comparisons is that it explicitly aims to control for differences in purchasing power over basic consumption needs (Ibid.).

The most commonly practiced method for poverty estimation is the head count ratio (H) defined as the proportion of the total population that happens to be identified as the poor e.g. the proportion falling below the poverty line expenditure (or income).

$$H = \frac{q}{n}$$

where q = population below the poverty line
 n = total number of population

Poverty measure based on the estimate of H has been severely criticized by Sen (Sen, 1981). Suppose a person below the poverty line have increased his income or expenditure but not sufficiently enough to cross the line. This is an improvement in terms of lowering the poverty level but the head count index remains unchanged. A better measure is the poverty gap (PG), based on the aggregate poverty deficit of the poor relative to the poverty line which gives a good indication of the depth of poverty in that it depends on the distance of the poor below the poverty line.

$$PG = \frac{1}{n} \sum_{i=1}^q \left[\frac{z - y_i}{q} \right]$$

This index can be expressed as the percentage short fall of the average income of the poor from the poverty line which can be termed as income gap ratio (I).

$$PG = I.H$$

where $I = \frac{z - y^p}{z}$ and y^p denotes the mean consumption of the poor.

This method has also been criticized by Sen (Sen, 1981) for being “completely insensitive to transfers of income among the poor so long as nobody crosses the poverty line by such transfers”. “It also pays no attention whatever to the number or proportion of people below the poverty line, concentrating only on the aggregate short-fall, no matter how it is distributed and among how many” (Sen, 1981). The measure proposed by Sen (Sen, 1976, 1981) though a very good one to measure the severity of poverty, does not satisfy “additivity” property (for details see Ravallion, 1992). A measure of the severity of the poverty taking “additivity” into

consideration is Foster-Greer-Thorbecke (FGT) measure whereby the poverty gaps of the poor are weighted by those poverty gaps in assessing aggregate poverty.

$$\text{FGT} = \frac{1}{n} \sum_{i=1}^q \left[\frac{z - y_i}{q} \right]^2$$

A review of the studies on poverty measurement in the case of Bangladesh over the last two decades shows considerable variation in the results. Discrepancies in estimates are found even for studies in the same year when researchers were different (Hye, 1996). The basic problem lies in the methodology applied by the different researchers as different methods of estimation produce significantly different results (Ravallion and Sen, 1996). The most crucial point that raises the debate about the methods of poverty measurement is how to set up a poverty line and what poverty measures are used. Taking all these things into consideration we have applied a method which we hope would best suit our purposes as mentioned earlier.

2.10.2 Empowerment: BRAC's activities are geared towards empowering rural women. Embodied within the phrase of 'empowerment' is the concept of change. What this study proposes to do is to investigate the changes that have taken place in the lives of women who participate in BRAC. The areas in which we expected to find changes were identified and on the basis of this the present study identifies 'empowerment' as the capacity of women to reduce their socio-economic vulnerability and their dependency on their husbands or other male counterparts, in terms of their ability to become involved in income generating activities and freely spend the income generated from these activities; their ability to accumulate assets over which they can have rights of sale and profits; increase their contributions to household expenditures and thereby acquire a greater role in household decision-making matters and finally, increase their self confidence and awareness of social issues.

To investigate women's empowerment, this study has made use of two instruments. One is the Chen and Mahmud Conceptual Framework (Chen and Mahmud, 1995), and the other is a continuum which was developed based on study findings. There are alternative models such as the Hashemi, Schuler and Riley model which could be used to measure empowerment. However, we did not use that model mainly because we considered that the indicators in the model were too arbitrary in measuring women's empowerment⁴

Chen and Mahmud's conceptual framework for assessing changes in women's lives consists of five matrices with which to investigate the impacts of development interventions on women's lives. For the purpose of this study, we have selected the Pathways Matrix, which tries to track the actual

⁴ See Chapter 7, Sec. 7.1.1

processes through which BRAC inputs affect changes in women's lives. There are four pathways of change in this matrix: Material, Cognitive, Perceptual, and Relational. We have chosen to focus on the Material, Perceptual and Relational pathways of change. These pathways can be experienced not only by the women themselves, but by many other agents/actors in their lives: family, community, elite, officials. Changes that occurred under these pathways will be considered at the level of the 'self', i.e., woman in her individual capacity or as member of BRAC-organized group, and at the level of the 'family', i.e., woman's natal and marital families: both nuclear and extended (*bari*). As we have not discussed the various aspects of empowerment in detail but have limited our analysis to the RDP affected changes that can be experienced by the women themselves and by their families, across three pathways in the matrix, we call our examination of empowerment a partial analysis. A brief description of each pathway is provided below.

Material Pathway of Change: In the material pathway to empowerment, women should experience changes in their access to and control over material resources and also in their ability to become involved in income generating activities. This will ensure that they can lead more productive lives, free from their traditional socio-economic dependence on their husbands and other male kin. In this particular case, the agent which will help bring about these changes is BRAC.

Ownership and control over resources/assets: Asset and resource ownership helps women's empowerment as it gives them power to take decisions about the use and management of those specific assets and resources.

Possession of resources play an important role in determining a person's bargaining power within the household as well as its fall back position in the community, in the market and with the state. Usually ownership is closely linked with access and decision-making power. (Mishra and Dale, 1996).

In the present study, control over assets has been defined as the ability to sell assets without the permission of husbands or other male family members.

Perceptual Pathway of Change: Under this perceptual pathway, we have chosen to look at women's perceptions of the changes that have occurred in their well-being since their BRAC involvement, as well as male perceptions of the positive and negative aspects of women's BRAC involvement. Perceptions play an important role in one's conceptualization of his/her own well-being. How others perceive oneself and how the individual perceives his/her own individual interests are also key factors in determining one's well-being.

Traditionally, rural Bangladeshi women are conditioned to consider family interests as their own well-being interests (Kabeer, 1991). Involvement in BRAC brings about wide scale changes in the lives of such women. Within the household they are able to enjoy an improved status, thanks to their monetary IGA contributions. Outside the household, they gain exposure to new ideas and knowledge through their attendance of issue-based meetings (*Gram Shobhas*), participation in awareness building and legal education training sessions. These changes will assist them in acquiring clear perceptions of their own well-being.

Relational Pathway of Change: Under this pathway we have chosen to look at women's reduced economic dependency on their husbands and the changes in their mobility since they have become involved with BRAC. Traditionally, rural Bangladeshi women engage in household activities that are non-economic in nature which render them economically dependent on their male kin. At the same time, the dictates of *purdah* and patriarchy severely restrict their employment opportunities. In instances where women do work outside their households, such employment, is often sporadic (working as agricultural day labourers in wealthy homesteads, for example), and as such, the income earned from it is also sporadic.

Social and cultural norms associated with *purdah* and patriarchy also restrict women's mobility in rural Bangladesh. This confinement restricts women's involvement in market transactions, as well as their opportunities to meet different people and gain new knowledge (Farashuddin, 1995). Through involvement in BRAC generated employment opportunities, women acquire the means of earning their own income, as well as increase their mobility and interactions with the outside world.

2.10.2.1 Continuum to Measure Women's Empowerment: In another attempt at analyzing women's empowerment, the study team developed a continuum, similar to that used in IAS-I, to measure the changes that have occurred in women's lives due to their involvement in BRAC. The continuum was based on the following hypothesis: empowerment is a continuous process of change that is greatly influenced by the length of time a woman has been involved in BRAC. Thus, the more time a woman spends in BRAC and receives BRAC inputs, the more changes she is likely to experience in her life and the more empowered she is likely to become. Two empowerment continua were developed, both consisting of 9 indicators each. One was based on qualitative information (QI). For the other continuum, relevant data were taken from the household survey (HHS) on all the sample members of the 25 VOs that were randomly selected for qualitative and case study work. Scores were given for each indicator with a range of 1 to 5 and the combined scores were then compiled in three cells for analysis. The indicators used in the two continua are enumerated below.

From Qualitative Information	From Household Survey Data
1. Use of Loan	1. Value of the sample member's own house
2. Loan repayment sources	2. Average loan size
3. Use of savings	3. Savings situation (amount)
4. Accumulating assets from own income	4. Ownership of assets
5. Ownership and control over assets	5. Control over assets
6. Involvement in IGAs	6. Amount of IGA generated income
7. Use of IGA generated income	7. Use of IGA generated income
8. Own well being (changed status in the HH)	8. Contribution to HH's yearly non-food expenditures
9. Mobility	9. Contribution to HH's daily food expenditures

The QI continuum relied on verbal statements provided by the key informants on the relevant issues, which were then reclassified and given weights between 1 and 5. For the HHS continuum, these weights were given to responses received on pre-determined issues in the survey. This is why, even though there are indicators that are common to both continua, the scores may vary. It may also be noted that the scores for the two continua have been presented as percentage figures. Since the three cells of analysis do not have the same number of VOs, the combined scores the VOs received were converted into percentages, so that their results could be more easily compared.

CHAPTER THREE : MATERIAL AND SOCIAL WELL-BEING OF THE PARTICIPANTS

Shantana R Halder

3.1 Introduction

This chapter attempts to test the hypothesis that RDP inputs like credit, training and other technical assistance contribute in improving social and material well-being of RDP member households. The main focus will be on issues such as changes in asset holding, savings and net-worth, volume and nature of household expenditure and changes in housing and health status.

For analyzing impact of RDP intervention, amount of RDP and other institutional loan and BRAC training are considered as input variables. Amount of household land, occupational status, sex and age of the household head and village level economic vibrancy are the variables which can not be influenced by RDP intervention in the short run but can influence the well-being status of the household. These are considered as non impact variables. Both 'with-without' and 'before-after' analytical approaches were applied to measure the impact of BRAC intervention. Due to lack of time series data, length of BRAC membership⁵ is considered as a proxy to show the impact over time. All the sample BRAC members are divided into three categories by measuring length of membership in months. The categories are: new members with membership length of less than one year (1-11 months), those with membership length of one year or more but less than four years (12-47 months) and the oldest member group with membership length of four years and above (48+ months). The inter-group comparison of BRAC members will show if there exists any bias during member selection which may affect their performance. Again, a comparison between two oldest groups of BRAC members will indicate whether the impact is sustainable or not and whether the time with BRAC is long enough to make any significant change in their well-being. Comparison between

⁵ Length of membership is the length of time since joining RDP up to the survey period of an individual, for which she has been a member of a village organization (VO) of RDP. The length of membership is calculated in months from date of enrollment to October, 1996.

BRAC and non-BRAC members will show the differences in their present status which can be interpreted as impact of RDP intervention. Selection of an appropriate comparison group for comparative analysis is often questioned because it is highly difficult to randomly select comparison households with similar pre-BRAC socio-economic status of RDP members and without involvement in development programmes.⁶

Variables which are created and analyzed in this chapter, will also be used in Chapter 5 as poverty correlates.

3.2 BRAC and Non-BRAC Inputs

As mentioned earlier, two input variables considered here are BRAC and other institutional loans and skill development training. There is some positive relationship between length of membership and volume of RDP inputs. The longer they are with BRAC the more they have a chance to have more loans and receive more training which may have an impact on their well-being in terms of changes in their assets, savings and net-worth as major outcome variables.

3.2.1 Credit from BRAC: Data on RDP credit include information on the last five loans including the current one at the time of interview⁷.

Amount of loan received by the individuals of the household are aggregated at the household level to derive the total amount of loan taken by the household.

As shown in Table A.1, 85% sample members received BRAC loan. Fifteen percent did not yet receive loan, of them 87.2% are new members with membership length of less than one year. Forty five percent of the total members received less than Tk. 7,500 since joining. Total cumulative loans over Tk. 15,000 were taken by only 14% of the members. Among households who received more than Tk. 15,000, the proportion of oldest group is the highest. The average amount borrowed by different membership age groups and the distribution of households by different loan amount category indicate that there is a positive relationship between length of membership and amount borrowed.

3.2.1 Determinants of BRAC loan eligibility: Regression results presented in Table A.2 show the major determinants of BRAC loan eligibility. The most significant positive determinants are amount of savings in the BRAC account, length of RDP membership, size of the household, whether the member received any BRAC training and annual income from member's

⁶ See chapter 2, section 2.7

⁷ The reason for not going beyond the last five loans was the assumption that village women who are the respondents of IAS-II could not recall more than that. This is also the outcome of our pre-testing of survey questionnaire. Sometimes access to loan passbook is also difficult.

running income generating activities (IGAs). The higher the value of these indicators more is the chance for the member to receive larger amount within the upper limit which is fixed by BRAC. The negative but significant result of *beta* coefficient of economic vibrancy indicates that members from less vibrant areas are receiving more BRAC loans. Members from high vibrant areas are borrowing less from BRAC. It may be because they have access to different other sources of loan. People from the remote areas have no alternatives but to borrow from BRAC or to take loans from *mohajhans* with usurious rate. Other socio-economic variables namely, sex and employment status of the household head⁸, per capita expenditure, land, and other non land assets also showed their positive but not significant contribution.

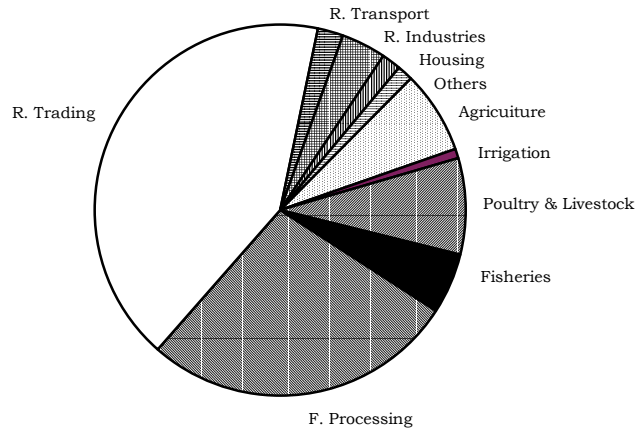
3.2.1.2 Sectoral disbursement and use of RDP loan: Loans from BRAC are officially sanctioned under 20 broad categories which were reclassified into eight. Table A.3 and figure 3.1 illustrate the sectoral distribution of current loan disbursement. Maximum loans were disbursed on rural trading and food processing which constituted 41.7% and 27.1% of total loans respectively. Poultry/livestock and fisheries are the next two broad sectors under which around 14% of loans were disbursed. However, nearly half of the loan were disbursed for activities in the agriculture sector in a broader sense of the term. It includes agriculture, irrigation, poultry, livestock, fisheries and food processing in our case.

There are no major differences in findings between RDP 1995 and the IAS-II figures regarding the relative importance of sectoral disbursement of BRAC loans.

The dominating role of rural trading and food processing in cumulative outstanding loan was also shown in RDP annual report (RDP, 1995). These are the two sectors where no technical assistance by BRAC is needed to utilize loans. That is why the cost of lending money to these sectors is also low. The clientele are also most likely to choose these sectors because they are less costly in terms of service charge but also because they do not have to make prior commitment about restricting the use of credit for any specific purpose.

Table A.3 also shows that around 95% of disbursed loans were received by the beneficiaries. Other five percent were deducted from the amount disbursed and saved in the BRAC account as forced savings. Usually this amount can be withdrawn only if the member drops out from the VO.

⁸ *Head of the household is a permanent member of the household, whom other members regard to be so. Generally the oldest male/female earner of the household who is taking the major role in decision making is considered as head of household. A person living alone in a dwelling unit is considered as head of that household.*

Figure 3.1: Sectoral distribution of current loan.

Data on RDP credit include information on the purpose for which they borrowed money and its actual use. In the loan application form borrowers themselves mention the purpose for which the loan was sought. Sometimes the purpose mentioned and the actual use of loan varied. In some cases the loan is used for multiple purposes. The borrower is free to invest the loan on the basis of her priority needs. Usually members take loans from BRAC for their husbands or other male members for investment in productive areas to increase their household earnings. According to Table A.3 only 52% of the current loan they received were used for the specific activities mentioned in the loan application form. In case of housing loan 67% were used for the purpose mentioned i.e., for housing. Nearly 57% of loans for rural trading were used for the purpose mentioned. On the other hand only eight percent of loans under the group 'others'⁹ were used for the purposes mentioned in the application form.

Table A.4 illustrates number of current loanees, mean loan size and the actual use of BRAC current loan by the borrowers according to their length of membership. Around 79% of the total members were current loanee who borrowed on an average Tk. 4,100. Average loan size for the new members was Tk. 2,255. These were Tk. 4,230 and Tk. 5,477 respectively for 12-47 and 48+ months groups respectively.

About 68% of the current loan were used for direct productive investment. For asset purchase and for housing six percent and seven percent of loan respectively were used. Only three percent were used for consumption. Nearly 17% of loan were used for treatment, repayment on loan, ceremonies, litigation and other social needs. There is no consistent trend regarding productive investment of loan amount by length of membership. But results show that percentage of loan used for the specific purposes mentioned in the

⁹Others' include loans for health related activities

loan application form is highest for the youngest membership group and lowest for the oldest group. These findings are similar to the findings of a BIDS study (Hossain and Afsar, 1989). In spite of considerable diversion of loan use, the results of the study should not cause any alarm if we consider that around 80% of the loan were used either for productive investment or for asset accumulation of the household.

3.2.2 BRAC and non BRAC institutional credit: Along with BRAC loan the data also include information on total credit received from BRAC and other institutions during the last three years. Institutional loans included loans from BRAC, Grameen Bank, Commercial Banks and other NGOs. According to Table A.5 the mean amount of total institutional loan was TK. 6,813 for BRAC households. BRAC loans constituted around 82% of it. Another 18% came from other non-BRAC institutions. Despite the non-accessibility of BRAC loans for the comparison households it is also worth mentioning that 35% of comparison households received significant amount of loan from different non-BRAC institutions. The mean amount of it for comparison households was Tk. 4,810. Among BRAC members the youngest members took more non-BRAC loans. It is because the supply side (BRAC) could not meet their demand during the short period of their presence in RDP VOs.

Distribution of the sample households by their total BRAC and non-BRAC institutional loan amount received during the last three years is shown in Table A.6. Around 15% of BRAC members did not yet receive any institutional loan. Of them majority are new members. Around 9% received more than Tk. 15,000. For the comparison group these proportions were about 65% and 11.7% respectively. The result also shows that among BRAC households in 79% cases BRAC loan was their only source of institutional loan received (Table A.5). Around five percent received loan from both BRAC and non-BRAC sources, two percent who did not receive BRAC loan, took it from other institutions. Percentage of those who received loan from both BRAC and non-BRAC and only from non-BRAC sources was highest for 1-11 months group and lowest for 12-47 months group. It implies that the new members who can not get higher amount of BRAC loan due to policy decisions had to borrow from other sources. On the other hand, the higher amount of non-BRAC loan of the oldest membership length group than 12-47 months group indicate that with increasing membership length after a certain period of time (48 months) the demand for higher amount also increased which increased the credit-worthiness of the oldest group due to BRAC intervention. Even though the oldest group received highest amount compared to all other members, average amount of loan offered by BRAC for this specific membership length group (48 months and above) was not adequate to fulfill their total demand. As a result they had to borrow loan from other places to meet the additional demand on that. This result gives an indication that the credit programme of BRAC needs to be specified based on an aggregate level of demand on credit, performance of individual

borrowers in terms of productive and profitable investment of credit and the repayment performance of loan installment of course.

3.2.3 Non-institutional loans: Non institutional loans were taken from relatives, friends, neighbours, money lenders and other sources. At the time of the survey each BRAC and comparison household had on an average Tk. 598 and Tk. 965 respectively of non-institutional loans (Table A.7). Only around 19% of BRAC members borrowed from non-institutional sources. For comparison group this proportion is 32%. The average amounts of loan taken by the actual borrowers were similar for both groups (Tk. 3,095 and 3,031 respectively for BRAC and comparison groups). Major sources of this kind of loans were relatives (52.0% for BRAC, and 39.9% for comparison group), neighbours (27.6% and 34.8% respectively for BRAC and comparison), and money lenders (11.6% and 12.7% for BRAC and comparison group respectively).

Among BRAC members percentage of households that received non-institutional sources and mean amount of this kind of loan increased with increasing membership length.

Table A.8 presents the proportion of institutional and non-institutional to total current loans by member category. Results show that among BRAC member households with increasing length of membership the ratio of non-institutional to total loans is reduced. The amount of institutional loan of 48+ months group was significantly higher than the 12-47 months group. This result indicates that intervention of any targeted credit programme reduces their dependence on informal sources. The result also shows that the comparison group households also received considerable amount of loans (81.3% of total) from different institutions. But the total amount is significantly higher for BRAC.

Loans from non institutional sources were used for different purposes. About 33.4% of BRAC and 22.4% of comparison households used their loans for productive investment (Table A9). For arranging marriage of offspring and for dowry another portion (14.7% for BRAC and eight percent for comparison group) of loan was used. For treatment and consumption 13.7% and 14.2% of BRAC and 4.9% and 25% respectively of comparison households' non institutional loans were used. For litigation, bribery and going abroad for job another 23.9% and 39.7% loan of BRAC and comparison groups were also used.

Among BRAC members proportion of this type of loan used for productive investment was highest for 1-11 months group although the absolute amount was highest for 48+ months group. The new members also used 25% of this loan for marriage of their offspring. This result indicates that the new members who had less access to higher BRAC amount are more dependent on non-BRAC sources for productive investment and other social needs.

Amounts of loan in kind (food items and other non-durable goods) and their use are shown in Table A.10. Number of borrowers was negligible for all groups. (five percent for BRAC and around eight percent for comparison groups). Average amount of such loan was Tk. 1,022 for BRAC and Tk. 3,093 for comparison. If we consider all samples then the average amount borrowed for all groups is negligible (Tk. 51 for BRAC and Tk. 236 for comparison groups). Amount of kind loan in most cases were spent for consumption.

3.2.4 Training from BRAC and its usefulness: Along with credit disbursement BRAC is offering different types of training for its clientele to develop their occupational skills, increase their knowledge on legal rights, child education and health improvements. (Rafi, et al., 1997). Since joining BRAC 339 persons from 281 sample households i.e., 1.2 members from each household received some kind of BRAC training up to the interview date (Tables A.11 and A.12). Percentage of households with BRAC training increased along with membership length.

Types of training received and their uses are presented in Table A.12. More than half of the trainees (51.9%) received training on poultry and livestock rearing. Poultry keeping by the women is a common home based activity. This is the main source of women's earning in the rural areas. This is a viable area where BRAC can contribute in increasing their income by giving some technical knowledge and loans to make it more profitable. Social awareness is the second most important area of training received (19.5%).

On the question how they used their training knowledge and whether it was useful or not, 26.5% of the trainees answered that they had been using it in their daily life. Around 33% use it in their income earning activities. Eighteen percent stated that training brings them their self satisfaction and it makes them respectable in the society. Another 18% said that the training was useless for them. Nevertheless almost 80% trainees responded favourably on the usefulness of training. Percentage of negative responses was highest for 1-11 months and lowest for 12-47 months group (Table 3.1). Training is a long term investment. New members who responded negatively may not have felt the impact of such training they received within their shorter period of enrolment in BRAC. But the higher negative responses of 48+ months group compared to 12-47 months group on the usefulness of training may have serious policy implication for BRAC.

Table 3.1: Distribution of responses on usefulness of training and member category

Usefulness of training	Membership length (months)			Total
	1-11	12-47	48+	
Useful	38 (64.6)	110 (90.2)	130 (82.3)	278 (82)
No use	21 (35.6)	12 (9.8)	28 (17.7)	61 (18)
Total responses	59 (100)	122 (100)	158 (100)	339(100)

Figures in parentheses indicate percentages

3.3 Landholding

Amount of landholding is both an input and output variable indicating the eligibility of BRAC membership and status of a household in the society. A household is eligible for BRAC membership if it owns less than 50 decimals of land and sells at least 100 person days of wage labour in a year. The data set have information about the amount of present and pre-BRAC land. Table A.13 shows that 82.5% of BRAC members belonged to the target group (TG) and 17.5% to the non-target group (NTG) households at the time of enrollment as members. The size of the NTG group has increased to 20% at present due to acquisition of more land after joining BRAC.

Changes in landholding category after joining BRAC is presented in Tables 3.2 and A.13. The ratio of landless to total BRAC member households at the time of joining was highest among the oldest membership age group. At present, this ratio is lowest for this group. As shown in the table 3.8% of landless BRAC households are no longer landless and shifted to other landholding groups. The average net gain on landholding since joining BRAC was 6 decimals. The changes in the ratio of different landholding groups and net gain in landholding imply that BRAC membership made some positive impact on their landholding status.

Table 3.2: Percent changes in landholding status since joining BRAC

Land category	BRAC membership group (length of membership in months)			
	1-11	12-47	48+	total
	n=360	n=417	n=295	n=1072
Landless	-0.9	-3.1	-14.0	-3.8
1-50 decimals	+0.2	+0.9	+3.7	1.2
51-100 decimals	-	+1.9	+1.0	0.9
>100 decimals	-0.01	+0.7	+3.7	1.7
Net change (in decimal)	2	5	10	6

3.4 Primary Occupation of the Household Head

All of our sample members from BRAC households are female but few of them are household heads. The household head usually utilizes the loan borrowed from BRAC but BRAC intervention may not necessarily help them change their occupation. Rather the occupation of the household head, to a large extent, determines the effectiveness of the loan use. Therefore, occupation of the household head can be treated as an initial endowment.

Primary occupation is defined as the main activity where a person spends his maximum time in a year and from which he/she earns major share of

income. Table A.14 shows that 52.1% of BRAC and 38.1% of comparison households are self employed. The percentage of self employed to total households was 14% more among BRAC member households. On the other hand, percentage of wage employed to total households was 18.1% more among comparison households. Among the self employed households majority (65% for BRAC and 60% for comparison) are involved in agro based activities. For the wage employed households the picture is opposite, i.e., majority are involved in non-agricultural activities (Table 3.3).

Among BRAC member households the percentage of self employed household head is the highest for new members and lowest for the oldest group. This may indicate a selection bias implying that BRAC is now targeting more enterprising households. On the other hand, percentage of household heads involved in different agro based activities for both self and wage employed groups was highest for 1-11 months group and lowest for 48+ months group which imply that older member households were relatively less involved in different agro based activities than newer member households (Table 3.3).

Table 3.3: Distribution of sample households by occupational status of the household head and member category

Occupation group	BRAC				Comparison n=223
	Length of membership (months)				
	1-11 n=360	12-47 n=417	48+ n=295	Total n=1,072	
Self (No)	204	214	141	559	85
Agri (%)	41	36	26	35	40
Non-agri (%)	49	64	74	65	60
Wage (No)	100	132	93	325	108
Agri (%)	73	51	51	58	56
Non-agri (%)	27	49	49	42	44
Others (No)	56	71	61	188	30

3.5 Women's Direct Involvement in IGA

One of the prime objectives of BRAC is to create employment for its members by involving them in some income generation activities (IGAs). The extent of women's involvement in IGA before joining BRAC and their present involvement is shown in Table 3.4. According to the table 44.6% of BRAC members are now involved in any IGA and are contributing to the household income, and therefore, to the household expenditure. The rate of members' pre-BRAC IGA involvement was 28.4%. Results show that there is a positive relationship between members' present involvement in any IGA and length of membership. More members from the oldest group who were not involved in

any IGA before joining BRAC are now involved in different activities that give them monetary return. Results also show that the ratio of pre-BRAC IGA involved members to total is highest among the youngest and lowest among the oldest member group. It implies that either more females with special entrepreneurial skill are now joining BRAC with the hope to increase income or that in selecting new members BRAC gives preference to those women who can use BRAC loan for raising their socio-economic status.

However, average annual income of members presently involved in different IGAs was found to be highest for 48+ months group and lowest for 1-11 months group. Mean value of income of members irrespective of their involvement in IGAs was also highest for the oldest membership length group. It implies that there are some positive impact of members' direct involvement in different IGAs on their annual income.

Table 3.4: Distribution of members by their involvement in IGA and member category

Involvement in IGA	BRAC (length of membership)				48+ vs.	48+ vs.
	1-11 n=360	12-47 n=417	48+ n=295	Total n=1,072	12-47 (t value)	1-11 (t value)
Present	160 (44.4)	180 (43.2)	138 (46.8)	478 (44.6)	0.95	0.60
Pre-BRAC	147 (40.8)	110 (26.4)	47 (15.9)	304 (28.4)	-	-
Average annual income of members involved in IGA	2,089	2,315	3,055	2,453	2.04**	2.62***
Average annual income of all members	929	999	1,429	1,094	2.25**	2.56***

Figures in the parenthesis indicate percentages. ***. significant at 1% level,
**.significant at 5% level

3.6 Economic Vibrancy

It is a proxy indicator which was created to show the level of local infrastructural development of the selected areas. To construct this indicator eight different variables like distance of the village from nearest Thana, distance from all weather road, distance from nearest bus stand, distance from nearest *hat*, *bazaar* and bank, number of shops per household in the village, and ratio of households using electricity to total were used. Data on economic vibrancy were gathered through village profile. To create a composite variable each of these eight variables were given individual scores (Table A.15). The scores were then ranked from zero to five. By summing the individual scores the villages were then divided into three categories according to their level of infrastructural development. Villages scoring more than 25 were categorized as high economically vibrant villages. The medium and low vibrant areas scored 15-25 and less than 15 respectively.

The key informants of village profile data were basically Union Parishad members, elderly persons, and village elite who are well informed about the village.

Table A.16 shows the distribution of sample households by their level of infrastructural development. Most of the selected households i.e., 69% of BRAC and 57% of comparison households came from medium vibrant areas. Only 11% of BRAC and 10.3% of comparison households, are from low vibrant areas. Proportionately more BRAC members came from relatively medium vibrant and less from high vibrant areas than the comparison group. Among BRAC members more among the oldest group came from medium vibrant areas and less from low vibrant areas.

Mean vibrancy score was 20.7 and 21.2 respectively for BRAC and comparison villages, the latter is marginally higher. Among BRAC villages the score was highest for 1-11 months group and lowest for 48+ months group which imply that BRAC targeting has gradually shifted towards more developed villages.

3.7 Non Land Assets

Everything that the household owns and has a money value is classified as an asset. Only the major items of assets have been considered here. They include productive and non productive durable goods. Productive assets include land, poultry and livestock, rickshaw/van, big trees with timber value of Tk 100 and above in current prices, power tiller, . boat, fishing net, loom, and other such assets. They cover 30 items¹⁰. Non productive assets include house, jewellery, TV, radio, cassette player, and other durable goods each with a current money value Tk. 100 or more. Non productive assets cover 20 items.

Value of non land productive assets and their ratio to total non land assets have been presented in Table 3.5. The average values of productive and total assets were respectively 371% and 380% higher for BRAC than those for comparison group. Although the ratio of productive to total assets was relatively higher for comparison group, the difference was not significant. Among BRAC members value of productive assets and its ratio to total were significantly higher for the 48+ months group than the group with membership length of 12-47 months. The significantly better off position of oldest membership group implies that there are some positive impact of RDP intervention which can be sustained as membership age goes up.

Table 3.5: Value of non land assets by member category

			BRAC	
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¹⁰ Land is usually considered as a part of productive assets. Since it is taken as an endowment variable, the present status of which is analyzed separately, the value of land is not included here as a part of productive assets.

Types of assets	BRAC (length of membership)				Comparison n=223	vs. comparison (t value)	48+ vs. 12-47 (t value)
	1-11 n=360	12-47 n=417	48+ n=295	Total n=1,072			
Productive non land assets (Tk.)	5,376	5,293	7,023	5,797	1,229	1.33	2.47**
Total non-land assets (Tk.)	16,381	16,839	18,438	17,125	3,570	3.33***	0.97
Proportion of productive to total assets (%)	34.0	31.4	36.5	33.7	35.7	-1.02	2.46**

Figures in parentheses indicate percentages ***- significant at 1% level **- significant at 5% level

The distribution of households by amount of non-land asset holding is shown in Table A.17. Households owning less than Tk. 5,000 were proportionately more among the oldest members and comparison groups. The proportion of households owning more than Tk. 50,000 was also highest among the oldest group and lowest among the comparison group. The proportion of households with non-land assets worth more than Tk 50,000 was significantly higher for BRAC than comparison group. Among BRAC members although the proportions of households with lowest and highest assets (Tk <5,000 and Tk >50,000 respectively) were highest for the oldest group there was no significant difference among different membership length groups.

3.7.1 Determinants of non land assets: Four different regressions are run to identify factors contributing to the value of non-land assets for BRAC and comparison households. Model I shows effect of all household level variables on the value of non land assets of all households. Model II regress impact of institutional loan to the outcome variable along with other household level factors. Model III and IV specified factors contributing to the outcome variable of only BRAC member households.

Regression results presented in Table A.18 show that for both BRAC and comparison households the level of education of the household, present amount of land, total amount of savings, age of the household head and vibrancy are the significant positive contributing factors which determine the value of non land asset accumulation (Model-I). Per unit increase in demographic dependency ratio has reduced Tk. 25.30 in the value of total non land assets. Sex of the household head as a dummy indicates that the value of assets of the female headed households was on an average Tk. 2,418 less than that for the male headed ones. The self employed households own significantly more assets than others. This result also shows that BRAC members own more assets than the comparison group.

Results presented in Model II indicate that along with other variables mentioned above amount of institutional loan irrespective of sources and membership status made significant contribution in increasing non-land assets.

Results presented in Model III and IV show that for BRAC member households along with household education level, amount of land, sex of the household head, savings and demographic dependency, length of membership which is highly correlated with amount of loan received and other inputs provided by BRAC made positive contribution to increase assets, although the impact of membership length is not significant. Results of dummy of different membership length groups (Model III) indicate that compared to assets of 1-11 months group other members with greater membership length own more assets which increases up to 84 months of membership length. The less value of coefficient of 84+ months group compared to 48-84 months group indicate that after 84+ months of membership length the value of non-land assets decreases. Preliminary analysis of data do not clearly show reasons behind the lower assets of this 84+ months group. Further study is necessary to clarify this finding.

Result also shows that households with BRAC members directly involved in any IGA own more assets compared to others. Results of dummy of households with BRAC training indicate that households with BRAC training own significantly less assets than those who did not receive any BRAC training. This implies that usually members from relatively poorer households received BRAC training. However, it is evidenced from Chapter 5, section 5.2.2.8 that training made positive impact in reducing their poverty status.

3.8 Net-worth

Net-worth is defined as the value of assets and savings less loans outstanding. Table A.19 shows that there were significant differences among households in terms of net-worth owned. Mean value of net-worth of BRAC and comparison households was Tk. 63,009 and Tk. 42,231 respectively. This mean value was about 50% higher for BRAC members than that of the comparison group. Percentage of households with net-worth less than Tk. 5,000 was 2.6% higher for the comparison group than BRAC. Percentage with above Tk. 50,000 net-worth was 10.7% lower among comparison group households, the differences of which was also significant.

Among BRAC members percentage of households with lowest net-worth (< Tk 5,000) was highest among the oldest group. Highest percent of members with membership length of 12-47 months owned net-worth over Taka 50,000. Except this for other net-worth categories the result does not show any significant difference in terms of distribution of households. But mean value of net-worth was highest for the 1-11 months membership age group which also indicates biases in the selection of RDP new members.

3.8.1 Determinants of net-worth: Results of regression analysis on the determinants of net-worth are presented in Table A.20. Model I is tested to find out relative factors contributing to increase/decrease in the value of net-worth of total BRAC and non-BRAC sample households. Model II is

tested to find out whether BRAC inputs have any impact on the output variable. Results of model I show that level of household education, age and occupational status of the household head and demographic dependency are major contributing factors which made significant impact. Increase in demographic dependency ratio reduced the value of the output variable. All other variables made positive contribution to the output variable. Results also show that the value of net-worth of BRAC households is Tk. 11,200 more than that of the comparison households, the differences being significant.

For BRAC member households results also show similar impact of those factors mentioned above but the extent of impact as shown by the value in *beta* coefficient differs on an addition to BRAC input variables. Along with other variables mentioned above length of RDP membership also made positive contribution to increase net-worth. Households with BRAC training own significantly less amount of net-worth similar to assets. Households with members directly involved in different IGAs own less net-worth compared to others. These households were relatively poorer than others at the time of joining BRAC (for more details see Chapter 5, sections 5.2.2.2 and 5.2.2.8)

3.9 Savings

Savings include cash and non-cash savings. Non cash savings include paddy seeds, *mushti chaal* saved by cutting food consumption, jute, potato and mortgaged-in land value. All types of savings converted to cash is considered as total savings of the household.

Savings were divided into two groups by the places where the money is saved. Money saved in the bank (govt. and private), post office, cooperatives and NGO accounts is considered as formal savings. Money saved in own house, and loans given to others is considered as informal savings. It is hypothesized that with increasing length of membership the ratio of formal savings to total will increase. This is based on the assumption that participation in RDP, which involves accumulation of regular weekly savings, and another five percent deducted from their loans which also go to the individual's account will increase their savings over time. The poor households do not have enough surplus liquid money to put in a govt. or any other private bank account. The NGOs' savings rate of minimum Tk 2 per week and their village based service in savings collection help to improve their savings habit. It is presumed that with increasing length of membership the amount of BRAC savings of a household will increase proportionately.

Table A.21 shows the mean amount of formal, informal and total savings of a household and ratio of formal to total savings. BRAC member households had about two times more savings than the comparison households. Among

BRAC there exists positive relationship between membership length and increasing amount of savings.

Regression results on the determinants of savings are presented in Table A.22. Model I describes the determinants of saving of all BRAC and non-BRAC households. Model 2 and 3 present results of BRAC member households and try to find out whether amount of BRAC loan or length of membership make any significant contribution or not with other socio-economic factors. Findings show that amount of loan received from any institution made significant positive contribution to increase savings for all households irrespective of membership status. Model I also shows that amount of total savings of a BRAC member household was on an average Tk. 459 more than that for a comparison household which was highly significant. For BRAC member households (Models II and III) both amount of BRAC loan and length of membership significantly contributed to increase savings, although membership length and amount of loan are highly correlated. Model II also describes that with increasing membership length training made significant impact in increasing household savings.

3.10 Expenditure Pattern

Household expenditure is considered in this study as a proxy for income and used to derive the poverty line. Household expenditure consists of food and non food expenditure. Tables 3.6 and A.23 describe the expenditure pattern of BRAC and comparison households. Findings show that average

Table 3.6: Expenditure pattern of BRAC and non-BRAC sample households

Expenditure pattern	BRAC	Comparison	BRAC Vs Comparison(t value)
Per capita monthly expenditure	687	540	3.43***
Ratio of cereal to total food expenditure	45.7	46.1	-0.26
Ratio of non food to total expenditure	35.9	32.4	3.57***
Per capita calorie consumption	2,306	2,182	3.37***
% of fish and meat to total food consumption	15.8	14.4	1.67
% of vegetable to total food consumption	12.2	12.1	0.08

, *** - significant at 1% level

per capita monthly expenditures of BRAC and comparison households were Tk. 687 and Tk. 540 respectively which was 27% higher for BRAC households. BRAC members were also consuming significantly more calories than the comparison households. Ratio of non food to total expenditure was also significantly higher for BRAC which mainly increased with increase in

household income. BRAC members were consuming more vegetables, fish and meat which have higher nutritional value.

Results also show that increasing length of BRAC membership positively contributed in changing the expenditure pattern of the members in terms of higher calorie consumption and intake of food items rich in nutrients.

3.11 Housing Status

BRAC provides credit to the rural poorer households for housing. Changes in housing structure, roofing materials, and increase in per capita floor space of living houses are the three variables used here indicating the housing status of the sample households. As shown in Table A.24 only 5.1% BRAC and three percent of comparison households owned durable houses with tin as roofing and wall materials, 51% of both BRAC and comparison households owned semi-durable houses with tin roofing but wall with other cheap construction materials like mud, jute-stick, bamboo and so on. There was no significant difference between BRAC and comparison households regarding the distribution of households by different types of housing structure. Among BRAC members, percentage of living houses with tin as roofing material increased with the increase in membership length (Tables 3.7 and A.24). Table 3.7 also shows the average value of living houses and per capita floor space of living houses for different categories of sample households. Both in terms of value of houses and per capita floor space, performance of BRAC members appears to be significantly better than that of the comparison group. However, among BRAC members the youngest members appear to be relatively better off in terms of value of living houses and per capita floor space for living.

Table 3.7: Housing status and member category

Variables	BRAC (length of membership)				Compa- -rison n=223	BRAC vs. compa- -rison (t value)	48+ vs. 12-47 (t value)
	1-11 n=360	12-47 n=417	48+ n=295	Total n=1,072			
Houses with tin roofing	194 (46.1)	304 (60.1)	240 (63.3)	738 (56.4)	147 (55.0)	0.58	1.54
Average No of houses	1.2	1.1	1.3	1.1	1.2	-0.80	3.57***
Value of living houses (Tk.)	8,873	8,294	7,994	8,406	5,865	3.06***	-0.36
Per capita floor space (stt)	84	64	62	70	58	2.30**	-0.49

Figures in parentheses indicate percentages,

** - significant at 5% level, *** - significant at 1% level

3.12 Level of Education

3.12.1 Level of education of the household head: Around nine percent of BRAC and three percent of comparison group households were headed by females. The literacy rates of male and female heads of BRAC households

were 29% and 12% respectively. For comparison group these were 19% and 17% respectively (Table 3.8). A person was termed literate if he/she completed at least one year of schooling. The literacy rate of female household heads of BRAC members was 42% lower than that of the comparison group. But the literacy rate of BRAC male household heads was 53% higher than that of comparison male household heads. Among BRAC members the proportion of literate both male and female household heads was highest for youngest membership length group and lowest for oldest ones which indicate some bias in recent member selection (Table A.25).

Table 3.8: Literacy rate of the household head by member category

Member category	Illiterate		Literate		Total	
	Male	Female	Male	Female	Male	Female
BRAC	694(71)	88(88)	278(29)	12(12)	972(91)	100(9)
Comparison	176(81)	5(83)	41(19)	1(17)	217(97)	6(3)

Figures in parentheses indicate percentages

3.12.2 Average level of education of the household: Education level of the household is determined by its average education level computed by summing up the individual level of schooling giving individual scores to different levels. For the graduate level and above including professionals and para-professionals (12 years of schooling and above) the score given is 5, for SSC & HSC - 4, for VI-X - 3, for I-V - 2, for ability to read and write - 1 and for illiterates - 0. The individual scores were aggregated to the household level and divided by the total number of members in a household with six and above years of age and then multiplied by hundred. The level of household education was then re-classified into four different groups as shown in Box 1.

Box 1. Education level of the household

Education group	Level of education	Scores
I	High	above 150
II	Medium-high	101-150
III	Low medium	51-100
IV	Low	<50

Table A.26 shows the education level of the households. Thirty three percent of BRAC and 40.8% of comparison households had low level of education. Only one fifth of BRAC and one sixth of comparison households had high level of education. Percentage of BRAC members with high level of education is significantly more than that for comparison group. Among BRAC, new members performed the best. These results show no direct relationship between the household education and length of membership.

3.12.3 Adult literacy: The adult literacy rate is the ratio of literate adults to total number of adults with age 16 years and above. Table A.27 gives detailed information on adult literacy disaggregated by membership category and sex. According to the table the adult literacy rate of BRAC and comparison households irrespective of sex is 26.7% and 16.5% respectively which is 61% higher for BRAC. For BRAC 32.5% of male and 20.5% of female adults are literate. For comparison group these rates are 21.9% and 10.6% respectively.

Among BRAC members the rate is highest for the youngest member group and lowest for the oldest one. The highest adult literacy rate among the youngest member group indirectly support the findings of another study that BRAC is most likely to choose households with higher level of adult literacy (Evans, et al., 1995).

3.12.4 Primary school enrolment: Table A.28 presents the rate of total primary school enrolment of the children aged 6-10 years, percent attending BRAC and other schools and percent not attending any school. Eighty three percent of BRAC and 77% of comparison households' eligible children were going to school. For BRAC the rate of enrolment for boys and girls were 81% and 85% respectively. For comparison households this rate was 73% and 81% respectively. Results imply that even though the enrolment is higher for BRAC 17% of BRAC member households' eligible children are not attending any school. Group discussion with VO members brought out some reasons behind these children's non attendance. These are presented below:

- *Parents don't take initiative to send children to school as they are not aware of the importance of education.*
- *Children who are already involved in income generating activities are not interested in attending school. Their parents also do not encourage them to attend.*
- *Daughters have become adolescents, so the parents are reluctant to send them to school.*

Within the eligible children 18% of BRAC and 7.8% of comparison household children are attending BRAC NFPE schools. NFPE is contributing nearly one fourth of total enrolment of BRAC members' children in primary education (Table 3.9). About 65% of BRAC and 69% of comparison groups' eligible children are attending non BRAC schools. Compared to BRAC NFPE schools percentage of children attending non-BRAC schools is more than two and a half times higher for BRAC and more than seven times higher for comparison group.

Table. 3.9: Primary school enrolment rate of the children aged 6-10 years (%)

Variables	BRAC (length of membership)	Comparison
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	1-11 n=280	12-47 n=398	48+ n=250	Total n=928	n=204
% of children enrolled	85.0	84.7	77.6	83.1	77.0
Boys	80.8	83.3	78.0	81.0	72.9
Girls	88.7	86.1	79.7	85.2	81.4
% of NFPE to total enrollment	15.1	22.8	27.3	24.4	10.2
Boys	22	39	43	37	25
Girls	81	61	57	63	75

Among those BRAC member children attending NFPE schools 63% are girls. During group discussions, information was also obtained from households having children eligible to attend NFPE school but not attending. Reasons for non-attendance in NFPE schools is presented below:

- *There is no NFPE school in the area.*
- *Children attend government primary school/madrassa/missionary school.*
- *Children are not yet old enough to meet the NFPE selection criteria.*
- *Quota for the NFPE school has already been filled, so rather than sending their children to a government primary school, they are waiting for the next cycle of the NFPE school to start.*

Group discussions also revealed major reasons why enrolment is lower among boys and higher among girls. Those are as follows:

- *boys have easier access to employment*
- *tangible benefit attached to female education by the government*

3.13 Health Status

A valuable indicator of the status of a household in the society is its health environment which affects the well-being of each member. In our study we considered the use of tubewell water for different purposes, types of latrine use, and the rate of contraceptive use as health indicators of well being. These are the areas where BRAC RDP also gives inputs to improve their health status through its Essential Health Care (EHC) services. Table A.29 shows that more than 95% percent of all households used tubewell water as their main drinking source while 85% of BRAC and 81% comparison households used it for cooking. For washing plates and clothes 75% and 51% of BRAC and 62% and 35% of comparison households respectively also used the tubewell water. Forty nine percent of BRAC and 31% of comparison households used it for taking bath. There is no significant difference among different categories of households in terms of using tubewell water for drinking and cooking. Significant differences were found between BRAC and comparison households and among BRAC members in terms of its use for

washing and bathing purposes. More BRAC members than non BRAC are using tubewell water for bathing and washing.

BRAC through its EHC programme provides motivation to its participants to use safe water not only for drinking but also for other purposes such as cooking and washing. Here, better performance of BRAC members provides evidence of positive impact of BRAC programme on the use of safe water for different purposes.

Types of latrine use (Table A.30) is one of the indicators of health and social status of rural households. Results show that only 23.7% of BRAC and nine percent of comparison households were using ring-slab latrine. Rate of use of sanitary latrine by BRAC members was 163% higher for BRAC than the comparison group. Results also show that there is a significant positive relationship between length of membership and sanitary latrine use.

Some studies consider possession of either an extra saree, or a pair of sarees for ordinary use or possession of winter clothes as an indicator of level of living (Rahman, et al., 1996). Our data set has information on whether they have any extra saree or not. Results show that BRAC members were significantly better off than non-BRAC households in this respect. Percentage of respondents having extra sarees was 10.5% higher among BRAC than that for comparison households (Table A.31).

Contraceptive prevalence rate, methods of contraceptive use, and the sources of their knowledge are the indicators of family planning practices, which are also taken into account in this study. Table 3.10 shows the rate of contraceptive use disaggregated by member category and age group¹¹. Eighty seven percent of total households had at least one eligible couple. The average number of eligible couple in a household was 1.1 (for both BRAC and comparison groups). Forty percent of BRAC and 27% of comparison eligible couples used contraceptives. More than half (60.2% of BRAC and 60% of comparison) of the users preferred pill, while around 18% of BRAC and 16% of comparison eligible couples completed ligation procedure. Only a few (3.4% of BRAC and 1.5% of comparison group) used condom which is the only one method used by the male (Table A.32). On the question how they gained knowledge on different methods of contraceptives used by themselves, more than 50% respondents did not give any answer. Nearly twenty three percent of BRAC and 18% of comparison group users answered that BRAC health workers motivated them to use such methods (Table A.33). Results indicate that BRAC made significant impact in increasing contraceptive use rate. However, there is a large scope in terms of area coverage and motivation of those who are eligible but do not yet follow family planning practices.

¹¹ Number of eligible couple is the number of currently married female with age <50 years.

Table 3.10: Rate of contraceptive use disaggregated by member category

Indicators	BRAC (length of membership)				Comparison n=223
	1-11 n=360	12-47 n=417	48+ n=295	Total n=1072	
% of household with eligible couple	86.9	89.9	82.7	86.9	87.9
No. of eligible couple in a household	1.1	1.1	1.2	1.1	1.1
% of couple using contraceptives	39.4	38.0	44.3	40.2	28.6

3.14 Who Benefited More from BRAC Intervention

In the previous sections of this chapter we discussed the overall status of BRAC and comparison households considering different socio-economic indicators separately. Attempts are made here to differentiate between BRAC and comparison households in terms of their well-being status by integrating major output variables under each endowment indicator. Results presented in Table A.34 show that considering occupation of the household head BRAC members of all employed groups were better off than comparison households of similar employed groups in terms of owning more non-land assets, net-worth, savings and lower household economic dependence. But the differences are wider for the wage employed group. For example, BRAC member households of wage employment group are consuming significantly higher calories. Their expenditure on both food and non-food items was significantly higher. They received significantly higher amount of loan and also owned significantly more assets and savings. Proportion of female to total income earner was also significantly higher for BRAC wage employed households than that of comparison group. These results imply that BRAC members of wage employed group benefited more from the intervention.

Considering amount of present land, results show (Table A.35) that BRAC member households with 1-50 decimals of land are significantly better off than the comparison households with the same amount of land. BRAC members own significantly more assets and net-worth and also consume more calorie. Their food and non food expenditure was significantly higher than the comparison group. Proportion of female to total income earner is also significantly higher for BRAC members. Proportion of self employed households were significantly higher and proportion of wage employed household were significantly lower for BRAC. Average household education level of BRAC households was also significantly higher. Occupational status of the household head and household education level which are considered

as non impact variables¹² indicate that BRAC members of this land group were also better off before joining BRAC which might have influenced their present better performance¹³ although the average amount of land was similar. BRAC households of this land category are younger than the comparison ones. The life cycle factors, higher initial endowment and also higher amount of loan received contributed to their better performance as it is also evidenced from section 3.7.1.

Comparison between landless BRAC and comparison households show that although BRAC landless members own more assets and net-worth results do not vary much from those of comparison landless households. Although BRAC members received significantly higher amount of loan from different institutions, their per capita calorie consumption and value of living houses were less than those of the comparison group. Households with above 50 decimals of land irrespective of their membership status received similar amount of loan, even comparison households received relatively higher amount. The average amount of land for this landholding category was two times higher for BRAC households. Although BRAC households owned higher non-land assets and net-worth the difference is marginal and statistically not significant. This result directly gives an indication that only amount of land can not explain the status of a household. It also indicates that amount of loan from any sources may have similar impact.

Differences among different membership length categories of BRAC households with respect to occupational status of the household head shows (Tables A.36-A.37) that compared to 12-47 months group, for households with higher membership length economic dependency has gradually reduced and amount of total savings increased for all employed groups. Results are also consistent in terms of receiving higher amount of loan with increasing membership length. Results of other variables included in these tables do not show any consistent trend with respect to membership length. In terms of value of net-worth and living houses members of 1-11 months group performed better in all employed groups. Their household education level was also higher compared to all other membership length categories. The household economic dependency of 1-11 months group was also relatively lower compared to 12-47 months group of all employed groups due to their higher proportion of income earner to household size. These new members are also living in relatively higher economically vibrant areas. These findings further justified the recent trend of an upward bias in member selection. That is why comparison between 1-11 months and 48+ months categories of BRAC member households can not show the real impact of BRAC intervention as their initial condition at the time of joining BRAC VOs was different.

¹² See section 3.1

¹³ See section 3.7.1.

Considering amount of pre-BRAC land as an endowment variable differences between 48+ and 12-47 months groups with similar landholding status show that with increasing membership length economic dependence of households has gradually reduced (Tables A.38-A.39). But proportion of female to total income earner within the household has reduced with increasing membership length for 100+ decimals landholding group. For all other landholding groups there is a positive consistent trend in the proportion of female to total income earner and length of membership.

Table A.38 illustrates differences in well-being status of different BRAC TG members with respect to their membership length. All the TG households are divided into two categories viz., 1) the absolute landless households who do not own any land including homestead and 2) households who own land up to 50 decimals. Among the absolute landless households the oldest group received higher inputs and owns more non-land assets, savings and net-worth although the differences are not significant. Per capita expenditure on food and non-food items and per capita calorie consumption of the oldest landless households was less compared to other membership length groups. It implies that with increasing membership length the amount of loan received also increases for all TG households which influence in increasing their household wealth. But the effect of BRAC inputs is not very high for the landless members.

Differences in well-being status of different membership length groups with 1-50 decimals pre-BRAC landholding show that there is a consistent positive relationship between length of membership and volume of BRAC inputs received which made significant impact in the better-off position of 48+ months group in owning more assets, savings and net-worth. The 48+ months group consumes significantly more calories and spends more on food and non-food items. The higher involvement of female household members in different IGAs and the higher income of BRAC members also contributed significantly in reducing household economic dependence of this group. Analyses of this result indicate that BRAC made significant positive impact for this 1-50 dec. landholding group.

Table A.39 presents differences in well-being status of different BRAC NTG members with respect to their membership length. All the NTG households are divided into two categories viz., households who owned up to one acre of land and households who owned more than that before joining BRAC. The 48+ months group of both landholding categories own more net-worth compared to 12-47 months group but less than that of the 1-11 months group. Even value of non-land assets of the 48+ months group of >100 decimals landholding category was less than the 12-47 months group. They also consume less calorie compared to all other membership length groups although amount of landholding of this group was significantly higher. This oldest membership length group came from relatively low vibrant areas.

Analyses of these results tell us two things. Amount of land itself may not be the only indicator of well-being of a household. Secondly only higher amount of loan can not influence in changing the economic condition of a household depending on other factors like village infrastructure and loan utilization capacity.

Results of different loan amount categories (Table A.40) do not show any consistent positive trend with increasing loan amount. But the highest loan amount category shows the best result in terms of household education level, per capita expenditure and ownership of more non land assets. It is also worth mentioning here that net-worth of members who do not receive BRAC loan was the second largest after the highest loan amount category. It implies that although there are some positive relationship between amount of loan and well-being status of a household, other factors are also responsible in changing the latter.

Around ten percent of the BRAC member households have multiple membership in different development agencies. These are the households with higher household education level and bigger household size compared to households with only BRAC membership. They received significantly more inputs than the households with only BRAC membership which contributed to their significantly higher non land assets and savings (Table A.41)

3.15 Are the Benefits Sustainable?

Table A.42 presents differences in well-being status between BRAC oldest and relatively new BRAC members¹⁴. According to the table the oldest members' own more assets (land and non land), savings and net-worth. The net gain in landholding since joining was also significantly higher for them. They received significantly higher amount of loan. BRAC members' direct involvement in any IGA which is the prime objective of BRAC programme positively contributed in increasing the ratio of total income earner to household size and especially in the ratio of female to total income earner. Members from the oldest membership length group now earn significantly more income than the others. Their per capita calorie consumption and expenditure on food and non food consumption are also relatively higher than those for the others. All of these together imply that in an overall context length of BRAC membership made positive contribution in improving the material status of their member households. Results of multivariate analysis in section 3.7.1 provide evidence that households with membership length more than 84 months own less assets than its previous

¹⁴ *In this analysis 1-11 months group is not included deliberately. It is found in the previous sections of this chapter that this membership length group had highest level of initial endowment i.e., higher household education level, higher adult literacy rate and higher percentage of self and lower percentage of wage employed households. Although the 48+ months group's pre-BRAC landholding was significantly higher compared to others, the initial condition since joining BRAC of 12-47 months and 48+ months groups was more or less similar considering those variables mentioned above except land.*

membership length group. Although analyses of data do not clarify reasons behind this, but this result give an indication that only loan is not enough to make significant change in the well-being status of a household and sustain it in the long run.

3.16 Conclusion

BRAC member households own 380% higher non land assets, 50% higher net-worth, 100% more savings than the comparison group households. Percentage of self employed households is significantly higher for BRAC. On the other hand, percentage of wage employed households is significantly higher for comparison group. Average household education level and adult literacy rate are higher for BRAC.

BRAC member households have access to higher amount of loan, although a considerable proportion of comparison households also received loan from different institutional and non institutional sources. BRAC member households have better housing condition. More households of BRAC members now use tubewell water for washing clothes, plates and for bathing. Status of sanitary latrine use is also higher for BRAC. BRAC member households are consuming better quality food and spending significantly less proportion of income on food than the comparison households.

Factors influencing the well-being status of a household irrespective of membership status are household education level, age and sex of the household head, household demographic and economic dependency, value of land and non-land assets, savings and village level vibrancy. Length of BRAC membership which is correlated with volume of BRAC inputs also made positive contribution in changing household well-being.

Among BRAC members of different membership length groups the oldest membership length group (48+ months) owns relatively higher land and non-land assets and savings. Percentage of living houses with tin as roofing materials is also highest for the oldest group. In terms of contraceptive prevalence rate and use of sanitary latrine the oldest group's performance is significantly better than others. They also received more inputs from BRAC and other sources.

On the other hand, percentage of wage employed households is highest and percentage of self employed households is lowest for the oldest group. Educational status of the household, viz., average household education level, adult literacy and primary school enrollment rates of the oldest group is also lowest compared to others. Value of living houses and per capita floor space are also lowest for them. The result is opposite for the new members. The new members also came from relatively high vibrant areas. All of these together indicate that there are some selection bias in member selection.

Comparison between two oldest membership length groups in their well-being status by controlling their pre-BRAC landholding and occupational status of the household head shows that with increasing membership length household dependency had reduced and the proportion of female to total income earner within the household increased due to increased involvement of BRAC members in different IGAs. It is also found that the impact of BRAC programme was highest for households with 1-50 decimals of land and lowest for the absolute landless.

Results of multivariate analysis show that members with 84+ months of membership length owned less assets than 48-84 months group which raises some questions on sustainability of impact.

CHAPTER FOUR : MEASURING WELL-BEING: PANEL DATA ANALYSIS

Debdulal Mallick

4.1 Introduction

BRAC has been trying to improve the condition of the rural poor by providing different types of inputs, from loan to training, to its clients. On the other hand, comparison group members, who are not members of any NGO, do not receive any such assistance. Rate of progress made by comparison group members when compared with BRAC members, therefore, shows what would have been the progress of the latter without BRAC intervention. On comparing this progress with that of BRAC members one can attempt to measure BRAC's impact on the well-being of its participants.

We have survey data on both BRAC and comparison households for two periods, 1993 and 1996. In 1993 when the first IAS was conducted, a total of 2,250 households consisting of 1,500 BRAC and 750 comparison group members were surveyed. In the 1996 round, only 750 sample households from the above, 500 BRAC and 250 comparison group members, were selected randomly (this has been discussed in detail in chapter-2). Between these two periods, 143 of 500 sample BRAC members of different membership length dropped out from BRAC. During the same period 68 of the 250 comparison group members who in 1993 were not members of any NGO, joined different NGOs with 15 of them joining BRAC. These 15 members who joined BRAC have thus been excluded from the comparison group. Since the remaining 53 comparison group members are now with some other NGOs, one may not treat the comparison group as a pure comparison one. Some of them have already received inputs from those NGOs and this can lead to an upward bias in the performance of the whole comparison group. Again, 35 BRAC and 12 comparison group members could not be traced for collecting data this time. Therefore, only 322 BRAC and 223 comparison households were included in the analysis.

The categorization of BRAC members in terms of membership length has been done in line with the IAS-I report. In IAS-I report the length of membership was measured by the length of time in months a person had been a member of a village organization. (Mustafa et al., 1996). Thirty six months have been added to the membership length of each of BRAC membership category for the Panel households to take care of the intervening period. The categorization for this chapter is as follows:

Table 4.1 Distribution of Panel samples by membership category

Sample category	Number of households included in IAS-I	Number of households randomly selected from IAS-I sample	Membership length at the time of IAS-I (months)	Membership length at the time of IAS-II (months)	Effective number of sample households in IAS-II
BRAC	1,500	500	Panel-I (1-11)	Panel-II (36-47)	141
			Panel-I (12-29)	Panel-II (48-65)	37
			Panel-I (30-47)	Panel-II (66-83)	80
			Panel-I (48+)	Panel-II (84 +)	64
			All BRAC	All BRAC (36+)	322
Drop out				Drop out	143
Comparison	750	250	Comparison	Comparison	223
Total	2,250	750			688

Since only less than one-third of the samples of IAS-I have been retained in IAS-II, the results of the present survey data may not be comparable with the results presented in IAS-I report. To overcome this we have taken the information of only those 688 households who appeared in both IAS studies and then have compared the two results. Moreover, there are some differences in the foci of IAS-I and IAS-II questionnaires. The IAS-I questionnaire did not emphasize much on the poverty situation though it was designed to focus mainly on the material well-being of BRAC members. The information required to analyze these issues which mostly consists of consumption and expenditure data, was inadequate in IAS-I questionnaire. For example, consumption data for one single day was collected in 1993, but food items included in IAS-I questionnaire were quite few in number and mostly mixed foods. Expenditure on these food items was also completely ignored. Therefore, drawing any poverty line from IAS-I data was not possible. Although one-week expenditure data was collected which included expenditure on both food and non-food items for the previous one week from the survey date, this in no way reflects the expenditure on the amount of food actually consumed. This one-week expenditure can not be generalized to calculate yearly household expenditure. The present IAS-II questionnaire has been designed to overcome these limitations emphasizing issues on poverty situation. However, there are still some other shortcomings in comparing the two questionnaires. Comparison can be made for only the common variables which appeared in both questionnaires. For example, both IAS questionnaires included non-land assets but each of them included some items that the other did not. When we go on comparing changes in

value of asset holding we are restricted to comparing only those common items appearing in both questionnaires. This can be extended to many other cases which will be mentioned when necessary. Although some issues important to explaining material well-being such as consumption and other expenditures have not been addressed in this chapter, we have tried to make the comparison as precisely as possible within our limitations.

Changes in different indicators, instrumental to analyzing material well-being, have been measured for all categories of our sample members. These changes across different groups have been compared to measure the impact of BRAC intervention. BRAC households are endowed with BRAC inputs such as loan, training and other human development inputs while the comparison households are not. The difference in the rate of changes in the different indicators of material well-being provides strong evidence on the relative advantages that the BRAC members might have had because of their involvement in RDP. The 'within' and 'between' variations of relevant parameters for different membership categories are our main focus in this chapter.

4.2 Determinants of Material Well-being

The most important indicators of material well-being discussed below are consumption, savings, assets, housing status, loan from different sources, and amount of landholding. Aspects such as who heads a household, his or her age, education level and occupation etc., have profound influence on material well-being of a household. Some other variables like economic and demographic dependency ratios, health and sanitation also have much influence as family size, number of income earners and family members' health largely determine a family's well-being. One needs to be cautious before explaining a variable. Some variables like age, adult-education which are not affected by BRAC intervention are non-impact variables. Amount of land, which is a long term impact variable is not likely to be changed immediately by BRAC intervention rather it largely determines a household's economic performance. Therefore, amount of land can be considered as an independent variable which, in the short run, influences but is not influenced by VO membership. On the other hand, consumption, assets, savings, housing and dependence on informal money lenders are impact variables.

4.2.1. Initial endowment: IAS-I report defined initial endowment as 'the original condition of households when joining BRAC' (Mustafa, et al.,1996). Since both IAS-I and IAS-II did not collect comprehensive data to assess the pre-RDP conditions of households, 'the proxy indicator of initial endowment used here is the amount of household land at the time of joining BRAC' (Ibid.). We have considered some other variables besides pre-BRAC landholding as initial endowment. Value of these variables for 1993 has been considered since we did not have any information on pre-BRAC values

of these variables. This practice does not affect our analysis as these variables are not likely to change in the short run due to BRAC intervention.

4.2.1.1 Landholding: It is likely that households with larger landholding are more capable of mobilizing and utilizing resources more efficiently, consequently generating more assets and savings required for increased investment than households with smaller landholding. These, in turn, increase the amount of landholding as investment in the land market is the safest option for the rural people. So change in landholding is a function of, among other variables, initial landholding.

Table B.1 shows that both BRAC and comparison households managed to increase their average amount of landholding marginally but this applies to only those who had in 1993 different amount of landholding. BRAC households with larger initial landholding were more successful in increasing their landholding. Landless households did not show any success in this regard. Since supply of land is limited and strong competition to purchase scarce land leads to higher price even in the rural areas, it is, therefore, very unlikely that the rural poor will be able to increase their landholding substantially.

4.2.1.2 Status of the household head: Besides pre-BRAC landholding, status of the household head and household composition have been considered as initial endowment because these contribute significantly to the economic performance of a household.

4.2.1.2.1 Number of female-headed households: Number of female-headed households among BRAC households remained almost the same at 11% over the last three years. In the comparison group there were 3.6% such households in 1993 which reduced to 2.7% in 1996. It is clear from Table 4.2 that there was almost no change over time in the number of female headed households. However, BRAC has targeted households that have larger projection of female heads. This is a positive selection bias.

Table 4.2: Distribution of female-headed households

Membership Category	Number of female headed households	
	1993	1996
Panel (36-47)	14 (9.9)	14 (9.9)
Panel (48-65)	3 (8.3)	4 (10.8)
Panel (66-83)	7 (8.8)	7 (8.8)
Panel (84 +)	11 (19.3)	9 (14.1)
All BRAC	35 (10.9)	34 (10.6)
Comparison	8 (3.6)	6 (2.7)
Drop out	16 (12.2)	15 (10.5)

Figures in parentheses indicate percentage.

Over 19% of the household heads in the Panel (84+) group were female headed which was the largest proportion among all membership categories. Though this percentage declined to 14 in 1996, the group still possessed the highest percentage of female headed households.

4.2.1.2.2 Education level of the household head: The number of BRAC household heads who were literate increased from 20% in 1993 to 29% in 1996. For comparison group this increase was insignificant. Interestingly, educational attainment, as measured by average years of schooling, of heads of BRAC households increased as is shown in Table B.2. In this case also, heads of BRAC households did significantly better than comparison households. It must be noted, however, that since almost all of the household heads are adults, their attaining of higher education level seems very unlikely. This paradox can be solved by examining the mean age of the household heads. Within the two successive surveys the mean age of the household head is supposed to increase by three years. But Table 4.3 shows that mean age of BRAC household heads increased by two years which indicates that some of the old household heads were replaced by comparatively younger ones with higher level of education. This change is likely to bring dynamism in a household. But this did not happen among comparison households. Among BRAC households the greatest advancement in educational attainment was among the Panel (36-47) group members.

Table 4.3: Mean age of the household head by membership category

Membership Category	Mean age of the household head (years)	
	1993	1996
Panel (36-47)	39.52	41.61
Panel (48-65)	41.44	41.84
Panel (66-83)	37.61	40.99
Panel (84 +)	44.65	43.66
All BRAC	40.02	41.89
Comparison	40.02	43.12
Drop out	40.24	43.02

4.2.1.2.3 Occupation of the household head: Economic condition of a household largely depends on the occupation of its head as income level is directly related to a particular occupation. It is worth mentioning here that very few BRAC members head a household but the heads usually utilize BRAC loans borrowed by the female members of their household. Therefore, occupation of the household head rather than that of the BRAC member has been considered here. Occupation has been classified into two broad categories- self employment and wage employment. People cultivating their own land, share tenants, businessmen, rickshaw or van pullers or who are not dependent on anyone to be employed, fall into the former category. Since servicemen are paid salary instead of wages and their socio-economic status is more or less similar to that of self employment category, for simplicity they have been included in that category. On the other hand, those who sell

labour power to others against wage payment such as day labourers have been classified as wage employed.

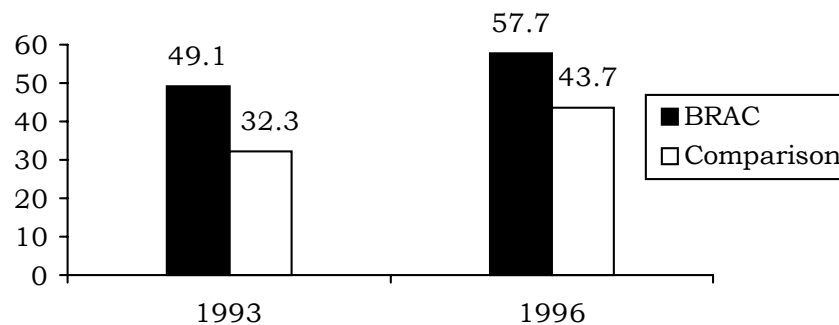
Table 4.4: Occupational status of the household heads

Membership Category	Self employment		Wage employment	
	1993	1996	1993	1996
Panel (36-47)	59 (41.8)	83 (59.3)	82 (58.2)	57 (40.7)
Panel (48-65)	23 (62.2)	20 (55.6)	14 (37.8)	16 (44.4)
Panel (66-83)	51 (63.8)	51 (64.6)	29 (36.3)	28 (35.4)
Panel (84 +)	25 (39.1)	31 (48.4)	39 (60.9)	33 (51.6)
All BRAC	158 (49.1)	185 (57.5)	164 (50.9)	134 (41.6)
Comparison	72 (32.3)	97 (43.7)	151 (67.7)	125 (56.3)
Drop out	66 (46.2)	72 (51.1)	77 (53.8)	69 (48.9)

Figures in parentheses indicate percentage.

In 1993, 49% heads of BRAC households were self-employed which increased to 58% in 1996 implying 9% household heads ventured into self employment. Comparison household heads showed success at a slightly higher rate (11%). Among BRAC households, members from only Panel (36-47) group successfully ventured into self-employment (18%) while for Panel (48-65) the result was the opposite.

Figure 4.1: Changes in the percentage of self employed HH head



In 1993, 17% more BRAC household heads were self employed than the comparison group. Even the youngest BRAC members who joined BRAC in 1993 had at that time 9% more households whose heads were self employed than the comparison group. This clearly shows a negative selection bias as proportionately less households from comparison group had been selected whose heads were enterprising.

Table B.3 provides data on sector-wise employment. For BRAC households number of household heads cultivating land increased from 11% to 19%. For comparison and dropout members this rate of increase was 10% and nine percent respectively. Percentage of BRAC household heads doing business declined from 23 to 20 in the last three years. This decreasing trend extended to all BRAC membership length categories but the comparison group did not experience that. Number of both agricultural and non-agricultural day labourers declined by six and two percent respectively for

BRAC households. Household heads of comparison group performed slightly better than BRAC household heads in this respect (9% and 10% respectively). The only sector where BRAC household heads did exceptionally good was service sector. However, overall success of the heads of BRAC households in terms of switching occupation was limited mainly to Panel (36-47) group.

Table 4.5: Changes in the sectoral composition of the occupational status of the household head

Membership Category	Farm		Non-farm		Others	
	1993	1996	1993	1996	1993	1996
BRAC	107 (33.2)	116 (36.0)	171 (53.1)	168 (52.2)	44 (13.7)	38 (11.8)
Comparison	93 (41.7)	95 (42.6)	117 (52.5)	110 (49.3)	13 (5.8)	18 (8.1)
Drop out	49 (34.3)	64 (44.8)	63 (44.1)	64 (44.8)	31 (21.7)	15 (10.5)

Figures in parentheses indicate percentage

These sectors have also been grouped into two broad categories – farm (agriculture) and non-farm (non-agriculture). Employment in the farm sector for both BRAC and comparison household heads increased but at a slightly higher rate for BRAC households (3% compared to 1%). On the other hand, employment in the non-farm sector reduced at a higher rate for comparison households than that of BRAC ones (3% and 1% respectively). Self employment in the farm sector increased by about eight percent and wage employment decreased by six percent in the last three years. For comparison households these rates were 10% and 9% respectively. On the other hand, self employment in the non-farm sector increased by about seven percent for comparison households but remained almost the same for BRAC households. Wage employment in the non-farm sector reduced for both BRAC and comparison households but at a higher rate for the latter (Table B.4).

4.2.1.3 Demographic and economic dependency ratio: Demographic dependency ratio is the ratio of the aggregate of population aged below 10 years and aged 65 years or more to population aged between 10 to 64 years, expressed in percentage terms. Economic dependency ratio is the ratio of economically inactive population to economically active population expressed in percentage terms. Economically active population consists of population of age 10 years or above, who are employed or unemployed during the reference period of the survey, excluding the disabled and retired persons, full time housewives and students, income recipients, beggars and other persons who did not work for pay or profit at least one hour during the reference week (BBS, 1995).

Table 4.6: Demographic and economic dependency ratio

Membership category	Demographic dependency ratio			Economic dependency ratio		
	1993	1996	% Change	1993	199	% Change
Panel (36-47)	65.3	63.0	-3.5	289.8	276.2	-4.7
Panel (48-65)	65.2	46.3	-29.0	247.9	234.2	-5.5
Panel (66-83)	57.3	43.2	-24.7	26.4	250.0	-5.4
Panel (84 +)	52.6	36.4	-30.7	202.4	196.6	-2.8
All BRAC	61.0	50.9	-16.6	262.6	249.4	-5.0
Comparison	61.0	50.2	-17.7	243.7	240.8	-1.2
Drop out	53.3	48.9	-8.6	238.0	244.6	+2.8

The demographic dependency ratio was the same for both BRAC and comparison households in 1993 and also declined since then at the same rate for both groups. Among BRAC households Panel (84+) category had in 1993 the lowest demographic dependency ratio and it declined at a faster rate compared to all other membership categories.

Economic dependency ratio for BRAC households was higher in 1993 than that of the comparison ones but decreased for the former category. The latter group experienced almost no change in the last three years. Since demographic dependency ratio which shows the change in age composition of a household, changed in a very similar fashion for both the groups, sharp fall in economic dependency ratio for BRAC households indicated that more members from BRAC households than comparison ones got employed in the last three years.

4.2.2 Inputs: BRAC provides, among other things, loan and training to its members. Since comparison households do not have access to formal financial institutions they rely on non-institutional sources for loan. However, BRAC households sometimes borrow from non-institutional sources. But access to BRAC loan is likely to have impact on their dependency on non-institutional loan. Therefore, non-institutional loan can be regarded as both an input and impact variable for BRAC households while for comparison households it is an input variable.

4.2.2.1 BRAC Loan: BRAC members of different membership length received different amount of loan in the last three years. Any unique relationship between this amount of loan with the amount received till IAS-I (1993) or membership length is not possible to be drawn because some new members received a large amount of loan while some old members received a very small amount between 1993 and 1996 (Table B.5). Therefore, any categorization in terms of cumulative amount of loan received till IAS-II and membership length to compare with the corresponding figures till IAS-I in terms of amount of loan and membership length was not feasible. In that case some members would be placed to a category where they previously did not belong to, and comparison of changes in different indicators over-time according to this categorization would be misleading. Since amount of loan is the most crucial BRAC input that influences member households' material

well-being, impact of loan has been measured by regression analysis. But a positive linear relationship between membership length and average loan size was found (Table 4.7).

Table 4.7: Cumulative amount of loan received by different membership

Membership category	Average loan (Taka)	
	1993	1996
Panel (36-47)	1,273	10,260
Panel (48-65)	4,014	16,483
Panel (66-83)	7,301	18,921
Panel (84 +)	9,509	19,917
Drop out	4,727	7,993

Some BRAC households were found which maintained membership with other NGOs and received loan from there. We have excluded loans from other NGOs as we are interested in only BRAC inputs. Since there is, of course, an impact of these loans on their consumption, savings and asset accumulation behaviour, this may raise some selectivity bias problem in assessing impacts of BRAC inputs. Techniques have been applied to solve this and other types of selectivity bias later in this chapter.

4.2.2.1.1 Changes in the pattern of loan use: A BRAC member can usually receive one loan at a time with the only exception being loan for housing. She is eligible for another loan after repaying the previous one. BRAC loanees are usually required to repay the loan in weekly instalments in one year. Therefore, the time gap between two successive loans is generally one year. Since the second survey was conducted three years after the first one, use of only last three loans was considered for comparison. It is not necessarily true that all the members received three consecutive loans. Some of the members received less than three loans even some members were found who did not receive any BRAC loan in both periods. They maintained membership for depositing savings and also for other human development inputs that BRAC provides.

Till 1993 only 214 of 322 sample BRAC members received loan and they received 557 loans. Eighty five of those 138 members who did not receive any loan were in 1993 among the newly joined members with membership length less than one year and 30 members were among those who dropped out between 1993 and 1996. A total number of 307 members received 894 loans between 1993 and 1996 but 15 members still received no loan.

In 1993 the highest percentage of loan was used in petty trade (30%) followed by investment in rural industry (11%) and food processing (11%), food purchase (9%) and livestock (9%). In crop production about six percent loan was used. About three percent of loan was used in land purchase and land mortgage each. In 1996 percentage of loan use in housing, crop

production and food processing increased sharply. Loan use in land purchase and land mortgage also increased. On the other hand, percentage of loan use in petty trade, livestock and rural industry decreased sharply. The highest rate of decline in the percentage of loan use was in rural industry followed by food purchase (Table 4.8). In 1996 a significant percentage of loan was used for loan repayment (5%).

Table 4.8: Changes in the pattern of BRAC loan use

Sector of loan use	Amount of loan (Taka)	
	1993	1996
Land purchase	40,500 (2.6)	1,02,500 (2.9)
Land mortgage	39,000 (2.5)	1,52,500 (4.3)
Crop production	93,000 (6.1)	3,26,000 (9.2)
Livestock	1,44,000 (9.4)	2,11,500 (6.0)
Poultry	16,000 (1.0)	32,000 (0.9)
Rural transport	41,000 (2.7)	1,06,400 (3.0)
Petty trade	4,62,600 (30.2)	8,70,000 (24.5)
Food processing	1,63,100 (10.7)	5,28,500 (14.9)
Productive assets/ Rural industry	59,500 (10.7)	16,500 (0.5)
Non-prod. asset	18,500 (1.2)	63,500 (1.8)
Household consumption	16,500 (1.1)	99,000 (2.8)
Loan out	---	65,000 (1.8)
Loan repayment/ Service charge	---	1,77,000 (5.0)
Housing	74,000 (4.8)	3,67,500 (10.4)
Food purchase	1,43,500 (9.4)	78,000 (2.2)
Others	1,11,000 (7.3)	1,80,200 (5.1)
Multiple use	1,08,500 (7.1)	1,67,800 (4.7)
Total	15,30,700 (100.0)	35,43,900 (100.0)

Figures in parentheses indicate percentage.

The above findings show an increasing trend of loan use in farm sector and land purchase and a decreasing trend in non-farm sector. This might be due to limited scope and therefore strong competition in rural non-farm sector. As a result, about two percent of loan was used for lending in the informal money market. Decreased amount of loan use in food purchase implies BRAC households' increased food security

In rural transport percentage of loan use remained almost the same. Scope of this sector is also limited as large public sector investment is required to develop rural infrastructure and its absence is likely to discourage investment in non-farm sector in general and rural transport in particular.

4.2.2.2 Training: BRAC provides, among other things, skill development training to its members. A large number of BRAC members received training in the last three years but comparatively new members were the major recipients.

Table 4.9: Number of BRAC household members receiving BRAC training by membership category.

Membership Category	Cumulative number of BRAC household members receiving BRAC training	
	1993	1996
Panel (36-47)	32 (22.7)	42 (29.8)
Panel (48-65)	8 (21.6)	14 (37.8)
Panel (66-83)	37 (46.3)	39 (49.4)
Panel (84 +)	27 (42.2)	27 (42.9)
All BRAC	104 (32.3)	122 (38.1)
Drop out	39 (27.3)	29 (20.3)

Figures in parentheses indicate percentage.

No member from the Panel (84+) group received training in the last three years. Surprisingly 10 drop out members who had reported receiving training in 1993 denied doing so this time around. Perception about BRAC training was also not much encouraging (Table B.8). Only new members regarded BRAC training as useful and reported that they had been using training in everyday life for income generating activities. This realization had dissipated in the last three years but only among the newer members. On the contrary, for older and dropout members the perception was just the opposite as more members of these groups reported that BRAC training did not bring any benefit to them. Even some of the dropout members, who regarded BRAC training useful three years ago, discarded them as of no use today.

4.2.2.3 Non-Institutional Loan: Both BRAC and comparison households borrow from non-institutional sources. Borrowing is made both in cash and in kind but purpose of these two types are usually different.

4.2.2.3.1 Cash loan: Poor people usually borrow from different non-institutional sources at a higher interest rate when they can not finance on their own. This usually happens should they require emergency money to cope with any crisis. This might also happen when they need a large sum for any kind of investment. BRAC members also sometimes seek fund from non-institutional sources either when amount of BRAC loan is insufficient for investment or when any sudden calamity hits their family.

Table 4.10 shows that in 1993 a larger percentage of households from the comparison group than BRAC borrowed from non-institutional sources. Three years later, though this number reduced for both groups, still larger percentage of households from the comparison group had outstanding non-institutional loan. But amount of such loan per household of those who borrowed reduced for only BRAC households (Figure 4.2). Dropout members, who now lack the opportunity to borrow from BRAC, increased their borrowing from non-institutional sources and they had in 1996 the

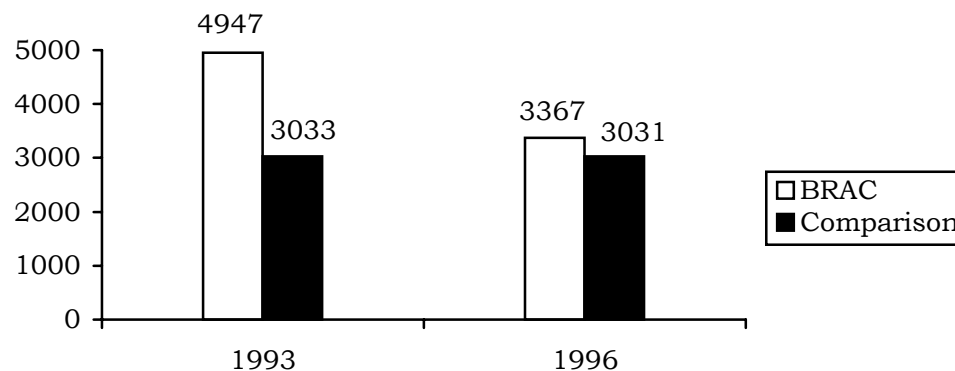
Table 4.10: Average amount of non-institutional cash loan by membership category

(in Taka)

Membership Category	All members		Those who received loan		All members		Those who received loan	
	1993				1996			
	Amount (per hh)	No. of cases	Amount (per hh)	No. of cases	Amount (per hh)	No. of cases	Amount (per hh)	No. of cases
Panel (36-47)	2,404	141	5,379	63	1,139	141	4,117	39
Panel (48-65)	6,338	37	16,729	14	612	37	1,888	12
Panel (66-83)	910	80	2,695	27	779	80	3,115	20
Panel (84 +)	646	64	1,192	35	636	64	2,907	14
All BRAC	2,135	322	4,947	139	889	322	3,367	85
Comparison	1,879	223	3,033	138	956	223	3,031	71
Drop out	937	143	2,350	57	1,589	143	4,544	50

largest amount of loan burden. Panel (48-65) group borrowed on average the highest amount and Panel (84+) group the lowest in 1993 from non-institutional sources. The former group showed tremendous success in reducing the amount of loan to the lowest of all membership categories in the last three years. Comparing different BRAC membership categories, non-institutional loan increased for only Panel (66-83) group but Panel (36-47) group had still the highest amount of outstanding loan, although their outstanding borrowing declined between the two periods.

Figure 4.2: Average amount of non-institutional loan for borrowers of different membership category



Tables B.9 and B.10 show sources and uses of non-institutional cash loan. BRAC households used a larger percentage of such loan for crop production than any other group did. Percentage of borrower households using their non-institutional loan for immediate consumption was lowest for BRAC households and highest for comparison ones. In 1993 about 64% of those

comparison households borrowing from non-institutional sources used their loan for immediate consumption which decreased to about 48% in 1996. The highest percentage of households using such loan for business was found among the Panel (48-65) group (21%). Loan use for treatment increased for BRAC households (from 6% to 16%) while it slightly decreased for comparison ones (from 7% to 6%). This might be due to their higher level of consciousness on health status. But increased level of expenditure on treatment indicates income erosion which could have been spent on asset accumulation or other productive investment.

Most of the borrower households of all categories borrowed mostly from their relatives, friends or neighbours. Very few households borrowed from *mohajons* and this number decreased except for dropout members. Higher percentage of BRAC households than comparison ones borrowed from *mohajons*. Among BRAC households Panel (84+) group had the highest percentage of households borrowing from *mohajons* (32%).

Increased loan burden, however, does not necessarily mean worsening of the economic condition of a household. When NGOs or formal financial institutions fail to provide enough loan required for productive investment or a potential investor does not have access to such sources he needs to seek loan from non-institutional sources. This is not harmful if he can manage to borrow at a reasonable interest rate.

Table 4.11: Non-inst. cash loan by occupational status for different membership category (in Taka).

Membership Category	1993		1996		% Change	
	Self	Wage	Self	Wage	Self	Wage
Panel (1-11)	2,910	2,040	1,677	375	-42.4	-81.6
Panel (48-65)	9,739	750	727	506	-92.5	-32.5
Panel (66-83)	1,212	378	823	727	-32.1	+92.3
Panel (84+)	746	582	668	606	-10.5	+4.1
All BRAC	3,014	1,289	1,170	521	-61.2	-59.6***
Comparison	2,574	1,544	530	1,536	-79.4	-0.5
Dropout	1,014	871	2,044	1,159	+101.6	+33.1

*** *t*-value highly significant

It is interesting to note that in 1993 households whose heads were self-employed borrowed larger amount from non-institutional sources than households with wage-employed head. Although the amount of loan decreased in 1996, the self-employed category, on average, still had larger amount of loan than wage-employed category. This may imply that BRAC households whose heads were self-employed were more capable of investing money in productive purposes. BRAC loan was not sufficient for them and they required to raise funds from non-institutional sources. For comparison households the reason of larger amount of borrowing is that these households do not have access to any formal financial sources. Therefore,

the amount of this type of loan was larger for comparison group and among the borrowers the households whose heads were self-employed borrowed larger amount in 1993 but managed to reduce their dependency on non-institutional sources within three years. On the other hand, average amount of non-institutional loan remained almost the same for the comparison households whose heads were wage-employed. For dropout households this type of loan increased irrespective of the occupation of the household head.

4.2.2.3.2 Kind loan: Borrowing in kind from non-institutional sources is usually made for immediate consumption. The decline in the number of both BRAC and comparison households borrowing from such sources supports the argument of reduced vulnerability placed earlier. Comparison households were the highest in number followed by dropouts in borrowing from non-institutional sources for immediate consumption. Most of the BRAC households borrowed from friends, relatives and neighbours (Tables B.11 and B.12). But borrowing from *mohajons* increased from two percent to 24% for comparison households while borrowing from other sources decreased. Use of such loan for purposes other than consumption can hardly be found.

4.3 Economic Impact

4.3.1: Changes in consumption pattern: For poor people a major share of increased income is spent on food consumption. Food expenditure increases more than proportionately until income reaches a certain level. Therefore, percentage of total expenditure (or income) on food is a very good indicator for measuring the economic condition of a household. Unfortunately, since we do not have enough information on food expenditure for IAS-I to make a comparison, as indicated earlier, we do it in terms of amount of per capita consumption of different food items. The main drawback of this approach is that when a household becomes better-off, it may substitute cheap and low quality food by expensive and high quality food. This would reduce total amount of consumption but may even cost more. Since quality of food is very difficult to be covered by household survey, comparison based on per capita food consumption is not conclusive.

From Table B.13 we see that in the last three years per day per capita consumption of rice, wheat, pulse, fish and meat decreased but that of vegetables, potato and milk increased for BRAC households. This is because BRAC always encourages its members to cultivate vegetables in homestead land and to rear cows and delivers loans for these purposes. The reason for decreased consumption of some protein-rich items can be attributed to their lower availability and higher prices. This trend applied more or less to other membership categories, with dropout households being the exceptions. BRAC households' per capita consumption of every item, however, was higher than that of the comparison households.

Consumption share of cereals (rice and wheat) decreased for all membership categories. For BRAC households this share fell (by 7%) at a lower rate than that of comparison households. Consumption share of vegetables increased for all membership categories and it was in 1996 the highest for Panel (84+) group (18%) followed by Panel (66-83) group. Consumption share of fish and meat decreased for all categories except for Panel (66-83) group members. Panel (66-83) group consumed a more balanced diet in terms of the rate of lowering consumption share of cereals and increasing that of vegetables and milk. Total amount of per capita per day consumption was higher for BRAC households than comparison ones but was the highest for dropout members.

4.3.2: Savings: Like consumption, saving is also an increasing function of income. Marginal propensity to save i.e., amount saved per unit of increased income which goes up with income level is a good indicator for measuring the economic condition. Since BRAC deals with the rural poor, their marginal propensity to save is likely to be lower. For lack of income and expenditure data we compute only the total amount of savings and then compare this for different membership categories.

Savings have been classified into three categories: i) savings in BRAC, ii) savings in formal financial institutions like banks, co-operatives, NGOs other than BRAC and iii) savings in informal places like relatives, friends, etc.

Table 4.12: Average amount of savings by membership category (in Taka)

Membership Category	BRAC savings		Formal savings		Informal savings		Total savings		
	1993	1996	1993	1996	1993	1996	1993	1996	% Change
Panel (36-47)	273	136	123	101	141	432	537	1,897	253.3
Panel (48-65)	545	1,587	290	90	00	147	835	1,824	118.4
Panel (66-83)	841	1,985	234	165	308	463	1383	2,613	88.9
Panel (84 +)	1,229	1,608	131	00	226	134	1586	1,742	9.8
All BRAC	636	1,592	171	96	183	348	990	2,036	105.7***
Comparison	-----	-----	288	231	109	460	397	692	74.3
Drop out	616	103	94	67	95	336*	805	536	-33.4

* *t*-value significant at 10 % level

*** *t*-value highly significant

BRAC members are required to deposit a certain amount of savings each week. Therefore, BRAC savings is an increasing and linear function of membership length with tenuous relationship with other indicators of material well-being. Although in both periods, BRAC savings was higher for households of higher membership length, in 1996 the oldest membership group fell immediately behind the Panel (66-83) group. This downward trend for the oldest members might be due to partial savings withdrawal and the lower rate of regular savings with which they are already habituated (BRAC

Internal Monitoring Report, 1997). Surprisingly total amount of savings was also lowest for the oldest group among all categories of BRAC members which implies that this group failed to save enough in places other than BRAC. Newer members, though their BRAC savings was lower, have saved higher amount in other places. Savings in formal financial institutions other than BRAC decreased and in informal places increased slightly for BRAC members (Table 4.12). Comparison households on average saved the highest amount in informal places. Occupational status of the head of BRAC households has very little to do with total amount of savings because BRAC savings that constitute the major share of total savings, are independent of occupational status of the household head (Tables B.14 and B.15).

4.3.3. Non-land asset accumulation: Asset is an important variable like income and expenditure for assessing the economic condition of a household. Since we do not have income or expenditure data for both periods, as mentioned earlier, change in non-land asset value has been taken as the main indicator to measure and compare economic performances. Assets are classified into two categories –productive and non-productive. Productive assets are those invested for income generation and generating profit. Non-productive assets do not generate income but are preserved as a store of value and can be liquidated at any time. The items which have been classified as productive assets are livestock, poultry, boat, fishing net, power tiller, tube-well, paddy husker, rickshaw and van. Non-productive assets include bicycle, watch or clock, radio, cassette player and television. Both questionnaires included all these items of productive assets indicated above but for non-productive assets, only common items have been chosen for comparison.

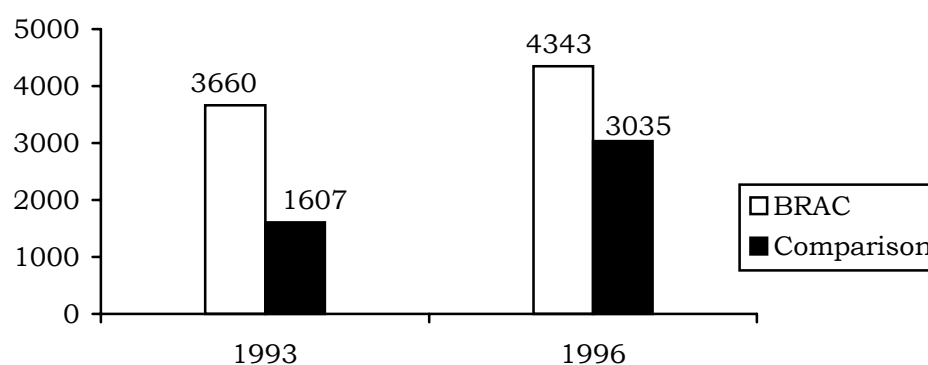
Table 4.13: Current value of non-land asset by membership category (in Taka).

Membership Category	Productive asset			Non-productive asset		Total asset		
	1993	1996	% Change	1993	1996	1993	1996	% Change
Panel (36-47)	3,004	3,806	26.7	417	571	3,421	4,377	28.0
Panel (48-65)	3,910	3,677	-6.0	266	835	4,176	4,512	8.2
Panel (66-83)	3,580	5,264	47.0	401	554	3,981	5,818	46.1
Panel (84 +)	5,062	4,756	-6.1	422	610	5,504	5,366	-2.2
All BRAC	3,660	4,343	18.7	401	605	4,061	4,948	21.8
Comparison	1,607	3,035	88.9	191	274	1,798	3,309	84.0
Drop out	3,088	3,880	25.7	203	329	3,291	4,209	27.9

Mean value of total (both productive and non-productive) assets of BRAC households was higher than that of any other category as it was in 1993. But the rate at which the value of productive and total asset increased was very high for comparison households as evidenced from Table 4.13 and Fig.4.3. These rates were 89% and 84% respectively. However, the mean value of total and of productive assets was still the lowest for comparison

group. The Panel (66-83) group, among different BRAC member categories, was most successful in increasing the value of total asset (47% for productive asset and 46% for total asset) but this rate was much lower than that of comparison households. On the other hand, mean value of these assets of Panel (84+) group decreased. For Panel (48-65) group mean value of productive assets decreased while mean value of total assets increased which implies that for this category value of non-productive assets increased at a faster rate. Still BRAC members were in a better position in terms of asset accumulation but progressed at a slow rate.

Figure 4.3: Value of non-land productive assets



Value of asset was found to be positively related with education level of the household head (Tables B.16 and B.17). The asset value was higher for households of all categories whose heads had a higher level of education. One important point worth mentioning here is that though mean value of asset decreased for the Panel (84+) group, only the households whose heads were illiterate experienced this downward mobility. The same was true for the Panel (48-65) group.

Occupational status of the household head is an important determining factor for asset accumulation of a household. Mean value of both productive and non-productive assets was higher for the household if its head was self-employed rather than wage-employed. (Tables B.18 and B.19). However, value of productive assets of comparison households increased at a much faster rate even when the household head was wage-employed. For BRAC households, value of assets increased marginally for wage employed household head. Among different BRAC households only the Panel (66-83) group demonstrated similar performance (36% increase) to that of the comparison group.

Table 4.14: Value of asset by landholding category (in Taka).

Landholding category	Productive asset			Total asset		
	1993	1996	% Change	1993	1996	% Change
No land	1,459	2,392	64.0	1,568	2,580	64.5
1-25 decimals	2,050	2,982	45.5	2,245	3,341	42.5

26-50 decimals	2,769	3,508	26.7	2,919	3,964	35.7
51-100 decimals	3,659	6,391	75.7	3,981	7,137	79.3
100 + decimals	8,702	9,627	10.6	9,249	10,554	14.1

Another decisive factor for asset accumulation was the amount of landholding. The larger was the amount of landholding, the higher the value of productive assets. However, the rate of increase of asset value was highest for the 51-100 decimal land category followed by landless households (Table 4.14).

4.4 Social Impact

4.4.1 Housing status: Economic condition of a household is reflected, at the first sight, in the quality of its houses. When a poor household becomes comparatively better-off it builds more living houses and/or uses better roof materials for the existing ones. More than 59% of living houses owned by BRAC households were tin-sheds in 1993 (Table B.20). Number of tin-shed living houses increased (8%) but total number of living houses remained almost the same in the last three years which implies that BRAC members renovated or built their houses by replacing low quality roof materials with higher quality ones such as tin. This also happened for comparison households. BRAC households possessed in 1993 more living houses built with better roof materials than comparison households and enjoyed this advantage over them in 1996. The evidence of better housing among BRAC households is strengthened by examining value of living houses and per capita floor space for living.

Table 4.15: Value of living and of all houses by membership category (in Taka).

Membership Category	Value of all houses			Value of living houses		
	1993	1996	% Change	1993	1996	% Change
Panel (36-47)	7,118	11,013	54.7	6,348	9,620	51.5
Panel (48-65)	6,150	9,171	49.1	5,437	8,403	54.6
Panel (66-83)	8,405	11,692	39.1	7,481	9,752	30.4
Panel (84 +)	8,405	8,440	0.4	7,215	7,756	7.5
All BRAC	7,545	10,462	38.7	6,697	9,146	36.6
Comparison	4,205	6,486	52.2	3,814	5,847	53.3
Drop out	6,745	9,106	35.0	6,194	8,041	29.8

Value of living houses of comparison households increased at a faster rate (53%) than that of BRAC households (39%). Among different BRAC households this rate was lowest for Panel (84+) group (8% only). However, mean value of living and of all houses was still much higher for BRAC households than comparison households as was in 1993 (Table 4.15).

Table 4.16: Per capita floor space for living

Membership Category	1993	1996	% Change
Panel (36-47)	41.53	62.00	49.3
Panel (48-65)	39.90	57.02	42.9
Panel (66-83)	50.90	59.27	16.4
Panel (84 +)	81.29	81.64	0.4
All BRAC	51.57	64.65	25.4
Comparison	41.80	56.70	35.7
Drop out	51.95	68.48	31.8

Area of floor space per household member increased for both BRAC and comparison households, but the rate of increase was higher for the latter group though their per capita floor space was still smaller in 1996 (Table 4.16). Since value of their living houses was lower than that of each of BRAC membership category, it is clearly evident that their houses were built with low quality building materials.

Value of living houses was also found to depend on the employment status of the household head. This value was higher for households whose heads were self employed (Table B.21). Although this value increased for both the self and wage employed household heads, the rate of increase was greater when the household head was self-employed with comparatively new BRAC members doing better.

4.4.2 Water and sanitation: Almost all BRAC and comparison households used tube-well water for drinking (98% and 96% respectively) in 1996 (Table 4.17). This rate was 100% for the Panel (48-65). Only 91% of the Panel (84+) group households used tube-well water for drinking which was even lower than the comparison group. About 70% BRAC households washed cooking utensils with tube-well water. This rate was only 58% for comparison households. Panel (66-83) group households ranked highest (79%) among different BRAC households in using tube-well water for washing utensils but they did not do any better than dropout households (78%).

Table 4.17: Number of households using tube-well water for different purposes

Membership Category	Drinking		Washing utensils	
	1993	1996	1993	1996
Panel (36-47)	138 (97.9)	140 (99.3)	85 (60.3)	92 (65.2)
Panel (48-65)	37 (100.0)	37 (100.0)	20 (54.1)	24 (64.9)
Panel (66-83)	79 (98.8)	79 (98.8)	59 (73.8)	63 (78.8)
Panel (84 +)	57 (89.1)	60 (93.8)	44 (68.8)	46 (71.9)
All BRAC	311 (96.7)	316 (98.1)	208 (64.6)	225 (69.9)
Comparison	206 (92.4)	214 (96.4)	129 (57.8)	140 (63.6)
Drop out	135 (94.4)	137 (96.5)	103 (72.0)	111 (78.2)

Figures in parentheses indicate percentage.

In 1993 only 9% BRAC households used sanitary latrine which increased to 26% in 1996 (Table 4.18). Only 10% comparison households used sanitary latrine and the rate decreased slightly in the last three years. Among different BRAC households highest percentage from Panel (66-83) group used sanitary latrine (44%) in 1996 followed by Panel (48-65) group (27%).

Table 4.18: Number of households using sanitary latrine

Membership Category	Number of households	
	1993	1996
Panel (36-47)	11 (7.8)	27 (19.2)
Panel (48-65)	3 (8.1)	10 (27.0)
Panel (66-83)	12 (15.0)	35 (43.8)
Panel (84 +)	4 (6.3)	12 (18.8)
All BRAC	30 (9.3)	84 (26.1)
Comparison	23 (10.3)	20 (9.0)
Drop out	12 (8.4)	20 (14.0)

Figures in parentheses indicate percentage.

Comparing Tables 4.17 and 4.18 we see that among all membership categories Panel (66-83) group were in the best and comparison group in the worst position both in terms of availing hygienic water and sanitation facilities.

4.5 Relative Performances of Different Membership Categories

The performances of different membership categories have been measured by regression analysis shown in Tables B.22-B.27. The dependent variable here is change in value of productive assets in last three years. This has been chosen instead of the value of total assets because we have very few common items of non-productive assets in both questionnaires. OLS regressions have been estimated for each of the membership categories. The independent variables used here are amount of BRAC loan received till 1993, amount of loan from non-institutional sources, household landholding, education, age, sex and occupational status of the household head, economic dependency ratio, BRAC training, and infrastructural condition such as distance of the village from pucca road and whether the village has any *bazaar*. Total amount of loan has been decomposed into BRAC loan and loan from other sources as comparison households do not have the access in the former type of loan.

Regression results show that for BRAC households change in asset accumulation was negatively related to initial asset holding in 1993. The lower the amount of asset holding in 1993 the higher was the rate of increase of asset accumulation. BRAC inputs – loan and training --did not have any significant impact on members' asset accumulation behaviour. BRAC members' involvement in IGA had significant negative effect. This is because a women usually involves in IGA only in absence of adult male income earner in the family. This type of household is generally very poor and any increased income goes to household consumption rather than productive asset accumulation. The same argument applies to BRAC training. Results also show that BRAC members who had in 1993 higher

level of non-institutional loan experienced a decline in their productive asset but asset holding increased, though not significantly, for those who increased their borrowing from such sources between 1993 and 1996. This shows that BRAC loan was inadequate for productive investment. Households with head employed in farm sector rather than in non-farm sector were more successful, though not significantly, in accumulating productive assets. Education level of the household head was also an important determining factor. Households with literate head accumulated more assets than those with illiterate head but their higher level education did not provide any benefit. Village level infrastructure was one of the most important determining factors for productive asset accumulation.

For comparison households, apart from initial asset holding in 1993, initial landholding was the only significant factor contributing to productive asset accumulation. This was also true for dropout members but these group benefited from BRAC loan.

Productive asset accumulation behaviour of BRAC members of different membership length revealed that newer BRAC members did not benefit from BRAC loan as the older ones did. As a result, impact of BRAC loan in the aggregate level was not found to be important. Pre-BRAC landholding is important for asset accumulation of older members. For new members age and employment status of the household head and village level infrastructure is important.

One of the most widely used models to handle panel data is the Fixed Effects Model (this model is also termed Least Square Dummy Variable Model) especially when there are large number of cross-sectional units and only a few periods (Greene, 1990 and Baltagi, 1995). This model focuses on cross-sectional variation or heterogeneity and compares the performances of different cross-sectional units over time. The model assumes that differences across units can be captured in differences in the constant term.

The result of the model is:

$$\ln TPAT = 5.79 d_1^{***} + 5.51 d_2^{***} + 5.41 d_3^{***} + 0.003 TAMLD^{***} + 0.57 OCPN^{***} + 0.25 SEX^{***} + 0.02 AGE^{**} + 0.15 EDUC_2 + 0.03 EDUC_3 + 0.37 EDUC_4 - 0.0 IGA - 0.000 ECDR - 0.000 AMCLN - 0.07 NPUC^{***} - 0.008 BAZR$$

$$R^2 = 0.947, \text{ Adjusted } R^2 = 0.946, F = 1244.43$$

(* t-value significant at 10% level, ** t-value significant at 5% level, *** t-value highly significant)

The estimated variables are the following.

$\ln TPAT$ = log of value of non-land productive assets, d_1 = dummy for BRAC, d_2 = dummy for dropout members, d_3 = dummy for comparison, $AMLCN$ =

Amount of non-institutional cash loan, TAMLD= Total amount of household landholding, OCPN= Occupation of the household head, IGA= Involvement in IGA, SEX= Sex of the household head, AGE= Age of the household head, EDUC_2=Education level of the household head (class I-V), EDUC_3= Education level of the household head (class VI-X), EDUC_4= Education level of the household head (class XI+), ECDR= Economic dependency ratio, BAZR= Whether any *bazaar* in the village, NPUC= Distance of the village from pucca road.

Result of the model tested shows that BRAC households demonstrated better performances than comparison and dropout households in terms of productive asset accumulation. Dropout households, though they left BRAC, possessed more productive assets than comparison households.

4.6 Conclusion

Value of both productive and non-productive assets of BRAC households increased but at a slower rate than that of comparison households. But absolute amount of change was higher for the former category.

Members of all categories failed to generate enough savings for investment. Total amount of savings was higher for BRAC households than any other category. But their total amount of savings mostly consisted of BRAC savings. They did no better than other categories in terms of generating savings elsewhere outside BRAC.

Since comparison and dropout households do not have access to financial institutions, they increased borrowing from non-institutional sources. BRAC households also borrowed but for productive investment purposes as BRAC loan was inadequate for them. However, this loan is larger for households of all membership categories whose heads are self employed.

BRAC households had better housing structure. Value of their living houses was higher compared to other categories. They also had better sanitation facilities.

An increasing trend was found for BRAC household heads to switch their occupation to farm sector from non-farm sector. Loan use also increased in the farm sector. Although return from investment in these two sectors was not possible to calculate in our study, switch to farm sector indicates limited scope of the rural non-farm sector. Development of non-farm sector requires huge public sector investment and its absence leads to diversion of investment in other sectors even if profit margin is lower there. This argument is reinforced from the findings that village level infrastructure is one of the most important variables responsible for productive investment. Public investment to develop rural infrastructure is required for the well-functioning of the rural development programme.

CHAPTER FIVE: MEASUREMENT OF POVERTY AND ITS CORRELATES

Shantana R Halder

5.1. Introduction

Poverty is a multi-dimensional concept covering human, social, economic and psychological aspects¹⁵. BRAC looks poverty in a holistic sense. Along with income and employment generation it tries to create an 'enabling environment' in which the poor can participate in their own development (Chowdhury and Alam, 1997). This chapter deals with poverty, its measurement and the correlates. In this analysis, however, focus has been confined mainly to the economic aspects of poverty based on the household expenditure which includes expenditure on i) food and ii) durable and non-durable non-food goods and services.

4.1.1 The data set: Data on food and non-food expenditure were collected separately through a structured questionnaire. Food consumption expenditure data were collected twice - once in October 1996 and again in February - March 1997 to minimize the error on seasonal fluctuation in terms of amount of food consumed and consumer price variation. Each household was visited by the enumerators daily for three consecutive days in each of the two time periods. They collected data applying the 24 hour recall method. The questionnaire included information on number of daily consumers below ten and above years of age, their sex, the total food intake of the household and its cost, sources of expenditure, and family members' contribution to household expenditure. The expenditure on food and its quantity were obtained on a total of 150 separate food items including drinks, tobacco and meals taken outside.

Expenditure on durable, non-durable, and other non-food items were recorded separately. Data on non-durable goods were also collected twice - once in the peak and another in the lean season. It includes firewood, kerosene, gas, daily expenses associated with personal care and main-

¹⁵For more details on the concept of poverty please see Chapter 2, section 2.10.

enance of hygiene. It covers a total of 50 items. The reference period for these items was one month. Only those goods which were consumed within this reference period were recorded here. Data on clothing, footwear, consumer durables and non-durables, housing, medical care, recreation and entertainment, education, taxes, interest, ceremonial expenditure, laundry and cleaning, gifts and donations, other personal expenditures, payments to servant in cash and kind, litigation, medical expenses and infants' requirements, maintenance and repair costs, and others covering 125 items were collected once in October 1996, with a reference period of one year preceding the interview. The reference periods used in the survey are one day, one month and one year based on the probable life time of the specific item.

5.2 Measurement of Poverty and Poverty Line

Poverty, in a broader sense of the term, is the form of economic, social, and psychological deprivation occurring among people lacking sufficient ownership, control or access to resources to maintain or provide individual, or collective minimum levels of living (Hye, 1996). In other words, it is the inability to provide minimum nutrition, health, education, shelter, security, leisure, and other aspects of life. Poverty with its narrower definition is measured by the percentage of population having income below the minimum expenditure required for meeting the basic needs.

There are mainly two different approaches, economic and non-economic to understand the extent of poverty i.e., the proportion of people deemed to be below the poverty line and its correlates (Khandker, et al., 1995). The economic approach measures poverty through income, consumption or nutritional measurement. The non-economic approach emphasizes more on health environment, working conditions, freedom of speech, religion, leisure, etc. This study mainly follows the economic approach of poverty measurement.

Researchers measuring poverty by following economic approach use income or expenditure data. Questions are raised whether income or expenditure is the appropriate measure of poverty. Income is considered to be a poor measure because it may be unstable at times, for it may be used to repay debts or to invest, in the hope of earning a higher income in the future. Incomes tend to fluctuate seasonally in rural underdeveloped regions because of dependence on agriculture. There are also problems in measuring income, particularly in agricultural sectors. Consumption is more stable and may be a better indicator of poverty (Khandker and Chowdhury, 1995).

Poverty line expenditure is determined here by following the cost of basic needs method. This method takes a normative consumption bundle of food items recommended for the average Bangladeshi population that gives a per capita intake of 2,112 kilo calories and 58 grams of protein needed to maintain a healthy productive life (Muqtada, 1986). The minimum required

expenditure on these food items is estimated by averaging prices of specific items of 25 selected sample areas, information on which were collected twice covering both lean and peak seasons (Table C.1). An additional 35% allowance was made for expenditure on non food items. There is no uniformity regarding percentage added for non food goods in different studies on poverty carried out in Bangladesh due to lack of reliable data on non food expenditure. It varies from 25% to 40% (Ravallion and Sen, 1996). Since we collected data on non food expenditure which includes all major items we used the actual percentage of non food to total expenditure as a constant markup for non food allowance which was around 35%.

The upper poverty line is estimated at Tk. 6,896 per person per annum and the lower poverty line expenditure is estimated at 76.7% of the upper poverty line which is Tk. 5,289. The data set shows that those who are consuming 1,800 kcal. or less are spending 23.3% less than the upper poverty line expenditure. Our result does not differ much from that of the Bangladesh Bureau of Statistics which also had found that the extremely poor households spend 27% less than the poverty line expenditure (BBS, 1995). The consumption bundle used in our study to derive the poverty line also includes among others items such as milk, meat and fish which give higher amount of protein, vitamins and micronutrients. But these are the items which are quite expensive and are consumed more by relatively higher income group. Tables C.7 and C.8 provide evidence that ratio of expenditure on fish, meat and milk to total food expenditure is significantly higher for non poor households. Ratio of cereal to total food expenditure is significantly higher for the poorest households. Cereal intake is the cheapest way of consuming more calorie. That is why the poor people are consuming more cereal which gives relatively higher calorie but less minerals and other micronutrients. The differences in consumption pattern of different types of household indicate the difference in the level of expenditure.

5.2.1 Incidence of poverty, poverty gap, and the severity of poverty:

All the sample households were divided into three groups by their level of poverty. Households having expenditure above the upper poverty line expenditure are termed as non-poor households, those households having expenditure in between two poverty lines are termed as moderate poor and households living below the lower poverty line are extremely poor households. Table C.2 gives the incidence of moderate and extreme poverty, poverty gap and FGT index¹⁶ by status of programme participants. Estimates show that 52.1% of BRAC and 68.6% of comparison households live below the upper poverty line (Figure 5.1). The incidence is 32% higher for comparison households. Percentage of households living in extreme poverty is 27% for BRAC and 37.2% for comparison households. Percentage of households living in moderate poverty is 25.1% for BRAC and 31.4% for comparison households.

¹⁶See Chapter 2, section 2.10 for a discussion on the concept of poverty and its measurement issues.

Table C.2 also shows results of poverty gap and severity of poverty indices among groups. Poverty gap indicates the depth of poverty which is the mean distance below the poverty line as a proportion of that line (where the mean is formed over the entire population counting the non poor as having zero poverty gap). The result indicates that poverty gap among BRAC member households was 13.1%. For comparison households it was 18.5% which was 41% higher than BRAC. Value of FGT index for BRAC and comparison households were 4.5% and 6.4% respectively, the latter was 41% higher for comparison households than BRAC which indicate that comparison households' poverty status is 41% more severe than that for BRAC households (Figure 5.2). In other words inequality among the comparison poor was higher than that of BRAC poor households.

Fig 5.1: Distribution of households by poverty status and member category

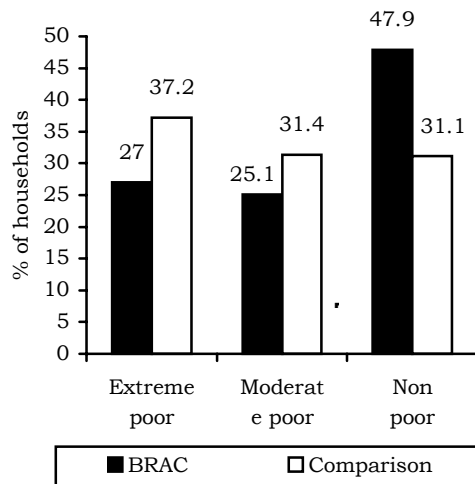


Fig 5.2: Poverty gap and FGT index ratios of BRAC and comparison households

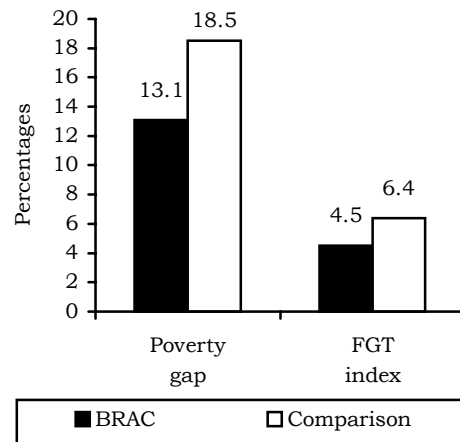


Figure 5.3 and Table C.2 show that among BRAC different membership length groups percent of households below upper poverty line (moderate and extreme poor together) was highest for 1-11 months group (57.2%) and lowest for 48+ months group (47.5%). Percentage of extremely poor households is also highest for the new members (31.9%) and lowest for oldest members (21.7%). Results do not show major differences in terms of percentage of moderate poor households for different membership length groups. Moreover, percentage of moderate poor households is marginally higher for 48+ months group than that for 12-47 months group. It implies that with increasing membership length incidence of extreme poverty reduces but no perceptible change has been noticed in moderate poverty. But results on non poor shows that percent of non poor households increases with increasing membership length. It is likely that a group of households who were in extreme poverty at the time of joining BRAC shifted

to the moderate poverty group. The similar proportion of moderate poor households also shifted to non poor group. That is why change in the level of moderate poverty is not visible.

However, percentage of non-poor households in 48+ months group was 52.5%. For 1-11 months group it was only 42.8%. It is evidenced from discussion in Chapter 3 that the 1-11 months group's initial endowment status before joining was higher compared to others. Apart from this, percent of non-poor households within 48+ months group was 9.7% higher. It is likely that with increasing membership length (the latter is highly correlated with other BRAC inputs) nearly 10% poor households shifted to the non-poor group, although analysis of cross sectional data does not allow to draw any such firm conclusion.

Figure 5.4. shows results of poverty gap and FGT indices of different BRAC membership length groups. The poverty gap index for 1-11 months and 48+ months groups were 15.3% and 11.0% respectively , the latter was 28% lower. Results of FGT index is also consistent with the results of poverty gap for different membership length groups. It implies that with increasing membership length the inequality among the poor is gradually decreasing.

Fig 5.3: Distribution of BRAC member households by poverty status and membership length

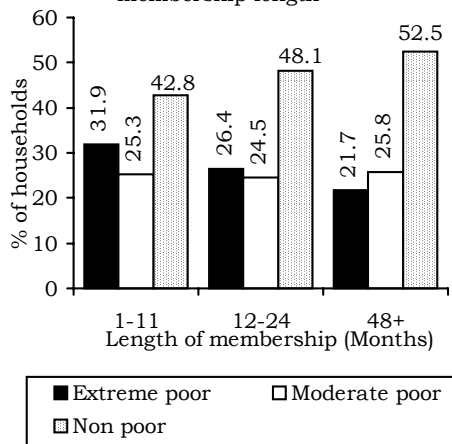
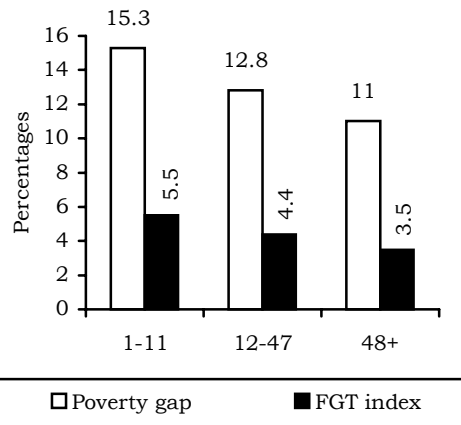


Fig 5.4: Poverty gap and FGT index ratios by BRAC membership length category

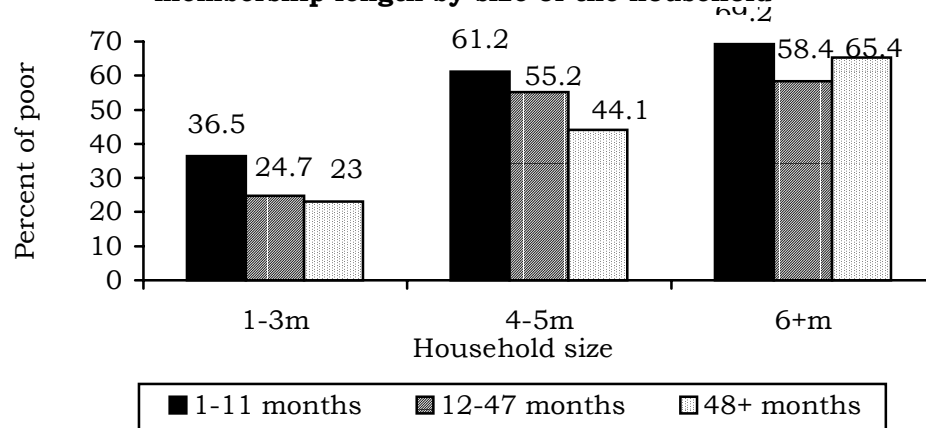


5.2.2 Poverty correlates

5.2.2.1 Household size and poverty: The incidence of both types of poverty increases with an increase in the number of members in the household. A similar trend is observed among both BRAC and comparison households (Table C.3). Poverty gap and FGT index also rise with an increase in the number of members in the household. But for BRAC the gap is significantly less than that for comparison households.

Among BRAC households results show that for households with household size up to 5 members poverty reduces with increasing membership length (Figure 5.5 and Table C.4). But for households with household size of 6 and above members there is no consistent relationship observed between length of membership and reduction in poverty. It implies that BRAC intervention was more effective for small and medium size households in terms of reduction of poverty.

Figure 5.5. Percentage of BRAC poor households of different membership length by size of the household



5.2.2.2 Gender and poverty: Considering expenditure on food and non food items, proportion of poor BRAC member households (moderate and extreme both) is higher within male headed households than the female headed ones. The poverty gap and FGT indices also show similar trend (Table C.3). However, they own more assets, savings and have a higher level of household education than the female headed ones. Their size of household is also two times larger. But proportion of BRAC members directly involved in any IGA and their average annual income is significantly higher for female headed ones (Table C.5). It implies that members from the female headed households who came from relatively poorer households achieved better results in terms of reducing the incidence of poverty due to their direct involvement in any IGA. For comparison households all poor female headed households are extremely poor. Results show that poverty gap and FGT indices are higher for female headed households of the comparison group.

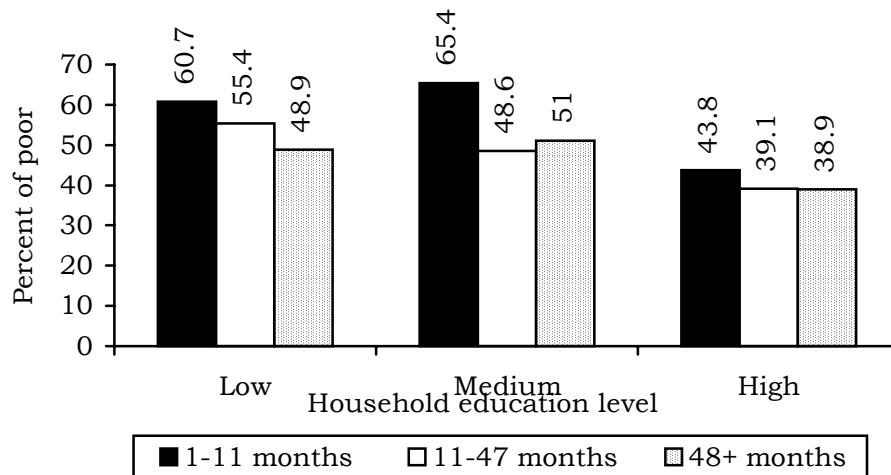
The incidence of extreme poverty for BRAC members who are directly involved in IGAs is lower (Table C.3). However, their moderate poverty is marginally higher. The FGT index also shows their lower intensity of poverty. Mean differences of well-being status of these two groups of BRAC member households are presented in Table C.6 which show that those who are directly involved in any IGA, their condition is worse than the others in terms of landholding (pre-BRAC and present) and net-worth. But due to

their involvement in IGAs household dependency (both demographic and economic) has reduced and per capita calorie consumption has significantly increased. This result directly indicates that BRAC covers those females who need more help to change their well-being status.

5.2.2.3 Education and poverty: There is a strong correlation between education and poverty. The incidences of moderate and extreme poverty are highest among households with low level of education and lowest among households with the highest level of education (Table C.3). Proportion of households below poverty line is gradually reducing with improvement in the level of education. There is no consistent trend in the incidence of moderate and extreme poverty separately with improvement in the level of education. The poverty gap is lowest for households with high education level for both BRAC and comparison groups. Although poverty gap and FGT indices are higher for all education groups of comparison households than BRAC the depth and severity of poverty goes down as the level of household education improves. This result is consistent with the relationship of household income and education level.

Among BRAC households the incidence of poverty reduces with increasing membership length for households with low level of education (Figure 5.6 and Table C.7). Similar result is also found for households with high level of education. But in case of households with medium level of education the incidence of poverty is little bit higher for 48+ months group than that of the 12-47 months group.

Fig. 5.6: Percentage of BRAC poor households of different membership length groups by their household education level



5.2.2.4 Poverty and occupation of the household head: Table C.3 describes the incidence of poverty and its correlates. Poverty and occupation of the household head are highly correlated. For both BRAC and comparison

households the incidence of extreme poverty is highest among the wage employment group. The poverty gap and FGT indices are also highest among the wage employment group. The incidence of moderate poverty of BRAC is highest for self employment group. For comparison group this proportion is highest among service group households. Percentage of households below moderate poverty is lowest among service group for BRAC and ‘miscellaneous’ group for comparison households. The differences in poverty gap between BRAC and comparison groups is highest among wage employment and lowest among self employment group. These results indicate that the inequality in income among the poor households are more for wage employment and less for self employment group. The mean differences in poverty gap and FGT indices between BRAC and comparison households is highest for the wage employment group.

Among BRAC households incidence of poverty reduces with increasing membership length for all employment groups except the wage employed (Figure 5.7 and Table C.8). For the wage employed group percentage of poor households is higher in 48+ months group than that in 12-47 months group. Thus the fall in percentage could not be sustained for long with increase in membership length for the wage employed group.

Figure 5.7: Percentage of BRAC poor households of different membership length groups by the employment status of the household head



5.2.2.5 Age of the household head and poverty: Proportion of households living below the poverty line increases with increasing age of the household head up to 45 years then it starts to go down (Table C.3). Poverty gap and FGT index also show similar trend. This is true both for BRAC and comparison households. Actually this result demonstrates effect of life cycle factors.

5.2.2.6. Landholding and poverty: Comparison between BRAC and comparison households shows that incidence of poverty is higher for comparison households of all landholding categories. Extreme poverty for BRAC is

mostly prevalent among households with less than 50 decimals of land (Table C.3). For comparison group percentages of households living in extreme poverty is highest among the landless (46.7%). Proportion of households living below the poverty line (upper and lower both) is higher among households with less than 50 decimals of land. The incidence of extreme and moderate poverty is substantially less among households with more than 50 decimals of land. With the change in landholding the poverty status is also changing. That is why this indicator is often used as a proxy for poverty. The positive relationship between poverty and amount of landholding to some extent reflects the actual poverty situation in our social and economic life.

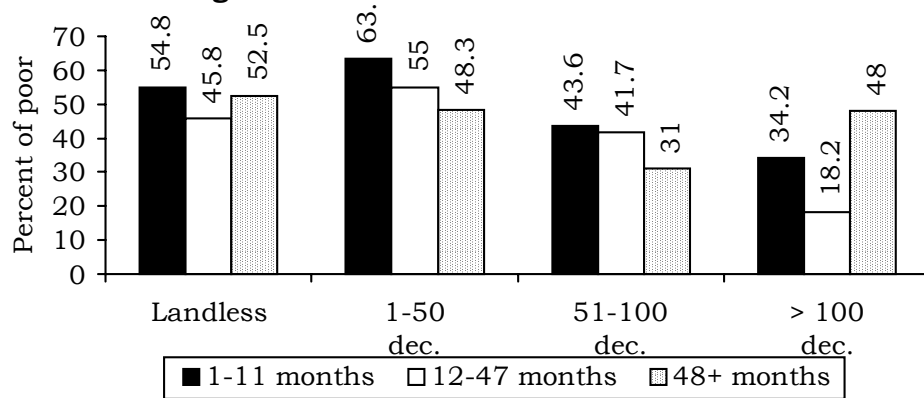
However, it is worth mentioning here that incidence of poverty among the absolute landless households was lower than the households with 1-50 decimals of land for both BRAC and comparison households. But the landless households owned significantly less non-land assets, savings and net-worth (Table A.35). Due to their higher involvement in labour intensive activities which is explained by the occupational status of the household head, the requirements of food also increases which contributed to their relatively higher food and non-food expenditure. Since we use expenditure for measurement of poverty, it is also reflected in their lower poverty status. This result is consistent with the results of the household expenditure survey of BBS (BBS, 1997).

Among BRAC member households of different membership length incidence of poverty decreases with increasing membership length for households who owned 1-100 decimals of land before joining BRAC (Figure 5.8 and Table C.9). Among the absolute landless and those who owned above 100 decimals of land percentage of poor households was higher for 48+ months group than the 12-47 months group. This result is consistent with the findings presented in section 3.14 which implies that the absolute landless and those who owned above 100 decimals of land benefited less from BRAC intervention.

5.2.2.7 Credit and poverty: One goal of the micro-credit programme is to alleviate poverty of the rural poor. In Chapter 3 of this study it is found that those who are not members of BRAC also received substantial amount of loan from different institutions (Table A.5). But the average amount is higher for BRAC members due to BRAC contribution. We also find that a considerable number of households (14.7% for BRAC and 65.0% for comparison) received no loan during the last three years. It is assumed that there should be some differences among those who did not receive any loan, and those who received loan of various amount. It is also assumed that there should be some differences between BRAC and comparison households in each loan category due to the fact that BRAC is not only offering credit to its participants, but also supports its members by providing other production inputs such as skill training and other technical assistance. These should positively contribute to the economic performance of the participant households. Results presented in Table C.3 show that for

all loan categories except the 7,501-15,000 one percentage of extreme and moderate poor households are relatively higher for comparison than that of BRAC. The poverty gap and FGT indices are also higher for the comparison group. The BRAC households which did not receive any loan from any institution are also significantly better off than the comparison households with no loan. This result indicates that BRAC membership in general irrespective of loan size made positive impact in the well-being status of the household.

Figure 5.8: Percentage of BRAC poor households of different membership length by different pre-BRAC landholding categories



If we consider only cumulative BRAC loan then we find that the higher the amount of loan, the lower is the poverty incidence (Figure 5.9). Poverty gap and FGT indices also show the direct impact of BRAC programme in reducing the depth and severity of poverty among the poor households with increasing amount of loan (Figure 5.10).

Fig 5.9: Distribution of BRAC member HHs by level of poverty and loan category

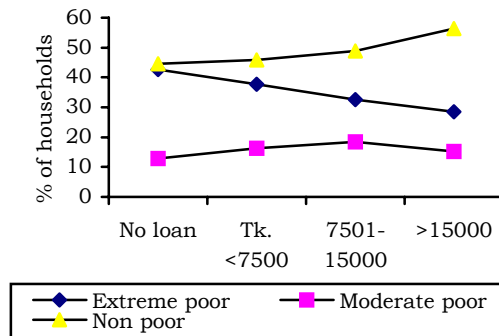
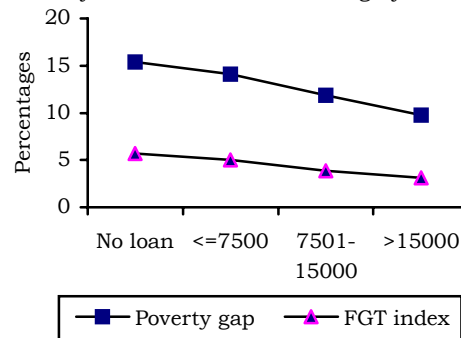


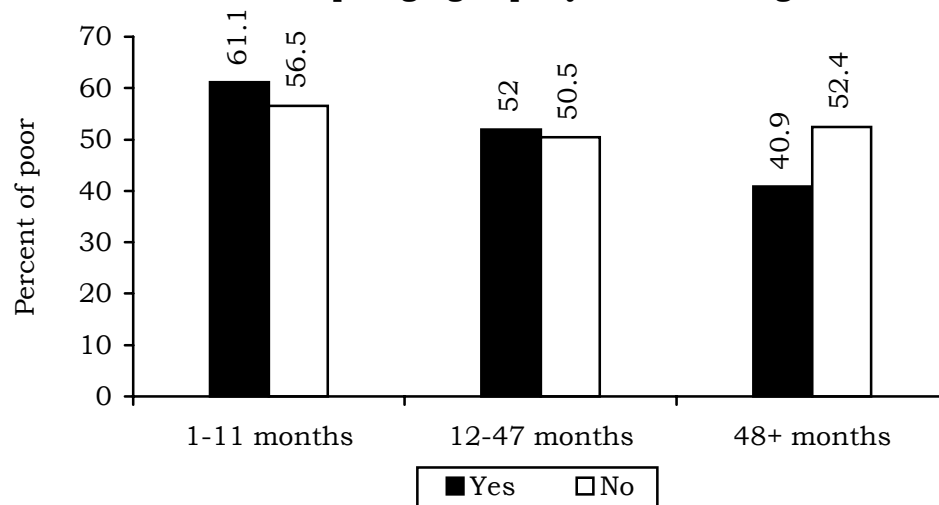
Fig 5.10: Poverty gap and FGT index ratios by amount of Brac loan category



5.2.2.8 BRAC training and poverty: Among BRAC member households proportion of households living below poverty line is 5.5% higher for those

who did not receive any kind of BRAC training (Table C.3). It is because proportion of extremely poor households is significantly higher within the households with no BRAC training. The poverty gap and FGT indices are also higher for them. However, members who did not receive any kind of training generally belong to households which are relatively better off in terms of owning more assets and net-worth. Members who received training are, nevertheless, more enthusiastic and have entrepreneurial skill which is also explained by their higher position in VO management committee, higher involvement in IGA and higher income from such IGA even though they were found to have owned relatively less assets and net-worth (Table C.10). Results of different membership length groups show that poverty incidence reduces with an increase in membership length for households with BRAC training (Figure 5.11 and Table C.11). For households without BRAC training results do not show any consistent trend. Even the incidence of poverty for 48+ months group is higher than that of the 12-47 months group. It implies that members with BRAC training comes from relatively less well-off households. BRAC inputs made positive impact in improving their economic condition, but still now they own less assets.

Figure 5.11: Percentage of poor BRAC households of different membership lengthgroups by BRAC training



5.2.2.9 Expenditure pattern and poverty: The mean differences in expenditure pattern of different poverty groups between BRAC and comparison households are presented in Table C.12. Among the extreme poor households BRAC members are consuming significantly more cereal than the comparison households. Cereal consumption increases with increasing income specially when income is too low and demand for food does not reach the satisfaction level, because this may be a cheaper way of consuming more calorie. With cereal BRAC members are also consuming relatively more vegetables, fish, meat and milk items which are rich in nutrients. Average

calorie consumption of BRAC members is also higher than that for comparison group. BRAC and comparison households are spending almost the same amount for food and non food consumption, but BRAC member households are showing better performance in terms of quality food intake.

Among moderate poor households BRAC members perform better in terms of per capita annual food and non food expenditures and calorie consumption. BRAC members spent proportionately less for food than non food compared to non BRAC households as income increases. But average proportionate expenditure on food is still higher for both BRAC and comparison households.

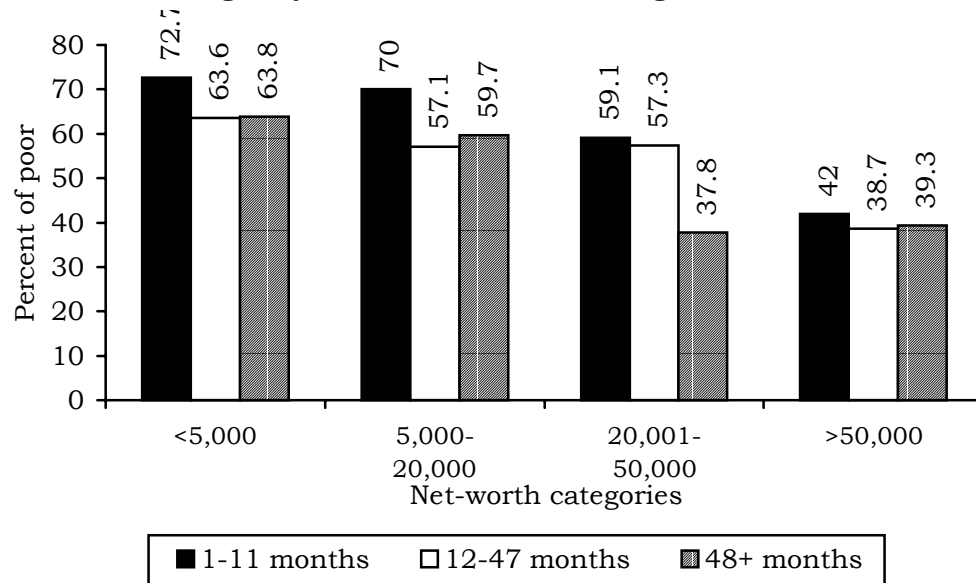
Among households who are above poverty line BRAC members are spending proportionately less for food significantly than the comparison households though this percentage is still high. Proportion of amount spent for cereal to total expenditure is relatively low for both BRAC and comparison which is expected with increase in income. The percentage is significantly lower for BRAC than that for comparison group. Positive results of all other variables included for this analysis indicate that BRAC member households are better off than the comparison group households with similar poverty status. It may also be deduced from this analysis that with reduction in the incidence of poverty, the households are opting for better quality food.

Among BRAC member households of different poverty groups, a comparison between members with membership length 48+ months and 12-47 months shows that the expenditure pattern does not change significantly except for vegetable consumption with increasing membership length. Results of some of the indicators even show negative performance, for example, percentage of total food expenditure on fish and meat reduced as membership length increased (Table C.13).

5.2.2.10 Net-worth and poverty: There is a direct positive relationship between increased amount of net-worth and poverty reduction performance. As shown in Table C.3 incidence of poverty goes down with increasing net-worth of a household. Poverty gap and FGT indices also show similar results. Differences in mean of BRAC and comparison households show that BRAC members' performance is better than that for comparison group in terms of reduction in poverty.

Among BRAC households of different net-worth categories incidence of poverty reduces with increasing membership length only for households with Tk. 20,000 and above as net-worth (Figure 5.12 and Table C.14). For those who owned net-worth less or equal to Tk 20,000 the incidence of poverty is higher for 48+ months group compared to 12-47 months group. It implies that BRAC intervention made more significant positive impact for the well-off households.

Figure 5.12 : Percent of poor BRAC households of different membership length by different net-worth categories



5.2.2.11 Poverty and empowerment: Chapters 7 and 8 discuss linkages between selected aspects of empowerment and BRAC RDP interventions. Here we try to link up some aspects of empowerment, which are measurable, with poverty. It is hypothesized that among BRAC members women of non-poor households are more empowered than women of poor ones. Since data set do not have information on empowerment related issues for comparison groups, we face some limitations to make comparison between BRAC and non-BRAC samples.

Table C.15 shows regression results indicating the linkages between empowerment and poverty. The dependent variable here is log of per capita monthly expenditure. A total of 23 independent variables are used. Seven of them, viz., level of household education, sex and age of the household head, age squared, cumulative amount of BRAC loan, demographic dependency ratio, and level of vibrancy are taken as poverty correlates and used as control variables. Sixteen dummy variables are considered as empowerment correlates. They are: sample member's ownership of living houses, land, cow, poultry, jewellery¹⁷, any type of savings, control over some assets like land, cow, poultry and jewellery¹⁸. On women's mobility only one indicator is chosen here which is presence in nearest bazaar by herself during the last

¹⁷ A person may claim ownership when he/she has some access to and management rights over resources.

¹⁸ Control over assets is defined as the ability to sell assets without the permission of husbands or other male family members.

three months.¹⁹ Participant's involvement in any income generating activities and women's contribution to food and non food expenditure are also taken as important empowerment indicators which are correlated with incidence of poverty.

Results of the regression analysis found some relationship between poverty and empowerment. Along with age and sex of the household head, household education level, amount of BRAC loan and economic vibrancy level and ownership of land irrespective of control over it and control over own jewellery made significant positive contribution to the household well-being. Female members who own any kind of savings, houses and those who are directly involved in any kind of IGA are those who are significantly poorer than the others. All other variables except ownership of goat and poultry and women's mobility contribute to the household expenditure. The well-being status of those who own goat or poultry and those who are more mobile is lower than others who do not own any of those mentioned above or who are not mobile. This imply that the poorer own goats or poultry and are more mobile than the relatively less poor.

The overall results show somewhat negative relationship between poverty reduction and empowerment. This is more or less consistent with the existing socio-cultural norms of our rural society.

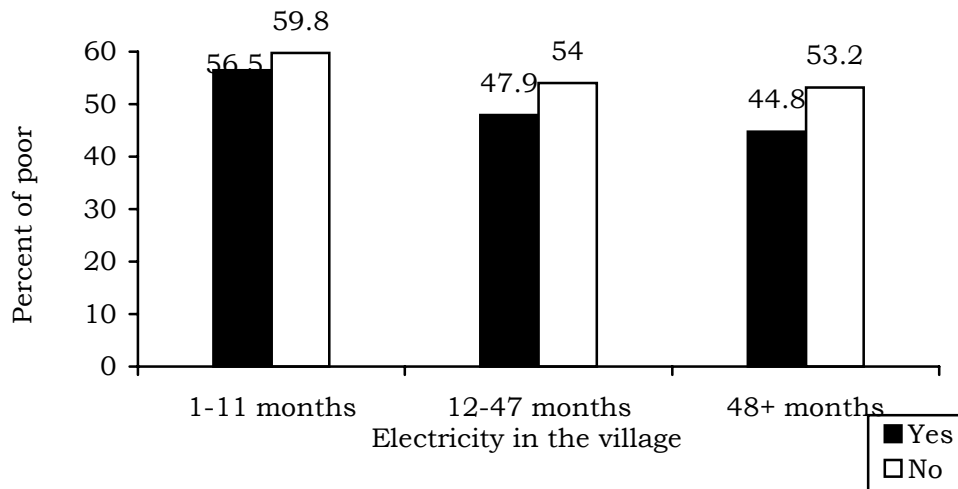
5.2.2.12 Electricity in the village and poverty: The role of infrastructure in the incidence of poverty is assessed by incorporating two village level indicators namely availability of electricity in the village and economic vibrancy. The incidence of moderate and extreme poverty is less in villages connected with electricity. Villages with electricity are well connected with the network of transport, all weather road, and with the nearest cities. People living in these villages are more updated on the latest information related to current prices of their products, employment opportunities and so on. These factors provide them with extra advantage in different aspects of life than those who live in the villages with no electricity. The poverty gap of the bottom half of the population is also less in developed villages compared to the backward ones in terms of access to electricity (Table C.3).

Among BRAC households there is a positive trend in reduction of poverty with increasing membership length for all villages irrespective of whether it is connected with electricity or not. But incidence of poverty reduces significantly with increasing membership length only for households living in the villages connected with electricity (Figure 5.13 and Table C.16). It implies that BRAC inputs together with higher village level structure contributed in reducing poverty.

¹⁹ In rural Bangladesh it is not socially acceptable for women to go alone to the bazaar place. It is assumed that involvement with BRAC makes them more conscious about their rights. Logic behind taking this specific indicator is that if the women is aware of her rights she can go alone to the nearest bazaar any time for any reason.

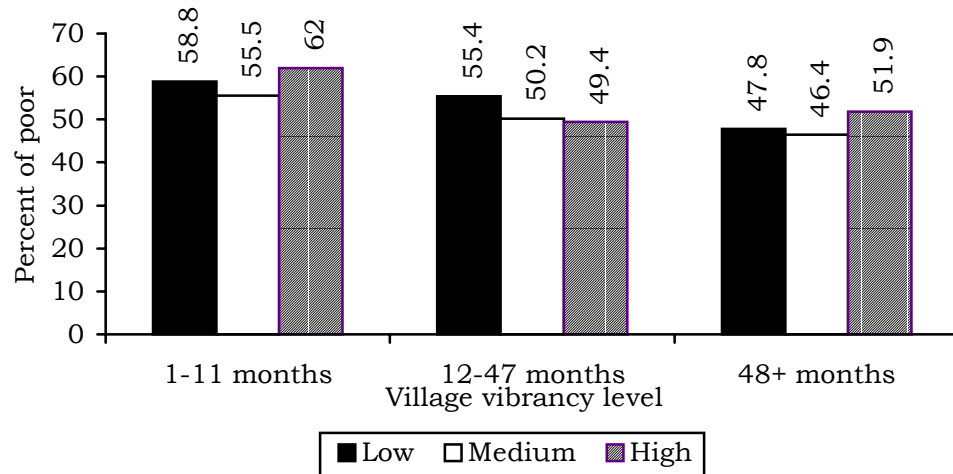
5.2.2.13 Vibrancy and poverty: For BRAC member households the incidence of poverty (extreme and moderate together) is lowest in the medium vibrant areas (Table C.3). In the high vibrant areas the incidence is marginally lower than the incidence of poverty in the low vibrant areas but higher than that in the medium vibrant areas. For comparison households the incidence is highest in low vibrant areas and lowest in the high vibrant areas. The poverty gap and the FGT index for BRAC member households are highest in the low vibrant areas but lowest in the medium vibrant areas, not in the high vibrant areas. These results are similar to the results of incidence of poverty among BRAC members. The poverty gap and FGT index for comparison group are lowest in the high vibrant areas but highest in the medium vibrant areas not in the low vibrant areas. Thus the relationship between level of vibrancy and poverty incidence, gap and FGT index does not show any consistent result.

Figure 5.13. Percentage of poor BRAC households of different membership length by electricity in the village



Among BRAC member households poverty incidence reduces with increasing membership length in low and medium vibrant areas. For high vibrant areas poverty is relatively higher in 48+ months group compared to that of in 12-47 months group (Figure 5.14 and Table C.17). It is evidenced from section 3.2.1.1 that members from high vibrant areas received less BRAC loan which may have some influence on this result.

Figure 5.14: Percentage of poor BRAC households of different membership length by level of village vibrancy



5.2.2.14 Poverty and material well-being: Before measuring poverty one needs to identify the level of well-being at the individual level. Chapter 3 did comparative analysis on material well-being of BRAC and comparison households by considering a large array of variables. In this section twenty key indicators were used to assess the impact of RDP intervention on poverty reduction.

Tables C.18-C.19 depict comparative pictures for different poverty groups of BRAC and comparison households and also for different membership age groups of BRAC households in terms of the mean differences in their well-being indicators. As shown in Table C.18 BRAC households among the poorest groups have significantly more non land assets and savings than those of comparison households. All of them live in relatively similar vibrant areas. BRAC households are more educated, and received significantly higher amount of loans. BRAC households with higher dependency ratio performed better in terms of owning more assets due to their higher loan amount and higher initial condition in terms of better educational level and employment status of the household head.

A comparison of BRAC and non-BRAC moderate poor households also shows that BRAC members own significantly more assets, savings and net-worth. Proportion of wage employment is significantly lower among BRAC members. With marginally higher dependency and loan, BRAC members perform better due to the higher proportion of female to total income earner and higher education level of BRAC members. These are also the variables which significantly contributed to the household expenditure. Other factors contributing significantly for all samples are age and sex of the household head, dependency, non land assets, amount of credit and vibrancy.

Among non poor households BRAC members' performances were better. BRAC members own significantly more land and savings. Their education level is also significantly higher. Relatively more BRAC member households came from self employed and less from wage employed group. They also own more assets and net worth.

Among BRAC member households of different poverty groups results do not show any significant differences between the oldest and the second oldest membership length group in terms of asset ownership. Proportion of female to total income earners significantly increased with increasing membership length for all poverty groups which is due to increasing involvement of BRAC members in any IGA. Significantly higher savings and inputs received by the oldest membership length group is explained by their greater membership length (Table C.19).

5.3 Determinants of Poverty Reduction Performance

Since expenditure is used in this study as a proxy for income, determinants of expenditure will explain determinants of household material well-being. Positive or negative contribution of any specific variable to expenditure has been taken as having positive or negative impact on reduction or increase in poverty level.

Number of multivariate regressions were run with the household level data to assess the relative contribution of different factors for explaining the variation in per capita expenditure. Results of these regression estimates are presented in Tables C.20-C.22 The dependent variable here is log of annual household expenditure. OLS regressions are estimated for different categories of households with respect to household landholding, employment status of the household head, poverty group, membership status, and for those who positively or negatively responded to the question on BRAC impact. The model is estimated in linear form so that the value of the parameters describes the marginal returns from the factors to expenditure. Sign in beta coefficient and value of *t* statistics explain how effectively (positive or negative) each variable contributed to the dependent variable. Value in beta coefficient of dummy variable explains the differences between those households included in the model and the others not included.

Regression results presented in Table C.20 show that BRAC members are significantly better off than the comparison group. Variables which significantly contributed to the household expenditure of both BRAC and comparison households are age and sex of the household head, education level of the household, land and non land assets, amount of institutional loan received during last three years, amount of savings and economic vibrancy.

For BRAC households along with age and sex of the household head, household education level, assets, savings and vibrancy, length of BRAC

membership which is correlated with other BRAC inputs also made significant positive impact on their present well-being status. Members who are directly involved in any IGA are significantly poorer than the other ones which is also mentioned in another section of this chapter.

For the wage employed group, sex and age of the household head, household education level, value of non land assets, amount of savings and also vibrancy made significant contribution to their economic well-being. BRAC members of this employed group are significantly better off than the comparison group. For self employment group except vibrancy all other factors mentioned above contributed significantly in reducing poverty. BRAC members of this employed group are significantly better off than non members. Length of BRAC membership made positive but not significant contribution for both wage and self employed group but the contribution is more positive for the self employed group (Table C.21)

For the landless households, sex of the household head, value of non land assets and vibrancy are the significant positive contributing factors in household expenditure. For households with less than 50 decimals of land along with all household level variables except demographic dependency and vibrancy, all contributed positively to their economic well-being. For households with above 100 decimals of land sex of the household head and household education level are the significant determinants of their level of expenditure.

Results of membership category as a dummy indicating the differences of BRAC and comparison households' well-being status show that BRAC members were better off than the comparison ones irrespective of their landholding status. But BRAC members from 1-50 decimals landholding group were significantly better off than comparison households of similar landholding group. Length of BRAC membership made positive impact for those who own land. The impact was higher for 1-50 decimals landholding group. For the absolute landless the impact of BRAC membership category was negative (Table C.22)

5.4 Incidence of Poverty - Perception of the Respondents

The data set has information on the perception of the respondents regarding their economic well-being. The respondents were asked the question whether they feel that they experienced any food deficit (mainly cereal) during the year preceding the interview. Four types of answers were recorded namely: 1) chronic deficit, 2) occasionally deficit, 3) no deficit, and 4) surplus. The reported answers of the respondents are summarized and presented in Table C.23. Only a few households (four percent of BRAC and nine percent of comparison) reported that they faced chronic deficit while more than one third (35% of BRAC and 42% of comparison) experienced it occasionally. The non-BRAC households faced significantly more deficit than BRAC households. Forty six percent of BRAC and 45% of comparison group

respondents were in break-even position i.e. they did not have any surplus but at the same time did not face any deficit during the preceding year. Around 15% of BRAC and 4% of comparison households had food stock any time during the previous year.

The perception on material well-being based on their food deficit status shows (Table C.23) that BRAC members perform significantly better than non-BRAC. They faced significantly less food deficit and experienced significantly more surplus position. Among BRAC members percentage of households facing chronic deficit and those who had surplus was higher among the oldest membership group. Percentage of households facing occasional deficit was less among the oldest group (Table C.24).

There is a linkage between the occupation of the household head and their perception on own well-being (Table C.25). Proportion of households facing deficit was significantly higher for all employment groups of comparison households. Percentage of households in the surplus position was significantly higher among BRAC member households of all employment groups. Among the employment groups the wage employment group faced significantly more food deficit than the rest of the sample households. Self employment group faced less deficit than the others. It may be concluded that graduation from wage to self employment which is the major concern of RDP is a step forward in the alleviation of poverty.

With respect to landholding category the landless households faced more deficit than the others. Households with more than 100 decimals of land also faced relatively more deficit (Table C.26). Among BRAC member households under different BRAC loan amount categories percentage of households facing any type of deficit was highest among those who did not receive any loan. This proportion decreased with an increase in the loan amount. Percentage of households with surplus food was highest among the highest loan category. These results indicate some positive relationship between amount of loan and reduction in food deficit (Table C.27).

5.4.1 Incidence of poverty -- perception vs. measurement: The poverty incidence of the households estimated by using the CBN method and their perception on their own well-being in terms of food security is compared in Table C.28. Other things remaining constant if we consider food security as a proxy for the incidence of poverty, households experiencing any type of food deficit can be interpreted as households living below the poverty line. Households facing occasional food deficit can be termed as moderate poor and those facing chronic food deficit can be called as extreme poor. There is a big gap between the estimated results of different analyzed indicators and the perception of the respondents on their own well-being. Even though analysis of our survey data shows that nearly one third of the respondents are extremely poor, their verbal responses do not focus the actual situation, probably because our respondents do not want to expose their poorest position to the outsider which may reduce their prestige in the society.

However, regression result on the well-being status of surplus and deficit groups shows that BRAC members are better off than the comparison ones whether they are in the deficit group or have no food surplus. But the difference between BRAC and comparison households on their well-being is significantly higher in favour of BRAC among the surplus households. Length of BRAC membership made negative impact to the deficit group. The surplus group in comparison with the deficit one is significantly more benefited by length of BRAC membership. This result directly indicates that BRAC intervention helped those more who are relatively well-off (Table C.29).

5.5 BRAC's Impact on Poverty Reduction Performance-Perception Survey Result

The data set contains information regarding the subjective judgment of the respondents on the changes in their economic well-being after joining BRAC. The respondents were asked whether their participation in RDP has any impact (positive or negative) on their economic well-being. Four probable answers were included in the questionnaire. They were i) substantial improvement, ii) some improvement, iii) no change, and iv) deterioration. Among BRAC members only 5.6% respondents reported that their economic conditions substantially improved compared to the pre-BRAC endowment and 57.3% responded that their economic condition had been improving. Around 35% of the respondents answered that the programme did not affect them either favourably or adversely. Most of them are the new BRAC members who are with BRAC over short period. Changes in economic well-being are a long term process. Obviously the new members would have to be with BRAC for quite a long time to experience any sustainable change. Only a few (1.8%) answered that programme participation negatively affected their economic well-being (Table C.30). The oldest group responded more positively in terms of BRAC impact than the other membership length groups. This implies that there is a positive relationship between length of membership and BRAC's impact on the well-being status of the household.

Table C.31 illustrates the linkages between the perception of the respondents regarding the impact of RDP intervention on their present economic condition and incidence of poverty. Around 26% of BRAC members who are extremely poor reported that RDP intervention helped to improve their economic condition, 16.7% respondents from this category said that RDP programme made significant impact to improve their economic condition although they still now belong to the extreme poor category. Comparatively a higher proportion of respondents from the non poor group found RDP intervention as having positive effect on their current economic status.

Table C.32 illustrates the impact of RDP on their poverty reduction performance. Thirty seven percent of those who faced chronic food deficit assessed the RDP intervention positively. RDP intervention had more positive impact on those who were on or above the poverty line belonging to

surplus and break-even groups. Only about nine percent of households who faced chronic deficit during the year responded that their economic condition had deteriorated after joining BRAC. Five households (3.2%) from the surplus group also reported that after joining BRAC their economic condition deteriorated. Only 1.8% of total BRAC members negatively evaluated BRAC intervention. On the whole, BRAC intervention made positive impact on their economic condition as stated by most of the respondents.

With respect to landholding categories results do not show any consistent relationship regarding the amount of land they owned and their perception on the positive impact of BRAC intervention (Table C.33). More households from 51-100 decimals landholding category positively evaluated BRAC intervention. Percentage of households having more than 100 decimals of land gave more negative response. Probably their expectations were higher than their actual level of improvement.

Among different employment categories, households from the self employment category responded more positively to this question (Table C.34). Relatively more households from miscellaneous employment category responded that BRAC made negative impact on them. With respect to different BRAC loan categories the results show consistent positive relationship between the increasing amount borrowed and number of households giving positive responses (Table C.35). Those who did not receive any loan in maximum cases stated that BRAC does not make any impact on their well-being status. Regression results on the material well-being status for those households who positively evaluated BRAC intervention and for those who stated that BRAC did not make any or makes negative impact are presented in Table C.36. Results also support that BRAC made significant impact on those who received a substantial amount of BRAC loan. This result gives an indication that amount of loan received can make significant positive impact in improving their economic condition.

5.6 Review of Critical Mass

IAS-I defined “critical mass” as the combination of loan size and membership length beyond which the probability of greater improvements in well-being increases and found this combination as the amount of loan over Taka 7,500 and membership length of two and a half years respectively (Mustafa et al., 1996). However, the result which was based on bi-variate analysis was significant for male members but not for female members. In IAS-I the highest category of loan considered was Tk 7500(+).

Zaman (1997) found only the amount of loan over Taka 10,000 responsible for the members improved well-being. His loan categories were below Taka 5,000, Taka 5,000 -10,000 and over Taka 10,000.

We made an attempt by multiple linear regression using different loan and length categories as Zaman did, to find out such a combination of inputs that consistently enhances member households' well-being. But we did not find any such combination. Interestingly, our result was similar to that of Zaman and Mustafa in the sense that, only the amount of loan over Taka 15,000 which was the largest loan size category led to better well-being. Findings of all these studies also showed that statistically significant variables were the highest loan size category.

This leads us to conclude that no such critical level of combination of inputs can be found to show any consistent upward mobility. Member performance and well-being are directly related to amount of loan they receive. Length of membership can be associated in a way that usually members with higher membership length receive larger amount of loan.

Therefore, our review of the concept of critical mass leads us to conclude that an attempt to find out any such level and the very concept of critical mass in this context appear to be questionable.

5.7 Conclusion

Around 52% percent of BRAC and 69% of comparison households live below the upper poverty line. Incidence of poverty is 32% higher for comparison households. Percent of households living in extreme poverty is 27% for BRAC and 37% for comparison households. Percent of households living in moderate poverty is 25% for BRAC and 31% for comparison households. Poverty gap among BRAC member households was 13%. For comparison households it was 19% which was 41% higher than BRAC. Value of FGT index for BRAC and comparison households were five and six percent respectively which was 41% higher for comparison households than BRAC which indicate that comparison households' poverty status is more severe than that for BRAC households

Poverty and other socio-economic characteristics of a household like sex, age and occupation of the household head, education level of the household, household land holding status, amount of loan received irrespective of sources and expenditure pattern of the household - all of them are highly correlated. Findings show that BRAC households with similar socio economic characteristics are significantly better off than the comparison households.

Among BRAC different membership length groups incidence of poverty was lowest for 48+ months and highest for 1-11 months groups. Percentage of extremely poor households was also lowest for the oldest and highest for the newest groups. Percentage of non poor households in 48+ months and 1-11 months groups were 52.5% and 42.8% respectively. It indicates that nearly 10%²⁰ of poor households shifted to the non poor group after joining BRAC.

²⁰*differences in percentages of non poor households of 48+ months and 1-11 months groups*

The poverty gap index for 1-11 months and 48+ months groups were 15.3% and 11.0% respectively, the latter was 28% lower. Results of FGT index is also consistent with results of poverty gap for different membership length groups. It implies that with increasing membership length poverty gap and its intensity is gradually reducing.

Results of different BRAC membership length groups on poverty by correlating each of the indicators under poverty correlates show that:

- Length of membership which is considered as a proxy to measure BRAC's impact over time made positive impact in reducing poverty for small and medium size households and also female headed ones;
- Although households with BRAC members directly involved in different IGAs are poorer households, their poverty reduces gradually with increasing membership length. The result is also consistent for households with low and high level of education;
- Among households of different occupational groups length of membership made positive impact in reducing poverty for all employment groups except wage employed. For the wage employed households the impact was negative;
- Among different landholding categories the impact of BRAC was positive for households with 51-100 decimals of land. It was more positive for the households from 1-50 decimals of land group. For the absolute landless the impact was negative;
- Considering amount of loan received results show some positive relationship between higher amount of loan and lower incidence of poverty, depth and its severity;
- Although households with BRAC training are poorer households but BRAC made some positive impact in reducing their poverty;
- Results of different net-worth categories show that BRAC intervention made more positive impact for the well-off households;
- Study found some adverse relationship between reduction of poverty and empowerment of women among BRAC member households. It is found that households with women who owned land irrespective of control over it and households with women who had control over their owned jewellery are significantly better-off households. Households with women who are more mobile and who are directly involved in IGAs are poorer households.

- The incidence of poverty was low in villages connected with electricity. It is found that BRAC inputs made more consistent impact for households living in villages connected with electricity. Poverty is also correlated with economic vibrancy which shows that incidence of poverty was least in medium vibrant areas. Differences in incidence of different membership length groups show that poverty reduced for households living in low and medium vibrant areas with increasing membership length.

The incidence of poverty measured by considering food deficit status of the household during the preceding one year shows that 39% of BRAC and 51% of comparison households faced chronic or occasional deficit. BRAC members experienced more surplus position than comparison group. Study found some positive relationship between amount of loan and reduction in food deficit.

Perception of members on the impact of BRAC on poverty reduction performance show that 62.9% of members reported that BRAC made positive contribution in changing their economic well-being. Only 1.8% stated that programme participation made negative impact. Study found some positive relationship between increasing membership length and positive responses of the respondents on this issue.

The overall findings of the study show that BRAC programmes have been able not only to reduce the intensity and depth of poverty but have also been able to reduce its incidence among its participants though the reduction in incidence is apparently modest.

CHAPTER SIX : VULNERABILITY AND CRISIS MANAGEMENT

Debdulal Mallick

6.1. Introduction

The preceding chapter focused on various dimensions of poverty and BRAC members' poverty reduction performances. However, to address the idea of poverty in a wider dimension, BRAC members' coping capacity and economic security in terms of vulnerability to seasonal fluctuations in income, consumption, food stock and mechanisms employed to confront any calamity have been analyzed in this chapter. Attempts have been made to integrate both quantitative and qualitative information for in-depth assessment of the BRAC's impact on the ability of its members to confront such crises.

There are two kinds of crises, those that are anticipated, that is, which occur due to seasonal variations, and those that are unanticipated. Income and employment opportunities fluctuate routinely every year in rural Bangladesh where livelihood of the poor largely depends on agricultural activities. Therefore, when such opportunities are squeezed in lean seasons, poor households are forced to retrench their already below-threshold living standards. This is exacerbated when any unforeseen catastrophe hits their families and puts downward pressure on their resource base. Exposure to crisis events carry shock potentials for the affected households and is one of the important poverty indicators. Such shock potentials are primarily economic in nature as they keep pressure on the resource margin of the households, in turn hindering their material well-being.

In this chapter, some key variables have been examined to analyze BRAC impacts on member households' capacity to cope with seasonal vulnerability and crises. Both quantitative and qualitative methods have been applied for this purpose. The VO as a whole has been taken as a unit of qualitative analysis.

6.2 Seasonal Vulnerability of BRAC Households

6.2.1 Identification of lean and peak months: Lean seasons are those months of a year when agricultural activities are slack entailing both reduced employment opportunities and income. During lean periods the rural poor face severe food deficits. There are traditionally two major lean seasons -one is late September to early November (*Ashwin-Kartik*) and the other is late March to early May (*Chaitra-Baishak*). The first one which affects nearly all parts of the country and comes after plantation of *Amon* crop, is more severe than the second one (Rahman, 1992). During the peak season, on the other hand, agricultural activities become intensified, especially as crops are harvested entailing increased income and employment. In some parts of Bangladesh more than two crops are harvested in a year which has been possible due to introduction of HYV. Therefore, identification of peak period for those parts of the country is somewhat difficult. Nonetheless, the period December-February (*Paush-Falgun*) is usually identified as peak period.

As mentioned earlier, data were collected in both October,1996 and February,1997 to capture fluctuations of different indicators for lean and peak seasons (details presented in chapter-2). We considered *Ashwin-Kartik* as the lean season for data collection. Due to *Ramadan*, which in 1997 was from early January to early February, data collection for the peak season was delayed and started from 15th February.

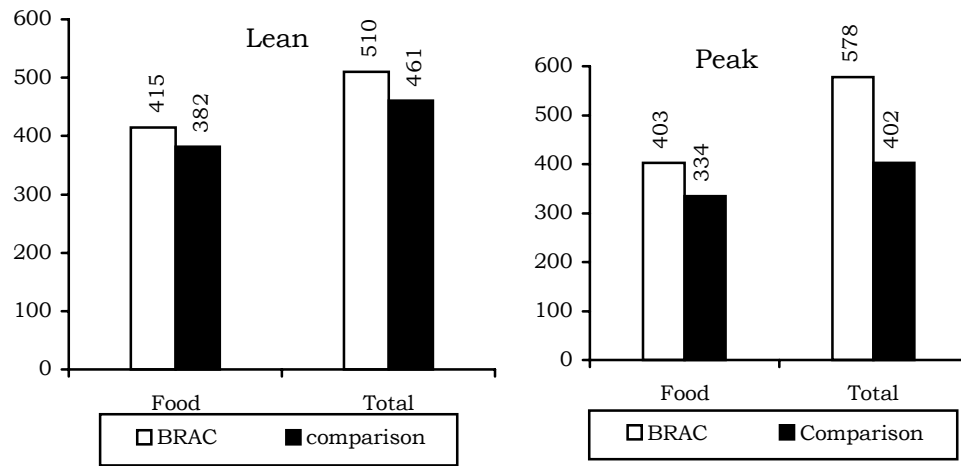
The rural poor, as mentioned earlier, are vulnerable to seasonal deficits because of unavailability of employment opportunities during lean seasons. BRAC intervention creates alternative employment and income generating opportunities and thus are expected to help them overcome seasonal vulnerability. Vulnerability to seasonal deficits has been assessed by comparing some key indicators which vary the most between peak and lean seasons. These include amount of calorie intake, per capita food and non-food expenditure and amount of food stock.

6.2.2. Calorie intake: Amount of calorie intake decreased marginally in the lean season for both BRAC and comparison households. Fluctuation in the amount of calorie intake was not large enough for any membership category to explain seasonal vulnerability. But for BRAC members of different membership length who did not receive any BRAC loan at all, amount of calorie intake fluctuated much in both directions (Table D.2).

Comparison solely based on amount of calorie intake is not complete in the sense that price level of necessary commodities varies over the year in different parts of the country at different rates and so do employment opportunities and income. Per capita expenditure on both food and non-food items are, therefore, considered more powerful tools for analyzing seasonal fluctuation.

6.2.3 Per capita food and total expenditure: Per capita monthly food expenditure was marginally (less than 3%) higher during the lean season compared to the peak season for BRAC households. This fluctuation was not large enough to indicate any significant seasonal variation in per capita monthly food expenditure. But for comparison households this fluctuation was much higher (about 18%) indicating their vulnerability to seasonal consumption expenditure (Fig. 6.1). Among different BRAC members only the oldest ones did not experience such fluctuation in per capita monthly food expenditure (Table D.3).

Figure 6.1: Per capita food and total expenditures for lean and peak seasons



Although per capita monthly food expenditure of BRAC households marginally declined in the peak season, per capita monthly total expenditure increased indicating a higher level of non-food expenditure in the peak season (Table D.3). One explanation for this might be attributed to the timing of data collection for the peak season that started just after the *Eid* festival when sample households already spent large sums on non-food items. After the festival they usually required to stint their consumption expenditure. Since data on three-day food expenditure (average of which has been converted into one month expenditure) and that on previous one-month non-food expenditure which included expenditure during the *Eid* period, were collected after the festival, non-food expenditure was likely to be much higher, therefore pulling up total expenditure in the peak season. Comparison group households, on the other hand, are not economically as sound as BRAC households as reflected in their decreased per capita food as well as total expenditure in the peak season.

Among different BRAC households per capita monthly total expenditure increased in the peak season for all but the highest membership length

categories. But this category demonstrated the best performances in terms of very little or no change in both types of expenditure in the two periods. It is worth mentioning here that fluctuation in per capita food expenditure was lower but per capita food expenditure was higher in both seasons for households of most of the membership categories when the household head was wage employed (Table D.4). But their per capita total expenditure was lower than that of households with self employed head which indicates their lower per capita non-food expenditure. However, BRAC households were better off irrespective of the occupational status of the household head.

But no unique relationship between BRAC loan and per capita food and total expenditure has been found as evidenced from Tables D.5 and D.6.

6.2.4 Food stock: About 39% BRAC households had no food stock in the lean season but this number reduced to 31% in the peak season. For comparison group about 51% and 41% households had no food stock in the lean and peak seasons respectively which indicates BRAC households' better food security (Table D.9). Occupational status of the household head contributes significantly to the food security of a household. Households with self employed head had more food stocks in both the seasons compared to households with wage employed head. About 28% BRAC households whose heads were self employed had no food stock in the peak season. This increased to about 35% in the lean season. They were better-off compared to comparison households of the same type as about 38% and 49% households of this group had no food stock in the peak and lean seasons respectively. The highest percentage of households with food stock for more than one month had been from BRAC (about 16%). Percentage of BRAC households who had no food stock and those who had for one-to-thirty days in the peak season increased in the lean season but households with food stock for more than one month decreased. Among different membership length categories of BRAC households 12-47 months membership group performed better in terms of lower percentage of house-olds with no food stock and highest percentage of households with food stock that can feed them one-to-thirty days.

Though average amount of food stock was higher in the peak season for both the BRAC and comparison households compared to that of the lean season, the former category had more stock in both the seasons than the latter. For BRAC households this went up with length of membership (Table D.12).

Amount of land under cultivation is one of the major determining factors of the amount of food stock as these two variables exhibit strong positive relationship. But when we compare households with no land under cultivation for different membership categories, BRAC households possessed more food stock than comparison ones. Such BRAC households had even more food stock than comparison households with cultivable land more than 50 decimals. But amount of BRAC loan was not found to be a determining factor of food stock. So was the poverty level (Table D.13).

6.3 Crisis Management

6.3.1 Types of unanticipated crisis: During qualitative data collection, group discussions were held with VO members in which they identified a fairly long list of unanticipated crisis events that they routinely face. These have been grouped into four broad categories.

1. *Natural disasters:* these include crop damage, damage to house and other assets due to flood, storm, cyclone, heavy rainfall, etc.
2. *Illness:* this includes expenditures that are incurred due to illness of family members, particularly that of the main income earner as well as income loss. It also includes expenditures that arise due to sickness or death of livestock.
3. *Financial/Social insecurity:* this includes lack of employment opportunities, asset loss, loan repayment problems, consumption crisis, legal expenses to settle disputes, death of the main income earner, accidents, dacoity, theft, etc.
4. *Social problems:* this includes daughter's marriage, husband's second marriage, divorce, disputes with neighbours, land disputes, beating up wife, etc.

Since these crises can not be anticipated beforehand, variables such as BRAC involvement or economic status of the household can in no way be related to such events. However, the strength to confront these events is fairly related to the above variables.

6.3.2 Mechanisms to cope with seasonal vulnerability and unanticipated crisis: Household survey data also provide information on types of crisis and mechanisms employed to encounter those events. Illness, financial loss, legal expenditure, accident, death of a family member are among the crises that have been reported by the respondents. Natural disasters have rarely been reported because during the one year reference period, i.e., one year back from the interview date, incidences of such type of crisis were almost absent.

Table 6.1: Number of households facing any crisis during previous year

BRAC (1-11)	BRAC (12-47)	BRAC (48+)	All BRAC	Comparison
98 (27.2)	102 (24.5)	73 (24.7)	272 (25.4)	49 (22.0)

Figures in parentheses indicate percentages

Table 6.1 shows that a slightly higher percentage of BRAC households faced crises. BRAC households faced relatively more severe crisis in the last one year than comparison households did (Table D.16). For BRAC households over 62% crisis events were medical expenditure due to illness and about

18% financial loss. These are only about 47% and 8% for comparison households respectively. About 18% crisis events were death for comparison group which is higher than that for BRAC households.

Table 6.2: Coping mechanism employed by different membership category (multiple response)

Membership Category	Coping mechanism						Total
	Asset selling	Borrowing	Using own money	Relief	No solution	Others	
BRAC (1-11)	27 (26.0)	45 (43.3)	5 (4.8)	13 (12.5)	6 (5.8)	8 (7.7)	104
BRAC (12-47)	29 (26.6)	47 (43.1)	12 (11.0)	8 (7.3)	3 (2.8)	10 (9.2)	109
BRAC (48+)	18 (22.8)	40 (50.6)	9 (11.4)	4 (5.1)	3 (3.8)	5 (6.3)	79
All BRAC	74 (25.3)	132 (45.2)	26 (8.9)	25 (8.6)	12 (4.1)	23 (7.9)	292
Comparison	11 (20.0)	32 (58.2)	3 (5.5)	3 (5.5)	5 (9.1)	1 (1.8)	55

(Figures in parentheses indicate percentages)

VO members identified a variety of coping strategies which they employed to lessen, neutralize or even overcome the destabilizing consequences of crisis events. Table 6.2 shows that some of the households of each category employed multiple coping mechanism. Higher percentage of comparison households than BRAC ones who faced any crisis had to borrow from informal money market (58% and 45% respectively). On the other hand, higher percentage of BRAC households used their own money to cope with crisis (9% compared to 5%).

All the strategies employed have been classified into two broad categories -- negative and positive coping mechanisms. Negative mechanisms refer to those strategies which can provide immediate solutions to a problem but might have long term consequences on the resource capacity of the household. Positive coping mechanisms are those which do not have such consequences. Provided below is a list of the coping mechanisms reported by the VO members during group discussions.

Negative coping mechanisms.

- Recourse to informal money lenders.
- Selling assets such as poultry, livestock, house, tree, land etc.
- Mortgaging land.
- Reduction in consumption: this reduces a household's immediate calorie intake, but may have no long term consequences, as it can be recovered fairly rapidly.

Positive coping mechanisms.

- Using own resources and savings; selling milk, eggs, *musti chaal*, breaking clay bank,.
- Working against wage payment/finding alternative employment outside the village.
- Support from relatives, VO members

Dissaving does not admit of any easy *a priori* classification into positive or negative coping mechanism. If a household uses up its savings to meet crisis it could be seen as negative coping in that the household has now less resources to meet production needs. On the other hand, recourse to dissavings presumes a level of savings for the household which could be seen as an indicator of its economic strength (Rahman, et al.,1996).

The use of a particular coping mechanism reflects the economic strength of a household. For the same type of crisis, the household which employs more positive coping strategies is said to be a strong household and the household which employs negative coping strategies a weak one.

BRAC households employed negative mechanisms at a slightly lower rate (about 71%) compared to comparison households (76%) to confront crises. But since BRAC households faced comparatively more severe crises, coping those with equal ease as comparison households did, indicate their stronger economic condition (Table D.17).

BRAC loan was not found to have any significant impact on coping capacity of a member household except for those who received Taka 15,000 or more. These households employed fewer negative and more positive coping mechanisms. Comparison households used their own savings (effect-neutral mechanism) at a higher rate compared to BRAC households. But BRAC households with self employed head employed positive and effect-neutral mechanisms at a higher rate and negative mechanism at a lower rate than comparison households of the same type. Since self employed households are economically more sound they used their own savings for coping crises. But even when the head was wage employed BRAC households used relatively more positive mechanisms. This indicates that BRAC members had wider employment opportunities and/or support from other VO members for their involvement in BRAC.

6.4 Conclusion

The following conclusion may be drawn from the above discussion on vulnerability and crisis management:

- Seasonal vulnerability cannot always be explained by fluctuations in the amount of calorie intake in the lean and peak seasons.
- Seasonal fluctuation in food expenditure is lower and non-food expenditure is higher in both the seasons for BRAC households than comparison households. This appears to indicate BRAC households' stronger economic condition.

- BRAC households have higher amounts of food stocks than the comparison ones in both the lean and peak seasons. For BRAC households this goes up as length of membership increases indicating the positive impact of BRAC inputs.
- BRAC households have employed negative coping mechanism at a lower rate and positive mechanism at a higher rate than comparison households to confront crises which indicates that they are relatively less vulnerable.

CHAPTER SEVEN : EMPOWERMENT OF WOMEN

Fehmin Farashuddin, Altaf Hossain
Shahnaj Akter, Dilruba Banu

7.1 Introduction

Two instruments have been used in this study to investigate and measure women's empowerment. One is the **Chen and Mahmud Conceptual Framework** (Chen, and Mahmud, 1995), and the other is a continuum which was developed based on study findings. From the Chen and Mahmud Conceptual Framework, three pathways were selected: material, perceptual and relational. Changes that occurred under these pathways at the level of the 'self' and the 'family' have been considered. In another attempt at analyzing women's empowerment a continuum was developed, similar to that used in IAS - I, to measure the changes that have occurred in women's lives due to their involvement with BRAC²¹.

7.1.1 Alternative approaches: There are alternative models and frameworks which can be used to investigate women's empowerment. For example, the Hashemi, Schuler and Riley model (Hashemi, et al., 1996), attempts to measure women's empowerment on the basis of eight selected qualitative and quantitative indicators. This model was applied in an analysis of the input of BRAC and Grameen Bank credit programmes on their participants.

The Chen and Mahmud Framework is an useful tool, designed specifically for use in investigating BRAC/ICDDR,B affected changes in women's lives and it seemed an appropriate tool for use in the present study where we wanted to consider different pathways and levels leading to women's empowerment. The Hashemi, Schuler and Riley model was not followed because we felt that many of the indicators were too arbitrary in measuring women's empowerment. Also, the scoring in the model was done only on data obtained from a quantitative survey, and when respondents received a certain pre-determined score, they were considered 'empowered'. For the

²¹ Please see Chapter 2 for more details on methodology.

present study, we also followed a scoring method in our 'continuum,' but we used both quantitative and qualitative data. And unlike the Hashemi, Schuler and Riley model, our respondents were not considered 'empowered' if they scored the maximum on any one indicator. Rather, the scores for all the indicators were compiled in order to determine whether these women could be considered as 'empowered' or not.

7.2 Material Pathways to Empowerment

To determine what BRAC affected changes have occurred in facilitating women's material pathways towards empowerment, this section provides a discussion on women's involvement in income generating activities (IGAs), as well as their ownership and control over productive and non-productive assets and resources.

7.2.1 Involvement in income generating activities: BRAC provides credit, training, and other support to rural women so that they may become involved in different types of IGAs and bring about meaningful changes in their lives. In the present study, survey data were collected to determine whether women are involved in IGAs and whether their IGA involvement has been positively affected by BRAC interventions. Qualitative information was obtained to substantiate the survey findings.

Qualitative findings revealed that the women from the following backgrounds traditionally become involved in IGAs:

- Women whose families have no adult male earning members;
- Women who are widowed or divorced;
- Women whose household sizes are very big and whose household economic conditions are poor;
- Women who have a strong willingness to improve their economic conditions;
- Women whose husbands cannot afford family expenditures;
- Women who are able to get their husbands' co-operation in their work; and
- Women who have the scope to engage in activities within their households which do not interfere with their traditional household responsibilities.

The following are the reasons why women may not become involved in IGAs, despite the opportunities provided to them by BRAC:

- Husbands are opposed to their wives' involvement in any activities outside their own houses. In a new (1-11 month old) VO, a husband was quoted as saying:

Ami moira loi, tahon kamaye jabi (let me die first, then you can go out for work).

- Women of relatively well-off households are not permitted by their husbands to work outside their households. But they often do not even have the scope to engage in any IGA within their households.

At the time of qualitative data collection, not all members of the youngest VOs (1-11 month membership age group) had received loans from BRAC, although all members of the older VOs had by this time received multiple BRAC loans. Survey data show that 45% of all members are involved in IGAs, but that the increment rate is not consistent over time. Table 7.1 provides a picture of survey results:

Table 7.1: Members' involvement in IGAs by length of membership

IGA involvement status	Length of membership (month)			
	1-11	12-47	48+	Total
Yes	160 (44.4)	180 (43.2)	138 (46.8)	478 (44.6)
No	200 (55.6)	237 (56.8)	157 (53.2)	594 (55.4)
Total	360 (100)	417 (100)	295 (100)	1072 (100)

Figures in parentheses indicate percentages
Source: IAS II Household Survey Data

According to qualitative findings, through their BRAC involvement, some women have become involved in IGAs for the first time ever, while others have been able to expand their traditional activities, which include poultry and livestock rearing, *kantha* stitching and net making. Others have also become involved in various non-traditional activities such as shopkeeping (BRAC's *Shuponno* stores), small trading and cocoon rearing. Many members were found to be engaged in these non traditional activities alongside their existing traditional ones. According to survey findings, 13% of members are also involved in multiple IGAs, that is, economic activities in which they are simultaneously engaged at the time of survey (see Table E.1). Members' multiple IGA involvement rate does not follow the expected trend, however, as it does not always increase according to membership length. Members of the middle aged VO group were found to have the highest multiple IGA involvement rate. On the other hand, the highest single activity involvement rate is found among the oldest group. But the average annual income of members presently involved in different IGAs has increased gradually with length of membership irrespective of their involvement in single or multiple activities (see Chapter 3, Section 3.5 for details). During group discussions, members who are involved in more than one economic activity stated that they received assistance from their husbands and other male kin in undertaking these multiple activities. Although they now have to work twice as hard, they are still happy. A woman from an oldest (48+ month old) VO said:

Ohon kaj barseh, kintu shanti hoiseh. Ohon khawon thakeh.
(Now we have to work harder than before, but we are at peace. At least we now have food).²²

Table 7.2: Members' involvement in income generating activities before and after joining BRAC

Item	Total no. of members	IGA involvement	
		Before joining BRAC	After joining BRAC
No. of members	1072	304 (28.4)	478 (44.6)
No. of activities involved in	-	501	693

Figures in parentheses indicate percentages
Source: IAS II Household Survey Data

Table 7.2 shows that after joining BRAC, number of members involved in economic activities has increased from 304 to 478 (by 16%). Out of 1072 members 45% are presently involved in 693 activities as compared to 28% members involved in 501 activities before joining BRAC²³. Women who are continuing their pre-existing activities under BRAC stated that after receiving assistance from BRAC, they are now able to undertake these activities on a wider scale and more efficiently. The following statements are from VO members regarding the differences they experience in undertaking these activities now:

- Before joining BRAC, women who were engaged in small trading could not run their business smoothly due to lack of capital. Sometimes they had to take loans from mohajans at very high interest rates. Because of this, they could not earn desirable profits and often incurred loss. After joining BRAC and receiving loans, they now have adequate capital for their business ventures. Now they earn more profits and can even save money after repayment of loan instalments and can spend on household necessities.
- In the case of poultry rearing, many women were already involved in this activity before joining BRAC, but on a very small scale at the family level. Now they engage in this activity commercially as they receive training, credit, input support, supervision and marketing support from BRAC. Mortality rate of poultry birds has reduced, so they can also earn more profits than before.

²² It should be noted that this statement, along with all others used in this chapter, reflects the sentiments expressed by the majority of the participants of the group discussions held in each VO.

²³ For sector-wise involvement please see Chapter 8, Section 8.3.2.

- Before joining BRAC, some VO members reared goats and cows on a share-rearing basis as they could not afford to purchase them on their own. But now they are able to rear their own livestock.
- Rural women traditionally cultivate vegetables in their homestead land for household consumption and sell the surplus. After receiving training and credit from BRAC, they have started vegetable cultivation on a commercial basis.

7.2.1.1 IGA income and expenditure patterns: Briefly mentioning the income of BRAC members from different IGAs, this subsection discusses their use and expenditure patterns. According to survey data, 57% of members who are involved with IGA has an annual income of less than Tk. 2000. Only 10% of members earn more than Tk. 6000 a year (Table E.2).

Table 7.3: Distribution of members' responses on use of IGA generated income by length of membership

Length of membership (month)	Use of IGA income				
	Food consumption	Asset purchase	Investment	Child education	Other hh expenses
1-11 (N=160)	113 (70.0)	31 (19.4)	6 (3.8)	28 (17.5)	90 (56.3)
12-47 (N=180)	143 (79.4)	9 (5.0)	3 (1.7)	29 (16.1)	104 (57.8)
48+ (N=138)	118 (85.5)	7 (5.1)	-	21 (15.2)	84 (60.9)
Total (N=478)	374 (78.2)	47 (9.8)	9 (1.9)	78 (16.3)	278 (58.2)

Percentage do not add up to 100 due to multiple responses. Other household expenses include clothing, medical, and instalment payment.

Table 7.3 shows the frequency of members' responses on different uses of women's IGA income. It can be seen that 78% of members who are involved in IGA used their incomes for food consumption purposes and 58% members of this group spent their income for other non-food household expenses. Over 16% of them bore expenses for children's education. Again 10% and two percent of members of this group spent income for asset accumulation and investment purposes, respectively. Proportionately less newer members stated to have spent their IGA income on food consumption while more of them stated that they spent income for asset purchase and children's education. It may be noted here that the table does not show the proportion of IGA income spent on different heads. It is therefore not possible to assess the relative importance of different areas of expenditure in terms of volume spent on each. However, a partial explanation of why more newer members spent less on food consumption may be derived for the evidence provided in Chapter 3, Section 3.8 that newer members were found to be better off than others in terms of initially owning more net-worth.

It should be noted that while the quantitative data provided information only on those BRAC members who were covered by the IAS-II household survey, the qualitative findings are more comprehensive, as they provide an overall picture of the different uses of members' IGA incomes. According to qualitative findings, apart from using their income for consumption purposes, members also make their BRAC savings and loan instalment payments with this money. They also try to save portions of it for their daughters' marriages or for any family emergencies. Only a handful of women of the eight VOs in the 1-11 month age group stated that they had used their income to repair their houses or to purchase any productive assets. Women of most of the six VOs in the 12-47 month age group, on the other hand, stated that they prefer to invest their income in productive rather than non-productive assets, as it is more profitable to do so. Finally, members of the eleven VOs in the 48+ month age group were found to have spent their money on improving their living units, installing tubewells and sanitary latrines, and purchasing productive assets. Some of them also used money for agricultural cultivation.

Apart from the various uses of women's IGA income, it is also important to examine who took the decision to use that income for these specific purposes. From the point of view of empowerment, it is not enough if women are simply provided with opportunities for income generation but cannot retain control over how that income will be spent. It is only when women are themselves involved in IGAs, whether BRAC initiated or pre-existing, that they are able to retain some kind of control over the income derived, especially if these are activities in which they do not require assistance from male counterparts (Mustafa, et al., 1996: 85). More often than not, however, male counterparts tend to appropriate portions of women's income, or, women themselves may willingly hand over their income to them, thinking that men are better equipped in handling monetary transactions.

The survey results revealed that 45% of women are themselves involved in IGAs. Qualitative findings also revealed that the majority of women, regardless of which VO age group they belong to, still depend on their male counterparts or seek their assistance in utilizing the loan money. Even though they do not utilize their loan money by themselves, women stated that they now enjoy a greater role in familial affairs, by the very fact that they are bringing in working capital into the households. Also their husbands often consult them about how to spend the income accrued from their IGAs.

The qualitative findings on women's own IGA involvement are not very encouraging. It was found that women in only one 1-11 month old VO (out of eight) had actually utilized their loan money themselves, to start small businesses, although they were of course assisted by their male counterparts. Women of two 12-47 month old VOs (out of six) had applied their loan money in their own IGAs, while women of two 48+ month old VOs (out of 11) used their loan money themselves as capital in existing IGAs, or

to start their own businesses. These women who are themselves involved in IGAs stated that they are able to retain a certain amount of control over the use of their income. They may use it to purchase personal items for themselves, tidbits for their children, or necessary household requirements. As for the majority of women who stated that they hand over their loan money to their male counterparts, they pointed out that sometimes they retain a small portion of it to purchase poultry birds and goats which they rear as their own.

7.2.2 Ownership and control over assets: In the existing socio-cultural milieu of Bangladesh, only a handful of women can claim ownership and control over resources. This is particularly true of the rural areas. When a person has ownership and control in terms of management and use rights over productive resources, s/he will be able to become involved in society's productive processes. With this hypothesis in mind, we tried to measure the pace of women's empowerment through their ownership and control over resources, both productive and non-productive. During preliminary field investigations the study team found some assets that were quite gender specific to traditional male occupations: bullock, bicycle, boat and fishing gear. Certain other non-productive assets like *khat*, *alna*, latrine and tubewell are traditionally considered as *shongsharer shompod* (household assets), and thus, no individual ownership is ascribed to them. Taking these factors into consideration, we limited our analysis to the following productive and non-productive household assets: land, housing, cows, goats, poultry birds, jewellery, brass utensils, rickshaw/van, sewing machine, trees, *dhenki*, watch, radio, TV, handlooms and rural shops. In this discussion on ownership and control, members' savings situations were also considered, using qualitative findings. Traditionally, women are able to retain relatively greater control over savings than other assets, especially if these are savings that their male counterparts are unaware of. During quantitative data collection, members were asked to identify which of the above-mentioned assets they owned. Then, in order to determine their control over these assets, they were asked to state whether they could sell them without their husbands' permission and whether they could use the money for any purpose they wished. The information has been analysed below.

7.2.2.1 Ownership of productive and non-productive assets: At first glance, the survey findings appear very encouraging, as they indicate that in each age group category, about 91% of all members own either productive or non-productive assets (see Table E.3). However, it should be noted that even the women who stated that they partially owned the above-mentioned assets have also been included in this table. Qualitative findings will perhaps provide a clearer picture of women's ownership over productive and non-productive assets and resources.

First let us consider land ownership. In Bangladesh women traditionally may own land in two different ways. One is through inheritance²⁴, and the other through purchase. In this analysis, we considered the latter and placed emphasis on the amount of land purchased with women's own money derived from both her income and BRAC loans. It was reported that few members from five VOs (48+ month) had bought some land with their own money. Survey data also show that 18% of members from all VOs owned land along with other productive assets but the differences are not proportionately distributed (see Table E.3.1 for details). According to qualitative findings a few members of two 12-47 month old VOs had leased some land using their BRAC loan money and their own savings.

Next let us consider housing. Ownership of house provides women with economic security and acts as a bargaining instrument in decision-making matters (Mustafa, et al., 1996). In rural Bangladesh, however, very few women are able to claim ownership over their houses (parental or husbands'), especially since inheritance laws and customs tend to be biased in favour of sons rather than daughters. In our analysis we considered whether women owned any living units at all, and whether there is any positive change in this ownership over time. Qualitative findings revealed that older BRAC members owned more living units than did newer ones. This would seem to suggest a positive relationship between the amount of time a woman spends in BRAC and her ability to become owner of living units.

Traditionally rural Bangladeshi women own chicken and ducks, and sharecrop goats and sometimes cows. Since they are directly involved in the management processes of these assets, they are able to claim ownership over them and control as well. Members of all three VO age groups stated that they owned poultry and livestock which they had accumulated with their own savings, from their IGA generated income and sometimes from their BRAC loan money.

According to quantitative findings, apart from owning poultry and livestock, group members in all three VO age groups also owned other productive assets such as sewing machines, rickshaw /vans, trees, *dhenkis* and hand looms. They have accumulated these assets with their own savings and BRAC loan money over time and the increment rate is highly significant (see Table E3.1). In terms of non-productive assets, it was found that women's ownership over jewellery and brass utensils has increased over time. TV and radio ownership was quite insignificant, however, although ownership of radio was found to be proportionately higher among the older members than among younger ones.

²⁴ According to Muslim inheritance laws, women may receive land at the time of their marriage or upon their father's death. In reality, very few women are able to enjoy this legal right (White, 1992:53).

7.2.2.2 Control over productive and non-productive assets: Logically, if one owns an asset, the assumption would be that s/he will also control it. But in reality this simplified generalization usually does not work. Ownership does not always imply legal ownership, rather it often refers to management and use rights. At the same time, different productive and nonproductive assets have different users, uses and management rights. In rural Bangladesh, it is men who traditionally exercise management and use rights over various assets, even if these are legally owned by their female counterparts. Thus, even though women may claim ownership over various assets, they are unable to exercise any control over the management or use of those assets (White, 1992:120-141).

The survey findings on women's control over assets are quite encouraging as they indicate that such control over assets, both productive and non-productive, increases significantly over time (see Table E.4). But again, the qualitative findings will, perhaps, provide a clearer picture of the actual situation prevalent in the IAS-II sample areas, regarding members' control over the assets which they consider as their own. Those members of the middle and oldest age group VOs who had purchased land in their own name stated that they usually seek the concurrence of their husbands before selling it. Traditionally, rural Bangladeshi women have very little say in land management and use rights, even over land that is registered in their own names. They also lack knowledge about land laws and legislation. Thus, even though members may have acquired the ability or the resources to purchase land, existing socio-cultural norms and precepts restrict them from exercising their control over it (White, 1992:130).

As with land, women traditionally have little say in matters relating to the buying or selling of houses. Thus, in this section on control over assets, we have considered women's contributions to household repairs or renovations, to determine whether such contributions affect their management or use rights over the living units in which they reside. In the context of rural Bangladesh, families often spend sizable amounts of money every year to keep their houses usable. Women's contributions also count in this regard. According to both quantitative and qualitative findings, BRAC members made more frequent and active contributions to household repairs or renovations. They used their IGA incomes as well as their own savings for such purposes.

Qualitative data revealed that older members own proportionately more cows than do newer members. But in terms of control, only a few members had the confidence to say they would be able to sell these cows. They can spend money from selling milk but can not sell the cow itself without their husbands' concurrence. In two 48+ month old VOs, however, members not only enjoy ownership and management/use rights over major assets like cows, but they can also claim partial control over them as well. In these areas, out-migration of men (for seasonal work like paddy harvesting) has

given women household decision-making powers, including the right to buy or sell major assets.

Qualitative findings did not reveal any notable distinction between older and newer members in their control over poultry and goats. Poultry rearing and goat share cropping are traditionally female domain in Bangladesh and as such, women generally are able to control the sale of both poultry and goats. In other words, their ability to do so may not be influenced by their BRAC involvement in any way.

7.2.3 Members' control and use of their savings: According to respondents, savings provide a four fold utility to rural women: old age security, access to the means of production, use as a coping mechanism at times of crisis and use to maintain household well being. Rural women traditionally accumulate savings in both cash and kind. They store cash savings in clay banks, trunks or inside hollow bamboo poles and make use of the money during both anticipated and unanticipated crisis periods. Often their male counterparts are unaware of the existence of such savings.

All members have cash savings in BRAC. Apart from this, members stated that they accumulate cash savings from three different sources: their own IGAs, husbands' IGAs and by reducing household expenditures. Members of four VOs from 48+ month age group informed that they had accumulated savings from their own IGA income. Again members from three VOs each from both 12-47 and 1-11 month age group stated the same. Women who are not involved in IGAs try to accumulate some monetary savings from their husbands' IGA incomes. In fact, most members of the 1-11 month VOs indicated their husbands as the main source of their savings. Members of two 12-47 month old VOs and one 48+ month old VO admitted a similar dependency on their husbands. This would seem to indicate that dependency on husbands in depositing savings decreases over time.

Women also accumulate monetary savings by reducing household consumption expenditures, through the collection and sale of *mushti chaal*, eggs, milk and homegrown vegetables. Qualitative findings show that members of three VOs from the 1-11 month group reduced consumption expenditures to accumulate savings. Again members of four 12-47 month and two 48+ month old VOs stated that they have also accumulated savings in this similar way. Older members also mentioned that they accumulate savings through their involvement in some kind of home-based IGA. In terms of savings in kind, all members stated that they save *mushti chaal* and women from many of the 48+ month VOs also mentioned poultry birds and goats and leased in land as their savings.

Several members from both the older and middle aged VO groups mentioned that as they cannot easily access their BRAC savings, they had decided to set up their own savings *samities*. It appears that as members' savings

behaviour experiences positive changes over time, rather than keeping this money in hand or depositing it in BRAC, they prefer to keep it in these informal *samities*. A few members of 48+ months VO age group were even found to operate bank accounts. So, it is evident from the analysis that over time women tend to accumulate greater amounts of savings.

It was found that women spend their savings mainly to purchase assets, contribute to household expenditures and purchase small personal items, make instalments payments and cope with crisis. The following analysis will provide details of these four uses of women's savings.

7.2.3.1 Asset accumulation through savings: Members of three 48+ month old VOs mentioned that they had accumulated assets with their savings money; members of two 12-47 month old VOs and two 1-11 month old VOs mentioned the same. We should remember here that most large assets such as land, leased in land, rickshaw/van or cows are usually managed by men, so women can only claim partial control over them. So, rather than purchase such large assets, women may be more interested in purchasing smaller ones such as goats, chicken, *dhenkis* and handlooms, i.e., those assets which they can manage by themselves.

7.2.3.2 Contribution to household expenditures/purchasing small personal items with savings: Qualitative findings indicate that overall, older members' contributions to all items was higher compared to those of the other two groups. Informants of all the age group VOs mentioned that they contribute to household expenditures with their savings money in such areas as food expenditures, purchase of household utensils and meeting children's education and medical needs. Through such contributions, women stated that they have acquired the confidence to manage household affairs. According to a member of a 48+ month old VO:

Shameer hateh taka na thakle nijerai shongshar chalayeh niteh pari (if our husbands run out of money, we can take care of family expenses ourselves.)

7.2.3.3 Repayment of loan instalments with savings and coping crisis with savings: Apart from the traditional agricultural lean seasons which affect much of rural poor in Bangladesh, a major crisis usually occurs in a poor household when the main income earner falls ill. Women's savings, whether in the form of hidden cash or *mushti chaal*, play an important role in maintaining the family during such crisis periods. Coping crisis through household savings could be seen as an indicator of its economic strength (Rahman et al., 1996:111). Women in all three age group VOs mentioned that in anticipation of the agricultural lean months, they try to make some savings during the peak seasons of the year and these savings are often what makes the difference between starvation and sustenance. These savings are also used to pay the all important BRAC loan instalment payments during crisis times. Almost all members of the three age group VOs also mentioned that they use their savings to make loan instalments.

7.2.4 Summarization of findings: Women who were previously not involved in any economic activities have now begun to participate in them, after having received credit, training and input supports from BRAC. Many women have also switched over from traditional to non-traditional activities and are now simultaneously engaged in more than one income earning activity throughout the year. Those who have expanded their pre-existing IGA activities after joining BRAC now claim to be able to carry them out more efficiently, thanks to training received from BRAC. Encouraging as these findings are, however, existing evidence suggests that over half of the women who receive credit from BRAC still involve their male counterparts for utilizing it in different IGAs. This is mainly because they do not have the necessary infrastructure support with which to carry out large scale income generating activities without any kind of male assistance. Again the rural culture also restricts women's access to large scale income generating activities.

Women have used their IGA generated incomes for a wide variety of uses including purchasing assets, making repairs on their living units, meeting household's food and non-food expenses, meeting children's educational demands and saving for daughters' marriage, among others. But they have yet to reach a stage where they can take independent decisions regarding the use of their income. However, qualitative findings have suggested that whereas previously women had no say in the income accrued from their BRAC loans when those loans were used by their husbands, now their husbands often consult with them about how to spend this income.

In terms of asset ownership, it is clear that the longer a woman remains involved in BRAC and the more employment opportunities she has, the more scope she will have to purchase large assets such as cow, land, as well as other productive and non-productive assets. Women's control over these assets is still limited, however, since they tend to consider them as household, rather than personal assets. With regard to savings, it is clear that due to their involvement with BRAC, women are able to develop a savings behaviour. Such savings provide them with a sense of economic security and findings have revealed that members are able to assert some kind of control over the use of such savings, more so than they can over other assets.

7.3 Perceptual Pathways to Empowerment

What this section hopes to do is to throw light on women's perceptions of their own well-being and the changes that they have experienced since their BRAC involvement. According to Sen (1990):

The well-being of a person may be plausibly seen in terms of a person's functioning capabilities: what he or she is able to do or be (e.g., the ability to be well nourished, to avoid escapable morbidity or

mortality, to read and write and communicate, to take part in the life of the community, to appear in public without shame) (p. 126).

During qualitative data collection, when group members were asked about the changes that had occurred in their lives due to their BRAC involvement, most of them would immediately mention better quality food for their children, improved housing conditions and increased asset holding, i.e., positive BRAC-related impacts on their households. They had to be prompted repeatedly in order to get the point across that the investigators were more interested in the changes that they themselves had experienced, not those experienced by their families or households.

It should be noted here that changes in one's well-being and more importantly, one's perception and realization of these changes vary from individual to individual across time and space. Therefore, it cannot be stated that being involved in BRAC for any specified length of time will bring about certain desired changes. Thus, this section, unlike others in this chapter, will not be divided into the three cells of analysis. Instead, an overall picture will be provided of the changes that women have experienced since their BRAC involvement, to determine how these changes have augmented their perceptions of their own well-being.

This section will also briefly cover male opinions on women's BRAC involvement, particularly in the light of the contributions these women make to family well-being. Male family members were asked to consider the changes or impacts that their households have experienced as a result of women's BRAC involvement. They have thus provided their opinions and viewpoints on the positive and negative aspects of women's contribution to family well-being.

7.3.1 Own well-being: Among the many changes women have experienced since their joining the VO, they highlighted their increased self-confidence; increased awareness and practice of social issues; increased credit worthiness; increased mobility, communications with outside world, and community acceptance; increased own savings and sense of economic security; reduced economic dependency on husbands and increased ability to manage household affairs; and increased importance to husbands and involvement in familial decision-making. The following discussion will provide details on each of these issues.

7.3.1.1 Increased self-confidence: The traditional stereotype of the rural Bangladesh woman is someone who is docile and subdued, someone who has no voice of her own. Involvement in BRAC brings about radical changes in such a woman's life. By traveling to BRAC area offices and interacting with mostly male staff, by handling money (many of them for the first time ever), and through participation in various training sessions, she is able to break out of this typecast and acquire a degree of self-confidence. In brief, this is what women had to say about their increased self-confidence:

Before, we were very timid and shy about appearing in front of strangers. Now we can do so without fear. We have gained strength in our words and actions. See, we can talk to you without any shyness. But in the beginning, when the BRAC *bhais* (brothers) would come, we would hide behind our *ghomtas* (veils). Now we can look them in the eye and speak to them as equals.

7.3.1.2 Increased awareness and practice of social issues: BRAC through its efforts at social mobilization, tries to assist group members in overcoming erroneous practices regarding health, family planning, education, marriage and other important matters. Group members participate in monthly issue based meetings in which they discuss “contemporary social, economic and political issues” (BRAC, 1996). They are always encouraged to bring their husbands to these meetings. Apart from that, through the HRLE programme, group members become aware of their rights and options regarding marriage, divorce, property, inheritance and other legal matters (Rafi, et al., 1997). Through the Essential Health Care programme, they gain accurate knowledge on water and sanitation, family planning, health and nutrition.

Group discussions with women revealed the different ways in which they are applying all this newly acquired knowledge in their lives. They now practice family planning in order to keep their families small. Many have installed sanitary latrines and tubewells in their houses, using their BRAC loan money or IGA income, in order to ensure safe water and sanitation practices for their families. They now regularly get their children vaccinated. For children’s medical emergencies, they no longer rely solely on traditional healers, but try to take them to the health centers for proper treatment. Members have also come to realize the importance of literacy and numeracy and so they try to make sure their children, particularly their daughters, attend school. They also want their daughters to lead better lives than they do. In this regard, members of a 12-47 month old VO stated:

Our mothers, who spent their entire lives behind purdah, remained illiterate and ignorant of so many things. They hardly ventured outside their homes. They did not work and were dependent on their husbands for everything. In fact, they did not even have the courage to talk to their husbands. We, on the other hand, are involved in BRAC. We engage in wage employment. We contribute to our households. Our husbands respect us and even ask for our opinions in many issues. We use safe water and hygienic latrines. We travel to different places. We are hopeful that just as we are better off than our mothers, our daughters will be even better off than us.

Although they still may not be able to take action against legal injustices, at least as a first step they have been able to acquire knowledge of property rights, inheritance laws, the legal marriage age, polygamy, dowry, divorce

and other legal matters. Women reported that though they have become aware of the social evils of dowry, they are often helpless in avoiding it. This is what women of a 12-47 month old VO had to say:

We have learned that dowry is illegal. But our hands are tied. If we do not give dowry, we will not be able to get good husbands for our daughters. People will look down upon us.

In the case of remarriage by their husbands, however, many older members claimed that they are able to take action. They have learned that it is illegal for their husbands to remarry without the first wife's consent. This is what women of a 48+ month old VO had to say in this regard:

We may not be able to take legal action if our husbands wish to remarry, but we can protest in other ways. We will not welcome the new wife or permit her to enter our homes. Our husbands are bound to us since we provide them with our BRAC loan money. So, if they do remarry, they will have to take their new wife and move somewhere else. This much power we have over them.²⁵

7.3.1.3 Increased credit worthiness: Women have reported that as a result of their BRAC involvement, they are no longer at the mercy of the village *mohajans*. Also, members of their communities no longer regard them as credit risks (Mustafa, et al., 1996). In fact, now they can guide others in taking loans and they feel they have acquired the self-confidence to take loans outside of BRAC as well. This is what women of a 12-47 month old VO had to say:

Before joining BRAC no one, rich or poor, would ever consider lending money to us. Now, they know we are in BRAC and that we regularly make kisti payments on our BRAC loans. So they are more willing to lend us money if we need it.

7.3.1.4 Increased mobility, communications with the outside world and community acceptance: When a woman becomes involved with BRAC, she is required to travel to, among other places, the area office, to different *paras* within her village to attend meetings and perhaps to BRAC Training Centres in a district town to attend training. But, because of what is perceived to be a break of *purdah* (which traditionally confines her to her immediate surroundings), both the group member and her husband have to face severe criticisms from village elders, religious clerics and the rural elite. Countless women and their husbands have taken a stand against such actions and persevered against the odds. They have been exposed to new ideas,

²⁵ It should be noted that this statement was made by a few women of one of the oldest age group VOs. Only after they have been involved with BRAC for such a long time and also after having received legal awareness training, would women be able to acquire the voice and self-confidence to make such a bold statement (Please see Mustafa, et al., 1996 for more details).

knowledge and experiences through their increased interactions with the world outside their homesteads/*baris*. At the same time, through their newly acquired self-confidence and increased mobility, they are now able to turn a deaf ear to the negative comments that come their way. This is what women of a 12-47 month old VO had to say:

Of course there will always be those who disapprove of our involvement in BRAC. But these people have never helped us and never will. If we stay at home according to their wishes, we will have to go hungry. We simply ignore their negative comments and continue along our way. Now that we have acquired strength in our words, we can even protest at their negative comments.

Not all community members oppose women's involvement in BRAC, many consider it as a better alternative to begging and approve of it (Mustafa, et al., 1996). Those who are aware of BRAC and understand its goals respect these women for trying to change their lives. In one area, women reported that not only have they gained community acceptance, but that rich people have now started to come to them for loans. Women also reported that far from disapproving of their BRAC involvement, community members have expressed an interest in joining BRAC themselves. This last point can be taken as a sign of community acceptance of not only women's involvement in BRAC, but of BRAC itself.

7.3.1.5 Increased own savings and sense of economic security: Women traditionally try to keep cash savings in clay banks, hidden underneath the floors of their homes or in hollow bamboo poles. They also save *mushti chaal* and rear poultry and livestock which they consider as insurance for crisis periods and other emergencies. BRAC requires women to deposit a certain fixed amount as their weekly savings. It also deducts five percent from each loan disbursed, and this becomes part of the member's savings as well. With their BRAC savings practice/habit as a model, many women have initiated small community savings *samities* where they usually deposit savings either in the form of cash or *mushti chaal*. Through this practice they are able to build up savings both within and outside BRAC.

Women reported that they use their savings to purchase assets, carry out repairs on their households, and assist their husbands during family emergencies. They also use it for personal expenses and to meet children's fanciful demands. Many also try to keep aside some cash for their daughters' marriages. Having savings, particularly in the form of cash, it provides women with a sense of economic security. This is what women of many VOs in the three cells of analysis stated:

We have greatly benefited by joining BRAC since we are forced to save some money every week. Now that we have some cash savings in our own names, we feel more secure. For example, if our

husbands ever threaten to leave us, we no longer get worried as we know we have something to fall back on.

7.3.1.6 Increased ability to manage household affairs: BRAC provides women with opportunities to engage in IGAs. Provided that women do not face opposition from their male counterparts when engaging in these activities and provided that their male kin do not usurp the income generated from them, women are able to utilize it to bring about benefits to their households. Women of one 48+ month old VO reported:

We no longer have to bother our husbands to purchase personal items for us. In fact, in order to ease their trouble, now-a-days we can even take care of our children's needs and fanciful demands.

As with their savings, women use their income to purchase assets, carry out repairs on their households and make instalment payments when their husbands are unable to do so. Apart from this, women also reported that they have now taken on many household responsibilities, like determining what to buy and how much to buy and that they use their income to meet these needs. One woman said:

Earlier we had to face many hardships. We could not get by on the earnings of my husband. But now I am involved in BRAC so I can contribute to my household. Now we can eat twice a day instead of only once. Now my children have two sets of clothing instead of just one.

7.3.1.7 Increased importance to husbands and involvement in familial decision-making: Men are initially reluctant to have their wives join BRAC as it involves interacting with strangers, but they soon learn to appreciate their wives' BRAC involvement. In regions where women do not traditionally engage in wage employment outside their homes, they usually hand over their BRAC loan money to their male counterparts and in places where women do engage in IGAs, they often hand over portions of their income to them for the same purposes. Women in many areas have reported that as a result of their BRAC involvement, their male counterparts now treat them better, especially when it is time for them to get new loans. In other words, they have been able to acquire some respect from them. In many areas, husbands even approve of their wives' IGA involvement because it brings extra money to the household (Mustafa, et al., 1996).

Women of several VOs in the 12-47 and 48+ month groups reported that they now have acquired newly found respect in the eyes of their husbands due to their BRAC involvement, the result of which is that their husbands now give their opinions some value and importance. In one area, for example, a woman accompanied her husband to a prospective son-in-law's house for settling their daughter's marriage. She herself admitted that this was very unusual for Bangladesh. In many other areas, particularly in the 1-

11 month group VOs, women have not experienced such changes and their husbands remain the sole familial decision-makers. But overall, the women stated that they now participate in household decision-making. According to women of a 48+ month VO:

Previously when we were not involved in BRAC, our husbands never consulted with us about household matters. Now, since we can bring them capital to invest, they appreciate us more. They sometimes even consult us beforehand about big household purchases. If there is a marriage proposal for our daughter, they will ask us our opinion about the boy. They never did this before.

7.3.2 Women's contributions to family welfare from the male point of view: Information for this subsection was collected from the male informants of the 25 case study villages. They have provided their opinions and attitudes on the positive and negative aspects of women's contribution to family well-being, in terms of asset accumulation, improved standard of living, health and sanitation, increased credit worthiness and other important issues. As we have limited our analysis of women's empowerment to the level of the individual member and her family, information has been collected from male family members only.

7.3.2.1 Asset accumulation: According to informants, the participant households have been able to accumulate land and other productive and non productive assets since their BRAC involvement. Improved housing facilities was one major benefit cited by informants from the 48+ month VO group. According to them:

Ageh channer ghore thakto, miader kollyaneh ekhon tiner ghore thake
(before they used to live in straw houses, now through the efforts of BRAC, they can live in tin houses).

7.3.2.2 Standard of living: According to informants of all three VO groups, the standard of living of the participant households has improved due to women's involvement in BRAC, in terms of better health and sanitation facilities, better quality and quantity food, children's education, medication and clothing needs. According to informants of a 48+ month old VO:

Some members had to starve at one time or other during the year, but now they get food three times a day.

Mohilara samity kora te, aye kora te shongshare shikkhar allo portase
(women have kindled the light of education in the households after their involvement in BRAC and earning an extra income).

7.3.2.3 Male perceptions of positive and negative aspects of women's BRAC involvement: The following comments voice the positive and negative opinions of male family members (mostly in the 48+ month VOs) regarding

the socio-economic changes that they believe group members and their families have experienced as a result of their involvement with BRAC.

- Women who are divorced, deserted, widowed or otherwise live on the last rung of society now have a chance to improve their lives.
- Women are now more conscious about themselves, and their power of understanding has increased.
- Women are now independent. They have learnt to sign their names and count. They can move about freely.
- Before women could not get even one taka from other people, but now they can borrow any amount of money from the village.
- Husbands can no longer always behave as they wish.
- Household violence has now reduced and husbands dare not be too violent.
- *Anek mohila porda manena, shamir kotha mane na (many women do not care for purdah and disobey their husbands).*
- *Mohilader taka dia pordar baireh niya jawa hoitese (women are being lured out of purdah with money).*

7.3.3 Summarization of findings: Due to their involvement in BRAC, women have experienced changes in many areas and BRAC has acted as the change agent which facilitated these changes. Although it cannot be stated that women have become completely empowered as yet, at least now they have begun to acquire positive self-perceptions of their own personal interests. These self-perceptions will allow them to assert themselves and demand for their rights in their struggle towards socio-economic empowerment. But this will be a difficult task, given the patriarchal setting in rural Bangladesh. Nevertheless, from the findings it is clear that many men have begun to appreciate the material benefits of having their wives involved in BRAC. Although there remain many traditionalists who oppose BRAC's activities with women, the opinions obtained from many progressive minded men indicate that they are supportive of the positive socio-economic changes that women have begun to experience through BRAC.

7.4 Relational/Power Pathways to Empowerment

This section hopes to provide an insight on women's relational/power pathways to empowerment in terms of their reduced economic dependence on their husbands and their increased mobility and communications with the outside world, both of which may be positively affected by their BRAC involvement. According to Bhatta (1980):

A greater economic role for women definitely improves their status within the family. A majority of them have more money to spend and even more importantly, have a greater say in the decisions to spend money (p. 40).

7.4.1 Reduced economic dependence on husbands: It has often been postulated that if women had opportunities for 'gainful' work outside the household, this would render their contributions to the household more 'visible', and concurrently reduce their economic dependence on their husbands (Kamal, et al., 1992). At the same time, although it cannot be expected that men will discontinue their appropriation of women's income, it is nevertheless clear that women will be able to retain at least some control over its use. Under most circumstances, it depends on the whim of the husbands as to how much they want to give to their wives to meet household needs. More often than not the amount that they give is insufficient, thus requiring the wives to somehow make ends meet. Often this leaves them susceptible to violence from their husbands due to their inability to provide them with decent meals (Khan, 1994).

During group discussions, VO members identified the many uses of their incomes. The 'positive' uses of their incomes include purchasing assets; investment and savings; and expenses for consumption, children's education, and other household affairs. The 'negative' uses of their incomes include using it to pay for dowry in daughters' marriages, and giving money to husband. The positive uses represent areas in which women have spent their income for the benefits of their households. Giving money to husbands has been classified as a negative use because it often reflects usurpation of women's income by their male kin. Of course this money will still benefit the households, but the implication is that women have no control over its use. Also, dowry is a social evil and using income to fulfill dowry demands goes against BRAC's goals of women's empowerment. Thus it has been considered a negative use of women's income.

According to qualitative findings, it appears that the positive uses of women's income have increased over time. In terms of personal expenses, women reported that since they now have an independent source of income, they no longer need to rely solely on their husbands whenever they need to purchase a new *sari* or other personal items, for example. Women of one 12-47 month old VO reported:

Often our husbands are reluctant to buy clothes for us and they take a long time to do it. Now we no longer have to wait for them. We have money of our own which we can use to buy these things.

Qualitative findings also revealed that over time, women contribute more to household expenses, thus reducing their previous dependence on their husbands/male kin. Women of one 48+ month old reported:

Before we were dependent on our husbands for everything. If they could not buy day to day necessities, or if they went away for a day, we did not have the capability to run our households at all. Now, if our husbands are not present, we can easily manage household affairs by ourselves.

Women's monetary contributions to their households are especially important during lean months or other crisis periods, in ensuring that family members do not have to go hungry and that the all important instalment payments are made on time. This is what one woman of a 12-47 month old VO had to say:

Prior to BRAC, seven people had to survive on the earnings of one. During crisis I had to sell *lakri* in order to make ends meet. My husband never had enough money. And how could I help - I didn't have any means of earning. Now through BRAC, I can help out my husband during crisis periods.

Women have also reported an improvement in their relationships with their husbands. More often than not, men treat their wives better because they hand over their BRAC money to them to use. Recent studies further substantiate this point (Goetz and Sen Gupta, 1996). Not only that, but it is also quite common for women to hand over substantial portions of their income to their husbands, either for household expenses or for investment purposes. Giving money to husbands is not necessarily an entirely negative use of women's income, as one woman in a 48+ month old VO reported:

In a needy household, no one is separate. Everyone's earnings help us get by.

Qualitative findings further indicated that over time, women are less inclined to hand over their income to their husbands, implying perhaps that they are able to retain some control over the use of the income. It also appears that women are also less inclined to use their income to meet dowry demands in daughter's marriages. Encouraging as this appears, this finding should not be taken at face value, because dowry is a social evil that cannot be easily overcome. Perhaps during the interview period no one's daughter got married, or the members know that dowry is bad, so even if they gave it, they hid this fact from the investigators. In fact, recent studies have indicated that the practice of dowry has actually increased over the past few years. Mahbub, et al. (1995), in a study conducted in South Uddomdi village in Matlab, used PRA exercises to identify the changes in some selected socio-economic issues in the village over the past ten years. Using timeline exercises, villagers identified that "dowry has become an essential part of marriage" (p. 29).

It is an established fact that "money going through a woman in a household [brings] more benefits to the household than money entering the household through a man" (Yunus, 1991). This is because men invariably retain part of their incomes for personal consumption, while women contribute the entirety of their income to the household, the money being allocated for the purchase of day to day necessities, domestic goods, clothing and so forth.

It should be noted that while the qualitative findings represent an overall view that women provided during group discussions, of all the different uses of their income and savings, the survey data only provides a picture of households' last one year's expenditures, from which women's contributions were then identified. Hence the differences in results between the quantitative and qualitative data. Overall, however, it would appear that women's economic dependence on husbands for personal and household expenses decreases over time.

7.4.2 Mobility: Through participation in weekly BRAC meetings and attendance in skills and development training sessions at TARCs, women's mobility increases. Depending on the location of the area offices and TARCs, women often have to travel through adjoining towns, local *bazaars* or other public places to which they may have never ventured prior to their BRAC involvement. This movement, whether in the company of others, or alone, opens their "eyes and ears" to the outside world. They gain exposure to new ideas as well as opportunities to interact with other women in BRAC initiated social networks (Mustafa, et al., 1996). Thus, these women gain confidence in their interactions with the outside world, particularly as they now acquire "socially legitimate reasons to move about and to associate with one another in public spaces" (Hashemi, et al., 1996: 73). The larger village community is often opposed to BRAC's activities as these bring women out of their homes and in contact with (male) outsiders, assist them in creating social networks amongst themselves, and most importantly, decrease their economic dependence on their male kin (Mustafa, et al., 1996).

For analysis purposes, qualitative information on women's mobility has been divided into three cells, but it cannot be postulated that the length of time women spent with BRAC alone will positively affect their mobility, especially since the social and cultural norms that have kept them confined within the boundaries of their *baris* for so long are not so easily overcome. It is hardly realistic to expect that BRAC interventions have made that big an impact on women's mobility in the VOs of the 1-11 month group. The findings substantiate this point. In two VOs, women reported that whereas before they only traveled to their natal homes, accompanied by their husbands, now they occasionally go to the AOs to get loans, but they are still accompanied by their husbands, or other VO members. In four other VOs in this group, women reported that their husbands do not disapprove of their increased movement outside the *bari*. They had to say:

Before we had to wait for our husbands. Now we go alone. We now have money, so money shows us the way.

Apart from the AO, women in this group occasionally go to the health centre for their children's treatment, but hardly any go to the market or other public places. Women of the last two VOs in this group have been relatively mobile even before their BRAC involvement and now that they have joined

BRAC, they do not think it has brought any further changes in their mobility. As BRAC has started operating in these eight VOs very recently, there is naturally a lot of community oppositions to its activities. But group members pay no heed:

So what if they say negative things. They never give us anything. Listening to them won't put food in our stomach. We will go wherever there is money.

The second cell consists of six VOs where BRAC has been operating for 12 to 47 months, but again, the qualitative findings do not necessarily indicate a trend that women's mobility improved with increase in their membership length. In three VOs, some members stated that they still cannot go anywhere at all without their husbands' permission. In another two VOs, members now go to the local *bazaar* and health center, accompanied by their fellow members. The women of the last VO in this group have experienced the most changes in their mobility since joining BRAC. They have gone from a situation where they only traveled infrequently to their natal homes accompanied by their husbands, to one in which they can freely move about on their own, to the health centre and local *bazaar*. Some members mentioned that they can even go to the *bazaar* to make small personal purchases by themselves without asking their husbands for money. This is what they had to say:

Before we had to rely on our husbands for everything. Now we have become independent. We don't want to remain under purdah any longer.

The final cell of analysis consists of eleven VOs where BRAC has been operating for over 48 months. Here, again, the qualitative findings do not point to any discernible trend. Women of two VOs enjoyed freedom of movement even prior to their BRAC involvement, so not much change has occurred after they joined the VO. Women of four other VOs in this group reported that as a result of their movement, they have come into contact with a lot of people and have been able to dispel their fears and timidity. One member said:

Our eyes and ears have opened. Before, even if someone was on the brink of death we could not think of taking him/her to the doctor. Now we can do so without hesitation.

Women of five VOs in this group reported significant changes in their mobility, where they are now confident enough to go to the local *bazaar*, health center, even nearby town, alone if necessary. Even though they don't face any kind of social criticism, some women themselves feel that their *purdah* is getting tainted.

The results from the household survey also indicate that women have become more confident in traveling by themselves but this is not consistent with length of membership. According to the survey findings, two percent of women in the 48+ month VOs traveled to the local *bazaar* on their own, as compared to two percent in the 12-47 month VOs and one percent in the 1-11 month group. Similarly, five percent women in the 48+ month group traveled to the health center alone, as compared to two percent in the 12-47 month group and four percent in the 1-11 month group (see Table E.5). It should be noted, however, that as the survey data represents findings on women's mobility for only the last three months prior to IAS-II data collection period these figures do not necessarily reflect long-term trends or changes in women's mobility. For example, in the last three months prior to data collection, women may not have had cause to travel very far from their homesteads. Or, when they did, they may have been accompanied by others, for a specific purpose, as in the case of traveling to the BRAC office to receive loans. Thus, the survey findings do not provide as clear a picture on changes in women's mobility as do the qualitative findings.

7.4.3 Summarization of findings: From both qualitative and quantitative results, it appears that women's economic dependence on their husbands for personal and household expenses decreases over time, according to the amount of time they spend in BRAC. Women reported that now that they have an independent source of income, they no longer need to rely solely on their husbands for the purchase of personal items. At the same time, their contributions to household asset purchase and investment and savings also increase over time. Women have also reported an improvement in their relationships with their husbands, primarily because they provide them with capital for investment purposes. Although no definite upward trend was discernible for these changes, it is now clear that involvement in BRAC is acting as a change agent in reducing women's economic dependence on their husbands and other male kin.

As for women's mobility, it is also clear that BRAC involvement has had positive impacts to some extent. Traveling to the AOs has given women opportunities to communicate with the outside world and at the same time has helped them overcome their fear and timidity in dealing with strangers. But rather than length of membership, it was the socio-cultural locational factors which contributed more in their mobility. Nevertheless, BRAC is still having positive impacts on women's relational/power pathways towards empowerment.

7.5 An Overview of the Impact:

In almost all sections of this chapter, the analysis has relied primarily on the opinion of VO members in relation to questions regarding the different socio-economic changes they have experienced as a result of their involvement with BRAC. The women's responses have been taken at face value in this partial analysis of empowerment.

In another approach at trying to capture some aspects of empowerment, a 'continuum' was developed to measure the changes in women's lives according to the length of time they have been involved with BRAC. Two 'empowerment' continua were developed, both consisting of 9 indicators each²⁶. Each indicator received a rating of 1 to 5 where 1 was the lowest and 5 was the highest. When giving scores for the qualitative information continuum, informants' responses were taken at face value while for the household survey data continuum, scores were given.

The following is an example of how an indicator has been used in the qualitative information continuum on women's empowerment.

Illustrating indicator: Loan repayment sources

<u>Rating</u>	<u>Description</u>
5	If loan instalments were paid with income from women's own IGAs
4	If loan instalments were paid with income from husbands/other male kin's IGAs
3	If loan instalments were paid with income by selling labour (women's/husbands')/from savings (including <i>mushti chaal</i> , poultry birds/eggs, goats)
2	If loan instalments were paid by borrowing money without interest from relatives.
1	If loan instalments were paid by borrowing money with interest from traditional money lenders/selling assets.

A 'very good' score of 5 was given if women repaid their BRAC loans from income derived from their own IGAs. A 'good' score of 4 was given if women repaid their loans with income derived from their husbands or other male kin's IGAs. A 'satisfactory' score of 3 was given where women repaid their loans by selling their own or husbands' labour or from their savings. If they repaid their loans by borrowing money without interest from relatives, they were given a 'bad' score of 2. Finally, if they repaid their loans by borrowing money with interest from traditional money lenders, or by selling assets, they received a 'very bad' score of 1²⁷.

The following is an example of how an indicator has been used in the household survey continuum on women's empowerment.

Illustrating indicator: Amount of money generated through own IGAs

<u>Rating</u>	<u>Description</u>
5	If the sample member earns a yearly amount of Tk. 5,000 or more from her IGA
4	If the sample member earns a yearly amount of Tk. 4,000-4,999 from her IGA

²⁶ Please see Chapter 2 and Annex E6 for more details.

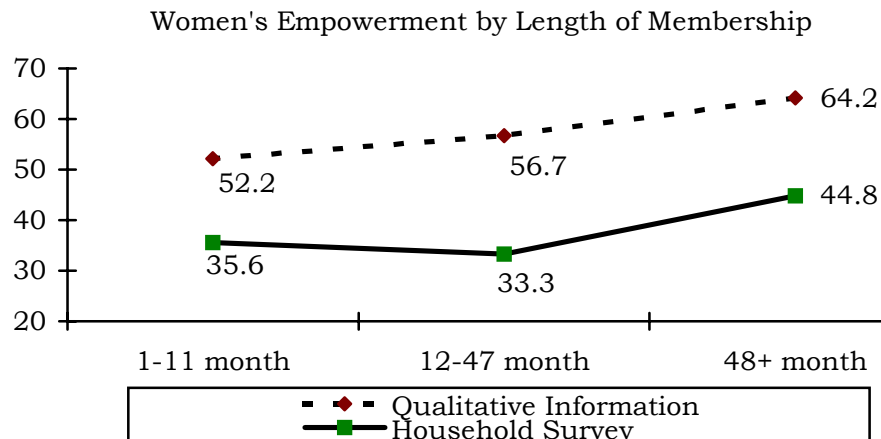
²⁷ See Annex E6 for more details.

- 3 If the sample member earns a yearly amount of Tk. 3,000-3,999 from her IGA
- 2 If the sample member earns a yearly amount of Tk. 2,000-2,999 from her IGA
- 1 If the sample member earns a yearly amount of Tk. 1,000-1,999 from her IGA

This study considered activities in which women are more or less regularly involved and from which they earn an income of at least Tk. 1,000 per year. Therefore, if the sample members had earned Tk. 5,000 or more per year from her income generating activity, they received a 'very good' score of 5. The rest of the scores were given accordingly.

Figure 7.1 presents a graphical representation of the score distributions for women's empowerment from the two continua. The percentage figures indicate the combined score that each VO age group received for both the qualitative information and household survey continua. It may be noted that the scores in the qualitative information continuum has increased proportionately from the youngest to the oldest VO age group, thereby appearing to accept the hypothesis that the more time a woman spends in BRAC and receives BRAC inputs more the changes she is likely to experience in her life and more 'empowered' she is likely to become. The scores from the household survey continuum, however, there was an initial decline in the scores and then they rose considerably. This may be due to the fact that even though both continua had the same number of indicators, different scoring methods were followed. In the qualitative information continuum, scores were given based on verbal statements provided by key informants, while in the household survey they were based on responses received on pre-determined issues in the survey.

Figure 7.1: Distribution of Continuum Scores on Women's Empowerment



7.6 Conclusion

It is quite clear that BRAC has been able to bring about substantial changes in the lives of its programme participants, in terms of facilitating their material, perceptual and relational/power pathways to empowerment, both at the individual and familial levels. Women who were previously not involved in any income earning activities have now begun to participate in them, due to their involvement with BRAC. In many cases, they have become engaged in non-traditional activities or are now engaged in more than one employment earning activity throughout the year. These women use their IGA generated incomes for a wide variety of personal and household uses, but they have yet to reach a stage where they can take independent decisions regarding the use of this income. In terms of asset ownership, it is clear that the longer a woman spends in BRAC and the more employment opportunities she has, the more scope she will have to purchase large assets. But women's control over these assets is still limited, however, since they tend to consider them as household owned, rather than personal assets.

Due to their involvement in BRAC, women have begun to acquire positive self-perceptions of their own personal interests. These self-perceptions will allow them to assert themselves and demand for their rights in their struggle towards socio-economic empowerment. It is also apparent that many men have begun to appreciate the benefits of having their wives involved in BRAC.

Involvement with BRAC also appears to act as a change agent in reducing women's economic dependence on their husbands and other male kin. Women reported that now that they have an independent source of income, they no longer need to rely solely on their husbands for the purchase of

personal and household items. Women have also reported an improvement in their relationships with their husbands, primarily because they provide them with capital for investment purposes. As for women's mobility, it is also clear that BRAC involvement has had positive impacts to some extent. Many women never even ventured outside their own *para* prior to BRAC involvement, let alone travel to a local *bazaar*. Traveling to the AOs has given these women opportunities to communicate with the outside world and at the same time has helped them overcome their fear and timidity in dealing with strangers.

These are the overall changes that women experience as a result of being involved in BRAC. The results of the two 'empowerment' continua seem to indicate that women experience these changes over time according to the length of time they spend in BRAC. What BRAC needs to do is further consider its programme strategies to ensure that these changes can be expedited and sustained in the long run. One major impediment may be the existing socio-cultural norms, values, beliefs and practices of rural Bangladesh, which are generally not receptive to these BRAC affected changes in women's lives. Programmes may be initiated at community level to improve the awareness level among rural people in this regard. BRAC needs to assess whether, apart from changing women's lives, it can also play an effective role in bringing about changes in the mind-set of society to ensure that its poverty alleviating interventions can be sustained in the long run.

CHAPTER EIGHT : ANALYSIS OF MEMBER PERFORMANCE AND COVERAGE

Shantana R Halder, A M Muazzam Husain
Nurul Amin, Fehmin Farashuddin

8.1 Introduction

The performance of VO members differs widely - some attain high success, some do fairly well, while others show poor performance. The present study seeks to analyse the factors responsible for differences in member performance. In consistence with this objective, the IAS-II sampling design provides for classifying the total sample population into three groups. In addition to drawing a broad sample of BRAC member households, we selected a sample of 200 households to cover those members who have performed extremely well and are termed in this chapter as success cases or success households. A third component of the sample population consists of 143 members who have dropped out of VO membership and are termed as dropouts. The members other than success cases and dropouts are termed in this chapter as other BRAC members.

In this chapter, first a comparative analysis of success cases and other active BRAC members is made, followed by an analysis of dropouts and their comparison with active BRAC members. Both quantitative and qualitative information have been used in the analysis. The household survey data have been used to compare the well-being status of different groups. Results of case studies on success and dropout cases are also presented in this chapter.

This chapter also includes discussion on the extent of coverage of the TG population by BRAC, the characteristics of BRAC members and the factors responsible for non-involvement of a segment of the TG in VOs and reasons for involvement of some NTG population in BRAC. Some policy implications have also been derived from the analysis.

For analysing member performance, the 200 success households were purposively selected from 20 out of the total 25 AOs included in the IAS-II sample. Five AOs were excluded as they were new AOs which were formed

within one year prior to the time of data collection and it was assumed that members of these new areas would not be able to achieve any considerable success in such a short period. Based on the perceptions of the AO staff, 10 member households were selected from each of these 20 AOs. However, during data collection, four success cases selected by AO staff were found to overlap with the randomly selected member households of the main survey, and were thus excluded for the present analysis. Thus, the total number of success households was reduced to 196. The 143 dropouts were randomly selected from the IAS-I sample population. The remaining 1,072 member households were randomly selected BRAC members. Of them, 322 came from the IAS-I (panel) sample and the other 750 from newly formed AOs. Details on the selection criteria are discussed in Chapter Two.

From the 196 success and 143 dropout cases, five success and five dropout cases respectively were purposively selected for in-depth case study work. Semi-structured checklists were used to elicit information from the ten cases and the information obtained was cross-checked with their household survey data sheets. The purpose of these qualitative case studies was to try to uncover the hidden reasons behind the individual member's success or failure, resulting from BRAC interventions.

8.2 Analysis of the Success Cases

This section analyses the characteristics of the selected success cases, their well-being and poverty status including involvement in Income Generating Activities (IGAs), use of IGA income, ownership and control; investigates into the factors contributing to their success; and derives certain policy implications. In addition to household survey data, results of five individual case studies on success cases are also used in the analysis.

8.2.1 Characteristics of the success cases by length of membership:

The success cases have been divided into three categories according to their length of BRAC membership (in months), as in the case of other BRAC members. Within the success group, the largest portion (46.4%) came from the 48+ months category, and the lowest from the 1-11 months membership category. Among other BRAC members, the 12-47 months membership category constitutes the largest group (38.9%) while the 48+ months category the smallest (27.5%). It may be noted that although the sampling was supposed to exclude AOs that were less than 12 months old at the time of data collection, 16 success cases were nonetheless included whose membership length was found to be less than one year, as the BRAC staff of the respective areas felt that these particular households had achieved a very high level of economic success within a few months (Table 8.1).

Table 8.1 Distribution of sample households by length of membership

Membership length (months)	Success cases	Other BRAC members
1-11	16 (8.2)	360 (33.6)
12-47	89 (45.4)	417 (38.9)
48+	91 (46.4)	295 (27.5)
Total	196 (100)	1072 (100)

Figures in parentheses indicate percentages

This section describes some characteristics of the success households with respect to selected explanatory variables that have been disaggregated by the households' length of membership. Analyses of results are provided in Table F.1.

Average household size and proportion of income earner to household size show no significant differences among the different groups of success households. Demographic dependency is significantly less among the oldest group. As the proportion of female to total number of income earners increased, member households' economic dependency decreased. This is a positive impact of BRAC interventions.

Amount of pre-BRAC land was used as a proxy to identify the initial economic condition of the sample households. Average pre-BRAC landholding of the different groups shows that all groups owned on an average less than 50 decimals of land before joining BRAC. Amount of present land shows positive changes in member households' landholding after joining BRAC. The oldest member group owns the highest amount of land. The net average gain in this regard is highest (33.3%) for this group (Table 8.2). It also shows that with increase in membership length, the net gain in present amount of land holding of success cases also proportionately increased.

Table 8.2. Average pre-BRAC and present landholding of the success cases by length of membership (dec.)

Variables	Length of membership (months)			Average
	1-11	12-47	48+	
Pre-BRAC land (dec.)	39	35	42	39
Present (dec.)	42	44	56	50
Change (dec.)	3	9	14	11
% increases	7.7	25.7	33.3	28.2

Amount of loans received from BRAC increased significantly with increasing membership age. There exists a strong negative relationship between the amount of BRAC loan and other non-BRAC institutional loan received by a household. Findings indicate that when households receive increasing

amounts of loans from BRAC, their demand for additional amount from other institutional sources tended to decrease. The amount of non-institutional loans taken from informal sources like friends, relatives, neighbours and others are negligible compared to BRAC and other institutional loans but tend to rise as membership length increases (Table F.1)

Amount of BRAC and total savings also increased with membership length. This is the common trend for all existing BRAC members (see Chapter 3). Savings with BRAC of the newest members appear to be relatively higher than the middle group. Relatively higher amount of loan taken by the new members within the short period of their membership explains their higher rate of savings. Moreover, the current savings policy of BRAC in raising its upper limits has perhaps encouraged higher savings for younger members. The total amount of formal savings of the new members which was also higher than that of the next following membership age group indicates that the new members have a better savings habit.

The value of both productive and non-productive non land assets was highest for the oldest member group and lowest for the youngest one. The value of non land assets gradually increased with increasing membership length. But the value of total assets (including land and non land) and net worth was found to be higher for the youngest member group than the next one. This indicates that newly recruited BRAC members had a higher initial endowment than their counterparts in the next membership length group.

Expenditure increased with increasing membership length. But the rate of increase is marginal. Proportion of food to total expenditure reduces significantly with membership length. Theoretically there are some direct relationship between increase in income and percentage of income spent on food. As income increases proportion spent on food reduces if the basic demand for food reaches a satisfactory level.

8.2.2. Well-being status of success cases vs. other members: This subsection makes a comparative analysis of the material well-being status of the success cases and the other BRAC members and tries to bring out the differences between the two groups.

To compare results a total of 22 variables explaining the material well-being of an individual household were selected. These include number of demographic and economic dependants per 100 demographically and economically active persons respectively, proportion of income earner to total population, proportion of female income earner to the total number of income earner, amount of pre-BRAC and present land, level of education of the household, per capita calorie consumption, per capita floor space, value of houses, amount of expenditure, amount of BRAC and other loans received, amount of savings, assets, net-worth, and sample members' income from the IGA involved. The hypothesis that will be tested here is that

the mean of all selected variables of success households would be significantly higher than that of the other BRAC members except the amount of pre-BRAC land, which is taken as a proxy for initial condition.

Table 8.3 shows the comparative well-being of all success cases and other sample BRAC members irrespective of their membership length. Results show that on the whole the success households are better-off than the other BRAC members. The quality of life in terms of housing facilities like per capita floor space of living houses, value of living houses, and the average level of household education - all of these show that the success cases are at present better-off than their counterparts. They received more inputs from BRAC and other institutions, and own more than two times non land assets, 150% more savings, and 87% higher net-worth. The performance of success cases in terms of per capita food and total expenditure and average annual income from member's running IGAs directly explain that their level of well-being is significantly higher than that of the other BRAC members.

Table 8.3. Mean differences of indicators of material well-being between success cases and other BRAC members (all age groups).

Indicators	Success cases n=196	Other BRAC n=1072	Success Vs Other BRAC t value
Household size (No)	5.5	5.0	3.15***
Demographic dependency (%)	50.9	51.0	-0.04
Economic dependency (%)	240.1	245.5	-0.41
% female to total income earner (%)	13.4	9.6	2.02**
Average level of hh education (score)	139	99	6.44***
Pre BRAC land (decimal)	39	36	0.29
Present land (decimal)	50	42	0.86
Per capita floor space (sft.)	82	70	2.15**
Value of living houses (Tk.)	20,359	9,718	9.07***
% of self employed	67.4	52.2	3.95***
% of wage employed	17.4	30.3	-3.72***
Total number of BRAC loan	3.82	2.23	12.16***
Total BRAC loan (Tk.)	17,118	7,558	16.80***
Last three years institutional loan (Tk.)	15,322	6,813	16.24***
% received training	70.9	26.2	13.01***
BRAC savings (Tk.)	1,991	932	13.85***
Total savings (Tk.)	3,113	1,245	14.79***
Members' annual income (Tk.)	8,342	1,094	17.77***
Monthly per capita expenditure (Tk.)	820	687	2.97***
% of food to total expenditure	63.0	64.1	-1.04
Per capita calorie intake per day	2,371	2,306	1.63
Total non land assets (Tk)	37,952	17,125	11.68***
Net worth (Tk.)	117,941	63,009	6.72***

** - significant at 5 % level, *** - significant at 1% level

A comparative analysis of the relative well-being of success cases and the other BRAC members by disaggregating them with length of membership also explains the better well-being status of the success cases.

Considering membership length of less than one year, the demographic dependency ratio of success households is marginally lower than that of other BRAC households (Table F.2). The proportion of female to total income earners who contribute to the common resource pool of the household is less for the success cases, but average annual earning of the individual BRAC member is ten times higher for the success cases. The success households are better educated. Although their per capita floor space of living houses is less, the value of their houses is 50% higher which indicate better quality of their living houses. They received much higher amount of loan from BRAC and other institutional sources. The amount of savings, non-land assets and net-worth are also higher and the mean differences of the first two are significantly higher for the success cases indicating a relatively higher level of economic well-being of this group. The success cases with relatively higher dependency and similar initial condition demonstrated better performances. This is apparently because they are better educated, and received more inputs from both BRAC and non-BRAC sources. They are involved in such IGAs from where they are able to get more return than their counterparts.

The differences between success households and other BRAC members with membership length 12-47 months are shown in Table F.3. The success households are initially better-off and gained much more than the others in landholding since joining. Results of *t* tests of different variables and their level of significance confirm their better-off position. The success cases are consuming more calorie, spending also more on food and non food items, have nearly two times higher savings, have more than two times non-land assets, and own better quality houses in terms of their value and per capita floor space. Members' average annual income from IGAs they run is 8.7 times higher for the success cases. All these explain their better performance.

Table F.4 shows the differences in the well-being of these two groups with membership length of 48+ months. Although the initial land holding of the success households was relatively lower the net gain in terms of present landholding is in their favour. Presently the success cases have less dependants and a higher proportion of female to total income earners in their households.

Their significantly higher level of education, food and total expenditure, inputs received, and the level of other output variables like amount of asset holding, savings, net-worth, and the higher volume of members' annual earnings tend to confirm that the success cases are indeed better-off.

8.2.3 Poverty status of success and other BRAC households: Figure 8.1 presents the poverty incidence of the success cases compared to other BRAC member households. Percentage of extremely poor households is only 8.2% among the success cases. For other BRAC households it is 27%. On the other hand percentage of households above poverty line is about 80% and 48% respectively for success and other BRAC households which is 150% higher for the success cases. The poverty gap and FGT indices indicating the depth of poverty and its severity are 5.0% and 1.4% respectively for the success households. These indices are 260% and 330% higher respectively for the other BRAC member households (Figure 8.2).

Figure 8.1 Relative performance of poverty incidence of success and other BRAC member households

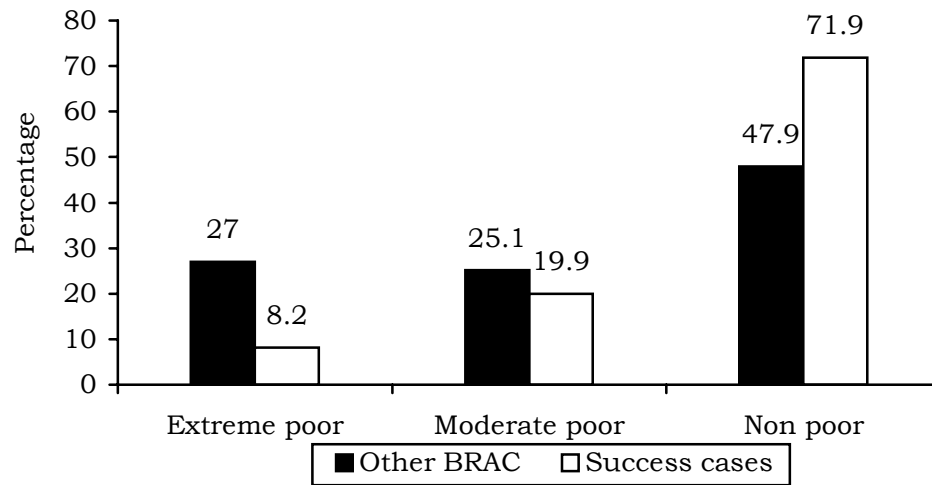
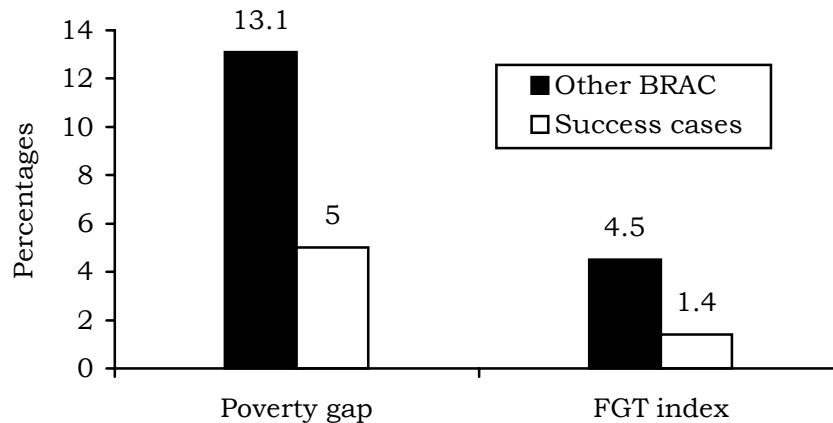


Figure 8.2. Relative performance of poverty gap and FGT index of success and other BRAC member households



8.2.4. Use of IGA generated income: Income generated by members from IGAs are spent in most cases for household needs: food consumption, education of children, treatment, buying clothes, etc. (Table 8.4). Percentage of income used for consumption is significantly higher for other BRAC members than the success cases. Members from the success households spend significantly more for children's education, purchasing clothes and treatment than other BRAC member households.

Table 8.4: Use of IGA generated income by member category

Use of IGA income	Success	Other BRAC	Success Vs BRAC (t value)
Food consumption	45.1	64.9	-5.57***
Children's education	23.5	13.6	3.65***
Treatment	26.7	21.2	1.79*
Purchase of clothes	3.6	0.2	4.20***
Others	1.1	0.2	1.53
Total	100	100	

* - significant at 10% level, *** - significant at 1% level

8.2.5. Ownership and control over assets and mobility: The study takes account of few aspects of women's empowerment like their ownership of asset, and whether they have control over them to convert it into cash any time without permission from their husbands. The list of assets owned by the female household members were identified during the period of questionnaire pre-testing. It is also assumed that to own a piece of land, or to have a chicken by her own is not the same. For comparability all the assets are given score considering their life time, value, and the main user of such assets. For land, cow, rickshaw, van, sewing machine, TV, spinning machine, and handloom the score given is 3 for each item, two is given for goat, big trees with minimum current price of Tk. 100, watch, and radio. For other items included in the list the score given is one. The reason for giving different scores for different types of asset ownership is that traditionally in the patriarchal society like Bangladesh females do not usually own any durable assets like a piece of land which are not easy to manage. The male ownership of such assets are well protected by different laws and social norms. The higher the aggregate score, the more assets a female member has on her own. According to Table 8.5, 5.5% more members from the success households owned any kind of assets. Among those who owned any asset the proportion of those who have control over them fully or partially is also significantly higher for the success households. Average value of assets owned by the individual member is also significantly higher for the success group (more than 60%). However, in spite of the higher percentage of success households having control (full or partial) over assets they own, the proportion of assets owned and controlled is similar for both of these two groups.

Table 8.5. Ownership and control over assets by member category

Variables	Success	Other BRAC	Success Vs Other BRAC (t value)
Members owning any kind of assets	189 (96.4)	974 (90.9)	2.61***
Members who have control over assets	150 (76.5)	681 (63.5)	3.54***
Average assets owned by the member herself (score)	12.2	10.0	10.31***
Average assets controlled by the member herself (score)	10.3	6.6	9.65***
Control over % of total assets owned	85.8	85.8	-0.02

Figures in parentheses indicate percentages, *** - significant at 1% level

Table 8.6 shows the differences in relative performances of success cases and other BRAC members in terms of some selected empowerment indicators. As shown in the table, success households are significantly better-off in all variables included in the table like ownership of land, living houses, savings, poultry and livestock, and other variables in respect of ownership and control over these assets. Member's visit to the nearest *bazaar* by herself during the last three months before the date of survey was considered as the indicator of women's mobility. Results show greater mobility of members among the success group. Success households may, therefore, be considered as more empowered than other BRAC members.

Table 8.6. Performance of BRAC members in empowerment indicators

Empowerment correlates	Sample groups (%)		Success Vs Other BRAC (t value)
	Success	Other BRAC	
Ownership of land	34.2	18.2	5.13***
Ownership of houses	20.9	8.8	5.12***
Ownership of cow	38.3	15.3	7.73***
Ownership of goat	29.6	20.4	2.86***
Ownership of poultry	83.2	68.8	4.09***
Ownership of rickshaw/van	10.7	3.6	4.32***
Ownership of jewellery	82.7	64.2	5.11***
Control over owned land	17.35	9.4	3.32***
Control over owned cow	20.4	6.8	6.23***
Control over owned goat	21.4	12.9	3.17***
Control over owned poultry	66.8	49.4	4.54***
Control over owned rickshaw/van	6.6	1.1	5.15***
Control over owned jewellery	52.6	34.8	4.76***
Own savings	90.8	88.3	1.01
Visited local market by herself	26.0	16.3	3.27***

*** - significant at 1% level

8.3. Factors Contributing to Success

Some factors have been identified to have influenced in determining the level of success of BRAC members. They are discussed below.

8.3.1 VO membership status: Table 8.7 presenting the position of the sample members in VOs reveals that most of the success members are involved in the management of the VO as president, secretary, cashier or small group leader. These are the persons who usually take various management decisions such as who may get loans and for what purposes. They are mainly the members who come into direct interactions with BRAC field staff. Usually members of the management committee of VO are selected from among those who have free time to devote to VO functioning activities, have management skills, and who are respected. Table F.5. indicates that all the presidents of sample VOs came from relatively better off households. The case studies and other studies carried out by RED, BRAC e.g., (Matlab studies) found that the person who takes the major initiative to form a VO usually become the president. Members of the management committee also enjoy more BRAC facilities such as receiving higher amount of loans than general members (Table F.5).

Table 8.7. Status of Success cases and other BRAC members in VOs

Status in VO	Sample household groups	
	Success	Other BRAC
President	67 (34.2)	45(4.2)
Secretary	14 (7.1)	29(2.7)
Cashier	22 (11.2)	25(2.3)
Small group leader	17 (8.7)	56(5.2)
General member	76 (38.8)	971(85.5)
Total	196 (100.0)	1072(100.0)

Figures in parentheses indicate percentages

8.3.2 Involvement in IGAs: Tables 8.8 and 8.9. illustrate the distribution of BRAC sample members presently involved in any IGA, their involvement before joining BRAC, number of IGAs each member is running, training in such IGAs, and the average annual income received from such activities. Seventy nine percent the success cases are presently involved in activities from which they receive any monetary return. For the other sample members the rate is only around 45%. Before joining BRAC these proportions were 25.5% and 28.4% respectively. Due to BRAC intervention the cumulative rate of increment in IGA involvement increased by 53.6% and 15.2% for success cases and other BRAC members respectively. It has also been found that a member who is doing any IGA is also engaged in a number of activities. The average number of activities they are involved in is more among the success cases. The success cases have received training in 41% of IGAs they are involved in; while the other BRAC members have

training in about 11% of the IGAs they are involved in. The success cases are also getting eight times higher return from their activities.

Table 8.8: Involvement in IGA of Success and other BRAC sample members

Length of membership (months)	Pre-BRAC involvement		Present involvement			
	Success	Other BRAC	Success		Other BRAC	
	No of members	No of members	No of members	No of IGA per member	No of members	No of IGA per member
1-11	6(37.5)	147(40.8)	14(87.5)	1.57	160(44.4)	1.44
12-47	33(37.08)	110(26.38)	73(82.02)	1.93	180(43.17)	1.53
48+	11(12.09)	47(15.93)	68(74.25)	1.94	138(46.78)	1.36
Total	50(25.51)	246(28.35)	155(79.1)	1.90	478(44.6)	1.45

Figures in parentheses indicate percentages

Table 8.9 Training in IGA and income from IGA of Success cases and other BRAC sample members

Length of membership (months)	Training in such IGA they run (%)		Average annual income (Tk.)	
	Success	Other BRAC	Success	Other BRAC
1-11	36.36	5.26	9,944	929
12-47	33.81	10.27	8,701	999
48+	47.68	14.77	7,709	1,429
Total	41.10	11.37	8,342	1,094

Findings of the case studies on five selected success cases revealed that those women involve themselves in any IGA, who have no adult earning members, have higher dependency ratio, and necessary skill. These women are also found to have the necessary willingness and enthusiasm to improve their existing socio-economic conditions.

Types of activities they are presently involved in, the activities they were engaged in before joining BRAC and their involvement in total number of activities are presented in Table 8.10. The total number of activities are more than the total number of respondents as many of them are engaged in multiple IGAs. The survey found 41 different types of activities of their involvement. All these 41 activities are divided into 7 broad sub-groups for simplicity of analysis (Table F.6). The table shows that numbers of pre- and present activities involved in by other BRAC members were 501 and 693 respectively. For the success cases these numbers were 175 and 295 respectively. The number of activities they are involved in increased by 38%

for other BRAC members and 69% for the success cases. Traditionally women in the rural areas are involved in post harvest activities of agricultural crops of their own, mainly in food processing. From such activities they can not get any direct return. The survey considers only those activities which can generate direct income. The major activities of such female involvement are poultry, goat and cow rearing and fisheries. Before joining BRAC these were the major areas of involvement of the sample members. Tailoring, *kantha* stitching, and net making which are included in cottage industries are the next broad areas. In spite of some major changes, these two groups of activities have retained their predominant position among all IGAs. Members who are doing the same job as before have expanded their activities by increasing their capital investment. With BRAC support more women are now cultivating vegetables for commercial purposes. This is one of the most profitable activities, which give continuous earning throughout the year.

Table 8.10: Present and Pre-BRAC IGA activities by member category

Activities	Present		Pre-BRAC		Average annual income (Tk)	
	Success n=196	Other BRAC n=1,072	Success n=196	Other BRAC n=1,072	Success n=196	Other BRAC n=1,072
Employed in activities created by BRAC	32 (10.9)	19 (2.7)	-	11 (2.2)	4,560	2,005
Poultry, livestock, fisheries and vegetable cultivation	151 (51.2)	351 (50.6)	98 (56.0)	241 (48.1)	5,210	1,587
Cottage industries	40 (13.6)	155 (22.4)	37 (21.1)	124 (24.8)	8,190	1,971
Wage employment	12 (4.1)	68 (9.8)	6 (3.4)	62 (12.4)	5,178	2,591
Small Trading	37 (12.5)	75 (10.8)	19 (10.9)	41 (8.2)	15,739	3,768
Vegetable cultivation	19 (6.4)	15 (2.2)	11 (6.3)	11 (2.2)	9,553	2,387
Other skilled labour	4 (1.36)	10 (1.0)	4 (2.2)	11 (2.2)	7,400	2,617
Total	295 (100)	693 (100)	175 (100)	501 (100)	10,549	2,458

Figures in parentheses indicate percentages

Small trading is another profitable area. The reduced proportion of day labourers and the increment of other activities explain that due to BRAC intervention females are now more interested in running activities independently. The number of individuals involved in such activities created by BRAC has also increased over time. The table indicates that BRAC selected more members from the success cases and created for them employment opportunities. BRAC trained up and locally employed those members who are more enthusiastic, have entrepreneurial skill, are literate, and also those who are more needy.

8.3.3 Kinship ties and loan privileges enjoyed: The case studies also recorded some aspects which the survey could not cover. It is found as indicated above that the success cases are members who themselves are involved in the management committee or have a close relative in the committee. They also played a major role in VO formation. They have many relatives in their VO. Many of them are also presently busy with multiple income generating activities.

Activities they are running need more financial capital which they borrowed from BRAC in their own name and in the name of their relatives. The credit disbursement rules of BRAC do not allow individual members to receive loan beyond a given amount at a certain period of time. It is costly for them to borrow money from the locally available sources, for example, from *Mahajans*, and their inadequate assets neither allow them to have loan from the bank by providing collateral. Under the circumstances, they 'managed' BRAC credit in others' name, which was in violation of BRAC credit rules. The actual user of borrowed fund took the responsibility to pay weekly instalments. In one case the incumbent also paid the weekly savings of these members by herself on condition that after withdrawal of their membership she would inherit their savings too.

8.3.4 Policy implications: Analysis of the performance of the success cases and other BRAC members shows the former had attained significantly higher level of success. The success households have lower dependency ratio (both demographic and economic), higher per capita floor space and value of houses, received more training, had higher income, expenditure, net worth, non-land assets and better employment status than the other BRAC member households.

An analysis of the factors contributing to the high level of success for the success cases shows that 61% of them were involved in the management of VOs against 14% for others, 79% were involved in IGAs against 45% for the others, 41% received training against 11% for the rest. There was a higher prevalence of their involvement with multiple IGAs, and at the same time they had enjoyed some special privileges such as having close kinship ties in the VO and enjoying the use of multiple loans for raising their socio-economic status.

The above findings have some valuable implications for micro-credit programmes/policies for alleviating poverty. The success cases demonstrated that they had combined the traits of leadership and entrepreneurial skill with enjoyment of special privileges such as multiple loan use. One can deduce from the above that:

- (i) It is not only access to credit but also other personal characteristics/traits of the poor that can bring success.
- (ii) All the poor do not have the same capacity to utilize loans and to achieve success. In this sense the poor are not a homogenous group.

Thus, a blanket micro-credit policy that puts stress upon easy access to credit alone cannot achieve desired result. Depending on loan utilization capacity along with other associated success variables such as traits of leadership, special skill and entrepreneurship, a flexible loan policy may have a greater chance of achieving success.

- (iii) Special programmes are necessary for those who are disadvantaged in respect of skill, entrepreneurship and leadership capacity. For example, a BRAC study (Evans, et al., 1996) found that the disadvantaged group prefers wage employment to credit programme.

8.4 Case Studies on Success

A synthesis of the findings on the five success case studies are presented here which briefly provides the common features of the five cases and the reasons behind their success. The results of two of the five case studies on success are presented in Annex F.11.

8.4.1 Socio-economic characteristics: The socio-economic background and the level of performance of the selected five success cases in terms of various indicators considered are presented below.

8.4.1.1 Socio-economic background: Of the five success cases, three were from northern Bangladesh, one from the north-eastern part and one from the north-western part of the country. All five of them are married. Their average family size is 7.8 members, while their average number of income earners is 2.8. Apart from one member who can only sign her name, three of the cases have studied up to Class V and the other up to Class VII. The oldest success case, Fatema, has been involved with BRAC for over 12 years, while the youngest, Tahera, for about 3 and a half years.

8.4.1.2 NGO involvement: Only one of the success cases was found to have been involved with any other NGO prior to BRAC. All of them apart from one were found to be the presidents of their respective VOs. The sole general member among the success group, Sahar Banu, does not really take an active role in *samity* affairs as she is not permitted by her husband to do so. Each of the four VO presidents was found to have been with her VO from its very inception. Two of them were actually instrumental in setting up the VO in their respective villages. It was found that all five women have close kin in their *samities*. In the case of Tahera, all members of the management committee are her close kin.

8.4.1.3 Training: Only two of the success cases have received training from BRAC - Fatema as an FE teacher and Razia as an HRLE teacher. Both of them also received several sectoral programme training. The other three women have been offered training but were unable to attend, either because their husbands did not permit them, or because the training venues were

too far from where they live and they were unable to leave behind their young children for extended periods of time.

8.4.1.4 Credit: Each of the five women has received five loans or more, the total ranging from Tk. 17,000 to Tk. 33,000. Interestingly, it was found that all five of them have also utilized the loans of several other *samity* members (who may or may not have been kin). They utilize these loans on the provisions that they will pay the loan instalments and make the savings deposits (so the savings become theirs). On an average, it was found that each success case has utilized the loans of at least 4-5 members.

8.4.1.5 Repayment of loans: Almost all the success cases' husbands have some role in utilizing their wives' BRAC loans, so they jointly provide the instalment payments, along with their wives. Of the five cases, only one, Fatema stated that she had defaulted on her instalment payments (of her current loan), due to unavoidable reasons. But the others have never defaulted on any of their loans. Razia even went so far as to say she would not allow any of her *samity* members to default either.

8.4.1.6 Savings: Before joining BRAC, none of these women had any savings. Now, they all have BRAC savings. Apart from that, one case was found to have savings in a village based savings *samity*; one has savings in two village based market co-operatives and a third has some cash savings in hand as well as in a local co-operative.

8.4.1.7 Involvement in income generating activities: All five cases were found to be involved in multiple and high return income generating activities (IGAs). In the case of Sahar Banu, her husband is the one who utilizes her BRAC loans in the family tomato trading business, cloth shop and bicycle repairing shop. Sahar Banu only participates in home based poultry rearing. As for the other four women, they are all jointly involved with their husbands, in varying degrees, in utilizing their BRAC loans. Razia's husband oversees the operations of the family rice mill, and also looks after the family's agricultural land. Razia herself is involved in dispensation of *kabiraji* medicine and she also rears pigeons, ducks and chicken.

Tahera is a woman with many entrepreneurial skills. She is simultaneously engaged in a tailoring business and a firewood business and she also has a dairy and poultry farm and grocery shop. She is also a BRAC pullet rearer. Her children assist her in these activities. Her husband carries out those activities that have to be conducted outside the household such as market transactions, buying materials for the tailoring business, and so forth. Maya Rani's husband runs a sweet shop and also has a paddy husking and firewood businesses. Maya assists him in these activities. In Fatema's case, she is the main income earner of the family as her husband Abdul is unable to work due to physical disabilities. Fatema is involved in *kantha* sewing,

needlework and home based poultry rearing. Her children assist her in these activities.

8.4.1.8 Use of IGA generated money: The five women stated that they mainly use their IGA generated income for family expenses, children's education and medical treatment, to make instalment payments and savings deposits, to pay for their daughter's marriage (in the case of Tahera), and to make improvements on their housing conditions. All five women have been able to make improvements in their housing conditions by putting up houses, or improving their existing houses with tin roofing; by installing tubewells, sanitary latrines and electricity. They also use the money for investment purposes or as savings.

8.4.1.9 Ownership and control over assets: The five women have also used their income to purchase assets; two purchased land; one owns five sewing machines, two own cows, and one bought a black and white television. Two of them stated that they could not sell their assets without their husband's permission, two stated that they could do so and the last case considers her assets as household assets, but said that she could sell them if necessary and her husband would not object.

8.4.1.10 Changes in social status/prestige within household and community: Four of the women reported positive changes in their social status both within their households and in their communities resulting from their BRAC involvement. Razia claimed that she had enough confidence now to run her household by herself, if that was necessary. She also stated that she and her husband are now very well respected in the community: she is often called upon to settle disputes among her members and when her husband goes to shops, he is given a chair to sit on, as a sign of respect.

Tahera feels that her status within her household has increased to a great extent since she has joined BRAC and become involved in IGAs. Before, she could not even tell her husband about any family needs. Now she is the one who mainly looks after these needs. The two of them jointly decided how much they will spend for what purposes and where they will invest. Before settling her daughter's marriage, she went along with her husband to visit the bridegroom's family to see their housing condition and socio-economic status. She herself admitted that this was something very unusual for a Bengali woman to do. In the community, both she and her husband enjoy a great deal of prestige and respect from neighbours. Villagers visit her to receive advice and where once no one provided her with any loans, now everyone wants to invest in her projects.

Maya Rani feels that her prestige and social status have both increased since she has joined BRAC. Before joining BRAC, Maya Rani did not make any economic contributions to her family, thus her opinions never counted for much. She also never made enquiries about her husband's business. But

now her husband gives importance to her opinions and even occasionally takes her advice regarding his business matters. In the *samity*, all her members respect her and obey her word. Both the VO members and her neighbours ask for her advice in solving their disputes and always invite her to their social events.

Fatema thinks that BRAC has changed her life in many ways. She now plays a vital role in the economic activities of her family, thus her family accepts her decisions regarding her children's education and marriage, land purchasing matters and so forth. Before she joined BRAC she had no role in such matters as her husband used to take care of everything. Now, all her sons and daughters, even those who are adults, obey her word. Community members also respect her. Many women work under her supervision. For the last two terms, Fatema has been elected as the female representative of her Union Parishad. She believes she was given this honour and respect because of her BRAC involvement.

The last case, Sahar Banu, also claimed to have experienced positive changes in her social status especially regarding household matters, but from the observations of the interviewers it was quite clear that Sahar Banu's husband is very much the dominant personality in the household and decision-maker within the household.

8.4.1.11 Changes in mobility: Of the five women, three have experienced positive changes in their mobility due to their BRAC involvement. Apart from regularly going to the local bazar, Razia has even gone to the thana and court, accompanied by her brother. She feels it is important for women to be aware of their surroundings. Fatema is the female representative of her Union Parishad and regularly attends the meetings. Tahera is also very mobile. Since she is involved with different income generating activities, she needs to visit many places. All three women stated that they face no community harassment when they move about and that anyway, they are confident enough to not pay any heed to such harassment, if any. Of the remaining two, Sahar Banu is not permitted by her husband to go outside the home, while Maya Rani only goes to the BRAC office at the time of taking loans.

8.4.2 Factors contributing to success: The following reasons have been identified as common factors contributing to the success of the five cases:

8.4.2.1 VO membership status: Four of the five cases are presidents of their VOs; two of them in fact took the initiative to set up the VO in their respective villages. VO presidents are usually members who are well respected by the others. It is mainly the VO presidents who take various management decisions regarding who will get loans, for what purposes and so forth. They are also the ones who directly interact with the area office staff on a regular basis. As a result, they are often able to enjoy more BRAC

facilities and may even receive higher amounts of loans than general members.

8.4.2.2 Involvement in multiple/high return IGAs: The five success cases were found to be women who had the necessary willingness and enthusiasm to improve their existing economic conditions and they have done so by investing their BRAC loans in multiple and high return economic activities such as shop-keeping, paddy husking, tailoring and vegetable cultivation. Two of them have also participated in several sectoral training programmes which have no doubt assisted them in undertaking these IGAs. Of the five women, two undertake the main activities related to their IGAs by themselves, two assist their husbands (who are the main income earners) in the family IGAs and the last one is involved in home based poultry rearing while her husband utilizes her BRAC loans in various small trading businesses.

8.4.2.3 Kinship ties and loan privileges enjoyed: All five success cases were found to have had close kin in the VO management committee²⁸ and they have all taken advantage of this fact. Since all them are involved in multiple IGAs, in many cases they often require more financial capital than they can access on their own. Rather than take recourse to money lenders, they take advantage of their VO kinship network and engage in multiple loan usage. One woman was found to be utilizing the loans of ten other members.

8.5 Analysis of the Dropout Cases

This section is designed to provide a detailed investigation of the characteristics of the sample households who have discontinued their membership, and the reasons behind their membership withdrawal. Discontinuation of membership is a phenomenon in village organization which may be divided into two types, viz., voluntary dropout by members and expulsion of members by BRAC. Currently, the problem of member dropout is not a serious problem for the RDP since the annual rate is less than four percent (BRAC, 1997). We have analysed the results of 143 selected samples of dropouts covered by the household survey to measure their material well-being, and the main reasons behind their membership discontinuation, while information from group discussions and wealth ranking exercises provided more detail on these reasons. Results of five individual case studies were also included in this analysis.

8.5.1. Characteristics of the dropout cases: Table 8.11. describes the differences in material well-being status between the BRAC members and those who have discontinued their membership. According to the table there is no significant difference between these two groups considering their initial condition (amount of pre-BRAC land), present landholding, dependency, quality of housing as measured by the value of houses and per capita floor

²⁸ The VO management committee is made up of the president, cashier, secretary and small-group leaders.

space, level of household education, food and non-food expenditure, per capita calorie consumption, value of non-land assets and net-worth. The table also shows that for both dropout households and existing BRAC members, the percentage of households below poverty line is about 52%. But there are significant differences between BRAC and dropout households in terms of occupational status of the household head, amount of inputs received, amount of savings and annual income received from members' ongoing IGAs. The differences are in favour of BRAC members. BRAC was the main source of credit of its members and 86.8% of their savings amount is saved with BRAC. These are the factors contributing positively to an increase in the total amount of inputs received and amount saved. The table does not tell us whether the dropouts are the poorest of the VO members nor those who have graduated to the non poor.

Table 8.11: Mean differences of indicators of well-being between BRAC existing members and dropouts

Indicators	Dropouts n=143	BRAC n=1072	T value
Demographic dependency ratio (%)	48.9	51.0	-0.50
Economic dependency ratio (%)	240	246	-0.43
Proportion of female income earner (%)	9.4	9.6	-0.11
Average level of household education (score)	89	99	-1.34
Pre BRAC land (decimal)	37	36	0.10
Present land (decimal)	39	42	-0.35
Per capita floor space (sft)	69	70	-0.08
Value of living houses (Tk.)	9106	9718	-0.54
% of self employed	42.7	52.2	-2.13**
% of wage employed	40.6	30.3	2.48**
Last 3 yr. institutional loan (Tk.)	4377	6813	-4.33***
% of BRAC to total institutional loan	52.0	82.1	-8.64***
% received training	21.0	26.2	-1.35
% of BRAC to total savings	8.7	86.8	-4.40***
Total savings (Tk.)	452	1245	-6.27***
Members' annual income (Tk.)	534	1094	-2.71**
% of food to total expenditure	67.8	64.1	2.89***
Monthly per capita expenditure (Tk.)	675	687	-0.21
Per capita calorie intake per day	2364	2306	1.25
Total non land assets (Tk.)	15931	17125	-0.66
Net worth (Tk.)	69212	63009	0.75
% below poverty line	52.4	52.1	0.09

- significant at 5% level, *- significant at 1% level

Table F.7 also shows that ratio of self employed households to total is significantly less and wage employment is significantly higher for the dropouts. Number of households with net-worth less than Tk. 5,000 is higher among the dropouts but at the same time number of those who own net-worth valued at Tk. 50,000 and more is also higher among the dropouts.

According to their self-assessment, 50% of the dropout households have faced food deficit either always or occasionally. The BRAC members are in a relatively better position. The proportions of households facing food deficit always or occasionally are about 10% lower for the BRAC members. BRAC households have enjoyed more break-even and surplus positions than that for the dropouts.

Table F.8 reports the differences in the material well-being status of the dropouts, those who owned net-worth above Tk 50,000 and those who owned less than Tk. 5,000. A total of 20 indicators were used here for comparison. The differences between these two groups of dropouts indicate that the 'poor' dropouts with net-worth less than Tk. 5,000 had higher demographic dependency. They had low level of household education, consumed less calorie and spent less on food and non-food. Percentage of wage employed households was significantly higher for this group. Proportion of income earner to total household size was also significantly higher for them.

Pre-BRAC land ownership status shows that the dropout 'poor' households own less land than the 'non poor' dropouts who owned net-worth of Tk. 50,000 and above. The absolute change in present land holding with respect to its initial amount since joining BRAC is also higher for the 'non poor' dropouts. Per capita floor space and value of houses show that there is a significant difference between these two groups of households. The 'non poor' dropouts also received more inputs from BRAC, owned assets fifteen times higher than the 'poor' dropouts.

The above discussion gives a picture that the dropouts are a varied type of people. Part of them are those whose level of education is low, do not own any land, and have a few assets. They are facing food deficit regularly. Wage employment is their main source of income. Analysis of case studies also show that the poor dropouts did not have enough free time to attend weekly meetings regularly.

8.5.2 Reasons for dropout: Eighty five percent of the dropped out members reported that they left BRAC willingly. The other 15% were forced by BRAC to leave (Table F.9). The dropouts stated six reasons behind their membership withdrawal. More than 69% of the dropouts reported that they could not pay their loan instalment in time. They told that they took loans and invested in unprofitable enterprises. They did not have alternative sources of funds to pay the instalment. Around 19% reported that the BRAC staff retained their savings and adjusted for their overdue loan. Around 6%

left BRAC because of loan defaulting to meet emergencies and receipt of less amount of cash loan money due to deduction for forced savings. Misbehaviour of the BRAC staff, misunderstanding among VO members and restriction imposed by household members are the other reasons for dropout (Table F.10).

Apart from these, group discussions and wealth ranking exercises have found some other reasons of membership discontinuation. All of them are ranked and presented here in order of their frequency. They are as follows:

1. Some members joined BRAC with an objective to accumulate savings. Being members for quite a long time they saved a large amount in their individual savings account. The restricted savings withdrawal policy of BRAC did not allow them to withdraw savings unless they left the VO. To withdraw this money they left BRAC.
2. Some members left BRAC due to absence of earning member in the household. Some of them reported that they took a loan when the earning member of the household was sick. They spent the amount for the treatment of their earning members. After the death of the earning member they found it difficult to pay their instalment. Some of them did not take any loan. But the absence of earning members due to death makes it difficult to pay regular savings. Other members of the VO forced them to pay their instalment regularly that is why they left BRAC.
3. Some of them are members of multiple NGOs. After receiving loans from different NGOs they could not pay their instalments regularly, so they left BRAC.
4. Many of them felt that their economic condition improved as a result of improvement of their husbands' business. So they do not need to stay any more in the VO and left it.
5. Distance of VO from the residence is also a problem for some of them who left BRAC. To attend regularly in the weekly meetings and pay instalment in the meeting place is time consuming. In addition they are overloaded with household work. So they left BRAC.
6. Some of them left BRAC and joined Grameen Bank. They told that GB allows two loans at a time. It also gives crop loan and allows withdrawal of group fund and individual savings from the savings account at any given time.
7. Migration is another reason for dropout. Some of the female members got married and left their parents' house. Some of them changed their residence and left the villages.

8. Some members came from a long distance, because there was no VO near their residence . After a certain period a new BRAC VO is registered near their village of residence. To become member of this new VO they left the old one.
9. Some of them were expelled by BRAC staff due to their old age.

Among the above reasons the BRAC induced factors include BRAC policy on restricted savings withdrawal, loan policy and restriction on membership age limit. Others are not directly related to BRAC policy or action.

8.5.3 Policy implications: Analysis of dropout cases shows that on an average those who dropped out had more or less the same amount of initial landholding as that of the active BRAC members when they joined BRAC. Performance indicators show insignificant differences between them and other (active) BRAC members in terms of material well-being such as landholding, dependency, quality of housing, floor space, expenditure, calorie consumption, value of non-land assets and net worth. However, disaggregation of the dropouts by their level of poverty shows that they are two distinct groups.

Part of them were very poor, owning no land, with low level of education, facing regular food deficits and were mainly wage employed, having no time to regularly attend meetings. Another group had better initial condition, higher educational level and owned more assets. This group had high expectations from BRAC that could not be fulfilled. The 'non poor' dropouts received more inputs from BRAC and owned fifteen times higher assets and net worth than the 'poor' dropouts. Eighty five percent left BRAC on their own, while 15% were expelled. Loss in IGAs and family crises, and consequent inability to make regular loan repayments, involvement in other NGOs, distance of residence from VO and migration caused membership withdrawal. BRAC induced reasons included restrictions on savings withdrawal, misbehaviour of BRAC staff and ineligibility due to old age.

BRAC has already taken steps to amend the present restrictions on savings withdrawal and has introduced a pilot project to determine a suitable policy for allowing savings withdrawal. Implementation of the system of savings withdrawal will hopefully remove the major cause of member dropout. Appropriate and more effective skill development training and provision of necessary support services may help improve profitability of IGAs, thus improving their loan repayment capacity as well. Finally, better field staff supervision by BRAC management and effective field orientation of field staff may reduce the incidence of staff misbehaviour with VO members.

8.6 Case Studies on Dropouts

A synthesis of five selected dropout cases is presented here which will briefly provide the common features of the dropout cases and the reasons behind

their failures that led to the discontinuation of their VO membership. As an example, the results of one of the five case studies on dropout is presented in Annex F.12.

8.6.1 Socio-economic characteristics The socio-economic background and the performance of the selected five dropout cases relating to various indicators considered for the case studies are briefly presented below.

8.6.1.1 Socio-economic background: Of the five dropout cases, two were from northern Bangladesh, one was from the north-eastern part, one from the north-western part and the last from the eastern part of the country. The case studies considered three situations: the members' socio-economic conditions before joining BRAC, while in BRAC and after leaving BRAC. All five of the dropout cases are married. Their average family size is 5.4 members, while their average number of income earners is 1.4. One case, Hanufa, was found to have studied upto Class IV, while another, Behula, has had one year of primary education. Of the other three, one is completely illiterate while the other two know how to sign their names. Two of the cases were involved with BRAC for well over eight years before they decided to leave, while the other three had been members for at least two and a half years before dropping out.

8.6.1.2 NGO Involvement: Four of the dropout cases had been general members of their respective VOs. The last dropout case, Jahanara, used to be president of her VO. All five cases joined BRAC with the hopes of being able to make improvements in their family's economic condition by putting up a new house, installing a tube-well, buying some agricultural land, making some savings, starting a small business and so forth. Although they have left BRAC, they have some kin who are still involved with BRAC.

8.6.1.3 Training and other BRAC benefits: Jahanara, the ex-VO President, received leadership training and Khodeza used to have a VGD card while she was a member. The others have not received any benefits from BRAC, apart from loans.

8.6.1.4 Credit: Behula and Jahanara received four loans while they were involved with BRAC (although two of Jahanara's loans were in her daughter's name). Monwara and Hanufa took two. The last case, Khodeza, took only one loan during her brief involvement with BRAC. The five women's loan amounts ranged from Tk. 1,500 to 10,000. Two of the five women purchased rickshaws with their BRAC loans: Monwara purchased hers for her husband and Hanufa rented hers out to someone. Khodeza used her loan to start a paddy husking business and Jahanara applied her loans to her existing paddy husking business. Behula used part of her loans to buy some livestock and with the rest she used to pay for her children's education.

8.6.1.5 Repayment of loans: For Monwara and Khodeza, their husbands were the ones who provided the money for their BRAC loan instalments. Jahanara and Behula made their instalment payments from their business profits and from their wages. Hanufa paid the instalment of her first loan from the profits of her rickshaw business and for her second loan, she used to depend on her husband's income to pay the instalments.

8.6.1.6 Savings: Before joining BRAC, none of these women had any savings. Apart from their BRAC savings, none of them were able to accumulate any savings outside BRAC either. Behula adjusted her BRAC savings with her remaining instalment payments when she decided to leave the organization. Khodeza claimed that she did not have any overdue instalment payments on her only BRAC loan. However, six of her instalment payments were not recorded by the P.A. in his ledger. So, when she left the organization, she had to adjust those remaining payments with her BRAC savings. Now that the five women have left BRAC, they hardly have any savings, except for Jahanara, who has now joined another NGO and has savings there.

8.6.1.7 Involvement in income generating activities: Three of the five women were found to have been involved in IGAs prior to joining BRAC. Monwara used to do tailoring work at home. Now that she has left BRAC, she sews kanthas. Khodeza was engaged in home-based poultry rearing, and homestead work for others prior to joining BRAC. Presently she is continuing this work. Jahanara used to engage in paddy husking and presently she works as a maidservant and continues her paddy husking work through her present involvement with another NGO. Hanufa was not engaged in any IGA prior to joining BRAC, and she also does not engage in any at present. Prior to joining BRAC, Behula used to work as an agricultural day labourer but presently she is only engaged in housework.

8.6.1.8 BRAC related economic changes: Monwara used her second BRAC loan to purchase tin roofing for her house, but apart from that, she was not able to make any other economic improvements to her household during her brief BRAC involvement. None of the other four women managed to do so, either.

8.6.1.9 Changes in social status/prestige within the household and community/changes in mobility: Two of the women (Monwara and Khodeza) were involved with BRAC for too short a period to experience any positive BRAC related changes in their social status or mobility. They previously could not sell any household assets without their husbands' permission and they still cannot do so. Their husbands are still the sole decision-makers within the family. As for the others, Behula stated that her status within and outside her family has remained the same before and after her BRAC involvement. In any case, she belongs to a tribal minority group in which women traditionally have always enjoyed greater freedom regarding

household decision-making and unrestricted movement within the community.

Hanufa stated that she had experienced some positive social changes due to her BRAC involvement. She has been able to know more people in the village and now she feels more comfortable when speaking with strangers, whether male or female. However, her mobility remains limited and she does not participate in any community social events. The last case, Jahanara, stated that she has become very mobile since joining BRAC and in terms of important household matters, she and her husband jointly take decisions. Prior to joining BRAC, she did not participate in any household decision-making.

8.6.2 Reasons for leaving BRAC: The five case studies identified some reasons for their discontinuation of membership. These are summarized below.

8.6.2.1 Illness of the main income earner: Three of the cases left BRAC because of the same reason: illness of the main family income earner. Monwara's husband fell ill with gastric ulcer soon after she joined BRAC and to pay for his medical treatment, make her instalment payments and maintain the family, she had to sell the rickshaw which she had purchased with her BRAC loan money. Without her husband's income, the family soon had to face severe economic hardships. At the same time, the prospect of defaulting on her BRAC loan loomed overhead for Monwara. So, she decided to leave BRAC.

Khodeza's husband also fell ill and as a result, there was no one to look after the paddy husking business that she had started with her BRAC loan money. At the same time, Khodeza had to take assistance in both cash and kind from others in order to cope with her husband's illness. Her household had to face many hardships during this crisis. Not only was her husband ill, but her three small children kept her busy all the time as well. Khodeza soon realized that she would be unable to make any further economic gains through BRAC, so rather than continue in this uncertain manner, she decided to leave the organization.

Behula was involved in BRAC for about nine years before she decided to leave, mainly due to her illness, which has been a constant crisis for her family for the last few years. In order to meet her treatment costs, pay her loan instalments and make her savings deposits, Behula has had to sell three big trees and even now, the family faces economic crises almost throughout the year as they can barely manage to get by on her husband's earnings as a day labourer. Rather than incur overdue, Behula decided to leave. She adjusted her BRAC savings with her remaining loan instalments.

8.6.2.2 Family disapproval/ unable to attend regular meetings/lack of free time: Hanufa's husband had never really approved of her BRAC involvement

and did not like her to go to the weekly meetings. If she could have made her savings deposits and instalment payments from her house, then he would not have had any objection. At the same time, she has four young children whom she has to take care of. She decided to leave BRAC partially to mainly appease her husband and also because there was no one to take care of her children while she attended the VO meetings.

8.6.2.3 Misunderstanding between members and field staff: Jahanara's case is very different from the other four. She used to be the president of her VO and in fact had been very instrumental in having the VO established in her village. Apart from her own loans, she and her daughter also utilized the loans of several other members. Her AO staff came to know of their multiple loan usage and in the process of trying to collect her instalment payments, some misunderstanding arose, resulting in a legal suit that the office filed against her. At different stages of this suit, Jahanara, her husband and her daughter were taken into police custody. At that time, the secretary of the VO faced the same problem and both she and Jahanara influenced the other VO members about not paying their instalments. A conflict soon arose between VO members and BRAC staff over this issue and the end result was the dissolution of the VO. Upon leaving BRAC, Jahanara, along with her daughter have both joined another NGO and Jahanara has been made president of her VO.

8.7 Membership Coverage

This section attempts to explore the nature and extent of coverage of the village households by BRAC and other NGOs in selected BRAC areas, the representation of the target group (TG) and non-target group (NTG) households in NGO programmes, to identify the reasons for involvement of some NTG households and non-involvement of some TG households and to derive policy implications of these findings for future BRAC interventions in poverty alleviation programmes.

8.7.1 Coverage of different types of households: Wealth ranking exercises were carried out in 25 villages where BRAC had organised VOs. Tables 8.12a. and 8.12.b show the distribution of households by land category and NGO involvement.

Table 8. 12(a): Distribution of households by landholding category and GO/NGO involvement

Involvement Status	Landholding Category		
	TG	NTG	Total
BRAC	1040 (47.0)	209 (18.7)	1249 (37.5)
Other GO/NGOs	268 (12.1)	159 (14.2)	427 (12.8)
No Involvement	904 (40.9)	750 (67.1)	1654 (49.7)
Total	2212 (100)	1118 (100)	3330 (100)

Figures in parentheses indicate percentages

Table 8. 12(b): Distribution of households by landholding category and GO/NGO involvement

Involvement Status	Landholding Category		
	TG	NTG	Total
BRAC	1040 (83.4)	209 (16.7)	1249 (100)
Other GO/NGOs	268 (62.8)	159 (37.2)	427 (100)
No Involvement	904 (54.6)	750 (45.3)	1654 (100)
Total	2212 (66.4)	1118 (33.6)	3330 (100)

Figures in parentheses indicate percentages

Wealth ranking exercises covered 3,330 households in the selected villages. According to the land ownership criteria of selecting TG²⁹, a total of 2212 households (66%) are eligible to participate in BRAC and 47% of them presently do so. Another 12% of these eligible households are involved with Grameen Bank and other GO/NGO rural development programmes including ASA, Proshika and BRDB. Thus a total of 59% of the TG households are covered by different GO/NGO programmes. Involvement in informal village savings *samities* was not included. The rest of the eligible

²⁹ TG includes those households who own 50 decimals of land or less and sell at least 100 days of manual labour per year. Usually those who own more than 50 decimals of land are termed as NTG.

households (41%) are currently not involved in any GO or NGO group activities. However, this estimate does not consider those households having involvement in the past but having no membership in any organization at the time of data collection. If past membership is considered, the percentage of non-involvement is expected to come down considerably. Again, the composition of GO/NGO membership shows that while about 17% of BRAC members belong to NTG, 37% of members of other GO/NGOs belong to NTG. This indicates that BRAC enrolls relatively poorer section of the rural population than other GO/NGOs. Tables 8.13a and 8.13b provide further details on the landholding status of community members and their coverage by different organizations.

Table 8.13a: Distribution of households by TG/NTG criteria and GO/NGO involvement

Involvement Status	Landholding Category				Total
	Landless	Only homestead	<50 decimals	>50 decimals	
BRAC	128 (53.3)	676 (48.3)	236 (41.3)	209 (18.7)	1249 (37.5)
Other GO/NGOs	26 (10.8)	186 (13.3)	56 (9.8)	159 (14.2)	427 (12.8)
No Involvement	86 (35.8)	538 (38.4)	280 (49.0)	750 (67.1)	1654 (49.7)
Total	240 (100)	1400 (100)	572 (100)	1118 (100)	3330 (100)

Figures in parentheses indicate percentages

BRAC covers about 38% of all the households while other organizations cover another 13%. Nearly half of the total households are thus covered by some poverty alleviation programmes. Among the TG households 11% are absolutely landless, 63% have only homestead land and 26% have land upto 50 decimals. The two poorest groups thus constitute 74% of the total TG households.

Table 8.13b: Distribution of households by TG criteria and NGO involvement.

Involvement Status	Landholding category			Total
	Landless	Only homestead land	<50 decimals land	
BRAC	128 (12.3)	676 (65.0)	23 (22.7)	1040 (100)
Other GO/NGOs	26 (9.7)	186 (69.4)	56 (20.9)	268 (100)
No involvement	86 (9.5)	538 (59.5)	280 (31.0)	904 (100)
Total	240 (10.8)	1400 (63.3)	572 (25.9)	2212 (100)

Figures in parentheses indicate percentages

8.7.2 Coverage of the hard core poor: The term 'hard core poor' is often used synonymously with the term 'ultra poor' who are considered as the 'poorest of the poor'. No uniform definition of the term is followed in available literature, especially in the context of Bangladesh. Here, for

convenience of our analysis we use the term 'poorest of the poor' as those households which are absolutely landless or have only homestead but no cultivable land. We also use the term 'hard core' poor synonymously.

Regarding the coverage of the poorest segment of the rural population by BRAC it may be observed from Table 8.14 that while 74% of the total TG population are among the poorest, the proportion of the same group among all TG households covered by BRAC is 77%. This indicates that in BRAC membership the poorest households are also more or less proportionately represented. A World Bank study (Khandker, et al., undated) also finds that more landless households participate in BRAC than in other programmes. In this connection the study concludes that BRAC is better targeted to the ultra poor than Grameen Bank and RD-12 programmes.

Table 8.14: Relative coverage of the poorest by BRAC

Status households	Total TG Households	Poorest Households	%
All	2212	1640	74
Covered by BRAC	1040	804	77

However, household survey data indicate that there is a recent trend visible in BRAC towards recruiting the less poor as VO members. This has some policy implication for BRAC which needs to be further investigated.

On the representation of the poorest in BRAC membership, analysis of household survey data provides a picture which is slightly different from the findings of the data from wealth ranking exercises. As shown in Table 8.15, among all BRAC member TG households, 60% belong to the poorest households group. The difference in the results from two sources of data may be explained by the differences in the sample area covered, sampling design and the data collection methods followed. The wealth ranking exercises were conducted in 25 villages while data for the household survey were collected from 125 villages. The former made a total enumeration of all households in the areas studied while the latter covered a sample of selected member households. Again, while in the former case data were collected through focus group discussions, the latter used a structured questionnaire.

Table 8.15: Distribution of BRAC and comparison households by their landholding status (results of household survey)

Member category	Total TG	With cultivable land	With homestead only	Absolute landless	Poorest households
1	2	3	4	5	6
					(col.4+col.5)
BRAC	855 (100)	340 (40)	405 (47)	110 (13)	515 (60)
Comparison	203 (100)	69 (34)	119 (59)	15 (7)	134 (66)

Figures in parentheses indicate percentages

During qualitative data collection, community members were asked about their perceptions of their present poverty situations. The results are presented in Table 8.16. According to the assessment made by the sample households, 50% of households not involved in any GO/NGO programme face seasonal or chronic food deficit throughout the year. Again, among the BRAC and other GO/NGO households nearly 77% and 62% respectively face such deficits. Thus, the perceptions of the respondents also testify to the findings of the qualitative study data results mentioned earlier that BRAC covers relatively poorer sections of the rural poor than other GO/NGOs in the areas studied.

Table 8.16: Distribution of households by poverty assessment and their NGO involvement

NGO Involvement	Poverty Assessment Category				
	Surplus	Equal	Seasonal Deficit	Chronic Deficit	Total
BRAC	112 (9.0)	181 (14.5)	315 (25.2)	641 (51.3)	1249 (100)
Other NGOs	72 (16.9)	123 (28.8)	89 (28.8)	143 (33.5)	427 (100)
No Involvement	478 (28.9)	353 (21.3)	353 (21.3)	470 (28.4)	1654 (100)
Total	662 (19.9)	657 (19.7)	757 (22.7)	1254 (37.7)	3330 (100)

Figures in parentheses indicate percentages

However, the fact remains that a significant part of the rural poor is still uncovered by different development organizations which needs to be given due attention by such programmes. Further consolidation of the programmes may be necessary to increase coverage along with adoption of appropriate strategies to attract the poorest to a greater extent. This also presupposes a better understanding of the reasons for non-involvement of the poor in NGOs a brief discussion on which is presented in the following sub-section.

8.7.3 Reasons for non-involvement: The main reasons behind non-participation in NGOs by the poorer sections of the communities were perceived through discussions following RRA exercises. These are presented as follows.

- Some of the most vulnerable and poor did not join any NGO because they were concerned about not being able to make regular savings deposits or timely loan instalments.
- Following the misappropriation of funds by some local NGOs, some poor people decided not to join BRAC. As they had been cheated before, they were suspicious of BRAC when it first started its operations in their area. They wanted to wait and see what would happen with BRAC before they joined. But by the time they had

became convinced of BRAC's legitimacy, there was no room for them to join the newly formed BRAC samity.

- Some female-headed households did not join BRAC or any other NGO as there were no adult males in their family. It is difficult for them to utilize loans and make timely instalment payments.
- Some people did not join BRAC because they thought it would be difficult to leave once they had joined. They were also concerned about whether or not they would get back their savings when they decided to leave.
- Some people mentioned that they did not join BRAC because of the high interest rates charged on its loans.
- According to some respondents, the poor of their village did not join any samities because they think it will be a lowering of their prestige and dignity in the eyes of the community.
- From the discussions it also became clear that the comparatively better off VO members were reluctant to include this section of people in their samities. According to some better off VO members, poor people will be more prone to defaulting on their loan instalment payments and in order to ensure that the samity does not acquire a bad name, they (the richer members) will have to take responsibilities to ensure timely loan repayments. This creates a great deal of trouble and animosity within the samity. Therefore, whenever NGO authorities seek their opinion regarding the inclusion of a poor person in the samity, better-off VO members always respond in the negative.
- In one area, a religious minority group was not included in the samity as the members were concerned that the group might suddenly leave the village without informing anyone.

8.7.4 Land holding status of BRAC VO members: Data collected through wealth ranking exercise in 25 IAS-II sample villages show that a total of 1,249 households in those villages are involved in BRAC. Of them, 1082 households (87%) are members of the IAS-II sample VOs, while the rest of the households (167) participate in neighbouring VOs. Their landholding status shows that 83% of all members fulfil the TG criteria while 17% fall into the NTG category (Table 8.17).

From household survey data analysis we found that 82.5% of BRAC present members owned 50 decimals of land or less and 17.5% owned land more than 50 decimals when they joined BRAC. Involvement in BRAC had an

impact on their present landholding status. Present TG and NTG components of BRAC members are 80% and 20% respectively³⁰.

Apparently, it seems that there is some difference between results drawn from wealth ranking exercises and household survey data. However, it should be remembered that the results are derived by using two different methodologies. Again, the difference in results is not significant.

Disaggregation of members according to length of membership indicates differences in the TG-NTG ratio among different membership length categories. The oldest membership category has a larger proportion of NTGs (20%) than the others (13%).

Table 8.17: Distribution of sample BRAC VO members by landholding and length of membership.

Length of Membership	Landholding Category		
	TG	NTG	Total
1-11 months	252 (86.9)	38 (13.1)	290 (100)
12-47 months	234 (87.0)	35 (13.0)	269 (100)
48+ months	554 (80.3)	136 (19.7)	690 (100)
Total	1040 (83.3)	209 (16.7)	1249 (100)

Figures in parentheses indicate percentages

8.7.5 Reasons for involvement of NTG in BRAC: Members' perceptions:

BRAC VOs are supposed to include only TG households. Usually members who own more than 50 decimals of land are termed as NTG and are not to be recruited as VO members, according to the RDP targeting criteria. However, in the present study and also in other studies (Mustafa, et al., 1996, Zaman, 1996) VO membership contains 16% to 29% of NTG members.

Inclusion of NTG within VOs is considered by Mustafa, et al., (1996) as the result of flaws in the selection procedure using temporarily employed surveyors that leads to poor quality of information gathered. According to Zaman (1996), these NTGs who fall outside the official targeting criteria are 'mistakenly' included as VO members. However, Zaman's study also found that the NTG members belonged to a 'lower/middle' socio-economic status group. Considering certain indicators they were better off than the TG members but on certain other indicators, no significant difference was found between the two groups. Field observations during the present study indicate that there are other factors besides selection errors and mistakes which need to be thoroughly probed. Again, during the study, the perceptions of concerned NTG members were obtained on the reasons for inclusion of NTG in BRAC. The factors identified may be classified as follows:

³⁰See Chapter 3

- Family crisis such as chronic illness and/or disability of the male income earner in the household, breaking up of a family without the paternal land being formally divided and high dependency rate (demographic and/or economic).
- Poor quality of land owned, yielding very low output or ownership of land in the high flood/drought prone areas leading to seasonal or chronic food deficit.
- High expectations such as their belief that they should also have access to BRAC inputs to raise their socio-economic status along with the TG members. One interesting view was that *‘those who have more need more. So, why should we not be allowed to become VO members?’*

8.7.6 Policy implications: The above findings have some policy implications. Due to certain reasons, some of the NTG members apparently belonged to the same socio-economic status group as the TG members though they might have more than 50 decimals of land. This implies that in addition to the present eligibility criteria of land ownership and labour selling status, certain other criteria may have to be added to determine the real eligibility of BRAC membership, such as quantity and quality of land, dependency ratio, and the wealth ranking status of the household. Wealth ranking exercises using PRA may enable BRAC field staff to make more realistic identification and selection of the target group for VO member enrolment.

In this respect, RDP field management personnel also seem to agree that NTGs at the marginal level belonged to the disadvantaged group (Ahmed, et al., 1996). However, the present study did not elicit the views of the RDP personnel on this issue. Further study on this aspect may reveal new facts on the eligibility issue.

8.8 Conclusion

Both quantitative and qualitative data were analysed to determine the factors responsible for differences in the performance of BRAC member households including dropouts, to identify reasons for dropout of VO members, to determine the coverage of the rural poor under BRAC programmes, including reasons for inclusion of NTG and non involvement of the poorer segment of the rural households.

The success households had achieved a high level of success in improving their well-being not only due to some special characteristics of their own such as quality of leadership and entrepreneurial skill but also because they came from relatively better off households, had strong kinship ties in the VO

management and enjoyed the privilege of multiple loan use and received much more training on IGAs.

The analysis of the dropout members shows that there was wide differences in their level of performance. Some showed more or less the same performances as other active BRAC members though they had received much less credit (during the last three years) and hence accumulated less saving. Another group of dropouts had lower initial endowment, lower household education level were more wage employed, faced more food deficits and their performance was lower. There were, thus, two distinct groups among dropouts.

Most of the dropouts (85%) left BRAC on their own either due to loss in IGAs, inability to repay loan and involvement in other VOs or due to restriction on savings withdrawal and misbehaviour of BRAC staff.

Membership coverage was examined through wealth ranking exercises in selected BRAC programme areas which revealed that half the rural households were covered by different rural development organizations including BRAC. Among the TG households 59% were covered by different organisations. On the other hand, 41% of the TG population was not currently involved in any organization. BRAC coverage of the poorer section of the rural households appears to be better than other NGOs.

Reasons for non-involvement of the poor in NGOs include failure in income generating activities and resulting inability to repay loan regularly, lack of savings capacity, absence of male earning members, low interest rate and restriction on savings withdrawal, lack of confidence in NGOs and non-cooperative attitude of existing VO members. Certain factors such as family crises, poor quality of land with low yield, food deficit and high expectations prompted the NTG to enrol as VO members.

Loan policy of BRAC may be made more flexible by considering entrepreneurial capability and skill of the VO members to improve member performance. Better field orientation, monitoring and supervision of field staff are likely to reduce member dropouts while membership eligibility criteria may be revised to make TG identification more realistic and minimize recruitment of real NTG population in the VOs. Considering the adverse circumstances inhibiting the participation of the poorest, special programmes and flexible rules may be introduced to ensure their greater involvement in BRAC. Other studies in this respect may be undertaken to help formulate guidelines.

CHAPTER NINE : CONCLUSION AND POLICY IMPLICATIONS

A M Muazzam Husain
Debdulal Mallick

9.1 Summing up the Findings

The findings of the study show that RDP inputs have had significantly positive impact on the socio-economic well-being of participants. Member households have 380% higher assets and 50% higher net-worth than non-members. Their average per capita calorie consumption and total food and non-food expenditures are also significantly higher than those of non-members. They have better housing facilities, enjoy better health and sanitation facilities and have a higher rate of contraceptive use.

Although older members performed better in many respects, certain indicators show better results for new BRAC members as well. This is due to their higher initial endowment which may indicate a bias in new member selection. This is further corroborated by panel data analysis. Nevertheless, a comparison between two older membership groups (48+ months vs. 12-47 months) indicate that with increase in membership length, household dependency had reduced due to increased involvement of BRAC members in different income generating activities (IGAs). It has also been found that the impact of BRAC programme is highest for households with some land (1-50 decimals) and lowest for the absolute landless.

The findings indicate improvement in poverty status and a relatively better position of BRAC households in terms of incidence and intensity of poverty. BRAC households were also found to be less vulnerable to crisis than non-members. Results also show that for BRAC households, incidence of extreme poverty decreases as membership length increases. BRAC programmes have been able to reduce both the intensity and depth of poverty and at the same time been able to reduce its incidence among the participants as well, though the reduction was relatively modest.

The study also shows that poverty is highly correlated with factors like sex, age and occupation of the household head, aggregate level of education of the household, landholding status and amount of loan received irrespective of sources. Another finding is that the impact of BRAC in reducing poverty is not positive for the landless households and households with wage employed head.

Participation in income generating activities, increased ownership of assets, mobility and increased self confidence helped BRAC members to improve their empowerment. However, their control over assets was limited due to the adverse socio-economic norms of the rural society.

The study also analyzed selected cases who demonstrated extra-ordinary success in utilizing BRAC inputs. Identification of factors contributing to significantly higher level of performance of such 'success cases' shows that involvement in VO management, close kinship ties in the VO, BRAC training and enjoyment of special loan privileges helped them achieve a high degree of success.

The current rate of RDP VO member dropout is less than 4%. Analysis of the characteristics of 143 dropout members indicates that on an average the differences in the performance between active members and dropouts were not significant. However, the dropouts included some who performed very well and some whose performance was very poor. Eighty five percent dropped out on their own while only 15% were forced out of BRAC. The main reasons for dropout, as stated by the respondents, included loss in income generating activities and consequent inability to repay loan regularly, adjustment of savings by BRAC staff for collecting overdue loan, restriction on savings withdrawal, 'misbehaviour' of some BRAC staff, misunderstanding among VO members and involvement in other NGOs. Qualitative and case studies further strengthened these findings.

On membership coverage it was found that 82.5% of BRAC households owned 50 decimals of land or less when they joined BRAC. Involvement in BRAC improved their landholding status and currently 20% households own more than 50 decimals. Wealth ranking exercises also revealed that 59% of target group (TG) households were members of different rural development programmes in the areas studied of which BRAC coverage was 47%. Other organizations covered 12%. The percentage of households excluded also includes those households which had VO membership in the past but have no members at present in any organisation. It appears that BRAC coverage of the poorest is proportionate to their number in the TG population. Its coverage is also better than other GO/NGOs.

9.2 Policy Implications

The above findings have some policy implications for BRAC which are briefly discussed below.

9.2.1 VO membership: The target group (TG) for selection of VO members by BRAC covers those households which own land not exceeding 50 decimals including homestead and contribute at least 100 days of wage labour per year for subsistence. All other households belong to the non-target group (NTG) which are not eligible for VO membership.

Household survey results show that according to pre-BRAC landholding status of the sample members 17.5% were NTG. According to their current status 20% were NTG. Again results from data collected through wealth ranking exercises on 1,249 BRAC member households show that among BRAC VO members 17% are NTG. Based on perception of the NTG respondents the study identified some reasons for their inclusion in VOs which include family crisis such as chronic illness and/or disability of the male income earner, high dependency ratio and poor quality of land owned yielding very low output or owning land in flood/drought areas leading to seasonal or chronic food deficit.

The above discussion implies that the present VO membership selection criteria need to be reassessed. Land ceiling seems to be an inappropriate criterion for several reasons. Firstly, amount of land owned by a household may be small or large but the effective landholding depends on several other things which include quality and location of the land, and also on the household size. Secondly, source of livelihood of many households even in the rural areas is not agriculture rather their main sources are petty business, service and other non-farm activities. Amount of landholding as a criterion for member selection may not be applicable to these households. Considering the above, new criteria should be developed to define the target group. Cut-off calorie intake or expenditure to determine who are poor might not be operationally feasible for member selection as those are expensive, time consuming and require specialized technical know-how. The wealth ranking technique may be a useful tool for this purpose as it is found to be more reliable and effective in identifying the target group (Amin, et al., 1995). Using this technique will also help better identification of the poorest households for improving the coverage of the programme.

The study findings indicate a recent trend in recruiting the relatively less poor households as VO members. New members were found to have owned more assets and net-worth and were more involved in income generating activities. Their initial endowment was found to be relatively better than 'older' members. This selection bias may have positively influenced the performance of these members but has some adverse consequences so far as the coverage of the poorest is concerned.

9.2.2 Credit and savings programme: Study findings show that the size of BRAC loan is not adequate for productive investment especially for the more enterprising members. Therefore, they need to seek fund from non-institutional sources for productive investment. Members with higher

entrepreneurial skill are capable of investing larger amount and should be provided with more loan. Therefore, the credit programme may be more flexible and the upper loan ceiling may be raised. Identification of enterprising members can be done by the RDP field staff on the basis of certain given criteria such as rate of productive investment of loan and profitability of their income generating activities. Although BRAC has recently raised the upper loan ceiling slightly this might not be enough because some other NGOs are now providing their members higher amount of loan and they can bid off enterprising BRAC members as they know that these members have already shown success. The Micro Enterprise Lending and Assistance (MELA) programme is a special type of programme and is not intended to cover large number of entrepreneurs like the usual micro-credit recipients. It can not be denied that there is already overlapping of micro-credit programmes in many areas and competition among the NGOs in the future might even be intense.

Data show that members used 52% of the loan for the purpose mentioned in their loan application form. Further probing revealed that the rest i.e., 48% is not really 'diverted' to unproductive use. A substantial part of it is used for productive purposes although it may not be the same as that stated in the application form. In fact, 80% of the loan was found to have been used for productive investment, purchase of assets and housing improvement. Thus the system of recording the purpose of loan use may be improved to avoid misunderstanding about use of loan.

BRAC requires VO members to deposit regular savings but imposes restrictions on their withdrawal. Mobilization of savings is necessary not only to provide indirect collateral to loans but also to increase the loan fund. Members are interested in depositing higher savings so that they can use them during emergencies or to cope with crises. Restriction on withdrawal of savings act as a disincentive for increased savings. Again, according to findings of both IAS-I and IAS-II and other studies this has acted one of the causes of membership discontinuation.

Realizing the importance of a provision for savings withdrawal by members, BRAC has been conducting a pilot programme in selected areas to devise appropriate mechanism for savings withdrawal by members. Findings of a recent study show that in the areas where pilot savings project has been started, AOs have imposed their own local arrangements which restricts savings withdrawal for many VO members (Nathoo and Amin, 1997). Restricted savings withdrawal coupled with lower loan ceiling may cause further dropout of BRAC members. Since some other NGOs have already offered this facility to their members, BRAC needs to introduce a flexible savings withdrawal system as soon as possible.

9.2.3 Training and IGA selection: In spite of the favourable opinion expressed by BRAC members on training in general, with an increase in length of membership above twelve months they perceive training more and

more as having little or no use. This may indicate that BRAC training is not directed towards the specific needs of the programme participants. The variation in infrastructural condition and other market factors should be duly considered while identifying profitable economic activities in different localities and in determining the nature and scope of training.

9.2.4 Strengthening the agriculture sector programme: Empirical evidence shows that for the heads of BRAC households there has been a shift in occupation from non-farm to farm sector over time. Expected increase in employment opportunities in the non-farm sector was not visible probably because of inadequate development of socio-economic infrastructure. It appears, therefore, that due to the existing structural features of our economy the agriculture sector may continue to have a relative advantage over other sectors in absorbing a larger section of labour force in the near future. This implies that BRAC has the comparative advantage and potentials to strengthen its programme in the agriculture sector. BRAC may contribute significantly to increasing the growth of the sector by facilitating the adoption of improved production technology and expanding agro-based industries and related support services. Such targeted programmes may promote for the diversification and specialization in our agriculture sector in addition to increase in cropping intensity and yield rate. This may also have a favourable impact on poverty alleviation and the effectiveness of its rural development programme and finally contribute to macro-economic growth.

9.2.5 Empowerment of women: The study found an increase in the ownership of assets by women due to their involvement in BRAC programme. Their control over assets have also improved but this control was found to be have been limited. The women themselves usually consider their own assets as household assets. This is influenced by the existing socio-economic and cultural norms in our rural society. Regarding the use of their income derived from involvement in income generating activities, 85% members spent their income for consumption purposes and the rest used them for investment and asset accumulation. Regarding their control over the use of their income, though they cannot take independent decisions in many cases, findings show that they now participate more than ever before in decision making in this respect. Thus one need not expect radical change in the 'empowerment of women' in this context. This is likely to change only slowly with overall socio-economic progress of the rural society. However, supporting programmes like the Human Rights and Legal Education (HRLE) are expected to help improve the awareness level among rural women and act as a factor in expediting empowerment.

Though BRAC membership has enabled women to increase their involvement in different income generating activities, findings indicate that a majority of women either depend on their male household members for utilization of their loan money or even hand over the loan to them for investment. Handing over money to male counterparts is not often considered to have any positive impact on the empowerment of women. However, the study results show that even in cases where the women

members do not utilize their loan by themselves, they enjoy a greater role in familial affairs as a provider of working capital and thus have been able to improve their status within the household. Under the condition prevailing in rural Bangladesh there are both economic and cultural reasons for handing over loan money by women members to their male counterparts in the household. Due to various constraints in the involvement of women in different income generating activities and considering the relative profitability of different enterprises there may be a rationale for handing over loan money to male members to increase the overall household gain. Besides, with substantial unemployment or under employment of male household members prevailing among the rural poor, male employment is given precedence over employment of women. Under the given cultural norms in the rural areas these are some of the reasons why loan money is often handed over to the male members of the household.

9.2.6 Improving overall programme impact and sustainability: The BRAC policy of extending the scope of its RDP beyond a single component of micro-credit to a multidimensional programme covering human and social development aspects appears to be justified. Findings show that only credit does not bring any major change in the well-being of the poor. Initial endowment of BRAC households, i.e., amount of landholding, occupation and education of household head, contribute significantly to productive asset accumulation of the member households. Members with lower initial endowment benefited less from BRAC loan. Even recently recruited members have demonstrated better performance for their higher initial endowment than the older ones.

Again, among the relatively poorer households, households with wage employed head have failed to demonstrate better performance. They need to be linked to the market in a different way than those with better entrepreneurial skill, probably through creating wage employment. With the heterogeneity of the poor and with differences in their skill level, a single policy should not be followed to cover them all. BRAC programmes should be made diversified and flexible to suit the practical needs and capacity of the specific target group.

Among other aspects necessary to improve the impact of the programme and to help its sustainability, comparative profitability analyses should be carried out frequently to help select more effective schemes and programmes. Better field orientation and monitoring of field staff should also be provided to improve staff performance and staff-participant relationship.

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Annexures

