



Work-in-Progress: Not for Quotation

Title **Special Evaluation Study on the Effect of ADB Microfinance Operations on Rural Poor Households and Status Of Women¹**
Note-to-File (Revised Framework)

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1. This paper is prepared as a supplement to the already approved position paper to expand on the methodology and approach, and to provide the rationale for an increased budget largely due to the need to expand the sample survey from 1,000 to 2,200 households for the rigorous impact evaluation.

I. INTRODUCTION

2. During the period 1990–2005, the Asian Development Bank (ADB) has approved 31 microfinance projects and 20 projects with microfinance components. These projects amounted to \$943 million in loans and \$6 million in grants in 16 developing member countries (DMCs). Of the 31 projects approved for microfinance activities, 15 (or 48%) were approved during the period 2000–2005. These projects amounted to \$492 million (or 59%) of the total loan and grant projects approved since 1990. All these indicate a growing interest on microfinance in development projects and activities of ADB.

3. In 2002, ADB's Microfinance Strategy was approved by the Board of Directors. Since then, projects with greater focus on microfinance have been initiated and completed, making it possible to review the effects of these projects on rural poor households and the socioeconomic status of women. In view of the envisioned overall review of the microfinance strategy in 2007, it is also an opportune time to assess ADB's experience in microfinance as a development tool for reducing poverty and improving the status of women.

II. OBJECTIVES

4. The main objective of the study is to assess, through real experiences in ADB projects, the extent to which microfinance services have reduced poverty among rural poor households and improved the economic and social status of women in ADB's DMCs.

5. The specific objectives of the study are to:

- (i) determine the effectiveness of ADB microfinance projects in reducing poverty of rural poor households and in changing the socioeconomic status of poor women;

¹ TA 6312-REG: *Selected Evaluation Studies for 2006*.

- (ii) determine the extent to which the project design and implementation of ADB microfinance projects have mainstreamed improving the status of women;
- (iii) draw out the lessons from ADB's experience in reaching rural poor households and poor women with microfinance services; and
- (iv) draw out the implications of the lessons to ADB's current and future directions for microfinance.

III. SCOPE OF THE EVALUATION

6. The study will review the impact of selected microfinance projects completed since 1995 in three DMCs with different economic and social characteristics to capture the results of projects which were still ongoing during the 1999 review of ADB's microfinance portfolio, the impact evaluation of 2001,² and those that were approved since the publication of the Microfinance Strategy. The focus of the evaluation study will be on rural poor households and women.

7. Three countries (Philippines, Bangladesh, and Uzbekistan) representing three of the five operational regions of the ADB have been selected in order to represent DMCs at different levels of development. Gender assessments in these countries will provide the study a documented baseline on the status of women. Further, much can be learned from the significant microfinance projects, at present or in recent past, supported by ADB in these countries.

8. The Philippines has been selected as an example of a long-established Southeast Asian country with an open capitalist economy and long history of rural and microfinance. It was also selected for its successful experience with microfinance both in earlier projects and through the Rural Microenterprise Finance Project (RMFP), for which 97% of the client borrowers were women and which has been rated as highly successful by a recently completed project completion report. Key inputs for the Philippines study will be obtained from the project performance evaluation report (PPER) recently completed by the Operations Evaluation Department (OED).³

9. Bangladesh, as a leader in the development of microfinance, has been chosen as an example of an established South Asian DMC that has a long history with ADB on projects that support microfinance activities. During the period 1990 to 2005, ADB has approved loans for Bangladesh in the amount of \$116 million for microfinance projects and \$14.3 million for projects with microfinance components. With Bangladesh still being one of the world's poorest nations (with average gross domestic product per capita only marginally higher than the dollar-a-day international poverty standard) and women remaining vulnerable to poverty (having limited access to economic resources, political participation, and other forms of decision-making), there is strong justification for the inclusion of Bangladesh in the study's coverage. The study will be looking into two microfinance projects in Bangladesh—the Participatory Livestock Development Project, completed in July 2003; and the still ongoing Rural Livelihood Project.⁴

10. Finally, Uzbekistan was chosen to represent the DMCs in Central Asia and to provide an example of a project approved after the release of ADB's microfinance strategy. On 20

² These reviews were as follows: Dingcong, Clarence G. 1999. *Review of Asian Development Bank's Microfinance Portfolio*. Manila: ADB; and ADB. 2001. *Impact Evaluation Study on ADB's Rural Credit Assistance in Bangladesh, People's Republic of China, Indonesia, Nepal, Philippines, Sri Lanka, and Thailand*. Manila.

³ The PPER for RMFP was completed in May 2006.

⁴ Loan 1524-BAN(SF): *Participatory Livestock Development Project*, for \$19.7 million, approved 19 June 1997; and Loan 1634-BAN: *Rural Livelihood Project*, for \$42.26 million, approved 29 September 1998.

December 2002, ADB approved a \$20 million loan to help provide microfinance services to poor households, microenterprises, and small businesses in Uzbekistan.⁵ Uzbekistan's financial sector remains small and underdeveloped with limited capacity to provide financial support to micro and small enterprises (MSEs) and to poor households, particularly in isolated areas. The project was envisioned to mobilize savings and provide the poor with financial services to set up MSEs which are critical in supporting the country's transition to a market economy and reducing poverty.

11. The study shall, first, provide an overview of the ADB's microfinance operations in terms of the scale, composition, and selected characteristics of its microfinance portfolio. Secondly, a review of ADB's microfinance operations in the three countries will be undertaken focusing on the extent project design in these countries have mainstreamed improving the status of women. Performance of these projects in terms of effectiveness in reaching their targeted groups and the effects of these projects on women will be evaluated. Third, the study will measure the poverty impact of microfinance on rural poor households and the status of women.⁶ In view of the costs, time, and the detailed process involved in conducting impact surveys, the RMFP in the Philippines will be selected for the impact assessment at the household and/or client level. It is envisioned that the assessment will illustrate the quantitative impact of an ADB microfinance project on poor households and women—the results of which will contribute to a better understanding of microfinance. While this quantitative impact assessment will be implemented in only one country, the profile of poor households and women in three countries will nonetheless be collected and analyzed through the use of sample surveys in each country. Data gathered from these surveys will also be used to determine if projects have indeed been effective in reaching target groups covered by the study.

IV. CONCEPTUAL FRAMEWORK

A. ADB's Microfinance Operations

12. ADB's basic framework for supporting microfinance activities in DMCs is embodied in its Microfinance Strategy of 2000.⁷ The role envisaged by ADB in the strategy is to catalyze the expansion of the supply of microfinance services and to strengthen the capacity of potential clients to access the services. On the supply side, the strategy focuses on building financial systems that can grow and provide financial services on a permanent basis to an increasing proportion of the poor, as well as the promotion of pro-poor innovations. On the demand side, the strategy supports investments in social intermediation to make access to financial services more readily available, especially to poor women. The strategy emphasizes selectivity in the application due to constraints on ADB's resources for microfinance, the various stages of microfinance development in DMCs, and the relative priority of microfinance in the context of ADB's overall strategy for poverty reduction and country operational strategies.

13. The purpose of ADB's Microfinance Strategy is to support the development of sustainable microfinance that can provide high quality services to low-income households and their microenterprises. To ensure poor households with permanent access to financial services, the strategy focuses on:

⁵ Loan 1963-UZB(OCR): *Small and Microfinance Development*, for \$20 million, approved 9 December 2002.

⁶ Stimulated by criticism by the Nongovernment Organization (NGO) Center for Global Development, the subject of impact evaluation is currently a "hot topic" in the development community. OED needs to increase the proportion of rigorous impact evaluations within its work program and this study will help meet this need.

⁷ ADB. 2000. *Finance for the Poor: Microfinance Development Strategy*. Manila (approved by the Board of Directors in May 2000).

- (i) creating a policy environment conducive to microfinance,
- (ii) developing financial infrastructure,
- (iii) building viable institutions,
- (iv) supporting pro-poor innovations, and
- (v) supporting social intermediation.

14. The overwhelming concentration of the poor in the rural areas justifies ADB's focus on this sector. In particular, women make up a significant proportion of the poor and suffer disproportionately from poverty. However, the huge demand in the region for institutional microfinance cannot be met by ADB and other agencies either individually or as group. The strategy thus emphasizes that ADB's support be (i) catalytic, (ii) selective, and (iii) concentrated in rural areas without ignoring urban areas.

15. Poverty reduction and improving the status of women are common primary or secondary objectives in most microfinance projects financed by ADB. Very often, the main targets of these projects are the rural poor households and women. It is therefore important that the impact of ADB's microfinance operations on these target groups (rural poor households and women) is objectively assessed to determine if the development objectives of poverty reduction and promoting the socio-economic welfare of women are being achieved. Further, since some projects (focusing on microfinance and on women) initiated after the release of the Microfinance Strategy in 2000 have already reached completion, it is thus possible to review the results of these projects particularly in relation to their development goals of reducing poverty among rural households and in effecting change in the socio-economic status of women.

16. Two important concerns regarding ADB's microfinance operations are highlighted in this study. The first lies on how well the project design of ADB microfinance projects have mainstreamed improving the status of women. Given that improving the status of women is one of ADB's five strategic development themes, microfinance activities are among the specific avenues for furthering the Gender and Development (GAD) objectives of ADB operations. Hence, project design and monitoring frameworks have to be examined to determine if improving the status of women has indeed been incorporated in microfinance projects. Second, it is important to determine the effectiveness of microfinance projects in reaching rural poor households and women as target groups. Specific questions that need to be answered are: Did projects reach large numbers of rural poor households and women as intended? Were there limitations in reaching these target groups? What measures are required to ensure a high level of women's participation?

17. In terms of the implications on ADB's microfinance operations, the following questions will be asked in the study:

- (i) What lessons can be drawn from ADB's experience in reaching rural poor households and women with microfinance services?
- (ii) Which of these lessons can be incorporated into the review of the Microfinance Strategy planned for 2007?
- (iii) What has been the experience of other funding agencies in implementing similar projects? How do these experiences compare with ADB's own experience?

B. Impact on Households

18. The impact of microfinance operations on households will be measured based on household income, consumption expenditures, assets, household savings, and other household welfare indicators such as education and health. Impact on household welfare will be measured both by expenditures levels (e.g., expenditure per capita on education and health) as well as final outcomes—such as school attendance rates and/or rate of absences for school-age children for education; and morbidity incidence, health seeking behavior, vaccination rates in the case of health.

19. The impact on women, on the other hand, will be measured in two ways. The first is through estimation of relevant causal relationships with sex-disaggregation. The second is by estimating relationships for gender-related outcomes such as personal income and savings, control over use of money earned, ownership and control over household assets, participation in decision making, increased mobility, and involvement in community affairs. The evaluation will consider that all these outcomes are a product of individual, household, and community characteristics and not just by microfinance interventions. Hence, appropriate controls for all of these other determinants will be done.

20. A household survey will be conducted to generate information needed for measuring household impact. To be able to appropriately measure impact, the survey will cover both treatment and control households employing quasi-experimental design. In addition, appropriate econometric estimation techniques will be applied in quantitatively measuring impact (Section V.D).

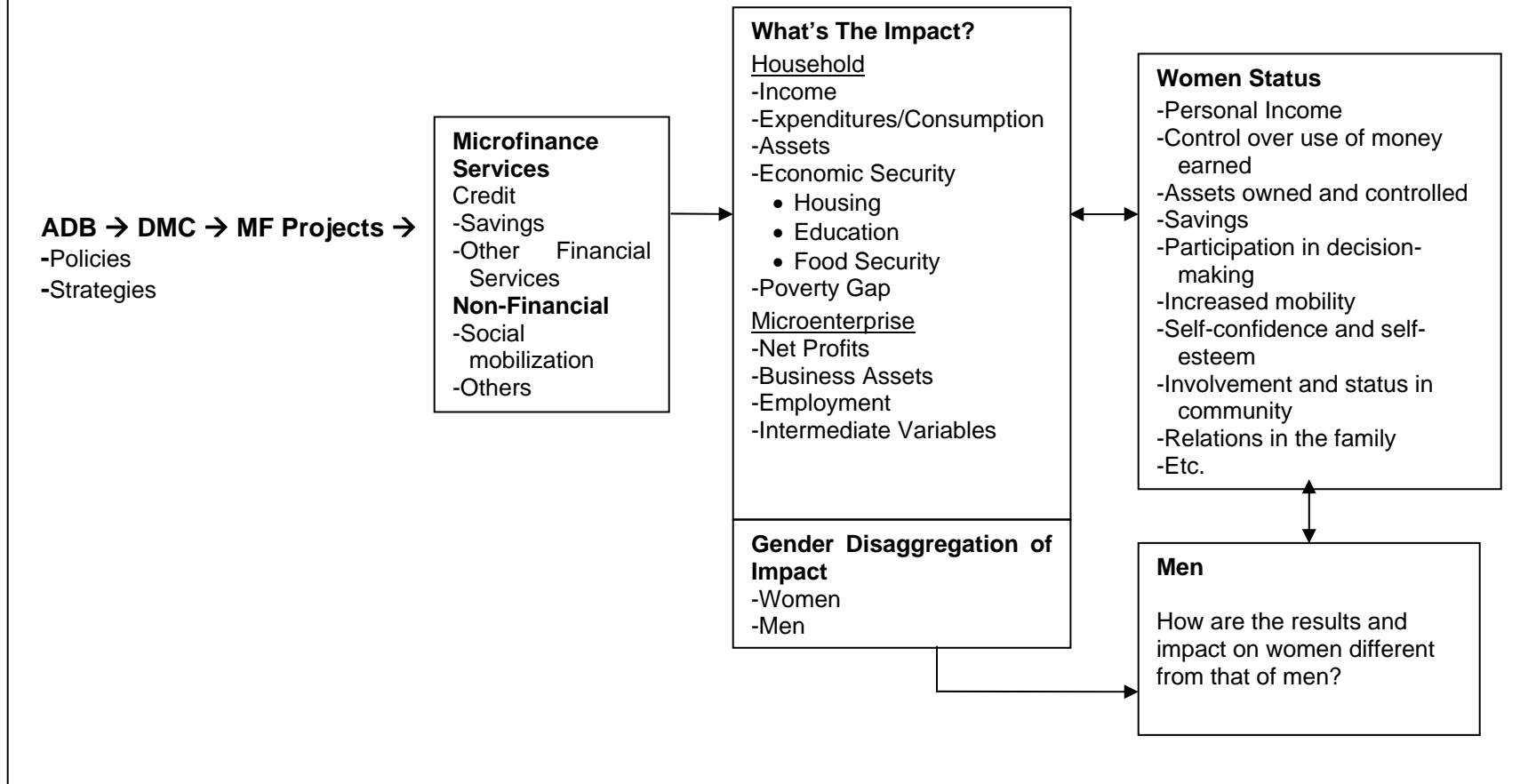
21. Figure 1 summarizes graphically the framework for assessing impact on poor households and status of women.

C. Effect on the Status of Women

22. Women in poor households are often the target of microfinance programs. The premises behind such targeting are two-fold: (i) microfinance is an effective tool in improving women's status, and (ii) overall household welfare is likely to be higher when microfinance is provided to women rather than men. The following outlines the interaction of women's status, household welfare, and microfinance.⁸

⁸ Drawn largely from Sharma, Manohar. 2003. In Quisumbing, Agnes R., ed. 2003. *Household Decisions, Gender and Development: A Synthesis of Recent Research*, pp. 195–199. Washington, D.C., International Food Policy Research Institute.

Figure 1:
Summary Framework for Evaluating Effects of ADB's Microfinance Operations
on Poor Households and Status of Women
Draft



- (i) Women are thought to make better borrowers than men. Evidence shows that relative to male borrowers, women perform better in repaying loans.⁹
- (ii) Women's preferences regarding household business management and household consumption goals differ from men's.¹⁰ Additional resources in the hands of women materially affect both the quality of investments financed by the microfinance programs and how extra income is spent. Evidence also shows that women tend to be more concerned about children's health and education, and are, therefore, likely to channel more resources for household food and non-food expenditures than men.¹¹
- (iii) The status of a woman in the household is linked to how well she is able to enforce command over available resources. Increased ability to tap financial resources independently enhances her control and influence in household decision making processes.
- (iv) Microenterprises newly financed by microfinance opens an important social platform for women to interact with markets and other social institutions outside the household, enabling them to gain useful knowledge and social capital. Group formation in many microfinance programs does not only reduce transactions costs in credit delivery but also assists women in building and making effective use of these opportunities.
- (v) Microfinance programs that are designed to cover all costs benefit both women and the supplier of microfinance services. In this regard, development goals related to women's empowerment and improved household welfare are self-financing, with no subsidies required.

23. These interactions point to the significant potential of microfinance in contributing to women's economic and social empowerment. Often, it has been assumed that increasing women's access to microfinance services will in itself lead to individual economic empowerment by enabling women's decisions about savings and credit use, enabling women to set up microenterprise, and increasing incomes under their control. It is then assumed that this increased economic empowerment will lead to the increased well-being of women and to social and even political empowerment.

24. Unfortunately, positive empowerment effects are not necessarily an automatic consequence of microfinance. Women empowerment is a complex process of change that goes much further than women's access to microfinance services or increase in income.¹² In male dominated societies, men may use women to gain access to microfinance funds, diminishing women's role to being mere conduits of cash. Women may have limited control over their income and what little income they earn may substitute for former male household contributions, as men retain more of their earnings for their own use. Further, expenditure decisions may continue to prioritize men and male children, while daughters or daughters-in-law bear the brunt of unpaid domestic work. Furthermore, women may invest in existing activities which are low profit and insecure and/or in their husband's activities, resulting in limited effect on income.

⁹ Khandker, Shahidur R., B. Khalily and Z. Kahn. 1995. Grameen Bank: Performance and Sustainability. *World Bank Discussion Paper 306*, Washington, DC: World Bank.

¹⁰ More pronounced particularly in societies with severe gender bias.

¹¹ Blumberg, Rae. 1989. Entrepreneurship, credit, and gender in the informal sector of the Dominican Republic. In *Women in Development: A.I.D.'s Experience, 1973-1985*, Vol. 2. Washington, DC: Center for Development Information and Evaluation, USAID.

¹² Mayoux, Linda. 2006. *Women's Empowerment Through Sustainable Microfinance: Rethinking Best Practice*, Gender and Microfinance website (Available: www.genfinance.info).

25. Disempowerment may even take place among women participants in microfinance programs. Payments on loans and micro-insurance divert resources which might otherwise go towards necessary consumption or investment. The responsibility for loans and savings on the shoulders of women may absolve men of responsibility for the household. Further, where microfinance programs use group meetings only for savings and credit, women's precious time for work and leisure are used up, cutting program costs but not necessarily women.

26. Empowerment, therefore, goes much further than either women's access to financial services or to household level poverty reduction. Poverty alleviation as measured by increased income is not sufficient for women's empowerment because intra-household inequalities constrain women from enjoying benefits of the increase, even when they are the major contributors.

27. Given these issues and nuances in assessing the socioeconomic effects of microfinance on women, the following key questions will be the main concerns of the study:

- (i) What have been the effects on the socioeconomic status of women from participation in the project?
- (ii) Were there factors that constrained improvement of women's status after project participation? What were these factors?
- (iv) What is the impact of savings and credit on women's role in economic decision-making in the household? How can impact be increased?
- (v) Are there cross-country, cross-regional, or cross cultural factors that affect the success of microfinance projects targeted at women?
- (vi) Were there cultural or other factors which impeded the success of the project to the financial products provided by the project?
- (vii) Have microfinance projects that focus on women operated in a sustainable environment or contributed to bringing about such an environment?
- (viii) On the basis of experience with these projects, what role should ADB play in promoting access to finance in order to improve the economic and social status of poor women?
- (ix) What type of support is required over and above access to finance that would ensure success of the project and individual women's enterprises?

V. METHODOLOGY

A. Tools

1. Qualitative Tools

28. The following participatory appraisal and self learning tools will be used by the study:

- (i) *Time Series of Asset Acquisition and Ownership*. This tool will be used to compare women's ownership of key assets before and after joining the program.
- (ii) *Household Generation, Receipt, and Spending Cash Analysis*. This tool will be used to determine which sources of income are generated, received, and spent by men, by women, by both, and why.
- (iii) *Expenditure and Saving to Meet Expenditure Analysis*. This tool will be used to determine which sources of income are generated, received, and spent by men, by women, by both, and why.

- (iv) *Women Empowerment*. This is an in-depth participatory self-learning activity designed for women clients who have participated in the program for more than 2 years. The purpose of this tool is to determine to what extent clients have been empowered in terms of economic and social status, and household decision-making while participating in the program.

29. These tools will be implemented in a workshop format wherein clients actively participate in a self-learning process. The size of these workshop groups would range from 5 to 10 participants. Focus group discussions/workshops for each tool in each country will be undertaken for the qualitative component. In summary:

- **Philippines**
 - 3 workshops per tool x 4 tools = 12 workshops
 - **Bangladesh**
 - 3 workshops per tool x 4 tools = 12 workshops
 - **Uzbekistan**
 - 2 workshops per tool x 4 tools = 8 workshops
- Total No. of Workshops for 3 countries = 32 workshops

2. Quantitative Tools

30. The methodology presented here duly considers that only a one-round survey is feasible for the study.¹³

31. To quantitatively measure the impact of the microfinance operations on household outcomes, semi-reduced form equations causally relating household outcomes with treatment variables (microfinance services indicators) will be estimated. Known sources of bias identified in the literature such as sample selection, non-random program placement, and dropout bias will be dealt with through a combination of appropriately choosing control households and econometric estimation techniques. The estimation will likewise control for the underlying household and community characteristics. The particulars of the estimation procedure are given in Section D below.

32. The data that will be used in the estimation will be generated by a well-designed household survey questionnaire. The sampling design of the survey will reflect the implementation characteristics of the RMFP.

33. The household survey questionnaire shall include a component that would depict the socioeconomic profile of sample program participants. This component will be used in all countries that will be covered by the study to provide information on the effectiveness of projects in reaching their target groups. The data gathered from this component will also provide comparison between and among countries covered by the study.

¹³ Initial attempts to get the data from the RMFP 2002 impact survey yielded negative results. It was also determined that going back to the households surveyed earlier maybe too difficult and hence too costly which the evaluation has not budgeted for.

B. Data Requirements and Indicators

1. Household

34. It is well-known that the household outcomes of interest in this study are a product not only of the intervention variable of interest and microfinance services, but also of a host of individual, household, and community characteristics. Thus, data requirements for the study will cover all these variables.

35. The outcome indicators will include: (i) household income (broken down by source and who contributed); (ii) household consumption expenditures (broken down into major components such as food, education, health, etc.); (iii) measures of savings; (iv) education indicators such as school attendance and absences by school-age children; (v) health indicators such as morbidity incidence by household members, health seeking behavior, and immunization; and (vi) gender indicators such as percentage of women clients with increased capacity to meet basic needs and to invest in fixed assets, percentage of women clients with increased asset ownership, etc.

36. The exogenous variables will include: (i) individual characteristics such as age, sex, education, marital status; (ii) household characteristics such as size, age structure, household assets, and housing characteristics; (iii) village characteristics such as service availability (electricity, school facilities, health facilities, financial services, accessibility indicators, urbanity); and particulars on Grameen Bank approach replicator (GBAR) operations relevant to the performance of the program; (iv) treatment variables such as membership in GBARs, loan characteristics (amount, number of cycles, months since first loan, etc.). Thus, the usual household roster will be included in the questionnaire. Individual loan particulars will also be gathered.

2. Intra-Household

37. Information on intra-household relations are mainly qualitative and will be secured primarily through the use of qualitative tools. Information will be gathered from microfinance clients to answer the questions raised in Section IV.C above. The focus of information that will be gathered is to determine the impact of microfinance services on the decision-making in the household, sharing of resources, and economic status. Specifically, the intra-household dynamics will be analyzed in the context of income flows: generation, receipt, and spending of cash. This will determine the level of involvement of women clients in generating, receiving, and spending cash before and after joining the program. The intra-household relations will be analyzed in the context of expenditure and savings patterns. This will determine if there is any change in the role of men and women in taking responsibility for saving to meet various expenditures and for making different expenditures before and after joining the program.

C. Survey Design and Sample Procedure

38. The target population of RMFP is poor households satisfying specific criteria, generally described as poor households, based on well-defined means tests.¹⁴ Given recent poverty estimates, this would mean the bottom 40% of the population.¹⁵

39. The study uses a quasi-experimental design utilizing new members who have not yet availed of loans as controls.¹⁶ Thus, the eligibility of GBARs will depend on their having suitable expansion areas. These areas should be different from existing areas with member-households already identified but have yet to avail of loans. In addition, another eligibility criterion for GBARs is that for the treatment group, an appropriate set of dropouts proportional to the dropout rate should also be available for the survey to control for the dropout bias.¹⁷

40. The sampling design will consider the structure of the RMFP implementation. In particular, it will consider the distribution of GBARs by geographical location (e.g., Luzon, Visayas, Mindanao) and by type (cooperative/rural banks, cooperatives, and nongovernment organizations [NGOs]). These will be used as stratification variables since it is expected that each type of GBARs may be comfortable working with and/or target specific types of clients. In particular, the country will be divided into nine sampling strata in a two-stage sampling scheme. The first stage will be the island groups (Luzon, Visayas, Mindanao) and the second stage, the types of GBARs (Rural/Cooperative Bank, Cooperatives, NGOs) (Figure 2). The primary sampling units will be the GBAR branches consisting of approximately 1,500 to 2,000 clients per branch. It is envisioned that there will be 100 sample households per strata (50¹⁸ for each of the treatment and control groups). Simple random sampling of households will be applied within each eligible GBAR selected. The number of branches for each type will be proportional to the number of clients served. An illustrative sampling allocation is provided in Table 1. This uses an allocation of 1,000 households for Luzon and 600 each for Visayas and Mindanao (a total of 2,200 sample households). Given the 100 household per sampling branch, this would mean 10 branches for Luzon and six branches for each of Visayas and Mindanao allocated to each type of GBAR according to the number of clients served.

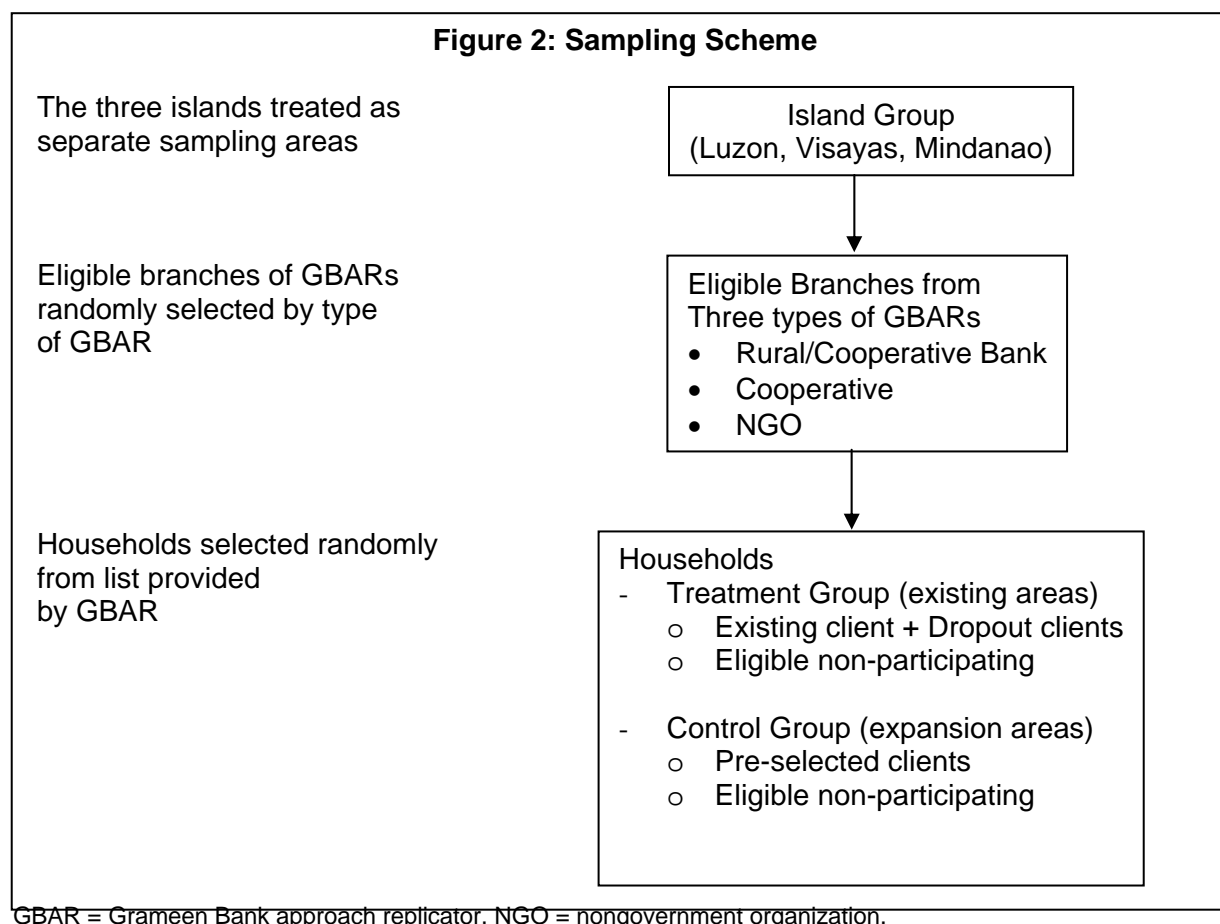
¹⁴ The means test is a simplified household survey to determine poverty levels of households. A composite score is derived from the test to rank households. In the RMFP, microfinance institutions are required to use an approved means test in targeting the poor.

¹⁵ ADB. 2002. *Microfinance for Rural Development Project*. Manila (TA 3814-PHI, final report submitted by International Management and Communications Corp. Virginia, USA).

¹⁶ (i) Coleman, Brett. 1999. The impact of group lending in Northeast Thailand. *Journal of Development Economics*, 60:105–141. Manila: ADB; (ii) Montgomery, H. 2005. *Serving the Poorest of the Poor: The Poverty Impact of the Khushhali Bank's Microfinance Lending in Pakistan*. ADB Institute.

¹⁷ Karlan, Dean. 2001. *Microfinance Impact Assessments: The Perils of Using New Members as a Control Group*. Massachusetts Institute of Technology, Department of Economics.

¹⁸ From the 2003 Family Income and Expenditures Survey (FIES) the average income of the bottom 40% (the target clients of the program) is P48,633 with standard deviation of 16,520. Using the sampling formula of $n = z^2 s^2 / L^2$, where L is the acceptable error set at 10% and 95% confidence limits, this implies a sample of 44. Thus a sample of 50 per sampling would be sufficient.



GBAR = Grameen Bank approach replicator, NGO = nongovernment organization.

Table 1: Illustrative Sampling Allocation

Area	Type of GBAR	Assumed % by No. of Clients	Distribution by % of Outstanding Loans ^a	No. of branches	No. of Households
Luzon	Bank	45	61	6	600
	Cooperative		13	1	100
	NGO		26	3	300
Visayas	Bank	27	61	4	400
	Cooperative		13	1	100
	NGO		26	1	100
Mindanao	Bank	27	61	4	400
	Cooperative		13	1	100
	NGO		26	1	100
Total		1,725,322^b			2,200

GBAR = Grameen Bank approach replicator, NGO = nongovernmental organization, No. = number.

^a Distribution of outstanding loans for whole country as of 2005; will be replaced by client households when this will become available from PCFC.

^b Estimated number of active clients as of 2005.

41. Since the study is designed to capture the impact on RMFP clients which was implemented from 1997 to 2002, the desired treatment households must be those that are with the program for at least 4 years and had five loan cycles.

42. The information on the total outreach of the RMFP is expected to be provided by the People's Credit and Finance Corporation. However, the determination of and information on eligible branches may be known only at the GBAR level. It is even likely that the list of clients from where the actual household selection will be done may only be available at the branch level.

D. Estimation Procedures

43. To be able to quantitatively measure the impact of variables of interest and microfinance services on household outcomes, the estimation procedure will utilize semi-reduced form equations¹⁹ for household i in village j of the form:

$$Y_{ij} = \beta_1 X_{ij} + \beta_2 V_j + \beta_3 M_{ij} + \beta_4 T_{ij} + \varepsilon_{ij}$$

Where:

Y_{ij} = household outcome of interest

X_{ij} = household characteristics

V_j = village characteristics

M_{ij} = membership dummy

T_{ij} = treatment variable

44. Except for explicit consideration for dropouts²⁰ in the sample, this is identical to the formulation (footnote 15) that employed an identical evaluation strategy. As argued in Coleman (footnote 15[i]) the coefficient of T_{ij} measures the impact of microfinance operations on household outcomes Y_{ij} . The treatment variable can be expressed in different measures of program participation, e.g.: (i) have availed of microfinance services, (ii) total amount of loans, (iii) number of loans cycles the household has borrowed, (iv) number of months since first borrowed.

45. The three known sources of bias in evaluating the impact of microfinance services using new members as controls are all covered in the above specification. Sample selection is controlled for by using appropriate controls—new members that have yet to avail of microfinance services (footnote 15[i]). Coleman (footnote 15[i]) has shown that not controlling for sample selection inflates the impact of microfinance services. Endogenous program placement, on the other hand, is controlled by village characteristics V_j or fixed effects estimation (Khandker, 1998). Dropout bias is controlled by including an appropriate number of randomly selected households that have dropped out of the program (both for reasons of graduation and problems with repayments) in the treatment group as recommended in Karlan (footnote 16).

¹⁹ See Khandker, Shahidur R. 1998. *Fighting Poverty with Microcredit*. Oxford University Press and World Bank for a description of how this semi-reduced form equation is derived from a household maximization procedure.

²⁰ Dropout is expected to be an endogenous household decision and, hence, cannot be included in the explanatory variables without appropriate instruments. Explicit consideration of an appropriate number of dropout households (both for reasons of graduation or repayment problems), however, controls for dropout bias (footnote 16) in the estimation.

46. Given the survey design and that the right hand side variables are all exogenous, the equation can be estimated using ordinary least squares for continuous variable outcomes or probit or logit for discrete variable outcomes.

E. ADB Microfinance Operations

47. Documents produced by ADB will be reviewed to assess the effectiveness of project design in reaching poor households and women. Among others, these would include the report and recommendation of the President to the Board of Directors, project performance reports, project completion reports and PPERs, and Country Gender Assessments. Sample progress reports of Executing Agencies and interviews with ADB staff will be conducted to gather information necessary for the study. Pertinent studies and documents produced by other agencies implementing similar projects will also be reviewed.

48. NGOs and microfinance practitioners shall be invited to participate in focus group discussions to gather their views and experiences with ADB-supported microfinance projects. The main focus of these discussions is on the effectiveness of projects in reaching poor households and effecting change in the socioeconomic status of women through the provision of microfinance services. Policy issues would also be discussed with gender representatives for the countries concerned at the ADB resident missions and within headquarters.

49. Further, the review shall include the experience of other funding agencies in supporting microfinance operations that focus on women. To the extent possible, ADB-financed microfinance projects shall be benchmarked with those financed by other funding agencies, such as the World Bank, International Fund for Agricultural Development, NGOs, etc. The Operations Evaluation Mission will exchange information with these agencies while conducting the study.

F. Schedule

48. The following schedule will be observed in conducting the study:

Pre-testing of questionnaires and tools	—	28 July 2006
Final questionnaire and assessment tools	—	7 August 2006
Preparations for field survey/work	—	7–19 August 2006
Actual field survey and interviews in Philippines	—	21 Aug–20 Sept 2006
Mission Visit in Bangladesh and Uzbekistan (first)	—	3–14 October 2006
Draft Report for Philippines	—	15 November 2006
Mission Visit in Bangladesh and Uzbekistan (second)	—	3–15 December 2006
Submission to DG, OED	—	IV April 2007