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*Are Credit and Savings Services Effective Against Hunger and Malnutrition?—A Literature Review and Analysis*

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# ARE CREDIT AND SAVINGS SERVICES EFFECTIVE AGAINST HUNGER AND MALNUTRITION? A LITERATURE REVIEW AND ANALYSIS

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FREEDOM FROM HUNGER

## EXECUTIVE SUMMARY

Poverty lending programs like the Grameen Bank have captured the attention of an audience that extends well beyond the traditional development community. Much of this enthusiasm relates to the programmatic successes—the repayment rates, the scale and/or the potential for financial self-sufficiency—rather than the impact of the programs. Still, the value of any development strategy ultimately depends on its ability to achieve sustainable improvement in the quality of life.

We have examined the academic and practitioner literature to determine what are known, or strongly asserted, to be necessary conditions for credit and savings programs to be effective against hunger and/or malnutrition. Knowing that no literature review can be comprehensive, provide definitive answers, or be free of interpretive bias, we aim mainly to stimulate new thinking, research, and practice—all of which should be directed toward building innovative, effective, sustainable, large-scale efforts to drastically reduce chronic hunger and malnutrition throughout the world.

The approach used is a review of secondary sources of information—articles, reports, and, whenever possible, program evaluations. In addition, interviews were conducted with a range of practitioners having expertise primarily in credit, gender issues, and nutrition (see Annex for a list of individuals consulted). These interviews were invaluable in terms of the generous sharing of insight and experience; they also afforded access to relevant unpub-

lished program documents which are generally difficult to obtain.

This paper aims to go beyond what Pinstrup-Andersen (1983) refers to as the “black box approach” to program evaluation to a more process-oriented approach. The “black box approach” focuses only on whether the desired impact is achieved, while the latter approach helps illuminate how the impact was achieved by tracing program impact through relevant processes. Part I of the paper investigates evidence regarding the relationship of income, empowerment, and behavior change (hypothesized as the intermediate benefits of poverty lending) to food security and nutritional status—the ultimate outcome goals. Part II examines the evidence that poverty lending programs have a positive impact on the intermediate benefits necessary for overcoming the underlying causes of hunger and malnutrition. Each section begins with a hypothesized relationship, includes a review of the evidence we found pertaining to that relationship, and ends with tentative conclusions regarding the relationship.

The major conclusions are summarized below.

### ***PART I: Relationship of the Intermediate Benefits (Income, Behavior Change, and Empowerment) to Food Security and Nutritional Status***

1. Certain conditions make more direct the impact of increased income on household food security (access to food) and nutritional status. Interventions are more likely to have this

impact when they ensure that income increases are 1) experienced by the poorest households, 2) controlled by women, 3) earned as steady rather than lump sum earnings, and 4) enhance the households' overall livelihood security.

2. The link between household food security and income is more direct than the relationship between income and nutritional status, for a variety of reasons. First, nutritional status is a function of an individual's overall health and not simply a function of access to food or even food intake. Second, intrahousehold food allocation decisions and resources (such as a caretaker's time) can greatly modify the effect of increased income. And third, key maternal and child health/feeding practices and use of existing health services also highly influence nutritional status.

3. The nutritional impact of increased income will be disappointing if it is not also coupled with improvement in the health of those most vulnerable to malnutrition, namely women and young children. Changes in nutrition and health care practices at the level of the household are likely to be the essential first line of prevention and treatment of malnutrition. For example, each of the following has nutritional implications: the selection and distribution of food within the household; practices related to breastfeeding, child feeding, and diarrhea treatment and prevention; diets during pregnancy, lactation, and/or during and after illness; use of existing health services; personal, food, and environmental hygiene. Even without the benefit of increased household income, these behaviors can dramatically improve household nutritional status. Conversely, increased income may occur in the absence of necessary behavior change and nutrition improvement.

4. Women's ability to increase their incomes or their control over income has a positive effect on their empowerment (self-confidence, status, and bargaining power within their households). The possibility of positive feedback of empowerment to income earning

and control seems likely, but we have yet to find documentation of such feedback.

5. Both economic and social manifestations of empowerment seem to be crucial for women to make nutritionally important behavior changes and to demand and use correctly health services and health technologies. Independent sources of income are likely to affect women's status, autonomy, and self-confidence. Social dimensions, such as greater mobility, public interaction, and/or group identification, are also important to women's exposure to new ideas and potential openness to change. Again, positive feedback of behavior change to empowerment was not documented but seems likely. It also seems that empowerment plays a pivotal role in creating a synergistic effect between income and important health/nutrition behaviors.

## ***Part II. Relationship of Poverty Lending to the Intermediate Benefits (Income, Behavior Change, and Empowerment)***

1. Concrete evidence of the economic impact of poverty lending programs is rare. The few rigorous evaluations to date (primarily the Grameen Bank and some ACCION affiliates) indicate that poverty lending programs do raise incomes, assets, and productivity of very poor borrowers, both men and women.

2. Poverty lending more often preserves an entrepreneur's own self-employment rather than creates new jobs. Incomes are most likely stabilized or moderately increased in the short term. However, with sequential loans and accumulation of business experience, participants may move into potentially more profitable activities. Labor productivity (hourly net income) is an important variable to be included in any impact study of credit, especially for women.

3. Poverty lending is designed to support primarily the existing economic activities of the poor. Because of the meager returns and structural constraints of women's traditional activities, this minimalist approach probably

does not bring about major economic improvements for women. Because women constitute the bulk of the participants in most programs, poverty lending is unlikely to produce major economic gains for poor households. However, in relative terms, these modest gains seem likely to make very important contributions to household survival, such as income smoothing and insurance against emergencies. And these are precisely the types of livelihood strategies that, if strengthened, are most closely associated with increased household food security and nutritional status.

4. Poverty lending empowers women participants. By providing opportunities for self-employment, it increases women's autonomy, self-confidence, and status within the household. Regular meetings and peer guarantee help foster group solidarity, which reduces women's isolation and increases their exposure to new ideas and information as well as their skills for interacting in the public sphere. There is even some evidence in support of the hypothesis that solidarity groups create empowerment of their members independently of their economic impacts by creating new bonds and social identification that help women resist traditional restrictions and foster new cultural norms. A wider survey of literature on noneconomic self-help groups would likely reveal that intragroup solidarity has a strong, direct, and positive impact on measures of personal and group empowerment.

5. Women's empowerment is unlikely to directly improve household food security and nutritional status without acting through behavior change that is either economically or nutritionally important. Likewise, poverty lending programs are unlikely to directly promote either economic or nutrition-related behavior changes without acting through some kind of educational process. Women's empowerment is believed to make women "learning ready," and women's economic resources can enable them to take action on what they

have learned. But some kind of information transfer and change promotion must occur before women are likely to know what to change and why and how.

6. With an education program, the potential of poverty lending to counter malnutrition can be realized. Without education, poverty lending may have only a weak positive effect on household food security and little, if any, impact on nutritional status. Education can be provided to poverty lending program participants either by a separate program or as an integrated component of the poverty lending program itself.

## INTRODUCTION

Despite dramatic gains in agricultural technology and food production, the number of individuals suffering from hunger and malnutrition grows. Global hunger and malnutrition is notoriously difficult to quantify, but according to one often cited source, the Bellagio Declaration:

- ❖ One billion people live in households too poor to obtain the food they need for work.
- ❖ Half of those are too poor even to obtain the food they need to maintain minimal activity.
- ❖ One child in six is born underweight and one in three is underweight by age 5.
- ❖ Hundreds of millions of people suffer anemia, goiter, and impaired sight from diets with too little iron, iodine and/or vitamin A.<sup>1</sup>

A major challenge to the international development community is to innovate solutions to hunger and malnutrition that are both effective and sustainable and have the potential to reach very large numbers of vulnerable people. With the success of the Grameen Bank and other large-scale programs in providing access to credit for millions of poor households, credit and savings programs are increasingly cited as good ways to reduce hunger and malnutrition. For example, responding to the 1993 International Conference on Actions to Reduce Global Hunger, the World Bank and other lending and donor institutions established The Consultative Group to Assist the Poorest (CGAP), which will focus on supporting large-scale development of credit and savings programs for the very poor.

The question we address in this paper is, “Are credit and savings programs designed for the poorest of the productive poor appropriate responses to the problems of hunger and malnutrition?” We have examined the academic and practitioner literature to determine what are known, or strongly asserted, to be necessary conditions for credit and savings programs to be effective against hunger and/or malnutrition. Knowing that no literature review can be comprehensive, provide definitive answers, or be free of interpretive bias, we aim mainly to stimulate new thinking, research, and practice. All of which should be directed toward building innovative, effective, sustainable, large-scale efforts to drastically reduce chronic hunger and malnutrition throughout the world.

### “Poverty Lending”

The Grameen Bank in Bangladesh has received widespread acclaim as an innovation in credit and savings services that represents a genuine breakthrough in poverty alleviation. Several comparable “poverty lending” programs have developed in recent years to provide financial services to the poorest socioeconomic strata. They all employ innovative methodologies that enable the poor to play a central role in their own development.<sup>2</sup> Poverty lending programs have demonstrated that the poor are creditworthy, that subsidized interest rates are not required to effectively serve this target group, and that social collateral is better than physical collateral for securing loans.

The three circles in Figure 1 represent a hierarchical progression of borrower groups, each with different economic goals and financial needs. According to Lassen (1990):

What distinguishes poverty lending from other microenterprise support is the target group. Poverty

<sup>1</sup> The Bellagio Declaration was produced and adopted by a group of development planners, practitioners, opinion leaders, and scientists for 14 countries meeting at the Rockefeller Foundation Center in Bellagio, Italy, in November 1989.

<sup>2</sup> Some of the best known examples are Badan Kredit Kecamatan (BKK) in Indonesia, Working Women’s Forum and Self Employed Women’s Association (SEWA) in India, Production Credit for Rural Women (PCRW) in Nepal, and programs supported by ACCION and FINCA in Latin America.

lending assists directly the poorest of the poor. Its policies and procedures are designed to support the economic development of self-employed producers with no assets. With poverty lending, it is legitimate to support sizes and types of activities (e.g., petty trading) and uses of surplus (to feed one's family) that are not promoted with producers and firms at higher levels on the economic ladder. . . . Poverty lending is dedicated to reaching not only those who would benefit from additional working capital, but those who are struggling to eat.

The potential of credit to alleviate poverty has long been appreciated. Throughout the 1970s and early 1980s, millions of donor dollars and untold government resources went toward rural credit programs. The failure of these programs either to reach small farmers or recover loans is well documented. Studies show that the proportion of loans in arrears in traditional rural credit programs ranges from 30 percent to 90 percent in Africa, the Middle East, and Latin America<sup>3</sup> (Holt and Ribe, 1990). Traditional rural credit programs have been characterized by subsidized loans to "small farmers," the size of which depends on the specific agricultural inputs to which they are tied. Poverty lending programs typically extend a series of very small (between \$10 and \$300), short-term loans (from one to twelve months), generally for rapid turn-

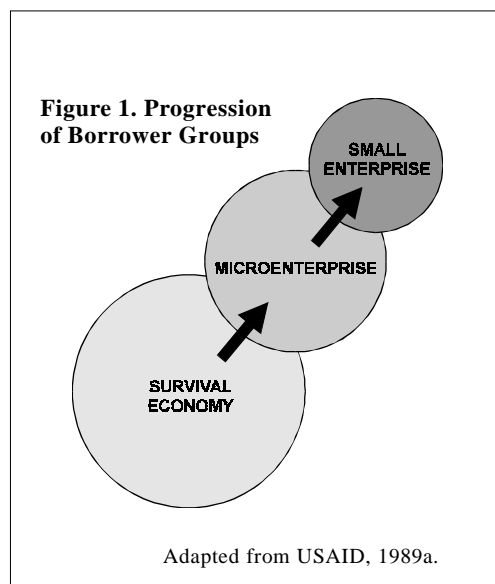
around activities. Through savings (either mandatory or voluntary) and successful repayment performance, loan sizes grow and optimally finance a progression of loan-funded activities with increasingly higher return.

Modeled after the workings of the informal financial sector rather than formal financial institutions, the loan application process for poverty lending programs tends to be informal and transparent, often taking place in the borrower's community and requiring minimal written documentation rather than requiring lengthy loan applica-

tions and review processes. Peer guarantee replaces physical collateral requirements of either land or assets. And repayment is scheduled in periodic payments (often weekly) rather than as a lump sum at the end of one year or an agricultural season.

According to Lassen (1990), the characteristics of a poverty lending program's success in working with the

very poor include the following: "It makes capital available at appropriate levels of money management experience—even \$20 if appropriate; it develops the investment skills, confidence, and experience of the severely poor; it motivates financial discipline through required savings and frequent repayment; it has no barriers that impede participation of the very poor." However, Lassen is quick to point out that in terms of financial principles (high repayment, cost effectiveness) and methods (commercial interest rates), poverty lending and microenterprise credit programs are quite similar.



<sup>3</sup> Unfortunately, these arrears do not represent income transfers to the poor because (intentionally or not) these programs exclude this group. Ironically, the subsidized interest rates justified on the grounds that the poor would be unable to pay commercial rates made it less likely that the programs reached the poor since the more powerful socioeconomic elite were able to usurp the cheap loans.

The features that seem to be most closely associated with these high recovery rates are 1) peer guarantee and shared responsibility for repayment; 2) short loan periods and periodic (often weekly) repayment installments; and 3) terms and requirements that channel investment away from agriculture to activities providing a more steady stream of income, such as trade, manufacturing, processing, or sales.

At the same time, certain programmatic features common to most poverty lending programs help to minimize administrative costs. Peer guarantee is not only effective, but it is much less expensive than time-consuming feasibility analyses of borrowers' investment plans. The overhead of many small loans is also reduced by bundling them into a larger single loan for solidarity groups (five to seven people) or village banks (approximately 30 people) which is then disbursed to individual borrowers. Finally, poverty lending programs tend to be "minimalist" with limited complementary services, such as training in business skills, management or marketing services, accompanying the loan. This combination of program-generated revenue and cost-effective delivery makes financial self-sufficiency an obtainable goal.

### **Assessing the Nutritional Impacts of Poverty Lending**

Poverty lending programs have captured the attention of an audience that extends well beyond the traditional development community. Much of this enthusiasm relates to the programmatic successes—the repayment rates, the scale and/or the potential for financial self-sufficiency—rather than the impact of the programs. The value of any development strategy ultimately depends on its ability to achieve sustainable improvement in the quality of life. The rapid expansion of poverty lending programs and the sustained participation of borrowers over multiple loan cycles indicate the tremendous demand among the poor for these types of programs. However, before the value of poverty lending can be assessed and compared to alternative hunger and nutrition-ori-

ented approaches, it is necessary to know its efficacy for improving household food security and nutritional status.

Pinstrup-Andersen (1983) characterizes many of the evaluations of nutrition programs as taking a "black box approach." The impact of a particular program on the nutritional status of a specific population over a given period is evaluated with little or no attention to the intermediate steps or relationships leading to that impact. According to Pinstrup-Andersen (1983):

If analyses of past and current programmes are to be truly useful for the choice and design of new programmes and policies and modifications or termination of current ones, it is necessary to know not only by *how much* but also *how* nutritional status is influenced. . . . The job of evaluating a given program then becomes one of tracing programme impact through the relevant processes while estimating the impact on each of the relevant components.

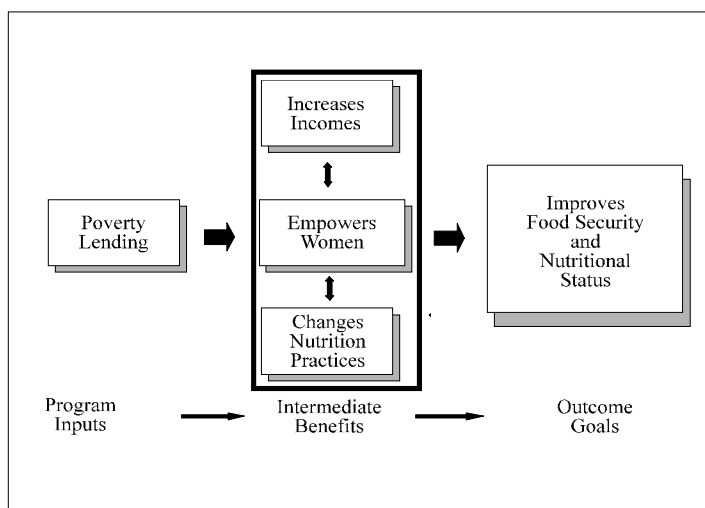
The "black box approach" has yielded some evidence that programs providing small loans at commercial interest rates to the poor and to women are associated with increased household food security and improved health status of the participants. A comparison of Grameen Bank members with equally poor households living in villages without the program found that 40 percent of the member households were able to fulfill caloric requirements during the study period compared to only 27 percent of the nonmember households (Rahman, 1987). Also in Bangladesh, an independent evaluation of a Save the Children credit and savings program for women found that child mortality rates were lower and contraceptive use higher among households where the mothers participated in the program (Barkat-e-Khuda, et al., 1990). Most striking

was that female children of program participants had a survival rate two times higher than among the control group.

While very encouraging, there are limits to the usefulness of these types of results. The sole focus on the ultimate benefit (intermediate processes and benefits are in the “black box”—Figure 2) prevents the study from documenting how participation in the Grameen Bank was nutritionally beneficial. It cannot provide insight into the relative contributions of behavioral, attitudinal, or economic changes stimulated by the program. If the expected impact had not been evident, the evaluator could not know what steps to recommend to increase the intended benefit of the program. In addition, “black box” studies are characterized by methodological problems such as self-selection bias and/or nonequivalent comparison groups that confound attribution of causality.

### *The Poverty Lending Benefit Process*

It is necessary to understand what mediates the program inputs of poverty lending on the intended impacts of food security and nutritional status. Working backward from the most immediate causes of hunger and malnutrition (as identified in Freedom from Hunger, 1989 and UNICEF, 1990), we identify three types of change among poverty-lending participants that are necessary to improve either household food security or individual health/nutrition status or both (Figure 2).



**Figure 2. Proposed Benefit Process of Poverty Lending**

We hypothesize that poverty lending can benefit its participants and their households by bringing about poverty alleviation, empowerment of women, and/or nutritionally important behavior change. The program may be effective against hunger and malnutrition by producing one, two, or all three of these changes.

The relative impact on food security and nutritional status and the overall strength of impact are expected to depend on the mix and strength of the three intermediate benefits. Also, we anticipate that the intermediate benefits can interact. This means that poverty lending can directly cause one or two of the intermediate benefits and, through these direct effects, indirectly stimulate change in other intermediate benefits. And it is possible that it is one of these indirect intermediate benefits, rather than one of the direct benefits of poverty lending, that generates an intended outcome.

Our inquiry of the literature is organized to examine what is known about each of the linkages (arrows) hypothesized in the benefit process diagram in Figure 2. In other words, we treat each linkage as a separate hypothesis to be tested. In Part I, we start with the linkages between the intermediate benefits and the intended outcomes. Then we look at the interactions among the intermediate benefits. In Part II, we examine the evidence that poverty lending directly generates one or more of the intermediate benefits. Finally, we draw some conclusions about the pathways by which poverty lending can bring about the intended outcomes.

## **PART I: RELATIONSHIP OF THE INTERMEDIATE BENEFITS (INCOME, BEHAVIOR CHANGE, AND EMPOWERMENT) TO FOOD SECURITY AND NUTRITIONAL STATUS**

### **LINKAGE OF INCOME TO FOOD SECURITY AND NUTRITIONAL STATUS**

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*An increase of income is hypothesized to increase household food security and/or improve nutritional status.*

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The link between household food security (as it is most commonly conceptualized) and income is more direct than the relationship between income and nutritional status. Before this statement can be examined, it is necessary to better define the terms being used. Recent work by UNICEF and IFAD, in connection with the International Conference on Nutrition (ICN) sponsored by WHO and FAO, have helped to clarify important distinctions between “food security” and “nutritional status” (FAO/WHO, 1992; Maxwell and Frankenberger, 1992; UNICEF, 1990, 1992).

Although there has been considerable broadening and redefinition of the term in recent years, household food security focuses on the family’s capacity to produce or acquire food (Maxwell and Frankenberger, 1992; UNICEF, 1990). In the 1970s when the concept of food security was first made popular, the focus was on the adequacy of food supply at the national and/or international level (Maxwell and Frankenberger, 1992). Today, the focus is on households’ and individuals’ access to food. At the household level, food security refers to “the ability of the household to secure, either from its own production or through purchases, adequate food for meeting the dietary needs of its members” (FAO/WHO, 1992).

A definition of food security recently proposed by UNICEF included both the household’s access to food and the proportion of total household resources committed to securing food. The latter is an important theoretical contribution meant to capture households’ vulnerability to hunger (Jonsson and Toole, 1991).

Food insecurity, or “underconsumption,” is experienced as hunger, a condition solely and directly related to the availability of food. Consequently, the food security literature has concentrated on food availability, specifically calories, as the marker for “adequate” food consumption; e.g., less than 80 percent of the recommended dietary allowance of calories represents “underconsumption.” However, actual consumption is quite difficult to measure objectively at the individual level. Nutritional status is easier to measure and often used as a proxy for individual and even household food security. But this creates a problem for research and policymaking.

Nutritional status is the outcome of a “process whereby living organisms utilize food (energy and nutrients) for maintenance of life, growth and normal functioning of organs and tissues and the production of energy” (UNICEF, 1992). Food quality and illness play essential roles in determining an individual’s nutritional status, but they are not necessary for household food security.<sup>4</sup> According to UNICEF:

For a long time nutrition has almost been equated with food supply, primarily because for a large number of people, food accessibil-

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<sup>4</sup> There is some disagreement on this point since reference to food for “meeting the dietary needs” implies food of good nutritional quality although, according to UNICEF, dietary intake is not an aspect of food security (UNICEF, 1992).

ity is not assured. Access to food or household food security is a necessary but insufficient condition for adequate nutrition. . . .

The underlying causes of malnutrition [poor nutritional status] are 1) insufficient household food security, 2) inadequate maternal and child health/nutrition practices, and 3) insufficient health services and/or their use and unhealthy environment.

Depending on the particular circumstances, these factors determine, either alone or in combination, the most direct causes of malnutrition—inadequate dietary intake and disease.

Anthropometric measures (weight, height, and arm or head circumferences) are the commonly used, objective measures of nutritional status. They capture more than a person's dietary intake and actually reflect overall health performance (ACC-SCN, 1990). For this reason, there is increasing agreement that nutritional status is not a valid indicator for food security. Anthropometric measures capture much broader influences than access to food.

The fact that household food availability does not ensure adequate nutritional status explains recent International Food Policy Research Institute (IFPRI) research findings of a relatively weak link between the adequacy of food consumption at the household level and children's nutritional status. Kennedy (1989) reviewed data from Sudan, Mexico, Malaysia, and Thailand to examine the relationship between income, household caloric intake, and preschooler caloric intake. Income was associated with higher household caloric availability but not preschooler caloric intake. The report concludes, "It now appears from this data that caloric availability within the household may not be a precise indicator of a child's nutritional status." Even when food is available, it may not be offered to the child, or the child's

appetite or nutrient absorption might be compromised by illness.

Another IFPRI study in Rwanda (von Braun, et al., 1991) found that doubling household caloric consumption from 1,500 to 3,000 calories per adult equivalent—a very large change—would reduce stunting in children by about a quarter of a standard deviation (17% of the z-score mean), whereas an intestinal parasite eradication treatment would have the same effect, and a clean latrine would have twice this impact. This comparison underscores the importance of health services and a healthy environment and not simply food for nutritional outcomes. Still, in the same study, the prevalence of malnutrition was greatest among the poorest, most food insecure households. The prevalence of seriously underweight children was 19 percent for households with caloric deficiencies below 80 percent, and only 8 percent in other households (von Braun et al., 1991).

Focus on nutritional status requires more of an intrahousehold perspective than a focus on food security, since not all members of a family are equally vulnerable. Due to the additional nutritional requirements of pregnancy, lactation, and rapid growth, women and children are most vulnerable to compromised nutritional status or "malnutrition." Yet it is not only the greater nutritional requirements that make women and children more vulnerable. Various sociocultural realities, such as intrahousehold food distribution patterns, inadequate feeding practices, or in the case of women, excessive labor obligations, exacerbate the situation.

According to Williams, et al. (1985), "repeated cycles of reproduction, infection, hard physical work and nutrient drainage leave women in a constant state of 'maternal nutritional depletion.'" This condition in turn leads to low birthweight babies and a multigenerational cycle of malnutrition.

It is essential that policymakers and development efforts focus on alleviating malnu-

trition, not simply hunger. Malnutrition is even more insidious than hunger as a block to the development of human capacity because it directly affects and potentially permanently stunts physical and mental development (ACC-SCN, 1993; USAID, 1993). The scope of the problem is also immense. According to UNICEF (1990), “about 150 million children under five years old are underweight, and more than 20 million suffer from severe malnutrition. . . . [Approximately] 350 million women have nutritional anemia. . . . Some 40 million children suffer from vitamin A deficiency. . . . Iodine deficiency disorders afflict 200 million to 300 million people.” The threat of malnutrition demands special attention to the most critical periods in individual human development—pregnancy, infancy, and childhood. Yet, unlike hunger, it often goes unnoticed, even by its victims. The first step is a clear appreciation for the causes of malnutrition and the limitations of assuming a direct association with household food security.

### **Link Between Income and Household Food Security**

In examining the literature, it is clear that certain conditions make more direct the relationship between income and household food security (access to food). Development interventions or policies that aim to increase incomes as a means for improving household food security should seek to maximize these conditions, which relate to poverty level, intrahousehold control, the type of the income increase, and the role income plays in the household’s broader livelihood strategy.

#### ***Household Poverty***

Poor households commit a majority of their resources to securing food. Expenditure studies have shown that as much as 70 percent of the budget of the poorest income group is devoted to food purchases (World Bank, 1990).

It is well appreciated that increases in the income of the poorest households will have the most direct relationship to improved food

security for two reasons. First, they are the group most likely to experience food insecurity. Second, marginal increases in their income are most likely to be used to purchase food. One of the most fundamental principles of economics is Engel’s law stating that the lower the income, the higher the proportion that will be spent on food (Blumberg, 1988).

An IFPRI study conducted in The Gambia provides a good example (von Braun, et al., 1989). Forty-nine percent of the poorest households consumed less than 80 percent of caloric requirements, while this was the case for only 2 percent of the highest income group. Among the poorest quartiles, an income increase of 10 percent was associated with an increase in food expenditures of 9.4 percent, indicating that virtually all of the income increase was channeled toward food.

Food insecurity might be “acute,” the result of a specific event, or experienced chronically, either throughout the year or at certain times of the year. Particularly in rural areas, where seasonality is more pronounced and markets less developed, the prevalence of food insecurity rises during the rainy season preceding the harvest, a time of year commonly referred to as the “hungry season.” In either case, the poorest households will more profoundly be affected. For example, an IFPRI study in The Gambia found that seasonal fluctuations in caloric intake were a problem for the poor, not the entire rural population (von Braun, et al., 1989). For the bottom income quartiles, caloric intake decreased by 15 percent during the wet season, while for the top quartiles, it remained constant.

De Waal (1989) and others have advanced a framework whereby food security is only one sub-objective of households’ greater goal of livelihood security. Coping strategies, risk management, and adaptive behaviors might necessitate households’ enduring hunger in the short-term to preserve productive assets (seeds, animals, timely planting, etc.) and to avoid long-term impoverishment (Maxwell and Frankenberger, 1992).

Households that are food insecure in spite of using a large portion of their resources are worse off. . . . However, many households achieve household food security at the expense of [a] very large proportion of their resources (time, money, land, etc.) . . . [These resources] are at great risk and should be recognized in programmes for household food security (UNICEF, 1992).

From this livelihood or resource perspective, the concern is not simply with short-term food availability but “with wider issues of livelihood, in particular with coping strategies and long-term adaptation to food stress” (Maxwell and Frankenberger, 1992). Increases in income will improve food security most when it strengthens the household’s resource base or provides diversified income sources, either at one point in time or over the year. For example, savings schemes can be effective in providing a form of insurance against predictable seasonal food deficits and unpredictable medical emergencies. Weekly cash income from trading activities can supplement much more substantial, but highly seasonal, income from agricultural activities. This type of activity can help to smooth income over the year. Income diversification, smoothing, and asset accumulation, such as cash savings, are likely to be very important to those living on the margin of food insecurity.

Clearly, increasing incomes of the poorest households will have the most pronounced impact on household food security.

### ***Women’s Control of Income***

Intrahousehold control over income also seems to affect the relationship between income increases and household food security. This perspective challenges the fundamental conceptualization by neoclassical economics of the household as a single unit of analysis with a single utility function and expenditures. Yet studies from around the world provide evi-

dence of gender differences and support the criticism that neoclassical household models underemphasize intrahousehold bargaining and the essential differences in the two sexes’ life experiences and cultural roles that lead to significantly different expenditure preferences (Blumberg, 1988; Bruce, 1989; Hoodfar, 1988).

Many of these studies focus on the relative proportion of women’s income spent on food (and other nutritionally important basic needs, such as medicine) as compared to men’s expenditure pattern (Bruce, 1989).

- ❖ In Cameroon, Guyer (1980) found that Beti women invested 74 percent of their income on food, while men spent only 22 percent. Of the total household food expenditures, 33 percent were made by men and 67 percent by women (Blumberg, 1988). Even at higher income levels, women reportedly spent the same proportion of their incomes on food. In the lean period, they purchased less expensive proteins, and when the profits were greater, they invested in higher quality food—specifically more animal proteins.
- ❖ In the Tamil Nadu and Kerala states of South India, according to Mencher (1988), women allocated almost all of their income to family needs, a consistently higher ratio than for men.
- ❖ In Mexico City, Roldan (1988) found women contributed virtually all of their earnings (primarily from the garment and textile industry) to the household, while men kept a quarter or more for their personal use.
- ❖ In Kenya, Kennedy (1989) found that women’s income, as measured by the percentage of total household income earned by women, had a positive effect on household caloric intake, above that of household income.

What is noteworthy in these comparisons is not simply women's proportionally greater allocation to basic needs but a finding that men usually reserve part of their income for personal use even when overall income is quite low (Bruce, 1989). In Mencher's (1988) study in South India, men continued to retain a relatively constant amount of income for their personal use even when the household was experiencing periods of economic stress.

A number of economists have researched the impact of marginal income increase by applying a Nash bargaining model that allows for intrahousehold differences in allocation behavior (McElroy, 1990; Shultz, 1990; Thomas, 1990). This approach was applied by Thomas (1990) to survey data on family income, health, and nutrition in Brazil. According to Thomas (1990), while both parents' incomes were significantly and positively associated with household per capita caloric and protein intakes, "the effect of maternal income on nutrient demand [was] between four and seven times larger than income in the hands of fathers."

The most common explanation for these gender differences refers to the particular cultural roles ascribed to the sexes and consequently different spending obligations (Blumberg, 1988). Women are expected to fulfill a nurturing role and, for this reason, may make less distinction between their own needs and the needs of their family—specifically their children. Moreover, men in many cultures have been socialized to believe that certain types of nonproductive consumption—drinking, cigarettes, clothing—are "proper for men" (Bruce, 1989). There also may be cultural expectations for men to spend their money to maintain the extended family "socially, economically, and politically" that might be "important to the long-term well-being of the family . . . [but that] do not affect immediate food availability" (Buzzard, 1995).

In the majority of the case studies cited,

such as Guyer (1980) and Mencher (1988), women's incomes were significantly smaller than men's. Even though women's income is relatively small in comparison to total household income, particularly when it is earned in small regular amounts, it leads to increased food availability in the household (Buzzard, 1995). Even small amounts of income can have a significant effect, since women's income is thought to influence spending in two ways: directly, through women's expenditures on food (and other nutritionally important basic needs, such as medicine), and indirectly, since women's cash contributions to the household budget lead to greater status and control over the intrahousehold distribution of food and other resources (Bruce, 1989). Acharya and Bennett (1982) completed a detailed study of household allocation decisions in Nepal and concluded that the form and level of women's contributions to the family budget were related to their intrahousehold bargaining power. Specifically, women earning cash incomes in the market economy had more influence over substantial household decisions than did women who worked as unpaid family laborers.

Despite the diversity of settings in which gender differences in spending have been demonstrated, it is clear that contextual and cultural variables influence associations between women's income, expenditure patterns, and ultimate impacts on food expenditures and household nutrition. Certainly, there are examples of cultures where women's income is not channeled toward food. For example, among the Berber of Morocco and the Serahuli in The Gambia, men are responsible for all family maintenance and food purchases; when women received cash gifts, funds were spent on jewelry or clothing (Blumberg, 1988). Carloni (1984) summarized the critical factors that color these relationships: women's level of involvement in the market sector; the degree of income pooling; and social and cultural norms of gender spending obligations. According to Engle (1986), there are signifi-

cant differences in cultural practices, even within the same geographical area, pertaining to the allocation of money, decisionmaking patterns, and gender obligations, that will influence the ultimate impact of increases in income.

### ***Type of Income***

The form in which increased income is earned may affect its relationship to food security. Lump-sum income tends to be invested in major purchases, while steady earnings tend to be channeled toward basic needs such as food (Alderman, 1986). If this is the case, this might also, in part, explain the closer association of women's income to food purchases. At least in rural areas, men's income is more often received in lump sums following the harvest, which is more likely to be spent on "big ticket" items, while the nonfarm income-generating activities, such as petty trade commonly undertaken by women, may be more likely to earn small but steady amounts of income.

### **Link Between Income and Nutritional Status**

As discussed in the introduction to this section, even when increases in income lead to greater food availability at the level of the household, this will not ensure improvement in individual family members' nutritional status because of issues pertaining to food quality, intrahousehold dynamics, and the general health of the individuals and their environment. However, maximizing the nutritional benefits of increased income again requires a focus on the poor, on women, and on the broader livelihood strategy within which this increased income is earned.

### ***Income and Nutritionally Important Expenditures***

Because households do not purchase foods based on nutritional considerations, increased income has a weaker effect on the nutritional quality (in terms of calories or nutrients) of purchased foods than on more general access to food. For example, in The Gambia study

referred to earlier, a 10 percent increase in income raised food expenditures by 9.4 percent, but caloric consumption by only 4.8 percent (von Braun, et al., 1989). A study done in South India found that even when increased food expenditures practically matched higher incomes one-to-one, there was almost no change in expenditures on nine major nutrients (Schiff and Valdes, 1991). Such findings as these have led some observers to question the efficacy of attempting to improve nutrition by increasing incomes since incomes would have to be greatly increased in order to have a significant impact on caloric or nutrient intake.

In response, Ravillion (1990) and others maintain that strategies for increasing income among the poorest income quartile can be immediately effective. They cite not only the finding that increased income is most likely to increase caloric intake in the poorest households, which are the most vulnerable to malnutrition (e.g., The Gambian study mentioned above), but they also point to the impact of increased income on other nutrition-relevant investment areas, including potable water, electricity, refrigerators, sewage systems, and medical services (Schiff and Valdes, 1989). This broader perspective is important since malnutrition is not simply a function of low incomes but of the broader socioeconomic milieu that is associated with poverty.

### ***Women's Income and Children's Nutritional Status***

As is true for food security, intrahousehold control over income seems to have an important effect on the nutritional impact of increases in income. Several studies have found women's income to have a more direct impact on children's nutritional status. Kumar (1978) in South India found "no uniform positive increase in child nutrition when paternal income rose, but increasing maternal income did benefit children." Tripp's (1982) research in northern Ghana found that children's nutri-

tional status was more closely related to the mother's than the father's engagement in trading activities, despite the fact that men earned considerably higher income. Similarly, De Groote (1994) in Mali found that young women's nonagricultural income, while quite small relative to total household income, had a positive effect on children's nutritional status in the pre-harvest season, while no such effect was found for household income. In Kenya, the nutritional status of children in *de facto* female-headed households was better than in male-headed households of comparable income levels, implying that female-headed households used their resources in a more nutritionally efficient manner (Kennedy, 1992).

However, because of a woman's dual role as primary caretaker and economic actor, it is important that increased income is not earned at the expense of her nutritionally important domestic obligations (e.g., cooking, growing food for the family, caring for children). There is a large body of literature examining whether women's labor force participation competes with quality child care and, consequently, has a negative impact on children's nutrition and health status (Engle, 1986; Leslie, 1985; Nieves, 1982; Popkin and Solon, 1976). For example, while increased income can mean a woman has additional disposable income to spend on her children, it might also mean that she must work longer hours, have less time for rest, and leave her child with surrogate care providers (Engle, 1986).

When improved nutritional status is the goal, a broad perspective is required rather than a narrow focus on increasing women's cash earnings (Buzzard, 1995). Women need options that provide greater economic return but that, at the same time, also help them to better balance their sometimes competing domestic and productive roles. Some examples would be technologies that improve the productivity of women's work and income-generating activities that are less arduous and/or more compatible with child care.

## **Tentative Conclusions or Programmatic Implications**

When incomes increase for the poorest quartile of households, there usually are comparable increases in household food expenditures. However, although the effect is still greatest for the poor (relative to higher income groups), increased income is much less likely to improve the nutritional quality of diets (e.g., consumption of calories, protein, and especially micronutrients), particularly at the level of individual women and children in the household.

There is concern that only large increases in household income can improve food security and nutritional status. However, even small increases can improve food security for the poor by smoothing their income through the year or by being saved for emergency use during seasonal food deficits. Perhaps more important than the absolute amount of income is whether the income helps poor households reduce their vulnerability through greater diversification of income sources or asset accumulation. In addition, even small increases in income can be used for medical expenditures, investment in improved sanitation, reduction of women's labor burdens, or other nonfood-related changes that enhance nutritional status of household members.

In many but not all societies, economic resources controlled by women are more closely associated with household food security and nutritional status than either men's or general households' income. Women usually dedicate a larger proportion of their earnings to nutritionally beneficial items, such as food and medicine. Even when the absolute amounts of women's earnings may be trivial compared to the total household income, their impact may be more significant than their size might imply. Women's cash contributions to the household budget are believed to lead to their greater status and influence over the intrahousehold distribution of food and other resources. There is also evidence that the nutritional benefit of women's income is greatest when earned in small and steady amounts,

particularly during the hungry season. Although the absolute amount of women's income is important, it is equally important to assess whether the income is earned in a manner that is compatible with women's domestic and caretaking obligations.

What is also clear from this review of the literature is that the nutritional impact of increased income will be disappointing if it is not also coupled with improvement in the health of those most vulnerable to malnutrition, namely women and young children. This issue is treated in more detail in the next section of the paper.

## LINKAGE OF BEHAVIOR CHANGE TO NUTRITIONAL STATUS

*Changes in adult diet, child care, and health management practices are hypothesized to improve household nutritional status.*

As discussed in the previous section, ensuring adequate nutritional status goes well beyond simply ensuring access to food. It is strongly related to behavior within the household, specifically expenditure patterns that determine the quality as well as the quantity of food brought into the household and the intrahousehold distribution of the good quality food to the individual members most vulnerable to malnutrition.

Moreover, the etiology of malnutrition goes well beyond insufficient food or even adult diets and child feeding practices inadequate to nutritional needs. It includes poor health management and hygiene practices leading to frequent and prolonged infections. Because health plays such an important role, the improvement of rural health delivery systems, particularly maternal and child health care services (i.e., immunizations, prenatal care, growth monitoring, and family planning), as well as water and sanitation projects, has been a major element in nutrition improvement strategies.

Yet, nutrition and health care practices at the household level are also essential because they represent the first line of prevention and treatment. Even if health services are available, their trial and sustained use depends upon decisions and behaviors at the level of the household. Because of their particular vulnerability, pregnant and lactating women and preschool children are of particular concern. Therefore, the key practices pertain to the diets and health of this group, especially children in the weaning period between six and thirty-six months of age. The weaning period is the stage of a child's life when he or she is most susceptible to malnutrition, since it coincides with the highest rates of illness, growth

faltering, and mortality (Kasongo Project Team, 1982; Waterlow, et al. 1980). In fact, much of the malnutrition evident in older children is explained by growth faltering during the weaning period.

### **Important Nutrition-Related Behaviors**

The following is a brief description of specific household-level attitudes and practices that make a tremendous difference in the nutritional status of household members. While still mediated by a household's economic resources, the adoption of many of these practices incurs minimal or no economic costs.

#### *Diet Quality During Pregnancy and Lactation*

Despite the additional nutritional demands of pregnancy and lactation, the quality of diets often do not improve, and in some areas, cultural taboos even restrict women's intake at this time (Williams, et al., 1985). Women require three times more iron than men, which explains in part why nearly two-thirds of pregnant women and one-half of all other women are estimated to be anemic (Smyke, 1991). The detrimental effects of poor quality diets and iron deficiency on the health of the women and development of the fetus have been well documented (Norton, 1994; Viteri, 1994).

#### *Breastfeeding*

Exclusive breastfeeding until an infant is about six months old is optimal (UNICEF/ WHO/ UNESCO/ UNFPA, 1993). Breastmilk is a safe, affordable, and nutritionally complete source of food that also helps protect infants against diarrhea, respiratory infections, and other illnesses (ibid). Replacing breastfeeding with bottlefeeding is a risky practice that unnecessarily exposes infants to contaminants and potential illness. Breastfeeding also contributes to birth spacing, since it delays the mother's return to fertility (ACC-SCN, 1991b). However, women may lack knowledge on the value of breastmilk, breast care, or positioning of the baby for successful breastfeeding (Adhikari and Krantz, 1989). In addition, if women lack confidence that they

have enough breastmilk, they will give their babies other food and drink. When this happens, the baby sucks less often and, consequently, less breastmilk is produced.

#### ***Weaning Practices***

Three of the most significant weaning practices are 1) the ages when complementary feeding begins and breastfeeding ends; 2) the types of complementary foods given to babies; 3) the feeding pattern and methods used (Mitzner, et al., 1984). In general, infants do not require foods complementary to breastmilk until they are about six months old. However, depending on the society, foods are often introduced much earlier or later than this optimal time. Traditional complementary foods are often nutritionally inadequate. In fact, recent research has shown that in terms of child, and particularly weanling, malnutrition, there may have been “an over-emphasis on food energy production and consumption, and a corresponding disregard for the contents and bio-availability of macro- and micro-nutrients in common food sources” (Brown, 1990).

Using data from weanling studies in Peru and Nigeria, Brown (1990) demonstrates that with the typical feeding pattern of three times a day and the limited gastric capacity of infants, weanlings require diets of significantly greater energy density than is the norm. Food bulk can be reduced and digestibility increased through processes like roasting, grinding, and fermenting (Adhikari and Krantz, 1989). Simple, nutrient-dense weaning mixtures can be made from a protein-rich legume, a high-energy source (such as a fat, oil, or sugar), and a ground cereal (Mitzner, et al., 1984). Although each of these components is readily available in virtually all parts of the developing world, this type of mixture is often not prepared, primarily because caregivers are not aware of the particular nutritional requirements of weaning-age children. During weaning, infants also require frequent feeding and the active involvement of the caretaker in encouraging the child to eat (Adhikari and Krantz, 1989).

#### ***Health Management Practices and the Role of Feeding***

Preschool children in the developing world are ill approximately 20 percent of their lives, most commonly with diarrhea and fevers (Brown, 1978). Breastfeeding of infants should continue and, if possible, increase in duration and frequency during episodes of diarrhea. With older children suffering from diarrhea, food intake should be maintained and then increased during the recovery period. The diminished appetites associated with illness may require special efforts on the part of the caretaker to encourage children to eat. During persistent episodes of diarrhea, oral rehydration therapy or home-prepared solutions should be given to children (ACC-SCN, 1991a).

#### ***Hygiene and Sanitization***

Personal, food, and environmental hygiene practices are important for minimizing exposure to infection and illness. Poor personal hygiene of food handlers is perhaps the most common cause of food contamination leading to diarrhea and other diseases (Mitzner et al., 1984). In addition, because microbial contaminants multiply quickly in a tropical climate, foods should be covered and eaten immediately after their preparation (Barrell and Rowland, 1979).

#### ***Use of Existing Health Services***

Maternal and primary health care services can play an essential role in maintaining good nutrition and health. The most effective services include: immunizations, pharmacies, birth attendants, pre- and postnatal care, and contraceptives. Use of family planning is one of the most nutritionally beneficial health practices because birth spacing greatly improves the health of the mother and the newborn and reduces the overall demand on limited household resources. Often these types of health services are not locally available, especially to poorer households. However, even when they are available, due to a lack of knowledge or attitudinal barriers, the poor very often do

not make sustained and effective use of the services.

### ***Micronutrient Deficiencies***

Specific nutrient deficiencies might be prevalent in certain areas or subgroups of the population depending upon local food availability and/or feeding practices. The most common micronutrient deficiencies are for vitamin A, iodine, and iron. A major finding of the last decade was the significant relationship of vitamin A deficiency to child morbidity and mortality (in addition to its better known association with blindness) (WHO/USAID/NEI, 1992). Even when sources of vitamin A are readily available and inexpensive, this deficiency may persist because of a lack of knowledge or because of the influence of traditional beliefs.

### **Tentative Conclusions**

Changes in nutrition and health care practices at the household level are likely to be the essential first line of prevention and treatment of malnutrition. Through their influence on dietary intake and health, a wide array of household behaviors affect the nutritional status of its members. For example, each of the following has nutritional implications: the selection and distribution of food within the household; practices related to breastfeeding, child feeding, and diarrhea treatment and prevention; diets during pregnancy, lactation, and/or during and after illness; use of existing health services; personal, food, and environmental hygiene.

Even without the benefit of increased household income, these behaviors can dramatically improve household nutritional status. Women have the sole, or at least primary, responsibility for all these nutrition-related practices in the vast majority of households worldwide. To make these changes often requires women to alter fundamental aspects of their most traditional roles. To do so requires not only health/nutrition information, but also a consciousness of the nature of malnutrition, social support, and attitudinal change.

## INTERACTIONS OF WOMEN'S EMPOWERMENT WITH INCOME AND BEHAVIOR CHANGE

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*It is hypothesized that earning and controlling their own income increases women's empowerment (self-confidence, status, and bargaining power within the household), which feeds back to enhance their earning and control of income and assets. It also is hypothesized that increasing women's empowerment predisposes them to learn and adopt new nutritionally beneficial practices which feed back to enhance their empowerment.*

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### Defining Empowerment

Empowerment is a term often used but rarely well-defined, despite its intuitive importance. For some, "empowerment" has primarily political connotations, such as in the following definition:

A spectrum of political activity ranging from an act of individual resistance to mass political mobilizations that challenge the basic power relations in our society (Antrobus, 1989).

However, others conceptualize empowerment in broader social terms that are grounded in an individual's actual and perceived (by themselves and others) capabilities to take action. A description of empowerment analogous to this conceptualization is provided by the Empowerment of Women Program:<sup>5</sup>

In our view, empowerment has various dimensions and manifestations. It has to do with an inner state (sense of self, of one's au-

tonomy, self-confidence, openness to new ideas, belief in one's own potential to act effectively), and with a person's status and efficacy in social interactions—in particular, the ability to make and carry out significant decisions affecting one's own life and the lives of others (John Snow International, 1990).

This definition is more appropriate to anti-hunger programming, because it involves a greater focus on behavioral and social manifestations of empowerment which are more directly linked to the ultimate goals of improved food security and nutritional status.

The best measures for empowerment would be context-specific and would capture the participants' perception of the positive changes in their lives caused by the program. According to the Empowerment of Women Program, the areas of inquiry appropriate for documenting empowerment would include the following:

relationships within the family, bargaining power and control over allocation of resources within the household, control over money, engagement in commercial transactions, physical mobility, contacts outside the family, interactions with institutions in the public spheres, ability to access health and other services (ibid).

The specific manifestations or examples of empowerment will depend on the cultural setting, although it is likely to incorporate both economic and social dimensions in virtually all settings. While women everywhere face sexism, change is likely to be most profound where restrictions on women's personal and

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<sup>5</sup>This research group is interested in documenting the impact women's empowerment can have on contraceptive use. Interestingly, they have chosen examples of poverty lending programs, such as the Grameen Bank, to research this relationship because they believe these types of programs most effectively lead to empowerment of women.

economic autonomy are greatest.

### **Link Between Income and Empowerment**

Both the inner manifestations (e.g., self-esteem) and the external expressions of empowerment (e.g., status within the household) seem to be closely linked to increases in women's incomes (Berger, 1989). An intensive study of household decision making in Nepal found that the greater a woman's involvement in the economic spheres outside of the household, the greater her influence in household resource allocation and expenditure decisions (Acharya and Bennett, 1982). This study indicates that it is not the "importance" of women's work to the well-being or maintenance of the family that affects her influence within the household but rather her involvement in spheres beyond the household (such as the market economy) and her ability to earn cash. This effect on status, bargaining power, and potentially self-confidence is associated with even small amounts of income earnings.

There is evidence suggesting that a woman's status and bargaining power within the household is also dependent on her self-confidence. According to Amartya Sen (qtd. in Bruce, 1989), women's self-perception strongly influences intrafamilial divisions and inequalities:

If a woman undervalues herself, her bargaining position will be weaker and she is likely to accept inferior conditions.

Outside earnings can provide psychological and practical leverage for women by offering them a better fall back position should negotiations break down (e.g. through divorce); an enhanced ability to deal with threats and indeed to use threats (e.g. leaving the house); and a higher "perceived" contribution to the family economic position by them and

others (Bruce, 1989).

Again, it is the increase in women's "options" rather than the absolute amount of income that makes the difference.

### **Empowerment and Behavior Change**

Women's lack of self-confidence has been identified as a major hinderance to the success of maternal-child health programs (Griffiths, 1992; McGuire and Popkin, 1990). Women's "silence" (lack of self-confidence to act or speak out) keeps them from obtaining attention for themselves and their children. Often, development interventions depend on local authority figures to engage women's participation in growth monitoring sessions, immunization campaigns, or health services (McGuire and Popkin, 1990). This approach has limitations when the adoption and sustained use of health/nutrition behaviors, health services, and health technologies depend upon women's self-confidence. McGuire and Popkin (1990) cite several studies that underscore the importance of maternal confidence to nutritionally important behaviors. Research done by Griffiths (1992) has found a positive correlation between mothers' self-image and the health and nutrition of their children.

- ❖ In Cameroon, mothers gave into the self-destructive behavior of anorexic children by relinquishing power to the child. However, in Swaziland, mothers' "sufficient self-confidence" enabled them to persist in feeding even sick children refusing to eat.
- ❖ In Turkey, a program intended to increase the early stimulation and cognitive development of children found that it was first necessary to build the self-confidence of mothers. While some husbands and mothers-in-law objected to the program's impact on women's self-assurance, participation rates were high, and the program was

successful in fostering beneficial maternal skills.

- ❖ In a nutrition and health education program in India, groups of women were organized to listen and discuss a radio program designed to motivate them to make nutritionally beneficial behavior changes. However, since mothers felt too powerless for independent action, the fathers and grandmothers of nutritionally at-risk children also required education.

Griffiths' (1992) experience in India underscores the importance of women's attitudes and self-perception to their adoption of critical health/nutrition practices. The women who had limited power within their own family felt powerless to ensure the good care of their children, were afraid that trying something new would cause a problem, and refused to do something "special" or different because it called attention to oneself.

These examples demonstrate how the empowerment (especially building self-confidence) of women can make them more learning-ready and influence the adoption of nutritionally important behaviors. Empowerment may also allow women greater mobility and thereby increase their exposure to new contacts and information.

In terms of specific behaviors, self-confidence can be linked with greater success in breastfeeding, introducing weaning foods, making changes in health practices, and persisting in recommended behaviors even when these mark a change in tradition or are resisted by the child (McGuire and Popkin, 1990). Empowerment is likely also to play a critical role in the adoption of contraceptive technologies.

Recent work by Schuler and Hashemi (1994) has made a significant contribution to the understanding of how both the social and economic dimensions of empowerment can lead to changes in important health behaviors, such as the use of contraceptives. Through ethnographic and survey research, this study examined whether participation in two credit

programs in Bangladesh (the Grameen Bank and the Bangladesh Rural Advancement Committee—BRAC) empowered women and if so whether this empowerment led to higher levels of contraceptive use.

The Grameen Bank was found to have a greater effect on contraceptive behavior, because it empowered women both economically and socially. It put more emphasis on strengthening the economic role of women, because enhancing their contribution to the family income was believed by program implementors to enable women to better make independent decisions as well as to play a more decisive role in household joint decisions. But the Grameen Bank also "created an identity for women outside of their families [that gave] women socially legitimate reasons to move about and to associate with one another in public spaces . . . expose[d] them to new ideas, and help[ed] them to become more confident and more skillful at interacting in the public sphere" (Schuler and Hashemi, 1994). The rituals of Grameen membership also helped to create a strong bond among the women that was believed to make it easier for them to resist the restrictions of the traditional family. Over time, participation in the program has come to change family planning norms, both among members and nonmembers in program communities. Using an aggregate score for empowerment, 65 percent of "empowered" women were practicing contraception, as compared to only 45 percent of those who were "not empowered."

### **Tentative Conclusions**

Women's ability to increase their incomes or their control over income has a positive effect on their empowerment (self-confidence, status, and bargaining power within their households). The possibility of positive feedback of empowerment to income earning and control seems likely, but we have yet to find documentation of such feedback.

Both economic and social manifestations of empowerment seem to be crucial for women to make nutritionally important behavior

changes and to demand and use correctly health services and health technologies. Independent sources of income are likely to affect women's status, autonomy, and self-confidence. Social dimensions, such as greater mobility, public interaction, and/or group identification, are also important to women's exposure to new ideas and potential openness to change. Again, the possibility of positive feedback of behavior change to empowerment was not documented but seems likely.

It also seems to be the case that empowerment plays a pivotal role in creating a synergistic effect between income and important health/nutrition behaviors. For example, the relationship between increased income and contraceptive use is synergistic (Buzzard, 1995). Women who have fewer or no young children are better able to earn additional income, and the capacity to earn greater income increases the demand for family planning. A similar interactive effect between income and better quality diets for women is possible and might also be mediated by empowerment.

Empowerment cannot act directly on food security and nutritional status. However, it seems to act indirectly on household food availability by enhancing the income-earning performance of women, increasing their status and influence within the household, and strengthening their economic autonomy and self-reliance. It also seems very likely that women's empowerment has greater impact on improving household nutritional status than women's direct earnings might imply. Empowerment has the potential to encourage the adoption of key health/nutrition behaviors by reducing women's isolation, exposing them to new ideas and forms of public interaction, increasing their openness and self-confidence to try new behaviors or seek out health services, and possibly by fostering the creation of new health/nutrition norms.

## PART II: RELATIONSHIP OF POVERTY LENDING TO THE INTERMEDIATE BENEFITS (INCOME, BEHAVIOR CHANGE, AND EMPOWERMENT)

### LINK BETWEEN POVERTY LENDING AND INCOME

*Poverty lending is hypothesized to increase or stabilize the income of the poor.*

Concrete evidence of economic impact at the beneficiary level by credit programs, or even by income-generating programs in general, is rare (USAID, 1989a; Buzzard, 1984). There is considerable anecdotal evidence suggesting significant benefits of poverty lending programs, but few rigorous evaluations have been conducted to date. The majority of work has focused more on the objectives, feasibility, and utility of credit to the poor than on its impact at the beneficiary level. Many practitioners regard good financial monitoring data as adequate evaluation information about a credit program. A growing number of borrowers reflects significant demand for credit among the poor. High repayment rates indicate the loans are used productively. The ability of borrowers to pay substantial interest rates suggests their loan activities are profitable (USAID, 1989a). Berger (1989) wrote “the preference for direct credit programs has developed despite little evidence of net impact of these programs on poverty.”

Still, financial monitoring data cannot substitute for beneficiary-level impact information.

For example, an evaluation of a credit program for women in India found that women were maintaining good repayment rates, but the small profits they made were used to pay the interest due on the loans (Berger and Buvinic, 1989).

The lack of impact information is attributable to a number of legitimate factors. First, the poverty lending model is relatively new, so program implementors, often indigenous organizations, are typically too busy establish-

ing systems and adapting program methodologies. They also have little or no resources to carry out or commission impact evaluations. Second, there are major methodological challenges to rigorously and convincingly evaluating the impacts of poverty lending programs, most notably: the need to evaluate overall return to participants’ various productive strategies (or household income) rather than returns from just one enterprise; the difficulty of eliciting accurate self-reports of incomes, costs, or expenditures given the high degree of illiteracy and lack of financial records among the target clientele; the difficulty in quantifying important social impacts, such as empowerment; and issues of endogeneity and self-selection, which make it difficult to attribute change or differences to the effect of the program.

#### General Economic Impact

A guiding philosophy behind “minimalist” credit programs is that they provide loans for existing or familiar income-earning activities, which seems to be associated with positive impact (Tendler, 1987). In her review of 102 USAID-supported women-in-development programs, Carloni (1987) found that credit programs were more successful than income-generating projects in having a genuine impact on women’s economic status. Specific income-generating projects face the much more difficult challenge of creating profitable employment, whereas “untied” credit is a flexible input that people can use in ways that they know best to adopt any of several technologies available to them.

Poverty lending (minimalist credit) programs tend to preserve and diversify the self-employment of entrepreneurs rather than create additional employment opportunities for others (Berger, 1989). The types of productivity improvements that small working capital loans make possible—even to the smallest

microenterprises—include the following (Berger, 1989):

- ❖ Entrepreneur can buy larger quantities of inputs at lower unit prices.
- ❖ Lack of working capital no longer threatens to discontinue business operations.
- ❖ Additional products can be added to the inventory to increase sales.
- ❖ Loans replace more costly sources of informal credit.

In the short term, program participants generally experience more income stability and moderate increases in income. However, one central question about poverty lending programs is whether, through sequential loans and accumulation of business experience, participants “may over time with the succession of loans move into more complex and potentially more profitable activities” (McKee, 1989).

### **Self-Reported Impacts**

The most common methods used by practitioners to evaluate the economic impact of their programs are participants’ self-reports of loan-funded activity profitability and/or relative changes in income or the quality of life since joining the program (Nelson, et al., 1995; Otero, 1987). While somewhat “crude,” this type of information provides important diagnostic information to implementors as to whether participants at least perceive the intended program benefits.

Program participants in diverse cultures and settings (El Salvador, Honduras, Ghana, Senegal, Mali, and Thailand) felt that either their business income or general household welfare had improved because of the program (Nelson, et al., 1995). An evaluation of FINCA’s village bank program in El Salvador attempted to qualitatively capture the broader economic impact by asking respondents to rate their progress up a “ten step ladder of integral development.” On average, respondents felt that their families had been lifted more than

three steps and that they were halfway to the ladder’s top.

As expected, borrowers were able to improve their economic returns by expanding their existing activities, diversifying their strategies, or by increasing their profit margin through decreased costs. In several cases, the reduced cost was for working capital, since the program replaced more expensive informal sources of credit (Nelson, et al., 1995). In Thailand, women participating in a Freedom from Hunger program had more diversified income sources, both in the short term (income from small business or animal raising in the preceding month) and over the course of the year (more likely to cultivate a dry season garden) (McNelly and Watetip, 1993).

A methodological improvement for evaluating these programs would be to quantify the degree of change in a borrower’s income, assets, savings, or labor productivity rather than depend on participants’ self-reports. Some of the most extensive, good-quality quantitative impact information comes from the Grameen Bank.

### **Impacts of the Grameen Bank**

In a sample of over 900 borrowers, average household income of Grameen Bank members was 43 percent higher than for the target group in villages without the program (Hossain, 1988). The main reasons given for the improvement in the living standard were accumulation of capital and additional employment in productive work financed by Grameen Bank loans—processing and manufacturing, trading, and transport operations. Livestock is an important asset for the rural poor; 63 percent of the members owned no cattle before joining the program, compared to 45 percent after two years. For those who owned cattle, the average number owned increased by 67 percent. After two years in the program, 80 percent of the borrowers were found to have an increase in working capital, which averaged from \$30 to \$112—an increase of 64 percent per year when adjusted for inflation. The Hossain

(1988) study also supports the belief that, while moderate in the short-term, the economic benefits of program participation increase after a series of small loans. For example, the borrowers' share of equity in total investments rose from 28 percent for first time borrowers to 63 percent for members borrowing four times or more.

A more recent study of the household and intrahousehold impacts of the Grameen Bank and similar credit programs in Bangladesh also found similar positive effects on the well-being of poor households (Pitt and Khandker, 1995). A methodological contribution of this study is that, through econometric methods and a quasi-experimental survey design that compared target and nontarget households in program and nonprogram communities, the potential self-selection bias and endogeneity of study variables were minimized. In a similar way, the analysis was able to separate the estimates of the impact of borrowing by men and by women.

The study concludes that program participation had a significant effect on the well-being of poor households. Program participation had a positive effect on household expenditures, asset accumulation, self employment, children's schooling, food consumption, and contraceptive use. Credit provided by the Grameen Bank had the most significant impact on variables associated with household wealth, women's power, girls' and boys' schooling, women's labor supply, women's assets, and total household expenditure (Pitt and Khandker, 1995). The effect was greatest when women were the program participants, even in terms of raising household expenditures. A dollar loaned to women raised household expenditures by a greater absolute amount than did a dollar loaned to men (Pitt, pers. comm.). The authors conclude that "program participation benefits the poor, especially women and children" (Pitt and Khandker, 1995).

The Hossain (1988) study also found evidence of a somewhat more favorable impact

on female than on male borrowers. For example, after two years of participation in the program, women's working capital increased 88 percent, compared to the increase in men's working capital of 56 percent (Hossain, 1988). This difference is explained by women's more limited economic involvement before the program. After joining the program, approximately 30 percent of the women borrowers moved from unemployment to self-employment, primarily in trading and processing. To a lesser degree, men also used their loans to change occupations, primarily from agricultural wage labor to petty trade.

### **Impacts in Latin America**

Quite different results were found in an evaluation of an ACCION-supported program in Peru. The incomes of male participants were found to increase much more than the incomes of female participants, and the gap between levels of informal sector earnings by men and women were quite striking (Berger and Buvinic, 1989). A survey of 560 female and 140 male market vendors found that women earned on average \$3.40 a day, while men earned \$5.00. Follow-up surveys found that male vendors increased their incomes at a much higher rate, 205 percent, as compared to women's increase of 43 percent.

The gender difference is typically explained by two factors. First, women are traditionally relegated to the income-earning activities with the lowest returns (e.g., commerce and sewing). Even more so than poor men, women have few productive assets that would enable them to earn a higher return (Berger and Buvinic, 1989). Second, a woman's dual role as economic provider and caretaker undermines her ability to earn greater returns. A study of market women in Lima, Peru found that many had opted for lower incomes from vending than higher incomes from factory work, because marketing gave them greater flexibility to fulfill domestic obligations (Bunster, 1983). The need to care for young and sick children was mentioned most often

as a motivating force behind choosing marketing. Unlike men, women's economic involvement, options, and opportunities are very much influenced by their stage in life and the life cycle of the family. A study in three subsistence communities in Guatemala documented how women adjusted their economic activities to accommodate the demands of pregnancy, childbirth, lactation, and child rearing (Cosminsky and Scrimshaw, 1982).

### **Impact on Women's Time and Productivity**

Given the excessive labor burdens of the poor, particularly poor women, time can be as important an economic asset as income. It is possible that one of the primary benefits of a credit program for women would be that they could earn the same or slightly more income in less time, freeing them to perform other duties or get much-needed rest. This possibility was documented in a study of the PRODEM program in Quito, Ecuador (Berger and Buvinic, 1989).

Approximately 300 borrowers were interviewed at the beginning of the PRODEM program and then again 12 months later. A control group was selected from a population with similar characteristics. The study found that the monthly and hourly net incomes of the borrowers and the controls did not differ much. However, the study did find increases in the productivity of the borrowers, particularly for women. "Women microproducer and microvendor borrowers increased their hourly net incomes (reducing total hours worked per month) from 1984 to 1985 to a significantly greater extent than did their male counterparts" (Berger and Buvinic, 1989). PRODEM women microentrepreneurs decreased the number of hours they worked monthly by 14 to 17 percent, as compared with women nonborrowers, who reduced their work hours by only 4 to 7 percent. The authors concluded that women prefer efficiency because of their dual responsibilities. This finding demon-

strates that measurements of labor productivity (hourly net income) is an important variable to be included in any impact study of credit, especially for women.

Time allocation information is also available for Grameen Bank participants. However, the data indicate that much of the increase in women's incomes was the result of the increased number of hours worked.

Female members worked an average of 4.9 hours a day, of which 4.2 hours were spent in the loan-financed activity. In comparison, housewives in the target-group nonparticipant households spent 0.64 hours a day in income-earning or expenditure-saving economic activities within the household (Yunus, 1988).

These numbers indicate that participation in the program resulted in women working an additional 16 standard eight-hour days a month. However, since most of these women came from either landless or marginally landholding households, they had only limited agricultural labor obligations and some surplus labor. This would not be the case, however, in parts of Africa where women are actively involved in farming for much of the year and would be unable to work an additional 16 days per month on a loan activity. The possibility of trade-offs between increased income and less time for child care or needed rest make the issue of productivity important. Women's time management skills, and the availability of productivity-increasing technologies, will influence how beneficial the impact of credit might be.

### **Important Context Variables**

The above examples demonstrate that poverty lending programs can help break the cycle of poverty and improve the lives of destitute borrowers. However, the likelihood that credit will help raise a given person's productivity

or income will be influenced by numerous contextual factors and the nature of the income-earning activity selected. The most important contextual factors include the vibrancy of the local market economy, the strength of demand, trends in the costs of inputs, and the availability of technology.

### ***Rural vs. Urban Settings***

Some observers feel that minimalist credit programs may be more suited to urban than rural areas:

If urban markets are generally stronger and more easily identifiable, the provision of relatively “minimalist” credit itself might enable low income individuals to respond quickly to new opportunities. In rural areas, in contrast, livelihoods may be more likely constrained by a range of factors requiring a more comprehensive sectoral attack (McKee, 1989).

Another challenge pertains to the fit between the terms of poverty lending and rural people’s economic activities. Successful programs demonstrate the importance of credit terms (loan amount, its duration, and payment schedule) matching the productive and repayment capacity of the beneficiary (Otero, 1987). Small amounts of capital, short loan periods, and weekly repayment are not conducive to agricultural investment, which is the primary work in most rural areas.

However, recent research has emphasized the significance of the nonfarm economic sector in rural areas and nonfarm income to rural household survival strategies. Large-scale field research conducted in the developing

world by Michigan State University has drawn attention to the importance of this sector (USAID, 1989b). In the majority of countries studied, over 60 percent of total manufacturing is located in rural areas, with a high of 86 percent in Sierra Leone.<sup>6</sup> The overwhelming majority of these firms were very small, employing fewer than five people. In many countries a significant number of the small enterprises were owned by women. Jiggins (1989), in her review of the income-earning strategies of poor women in sub-Saharan Africa, concluded that household-based agricultural activity remains the foundation of rural livelihoods, but increasingly women are dependent on self-employment (primarily in trading and agroprocessing) or wage work for survival.

According to the World Bank (1990), the importance of nonfarm income is increasing. In Kenya, among smallholder families, per capita income from nonfarm sources climbed 14 percent a year between 1974/75 and 1981/82 while incomes from farm employment rose only 3 percent per year. Also in Kenya, the rural nonfarm sector was found to be second in size only to small-scale agriculture, eight times as large as the urban informal sector, and larger than the combined modern private and public sectors (Norcliffe and Freeman, 1980). Other than farming, the rural nonfarm sector had the largest proportion of women (one-third of whom vended fruit and vegetables).

The demand for goods and services from the rural nonfarm sector depends on the health of the local farm economy, so the two sectors may not be as discrete as some assume (World Bank, 1990).

One of the particular socioeconomic characteristics of the survival economy is that households diversify income sources: “family members engage in a wide range of income-

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<sup>6</sup> Research sites included Sierra Leone, Bangladesh, Jamaica, Honduras, Haiti, Egypt, and Thailand.

earning activities in different seasons to spread risk” (Carloni, 1987). Women play a particularly important role in this pattern of livelihood diversification. They may have several seasonal income-earning activities in a single year or even simultaneously. The seasonality of rural life dominates the economic activity of rural people and must be taken into consideration in credit program planning. It is precisely this type of livelihood strategy that, if strengthened, can have the most direct effect on improving household food security.

### **Assured Supply and Demand**

A review of the necessary characteristics of high-performance projects proposed that borrowers must “undertake an economic activity for which they have assured supplies and an established demand” (Berger, 1989). Unfortunately, few, if any, of the survival strategies of the poor are characterized by such certainty.

A study of Ghana’s small enterprise sector concluded “that microenterprises are constrained more by a lack of demand than a lack of credit (credit is more important for small and medium-size firms)” (Holt and Ribe, 1990). However, other studies have reached the contrary conclusion that working capital is a major constraint to the smallest entrepreneurs. Credit needs will certainly differ among poor groups and different settings.

A GEMINI study of microenterprise activity in Niger found that women were heavily concentrated in the traditional income-earning activity of weaving mats (Mead, et al., 1990). However, the declining availability of palm leaves resulted in higher raw material prices and the reduction of women’s profits. At the same time, plastic mats imported from China increased competition, particularly for urban markets, making it difficult to pass on the higher input costs to customers. The report concluded that women must be helped to diversify out of mat weaving.

The influence of the market on profitability requires the close attention of project man-

agers in the design and implementation of credit programs.

### **Debates Pertaining to Poverty Lending**

The success of programs like BKK, Grameen, and ACCION have greatly increased faith in the efficacy of credit to assist even the very poor. However, a number of issues pertaining to the desirability of poverty lending programs continue to be debated. The following are brief summaries of the most important points of contention.

First, not all observers are yet convinced of the creditworthiness of the poor. In a USAID review of credit programs, one section focused on 32 programs targeted for the poorest of the self-employed and unemployed or for highly disadvantaged groups, like illiterate women in economically remote areas or marginal urban areas. The review found the programs to be very expensive and found few that had much positive impact on the borrowers’ economic status. For example, the findings that 53 percent of borrowers experienced serious difficulties and that fewer than 50 percent improved their net worth were not considered surprising by the reviewers. The report concluded, “This result is not unexpected, given the difficult business climate faced by a relatively inexperienced entrepreneurial group. The precarious economic conditions of the clients meant earnings were not reinvested in the enterprise but were used to meet consumption needs. . . . Entrepreneurship is not for everyone and good programs need to know when to quit” (USAID, 1989a).

A very different perspective was offered by Stearns of ACCION:

Although there are legitimate causes of delinquency that lie beyond the control of the credit programs, experience from around the world is showing that high delinquency is, more often than not, a function of a program’s objec-

tives, methodology and operations, rather than target group and economic environment. In most cases, the microenterprise program itself is the determining factor as to whether or not delinquency emerges as a problem (Stearns, 1990).

From this vantage point, the costliness and high failure rate of the credit programs reviewed by the USAID report might be more related to their failure to follow the principles of what Lassen (1990) called “New Style” poverty lending than to the inherent riskiness of the clientele.

A second point of contention relates to the objectives of credit programs. One view is that loans should be made to businesses most likely to generate employment and stimulate links to other economic activities. This perspective is summarized in the following excerpt:

Most microenterprise assistance programs are a reaction to the failure of trickle-down economics and are based on the assumption that assistance must be provided directly to the beneficiary. Everyone must be his or her own entrepreneur. This perspective, however, presumes an answer to a question that is only beginning to be asked: trickle down from what level? . . . the poorest target groups may best be reached by assisting firms with the greatest potential for creating jobs accessible to the poor (USAID, 1989a).

From this economic growth-oriented perspective, the vast majority of the survival economy (Figure 1, p. 2) is too marginal to merit program investment. Poor women, especially in rural areas, are viewed as lacking the business skills, assets, and potentially even the motivation for business expansion and spe-

cialization to adequately use credit that larger enterprises would use to create employment and generate demand. Women’s economic strategies tend to be characterized more by economic diversity than by specialization.

However, current trends indicate that more and more very poor women, even in rural areas, will enter the market economy as operators of their own survival-level microbusinesses. Neglect of these very small activities can have negative distributional consequences and can frustrate poverty alleviation and, most certainly, food security goals (Berger, 1989).

A third area of debate concerns the degree of help that minimalist credit can provide to women. Because of the meager returns and structural constraints to women’s traditional activities, some have questioned the efficacy of the minimalist approach at bringing about significant economic improvement and empowerment (Marilyn Carr, UNIFEM, pers. com.; Downing, 1990; McKee, 1989). According to Buvinic (1989):

Projects failed (to substantially assist women) because the objective is to enable women to earn extra income for the household instead of establish successful women’s enterprise. Development agencies view women’s economic role as earning extra pin money for the households, and it is easier to implement social welfare programs than increase productivity and incomes of the poor.

McKee (1989) proposed two alternative approaches: 1) to choose an existing subgroup of women workers (such as a trade group) and support a variety of program activities to improve the infrastructure and conditions of that activity or 2) to choose economic activities with the potential for high returns (e.g., mechanized food processing, high-value handicrafts, and so on) and attempt to move women into

those activities. Downing (1990) proposed that this second approach is a promising alternative to either the growth-oriented or poverty alleviation-focused approach to credit.

While both are provocative suggestions, the few existing examples of these approaches would be quite difficult to implement on a large scale, because of the substantial costs and specialized services involved. Moving women into nontraditional areas is a risky and resource-intensive task, and it would not be feasible for poor women alone to assume this risk (Downing, 1990). Another important question would be “is it more empowering to achieve modest, tangible gains through an incremental strategy, or to pursue a potentially higher reward, risking failure?” (McKee, 1989).

Buvinic (1989), in an evaluation of the characteristics of “better performing” credit projects, concluded: “Better performing projects are those run by specialized agencies that focus narrowly on a particular task and provide a single missing ingredient (usually credit) rather than integrated services.” Even programs like SEWA, that later provided their participants with a variety of services, began as “minimalist programs” striving to provide poor women with credit. This relatively narrow focus expanded as the needs of the clientele were better understood. Such a gradual process has two advantages: (1) it allowed time for the organization to come to understand the specific needs and obstacles facing the poor and women in that context, and (2) the program was not initially overcome by multiple institutional requirements (McKee, 1989).

### **Tentative Conclusions**

Concrete evidence of the economic impact of poverty lending programs is rare. The few rigorous evaluations to date (primarily the Grameen Bank and some ACCION affiliates) indicate that poverty lending programs do raise incomes, assets, and productivity of very poor borrowers, both men and women.

Poverty lending more often preserves an entrepreneur’s own self-employment rather than creates new jobs. Incomes are most likely stabilized or moderately increased in the short term. However, with sequential loans and accumulation of business experience, participants may move into potentially more profitable activities.

The gender-specific impacts of poverty lending impacts on men’s, women’s and household income and assets depend upon the program context. However, it seems likely that women’s relegation to traditional income-generating activities, balanced by their domestic obligations, means that the absolute amount of income increases may not be as great for women. However, recent evaluations of the Grameen Bank found even greater improvement in women’s income relative to men’s and a more positive association with increased general household expenditures when loans were made to women rather than men.

Measurements of labor productivity (hourly net income) is an important variable to be included in any impact study of credit, especially for women. It is possible that women themselves choose to earn less income so that they can better conduct both their domestic and economic obligations. One of the primary benefits of a credit program for women might be that they could earn the same or slightly more income in less time, freeing them to perform other duties or get much-needed rest. Or the credit program may provide a women with more options to undertake less arduous work and/or work that is more compatible with child care.

Poverty lending may have more impact among the urban and periurban poor than in rural areas. The small amounts of capital, short loan periods, and weekly repayment typical of poverty lending programs are not conducive to agricultural investment, which is the primary work in most rural areas. However, recent research has emphasized the significance of the nonfarm economic sector in rural areas and nonfarm income to rural household sur-

vival strategies.

One of the particular socioeconomic characteristics of the survival economy is that households diversify income sources. Women play a particularly important role in this pattern of livelihood diversification. They may have several different income-earning activities in a single year or even simultaneously. This may be an important reason poverty lending programs involve far more women than men.

Poverty lending is designed to support primarily the existing economic activities of the poor. Because of the meager returns and structural constraints of women's traditional activities, this minimalist approach probably does not bring about major economic improvements for women. Because women constitute the bulk of the participants in most programs, poverty lending is unlikely to produce major economic gains for poor households. However, in relative terms, these modest gains seem likely to make very important contributions to household survival, such as income smoothing and insurance against emergencies discussed in the earlier section regarding income's impact on household food security. And these are precisely the types of livelihood strategies that, if strengthened, are most closely associated with increased household food security and nutritional status.

From the economic growth-oriented perspective, the vast majority of the survival economy is too marginal to merit program investment. However, current trends indicate that more and more very poor women, even in rural areas, will enter the market economy as operators of their own survival-level microbusinesses. Neglect of these very small activities can have negative distributional consequences and can frustrate poverty alleviation, food security, and nutrition improvement goals.

## LINK BETWEEN POVERTY LENDING AND EMPOWERMENT OF WOMEN

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*Poverty lending programs are hypothesized to directly increase women's self-confidence and other manifestations of their empowerment, perhaps even independently of any economic impact.*

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### Evidence of Impact on Empowerment

Our personal observations indicate that the earliest and most striking evidence of impact by poverty lending programs is the increase in women's self-confidence. According to McKee (1989), there is significant evidence that microlevel programs that improve women's livelihoods also bring about "more fundamental changes in their lives in terms of their self-esteem, confidence, participation in political and community life, and family decision-making power and status."

The following observations were made by an evaluator of the Production Credit for Rural Women Program in Nepal (UNICEF, 1989b):

Women reported that their husbands consulted them more often, and neighbors and family members asked for advice more often. Ministry of Health staff reported that PCRW members used their services more and followed prescriptions more carefully. Women said they were more confident and less dependent.

Reports from the Grameen Bank have all been impressive, particularly since women in Bangladesh traditionally have such a socially subordinate role. According to Yunus (1988):

The usual scene of a poor rural woman is that under a long veil she bows down and eyes are fixed on the ground and she talks in a shy and timid manner. She never looks

straight to the eyes of an unknown urban visitor (male or female). When one talks to a Grameen loanee woman the difference is striking and very obvious. They will stand confidently and speak out as an equal partner in a conversation. Though they have veils on the head and a baby on the lap, they do not bow down but reflect the spirit that now they are being valued by the society. The spirit is more apparent among those women loanees who have been members for a longer period. The new ones are proceeding step by step.

Another observer of Grameen comments (Yunus, 1988):

Poor women have been the greatest beneficiaries of the Grameen efforts. Rural poor women are becoming income earners with the help of Grameen loans and subsequently are asserting their rights on their male counterparts and the society at large. They have become quite confident of their own ability and can easily stand against social injustice.

Despite the importance of empowerment and the significant progress various poverty lending programs have had in bringing it about, this program benefit is often the least well appreciated and most casually documented. The principal reason is the methodological difficulty of defining and measuring empowerment, particularly because the specific manifestations of empowerment depend on the sociocultural setting.

In most published accounts, it is not known or stated whether it is the increased income gained by women in the poverty lending programs that enhances empowerment or something about the structure or process of the program itself. From our personal obser-

vations of the very early surge in self-confidence among program participants, we suspect the program design itself is empowering women. Since all poverty lending is done through self-help groups, generically called “solidarity groups,” we hypothesize that the experience of participation in a solidarity group is empowering by itself, independent of the empowering effect of increased income-earning performance.

### **Link Between Solidarity Groups and Empowerment**

In many parts of the developing world, particularly in sub-Saharan Africa, women’s groups have long been important for mutual support and action. Women’s self-organized savings societies are often an important mechanism whereby women can accumulate working capital for their income-generating activities or have access to funds for emergencies or large expenses like school fees. These savings societies engage in a wide variety of community development activities. The use of solidarity groups by poverty lending programs builds on this tradition of self-help groups of women. A study in Kenya concluded that membership in these women’s groups cuts across socioeconomic lines to include the very poor as well as better-off women (Muzaale and Leonard, 1985).

Observers note that empowerment and community development goals are achieved in relation to the extent that solidarity groups are used and developed in poverty lending programs (McKee, 1989). From an economic perspective, solidarity groups are noteworthy for their potential to reduce administrative costs (e.g., bundling many small loans for easier bookkeeping and replacing costly analysis of loan and borrower creditworthiness with peer group review). However, solidarity groups are also important for organizing individuals and creating a spirit of greater mutual support. According to Antrobus (1989):

Consistent with history and what is known about women’s solidarity

groups, it will only be in an atmosphere of trust and support provided by these groups that women will be able to carry out analysis and courageously redefine the structures of their oppression—that is, to experience empowerment.

Ashe (1986) documented the functional benefits of the solidarity group mechanism in a Women’s World Bank program in Cali, Colombia (Ashe, 1986). Evidence of solidarity was measured in terms of mutual assistance, social support, and collective action between group members, and the tendency of the group to assume responsibility for carrying out the program functions of group formation, repayment, and program promotion. Of those interviewed, Ashe found that 66 percent of the groups had at least one member who could not repay a loan; 88 percent of the groups had covered this outstanding loan to fulfill their repayment obligations; and 68 percent had loaned money to one another.

Ashe (1986) also found that evidence of solidarity and the social impacts of the program increased with the length of program participation, as the membership internalized the solidarity aspects of the program. For example, “of those who had been with the program more than five months, 80 percent exchanged information about sources of financing, and 92 percent shared information about where to purchase less expensive merchandise; this compared with 33 percent and 37 percent for ‘new’ groups.”

Group savings schemes are another way of building solidarity and mutual cooperation. The accumulated savings of the group can serve economic and welfare objectives, such as when members use funds to assist those experiencing emergencies. According to Yunus (1988), the mutual and financial support that solidarity group members offer one another during difficult economic periods is an important element in the Grameen Bank’s success.

A highly innovative evaluation of a development program in Kenya documented

both the outcome and the process by which individual and group empowerment was achieved (Clark and Gakuru, 1982). The program under study shared many design features with poverty lending. Utilizing a “before-and-after” research design, the evaluation found that in addition to the economic benefits of program participation, increased confidence both at the individual and group level was also evident. According to Clark and Gakuru, “The most dramatic change was seen in interview data related to confidence, which increased fourfold” at the individual level. Group confidence was measured by staff log entries of examples when groups exhibited either “a willingness or unwillingness to take a risk, confront a problem, raise a question, or discuss a difficult issue” (Clark and Gakuru, 1982). Changes in the confidence indicators from before and after program participation closely mimicked a group’s successful completion of its collaborative activity.

More recently, the Schuler and Hashemi (1994) study of empowerment and contraceptive use among Grameen Bank and BRAC participants in Bangladesh documents how participation in a group has an empowering effect beyond any direct economic impact. Women’s identification with the group gave them a socially legitimate reason to meet and interact in the public sphere which served to increase their exposure to new ideas, their self-confidence, and mobility. In particular, the more regimented and ritualistic approach of the Grameen program (compared to the BRAC program) was thought to develop a more intense identification and bond that made it easier for women to resist the restrictions of traditional family life and adopt new family planning norms.

### **Tentative Conclusions**

Poverty lending empowers women participants. By providing opportunities for self-employment it increases women’s autonomy, self-confidence, and status within the household. Regular meetings and peer guarantee help fos-

ter group solidarity which reduces women’s isolation, increases their exposure to new ideas and information, as well as their skills interacting in the public sphere. There is even some evidence in support of the hypothesis that solidarity groups create empowerment of their members independent of their economic impacts by creating new bonds and social identification that help women resist traditional restrictions and foster new cultural norms. A wider survey of literature on noneconomic self-help groups would likely reveal that intragroup solidarity has a strong, direct, and positive impact on measures of personal and group empowerment.

## LINKAGE OF POVERTY LENDING TO BEHAVIOR CHANGE AND NUTRITIONAL STATUS

*Poverty lending programs are hypothesized to be insufficient to significantly improve household nutritional status without linkage to education that specifically promotes nutritionally important behavior changes.*

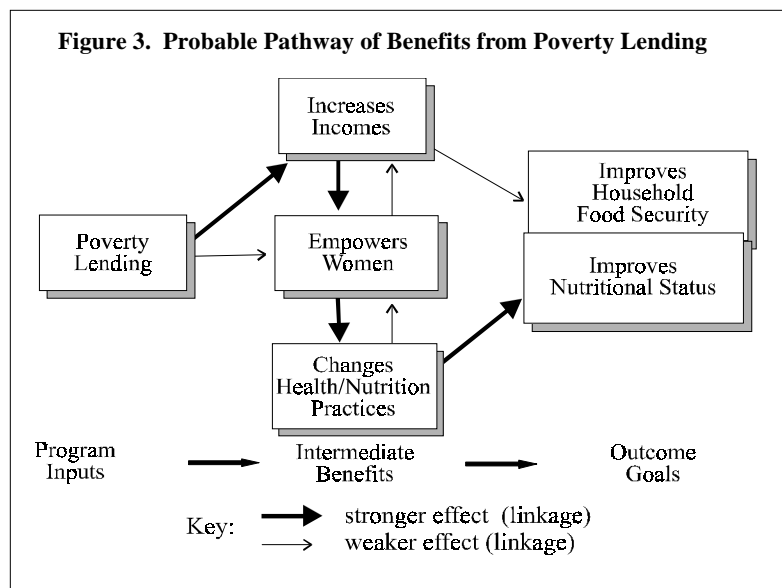
Figure 3 summarizes the tentative conclusions we have drawn to this point. The strongest linkages, or causal connections, in the benefit pathway seem to be *from* poverty lending:

- ❖ to modest increases in women's income, savings, and assets, *which lead*
- ❖ to women's empowerment, *which lead*
- ❖ to changes in nutritionally important practice, *which lead*
- ❖ to improvements in household nutritional status, especially for women and children in the household.

In addition, increased income, income smoothing and diversification through the year,

and accumulated savings for emergencies seem to improve household food security. Poverty lending programs have the type of economic impact that is most directly linked to increased food security: income increases among the poorest households, income controlled by women, and income earned through nonfarm income-generating activities which generate the type of small steady earnings that are channeled directly toward food and other basic needs. While the productivity and profit gains tend to be modest, access to loan capital plays an essential role in stabilizing and diversifying poor households income. Access to loan capital helps entrepreneurs weather periods of poor returns, when they might otherwise have gone out of business, and provides the households with an alternative income source that helps augment and smooth incomes throughout the year. In addition, the opportunity to augment savings and build productive assets over multiple loan cycles provides additional resources for emergencies or cyclical periods of scarcity.

Women's experience with the credit, increased capacity to economically contribute to the family's well-being, and interaction with the solidarity group are also very likely making a direct and strong contribution to women's empowerment. Empowerment enhances the effect of an increase in income on spending beyond women's direct earnings, through their greater influence over household expenditures and/or resource allocation. There may be positive feedback from women's empowerment to income generation and from successful behavior change to empowerment.



<sup>7</sup> Village banking is a poverty lending methodology developed by John Hatch of FINCA. This methodology is similar to the Grameen Bank's, in that borrower groups with approximately 30 members jointly guarantee each other's loans and repayment and savings are typically made at regular weekly or bi-weekly meetings. However, loans are for a shorter period (four to six months), and groups are more self-managed.

## **The Need for Education**

Women's empowerment is unlikely to directly improve household food security and nutritional status without acting through behavior change that is either economically or nutritionally important. Likewise, poverty lending programs are unlikely to directly promote either economic or nutrition-related behavior changes without acting through some kind of educational process. Women's empowerment is believed to make women "learning ready," and women's economic resources can enable them to take action on what they have learned. But some kind of information transfer and change promotion must occur before women are likely to know what to change and why and how.

If desirable behavior change is blocked only by lack of money and/or self-confidence (both are major blocks!), then more income and empowerment could be sufficient to bring about desired changes. However, if lack of information is a major block in itself, as it almost always is among the very poor women served by poverty lending programs, then an educational program is required for the same solidarity groups of women taking loans.

Without the extra investment in information transfer and change promotion, the benefit pathway to improving household nutritional status will probably be blocked by lack of change in nutritionally important practices of women and other household members. With an education program, the potential of poverty lending to counter malnutrition can be realized. Without education, poverty lending may have only a weak positive effect on household food security and little, if any, impact on nutritional status.

## **An Integrated Approach**

Education can be provided to poverty lending program participants either by a separate program or as an integrated component of the poverty lending program itself. The advantages of the second option are the opportunity to use the solidarity group meetings as a forum

for participatory nonformal education and to use the same field staff to deliver both financial and educational services, thereby minimizing the extra investment in information transfer and change promotion.

Freedom from Hunger, together with its local partners in Bolivia, Burkina Faso, Ghana, Honduras, Mali, and Thailand, is attempting to demonstrate the feasibility of this integrated approach, which they call *Credit with Education* (Dunford, 1990, 1992, 1994; Lassen and MKNelly, 1992; World Bank, 1993). They are implementing a village banking<sup>7</sup> methodology which directly incorporates nonformal education at borrower group meetings to promote important health/nutrition and family planning practices, microenterprise development, and credit group management. The education component is fully integrated into the poverty lending methodology so that the delivery mechanism for both the financial and education services is the same, and participants simultaneously have access to greater information as well as economic resources. This strategy aims to enhance the food security and nutritional impacts of poverty lending programs while maintaining the financial sustainability necessary for widespread expansion.

The health and nutrition education of *Credit with Education* focuses on five topic areas: diarrhea management and prevention, breastfeeding, infant and child feeding, immunizations, and family planning. The specific topics, or ideal practices, addressed at the meetings vary from country to country, reflecting local needs. All are within the scope of resources and range of decision making normally available to women, and all relate to key causes of malnutrition in the program area. Preliminary impact research has shown that health and nutrition education through this integrated approach can be effective for improving participant knowledge and probably behavior. Further research is underway, and more will be needed to test whether the integrated approach is more cost-effective for improving nutritional status than delivery of poverty

lending and health/nutrition in parallel, but independent, programs serving the same clientele.

The microenterprise education focuses on four topic areas: choosing an appropriate activity, increasing profits, increasing sales, and managing a microenterprise. The field agent facilitates discussions that help the women use the local markets and their own activities for case studies. They also help each other to find ways to make their loan-funded activities complement rather than detract from their other obligations so that increases in income can increase their families' overall well-being.

The need and efficacy of management training has been questioned, particularly for women's very small and typically changing mix of enterprises (McKee, 1989). One review of several microenterprise credit programs found that the minimalist programs providing little training had as strong an impact on borrowers' incomes as "credit-plus" programs (Berger, 1989). However, rather than focus on inappropriate bookkeeping or accounting skills, microenterprise development education can and should focus on basic business principles that can assist the borrowers to use the credit more strategically to earn a greater return. According to one review of income-generation programs (Buzzard, 1984), "All too often, people make a product and hope someone will buy it rather than searching out what people want to buy and making that product." This is an example of the type of economic behavior change that can lead to higher incomes and consequently better food security and nutritional status.

### **Nonformal Education During Solidarity Group Meetings**

One of the defining characteristics of poverty lending programs is the regular meetings of solidarity groups either on a weekly, bi-weekly, or monthly basis. While it is true that these regular meetings facilitate the installment repayment of the loan, they also play a crucial role in forging the solidarity of the borrower

group. And, from a program design standpoint, these regular meetings also provide an excellent forum and opportunity for education.

According to the founder of SEWA, a poverty lending program in India, their program "organizes borrowers to bring them together to think through their common problems, agree on common issues, decide common action, and forge common ideologies" (Bhatt, 1989). This group capacity could be channeled toward behavior change essential for improving the nutritional status of those most vulnerable to malnutrition and food insecurity. It is essential, however, that the education be nonformal and participatory rather than didactic if it is to be effective and build upon the potential of the group.

Nutrition education has great potential to influence attitudes and behaviors critical to improve nutritional status, but evaluations of nutrition education typically find this potential is rarely achieved (USAID, 1990). Lessons or messages are commonly delivered in a lecture style with participation, if any, confined to rote repetition of predetermined solutions. The manner in which messages are formulated and delivered often hinders their ultimate effectiveness. According to the Manoff Group (1984),

The reason for many failed nutrition and health education programs is that the ideas for messages have not come from investigations to identify the audience, its problems, and possible remedies, but from the suppositions of those planning the programs and other experts. This has culminated in projects advising villagers to boil drinking water when fuel is scarce or designing posters with a written message when illiteracy is prevalent. Messages made of theories sometimes have impact, but more often than not they are rendered ineffective in the face of long-held customs and beliefs.

Still, it is recognized that if nutrition education can be made more effective by being “more specific, more action-oriented, individualized and relevant” the benefits could be great (Lotfi, 1988). This is best achieved through face-to-face communication and active participation by beneficiaries. This nonformal approach, together with the excellent forum provided by the solidarity group meetings, exemplify the characteristics of the most effective approaches to nutrition/health education.

First, the importance of beliefs and customs requires that nutrition education address social obstacles to behavior change and not simply impart information. The program field agent “should listen to the community with a respectful attitude, learn from them, work with them and for them, and provide guidance rather than simply teach them” (USAID, 1990). Solidarity group members understand the kinds of constraints each woman is facing much better than even the most empathetic field agent. The advice and support they can offer one another is more relevant, and the relationships within the group are much longer lasting and potentially more influential over time.

Even if the costs of change (in terms of time or money) are perceived to be large, it may still take place if a firm and trusting relationship builds up between members of the target community and the agent of change. . . . The relationship between extension worker and target families is an all-important factor in determining whether change will occur. The extension worker must show the family that he/she truly understands the kinds of economic and social constraints under which the family is living and support the family through its difficulties. Outsiders find this difficult to do (Nabarro, 1984).

Second, solutions will be most appropriate and most likely to be adopted when they are developed or modified locally. Immink (1988) proposes, “The community collectively thinks about and discusses its food and nutrition problems, their immediate causes and what priorities should be given to solving them. In participatory sessions the community decides on courses of actions and sets priorities.”

A review of several nutrition education programs focusing on weaning practices concluded that the most successful examples were based on negotiations with the target population regarding problem identification and solution formation (Chauliac, et al., 1991). This interactive process also strengthens people’s capacity at a local level to analyze their reality and to take greater responsibility for implementing change (Immink, 1988). In addition, there is some evidence that programs employing a learning approach to develop adult confidence and collaborative skills also can result in participants’ adoption of specific, nutritionally beneficial child feeding practices (Clark and Gakuru, 1982).

### **Synergy Between Increased Income and Nutrition Education**

A great opportunity exists to combine programs that increase incomes with education, that encourage allocation of quality foods for those most vulnerable to malnutrition, and that support the adoption of key health and nutrition behaviors. Providing economic and information resources to the same participants can have a synergistic impact that makes improvements in food security and nutritional status more likely than would be the case if either resource were provided alone. The possibility that the education component will positively affect expenditure patterns and intrahousehold distribution of resources enhances the likely nutritional impact of increased income from the credit program. Moreover, the nutritional impact of the education will also be strengthened by the simultaneous improvement in economic status.

For example, a study of a food supplementation program in the Philippines found that providing households with additional economic resources (in the form of food) did not affect critical intrahousehold behaviors that would ultimately dictate whether this assistance would have a positive impact on children's nutritional status. Only the addition of an education component had this effect. The authors concluded that:

When multivariate analysis is employed, the nutrition education component of the scheme shows no significant impact on household food expenditures and acquisition, but food consumption and nutritional status of preschoolers are strongly affected, indicating that the nutrition messages increased the focus on children (Garcia and Pinstrup-Andersen, 1987).

Not only does the ultimate nutritional benefit of increased economic resources depend upon complementary nutrition education, but the reverse is also true. Greater nutrition knowledge may only be effective if steps are taken to ensure a minimum socioeconomic status. This was the conclusion of a study of the mediating effect of maternal nutrition knowledge on the association between maternal schooling and child nutritional status in Lesotho (Ruel, et al., 1992):

The effect of maternal schooling on weight-for-age was mediated by the mother's nutrition knowledge only among wealthier households. These results imply that, in Lesotho, nutrition education for mothers could contribute to improving children's growth, but only in households that have access to a minimum level of resources. For poorer households, nutrition education would not be sufficient.

The logic behind combining health and nutrition education with a women's income-earning project is quite clear to the women themselves. The Population Council conducted a study of 21 women's groups in Zimbabwe to better understand women's perceptions of the wisdom of combining income-generating, family planning, and literacy education programs (Mutambirwa, et al., 1986). The group members felt this approach was desirable because 1) children are better cared for when the mother has ready cash to use in the home, 2) adequate spacing of children provides time for women to engage in income-generating activities, and 3) when women engaged in successful income-generating activities, their influence on the economic well-being of the family increased. The interest among women for both types of assistance is also evident. A survey examining training needs of women borrowers in an ACCION program in Peru found that while a third of the participants were interested in enterprise training, almost half requested health-related courses in family planning, hygiene, and nutrition (Reichman, 1984).

While many of the most nutritionally important behaviors are not costly, the economic status of the household, and particularly the role of women, will greatly influence whether they are adopted. For this reason, programs that combine credit with education are increasingly recognized as important and necessary to "break the deadlock on women's resources for nutrition" (McGuire and Popkin, 1990).

Simultaneously, providing both economic and information resources in a manner that fosters the problem-solving capacity of the participant has the potential to overcome the major blocks to behavior change and consequently improved nutritional status. According to Nabarro (1984), even when a nutrition or health message has been presented well and understood by the mother, change often still does not occur. This often happens because of a number of different kinds of "blocks."

First, the “pragmatic” block refers to a mother’s resistance to adopt a behavior change, because it runs counter to her perception of the problem.

Second, the “ritual block” refers to traditional practices and customs, like the belief that pregnant women should not eat specific foods. Since adherence to these practices is associated with adherence to the status quo, social support and empowerment are necessary to overcome this block. Third, the perceived value of beneficial practices, together with the capacity of the household to implement them, is necessary to address what Nabarro (1984) calls the “economic capacity” block. Increased income from poverty lending can play an important role in overcoming this type of block to key behaviors that require added expense or time; for example, additional protein in the diet or the preparation of weaning foods.

### **Integration for Financial Sustainability**

While the nutritional benefits of incorporating quality, nonformal education directly into a poverty lending program are clear, this additional service imposes additional delivery costs. The added cost might seem to undermine the program’s progress toward self-financing sustainability in a timely manner. However, if tightly integrated and delivered in a cost-effective manner at large scale, the marginal cost of the education services can be negligible, as Freedom from Hunger is demonstrating through the *Credit with Education* version of village banking, for two reasons:

1. The education component of *Credit with Education* is so tightly woven into the credit service delivery mechanism that it represents virtually no additional cost at the level of the village bank. The same field agent who organizes and trains village banks to manage loan capital also facilitates nonformal education.

With or without the 15- to 20-minute education session held at each regular village bank meeting, the field agent’s transportation costs, salary, and schedule for attendance at the meetings remains the same. Each agent is expected to handle a portfolio of at least ten village banks, which is the same minimum ratio as other village banking programs that lack an education component.

2. The education component employs a nonformal and minimalist approach so that program operating costs that solely pertain to the education component are quite small. Rather than depending on expensive flip charts or story boards, the education sessions involve stories, skits, and the women’s own active discussions. The program has supervisory and training staff who are education specialists and whose benefits, travel, and support costs do represent additional expenses. However, these additional costs for personnel and their support should constitute only about 3 percent of total nonfinancial costs of a large-scale program (Freedom from Hunger, unpublished data).

In brief, the impact of a poverty lending program is likely to be greatly amplified and broadened by an education component, and these major benefits can be provided with modest additional investment. It is even likely that the program’s financial performance and long-term success will be enhanced by a healthier, better nourished, more informed, and more productive clientele.

## CONCLUSION

Incorporating nonformal health/nutrition and microenterprise education directly into the delivery system and organizational structure of a poverty lending program is a promising strategy for enhancing the food security and nutrition impact of these programs. Doing so builds upon the likely increases in women's economic capacity and empowerment to promote the adoption of key nutrition and health behaviors that play such a critical role in redressing or preventing malnutrition. Through their cost-effective methods and remarkable repayment rates, poverty lending programs offer the possibility of reaching hundreds of thousands of poor households in a financially sustainable manner. Poverty lending combined with education could translate the likely modest increases in income and productive assets these households will enjoy into genuine improvement in household food security and nutritional status.

It is interesting to note that this integrated strategy embodies many of the factors essential to successful nutrition programs identified at the 1989 International Conference of International Nutrition Planners in Korea (USAID, 1990):

- ❖ The need to address the problems of poverty and nutrition in an integrated, multisectoral manner.
- ❖ Active and genuine participation of the community, through decentralization of power, which promotes local searches for solutions.
- ❖ The targeting of the poorest and most marginalized.
- ❖ Greater attention to sustainability and cost-effectiveness and a central role for women's groups.

## RÉSUMÉ ANALYTIQUE

Les programmes de prêt à la pauvreté comme celui de la Banque Grameen ont capturé l'attention d'une audience qui s'étend beaucoup plus loin que la communauté traditionnelle de développement. Beaucoup de cet enthousiasme est lié aux succès—les taux de remboursements, l'échelle et/ou le potentiel pour une autosuffisance financière—plutôt qu'aux impacts des programmes. Néanmoins, la valeur de toute stratégie de développement dépend finalement de sa capacité à atteindre une amélioration pérennisée de la qualité de vie.

Nous avons examiné la littérature académique et pratique pour déterminer quelles conditions nécessaires sont connues, ou solidement soutenues, pour que les programmes du crédit et de l'épargne puissent être efficaces contre la faim et/ou la malnutrition. En sachant qu'aucune revue littéraire ne peut être complète, ne peut fournir de réponses définitives, ou ne peut être sans préjudice interprétatif, nous visons principalement la stimulation d'une pensée, d'une recherche et d'une pratique nouvelles. Toutes devraient être menées vers l'édification d'efforts innovants, efficaces, pérennisés et à grande échelle pour réduire radicalement la faim chronique et la malnutrition à travers le monde entier.

L'approche utilisée est une revue des sources secondaires d'information—articles, rapports et, chaque fois que possible, évaluations de programme. De plus, des interviews ont été menées avec une variété de praticiens qui sont principalement experts en matière de crédit, des questions de sexe et de nutrition (voir "annex" pour une liste des individus consultés). Ces interviews se sont révélées inestimables quant à leur part généreuse de perspicacité et d'expérience; elles ont aussi permis un accès à des documents de programmes non publiés qui sont généralement difficiles à obtenir.

Ce document vise à aller plus loin que ce que Pinstrip-Andersen (1983) mentionne

comme étant l'approche de la "boîte noire" lors d'une évaluation de programme, en choisissant une approche plus orientée vers le processus. Cette approche de "boîte noire" se concentre seulement sur le fait de voir si l'impact désiré est atteint, tandis que la deuxième approche aide à éclairer comment l'impact a été atteint en suivant l'impact du programme à travers des processus adéquats. La première partie de ce document étudie l'évidence concernant les liens entre le revenu, la prise de pouvoir, le changement de comportement (hypothétiquement en tant que bienfaits intermédiaires du prêt à la pauvreté) et la sécurité alimentaire et le statut nutritionnel—les buts du résultat ultime. La deuxième partie examine l'évidence que les programmes de prêt à la pauvreté ont un impact positif sur les bienfaits intermédiaires nécessaires pour surmonter les causes sous-jacentes de la faim et de la malnutrition. Chaque section commence avec un lien hypothétique, comprend une revue de l'évidence que nous avons trouvée pertinente à ce lien, puis finit avec des conclusions tentatives en ce qui concerne le lien.

Les conclusions principales sont résumées ci-dessous.

### *1ère PARTIE: Le lien entre les bienfaits intermédiaires (revenu, changement de comportement, et prise de pouvoir) et la sécurité alimentaire et le statut nutritionnel.*

1. Certaines conditions rendent plus direct l'impact du revenu augmenté sur la sécurité alimentaire du foyer (accès à la nourriture) et sur le statut nutritionnel. Il est plus probable que des interventions auront cet impact quand elles s'assurent que les augmentations de revenus sont 1) vécues par les foyers les plus démunis, 2) contrôlées par les femmes, 3) gagnées de manière régulière plutôt que par somme forfaitaire, et 4) qu'elles améliorent la sécurité générale de subsistance des foyers.

2. Le lien entre la sécurité alimentaire du

foyer et le revenu est plus direct que celui entre le revenu et le statut nutritionnel pour une variété de raisons. Premièrement, le statut nutritionnel est une fonction générale de l'individu et non simplement une fonction de l'accès à la nourriture ou même à la consommation de celle-ci. Deuxièmement, les décisions et les ressources concernant l'allocation de la nourriture à l'intérieur des foyers (tel que le temps du responsable) peuvent considérablement modifier l'effet du revenu augmenté. Et troisièmement, les pratiques clés de l'alimentation de la mère et de l'enfant et l'utilisation des services sanitaires existants influencent beaucoup aussi le statut nutritionnel.

3. L'impact nutritionnel du revenu augmenté sera contrecarré s'il n'est pas ajouté à l'amélioration de la santé des personnes les plus vulnérables à la malnutrition, à savoir les femmes et les jeunes enfants. Des changements dans les pratiques de soin sanitaire et nutritionnel au niveau du foyer ont plus de chance d'être la première direction de prévention et de traitement de la malnutrition. Par exemple, chacun des faits suivants a des implications nutritionnelles: la sélection et la distribution de la nourriture dans le foyer; les pratiques liées à l'allaitement maternel, à l'alimentation de l'enfant, et au traitement et à la prévention de la diarrhée; l'alimentation lors de la grossesse, l'allaitement, et/ou durant et après une maladie; l'utilisation des services sanitaires existants; l'hygiène personnelle, alimentaire et du milieu. Même sans le bienfait d'un revenu augmenté du foyer, ces comportements peuvent améliorer de manière dramatique le statut nutritionnel du foyer. Réciproquement, un revenu augmenté peut se produire en absence d'un changement de comportement nécessaire et d'une amélioration nutritionnelle.

4. La capacité des femmes d'augmenter leurs revenus ou leurs contrôles sur le revenu a un effet positif sur leur prise de pouvoir (confiance en soi, statut, et pouvoir de négociation à l'intérieur de leurs foyers). La

possibilité d'un feed-back positif de prise de pouvoir concernant le gain et le contrôle des revenus semble probable, mais il nous faut encore trouver de la documentation sur un tel feed-back.

5. Les manifestations économiques et sociales de la prise de pouvoir semblent toutes deux être cruciales pour que les femmes effectuent des changements importants de comportement nutritionnel et qu'elles demandent ainsi qu'utilisent correctement les services et les technologies sanitaires. Des sources indépendantes de revenus ont de fortes chances de toucher le statut, l'autonomie et la confiance en soi des femmes. Des dimensions sociales, telles qu'une mobilité plus importante, une interaction publique, et/ou une identification du groupe, sont aussi importantes pour la familiarisation des femmes aux idées nouvelles et à une découverte potentielle du changement. En outre, un feed-back positif sur le changement de comportement envers la prise de pouvoir n'a pas été documenté, mais paraît probable. Il semble aussi que la prise de pouvoir joue un rôle essentiel en créant un effet synergique entre le revenu et les comportements importants sanitaires/nutritionnels.

## ***2ème PARTIE. Le lien entre le prêt à la pauvreté et les bienfaits intermédiaires (revenu, changement de comportement, et prise de pouvoir).***

1. Une évidence concrète de l'impact économique des programmes de prêt à la pauvreté est rare. Les quelques évaluations rigoureuses à ce jour (principalement la Banque Grameen et certains affiliés d'ACCION) indiquent que les programmes de prêt à la pauvreté augmentent en effet les revenus, les actifs et la productivité des emprunteurs très démunis, à la fois hommes et femmes.

2. Le prêt à la pauvreté préserve plus souvent le propre emploi de l'entrepreneur qui travaille à son compte plutôt que de créer de

nouveaux emplois. Les revenus ont de fortes chances d'être stabilisés ou plus ou moins augmentés durant une période de temps courte. Cependant, avec des prêts séquentiels et une accumulation de l'expérience commerciale, les participants peuvent passer à des activités potentiellement plus rentables. Une productivité salariale (revenu net de l'heure) est un variable important qu'il faut inclure dans toute étude de l'impact du crédit, surtout pour les femmes.

3. Le prêt à la pauvreté est mis au point pour soutenir principalement les activités économiques existantes des démunis. A cause des rendements pauvres et des contraintes structurelles des activités traditionnelles des femmes, cette approche minimaliste n'amène probablement pas d'amélioration économique importante chez les femmes. Parce que les femmes constituent la masse des participants dans la plupart des programmes, le prêt à la pauvreté risque guère de produire des gains économiques importants pour les foyers démunis. Cependant, relativement parlant, ces gains modestes semblent faire des contributions importantes, telles qu'un revenu régulier et une assurance contre les urgences, à la survie du foyer. Et ces dernières stratégies sont précisément celles qui, si renforcées, sont associées de manière la plus proche avec une augmentation de la sécurité alimentaire du foyer et du statut nutritionnel.

4. Le prêt à la pauvreté donne du pouvoir aux femmes participantes. En fournissant des occasions pour un emploi indépendant, il augmente l'autonomie, la confiance en soi et le statut à l'intérieur du foyer des femmes. Des réunions régulières et une garantie de leurs pairs aide à favoriser la solidarité de groupe, ce qui réduit l'isolation des femmes et augmente leur familiarisation aux nouvelles idées et à l'information aussi bien que leurs compétences pour dialoguer avec le secteur publique. Il y a même une preuve qui soutient l'hypothèse que les groupes de solidarité créent une prise de pouvoir de leurs membres indépendamment de leurs impacts

économiques en créant de nouveaux liens et une identification sociale. Ceci aide les femmes à résister aux restrictions traditionnelles et à encourager de nouvelles normes culturelles. Une étude littéraire plus étendue sur les groupes d'auto-assistance non économique aurait de fortes chances de révéler qu'une solidarité entre les groupes a un impact solide, direct et positif sur les mesures de la prise de pouvoir de la personne et du groupe.

5. La prise de pouvoir des femmes risque guère d'améliorer directement la sécurité alimentaire du foyer et le statut nutritionnel sans agir à travers un changement de comportement qui soit important soit économiquement soit nutritionnellement. De même, les programmes de prêt à la pauvreté risquent guère de promouvoir directement des changements de comportement qui sont liés soit à l'économie soit à la nutrition sans agir grâce à une sorte de processus éducatif. La prise de pouvoir des femmes est considérée comme un fait qui rend les femmes "prêtes à l'apprentissage", et les ressources économiques des femmes peuvent leur permettre de mettre en pratique ce qu'elles ont appris. Mais un type de transfert d'information et de promotion du changement doit se produire avant que les femmes aient de fortes chances de savoir pourquoi, comment et que changer.

6. Avec un programme éducatif, le potentiel du prêt à la pauvreté pour riposter contre la malnutrition peut se réaliser. Sans l'éducation, le prêt à la pauvreté peut n'avoir qu'un seul effet possible et faible sur la sécurité alimentaire du foyer et qu'un peu d'impact, s'il existe, sur le statut nutritionnel. L'éducation peut être fournie aux participants du programme de prêt à la pauvreté soit avec un programme séparé soit en tant qu'élément intégré du programme même du prêt à la pauvreté.

## RESUMEN EXECUTIVO

Los programas de crédito para gente de recursos escasos como el Banco Grameen han captado la atención de una audiencia que extiende mucho más allá de la comunidad tradicional de desarrollo. Mucho de ese entusiasmo está relacionado con los éxitos programáticos—el índice de devolución, la escala y/o la potencial para autosuficiencia—en vez del impacto de los programas. Sin embargo, el valor de cualquier estrategia de desarrollo últimamente depende de la habilidad de alcanzar al mejoramiento sostenible de la calidad de vida.

Hemos examinado la literatura académica y profesional para determinar qué está conocido, o fuertemente mantenido, como condiciones necesarias para la eficacia de programas de crédito y ahorros contra el hambre y/o la malnutrición. Por saber que ninguna literatura puede ser comprensiva, no puede ofrecer respuestas definitivas, y no puede faltar el prejuicio interpretivo, queremos actuar como estimulante para el pensamiento, la investigación, y las prácticas nuevas-- todos los cuales deben estar dirigidos hacia la construcción de esfuerzos innovadores, efectivos, sostenibles, y de gran escala para reducir drásticamente el hambre crónico y la malnutrición por todo el mundo.

El método implementado es un repaso de fuentes secundarios de información—artículos, informes, y cuando posible, evaluaciones de programas. Además, hicieron entrevistas con varios profesionales expertos, principalmente en el crédito, los asuntos del género, y la nutrición (vea el Annex para una lista de individuos consultados). Estas entrevistas eran invalorable en cuanto al compartó generoso de ideas y experiencia; también ofrecieron el acceso a documentos no publicados de programas, los cuales por lo general no se puede obtener fácilmente.

Este informe aspira ir más allá del método de la evaluación de programas llamado por Pinstrup-Andersen “black box” (caja negra),

a un método más orientado al proceso. El método “black box” se enfoca solamente en el logro del impacto deseado, mientras que el último método ayuda iluminar como se logró al impacto por seguir el impacto del programa a través de procesos pertinentes. La Parte I del informe investiga la evidencia con respecto a la relación entre los ingresos, el fortalecimiento de confianza en si misma, y el cambio de comportamiento (creído como los beneficios intermedios de crédito para gente de recursos escasos) a la seguridad de alimentos y el estado nutritivo—las últimas metas. La Parte II examina la evidencia que programas de crédito para gente con recursos escasos tienen un impacto positivo en los beneficios intermedios necesarios para sobrepasar las causas fundamentales del hambre y la desnutrición. Cada sección empieza con una relación hipotética, incluye un repaso de la evidencia que encontramos pertinente a la dicha relación, y termina con las conclusiones tentativas con respecto a la relación.

Las conclusiones principales están resumidas abajo.

### ***PARTE I: La relación de los beneficios intermedios (Ingresos, Cambio de comportamiento, y el fortalecimiento de confianza en si misma) a la seguridad de alimentos y el estado nutritivo.***

1. Ciertas condiciones hacen más directo el impacto de ingresos aumentados en la seguridad de alimentos (el acceso a alimentos) y el estado nutritivo. Las intervenciones probablemente tendrán este impacto cuando aseguran que los aumentos de ingresos son 1) experimentados por las familias más pobres, 2) controlados por mujeres, 3) ganados como ingresos continuos en vez de ingresos recibidos en suma global, y 4) buenos para la seguridad total de la familia.

2. La liga entre la seguridad de alimentos de la familia y el ingreso es más directo que la relación entre el ingreso y el estado nutritivo,

por varias razones. Primero, el estado nutricional es una función de la salud total de un individuo y no simplemente una función del acceso a la comida, ni siquiera el consumo de alimentos. Segundo, las decisiones y recursos del reparto de alimentos entre familias (como el tiempo de la persona responsable del cuidado) pueden modificar mucho el efecto de los ingresos aumentados. Y tercero, las prácticas clave de cuidado y alimentación de infantil y materna y el uso de los servicios establecidos también influyen al estado nutricional.

3. El impacto nutricional del ingreso aumentado será decepcionante si no está acompañado al mejoramiento de la salud de los más vulnerables a la malnutrición, especialmente las mujeres y los niños. Cambios en la nutrición y las prácticas del mantenimiento de la salud al nivel de la familia estarán la primera ruta de la prevención y el tratamiento de la malnutrición. Por ejemplo, cada uno de los siguientes tiene implicaciones nutricionales: la selección y distribución de alimentos dentro de la familia; las prácticas relacionadas a la lactancia materna, alimentación de niños, y el tratamiento y la prevención de la diarrea; las dietas durante el embarazo, la lactancia, y/o mientras de y después de una enfermedad; el uso de servicios establecidos de salud; la higiene personal, ambiental, y de la comida. Aún sin el beneficio del ingreso aumentado de la familia, estos comportamientos pueden mejorar dramáticamente el estado nutricional de la familia. A la inversa, el ingreso aumentado puede ocurrir en la ausencia de cambios necesarios del comportamiento y el mejoramiento nutricional.

4. La capacidad de las mujeres de aumentar sus ingresos o su control de los ingresos tiene un efecto positivo en su habilitación (la auto-confianza, el estado, y el poder de negociar dentro del hogar). La posibilidad de refuerzo entre el fortalecimiento de confianza en sí misma y los niveles de ganancia y control parece posible, pero todavía falta la documentación de tal retro-alimentación.

5. Tanto la manifestación económica como la social del fortalecimiento de confianza en sí misma parecen ser críticas para que las mujeres hagan cambios importantes del comportamiento nutricional y para que demanden y usen correctamente los servicios de salud y la tecnología de salud. Es probable que las fuentes independientes de ingresos afecten al estado social de las mujeres, la autonomía, y la auto-confianza. Las dimensiones independientes, como la movilidad amplia, la interacción pública, y/o la identificación con un grupo, también son importantes para la exposición de la mujer a nuevas ideas y la potencial para cambios. De nuevo, la información positiva sobre los cambios de comportamiento a habilitarse tiene un papel principal en crear un efecto sinérgico entre los ingresos y los comportamientos importantes de la salud y la nutrición.

***PARTE II. La relación de crédito para gente de recursos escasos a los beneficios inmediatos (Los ingresos, el cambio de comportamientos, y el fortalecimiento de confianza en sí misma).***

1. La evidencia sólida del impacto económico de programas de crédito para gente de recursos escasos es rara. Las pocas evaluaciones rigurosas hasta hoy (principalmente el Banco Grameen y algunos asociados de ACCION) indican que los programas de crédito para gente de recursos escasos suben los ingresos, los bienes, y la productividad de los prestatarios más pobres, ambos mujeres y hombres.

2. El crédito para gente de recursos escasos a menudo preserva el auto-empleo del empresario en vez de crear trabajos nuevos. Es probable que los ingresos establezcan o aumenten en un corto plazo. Sin embargo, con préstamos consecutivos y la acumulación de experiencia comercial, los participantes podrían cambiar hacia las actividades económicas más

rentables. La productividad laboral (el ingreso total por hora) es una variable importante de incluir en cualquier estudio del impacto de crédito, especialmente para las mujeres.

3. El crédito para gente de recursos escasos está diseñado para apoyar principalmente las actividades económicas establecidas de los pobres. Por sus ingresos bajos y los límites estructurales de las actividades tradicionales de mujeres, este punto de vista minimalista probablemente no lleva a cabo mejoramientos económicos mayores para mujeres. Por el hecho que las mujeres constituyen la mayoría de los participantes en tales programas, es improbable que el crédito para gente de recursos escasos produzca ganancias económicas significativas para los pobres. Sin embargo, en terminos relativos, estas ganancias módicas pueden hacer una contribución importante a la supervivencia de la familia, como la regularización de los ingresos y los seguros contra emergencias. Son precisamente los tipos de estrategias de ganarse la vida que, si reforzadas, son las más asociadas con la seguridad aumentada de alimentación familiar y el estado nutritivo.

4. El crédito para gente de recursos escasos fortalece la confianza en si misma de las participantes mujeres. Por proveer oportunidades de auto-empleo, sube la autonomía de la mujer, su auto-confianza, y su estado dentro de la familia. Las reuniones regulares y la garantía de las otras ayudan a facilitar la solidaridad del grupo, que reduce la aislación de la mujer y aumenta su exposición a nuevas ideas e información, tanto como las habilidades de interactuar dentro del ambiente público. Existe la evidencia en apoyo de la hipótesis que los grupos de solidaridad crean el fortalecimiento de confianza en si misma de sus participantes independientemente de los impactos económicos por crear nuevas ligas y la identificación social que ayudan a mujeres resistir las restricciones tradicionales y alentar

las nuevas normas culturales. Una inspección más amplia de la literatura de grupos no económicos de auto-ayuda revelaría que la solidaridad entre grupos tiene un impacto fuerte, directo, y positivo en los medidos de fortalecimiento de confianza en si misma personal y de grupos.

5. Es improbable que el fortalecimiento de confianza en si misma de mujeres mejore directamente la seguridad de alimentos de la familia y el estado nutritivo sin actuar a través del cambio de comportamiento que es importante economicamente o nutritivamente. Del mismo modo, es improbable que los programas de crédito para gente de recursos escasos promuevan directamente los cambios de comportamiento económicos o los relacionados a la nutrición sin actuar a través de algún tipo de proceso educativo. Se cree que el fortalecimiento de confianza en si misma de mujeres las hace “lista para aprender”, y los recursos económicos de mujeres les permiten a realizar lo que han aprendido. Sin embargo, debe pasar algún tipo de transferencia de información y fomento de cambio antes que sabrían las mujeres qué cambiar y por qué y cómo.

6. Con un programa educativa, se puede realizar la potencial de crédito para gente de recursos escasos de luchar contra la malnutrición. Sin educación, el crédito para gente de recursos escasos solamente tendría poco efecto positivo en la seguridad de alimentación de la familia y poco, si lo hay, impacto en el estado nutritivo. Se puede proveer la educación a los participantes de programas de crédito para gente de recursos escasos por un programa separado o como un componente integrado del programa de crédito misma.

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## ANNEX

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