Assessing the Impact of Microenterprise Services (AIMS)
Management Systems International
600 Water Street, S.W.
Washington, D.C. 20024-2488
Tel: (202) 484-7170 • Fax: (202) 488-0754
E-mail: aims@msi-inc.com

OVERVIEW OF STUDIES ON THE IMPACT OF MICROENTERPRISE CREDIT

June 1996

Submitted to:

Monique Cohen
Office of Microenterprise Development
Economic Growth Center, Global Bureau
USAID

Submitted by:

Jennefer Sebstad and Gregory Chen
Management Systems International

This work was funded by the Microenterprise Impact Project (PCE-0406-C-00-5036-00) of USAID's Office of Microenterprise Development. The Project is conducted through a contract with Management Systems International, in cooperation with the Harvard Institute for International Development, the University of Missouri, and The Small Enterprise Education and Promotion Network.

TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY

Purpose and Scope of the Review

The objective of the review is to highlight the main findings from research and evaluation reports on the impact of microenterprise credit services. Special attention is given to variables and measures related to household economic security, enterprise stability and growth, and individual control over resources since these impact areas are emphasized in the framework of the Assessing the Impact of Microenterprise Services (AIMS) Project. The AIMS mandate is to focus on ways microenterprise services strengthen enterprises and enhance the economic security and quality of life of clients and their households.

This desk study reviews the findings from 32 research and evaluation reports on the impact of microenterprise services, primarily credit. The overview covers findings from survey research and case studies of 41 programs in 24 countries in Asia, Africa, and Latin America.

Description of the Studies

The criteria for selecting impact studies to include in the review included: studies of programs that provide financial services to microentrepreneurs; studies that consider impacts at the household, enterprise, individual or community levels; and, studies that addressed the question of impacts in a systematic and thoughtful manner. Most of the studies were supported by development agencies. The earlier studies focus on enterprise productivity and growth, reflecting the program objectives and emphasis. The more recent studies look beyond the enterprise.

Many of the early efforts to study microenterprise program impacts involved case studies and before/after surveys of borrowers. Since 1990, a growing number of impact studies have used a quasi-experimental design in an effort to separate the effect of credit from other factors that may be promoting or inhibiting changes. Nineteen of the 32 studies included in the review used a quasi-experimental research design.

Findings

<ins>Enterprise Level Impacts</ins>: Twenty six of the 32 studies included data on enterprise level impacts and generally found positive effects. They examined the impact of credit (usually upon a single assisted enterprise) on output, asset accumulation, technology, employment, enterprise management, markets and income. Effects on enterprise productivity were measured in some studies.

The studies found positive changes in output, with average increases in sales and in some cases diversification of goods or services produced, especially among women. Of the ten studies the looked at impacts on microenterprise asset accumulation, seven found a positive change in the value of fixed assets among borrowers* enterprises. Only a few studies looked at technology change and these found technical innovation to be confined to a small group of growers within the group of borrowers with multiple loans.

The findings on enterprise employment are mixed. Of the twenty studies which focused on this topic, most found positive, but small impacts on the number of paid employees (excluding owners) in enterprises and these impacts were concentrated among a small proportion of the borrowers. The findings indicate that the most significant employment impacts are related to increased use of family labor, or increased hours of work by owners or current workers. It is common for increases in either paid or family employment to reach a plateau after several loans and then remain steady, indicating that the enterprise has reached a more efficient level of operation.

The impacts of credit on enterprise income, measured as gross profits or net profits were generally positive, with average increases attributed to the loans ranging from 25 to 40 percent. Income increased for at least half of the enterprises in most of the studies, while it remained the same or even declined for the others. Higher incomes resulting from credit were associated with increased capacity utilization, diversification of goods or services sold, or lower cost supplies and raw materials.

Overall, the findings show that there are a variety of different types of impacts at the enterprise level. While a small number of enterprises experience sustained growth, a majority grow only a little and level out, or maintain their operations at a constant level. Several studies pointed out the important role of credit in enabling enterprises to survive in the face of downward economic pressures or when faced with other crises.

<u>Household Level Impacts</u>: Resources are fungible within the household and hence the use of credit and profits from enterprises may be evident across a range of household production and consumption activities. More than half of the studies reviewed (18 out of 32) included data on household level impacts. They generally found increased income and asset accumulation, and improved consumption. The six studies which examined changes in household income-considering both enterprise and non-enterprise sources of income -- indicate that credit has a positive impact, although the increases vary. Ten studies looked at household asset accumulation and most found positive change.

Among the six studies that examined household expenditure patterns, three showed a decrease in the proportion of total household expenditures allocated to food, suggesting a shift beyond immediate survival. Another study found increased expenditures on certain food items associated with improved family diets and nutrition. A study on Bangladesh found that credit to women increases expenditures on household food and non-food items, while credit to men does not. Three studies assessed impacts on health and nutrition, but the findings do not show strong or direct impacts in this area, at least in the short run.

The findings are mixed on the impact on children*s education. Of the five studies which examined this topic, two were positive and another found that it had an impact on boy*s schooling but not girl*s. Two studies found no evidence of an impact on children*s education.

Three rigorous studies analyzed the relationship between microenterprise credit and contraceptive use. All were carried out in Bangladesh and indicate a strong relationship.

Individual Level Impacts: Because individual household members do not always share common goals or control over resources, the distribution of impacts from microenterprise credit programs vary for individuals within the household. Eleven of the 32 studies examined intrahousehold dynamics and the well being of individuals within the households.

Several studies looked at the impacts of credit on women*s empowerment. The findings from Asia are generally positive. The findings from Africa show little change in decision making patterns but provide evidence of increased self confidence among women. Other studies considered women*s control over loans, enterprises and enterprise income. The findings point out that even though a woman receives a loan, it should not be assumed that she has control over the use of the funds.

Other Factors Influencing Impacts: The studies refer to a range of economic, social and political factors that affect the impacts of credit programs. Also, many studies consider gender to be a key issue in understanding impacts, and the overwhelming conclusion is that gender does make a difference. This is due largely to separate "gendered" economies within households and the microenterprise sector. Several studies refer to differences between men and women in the ownership of land or housing, labor allocation, expenditure patterns, decision making roles, and access to alternative sources of credit. Other studies indicate gender divisions within the microenterprise sector, with women concentrated in particular types of enterprises and activities. A series of case studies which investigated the impacts of microenterprise program credit on poverty found impacts vary among different poverty groups with greater benefits for middle and upper groups among the poor than for the core poor who are less able to take on added risks.

Lessons for Future Impact Studies

The self selection of participants and non-random placement of programs has an important effect on the direction of change, and should be accounted for in future impact studies. Also, most studies do not cover those who are no longer program participants, that is "drop-outs," and this is likely to result in an overestimation of the program impacts. The review has revealed gaps in the research to date. Several areas of inquiry are suggested for future research. These include: greater attention on the composition and management of household economic portfolios, analysis of differences in impact across different socioeconomic or poverty levels of borrowers, and more attention to how program design, performance and context influence impacts.

OVERVIEW OF STUDIES ON THE IMPACT OF MICROENTERPRISE CREDIT[1]

I. PURPOSE AND SCOPE OF THE REVIEW

This desk study reviews the findings from 32 research and evaluation reports on the impact of microenterprise (ME) services, primarily credit. Tables 1 and 2 and the attached bibliography list the 32 impact studies included in this overview. The study summarizes key findings on the impacts of credit on microentrepreneurs, their enterprises, and households. The following sections discuss the purpose of the studies included in the review, their main research questions, the variables studied, and key findings. A final section summarizes lessons and suggestions for future impact studies.

This overview covers findings from survey research and case studies of 41 programs in 24 countries in Asia, Africa and Latin America. All of the programs had credit as a primary input, many with additional services. The review draws on studies collected by the AIMS team over the past year from academics, practitioners, donor agencies, private voluntary organizations (PVOs), and non-governmental organizations (NGOs), and through bibliographic reviews. Criteria for selecting impact studies to include in the review included:

- studies of programs that provide financial services to microentrepreneurs;
- studies that considered impacts at the household, enterprise, individual, or community levels; and
- studies that addressed the question of ME program impacts in a systematic and thoughtful manner.

Although the sample of studies is by no means complete, it is exemplifies much of the work carried out on ME impact issues over the past five years.[2]

The objective of the review was to capture the main findings from the studies, with special attention to variables and measures related to household economic security, enterprise stability and growth, and individual control over resources, impact areas emphasized in the framework of the Assessing the Impact of Microenterprises Services (AIMS) Project. This study should be read jointly with a partner AIMS desk study that reviews the methodological approaches of eleven relatively rigorous impact studies (eight of which are also included in this overview) (Gaile and Foster 1996).

---

[1] The authors gratefully acknowledge the contributions of Barbara MkNelly, Joan Parker, Donald Snodgrass, Clarence Zuvekas, and Monique Cohen who commented on an earlier draft of this paper.

[2] The overview includes two studies, one by Nelson and Bolnick from Indonesia (1986) and one by Lapar, et al. from the Philippines (1995), that also cover small enterprises in their samples. They were included because they were among the very few studies that used rigorous, quasi-experimental methods to study credit impacts at the enterprise level.

The methodological overview describes the methodology of each study, its strengths and weaknesses, and lessons for future impact studies.

While it is difficult to compare the findings from different programs and different regions, some common patterns do emerge from the 32 studies. Overall, each suggests varying degrees of positive impact on program participants, most significantly increased income. In addition, many of the studies show important non-income changes, notably, increases in assets, household security, and improved consumption. The studies show mixed effects upon employment, children*s schooling, and women*s empowerment. While the programs are effective in reaching large numbers of poor households and women, credit has a differential impact on groups within the poor. Finally, the studies often refer to factors outside of program interventions, such as economic conditions or policies, which have profound influence on microentrepreneurs, their enterprises, and households.

II. DESCRIPTION OF THE STUDIES

A. Purpose

Most of the studies included in this review have been supported by development agencies such as USAID, the UN, the World Bank, the Overseas Development Administration (ODA), and various PVOs. The purpose of the studies and the issues they address largely reflect the socioeconomic objectives of these organizations: employment generation, improved productivity and enterprise growth, increased incomes and enhanced living standards for people, poverty alleviation, improvements in women*s status, reduced fertility, and better health and nutrition.

The stated objectives of many early microenterprise programs emphasized enterprise productivity and growth and employment generation, and impact studies of them largely emphasized these areas. These studies showed fairly consistently the limits to growth of many microenterprises, the fungibility of resources within poor households, and the use of credit and the profits it generates for investments across a range of household production, consumption, and investment activities. This contributed to increasing acknowledgment of the important role of credit for poor households, beyond the enterprise. Over time, the objectives of ME programs have undergone a fundamental shift, placing greater emphasis on improvements in the lives of microentrepreneurs and poverty alleviation. This was accompanied by a change in program designs and expectations with respect to outcomes and impacts.

This progression is reflected in the *purposes* and the *research questions* guiding the impact studies included in this review. The pre-1990 impact studies focused on questions related to the productivity of enterprises (Buvinic et al. 1989), net economic benefits of programs (Kilby and D*Zmura 1985), and enterprise output, productivity, and employment (Nelson and Bolnick 1984). Since 1990, the purpose and research questions have been broader including, in addition to enterprise level issues, impacts on household behavior (Pitt and Khandkar 1995; Sebstad and Walsh 1991; Churchill 1995; Creevey 1995; Vengroff and Creevey 1994), family planning and fertility (Schuler and Hashemi 1995; Dearden and Khan 1994), income, technology, and poverty (Hulme and Mosley 1996), women*s status (Goetz and Gupta 1995; Schuler and Hashemi 1995; MkNelly and Watetip 1994), and health and nutrition (MkNelly and Watetip 1994). All of the studies included gender as a variable, reflecting a high level of gender awareness in the programs and among the researchers.

Of the 32 studies reviewed 15 were from Asia (nine from South Asia and six from Southeast Asia), 10 were from Africa (including two from Egypt), three were from Latin America, and four were cross-regional, multi-country studies. Notably, the research team found very few ME impact studies from Latin America.

The studies generally fall into three (non-discrete) clusters:

Overseas Development Administration (ODA) cluster: This group of studies sponsored by ODA examines the impact of ME credit on income, material well being, and poverty alleviation in seven countries. The assessment of client and household level impacts was part of a broader evaluation of program performance, sustainability, and impact on financial markets. All of the studies used the same basic framework, set of research questions, and, in most cases, impact variables. Individual case studies were prepared for each country, and together with a synthesis of the findings, are included in a forthcoming publication. This cluster of studies represents one of the first efforts to gather evidence from different countries on a specific set of research questions of interest to policy makers. The consistency in the methods used proved useful in generating a larger body of evidence on certain impact variables, and addressed some key policy questions related to the developmental impacts of credit.

Bangladesh cluster: The richest body of information on the impacts of ME credit is from Bangladesh, where six major impact studies covering seven programs have been carried out since 1992. These studies have covered a wide range of issues at the household, enterprise, individual and community levels. They have used a mix of research designs, including several rigorous quasi-experimental designs, before-after surveys, in-depth case studies, and ethnographic surveys. The systematic research designs, highly qualified researchers involved, and larger sample sizes and time frames for the studies reflect the scale of the programs and the high level of donor resources allocated to them. They are interesting in that they offer a look at impacts from different angles and perspectives in one setting. With a larger body of impact information to draw upon, these studies have been able to take a deeper and more critical view in interpreting findings, and in suggesting the role of large scale credit programs in alleviating poverty, expanding enterprise incomes for the poor, promoting gender equity, and reducing fertility.

Project evaluation cluster: Studies in this group are generally lower budget, shorter term efforts carried out as part of donor sponsored project evaluations. Due to time and resource constraints, they generally study smaller samples of borrowers and employ non-experimental designs. Because they are less rigorous and do not cover the same variables, the findings are not as useful in addressing some of the bigger policy questions. But they have been valuable at the project level in identifying how projects can be adapted to strengthen impacts. The findings are included here because they fill in and amplify the findings from some of the more rigorous studies.

B. Methodological Approaches

The rapid and large scale expansion of micro-lending programs and the increasing level of development resources allocated to these programs in recent years has brought more policy level attention to the contributions of ME credit to broader development objectives. This has given rise to more rigorous impact studies.

Many early efforts to study ME credit impacts involved case studies and before/after surveys of borrowers. They generated a lot of useful micro level information on clients, the dynamics of their enterprises and households, the use of credit, and perceived benefits. While these studies have been helpful to implementors in confirming the benefits of credit and in identifying ways programs could be improved, the findings from these studies have been considered insufficient by donors and policy makers concerned with impacts on broader development objectives and whether or not ME programs are good investments.

Driven by these policy level concerns, more recent ME credit impact studies have tackled bigger issues such as the contributions of ME credit to poverty alleviation, employment generation, sustained income growth, or reduced fertility. They have used more sophisticated techniques to separate the effects of credit from other factors in studying impacts. Policy level concerns and audiences have affected not only the issues and methodological rigor of impact studies, but the resources available and the expertise of the researchers involved.

Since 1990, a growing number of ME impact studies have used quasi-experimental designs in an effort to separate the effect of credit from other factors that may be promoting or inhibiting changes. Nineteen of the 32 studies included in this review used quasi-experimental research designs (Annex 1, Table 1). These studies take account of factors inherent to households, enterprises, and individuals that may affect impacts (poverty level of households; composition of households; location; enterprise sector; gender of borrower). They also consider that certain context factors -- other than limited access to credit -- structure opportunities and constraints for microenterprises (MEs) and that these vary across communities. The context factors include economic environment, policies, regulatory context, and socio-cultural setting.

This present review of previous studies reinforces the importance of research designs that separate effects of credit from other factors. One study which compared findings from experimental and non-experimental designs found differences not only in the amount of change that could be attributed to credit, but in the direction of change in certain variables (Pitt and Khandkar 1995).

The review also suggests the limitations of quantitative survey data alone in understanding impacts. Context information, ethnographic data, and in-depth case studies have been critically important in interpreting quantitative data, in explaining why certain changes have or have not occurred, and in understanding the implications of certain changes for microentrepreneurs and their families. Eleven of the 32 studies included in this review, including some of the most rigorous, have used a mix of quantitative and qualitative methods in studying impacts (Annex 1, Table 1).

III. FINDINGS

The objective of the overview was to capture the key findings from the impact studies, with special attention to impacts in the areas emphasized by the AIMS project*s analytic framework: household economic security, enterprise stability and growth, and individual control over resources. As a starting point, the findings from the studies were categorized into five groups, enterprise, household, individual, community, and other impacts. The next step was to identify the range of impact variables studied in each of these analytic categories, the direction of change, and how impacts varied by the type of program or inputs received by clients, the context, the gender of clients, and the socioeconomic status of client households.

The review presented several challenges. The studies contained a vast amount of information to sort through and organize. It was not possible to include everything, so it was necessary to make judgments in identifying the most important and robust impacts to cover in the analysis. Extracting and classifying the data required several readings of each study, and going back and forth to confirm points along the way. It was necessary to drop some of the categories of information we had hoped to analyze, such as descriptive information on clients and programs and community level impacts, because the information contained in the studies was insufficient and/or not easily comparable. Many interesting questions arose during the analysis phase, but time constraints precluded going back to the studies or secondary sources of information to pursue these questions further. [3]

Another challenge was determining how each study defined and measured its variables, and then dealing with inconsistencies in the definitions and measures across the studies. For example, in studying household assets, some studies looked at total assets, others productive assets, and still others specific assets such as savings, indoor plumbing, or vehicles. Some studies measured the value of assets, others expenditures on assets, others the structure of assets, and still others the existence or not of a selected asset. In the write up, we tried insofar as possible to stick with the definition of the variables and measures used by the researchers, so as not to misrepresent the findings.

[3] Due to time constraints, our sample of studies was limited in number and we did not 'cut* the analysis in as many ways as we would have liked. Any future updates of this overview of impact studies might consider the following: (i) extending the sample of studies to include several forthcoming reports from impact studies and self evaluations from NGOs; (ii) reviewing in-depth case study materials that probe particular impact issues; (iii) describing the programs, their inputs, and their clients more systematically (which would likely require a review of secondary sources of information) and insofar as possible, analyzing impacts across different types of programs and clients; (iv) categorizing each finding as 'robust*, 'suggested*, or ' unconfirmed*, thereby indicating where the literature has built a consensus on impact, where the evidence is just emerging, and what areas have not yet been explored adequately; and (v) separating out the findings from the more methodologically rigorous studies and comparing them to the larger sample. This would indicate which findings hold up with the smaller and more stringent sample of studies, and provide lessons on study methodologies.

A. Enterprise Level Impacts

Twenty six of the 32 studies included data on enterprise level impacts and generally found positive effects. They examined the impact of credit, usually upon a single assisted enterprise, on output, assets, technology, employment, enterprise management, markets, and income. Effects on enterprise productivity were measured in some studies by combining data on changes in income relative to changes in assets, and changes in income relative to changes in labor inputs.

The studies overall found positive changes in *output*, with average increases in *sales* and in some cases *diversification* of goods or services produced, especially among women. Both the quasi-experimental and non-experimental studies found an increase in outputs, although the amount of change attributed to credit was less in the studies that accounted for non-credit effects. Several of the more rigorous studies focused explicitly on output, and found credit to have a significant impact even when controlling for other factors such as the number of family workers, the level of fixed assets, higher labor costs, or longer working hours (Lapar, et al. 1995a; Lapar, et al. 1995b). One study concluded that credit raises output by allowing entrepreneurs to use inputs more intensely or optimally, to use newer technology, and to overcome financial constraints related to the purchase and efficient allocation of inputs (Lapar, et al. 1995a). Several studies showed the effects on output to be cumulative with the number of loans (Buckley 1996; Churchill 1995).

Increased *output* is not spread evenly across enterprises, however. While a majority of enterprises studied experienced increases, many stayed the same, or even decreased their outputs. This pattern of variation was fairly typical for many enterprise level variables. One study found the impact of credit on output to depend on market conditions, and to be less for manufacturing than for non-manufacturing enterprises (Lapar, et al. 1995a). This helps to explain why in some studies women, who are more active in non-manufacturing enterprises, experienced higher increases in sales than men.

Of the ten studies that looked at the impacts of credit on *microenterprise assets*, seven found a positive change in the value of fixed assets among borrower enterprises (Jamaica, Honduras, Dominican Republic, South Africa, Kenya, Bangladesh, and Indonesia). Two found no change (Guinea and Sri Lanka) and one found mixed effects (Malawi). Several studies pointed out that a significant proportion of borrowers (up to 30 percent) had no fixed assets at all. The most rigorous study of change in enterprise assets, from Indonesia, showed an increase in expenditure on assets in 24 of 29 subsectors in one program, and about half of all subsectors in another program (Nelson 1984). The first program had more prosperous clients, and larger loans. One study from Malawi showed one quarter of client enterprises increased assets, half had no change, and one quarter had no assets to begin with (Buckley 1996). This general pattern of variation in asset change was found in several other studies. Gender differences in patterns of asset ownership and change were noted in several studies, but the findings were not consistent.

Several studies analyzed fixed and current assets separately. A study from Kenya showed no growth in fixed assets but a significant change in current assets, although the sustainability of the change was questioned (Buckley 1996). This study further found that most borrowers operate with a high current to capital asset ratio to start with, in keeping with the nature of their business activities (mostly retailing), and reflecting shorter term horizons. Investment in fixed assets, less prevalent but still observed, suggests an increasing borrower commitment to the enterprise over time.

Only a few studies looked at impacts on *technology change*. Those that did found technical innovation, in general, to be confined to a small group of borrowers within the group of borrowers who have taken multiple loans. Moreover, there appears to be a positive correlation between borrowers initial income and the adoption of new technology. (Hulme and Mosley 1996). One study from India found that all of the borrowers implementing technical change were men; another from Sri Lanka found that technical change was generally related to agricultural techniques (Mosley 1996; Montgomery, et al. 1996). Hulme and Mosley conclude in their cross regional study that impacts of credit on production and income is higher when it is invested in new technology, although opportunities for such investment vary between sectors and increase risk -- which is precisely what poor borrowers are hoping to avoid.

The findings on the impacts of ME credit on *enterprise employment* are mixed but some patterns do emerge. Twenty studies looked at the impact of credit on employment. Most found positive, but small, impacts on the number of paid employees (excluding owners) in enterprises. Increases were generally concentrated among a small proportion of borrowers, in most cases less than 25 percent of enterprises. Most enterprises experienced no change in paid employment. One study from rural Malawi found that the impact on employment was primarily due to the start up of new enterprises, but this was atypical, since most programs tend to support ongoing rather than new enterprises (Buckley 1996). A study from Bolivia showed that credit was used to take on paid labor only after the business has grown to a certain critical size in terms of sales or output. Before that increases in employment tend to be confined to family labor (Mosley 1996). Several studies suggest that men are more likely than women to benefit from these new paid employment opportunities.

Hulme and Mosley (1996) conclude that the limited impact on paid employment is a natural result of limited technological change that would demand more labor, and the risks associated with bringing in additional paid workers. The impacts on paid employment are minimal among poorer borrowers and among first time borrowers. Programs serving more prosperous customers with larger enterprises generate more employment.

The findings generally indicate that the most significant employment impacts are related to increased use of *family labor*, or increased hours of work by owners or current workers. The ODA studies found that increased output resulting from loans initially increases the demand for family labor (Hulme and Mosley 1996). One of the more rigorous studies concluded that microenterprise credit tends to have more impact on job stability and improved labor productivity than job creation (Nelson 1984). Hypothetically, increased use of family labor can be positive when it results in higher productivity; but negative when the returns to labor do not offset opportunity costs associated with an increased workload for women or with the use of child labor at the expense of their education.

It is common for increases in either paid or family *employment* to reach a plateau after several loans and then remain in a steady state, indicating that the enterprise has reached a more efficient level of operation.

Five studies looked at the impacts of ME credit on *business management practices* such as record keeping, cash management, use of bank accounts, and management of customer credit and consistently found little or no impact in this area.

Many of the studies referred to constraints imposed by *markets* (limited market demand; high competition; seasonality of demand; difficulties in accessing markets due to physical constraints such as lack of roads or transport; or structural constraints associated with monopolistic practices, gender, or ethnicity) but did not systematically study the impact of loans in helping clients overcome these barriers. Several studies showed that borrowers found new markets for their products; and one study of Grameen Bank clients found a high elasticity of demand for goods and services produced by clients and little evidence of substitution effects.

The impacts of ME credit on enterprise *income*, measured as either gross profits or net profits were generally positive, with average increases attributed to the loans ranging from 25 to 40 percent. Income increased for at least half of the enterprises in most of the studies, while it remained the same or even declined for a significant proportion. Several studies found the effects of credit on enterprise income to be cumulative -- among repeat borrowers, enterprise incomes were higher, and comprised a higher proportion of total household income. A few studies looked at changes in profit margins, reflecting more structural change in enterprise operations, and found increases among a small proportion of enterprises studied. Evidence from Kenya shows a downward trend in profit margins for poor borrowers, due partially to rising inflation and price decontrols (Buckley 1996). These findings further suggest that credit contributes to sustained growth among only a small proportion of enterprises, while the large majority grow only up to a point, then level out. A small proportion even decline or close down, but this generally is due to factors unrelated to credit.

Higher *incomes* resulting from credit were associated with increased capacity utilization, diversification of goods or services sold, or lower cost supplies and raw materials. With respect to lowering costs, several studies, most notably from Egypt, found an important impact of program credit to be reduced reliance on supplier credit, resulting in lower cost inputs, more choice and quality in inputs, and less dependence on supplier controlled marketing channels (Oldham 1995; Sebstad and Loza 1993).

With respect to impacts on *productivity*, the evidence is scant. The Bangladesh study by Montgomery, et al. (1996) shows that changes in income are lower than changes in enterprise assets, suggesting no significant impacts on productivity. The Ecuador study by Buvinic et al. (1989) finds that women reduce the amount of time in their enterprises, but earn more per hour, indicating higher labor productivity. They show that women use credit to increase efficiency and productivity, rather than to grow.

Nelson and Bolnick*s Indonesia study concludes that enterprise level impacts may be limited when: (i) credit is provided without technical (cost reduction) or marketing (sales increasing) measures in highly competitive markets; (ii) credit funds are diverted and not invested in the enterprise; (iii) the loan size is too small to raise production to an efficient level; and (iv) credit is granted to enterprises which are already operating at an effective level of production.

Overall, the findings confirm that the impacts of credit are *heterogeneous* at the enterprise level. While a small number of enterprises experience sustained growth, a majority grow only a little and level out, or maintain their operations at a constant level. Moreover, the role of credit in enabling enterprises to survive in the face of downward pressures should not be underestimated. The seven country ODA study finds that impacts on production are greater in high turnover schemes, in places where the rate of growth in the economy is higher, and when credit is invested at a higher rate in new technology. However opportunities for such investment vary between sectors and increase risk. This may explain why poor borrowers, who are trying to avoid risk, experience more limited impacts in this area. This study identifies two types of beneficiaries: richer beneficiaries who use credit for capital deepening, which increases their expectations of income and risk at the same time; and poorer beneficiaries use credit for capital widening, which involves unchanged risks and income, or even reduction of risks and vulnerability. The authors conclude that it is unusual for credit to trigger a continuous increase in technical sophistication, output, or employment, as long borrowers are preoccupied with household survival, a topic we turn to in the next section (Hulme and Mosley 1996).

B. Household Level Impacts

Early on, those concerned with the impact of ME credit have recognized the fungibility of resources within households, and the use of credit and profits generated by credit across a range of household production and consumption activities. In recent years, impact studies have begun to address more systematically the impacts of credit at the level of the household.

A little more than half of the studies (18 of 32) included data on household level impacts. They generally found increased income and assets and improved consumption. However, there was not sufficient data to conclude that these effects were sustained or gained momentum over time, thereby substantially reducing vulnerability and improving household security.

Six studies from Asia and three studies from Africa examined changes *in household income* -- considering both enterprise and non-enterprise sources of income. The findings indicate that credit has a positive impact on household income, although the increases are variable. A few studies show that all income groups experience increases, although the absolute amount of change is less for poorer households. A study from Sri Lanka shows large differences in the amount of change between communities, indicating the importance of local economic conditions (Hulme, et al. 1995). One Indonesian study found significant changes due to non-assisted enterprise income, and suggested that changes in other sources of income may be more important for poorer borrowers (Mosley 1996). The findings from Africa were more mixed than from Asia: clients from one program in Kenya had lower household incomes than the control group while clients from another program had higher household incomes (Buckley 1996). And clients in one program in Malawi experienced no change in this area (Buckley 1996). It is unclear whether the proportional impact on income was greater for poorer or for better off households. One Bangladesh study suggests that the proportional impact on poorer households was greater, while several other studies conclude otherwise (Mustafa, et al. 1995; Hulme and Mosley 1996).

A few studies also examined changes in the *sources of household incomes*, but the findings with respect to specialization or diversification vary. One study from Bangladesh shows specialization in the sources of income among clients (TRDEP) who had increased their household incomes (Montgomery, et al. 1996). A study from India found the opposite, with diversification in the sources of income among poor borrowers who had increased their household incomes (Mosley 1996). Similarly, findings from Thailand show that credit contributes to an increased variety of secondary occupations (MkNelly and Watetip 1993). One explanation may be that the clients in the first program were relatively better off and better able to assume the risks associated with specialization, while those in the latter two programs were poorer and more risk adverse.

Ten studies looked at household *asset accumulation*, and most found positive change. Definitions of assets varied, including total household assets, productive assets, expenditures on assets. Some studies looked at one or more specific assets, such as savings or infrastructure (e.g., running water, electricity, indoor plumbing, or telephones). Three ODA case studies found an increase in total household assets among borrowers. In Bangladesh, increases ranged from six to 12 percent and the structure of assets changed in favor of productive assets, suggesting more secure income. In Sri Lanka, 82 percent of all clients increased their household assets, due mostly to increases in non-productive assets related to enhanced living standards, but not necessarily economic output. Several other studies found increased expenditure on assets such as housing, land, or livestock. Evidence from Bangladesh suggests that successive loans lead to a build up of productive assets over time (Montgomery, et al. 1996). In India, household assets increased for both women and men borrowers, but more so for men. Pitt and Khandkar*s study from Bangladesh shows credit to women increases women*s non-land assets.

The findings from Africa on changes in *household assets* are more mixed. A study from Guinea shows little impact on assets except for running water in homes. In comparison, a study from Senegal shows modest impact on asset ownership, with more impact for women than for men (Creevey, et al. 1995; Vengroff and Creevey 1994). Churchill*s study from South Africa found that loans had more impact on the accumulation of household assets such as electricity, indoor plumbing, telephones, and vehicles, than on food expenditures, suggesting a shift from concern for immediate survival to longer term household security (Churchill 1995).

Only a few studies reported findings on the impact of loans on *savings* and found an increase in the number of people who save regularly, but they did not measure the amount of change (Chen 1992; Churchill 1995). A number of ME credit programs require clients to save in order to qualify for loans, but there is little evidence to show that clients save over and above this amount.

One study from Bangladesh (Montgomery, et al. 1996) analyzed the *relationship between income and assets*. They found that successive loans do lead up to a buildup of assets over time and the structure of assets shifts in favor of more productive assets, but that real incomes increase only marginally. The shift is slow and gradual, however, and the returns are marginal. However, productive assets still comprise only 14 percent of total household assets. This suggests an increase in security rather than absolute income.

The most systematic look at the impact of credit on *household labor supply*, defined as hours of work in remunerative activities, was Pitt and Khandkar*s study from Bangladesh. This study found overall increases in women*s labor supply but decreases in men*s labor supply. The gender of the borrower makes a difference here. Credit to women increases women*s labor supply but reduces men*s, while credit to men has no affect on women*s labor supply, while also reducing men*s (Pitt and Khandkar 1996). In Vengroff and Creevey*s Senegal study, women participants reported spending more time on work than before, while women in the control group reported no change. Other findings generally suggest a positive impact on household labor supply, namely, change in the relative importance of labor income among borrowers in India, and an increase in the hours of work of owners in microenterprises in several countries.

Six studies looked at *household expenditures* to see if higher incomes had an effect on expenditure patterns. Findings from three studies showed structural change, with a decrease in the proportion of total household expenditures allocated to food, and an increase in non-food expenditures reflecting a shift in concern beyond immediate survival. The Thai study found increased expenditures on certain food items suggesting improved family diets and nutrition (MkNelly and Watetip 1993). Pitt and Khandkar*s Bangladesh study show that credit to women increases expenditures on household food and non-food items, while credit to men does not. Two other studies traced the use of loans and profits from loan investments, and found both are used for household consumption (for both food and non-food items).

Five studies considered the impact of credit on *children*s education*, either by examining changes in expenditures on school fees, children*s school enrollment, school attendance, or educational attainment. The findings are mixed. One study from Indonesia shows that credit contributes to increased expenditure on education; another from Kenya shows that program borrowers are more likely than a control group to spend a portion of their enterprise profits for school fees (Sutoro 1989; Buckley 1996). But the findings from other studies are less positive. Pitt and Khandkar*s Bangladesh study shows that, overall, credit has an impact on boy*s schooling but not girl*s. However, their data from Grameen Bank shows that credit to women has a statistically significant effect on the schooling of girls (Pitt and Khandkar, 1995). Peace and Hulme*s cross regional study and the Creevey, Ndour, and Thiam*s Guinea study found no evidence to support the hypothesis that credit has a positive impact on children*s education. The latter suggests that it may have been too soon to see impacts in this area. The cross regional study mentions that, in some cases, credit may have a negative impact on children*s education by increasing the demand for child labor. The mixed nature of the findings suggests the importance of cultural context for this variable.

Health and nutrition are not primary objectives of most ME credit programs, but three studies considered impacts in this area. The findings do not show strong or direct impacts in this area, at least in the short run. One study from Bangladesh showed no impact on the anthropometric status of children. Another study from Guinea indicated that clients perceived an improvement in their family diets, but actual improvements were not measured. The most systematic treatment of health and nutrition questions -- MkNelly and Watetip*s study of an integrated credit and nutrition education project in Thailand -- found positive impacts on health and nutrition knowledge and practice, but no evidence of change in children*s nutritional status. There were several indirect indicators of impact, however, such as better dietary quality for preschoolers, increased expenditures on food, and increased investment in crops with nutritional benefits.

Evidence on the impact of credit on *fertility* was stronger although somewhat contradictory. Three rigorous studies analyzed the relationship between microenterprise credit and *contraceptive use*, all in Bangladesh (Dearden and Khan 1994; Pitt and Khandkar 1995; and Schuler and Hashemi 1995). Schuler and Hashemi*s study of Grameen Bank and the Bangladesh Rural Advancement Committee (BRAC) show that credit has a positive impact on women*s empowerment, and that empowerment is positively associated with contraceptive use. It further indicates that Grameen Bank had a community wide effect on contraceptive use and a stronger effect in promoting a small family norm. Similarly, Dearden and Khan found positive impacts on contraceptive use and higher rates of *adoption* among Save the Children program participants, although the rates of adoption were lower among poorer classes. Contraceptive use did not necessarily translate into lower *fertility*, however. While program participants reduced their fertility rates, this was attributed to region of residence rather than program participation. Contrary to these findings, Pitt and Khandkar*s study of Grameen Bank, BRAC and BRDB shows little impact on contraceptive use, largely because of the self selection of women who already use contraception into these programs.

As with many of the enterprise level variables, both the quasi-experimental and non-experimental studies generally found the same direction of change in household level variables, although the actual amounts of change were less in the quasi experimental studies. Pitt and Khandkar*s study did find, however, that if non-random placement of programs is not accounted for, the findings grossly underestimate the effects of credit on household expenditure. And if self selection of participants into the programs is not controlled for, the findings with respect to contraceptive use show positive impacts (rather than no impact).

C. Individual Level Impacts

Because individual household members do not always share common goals, interests, or control over resources, microenterprise credit does not necessarily benefit household members equally. Eleven of the 32 studies examined the impacts of credit on intrahousehold dynamics and on the empowerment and well being of individuals within households.

1. Impacts on Women

Several studies looked at the impacts of credit on *women*s empowerment*, using different, context specific measures. The findings from Asia are generally positive. Schuler and Hashemi*s study from Bangladesh shows improvements in women*s physical mobility, economic security, ability to make own purchases, freedom from family domination and violence, political and legal awareness, and public participation. Chen*s study of Grameen Bank suggests women participants in credit programs are more conscious of their rights, better able to resolve conflicts, and have more control over decision making. A study in Sri Lanka found that loans contributed to women*s independent income, which gave them more bargaining power in their relations with male family members (Hulme, et al. 1996). The findings on changes in women*s aspirations are more mixed. Results from Thailand show an increase in women*s confidence and cooperation with neighbors, and their husband*s are more likely to listen to them. The findings from Africa (Guinea, Senegal, and Kenya) show interesting gender differences in decision making, but little evidence of change in decision making patterns. There is evidence of increased self confidence among women, however.

Several studies also considered *women*s control over loans, enterprises, and enterprise income*, but there is not enough evidence to draw general conclusions. A study in Bangladesh found that only 36 percent of women have full or significant control over productive processes which reduces their control of loans. The study finds that women*s control over loans is greater when they invest in traditional women*s work, and increases over time with participation in credit programs. However, men*s appropriation of loans is common and increases with loan size. The study argues that with male appropriation of loans, women absorb the enforcement costs of securing the loan installments, thereby subsidizing this 'transaction cost* of lending (Goetz and Gupta 1996). A case study from Vietnam showed that loans controlled by men had negative implications for women and their influence on decision making, and in some cases increased the workload of male children (Peace and Hulme 1994). A study in Kenya found little evidence of conflict between spouses over women*s labor investments or enterprise management, except in some home-based enterprises. Husbands did, however, try to control income from women*s enterprises -- but not always successfully (Sebstad and Walsh 1991). In her cross regional survey of women*s credit and technology projects, Creevey suggests that women gain more independence in areas where they are subjugated, but may loose control over new income in areas where they already are more independent (Creevey 1994).

Women*s empowerment and control have important socio-cultural dimensions, and there remains considerable debate about how to define these issues and study them across different types of households and in different cultural settings and contexts.

2. Impacts on Children

In general, most projects assume that the needs and priorities of children coincide with the household, and do not consider impacts on children separately. Only one study looked systematically at the impacts of microenterprise programs on children (Peace and Hulme 1995). It reviews materials form more than 70 microenterprise projects supported by NGOs and official agencies and explores the assumption that increased household income has a positive impact on child welfare by increasing infant and child *survival rates*, improving *nutrition*, *health,* and *education,* and reducing the *exploitation* of children. The study finds that these assumptions are not yet substantiated by empirical evidence, although this may change as impacts are measured over longer periods of time. It further shows some contradictory evidence about the impacts on children, with some cases showing improvements in school enrollment, nutrition and child care, and others showing an increased demand for child labor without children accruing benefits. It further confirms the findings from other studies showing that income under the control of women is more likely to be spent on food and child welfare.

D. Other Factors Influencing Impacts

1. Context Factors

The studies included in this overview referred to a wide range of economic, social, and political factors affecting the impacts of credit on microentrepreneurs, their enterprises, and households. Economic factors included inflation rates, economic growth rates, informal sector growth trends, the status of financial markets, the status of export markets, recent policy changes such as currency devaluations, or regulatory conditions such as taxes, licensing, or security of tenure. Social factors included family authority patterns, gender norms, ethnic competition, and migration. Political factors included violence, corruption, and political disturbances.

How this information was used varies. In most studies, it was not really integrated into the analysis. Oldham*s study from Egypt is an exception. It paints a clear picture of how national and local context factors converged to create severe liquidity constraints for microentrepreneurs in Alexandria, and how program credit has helped them deal with these constraints.[4] This study, in particular, shows how a solid understanding of context is critical to framing the right impact questions and interpreting the findings in a meaningful way.

In their study from Senegal, Vengroff and Creevey identify specific constraints to microentrepreneurs resulting from a recent policy change -- the devaluation of currency -- and frame a set of research questions and hypotheses around the role of credit in helping borrowers overcome these constraints. This suggests an approach for studying the role of credit in specific contexts.

Location factors were considered in three studies. A study from Bangladesh shows that the socioeconomic status of households varies by location, and this affects the relationship between credit and contraceptive use (Dearden and Khan 1994). A study from Kenya suggests differences in impacts on enterprise income for urban and rural clients, especially women (Sebstad and Walsh 1991). As referred to earlier, a study from Sri Lanka shows large differences in the amount of change in household income between communities, indicating the importance of local economic

---

[4] Oldham, et al. (1994) found that the closing down of the export market to Libya and the sharp decline in the value of the Dinar had special significance to Alexandria, which contributes a high proportion of Small and Microenterprise Industry (SMI) exports to Libya. At the same time, the return of skilled industrial workers from Arab Gulf, who use savings to open SMIs in Alexandria increased competition. At the same time, the national policy of moving workshops out of provincial capitals into industrial parks resulted in increased difficulty in obtaining establishment and operation licenses or permission to alter premises. Merchants were unable to pay cash for products, and stretched their payments to producers out over time, resulting in severe liquidity constraints for microenterprises, and extended 'down time.* Moneylenders appeared for the first time in many years. The program loans helped the enterprises to survive by easing the liquidity constraints of borrowers and enabling them to continue production and avoid indebtedness to moneylenders.

conditions (Hulme, et al. 1996).

2. Gender

The impact studies included in this review reflect a high level of gender awareness in their designs. A gender perspective is reflected in the programs, most of which reach large numbers of women. It is also reflected in the approach of many of the studies, which recognize (implicitly or explicitly) the existence of separate 'gendered* economies within households and within the ME sector.

Important gender differences are found in the profile of clients. At the household level, several studies refer to differences between men and women in the ownership of land or housing, access to alternative sources of credit, labor allocation, expenditure patterns, and decision making roles. Gender differences are also found in marital status (with more single, divorced or widowed women than men) and education levels. Women headed households are over-represented in many ME programs, and these households are often characterized by their poverty and high dependency ratios (Vengroff and Creevey, 1994; Buvinic et al., 1989; Goetz and Gupta 1996; Pitt and Khandkar 1995; Sebstad and Walsh 1991).

Other studies indicate gender divisions within the ME sector, with women concentrated in particular types of enterprises and activities. In Egypt, for example, one study covered 96 types of microenterprises, 28 of which involved women. Another study covered 43 types of enterprises, 14 of which involved women (Sebstad and Loza 1993). There is evidence in some of the studies that suggests that women*s enterprises may be more likely than men*s to have lower capitalization, different asset structures, and fewer employees. In some cases, this may represent an historically defined gender division of labor; in others it may reflect women*s different enterprise goals, especially those related to risk (Lapar, et al., 1995; Sebstad and Walsh 1991). These are only a few examples, but suggest why a gender perspective is important in conceptualizing impacts, selecting variables to measure, and interpreting findings.

The impact findings discussed in the previous sections refer to impacts on both women and men, with significant gender differences, as reported in the studies, noted in the text. Some notable findings are:

- at the individual level, survey research in Bangladesh shows that although women make up a large majority of borrowers in most programs, women don*t always control loans. The impact of a loan depends on who controls it (Goetz and Gupta 1996);

- at the enterprise level, a study in the Philippines found that women experienced higher increases in sales compared to men. This was because women are concentrated in non-manufacturing enterprises, and output is generally higher in these enterprises (Lapar, et al., 1995);

- a study in Ecuador (Buvinic et al. 1989) shows that women borrowers reduce the time in their activity (although labor productivity increases), whereas men increase the number of hours worked in their businesses;

- at the household level, a rigorous, econometric study in Bangladesh concluded that credit to women has more impact than credit to men on women*s non-land asset accumulation, and women*s labor supply (Pitt and Khandkar 1995);

- data from Grameen Bank show credit to women has a statistically significant impact on girl*s schooling, while credit to men does not (Pitt and Khandkar 1995);

- credit to women is associated with greater impact on household expenditures, in particular, greater expenditure on food and child welfare. Women are more likely to invest profits in their families and men are more likely to invest profits in their businesses.

Many of the studies consider gender to be a key issue in understanding impacts, and the overwhelming conclusion is that gender does make a difference.

3. Sectoral Differences

The findings confirm that credit has a positive effect on enterprises across subsectors, but the types and degree of impacts vary, for example, by the composition of the asset base or the market conditions for that subsector (market size, stability, or location; level of competition; barriers to entry). Impacts are often more visible, immediate, and dramatic in enterprises that operate with high levels of working capital -- primarily non-manufacturing activities (trade and services). These changes often level off after an initial growth spurt, however, and there is limited evidence showing whether or not they maintain the higher levels of operation over time.

Many manufacturing enterprises require lumpier investments and a longer time period to grow. And while they usually have higher levels of employment to start with, several studies suggest that employment growth rates associated with ME credit are higher for non-manufacturing enterprises.

4. Poverty Level of Borrowers

The ODA case studies provided the most systematic information on the impacts of ME credit on poverty. In their synthesis of these studies, Hulme and Mosley (1996) conclude that a large portion of borrowers in ME credit programs are poor, but that impacts vary among different poverty groups. Their findings suggest the following:

- ME credit programs are successful in reaching poor households, and in moving significant numbers above the poverty line.

- The participation rates of poor borrowers is higher in programs that target the poor than in open access schemes. However, because some of the open access schemes are very large in scale, the absolute number of poor people participating in these programs, in some cases, is actually higher.

- The impacts of credit are not ‘scale neutral*, and credit has differential effects on different groups among the poor. Findings from several studies suggest it may benefit middle and upper groups among the poor more than the core poor, who are more vulnerable and less able to take on added risks. For a minority of the core poor, credit may increase their vulnerability.

- The core poor do benefit through increased income stability in the off-seasons, increased assets, diversification of economic activities, and access (in some programs) to instant consumption loans for crisis.

- The overall effect of credit in reducing the vulnerability of the core poor may be limited, however, especially in increasing savings, expanding demand for goods and services produced by vulnerable households, or encouraging the adoption of risk reducing technologies.

IV. SUMMARY AND LESSONS FOR FUTURE IMPACT STUDIES

A. Summary

The 32 studies included in this overview represent a variety of programs in different places and use a range of research designs and measures of impact. This makes it difficult to draw general conclusions. Nevertheless, the findings indicate positive impacts across different types of programs, contexts, socioeconomic groups, and gender of clients. They further suggest directions for future impact studies.

From this overview, it is evident that impacts are not only heterogeneous, but cumulative with the number of loans. In this respect, impacts are adversely affected programs interrupt disbursements. In one program, for example, disbursements were suspended periodically when repayment rates dropped below a certain level. In this case, good borrowers were penalized along with the bad, and impacts were reduced accordingly. Drop out rates also were quite high (Churchill 1995). Similarly, impacts are affected by any dramatic shifts in program methodologies or loan products. This suggests the importance of the relationship between program design and performance and impacts, a topic that warrants greater attention in future impact studies.

At the enterprise level, the studies consistently find impact in the areas of output and income, and somewhat less consistently in the areas of asset accumulation and employment. A vast majority of assisted enterprises show some improvements, although few appear to move on to a path of sustained growth.

It is also clear that the benefits of credit extend beyond the enterprise to the household and individual levels. A growing body of evidence shows generally positive effects on household production and incomes, asset accumulation, and consumption. Loans have an impact on poverty not only through improved consumption, but also through household investments that improve living conditions and contribute to improved household security. Findings from several studies also suggest changes in women*s empowerment and contraceptive use.

The findings dispel certain myths. For example, Hulme and Mosley found that in a minority of cases, credit may increase the vulnerability of poor borrowers. But there was little to suggest that the very poor, on average, are made worse off by credit (Hulme and Mosley 1996). There was evidence, however, showing male appropriation of women*s loans, indicating that women may not always benefit directly from credit even when their participation rates are high.

Up to now, there is little evidence upon which to base conclusions about the longer term sustainability of ME credit impacts. It is clear, however, that credit is only one of many factors affecting longer term enterprise growth, household security, and poverty alleviation. Expectations about the role of credit in promoting change in these areas should be realistic.

B. Lessons for Future Impact Studies

In designing future impact studies, two methodological points deserve mention. One is that self selection of participants and non-random placement of programs has an important effect on the direction of change, and should be accounted for in future impact studies (Pitt and Khandkar 1995). Another point is that many studies do not look at drop outs, which can result in an overestimation of the impacts of the programs (Oldham, et al. 1994; Churchill 1995).

The results of this overview reveal gaps in the research to date, suggesting several areas for future research. Some examples include:

- at the enterprise level, greater attention to impacts on labor productivity and markets;

- at the household level, more emphasis on impacts on the composition and management of household economic portfolios, and especially on household assets such as savings, children*s education, and housing;

- at the individual level, additional research on the role of credit in promoting women*s empowerment in different socioeconomic and political contexts;

- continued analysis of the differences in impact across different types of socioeconomic or poverty levels of borrowers, with attention to the role of credit and savings services in managing risk;

- greater attention to temporal issues in distinguishing between shorter term impacts and those that emerge over time;

- more attention to how program design, performance, and context influence impacts;

- continued efforts to link client survey data with qualitative case studies to probe selected impact issues in more depth; and

- the development of practical methods for using client level impact data in cost benefit analyses of ME programs;

BIBLIOGRAPHY

Buckley, Graeme, forthcoming. "Financing the Jua Kali Sector in Kenya: the K-REP Juhudi Scheme and Kenya Industrial Estates Informal Sector Program." In *Finance Against Poverty, Volume II: Country Case Studies,* edited by David Hulme and Paul Mosley, 349-427, London: Routledge (draft).

Buckley, Graeme, forthcoming. "Rural and Agricultural Credit in Malawi: A Study of the Malawi Mudzi Fund and the Smallholder Agricultural Administration." In *Finance Against Poverty, Volume II: Country Case Studies*, edited by David Hulme and Paul Mosley, 428-521. London: Routledge (draft).

Buvinic, Mayra, Marguerite Berger and Cecelia Jaramillo, 1989. "Impact of a Credit Project for Women and Men Microentrepreneurs in Quito, Ecuador." *In Women's Ventures,* edited by M Berger and M. Buvinic, 222-246. West Hartford CT: Kumarian Press.

Chen, Martha, 1992. "Impact of Grameen Bank's Credit Operations on its Members: Past and Future Research." Report to the Grameen Bank.

Churchill, Craig F., 1995. "The Impact of Credit on Informal Sector Enterprises in South Africa: A Study of Get Ahead Foundation*s Stokvel Lending Programme." Clark University MA Thesis, Worchester, MA.

Creevey, Lucy E., , Koumakh Ndour and Abdourahmane Thiam, 1995. "Evaluation of the Impacts of PRIDE/VITA (The Guinea Rural Enterprise Development Project)." GEMINI Technical Report No. 94, Bethesda, MD.

Creevey, Lucy E., 1994. "Summary Report: A UNIFEM Comparative Study Assessing Impacts of Projects to Support Microenterprises."

Dearden, Kirk and Nazmul Khan, 1994. "Assessing the Impact of Women*s Savings and Credit Programs on Fertility: A case from Bangladesh." Save the Children Women/Child Impact Program Monograph No. 2, Westport, CT.

Gaile, Gary and Jennifer Foster. 1996. Review of Methodological Approaches to the Study of the Impact of Microenterprise Credit Programs. Paper submitted to USAID by AIMS. Washington, D.C.: Management Systems International.

Gupta, Surendra K. and Mario D. Davalos, 1993. "Midterm Evaluation of the Microenterprise Development Project of Jamaica." GEMINI Technical Report No. 59. Bethesda, MD.

Goetz, Anne Marie, and Rina Sen Gupta, 1996. "Who Takes the Credit? Gender, Power, and Control over Loan Use in Rural Credit Programs in Bangladesh." *World Development,* Vol. 24, No. 1, pp. 45-63.

Hulme, David, Richard Montgomery, with Debapriya Bhattacharya, 1996. "Mutual Finance and the Poor: A Study of the Federation of Thrift and Credit Cooperatives in Sri Lanka (SANASA)." In *Finance Against Poverty, Volume II: Country Case Studies,* edited by David Hulme and Paul Mosley, 228-315, London: Routledge (draft).

Hulme, D. and P. Mosley, 1996. *Finance Against Poverty, Volume I: Analysis and Recommendations,* London: Routledge (draft).

Kilby, Peter, and David D'Zmura , 1985. "Searching for Benefits." USAID Evaluation Special Study No. 28. Washington, D.C.

Lapar, Ma. Lucila A.; Douglas H. Graham and Richard L. Meyer, 1995. "The Effect of Credit on Output: Are there Sectoral Differences?" Rural Finance Program. Department of Agricultural Economics. The Ohio State University. Columbus, OH.

Lapar, Ma. Lucila A.; Douglas H. Graham, Richard L. Meyer, and David S. Kraybill, 1995. "Selectivity Bias in Estimating the Effect of Credit on Output: The Case of Rural Non-Farm Enterprises in the Philippines." Rural Finance Program, Department of Agricultural Economic, The Ohio State University. Columbus, OH.

MkNelly, Barbara and Chatree Watetip, 1993. "Impact Evaluation of Freedom from Hunger's Credit with Education Program in Thailand." Freedom From Hunger Foundation. Davis, CA.

Montgomery, Richard, Debapriya Bhattacharya, and David Hulme, 1996. "Credit for the Poor in Bangladesh the BRAC Rural Development Programme and the Government Thana Resource Development and Employment Programme." In *Finance Against Poverty, Volume II: Country Case Studies*, edited by David Hulme and Paul Mosley, 123-227. London: Routledge (draft).

Mosley, Paul, 1996. "Indonesia: BKK, KUCK, and the BRI Unit Desa Institutions." In *Finance Against Poverty, Volume II: Country Case Studies,* edited by David Hulme and Paul Mosley, 46-122. London: Routledge (draft).

Mosley, Paul, 1996. "India: Regional Rural Banks." In *Finance Against Poverty, Volume II: Country Case Studies*, edited by David Hulme and Paul Mosley, 316-148. London: Routledge (draft).

Mosley, Paul, 1996. "Metamorphosis from NGO to Commercial Bank: The Case of Bancosol in Bolivia." In *Finance Against Poverty, Volume II: Country Case Studies*, edited by David Hulme and Paul Mosley, 1-45. London: Routledge (draft).

Mustafa, Shams; Ara, Banu Dilruba Ishrat, Hossain Altaf; Ajmal Kabir, Mohammad Mohsin; and

Abu Yusuf, 1995. “Impact Assessment Study of BRAC's Rural Development Programme”

Nelson Eric R. and Bolnick Bruce R., 1986. “Survey Methods for Assessing Small Credit Programs Evaluating the Economic Impact KIK/KMKP Credits.” Jakarta.

Nelson, Eric, 1984 “The Economic Impact of KIK/KMKP Credit on Indonesian Small Enterprises.” Draft Memo to Kepala Urusan Kredit Koperasi dan Kredit Kecil (Mimeo).

Neill, Catherine, Mario Davalos, Washington Kiiru, M. Manundu, and Jennefer Sebstad, 1994. “The Kenya Rural Enterprise Programme under Cooperative Agreement No. AID-615-0238-A-00-7026-00: A Final Evaluation” GEMINI Technical Report No. 77. Bethesda, MD

Oldham, Linda, Hager El Hadidid, Hussein Tama*a, Michele Suliman Nashed, Sherif El Dewany, Mahmoud Hussein, Mohamed Abdel Aziz, Mohamed Sakr, 1994. “Measuring Socioeconomic Impact of Credit on SMI: Assessment of the Monitoring System Used by the Alexandria Businessmen*s Association, Egypt.” GEMINI Technical Report No. 76. Bethesda, MD.

Peace, Gill and David Hulme, 1994. “Microenterprise and Children - What are the Intra-Household Impacts of Income Generating Programs?” Small Enterprise Development, Vol. 5, No. 1.

Pitt, Mark M. and Shahidur R. Khandher, 1995. “The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter?”

Pitt, Mark M. and Shahidur R. Khandkar, 1995. Household and Intrahousehold Impacts of the Grameen Bank and Similar Targeted Credit Program in Bangladesh”

Schuler, Sidney Ruth and Syed M. Hashemi, 1994. “Credit Programs, Women's Empowerment, and Contraceptive Use in Rural Bangladesh.” *Studies in Family Planning* 25 (2): 65-76.

Sebstad, Jennefer and Sara Loza, 1993. “Lending and Learning: Formal Banks and Microenterprise in Egypt”, Report to the Ford Foundation Cairo. Community Economics Corporation. Washington, D.C.

Sebstad, Jennefer and Martin Walsh, 1991. “Microenterprise Credit and its Effects in Kenya: An Exploratory Study.” Report prepared for USAID AFR/MDI and S&T/WID. Coopers and Lybrand, Washington, D.C.

Sebstad, Jennefer, 1992. “Get Ahead Foundation Credit Programs in South Africa: The effects of loans on client enterprises.” GEMINI Technical Report No. 44. Bethesda, MD.

Sutoro, Ann Dunham, 1990. “KUPEDES Development Impact Survey: Briefing Booklet.” BRI, Planning, Research and Development Department.

Vengroff, Richard; Lucy Creevey, 1994. “Evaluation of Project Impact: ACEP Component of the Community Enterprise Development Project.” Report to USAID/Dakar. University of Connecticut, Storrs.

Table 1: ME IMPACT STUDIES BY REGION, COUNTRY, AUTHOR, PROGRAM, PURPOSE, AND METHODOLOGY

REGION/COUNTRY AUTHOR	PROGRAM	PURPOSE OF THE STUDY	RESEARCH METHODS
Asia			
Bangladesh Pitt and Khandkar (1994)	Grameen Bank Bangladesh Rural Advancement Committee (BRAC) Bangladesh Rural Development Board RD 12 Program (RD 12)	To study the impact of group based lending programs for the poor on household behavior	Quasi-experimental design Survey - With credit/without credit
Bangladesh Pitt and Khandkar (1995)	Grameen Bank BRAC RD 12	To estimate gender differences in the impact of group based lending programs on household behavior	Quasi-experimental design Survey - With credit/without credit
Bangladesh Schuler and Hashemi (1994)	Grameen Bank BRAC	To examine the effects of women*s participation in rural credit programs on women*s status and contraceptive use	Quasi-experimental design Survey - With credit/without credit - Longitudinal data Ethnographic study In-depth case studies

TABLE 1 (cont.)

REGION/COUNTRY AUTHOR	PROGRAM	PURPOSE OF THE STUDY	RESEARCH METHODS
Asia			
Bangladesh Montgomery, Bhattacharya, and Hulme (1996)	BRAC Government Thana Resource Development and Employment Program (TRDEP)	To study the impacts of program credit on incomes, productivity, and poverty (part of a larger program evaluation)	Quasi-experimental design Survey - Old borrowers/new borrowers - Before/after based on recall
Bangladesh Goetz and Gupta (1994)	Grameen Bank BRAC RD-12 Thangemara Mohila Sebuj Sengstha (TMSS) Shaptagram Nari Swanivar Parishad (SNPS)	To examine the impact of program credit on women, intrahousehold relations, and power relations of gender	Non-experimental design Survey of borrowers - Loan use histories
Bangladesh Dearden and Khan (1994)	Save the Children credit and savings programs	To examine the relationship between participation in savings and credit programs and fertility	Quasi-experimental design Survey - With credit/without credit - Longitudinal data
Bangladesh Chen (1992)	Grameen Bank	Review of 80 studies and other internal documents on the impact of Grameen Bank on its members	Review of previous impact studies

TABLE 1 (cont.)

REGION/COUNTRY AUTHOR	PROGRAM	PURPOSE OF THE STUDY	RESEARCH METHODS
Asia			
India Mosley (1996)	Two Regional Rural Banks in Andrah Pradesh	To study the impact of program credit on income and production methods (part of a larger program evaluation)	Quasi-experimental design Survey -Old borrowers/new borrowers - Retrospective based on recall
Sri Lanka Hulme, Montgomery, and Bhattacharya (1996)	Federation of Thrift and Credit Cooperatives in Sri Lanka (SANASA)	To examine the role of credit and savings on income, asset formation, productivity, employment, technology adoption, and poverty (part of a larger program evaluation)	Non-experimental design Survey of borrowers - Before/after based on recall
Thailand MkNelly and Watetip (1993)	Freedom from Hunger Credit with Education Program	To assess the effect of credit and nutrition education on economic resources, health and nutrition knowledge and practice, and self confidence among participants	Quasi-experimental design Survey - With credit/without credit - Retrospective based on recall In depth interviews Focus groups interviews

TABLE 1 (cont.)

REGION/COUNTRY AUTHOR	PROGRAM	PURPOSE OF THE STUDY	RESEARCH METHODS
Asia			
Indonesia Mosley (1996)	BKK KUCK BRI Unit Desa Institutions	To study the impact of program credit on income and production methods (part of a larger program evaluation)	Review of two previous impact studies (1) Non-experimental design Survey of borrowers (KUPEDES) - Before/after based on recall (2) Quasi-experimental design (BKK, KURK) - With credit/without credit - Before/after based on recall
Indonesia Sutoro (1990)	BRI	To study the impact of credit on employment, income, technology, standard of living, and equity	Non-experimental design Survey of borrowers - Before/after based on recall In-depth interviews
Indonesia Nelson (1984) Nelson and Bolnick (1986)	KIK/KMKP	To study the incremental effect of credit on employment, investment, and production	Quasi-experimental design Survey - With credit/without credit - Before/after based on recall

TABLE 1 (cont.)

REGION/COUNTRY AUTHOR	PROGRAM	PURPOSE OF THE STUDY	RESEARCH METHODS
Asia			
Philippines Lapar, Graham, Meyer, and Kraybill (1995)	Study of rural non-farm credit (not a program evaluation)	To measure the effect of credit on output under assumptions of selectivity bias	Quasi-experimental design Survey - Cross sectional study of rural non-farm enterprise with and without credit
Philippines Lapar, Graham, and Meyer (1995)	Study of rural non-farm credit (not a program evaluation)	To measure sectoral differences in the direct and indirect effects of credit on output	Quasi-experimental design Survey - Cross sectional study of rural non-farm enterprise with and without credit

TABLE 1 (cont.)

REGION/COUNTRY AUTHOR	PROGRAM	PURPOSE OF THE STUDY	RESEARCH METHODS
Africa			
Kenya Buckley (1996)	Kenya Rural Enterprise Programme (K-REP) Kenya Industrial Estates Informal Sector Programme (ISP)	To assess the impact of credit on business activity and household income and expenditures (part of a larger program evaluation)	Quasi-experimental design Survey - With credit/without credit - Old borrowers/new borrowers - Before/after based on recall
Kenya Neill et. al. (1994)	K-REP	To study how credit clients build their base of household economic security (part of a larger program evaluation)	Non-experimental design Survey of borrowers - Before/after based on recall
Kenya Sebstad and Walsh (1991)	K-REP	To explore the effects of microenterprise credit at the enterprise, household, and community levels	Non-experimental design Exploratory - In-depth case studies - Before/after based on recall - Ethnographic data

TABLE 1 (cont.)

REGION/COUNTRY AUTHOR	PROGRAM	PURPOSE OF THE STUDY	RESEARCH METHODS
Africa			
Malawi Buckley (1996)	Malawi Mudzi Fund	To study the impacts of non-farm group credit on selected enterprise and household variables (part of a larger program evaluation)	Quasi experimental design Survey - With credit/without credit - Old borrowers/new borrowers Informal interviews with credit and non-credit respondents
South Africa Churchill (1995)	Get Ahead Foundation	To assess the impact of micro enterprise credit on small scale enterprises, on the living conditions of entrepreneurs and their families, and on benefits to the next generation	Quasi-experimental design Survey - Old borrowers/ new borrowers/ prospective borrowers - Before/after based on recall
South Africa Sebstad (1992)	Get Ahead Foundation	To assess the effects of microenterprise credit on clients and their enterprises (part of a larger program evaluation)	Non-experimental design Survey of borrowers - Before/after based on recall

TABLE 1 (cont.)

REGION/COUNTRY AUTHOR	PROGRAM	PURPOSE OF THE STUDY	RESEARCH METHODS
Africa			
Guinea Creevey, Ndour, and Thiam (1995)	The Guinea Rural Enterprise Development Project (PRIDE/VITA)	To study the impacts of microenterprise credit on participants* enterprise performance, individual income, individual outlook, family finance, and family well-being	Quasi-experimental design Survey - With credit/without credit - Before/after based on recall and baseline survey data
Senegal Vengroff and Creevey (1994)	Agence de Credit pour l*Enterprise Privee (ACEP)	To test the assumption that the program has a positive effect economically, financially, and socially on the quality of life of clients	Quasi-experimental design Survey - With credit/without credit - Before/after based on recall In-depth interviews
Egypt Oldham, et al. (1994)	Alexandria Businessmen*s Association	To assess the socioeconomic impact of the credit program for small and micro-industries and the accuracy of data obtained by the Association*s monitoring system	Non-experimental design Survey of borrowers and ABA monitoring data - Before/after based on recall - Time series

TABLE 1 (cont.)

REGION/COUNTRY AUTHOR	PROGRAM	PURPOSE OF THE STUDY	RESEARCH METHODS
Africa			
Egypt Sebstad, et al. (1993)	National Bank for Development (NBD) Principal Bank for Development and Agricultural Credit (PBDAC)	To assess the impact on borrowers and enterprises of two experimental microenterprise credit programs undertaken by formal banks (part of a larger program evaluation)	Non-experimental design Survey of borrowers - Before/after based on recall In-depth case studies Focus group interviews

TABLE 1 (cont.)

REGION/COUNTRY AUTHOR	**PROGRAM**	**PURPOSE OF THE STUDY**	**RESEARCH METHODS**
Latin America			
Ecuador Buvinic, Berger, and Jaramillo (1989)	PRODEM	To assess the impact of credit on women entrepreneurs and on the productivity of enterprises	Quasi-experimental design Survey - With credit/without credit - Longitudinal data
Bolivia Mosley (1996)	BancoSol	To assess the direct impact of BancoSol loans on the employment, technology, and income levels of borrowers (part of a larger program evaluation)	Quasi-experimental design Survey - Old borrowers/new borrowers - Before/after based on recall
Jamaica Gupta and Davalos (1993)	Microenterprise Development Project	To assess the impacts of microenterprise loans on enterprises, gender and poverty alleviation (part of a larger program evaluation)	Review of one previous impact study (1) Non-experimental design Survey of 25 assisted firms - Before/after based on recall

TABLE 1 (cont.)

REGION/COUNTRY AUTHOR	PROGRAM	PURPOSE OF THE STUDY	RESEARCH METHODS
Cross regional			
Seven countries Hulme and Mosley (1996)	13 microenterprise credit programs in seven countries	To study the impacts of microenterprise credit on income, technology, poverty, vulnerability and deprivation	Primary and secondary data Mixed methods (see case studies above)
Cross regional Peace and Hulme (1994)	70 income generation programs implemented by NGOs and official agencies	To study the impacts of income generation projects on children	Review of secondary data
Eight countries Creevey (1994)	Women*s small and medium enterprise development projects in eight countries funded by UNIFEM, ATI, and ITDG	To assess the impacts on women*s lives and work of different strategies for promoting women*s small and medium enterprises (credit, training, mobilization, technology, marketing, skills development, initial capital)	Quasi-experimental survey - With credit/without credit -Before/after based on recall

TABLE 1 (cont.)

REGION/COUNTRY AUTHOR	PROGRAM	PURPOSE OF THE STUDY	RESEARCH METHODS
Cross regional			
Five countries Kilby and D*Zmura (1985)	Five microlending programs: Partnership for Productivity Upper Volta Northeast Union of Assistance to Small Businesses (UNO) Brazil The Institute for Honduran Development (IDH) The Dominican Development Foundation (DDF) Rural Development Fund (FDR) Peru	To compare the net economic benefits derived from five microlending projects	Review of five previous impact studies -Four non-experimental surveys of borrowers - One quasi-experimental survey (DDF)

Table 2: SUMMARY OF FINDINGS ON THE IMPACTS OF MICROENTERPRISE CREDIT (1996)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Asia				
Bangladesh Pitt and Khandkar (1994) *Grameen, BRAC, RD-12*	*HH*: School enrollment Labor supply Asset holding Per capita expenditure *IND*: Women*s non-land assets Contraceptive use Antrhopometric status of children		- Credit has a significant impact on boys *schooling*, but not girls schooling - Credit to women increases *women*s labor supply*; credit to men has no impact on women*s labor supply; - Credit decreases *men*s labor supply* - Credit increases *women*s non-land assets* (credit to women more so) - Credit increases *expenditure* on food and non-food items	- Little evidence that women*s participation increases *contraceptive use* - Self selection of women who already use *contraception* in the program is large - Little evidence of change in the *anthropometric status* of children - *Non-random placement* of programs has a significant effect on impacts -*Self selection* has a significant effect on impacts

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Asia				
Bangladesh Pitt and Khandkar (1995) *Grameen, BRAC, RD-12*	*HH*: Children*s schooling Women*s and men*s labor supply Women*s non-land asset holding Household expenditure *OTHER:* Determinants of credit demand		- Credit has a bigger impact on boys *schooling* than girls - Grameen credit to women effects girl*s *schooling*, but not other programs - Credit to women increases women*s *labor supply* for Grameen, but not other programs; it reduces men*s *labor supply* - Credit to men has no affect on *women*s labor supply*, but reduces men*s labor supply -Credit to women increases the value of *women*s non-land asset* holdings; credit to men does not - Credit to women is a significant determinant of total HH *expenditure*; credit to men is not	- Women of lower income HH more likely to join - Availability of outside sources of intra-family transfers not a determinant of credit demand - Age and sex of HH head important determinants of credit demand. Male head reduces credit to women; older head reduces credit to women

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Asia				
Bangladesh Schuler and Hashemi (1994) *Grameen, BRAC*	*IND*: Index of empowerment based on: physical mobility, economic security, ability to make own purchases, freedom from family domination and violence, political and legal awareness, public and political participation Contraceptive use			- Participation in credit programs *empowers* women by strengthening their economic roles - Age and schooling have positive effects on *empowerment* but not relative wealth - Empowerment is positively associated with *contraceptive use* - Grameen has community-wide effect on *contraceptive use* - Grameen stronger in promoting *small family norm*

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Asia				
Bangladesh Montgomery, Bhattacharya, and Hulme (1996) *BRAC, TRDEP*	*ENT:* Income Assets Productivity Employment Enterprise management *HH:* Income Expenditure Assets *OTHER:* Poverty impacts	- *Ent income* higher portion of HH income for repeat borrowers - Higher *net ent profits* for third time borrowers - Significant increase in value of *enterprise assets* (51-90%); - Little change in *productivity* (income change less than asset change) - Minimal impact on *paid employment* - *Increased labor supply* in ME for 1/3 BRAC borrowers - Little impact on enterprise *management*	- Marginal change in *HH income* for BRAC; diversification of sources -Significant change in *HH income* for TRDEP; specialization - No change in structure of *HH consumption* for BRAC; -Decrease in % *expenditure* on food for TRDEP -Increase in value of total *assets* (6%-12%); higher for successive loans; - Change in *structure of assets* for BRAC w/increase in productive assets; suggests more secure income	- Majority of borrowers remain below the poverty line for BRAC - More TRDEP borrowers graduating out of poverty - Better off among the poor benefit more from credit. To use credit effectively, hh need to reach minimum economic level (defined by income, assets, % monthly income spent on food; average landholding; average % income from daily laboring)

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Asia				
Bangladesh Goetz and Gupta (1996) *Grameen, BRAC, RE-12, TMSS, SNPS*	*IND:* Index of loan control based on: control over loan proposal, control over productive process, control over labor input, control over marketing, control over use of profits			- *Men*s appropriation* of loans higher than indicated in other studies - This is related to the fact that only 36% women have full or significant *control over productive process* - Women*s *control over loans* is greater when they invest in traditional women*s work - Women*s *control over loans* increases with years of membership - *Male appropriation* increases with loan size - With *male appropriation*, women absorb the enforcement costs by securing loan installments from men

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Asia				
Bangladesh Dearden and Khan (1994) *Save the Children credit and savings programs*	*IND:* Contraceptive use Rate of contraceptive Fertility			- Higher *contraceptive prevalence* for members - Higher rates of *adoption* for members -Lower *fertility* rates for members than non-members, but attributable to region of residence -social class plays modest role -- poorer classes have lower use of *contraceptives*
Bangladesh Chen (1992) *Grameen Bank*	*ENT:* Income Employment Markets Productivity *HH:* Expenditure Savings *IND:* Decision making Contraceptive use Perceptions *OTHER:* Political effects	- Positive effects on *income* and income distribution - Reduced *unemployment* -Increased hours per day in income activities - High elasticity of *demand* for products, little evidence of substitution - Few measures of changes in *productivity*	- Increased *savings* mobilization within communities; no data on individual savings - GB HH *expenditure* on food less in relative terms, more in absolute terms compared to non-GB HH - Increased investment in *housing* - Improved HH *nutrition*	- Women more conscious of *rights* - Women increase control over *decision making* - Women increase contraceptive use - Mixed findings on changes in women*s *aspirations* - Improved *perceptions* from husbands - Members less dependent on local elite and traditional patron client *relationships* - Members better able to resolve *conflicts* - More *autonomy* from local power structure in voting

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Asia				
India Mosley (1996) *Two Rural Regional Banks*	*ENT:* Employment Technical change *HH:* Family income Assets *OTHER:* Poverty	- Average increase in *employment* of .6 workers - Higher *employment* increases for women than for men - Poor women more likely to take on *employees* than poor men - Increase in unpaid *intrafamily employment* up to certain income threshold -12% borrowers implement *technical change* -- all men	- Positive impact on *family incomes* - Positive *income* less likely for poor, especially poor men. - Poor who do increase *income* more likely to have diversified sources - As *hh incomes* rise, less dependence on livestock income; more dependence on labor income - Increase in *hh assets* - *HH asset* increases higher for men than for women - Loans to people with *diversified portfolio* have higher impact - Loans used for *asset* purchases have lower impact	- 12% sample crossed *poverty* line; 25% women

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Asia				
Sri Lanka Hulme, Montgomery, and Bhattacharya (1996) *SANASA*	*ENT:* Assets Technical change Employment *HH*: Assets Income *IND*: Independent income for women *OTH*: Poverty Socio-political relations	- Little impact on *enterprise assets* - *Technical change* related primarily to agricultural techniques - Little impact on *employment* outside borrower*s household - Increase in *intrahousehold employment* - 8% clients increase number of *paid employees* - 30% clients *diversify* sources of enterprise income over last 3 years - More common for women to *diversify* than men - Reduced dependence on supplier credit	- 16% increase *in hh income* (real) - Large variation in *hh income* increase betwn sites indicating importance of local economic context - *HH income* increases correlated to no. hh members working in enterprise - *HH income* improvements across all income groups - 82% clients increase *hh assets*, mostly non-productive assets - 56% clients increase hh assets more than Rs10,000	- 1/4 households below *poverty* line graduate -*Independent income* for women increases bargaining power with male relatives - Reduced dependence on supplier credit leads to less dependence on more economically powerful traders

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Asia				
Thailand MkNelly and Watetip (1993) *Freedom from Hunger Credit with Education Program*	*ENT:* Growth Markets *HH*: Diversification of income sources Women*s time for childcare HH diets Food expenditures *IND*: Health and nutrition knowledge and practice Women*s work Women*s empowerment Children*s nutritional status and diets	- 62% expand existing income activities - 43% start new income generating activities 22% find new markets - Increased participation of family labor in MEs	- Greater variety of *secondary occupations* for participants - Increased *investments* in agriculture and animal husbandry - Increased *investments* in crops with nutritional benefits - No impact on *wage employment* - Little impact on *childcare* - HH *diet* better than control group - Increased *expenditure* on food	- Positive impacts on health and nutrition *knowledge and practice* - Positive impacts on women*s *empowerment* (confidence, cooperation with neighbors, husbands listen) - No difference in children*s *nutritional status* but improved diet quality - Little impact on women*s wage earnings - 34% women reduce work as wage laborers and increase work in their own enterprises

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Asia				
Indonesia Mosley (1996) *BKK, KURK, BRI*	*ENT:* Income Employment *HH:* Family income	- 24% increase in *ent income* for BRI - Average change in employment 2.2 for BRI over 3 years and .3 for KURK over one years	- 21% increase in *hh income* for BRI - 5.2% increase in *hh income* for FID-I compared to 2.4% for control grp - 3.9% increase in *hh income* for KURK compared to 2.1% for control grp - More clients increase *hh incomes* compared to control groups; fewer stay same or decrease - Change due to non-assisted enterprise income significant, and may be more significant the poorer the borrower	- *Outreach* to women varies. Programs w/outreach to smaller villages better at reaching women; programs that require collateral less accessible to women; negative correlation between loan size and % women borrowers - 8% BRI clients cross UN defined *poverty* line; 7% BKK clients; 5% KURK clients - BRI not *poverty* focused, but accounts for large numbers who cross poverty line because it is a big program

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Asia				
Indonesia Sutoro (1990) *BRI*	*ENT:* Income Employment Real wages Technological change *HH*: Income Schooling Landlessness	- 93% increase in *net enterprise income* - 65% increase in total number *workers* - 84% increase in annual working *hours* - 9% increase in real *wages* - Increased *gap between workers and owners*; wages as % of ent income declines from 14% to 11% - 26% increase ownership of productive *machinery* - 16% increase in ownership of business *vehicles*	- 76% increase in *household income* - expenditures on *schooling* for children increased by 65% - decreased *landlessness*; land purchases exceed land sales by factor of six	

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Asia				
Indonesia Nelson (1984) Nelson and Bolnick (1986) *KIK/KMKP*	*ENT*: Employment Investment Production	- Positive impact on *employment*, esp. in industry and ag. sectors - Negative impact on *employment* in construction - Greater impact on reducing *underemployment* than job creation in some sectors - Positive impacts on *investment*, except in construction and some trade activities -Positive impacts on *production*, but small in many sectors - No or negative impact on *production* in 8 of 29 sectors - Impact very *heterogeneous* in retail trade		- Impacts very *heterogeneous* across sectors - Lack of impact due to: (1) credit w/out technical (cost reduction) or marketing (sales increasing) measures in highly competitive markets; (2) diversion of funds so no investment; (3) credit too small to raise production to efficient level; (4) credit granted only to enterprises already at an effective level of production

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Asia				
Philippines Lapar, Graham, Meyer, and Kraybill (1995) *Rural non-farm credit*	*ENT:* Output	- Strong positive relationship between credit and *output* - O*utput* also related to number of family workers, fixed asset level, cost of labor, working capital level, working hours of owner - Controlling for these factors, credit still has a significant effect on *output* - *Output* not related to firm age, household size, or trading activity - Level of increases in *output* dependent on market conditions		
Philippines Lapar, Graham and Meyer (1995) *Rural non-farm credit*	*ENT:* Output *OTHER:* Determinants of credit demand	- Credit has no effect on *output* of manufacturing enterprises - Credit leads to 22% increase in *output* for non-manufacturing, controlling for working capital and employment		- Entrepreneurs with more *assets* less likely to seek external funds to finance operations; prefer self financing - More *income* last year, less likely to seek external funds (less liquidity constraint) - Men more likely to borrow, even though women more active in rural non-farm sector - Credit to non-manuf. not right amount or *size* to realize optimal returns

TABLE 2 (cont.)

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	**ENTERPRISE LEVEL**	**HOUSEHOLD LEVEL**	**INDIVIDUAL OR OTHER**
Africa				
Kenya Buckley (1996) *K-REP*, *ISP*	*ENT:* Income Business assets Sales Employment *HH*: Expenditures Income	- Limited impact on ent employment: only 14% K-REP and 29% ISP borrowers increase employment; - Little impact on fixed assets; increases in current assets but sustainability questionable - Positive impact on sales; 43% higher for K-REP and 25% higher for ISP compared to control grp - Mixed findings on profits: negative for K-REP, but less negative than control groups; positive for ISP	- Increase in hh *expenditure* - *Expenditure* growing for both KREP at 33% and ISP at 25% - Increase in *expenditure* exceeds increase in income - Mixed effects on *household income*: hh income lower for KREP than control group; higher for ISP than control group	
Kenya Neill et al (1994) *K-REP*	*ENT*: Employment *HH*: Security	- 22% increase in *employment* - Before loans *employment* growth lower than national average; after loans equivalent - Variation in *employment* impacts; no growth for 43% borrowers	- Loan use for *non-business expenditures* indication of improved household security	

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	**ENTERPRISE LEVEL**	**HOUSEHOLD LEVEL**	**INDIVIDUAL OR OTHER**
Africa				
Kenya Sebstad and Walsh (1991) *K-REP*	*ENT*: Financial status Employment Assets Management *HH*: Income Expenditures Investment Labor allocation *OTHER*: Backward and forward ent linkages Provision of new goods and services for community Regulatory environment	- Positive change overall in financial performance; increase in *sales*, *direct value added*, *cash income* - Not all enterprises impacted positively; 50% decrease *cash income* - No change overall in *profit margins* but 33% clients increase - Greater improvements in *financial performance* in urban areas than rural; urban women do better than urban men; rural men do better than rural women - 37% increase in *employment* - No change in structure of *employment* - 29% increase in value of fixed assets - Big gender difference in ownership of fixed assets in rural (but not urban) areas; value of men*s fixed assets higher than women*s - Little change in management practices	- L*oans used* for savings, hh expenditure, other enterprise activities - Assisted enterprises provide 42% hh income - Real *hh income* increased - 28% clients *invest* in housing, 12% in land; 46% in agriculture or livestock and 22% in other enterprise since taking loan - Little evidence of changes in labor supply, altho more women *supply labor* full time in assisted ent than men	- Little evidence of *conflict* between spouses over women*s labor investment or enterprise management; some conflict associated with home based enterprises - ME investment does not increase *women*s workload*, but some husband*s try to *control* income from women*s enterprises - Little change on structure of *backward linkages*, altho slight shift from retail to wholesale suppliers - Greater change in structure of *forward linkages*, with increase in % ent selling to other enterprises and institutions - No evidence of change in *types of products* sold - *Regulatory* environment impinges negatively on ent. Ent. w/increased profit margins more likely to operate outside regulatory framework, have secure tenure, and access to utilities

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	**ENTERPRISE LEVEL**	**HOUSEHOLD LEVEL**	**INDIVIDUAL OR OTHER**
Africa				
Malawi Buckley (1996) *Malawi Mudzi Fund*	*ENT* Sales Assets/enterprise worth Employment *HH* Monthly income Use of profits/expenditure *OTH* Participation of poor in program	- positive impact on *sales;* impacts cumulative with no. loans - variable impact on *assets*; 29% report increase; 46% no change; 25% businesses have no assets - *enterprise worth* measured primarily in terms of value of current assets - *employment* impact through start ups; 75% borrowers start ups - no *employment* impact in on-going enterprises - employment impacts primarily through worker/owners (few employees)	- Assisted enterprise only *source of hh income* for 80% borrowers - no increase in real *hh income*; 33% report lower incomes - *hh income* higher for repeat borrowers -32% borrowers use profits for food; 10% for school fees; 9% for loans	

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	**ENTERPRISE LEVEL**	**HOUSEHOLD LEVEL**	**INDIVIDUAL OR OTHER**
Africa				
South Africa Churchill (1995) *Get Ahead Foundation*	*ENT* Monthly profit Job creation Fixed assets Management practices *HH* Food expenditure per capita Living conditions Savings	-Positive impacts on *monthly profit* (80% for clients vs. 43% for control grp); cumulative effect with no. loans - Little impact on *job creation*; growth rates low, but higher among clients than control grp; repeat borrowers depend less on unpaid labor - Positive impact on *fixed assets*; correlation btwn no. loans and value of fixed assets; 31% of businesses have no fixed assets - No impact on management practices	- Little impact on *food expenditure* per capita - Positive impact on *savings*; more borrowers save regularly than control grp (71% compared to 54%) - Significant impact in other *living condition* variables; more difference btwn borrowers and control grp in these variables than in business variables: electricity, indoor plumbing; telephones; vehicles; tarred roads; street lights; public transport	

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	**ENTERPRISE LEVEL**	**HOUSEHOLD LEVEL**	**INDIVIDUAL OR OTHER**
Africa				
South Africa Sebstad (1992) *Get Ahead Foundation*	*ENT* Sales Gross profits Gross profit margins Employment Management practices	- Increase in *sales*, *gross profits* - Overall decrease in *gross profit margins*; but 29% clients increase gross profit margins - Slight increase (10%) in overall *employment*, including owners - Greater increase (32%) in no. *paid employees* excluding owners - Increase in proportion of *wage employees* and of women employees - Little change in *management practices* - Limited change in *diversification* of businesses, movement from one sector to another; new business start up, or location		

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	**ENTERPRISE LEVEL**	**HOUSEHOLD LEVEL**	**INDIVIDUAL OR OTHER**
Africa				
Guinea Creevey, Ndour, and Thiam (1995) *Guinea Rural Enterprise Development Project*	*ENT* Income Assets Profitability Employment Source of supplies *HH* Income Physical assets Children*s education Family diet Expenditures *IND* Personal income Personal assets Control of own resources Decision making power	- Positive impact on ent. *income* for repeat borrowers -- impacts cumulative - No impact on *assets* (premises, vehicle, electricity) - No impact on ent. *employment* - No impact on *source of supplies*	- Very wide range in *income* level of hh - Repeat borrowers have higher hh *income* and more likely to say it improved over two years - No overall impact on hh *assets*, except on running water in homes; some evidence of impact among traders with multiple loans - No impact on children*s *education* - Positive impact on perceived improvement in *family diet*	- Positive impact on *individual income* of multiple loans - No impact on *individual assets* - No change in *decision making patterns* of women

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	**ENTERPRISE LEVEL**	**HOUSEHOLD LEVEL**	**INDIVIDUAL OR OTHER**
Africa				
Senegal Vengroff and Creevey (1994) *ACEP*	*ENT* Sales Operating capacity Employment Sources of finance Perception of obstacles to business development *HH* Debt Assets Expenditure *IND* Decision making authority Self confidence	- Small positive impact on *sales*; more for women than men - Positive impact on *capacity utilization* -- less decline for clients compared to control grp; women operate at higher level than men. - No net impact on *employment* - No impact on expanding access to alternative *sources of finance* - Little impact on overcoming major *obstacles to business development* (e.g., access to primary products and land)	- Loans increase *indebtedness* to private moneylenders for some clients - Modest impact on hh *asset* ownership (land, houses, livestock, motor vehicles, savings); more for women than men - Little impact on *expenditure* (except on purchase of assets) - Women perceive greater debt burden - Men more likely to *invest profits* in businesses; women in family	- No impact on decision making patterns; - Positive impact on self confidence, especially for women (92% of women clients perceive more self confidence); - Loan makes up higher proportion of credit available for women compared to men - Indications that context fact, *devaluation*, has negative impacts due to effects on food prices, cost of inputs, transport and fuel costs, price of spare parts and electricity

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	**ENTERPRISE LEVEL**	**HOUSEHOLD LEVEL**	**INDIVIDUAL OR OTHER**
Africa				
Egypt Oldham 1995 *Alexandria Businessmen*s Association*	*ENT:* Sales Income Employment Raw materials acquisition/storage Other sources of credit Form of production Marketing channels	- 70% clients increase *sales* -67% clients increase *income* - Majority of client *use profits* to reinvest in enterprise; 59% also use for household - Negative impact on *employment* from 3.0 to 2.8 - 43% clients benefit through reduced cost of *raw materials* - Decrease *in use of supplier credit* for raw materials purchase from 25% to 19% of total purchases - Decrease use *of taking a partner* to finance an order - Decrease *in other sources of finance* (purchaser credit, bank loans, rotating credit associations, family resources)		- Credit has little impact on business growth, but it enables clients to stay in business during difficult periods - Down time increasing due to liquidity constraints as merchants stretch out their payments for products delivered

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND *OTHER*	**ENTERPRISE LEVEL**	**HOUSEHOLD LEVEL**	**INDIVIDUAL OR OTHER**
Africa				
Egypt Sebstad and Loza (1993) *NBD, PBDAC*	*ENT:* Sales Gross profits Employment Management practices *OTHER:* Access to other sources of finance Use of increased ent. income	- Positive impact on sales and gross profits for over half clients - Limited impact on employment - No change in type of employment - Minimal impact on management practices - Substitution for supplier credit an important impact - Little graduation to mainstream commercial credit		- Little change in use of other sources of credit - at individual level, clients experienced greater control over buying and selling; increased independence from suppliers; more security; less anxiety - Small proportion of clients regret taking loan - Loans reach 93 different types of businesses, 28 involving women clients - Many other context factors seen to affect potential for positive impact

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Latin America				
Ecuador Buvinic, Berger, Jaramillo (1989) *PRODEM*	*ENT:* Net monthly income Net hourly income Employment Labor productivity	-Small positive impact on *net monthly and hourly incomes* - Increase in *hourly income* a proxy for labor productivity - More significant increase in *hourly income* for women than men - Positive impact on *job stability;* - Little impact on *job creation* -Women use credit to increase efficiency/productivity		

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Latin America				
Bolivia Mosley (1996) *BancoSol*	*ENT:* Income Employment Technological change	- 91% borrowers increase *incomes* - *Income* increases higher for poor - *Income* increases higher for borrowers than for control group - 25% spectacular *income* growth; 10-15% bankrupt; 60-65% stay same -39% borrowers increase *employment;* mostly richer borrowers with enterprise sales > Bs. 1000/mo - *employment* higher for borrowers than for control groups - 26% use loans for new *technology* (mostly sewing machines)		29% borrowers cross *poverty* line
Jamaica Gupta and Davalos (1993) *Microenterprise Development Project*	*ENT:* Sales Equity Salary Employment	-7% growth in *sales* (after inflation) - 11% growth in *equity* - 4% growth in *salary* - 1,156 *jobs* secured or sustained		- Good *outreach* to women - Project appears to be reaching the *poor* (using proxies of loan size, enterprise assets and enterprise employment)

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Cross regional				
Seven countries Hulme and Mosley (1996) *13 ME programs*	*ENT:* Income Technology Employment *HH/OTHER*: Survival Poverty Vulnerability	- Credit increases income, but little evidence of sustained *growth* - *Technical* innovation for only a small group, most with higher initial income levels - Limited impacts on paid *employment*, related to undramatic technical change; more impact on labor productivity and family labor - *Output*, *technical* sophistication, and *employment* reach plateau after one or two loans, then remain steady - Loans have a *cumulative* effect on impacts	- Primary concern of poor households for *survival* constrains enterprise level impacts, as households cannot take on added risks - Programs reach *poor households*, especially targeted programs, and move significant numbers above the poverty line - Credit not scale neutral -- has *differential* effects for different groups of *poor;*. more likely to benefit middle and upper poor; less likely to benefit core poor.	- Limited impacts on *vulnerability* because most credit programs don*t reach core poor; don*t generate paid employment for the poor; don*t increase savings; don* t increase demand for goods and services produced by vulnerable households; don*t lead to adoption of risk reducing technologies; - Some positive impacts on *vulnerability* thru increased income stability in off season, increased assets, diversification of activities; and provision of instant consumption loans for crisis.

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Cross regional				
Cross regional Peace and Hulme (1994) *70 income generation projects*	*IND*: Child health Child nutrition School enrollment of children Abuse Child labor Children*s nutrition Control of income Care of children			**-** No hard evidence of positive improvements in children*s *health*, *nutrition*, *school attendance* and educational attainment, or freedom from *abuse* **-** Contradictory evidence on the impacts on child *labor* **-** Income under control of women more likely to be spent on food and child *welfare* **-** Income under control of men more likely to be spent on consumer durables and their own entertainment **-** *Income* increases are important, but don*t always lead to positive changes in the *welfare* of children

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Cross regional				
Eight countries Creevey (1994) *Eight SME projects with technology components*	*ENT*: Income Assets Economic activities Spouse income and assets Use of spouse*s income IND: Decision making patterns Individual perception of impacts	- Positive impacts on *income* - Evidence of positive impacts in other enterprise level - *Technology combined with other inputs* more effective - *Simpler* projects have *narrower* impacts		- Positive impacts on *decision* making patterns - Income key to *perception* of impacts -- optimism and faith in project rise with income

TABLE 2 (cont.)

COUNTRY PROGRAM AUTHOR	IMPACT LEVELS AND VARIABLES	KEY FINDINGS		
	ENT HH IND OTHER	***ENTERPRISE LEVEL***	***HOUSEHOLD LEVEL***	***INDIVIDUAL OR OTHER***
Cross regional				
Five countries Kilby and D*Zmura (1985) *Five microlending programs*	*ENT*: Output/Sales Profits Profit margins Production processes Assets Employment Bankruptcy	- Positive impacts on *output* and *sales* for over 57% Positive impacts on *profits* for 55% - Downward pressure on *profit margins* - No change in *production processes* - Increase in *assets* - *Employment* generation in 2 of 3 programs studied - Less *bankruptcy* - Benefits primarily from *output response*, less from changes in backward linkages or final demand linkage		- Positive impacts in both contracting and expanding *economic contexts*, more so in latter - *Inflation* highly detrimental to project performance and impact