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# OUTCOMES OF MICROCREDIT PROGRAMS: SUSTAINABILITY, SOCIAL DEVELOPMENT, ECONOMIC DEVELOPMENT, AND FOOD SECURITY

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***ABSTRACT:*** *Poor entrepreneurs can take out small loans to start a business through microcredit programs. The most noted microcredit program is the Grameen Bank. The mission of the 1997 Microcredit Summit was to "reach 100 million of the world's poorest families, especially the women of those families, with credit for self-employment and other financial business services by the year 2005." Microcredit, a mechanism for alleviating poverty, may also be an approach to reducing hunger through increasing the incomes of the poor. Achievable through microcredit programs, economic development, social development, and sustainability are essential to a viable food security strategy.*

Do not feed the hungry. Let the hungry feed themselves. To let the hungry feed themselves *is not* to allow limited resources and infrastructure restrict them from achieving food security, but letting the hungry feed themselves *is* to provide the needed institutional support. Achieving food security in developing countries involves a complexity of ecological, political, and technological aspects, as well as many other factors, in which the role that microcredit plays is a fairly simple concept. Microcredit programs provide loans to very poor people to start a small business. The entrepreneurs use a portion of their profits to pay back the loans. A borrower from a microcredit bank may also receive business, health, educational, and other services determined by the needs of the population served by the bank. Such an approach to increasing food security is likely to be sustainable because it capitalizes on the initiative and first hand knowledge of people living in poverty while achieving economic and social development.

In developing countries, achieving food security depends, in part, on sustainable levels of social and economic development. Achieving food security requires that people have opportunities to generate incomes that are high enough to purchase adequate amounts of food and other goods and services which are necessary for a sustainable survival. Valdes (1988) defines food security as "the ability of food deficit countries, or regions within countries, to meet target consumption levels on a year-to-year basis." The consumption levels are the amounts of food and nutrients that populations need to perform the functions required for productive daily living. These levels may be quantified in terms of calories, grams of food, and dollar value. Approximately one billion people live in a state of poverty that prevents them from acquiring the food needed for a sustainable survival, according to the World Health Organization .

Reaching these one billion hungry people requires economic development programs that can be implemented at the local level, while having the flexibility to be applied globally. Microcredit programs provide poor people with the institutional support needed to generate a source of income which may help them to achieve food security. Entrepreneurs can overcome the obstacle of a lack of access to credit with microcredit loans to buy a loom, a kiln, a plot of land, a few chickens, or other resources needed to start a business. In the absence of microcredit programs, loan sharks and family members are often the only sources of credit for people who do not own land or have very little collateral. The interest on loans from informal money lenders may be so high that entrepreneurs may not be able to repay loans and generate an income for a sustainable survival.

Unlike commercial banks, physical collateral is not needed for a microcredit loan because the commitment of a group of clients to repay loans takes the place of collateral. In addition to providing loans, many microcredit programs help with business training and offer social support. Achieving food security in developing countries is not only an economic matter as social forces often determine economic mobility. This paper will attempt to assess the sustainability of microcredit programs as an approach to achieving food security in terms of social and economic development.

## BACKGROUND TO MICROCREDIT

In Bangladesh, Dr. Muhammad Yunus, professor of economics at Chittagong University, started the first microcredit program known as the Grameen Bank in the 1970s. Dr. Yunus introduced the concept of group lending in which the group is responsible for repaying loans even if one member fails to repay. There are five members in each group. People generally form groups with people they trust. Group formation takes the place of commercial banks' inquiries into the credit worthiness of applicants. The success of this approach is indicated by Grameen Bank's 98% repayment rate. Over the past 20 years, the Grameen Bank has lent over $2 billion dollars in loans averaging $67 dollars (Gibbs, 1990).

Generally, the interest rate on microcredit loans is at least 20%. Borrowing from a microcredit bank may be more profitable than borrowing from an informal money lender because, according to Wickrama and Keith (1994), "borrowing money from a lender is often a transaction between a powerful elite and the poor who are powerless." Borrowers may use the loans to invest in their farms or businesses. However, the entrepreneurs may become indebted to the loan sharks who may charge as much as 200 % interest. To pay the debt, the borrowers may give their goods to the loan sharks who then act as middlemen (Wickrama and Keith, 1994). As a result, the borrowers receive a price for their goods below the market price. In addition to the provision of loans, entrepreneurs are taught business skills and encouraged to save. Increasing the income of the entrepreneur who receives a loan requires that the rate of interest being paid on the loan is smaller than the rate of return on assets (Wahid, 1994). Although entrepreneurs generally need to spend a large portion of their money on necessities such as food, savings may be accumulated if creditors allow the entrepreneur to make small payments over a long period of time (Wahid, 1994).

The Grameen Bank is a model for poverty alleviation for thousands of other organizations, who have provided access to credit to a total of over 8 million people living in poverty, in both developing and developed countries (Servon, 1997). In various parts of the world, microcredit programs are known as "cottage industry, small-scale enterprise, informal-sector business, home-based industry, own-account work, income-generating projects, entrepreneurial activity, and community enterprise" (UNPF, 1997). For the purpose of this paper, microcredit is defined as a program that provides small loans, business training, and social services to poor clients who would be considered high risk by regular lending institutions. Women are the focus of microcredit programs because they are most often discriminated against by regular banks. In some countries, a woman must use her husband's name to get a loan from a regular bank. The 1997 Microcredit Summit declared in its action plan to "launch a global movement to reach 100 million of the world's poorest families, especially the women of those families, with credit for self-employment and other financial and business services, by the year 2005." The majority of the clients of microcredit programs are women. In 1992, Grameen Bank served 1,186,826 women and only 84,635 men (Wahid, 1994).

There are regional variations in the targeted populations and services of microcredit programs. The microcredit program known as Trickle Up has helped Hui minorities in China, people suffering from leprosy in Myanmar, victims of land mines in Cambodia, refugees in Sierra Leone, the families of children on the streets in Ethiopia, families affected by AIDS in Uganda, women in Benin, rural communities in Guatemala, parents of child laborers in Ecuador, and youth in Peru to gain skills and capital (Trickle Up, 1996). The Freedom from Hunger organization targets "women in families suffering form chronic hunger and malnutrition" (Microcredit Summit Campaign, 1997). The social and business services provided by microcredit programs vary according to the needs of the community. In Vietnam, the Hai Hung microcredit program provides education on livestock and domestic issues for women engaged in pig farming in the Kim Thi and Nam Thanh districts (Oxfam, 1996).

## SUSTAINABILITY OF MICROCREDIT BANKS AND BUSINESSES

### Banks

Before assessing microcredit as a sustainable approach to achieving food security in terms of social and economic development, the viability of microcredit programs and businesses needs to be addressed. Sustainability is key to the viability of microcredit as a food security strategy. The Microenterprise Division of the Inter-American Development Bank (1994) defines a sustainable bank as "one that covers all of its expenses with operational income and generates sufficient surplus to maintain the real value of its equity base." The sustainability of microcredit banks is often questioned because they have not been created by market demand similar to that of a commercial bank. Other factors, however, suggest that the banks are viable. The interest rates which may exceed 40 % are among the most noted features of microcredit loans, as well as being the cornerstone of success for microcredit banks. Interest rates on microcredit loans are used to cover the "administrative and supervisory costs, losses resulting from defaults and delinquencies, and the opportunity cost of capital" (Sinha, 1976). Creditors charge interest rates that are higher than those of commercial banks because microcredit banks that use subsidized interest rates to make up for low profits are generally not sustainable (Sinha, 1976). When interest rates are too low, the loan may be viewed as a grant by the borrower. Subsidizing interest rates also decreases the number of clients that the bank can serve. In addition, financial hardship could occur if the government fails to continue subsidizing the loans. Setting interest rates below the market interest rate may also lead to corruption within the institution (Gerda et al., 1997). According to Speth (1997), the Administrator of the United Nations Development Programme, "access to credit is far more important to people than subsidized interest rates."

In addition to interest rates, low operating costs and high repayment rates are key factors among the issues that determine the sustainability of banks, according to Dr. Humaira Islam, the executive director of the Shakti Foundation in Bangladesh (Microcredit Summit Campaign, 1997). In 1992, only 10% of the operational expenses of the banks managed by the Shakti Foundation were covered with interest rates. By 1997, 70 % of the costs were covered by interest rates. Since 1992, The Shakti foundation has managed over US$2 million dollars in loans in increments of approximately 4,000 taka or US$100 dollars. Membership has increased from 1,200 women in 1992 to 15,000 women in 1996. H. Islam attributes the loan repayment rate of generally 100% to: (1) Regular attendance [of entrepreneurs] in the weekly center meeting; (2) Group pressure-if someone is defaulting; (3) Continuous interaction with borrowers through different kinds of workshops, and (4) A center fund to take care of defaults.

The Shakti Foundation provides loans for at least 15,000 women in urban areas (Microcredit Summit Campaign, 1997). Microcredit programs can serve several thousand borrowers or less than a hundred borrowers while remaining sustainable.

The sustainability of microcredit banks is also achieved through the efforts of many organizations that improve the quality of microcredit banking services. Established by the UNDP, the MicroStart Program uses experienced microcredit consultants to assess new programs (Microcredit Summit Campaign, 1997). Other organizations such as Calmeadow, a Canadian non-profit, also provides business services to microcredit programs. When the Get Ahead Foundation in South Africa suffered from an over extension of services from 3,000 to 8,000 clients, low repayment rates, and deteriorating group lending practices, Calmeadow helped the Get Ahead Foundation by evaluating management practices, enforcing group lending practices, and improving their computer system. These changes allowed the Get Ahead Foundation to serve at least 10,000 clients, and the changes led to an increase in the repayment rate from 73% to 91% (Microcredit Summit Campaign, 1997).

Measures also need to be taken to reduce the default rate by ensuring that microcredit loans are not used to cover the cost of funerals, weddings, or other non-business expenses. Sinha (1976) suggests that one of the major threats to rural credit programs is the tendency of borrowers to fall back on loan sharks when an unexpected need for money, as in the case of a funeral, arises. In Bangladesh, the Grameen Bank started the Emergency Fund to provide interest free loans when such an event arises. Entrepreneurs are required to routinely contribute to the fund as a group. Each client at the Grameen Bank contributes one taka to the fund, and a percentage of the principal is added to the fund. The lending group can choose how the funds should be distributed (Bouri, 1997).

**Businesses**

Businesses started with microcredit loans must compete with commercial businesses which have "more secure sources of supply, better distribution channels, and operate in a more benign policy environment" (InterAction, 1997). To increase the "competitive advantage" of the entrepreneurs, Appropriate Technology International, Save the Children, and TechnoServe are among the many organizations which aid micro-businesses with technology, marketing advice, and training (InterAction). Technical aid and business training become increasingly important as the entrepreneurs' businesses grow. Bouri (1997) suggests that access to technical support, in turn, lowers the default rate on microcredit loans.

The unique political, social, and economic contexts of the programs need to be taken into account; thus, political and economic policies of governments affect the viability of micro-enterprises. In some post-Communist countries that have high unemployment and low government funding, regulations and high taxes further hinder entrepreneurs' efforts to start businesses (Microcredit Summit Committee, 1997). In Bangladesh, the social context is particularly important to the viability of businesses started by poor women. Practitioners realize that studying the existing social structure of communities where microcredit programs are introduced is important for both insuring the well being of the client and integrating new businesses into the local economy. Efforts are made to allow poor entrepreneurs to achieve economic mobility while taking into account the power of the elites and cultural norms (Bouri, 1997).

## FOOD SECURITY

The role of microcredit in achieving food security needs to be addressed in context of the Harris (1990) explanation of malnutrition as "a social construct as much as a biological state or process, an economic input as well as an income," with income being the most important consideration in this three tiered process. In addition to reducing food scarcity through increasing incomes, Ayres and McCalla (1996) note that increasing agricultural productivity globally, improving health care, and nutrition are also essential to achieving food security. Various microcredit programs offer health and agricultural services; thus, microcredit may be a viable approach to the multi-causal problem of hunger in developing countries.

Social development and economic development generally have an interdependent relationship for people living in poverty. When the structure of a society restricts women from employment opportunities, their ability to generate an income which can be used to secure food is also limited. The social structure needs to allow women to generate income that, at the same time, will be used to gain respect in society. The process in which participation in microcredit programs leads to increased food security is shown in Figure 1.

While microcredit programs may alleviate food scarcity through social development, economic development, and increased agricultural productivity, microcredit is not suggested as a cure-all for the problem of hunger in developing countries. Kates and Millman (1992) define three causes of hunger: (1) Food shortage, where there is not enough food in a bounded region.; (2) Food poverty, where there may be sufficient food but some households do not have the sufficient means of obtaining it; and (3) Food deprivation, where the household may have sufficient food, but food may be withheld from individuals, special nutritional needs may not be met, or illness may prevent proper absorption. Microcredit may not be a viable food security strategy when, for a example, a food shortage occurs because failed transportation infrastructure does not support trade. Microcredit, however, may help to reduce a food shortage if loans to purchase fertilizer or other agricultural inputs increase productivity. Microcredit may alleviate food poverty by helping entrepreneurs to increase their spending on food by, first, increasing their incomes. Microcredit programs may help to reduce food deprivation through social development. Women who contribute to the family's income may also have a greater role in deciding how food should be distributed to family members.

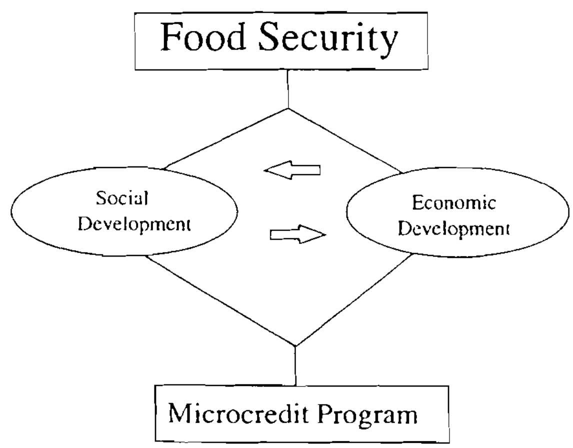


Figure 1. Process in which participation leads to increased food security.

Microcredit may also be a viable food security strategy because the programs are implemented at the local level. According to Holmes (1995):

> In most of the past half century, food security was seen only in macro terms–that is, ensuring that the rate of food grain production surpasses population growth, and that there are buffer stocks appropriate to emergencies. This will not suffice. The world now recognizes that food security must be established at every level: regional, national, household, and even among the members within a single household.

The case of Tibiwa Asani in Bugembe, Uganda demonstrates the impact of participation in a microcredit program on the household. Asani's family suffered from hunger because they did not have enough money to buy sufficient amounts of food. According to Asani, "The whole family was becoming thin and wasted." Asani shares her home with her husband, co-wives, mother-in-law, ten children, and grandchildren. To add to the family income, Asani sold groceries along a road, but her profits were low. Asani joined a microcredit bank known as Cuebezow. Asani bought 50 chickens with her first loan of US $75 dollars. After increasing her profits and expanding her business, she received a loan for US $600 dollars. Asani used her profits to pay her loan and send her children to school. With her new income, she also built a brick home and purchased a cow. According to Asani, "Now I don't have to ask my husband for anything." Asani has accumulated at least US $600 dollars in savings and, her family no longer suffers from malnutrition (RESULTS Educational Fund, 1997).

**Social Development**

Microcredit programs are instrumental in achieving social development through educational services and through empowering women to earn incomes high enough to change their living conditions. Improved food security is likely to be achieved as the rising incomes of women increase their opportunity to make family planning decisions. The increased confidence of entrepreneurs are the less quantifiable results of entrepreneurship. Todaro (1997) has emphasized the importance of self-esteem, human freedom, and sustenance in development. Microcredit programs achieve these three aspects of development. Microcredit programs provide women the access to resources which social structures may not normally allow them to access. This is evidenced by the case of Mursheda in Bangladesh. Mursheda was confined to her home by the custom of Purdah until her husband quit his job and took another wife. She moved in with her family and worked for lentils and two handfuls of rice a day. She joined a group of five women to take out a loan from the Grameen Bank. With the first loan of $50 dollars, she bought a goat. With a second loan of $100 dollars, she bought thread. With a third loan of $300 dollars, she started a scarf business which employs several other women. Keeping almost all of her profits now, she can afford to send her children to school, and she can purchase a bed, cows, land, and a sanitary latrine. Mursheda notes that, "People respect us. We hold a lot of money now. We can approach people with dignity" (*Faces of Microcredit,* 1997). According to Wahid (1994), the Grameen Bank has helped to:

> . . . revolutionize the rural people's attitude toward women and work in . . . an Orthodox Muslim society like Bangladesh [where] women have been subjugated historically to many social vices such as early marriage, excessive child bearing as well as illiteracy and unemployment.

Before receiving a loan from the Grameen Bank, entrepreneurs must agree to 16 principles of social and economic development. Principle number 11, a kind of social charter, demands that "We shall not take any dowry in our sons' weddings, neither shall we give any dowry in our daughters' weddings. We shall not practice child marriage" (Smith, 1997).

The success in improving the social status of women is not limited to Bangladesh. Among the outcomes of the Women's Initiative Fund, a microcredit program in Egypt, are: (1) Thecreation of non-traditional job opportunities for women; (2) The improvement in the overall status of women, through provision of information on legal rights, occupational safety, environmental issues and child welfare linked to training and technical assistance; and (3) A new respect for women in the community, with increased exercise of choice on such matters as marriage and the spacing of children (Lalonde, 1997).

The United Nations Population Fund (UNPF, 1997) supports the use of microcredit programs to achieve social development through economic development. The UNPF suggests that increasing the incomes of women is linked to decreasing fertility rates and increasing attention to health care, the education of children, and family food security. Women spend more money on purchasing food for the family and "where women have provider responsibilities, it is generally the mother's, rather than the father's, income or food production that is more closely related to children's nutrition" (UNPF, 1997).

**Economic Development**

Increasing the incomes of people affected by food scarcity is essential to achieving food security. According to Amartya Sen (1992), low incomes lower the demand for food which in turn lowers the supply of food at local markets. This process may be reversed as the poor acquire "food entitlements" which are the means such as trade, social security, and employment that are necessary to generate incomes to purchase food. The relationship between income and food security is evident in Table 1. Individuals who have incomes below $300 generally have a calories supply of as much as 1,997 each day (1982). In contrast, people who have incomes of at least $300 have access to at least 2,470 calories daily (1982).

Table 1. Daily Per Capita Calories Supply by Income, 1982.

| Income Group | Total Calories | Percent of Requirement |
|---|---|---|
| Below $300 | 1,997 | 93 |
| $300-$500 | 2,470 | 106 |
| $500-$1,000 | 2,460 | 108 |
| $1,000-$2,000 | 2,665 | 112 |
| $2,000-$5,000 | 3,709 | 128 |
| $5,000 & over | 2,313 | 134 |

Source: Gillis, M. and Perkins, D. et al., 1987. World Bank, 1985

Attempts to increase the incomes and capital of the poor through microcredit have been widely successful. In 1996, approximately 50% of the clients of the Foundation For International Community Assistance (FINCA) raised their incomes above the poverty line by participating in microcredit programs (Microcredit Summit Campaign, 1997). At the Grameen Bank, the number of cattle owned by entrepreneurs increased by 26% each year. In addition, their capital generally tripled over 27 months. Wahid (1994) cites Hossain's 1985 study of Grameen Bank clients in which Hossain found that women increased their income by approximately 737 taka, and men increased their incomes by approximately 639 taka. In 1986, Grameen Bank entrepreneurs consumed 68 more grams of food per day than people who were not members of the Grameen Bank (Wahid, 1994). Only 12% of the members of a UNICEF sponsored microcredit program in Vietnam did not achieve sustainable levels of food security after three months, while 73% of non-member households reported food shortages (UNICEF, 1997). Microcredit has also increased food security by providing people with access to expensive agricultural inputs such as fertilizer which are needed to increase crop productivity. Borlaug (1997) suggests that increased agricultural productivity through the use of improved technologies is essential to meeting the growing global demand for food. Cited by Wahid, Alam's 1988 study of the crop productivity of Grameen Bank members suggests that clients who practice small scale farming have increased their productivity by growing more high yield variety (HYV) crops. They are able to grow more HYV crops because they have increased their incomes enough to buy the fertilizers and pesticides that are used with HYV agriculture (Wahid, 1994).

## CONCLUSION

The relationship between socio-economic development and food security is complex. Human capital is essential to productivity, and humans who do not suffer from malnutrition are likely to have the "strength, stamina, and ability to concentrate on the job" which are needed to be a productive worker (Gillis et al., 1987). Generating income allows people to have the opportunity to buy food. Parents can buy food for their children who will, in turn, be healthier and more efficient workers (Gillis et al., 1987). Having an income that is high enough to secure adequate amounts of food, goods, and services will not help people to maintain food security unless they are able to spend it. Therefore, the definition of food security may be further extended to take into account access to facilities such as schools, hospitals, and food markets. This requires that economic development through microcredit programs occur in tandem with infrastructure development. Moreover, gains made even from microcredit endeavors depend in part on infrastructure development. Smith (1997) notes that capital accumulated through microcredit may be lost in the case of a flood in Bangladesh. Highlighting the need for a multifaceted approach to development at the 1997 Microcredit Summit, Yoweri Museveni explained that agricultural reform, more education, an improved food processing capacity, less protectionism, and changes in bureaucracy are needed to set the stage for microcredit programs in Uganda. Although many obstacles to overcoming widespread poverty, such as poor physical infrastructure development and political instability, are not within the scope of microcredit programs, the success of microcredit is demonstrated at the level of the household and individual.

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