AIMS

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PRACTITIONER-LED IMPACT ASSESSMENT: A TEST IN MALI

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ACRONYMS

AIMS	Assessing the Impact of Microenterprises Services Project
ANOVA	Analysis of variance test
CA	Credit association
CMDT	Malian cotton marketing board
NGO	Non-governmental organization
ODEF	Organization de Desarrollo Empresarial Femenino
PVO	Private voluntary organization
SEEP	Small Enterprise Education and Promotion Network

FOREWORD

The Assessing the Impact of Microenterprises (AIMS) Project seeks to gain a better understanding of the processes by which microenterprise programs strengthen businesses and improve the welfare of microentrepreneurs and their households. In addition, it focuses on strengthening the ability of the U. S. Agency for International Development (USAID) and its partners to measure the results of their microenterprise programs. The core agenda of the project includes desk studies, focused field research, three major impact assessments and the development and testing of tools for use by private voluntary organizations and non-governmental organizations to track the impacts of their microenterprise programs.

This paper reports on the second test of tools for organizations to use to track the impacts of their microenterprise programs. Subsequently, the results and lessons learned from the two tools tests will lead to development of a manual containing practitioner tools and guidance for their application.

Additional information about this USAID-funded project, as well as copies of AIMS publications, are available on the AIMS home page (http:\\www.mip.org). The AIMS publications include those which address specific issues and those based primarily on field work applying the AIMS approach to assessing the impact of microenterprise programs. Included in the latter will be papers on the three major impact assessments which focus on specific programs and cover program participants and a comparable group of non-participants. The three assessments will consist of information obtained through two rounds of data collection, with a two-year interval between the survey rounds, complemented by case studies and focus group discussions.

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The authors are particularly thankful to Elaine Edgcomb and Carter Garber who conducted the first tools test and paved the way for the second. In addition, the final version of this report greatly benefited from the in-depth feedback provided by Monique Cohen of USAID and Elizabeth Dunn of MSI and the excellent editorial skills of Robin Kipke of Freedom from Hunger.

A very special thanks needs to be extended to the clients, themselves, who welcomed the team with open arms and volunteered, in many instances, an entire day to the effort. Their enthusiasm and dedication was inspirational and illustrated, firsthand, what the *Credit with Education* program is all about. Their graciousness is best exemplified in the following quote from a village leader as she presented the evaluation team with a sack of millet:

> *"Your tool is a pen, and we have profited from your tool; our tools are our hands, the land, and we would like you to profit from our tools."*

[1] *Credit with Education* is a service mark protected by Freedom from Hunger for the exclusive use of member organizations of the *Credit with Education* Learning Exchange.

EXECUTIVE SUMMARY

This report documents the second field test of practitioner impact assessment tools designed as part of the PVO-NGO component of the U.S. Agency for International Development's AIMS Project. In an effort to develop low-cost, yet effective ways practitioner organizations can collect information and generate credible findings about the impact of their microenterprise programs, the PVO-NGO component of the AIMS project is charged with developing, testing and refining useful tools within the scope of practitioner resources, staff availability and expertise to implement and analyze their program impact.

Over a three-week period in March 1998 with Kafo Jiginew's—a Malian credit union— *Credit with Education* program, two facilitators contracted by the SEEP Network and a trainer from Freedom from Hunger trained and worked with a team of nine Kafo Jiginew staff to collect and analyze impact data, using five data collection instruments. The three-week period included a week of training, instrument testing and planning; a second week of data collection; and a third devoted to analysis.

The impact survey was administered with three sample groups—one-year clients, two-year clients and incoming clients (women interested in the program who had not yet received any services), and the qualitative tools were conducted with two-year clients. Due to the test nature of the activity, only a minimal number of *Credit with Education* clients were interviewed with each tool. Still, the process provided Kafo Jiginew with a rich variety of information to document better the impact of its *Credit with Education* program as well as to improve program services. Positive program impact was seen at all levels.

At the microenterprise level, a progression of changes for clients over time was evident. While the current clients (one- and two-year clients together) were significantly more likely than incoming clients to have expanded their businesses, added new products, reduced costs with cheaper credit or developed new businesses in the last 12 months, only two-year clients were significantly more likely to have acquired business assets, invested in a marketing site, hired more workers and improved the quality of their product. In addition, only the two-year client sample showed significant improvement in indicators meant to capture entrepreneurial skill and differentiation between the enterprise and the household.

At the household level, program participation enhanced the ability of the households to reduce risk and deal with periods of crisis or economic difficulty. Current clients were significantly less likely than incoming clients to have experienced a period of acute food insecurity or to have been unable to conduct their enterprise due to lack of money. Current clients were significantly more likely to have personal savings and report increased income in the last year than incoming clients, and two-year clients also had more diversified enterprise strategies. The qualitative tool found clients were more directly contributing to the basic needs of their households and felt they could better ensure their familes' health. However, the survey found few quantitative differences in household welfare.

At the individual level, this increased financial security as well as exposure to education and self-confidence sessions may be responsible for the greater sense of empowerment current clients felt. They reported feeling more confident to take a loan, to "solve any problem that presents itself," and to deal with family crises. They also felt they were better able to manage their enterprise(s), care for their children and contribute to household expenses or purchases.

At the community level, current clients felt the program enabled them to increase their attendance and participation in important ceremonies and to have greater leadership roles in the community. This may be attributed in part to the solidarity and relationships with other women in their credit associations, which clients mentioned valuing so highly in each of the assessment tools.

In addition to these positive impacts, the assessment tools raised a number of issues for Kafo Jiginew to consider further as it looks to improve and evolve the *Credit with Education* program. A high percentage of clients reported using at least some of their most recent loan for nonproductive uses. Spending loan capital directly on clothing or articles for the family was associated with a client's longer program participation, while channeling part of the program loan to other family members was associated with larger loan sizes. Although the Kafo *Credit with Education* program has enjoyed excellent repayment rates to date, these practices potentially threaten its success.

Another finding was that average loan sizes and enterprise returns were as much as six times higher in towns than small villages for clients of the same duration. Given the goals of the *Credit with Education* program to improve Kafo's outreach to a relatively poorer and remote clientele, the program is committed to providing services to these communities. However, it might be appropriate to apply different program policies for initial and subsequent loan sizes that would better respond to the demands of some of the clients in towns and potentially enable higher program revenues earned in urban areas to partially subsidize outreach to more remote villages.

In terms of keeping good clients, the single most common reasons ex-clients gave for why they had left the program was sickness or death in the family. Kafo might explore ways the program or credit associations themselves could better address clients' health crisis problems, e.g. an emergency fund for serious illness or death, or improved coordination with health services where available. The ex-client responses indicate that, while they valued the program during periods of health crisis, they were unable to sustain their membership.

Similarly to the first tools test, Kafo Jiginew and Freedom from Hunger staff demonstrated that practitioners *can* conduct credible, useful and relatively low-cost impact assessments of their microenterprise programs. However, in both test sites, it was clear that certain organizational infrastructure and considerable commitment, skill and administrative support are required for the assessment to be successfully carried out.

One of the goals of the AIMS project is to develop assessment tools that practitioners can implement without additional external assistance. The assessment team discovered that the client exit survey and the client satisfaction group discussions were somewhat more practitioner-friendly than the other three tools. Whether additional technical assistance would be necessary or useful depends of course on practitioner staff expertise and time availability. In order to conduct the assessment properly, expertise as well as previous experience is needed to train interviewers, conduct sampling, code and analyze quantitative data and qualitative content. If the practitioner staff lack these skills, it would be advisable to seek outside expertise, ideally local, to play an instructive role in these areas.

Another issue that will affect whether outside assistance is required is the amount of staff time required to conduct a full application of the tools. While ideal sample sizes for the impact survey have yet to be determined, it is intended that a fuller application of the assessment tools would include a greater number of interviews. This would, of course, increase costs and requirements of staff time — two very important issues for microenterprise programs. Because such programs are typically committed to cost-effectiveness and financial sustainability, their staff already have very heavy workloads. Field agent absence for periods of longer than even two weeks begins to jeopardize the quality of service offered to existing clients and slows expansion to new clientele. As mentioned in the ODEF report, there are a variety of ways the assessment tools could be applied. All five assessment tools need not to be conducted during the same time period which would reduce the intensity of demand on staff time. Still, with larger samples, the total amount of time needed for data collection and processing will inevitably increase. Therefore, some practitioners might opt to involve individuals other than current field staff in the assessment (e.g., university students, local research groups or new staff).

Additional work remains to be done on the practitioner tools, particularly the impact survey, to make them more manageable. Shortening the survey and simplifying some of the questions would reduce the amount of time required in all stages — data collection, data entry and analysis. SEEP also plans to develop additional guidance for the application of these assessment tools, including analysis guidelines. With these additional refinements and guidelines, the assessment tools can be made even more practitioner-oriented.

Perhaps the most encouraging lesson from the second tools assessment was that, for relatively modest costs, practitioners can both better document <u>and</u> learn from the impacts their microenterprise programs are having on clients and client households. Certainly a longitudinal design tracking the same clients and nonclients over time, together with more advanced statistical analysis techniques, would have provided findings that could less equivocally be attributed to the influence of the program. However, such an approach is not feasible or even desirable for many practitioners. Yet, learning about and from client-level impact is essential to microenterprise practitioners. As one senior Kafo Jiginew official explained, *Credit with Education* is about more than figures and numbers (loans made and repayment rates). It is about "durable development" which means increasing people's skills, their self-confidence, their well-being and their participation in the development process. The AIMS project provides practical tools for assisting practitioners who want to go beyond the program performance figures to understand better and improve the capacity of their microenterprise programs to achieve durable development.

I. INTRODUCTION

Credible impact research has often been considered outside the capabilities of practitioner organizations because they don't have the expertise, resources or time to carry out such studies. The PVO-NGO component of the AIMS project is intended to respond to this challenge. Its purpose is to develop a set of tools which could be used by practitioners to generate useful and credible assessments which capture the range of social and economic impact of their microenterprise programs on clients, their businesses, households and communities. For practitioners to be able to do this with no or only minimal external assistance, the tools must be low-cost, quick and within the scope of staff expertise, experience and availability to collect and analyze the data.

Five assessment tools were designed by a team of PVO practitioners to collect quantitative and qualitative data addressing a set of AIMS project hypotheses about impact as well as information about client satisfaction which would help the practitioner organization improve its services. The five tools are:

1) An impact survey to collect information to test AIMS project hypotheses.
2) A client exit survey to determine why clients left the program and whether motivating factors were related to the program or not.
3) In-depth individual interviews about loan use over time.
4) In-depth individual interviews about empowerment.
5) Client satisfaction group discussions about the program and their suggestions for improvements.

This document reports on the second field test carried out in the *Credit with Education* program area of Kafo Jiginew, a Malian credit union federation, in March 1998. (The first field test was carried out with Organizacion de Desarrollo Empresarial Femenino (ODEF) in Honduras in September 1997.) The objectives of both field trials were to:

1) Test a process of training, data collection and analysis conducted by and for practitioners.
2) Assess whether the tools applied were simple, credible, useful and cost-effective.
3) Analyze all the data collected and document, to the degree possible, the impact of the *Credit with Education* program on its clients.

The experience of the two field tests will be used to refine the tools, develop a manual, and conduct two field-based workshops which will be offered to the PVO-NGO community. Because the purpose of these tests was to assess the practitioner tools themselves, only a minimal number of interviews were conducted. In the coming year, ODEF and Kafo will conduct a fuller application of the tools with larger sample sizes.

This report describes both the outcomes of the assessment and the process itself. Section I presents the underlying assumptions of the AIMS project and lays out the specifics of the test in Mali. Section II provides some background on the practitioner organization which served as the test site. Sections III and IV lay out the logistics of the test, the assessment design and sampling methodology used. Section V examines loan and enterprise profit use and their link to the types of impact that can be expected. Impact findings related to the AIMS hypotheses, client exit and client satisfaction are found in the next three sections (VI-VIII). Section IX highlights the institutional implications of the assessment findings. The final section, X, highlights lessons learned and examines the feasibility of practitioners conducting similar assessments. The appendices include the specific hypotheses tested, the assessment schedule, as well as more detailed information on the Kafo staff involved, the impact variables used and the qualitative findings.

A. Conceptual Background

The fundamental purpose of the AIMS project is to provide practitioners with a framework for understanding more clearly how microenterprise development intersects with the economic goals and behaviors of individuals and households. This framework, based on the household economic portfolio model, suggests that impacts may be found at the levels of the enterprise, individual, household and community.

The household model demonstrates how a microenterprise is situated within a broader household strategy to achieve economic security and family well-being. The model suggests that a household's economic activity can be viewed as a portfolio of income-generating and investment strategies designed to act together to achieve specific goals. Because the microenterprise is firmly embedded in the household, especially among poorer families, searching for impact of microenterprise programs requires examining the full range of economic activities undertaken. The model allows practitioners to address the issue of fungibility of credit by opening up the range of possible impacts to include those on other productive activities in the household, on consumption and by providing an explanatory framework for these choices. The model also recognizes that decisions about economic activities and the use of resources within the household may be joint or separate, thereby suggesting the importance of examining decision-making and resource control on the part of female clients with respect to the microenterprise. For this reason, enterprise development may have both social and economic effects, and impact must be sought in both areas. Lack of impact in the most obvious place — the target enterprise — does not mean there is no impact at all. This does, however, increase the difficulty of designing simple tools.

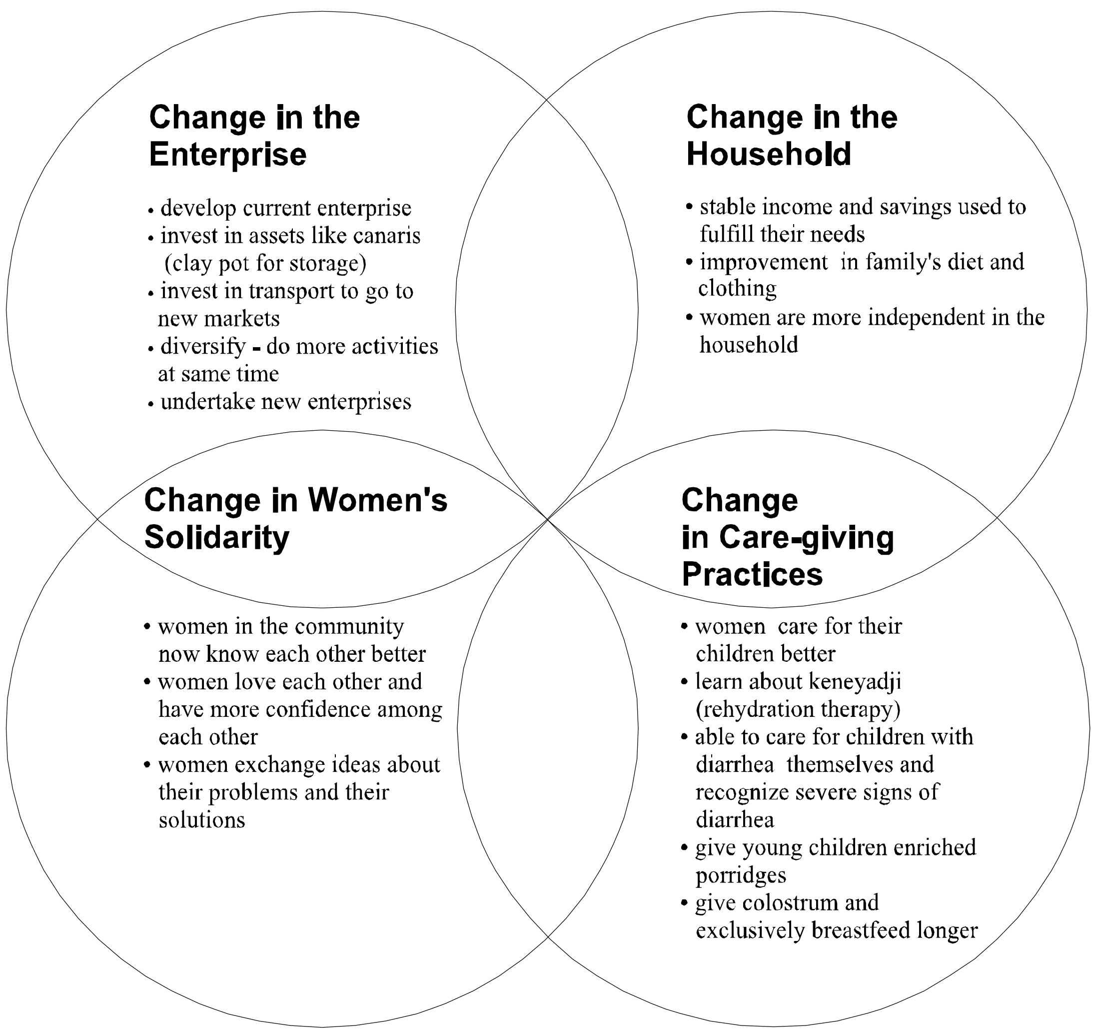
B. Hypotheses and Client Satisfaction

The practitioner tools were designed to provide data across a wide variety of program methodologies and contexts regarding hypotheses outlined in appendix 1. These hypotheses were selected by a working group of practitioners as the key ones that concerned them from the larger set of AIMS project hypotheses. Program operators also have an interest in information that will help them improve program services, and ultimately the impact. As programs become more market driven, there is a need to understand better what clients like and dislike about program services, what changes they would suggest and which factors enhance client loyalty, and which lead clients to leave the program. Recognizing this, the tools were designed to assess and better understand client knowledge and satisfaction with the program as well as to investigate specific impact hypotheses. In each case, the tools should be tailored by each practitioner organization to investigate specific hypotheses and other areas of inquiry as dictated by the emphases of its program goals and services.

C. Domains of Impact

As part of the tools assessment, a participatory exercise was conducted with field staff to identify the principal domains of impact of the *Credit with Education* program. Field staff were asked to reflect and list the three principal changes they saw the program having in the lives of women who were members. Figure 1.1 groups these changes into four principle domains of impact. Because of their more open approach, the qualitative tools and client satisfaction questions gathered information pertaining to each of these four domains. The impact survey, however, primarily addressed the enterprise and household changes because the sub-group of hypotheses selected as the focus of this tool did not specifically address borrowers' solidarity or care-giving practices.

Figure 1.1 Staff Participatory Exercise—Principle Domains of Impact of the *Credit with Education* Program



II. THE MICROFINANCE PROGRAM EVALUATED AND ITS CONTEXT

The second field test of the tools was conducted with clients of the *Credit with Education* program of the Kafo Jiginew Savings and Credit Union of Southern Mali, one of the most successful credit union networks in West Africa. In the Bambara language, a *kafo* is a union or federation and a *jiginew* is a granary. To farmers of the region, the name implies both security and wealth.

Kafo Jiginew was established under the auspices of the Malian cotton marketing board (CMDT) in 1988 to serve as the central credit union for a network of small rural savings and credit union cooperatives *(caisses)*. The Kafo network consists of 74 self-managed credit union cooperatives or caisses that, as of December 1997, were serving more than 46,000 members, primarily male farmers. In recent years, however, Kafo has taken significant steps to improve its outreach and increase the number of women members by offering loan products they find attractive and manageable. One of these steps was the partnership it entered into with Freedom from Hunger in early 1996 to implement an integrated strategy called *Credit with Education*. This strategy is an integration of credit, savings and nonformal health and nutrition education for groups of rural women.

A. Overview of Kafo Jiginew Structure and Services

Headquartered in Koutiala, Kafo Jiginew serves as a central liquidity fund for the cooperative, investing or redistributing surpluses from the network (Freedom from Hunger, 1997). Kafo also provides centralized accounting, inspection and training services, and serves as a central supplier and purchasing agent for the cooperatives. This structure ensures uniformity in accounting, reporting and pricing, while allowing members to control matters of most concern to them, such as credit approval and loan recovery. The Kafo Jiginew office is staffed by a general manager, a manager of training, a program manager of the *Credit with Education* program for women, two accountants, two inspectors and various support staff.

The network is operated according to the standard Savings and Credit Cooperative (COOPEC) structure wherein members serve as both clients and owners. Each credit union cooperative has a Board of Directors consisting of 12 members, including two local managers/cashiers, a supervision committee and a credit committee for reviewing loan requests, all of whom receive training from Kafo staff. To become a member of the credit union, it is necessary to deposit approximately US$10 known as "the social contribution" which cannot be withdrawn while a member. Membership provides clients access to savings and loan services. Every cooperative is expected to reach financial self-sufficiency within its fifth year of operation.

Although a *Credit with Education* credit association has on average approximately 25 members, the association as a whole is counted as a single cooperative member because it maintains a single savings account with the local credit union cooperative. One or two *Credit with Education* field agents are assigned to each cooperative interested in offering the program. The field agent travels to surrounding communities to promote the program, help organize and train new credit associations and extend credit, savings and educational services to as many as twenty different credit associations in the area of the local cooperative. A program coordinator supervises from six to ten field agents and manages one of three district-level *Credit with Education* program offices.

1. Savings Services

Kafo offers two savings products to its members — savings accounts which pay 4 percent interest annually and one-year time deposits which pay 6.5 percent interest annually (Kafo Jiginew, 1997). Savings deposits are an important source of liquidity for Kafo and provide the bulk of the loan capital granted to borrowers. However, because of the seasonality of farming activities in the region, savings accounts fluctuate dramatically during the year. Furthermore, demand for credit exceeds the supply of savings. To meet all of the demand of its members in the region, Kafo has established a line of credit with the Banque Nationale du Développement Agricole (BNDA) at an interest rate of 9 percent.

Savings policies and services for the *Credit with Education* members are somewhat different. Individuals' savings are held in a credit association group account with the local cooperative. Members are required to save a minimum of approximately $.20 at each meeting although they are encouraged to save more. Individuals' savings can be withdrawn at the end of each four-month loan cycle.

2. Loan Services

Kafo offers four basic loan products, the most recent addition being *Credit with Education* (Horus Banque et Finance, 1997). The first three products offer loans to business owners and farmers with sufficient collateral and personal guarantee. To receive one of these loans, members must wait six months after opening an account with a network cooperative. The most common loan product is the agricultural loan obtained by farmers during the dry season before cotton planting and repaid after the harvest. As much as US$6,000 can be borrowed at 2 percent interest per month, typically for nine months. In addition to personal guarantees, applicants must offer the crop harvest as collateral. Short-term working capital loans of up to US$100 may be obtained for profitable commercial activities at an interest rate of 4 percent for one to three months. Medium-term equipment loans for the purchase of farm equipment are available for up to three years at an interest rate of 1.2 percent per month. The equipment purchased serves as security in addition to the personal guarantee and collateral requirements.

The fourth type of loan product is offered to credit associations of poor women through the *Credit with Education* program. These loans are atypical in that they are granted without physical collateral to credit associations which then disburse individual loans to their members who mutually guarantee each other's repayment. The interest rate on these 16-week loans is 3 percent per month which is higher than the other three loan products. In December 1997, after a little over one year of program operation, *Credit with Education* loans outstanding represented 6 percent of the total portfolio of loans outstanding although the 7,164 credit association members comprised approximately 19 percent of Kafo Jiginew's borrowers.

Table 2.1. Volume of Loans (in US$) of Kafo Jiginew Loan Products 1993 through 1997

	Agriculture	Working Capital	Equipment	*Credit with Education*
September 1993 $1=295 FCFA	783,000	17,000	7,000	-
April 1996 $1=490 FCFA	1,170,000	302,000	286,000	49,000
December 1996 $1=500 FCFA	3,466,000	114,000	366,000	138,000
December 1997 $1=550 FCFA	3,460,000	125,500	430,000	285,000
Percent of Total Portfolio - 12/97	78	3	10	6

3. The *Credit with Education* Program

a. Partnership with Freedom from Hunger. In early 1996, Kafo Jiginew and Freedom from Hunger formed a partnership to offer microfinance services together with nonformal education to poor women through the *Credit with Education* program. By adopting *Credit with Education*, Kafo sought to improve its credit portfolio risk by further diversifying lending to microenterprise activities that have high repayment rates and a different seasonal demand from agricultural loans for cotton. Kafo also aimed to increase its outreach to a poorer clientele and a greater number of women. The nonformal education and group capacity-building offered through *Credit with Education* provides an additional service for members which increases social benefits in a cost-effective and financially sustainable manner. Through their participation in the program, it is intended that women will build their productive assets, accumulate savings, enhance their organizational capacity and self-confidence and improve their knowledge and practice of critical maternal and child health and nutrition behaviors. Ultimately, it is hoped that individual women will graduate from the *Credit with Education* program and themselves become individual members and borrowers of Kafo.

Freedom from Hunger's role in this partnership is to provide the technical assistance and training required to build Kafo Jiginew's capacity to manage the expansion of *Credit with Education* and the full integration of the program into its operations. Through jointly sought grant funding, Freedom from Hunger supports the administrative costs of the *Credit with Education* program not covered by interest and fees paid by clients for at least the first five years of the program.

Kafo Jiginew manages all aspects of the program and finances the necessary credit funds together with participating cooperatives. The *Credit with Education* program manager is based out of Kafo's headquarters, while field agents are attached to each of the participating cooperatives. The field agents, or *animatrices,* facilitate the education sessions and train and supervise 15 to 20 credit associations in the management of the credit and savings. Each credit association, as a group, becomes a member by paying a subscription fee and maintaining an account with the cooperative to which it is linked. Unlike the original village banking methodology as designed by FINCA, there is no expectation that individual credit associations will "graduate" from the program and operate as autonomous village banks separate from Kafo Jiginew.

b. How *Credit with Education* works. The *Credit with Education* program operates in the following manner. Credit associations (CAs) of 20 to 30 women are organized and subdivided into solidarity groups of four to six members for a two-tier system of joint guarantee. The CA applies for a loan from the local Kafo cooperative based on the individual loan requests of its members. Members can ask for as little as US$5 and as much as $US50 for their initial loan. Each cycle the loan amount can increase by $25 up to a maximum of US$300. Each woman must get approval for her loan amount from her solidarity group as well as from the whole CA. Once the CA receives its loan, the credit is subdivided into the approved individual loans.

At the weekly (or in later cycles, bi-weekly or monthly) meetings, members make loan repayments and minimum 100FCFA savings installments weekly and participate in nonformal learning sessions on diarrhea treatment and prevention, breastfeeding, child feeding, immunizations, family planning, better business development and self-confidence topics. Payments are deposited into the CA account maintained at the cooperative until the 16-week loan cycle ends. The CA loan amount is repaid with interest to the cooperative, and members can access their savings. Depending on repayment performance, the whole process starts again, driven by the loan amounts requested by the members individually and collectively. Members may request loans to finance small businesses, commerce or any feasible income-generating activity in which they choose to engage.

c. Status of the *Credit with Education* program. At the time of the AIMS tools test, Kafo Jiginew's *Credit with Education* program had been implemented for almost two years, growing rapidly over that time to reach more than 7,000 women while always maintaining excellent repayment quality. In early 1998, major expansion was underway into the Sikasso and Fana districts with dozens of new CAs in training.[2] Table 2.2 provides additional details on the status and growth of the program.

Table 2.2 *Credit with Education* Status Report

	December 1996	December 1997
Number of Credit Associations	158	272
Number of Members*	5,789	7,164
Number of Borrowers	4,814	5,745
Amount Lent to Date	$327,610	$989,594
Amount of Outstanding Loans	$140,220	$254,208
Average Loan Size per Borrower	$29	$44
Amount of Savings	$7,219	$99,989
Portfolio at Risk**	0%	0%
Operating Self-Sufficiency (last 6 months)	29%	49%

* Number of members is larger than number of borrowers because some women choose to save with the CA and regularly attend meetings but not borrow.

** Outstanding Balance of Late Loans > 30 days/Total Loans Outstanding

B. Context of the Field Test

[2] According to Kafo Jiginew's *Credit with Education* business plan, by the year 2002 the program will be reaching 30,246 women with an outstanding loan portfolio of $3,613,743. The program will be 104 percent financially self-sufficient. *Credit with Education* will represent 29 percent of Kafo Jiginew's outstanding loan portfolio and 38 percent of the interest revenue from clients. Savings generated by the program will total $386,670.

Kafo Jiginew operates in the heart of the country's "breadbasket" and principal cotton-growing area. The majority of Sikasso's population lives in rural areas that would be considered poor by any standard despite the major contribution the region makes to the country's economic growth and cotton production. Women commonly engage in informal income-generating activities in addition to farming, particularly during the dry season. In fact, most households, including those with salaried jobs, engage in informal activities to supplement their agricultural production. This informal sector accounts for at least 25 percent of the GDP and employs 80-90 percent of the economically active population.

The Kafo network now reaches more than 500 villages in the four districts of the Sikasso region—Koutiala, Sikasso, Fana and Bougouni (see figure 2.1). When the tools test was conducted, *Credit with Education* was only operating in the Koutiala district, although dozens of new credit associations were in training in the districts of Sikasso and Fana and program expansion into these districts was imminent. For the purposes of the tools test, the program communities were categorized into three groups to reflect the range of commercial development in the program communities.

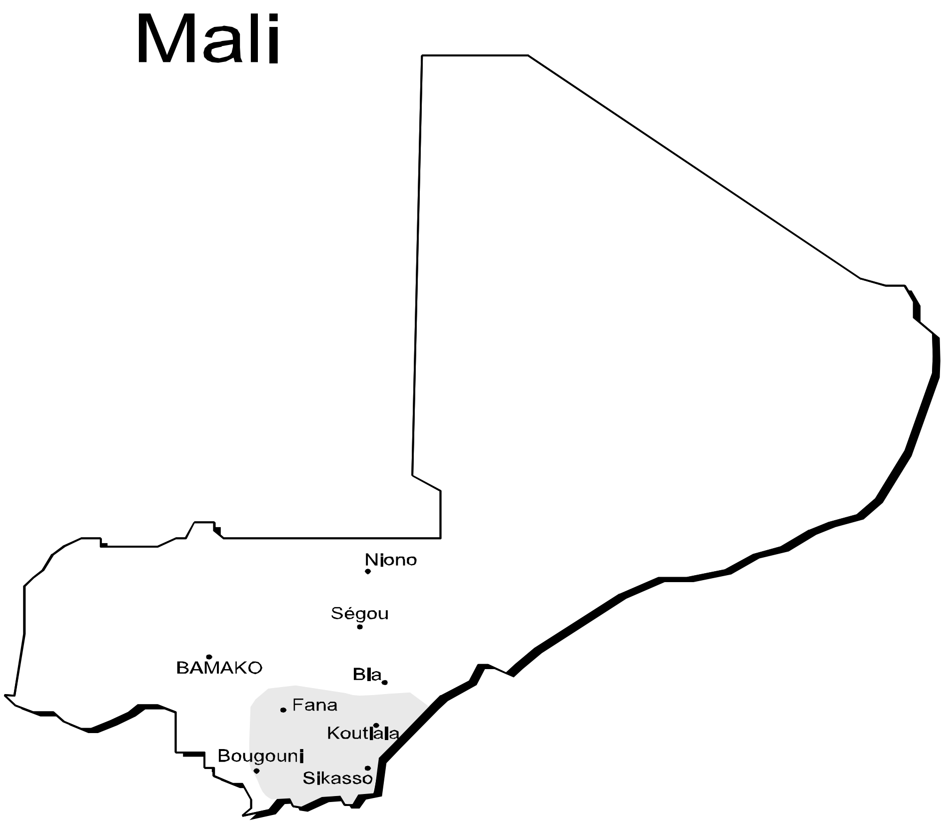
<u>Category 1–Towns</u>. There were only three Category 1 towns in the program area—Koutiala, Sikasso and Fana. These are relatively large towns of between 50,000-85,000 inhabitants. Sikasso is actually a regional capital and is second in size only to Bamako, the country's capital. Category 1 towns are more commercially developed and have better public services (schools, health facilities, electricity) than surrounding villages. These towns are all located on a main road. In addition, of paramount importance is the fact that they have greater commercial activity and daily rather than weekly markets. Many people are able to speak French and virtually all speak Bambara.

<u>Category 2– Large Villages</u>. The Category 2 communities were relatively large villages, each with its own Kafo Jiginew credit union cooperative. Their commercial sector is less active than the towns, but still represent major weekly markets that draw vendors and customers from surrounding communities. Some are on the main road, others are not, but there is usually some form of either daily or weekly public transportation to these villages. These larger villages have public schools and health centers. More people can speak French in these communities and a higher percentage of people are fluent in Bambara than in the Category 3 small villages.

<u>Category 3–Small Villages</u>. The Category 3 communities are relatively small villages with no electricity, public school or Kafo Jiginew cooperative (in one community, a private individual had organized the first years of primary instruction in his home.) Category 3 communities are typically located in more remote areas and none were located on a main road. All have only <u>minor</u> weekly markets that attracted few customers from surrounding communities. Public transportation is not available, so people use donkey carts, bicycles and motorcycles to travel, and many go long distances on foot. Very few people in these villages speak French. In Miniaka villages, often many people cannot speak Bambara, though many may at least understand it.

Section IV provides additional detail on how the tools assessment drew a representative sample of each of these different "types" of communities.

Figure 2.1 Map of Mali and Kafo Jiginew's Catchment Area (the shaded area)



III. LOGISTICS

The field test of the five qualitative and quantitative tools was conducted over a three-week period in March 1998. In collaboration with the AIMS facilitators and Freedom from Hunger trainer, Kafo Jigenew staff carried out each stage of the process from refining the assessment instruments to conducting the analysis of results.

Before the trial, the assessment tools were translated from English into French and sent to Kafo Jiginew for review, recommendations and translation into the most common local language Bambara. This preparatory work made it possible to begin the assessment training with French and Bambara drafts of each of the five impact evaluation tools.

A. Schedule

The assessment began with a week of final preparations for the test implementation which included training interview teams in data collection methods, pretesting and revising the tools, finalizing their translation into Bambara, selecting samples and creating the schedule for data collection. The credit associations and communities for the impact survey and qualitative tool were selected within the first two days. A proposed schedule was made and distributed to the Kafo Jiginew field agents working with these communities. It was necessary to arrange an appointment with each CA so that the assessment tools could be completed in the available time.

In the second week, quantitative and qualitative data were collected and survey data was compiled and computerized. In about a third of the cases, it was possible to schedule the survey to correspond with the credit association's pre-arranged regular meeting to minimize inconvenience to the client. The field agents and CA management committees were tremendously helpful in making the schedule work. In all cases, the women were organized and waiting even when the interview team was late.

The final week was spent training Kafo staff in analysis techniques, analyzing the data collected and reviewing preliminary findings and appropriateness of the various tools. A detailed schedule of activities for the three-week period is included in appendix 2.

B. Staffing

The assessment team was composed of 12 individuals: two AIMS facilitators, one training specialist from Freedom from Hunger and nine Kafo staff members — the C*redit with Education* program manager, three regional coordinators, three field agents, and two Peace Corps volunteers who work with Kafo Jiginew. Apart from the AIMS facilitators, only one of the team members had experience with survey or qualitative research; none of the qualitative team members had previous experience. However, the Freedom from Hunger trainer had considerable experience in conducting surveys and participatory evaluations. A profile of Kafo Jiginew assessment team members is included in appendix 3.

Table 3.1 Staffing

	Quantitative Team		Qualitative Team
Responsibilities of Team	Data collection, coding, analysis of surveys	Data input and analysis	Data collection and analysis of in-depth interviews, focus groups and ex-client survey
Composition of Team	5 Kafo staff (2 field agents, 2 coordinators, *CwE* program manager) 1 FFH Trainer 1 AIMS consultant	1 Kafo staff (Peace Corps)	2 Kafo staff (1 field agent, 1 coordinator) 1 Assistant (Peace Corps) 1 AIMS consultant

The assessment team was divided into two groups as outlined in table 3.1, each assigned to specific credit associations for data collection activities. Because of the different sampling requirements of the two teams, they operated independently of each other—each team with its own car and daily schedule. Every reasonable attempt was made to avoid having Kafo field agents interview clients with whom they normally work. This did, however, occur in just two of the 94 impact surveys. One of the interviewers worked with all of the two-year CAs in the town of Koutiala so it was necessary to have her complete two interviews at the two-year CA selected for the assessment so the team could finish in the available time.

C. Costs

The "testing" nature of this field trial necessitated outside assistance at an additional cost for training and analysis which future pracitioner-led assessments will not require. For this reason the AIMS project covered the cost of salaries and travel expenses for the two AIMS facilitators. In addition, AIMS provided a grant of US$7,500 to Kafo and Freedom from Hunger to underwrite a portion of their costs. Kafo Jiginew's costs (for salaries, per diem, gasoline, driver, photocopying and supplies) totalled US$2,800.[3] Freedom from Hunger's expenses were US$8,700 for the salary, hotel and per diem for the trainer and driver as well as compensation for the use of their vehicle. A total of 197 person days were required to carry out the assessment—68 days for on-site planning, training and pre-testing; 78 days for data collection, 15 days for software installation, data coding, data entry and data cleaning; and 36 days for analysis.

D. Instruments

A combination of five quantitative and qualitative tools were tested in this field assessment for their appropriateness and ability to provide information on the AIMS impact hypotheses as well as client satisfaction.

[3] This figure does not include the opportunity cost of foregone program revenue that field agents might have generated if they were able to do their regular work.

The impact survey was conducted with a sample of 94 one-year, two-year and incoming clients to collect information which tested the sub-group of AIMS hypotheses selected by the practitioner working group. In addition, several open-ended questions were added to explore client satisfaction with the program. The portions of the tools that would be read aloud to clients were translated into Bambara, the local language. In all cases, the field staff would explain the following points before the interview would begin: 1) participation in the survey was voluntary and would in no way affect an individual's program status or access to program services; 2) participants were encouraged to respond to the questions frankly so that the program could learn from their experience; and 3) their identity would remain confidential in any presentation of results. Respondents' answers were coded and loaded into a data file. A simple statistical package, EpiInfo, was used to analyze the survey results.

The exit survey examined whether 20 ex-clients left for reasons related to the program. The exit survey is meant to be used on an on-going basis by the program, particularly if there is a high client turnover rate. EpiInfo was also used to do descriptive analysis of the results although no statitical tests were performed because the sample was quite small and not collected in a random manner.

In-depth individual interviews were held with 12 two-year clients to examine loan use over time**.** Clients were asked how they had used the series of loans they received since joining the program. Analysis of the loan-use tool involved a three-step process: first, the data collected from the 12 interviews was transferred onto a form which captured all of the information from the interviews; second, the most salient information was gleaned from the form and captured on two tables; and finally, the team read through each respondent's "case history" and noted any apparent typologies of loan and profit use through this review. Answers to each question were compared and contrasted and major changes and/or trends were identified and summarized.

Another in-depth discussion guide explored empowerment with 12 two-year clients. Again, content analysis was used. First, answers from each of the respondents were clustered together by domain (individual, household, enterprise, community) and placed in a table with the answers from the past placed alongside the answers from the present. Second, answers to questions in each domain were compared and changes were identified and summarized.

In addition, focus groups were held with six credit associations to discuss client satisfaction and ways to improve the program. Two members of the qualitative team participated in each focus group discussion: one facilitated the group process and the second served as a recorder. The recorder ensured that all opinions and recommendations were captured, especially the reasons why participants supported certain program changes. The analysis plan involved summarizing the number of groups liking or disliking a particular program aspect, their reasons for the need of the program to change and their suggestions for change.

A more detailed treatment of the objectives, characteristics, strengths and weaknesses of each of these five tools can be found in appendix 4.

E. Data Analysis

The objective of both the quantitative and qualitative analysis plans was to use methods that practitioners could apply with minimal training. The analysis of the information collected with the quantitative tools was conducted with a public domain statistical package, EpiInfo[4]. Simple content analysis was used to analyze the case study information collected by the qualitative tools. No computer software was used in the analysis of the qualitative tools since the small number of interviews allowed this to be done manually.

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[4] Information about how to access EpiInfo software and manual is available at www.cdc.gov/epo/epi/epiinfo.html. The manual and software are available in English, French and Spanish.

IV. SAMPLE DESIGN

A. General Design Issues

1. Cross-sectional Design

The impact survey utilized a cross-sectional rather than longitudinal design. Program impact is assessed by comparing the responses of current clients to non-clients at one point in time rather than interviewing the same individuals before and after program implementation. Although the SEEP design team appreciated the strengths of a longitudinal design (particularly when coupled with a comparison group that does not receive the program), it was decided that a cross-sectional approach would be more practical for many NGOs. A cross-sectional design would also provide NGOs with more immediate impact information while requiring less time and expense.

2. Categories of Respondents

The impact survey sampled three categories of respondents; one-year clients, two-year clients and incoming clients. One-year clients were members of credit associations inaugurated approximately 12 months earlier in either March or April 1997. Two-year clients were members of credit associations inaugurated two years ealier in March 1996 during the first month of *Credit with Education* implementation. Incoming clients are women who have indicated their interest in joining the *Credit with Education* program but who have yet to receive a loan.

Another distinction used throughout the study is current versus incoming clients. The one-year and two-year clients together represent the current client sample. The objective of including two current client sample groups in the impact survey was to test the assumption that impact increases with longer program exposure. In the first test of the impact survey in Honduras, the sample of clients was drawn from borrowers of at least one year. To give a greater time dimension to the cross-sectional survey, it was decided for the Mali tools test to include two client groups intentionally: one- year clients and two-year clients.

3. Selection of the Comparison Group

A distinctive feature of the impact survey design selected by the SEEP team for the impact survey was the use of incoming clients for the nonclient comparison group. Incoming clients represented an appropriate comparison group for assessing impact because they have self-selected to join the program as did the longer-term clients. Incoming clients are therefore likely to have characteristics similar to current clients with the important exception that they had not yet received program services. However, it was essential that the incoming clients be selected from the same or very similar program areas as current clients if they were to be an appropriate comparison group.

Because all of the one-year and two-year client samples lived in Koutiala district, it was desirable to include incoming clients from this same district. Unfortunately, at the time of the study no new credit associations in the Koutiala district were in training although program promotion had begun in several new program communities. For this reason, two criteria were used to identify incoming clients. First, in communities where field agents had only conducted one or two community-wide introductory meetings, incoming clients were those women who had added their name to a list of interested persons compiled by a local leader. Second, in communities where CAs were already formed, incoming clients were women participating in the five-week orientation training for new groups.

Although the program has an ethos of extending services to the poorer households in the communities, the only specific entry requirements for joining the program is that a woman must become a member of a self-selected solidarity group that agrees to guarantee jointly each other's loans and the loans of all other members of their credit association. Because women in training are already members of a solidarity group, they have met the program's entry requirement and therefore constitute an arguably better comparison group than the incoming clients who had only expressed an interest in the program. Still, the need to draw respondents from similar geographical areas across the three sample groups led to the decision to apply both criteria for incoming clients.

B. Selection of Credit Associations for the Survey

Credit associations of the desired age were identified. These credit associations were grouped into categories by whether they were located in: category 1— towns, category 2— large communities or category 3— small communities. The two-year sample was selected first. An effort was made to draw the one-year and incoming client samples from the same or similar types of communities as the two-year clients so that the three sample groups would be as similar as possible.

1. Categories of Towns and Villages

As described in section II: B, the *Credit with Education* program communities were classified into three categories: category 1–towns, category 2–large villages and category 3–small villages. To insure that the respondents were representative of the *Credit with Education* program in general, it was important to include the range of these different "types" of communities in which the program is operating. At the time of the tools test, it was estimated that approximately 25 percent of the active credit associations were operating in category 1– towns, 50 percent in category 2– large villages, and the remaining 25 percent in category 3–small villages. Therefore, for each of the three sample groups, one category 1– town, two category 2– large villages and one category 3– small villages were selected for a total of four study communities per sample.[5]

Given the relatively large catchment area and dispersed nature of the program communities, it was also necessary to select communities that could feasibly be visited in the allocated one-week period. In some cases, it was possible to draw one-year clients and two-year clients from the same community. For example, at the time of the tools assessment, the only category 1 town with active CAs was the town of Koutiala. As described below, a two-year and a one-year CA was randomly selected from this same town.

[5] Originally, it was intended that the impact survey would be conducted in 15 credit associations over six days; 5 two-year CAs, 5 one-year CAs and 5 CAs in-training. By the second day of data collection, it was clear that it would only be feasible to visit two CAs per day. The schedule was revised so that 4 CAs from each of the three sample groups would be visited, for a total of 12 rather than 15 CAs.

2. <u>The Procedure for Selecting Credit Associations</u>

The first step in selecting credit associations for the impact survey was to identify credit associations of the desired age. Lists were created of the credit associations that had been inaugurated one and two years earlier. The incoming client group was selected both from credit associations participating in the orientation training and from new communities that had yet to organize credit associations and begin training.

The two-year client sample was limited to those credit associations that were inaugurated in the program's first month of implementation approximately two years earlier in April 1996. A challenge with the two-year client sample was to identify credit associations that had received uninterrupted program services for approximately two years. Although a relatively large number of credit associations — 75 — were inaugurated in the initial April 1996 "class," only eleven credit associations were in their sixth four-month loan cycle at the time of the tools assessment (six loan cycles indicate a minimum 20 months of program exposur). As mentioned in the section of the report on context, many credit associations elect to suspend program services during the rainy season. The desire to interview women who had participated in *Credit with Education* for approximately two years led to the decision to sample only from these eleven sixth-cycle credit associations. These eleven credit associations were classified as to whether they were operating in a town (category 1), a large village (category 2) or a small village (category 3). Credit associations were selected at random from these groupings.

The procedure for selecting the one-year credit associations was quite similar. A list of all credit associations inaugurated approximately one year earlier in March or April 1997 was prepared. Less than a dozen CAs had been formed at that time, and the one-year sample was limited to those CAs that were in their third or fourth four-month loan cycle. For logistical reasons and comparison purposes, one-year credit associations which were located either in the same communities or close to the two-year CA sample communities were purposely selected.

Ideally, the incoming client sample would be drawn from the same or very similar communities as the one-year and two-year clients. Only a single credit union cooperative in Koutiala district (Bongosso) had yet to join the program. A category 3–small village and a category 2–large village were randomly selected from Bongosso and the surrounding villages where initial program promotion had already begun. However, to include a category 1–town and a second category 2–large village, it was necessary to visit one of the districts in which the program was expanding. Because Fana district was located three to four hours from Koutiala, it was decided to limit the incoming sample to the more accessible Sikasso. The only category 1–town in this district was Sikasso proper. One of these eight CAs in-training in Sikasso was randomly selected. In addition, a second category 2–large village located between Koutiala and Sikasso that had CAs in training was selected as the fourth study community.

3. Breakdown of Communities Selected for the Impact Survey Sample

Table 4.1 provides a breakdown of the communities and number of respondents included in the impact survey. As described above, each of the three groups—one-year clients, two-year clients and incoming clients— had a sample of approximately 25 percent from towns, 50 percent from large villages and 25 percent from small villages. Seven to eight clients were interviewed at the 12 credit associations for a total survey sample of 94 women.

Table 4.1 Impact Survey Communities by Category and Sample Group (number of women)

	One-year Clients n=33	Two-year Clients n=30	Incoming Clients n=31
Category 1– town	Koutiala (8)	Koutiala (8)	Sikasso (8)
Category 2– large village	Karangana, Sinsina (16)	Karangana, Ourikila (14)	Bongosso, Kléla (16)
Category 3– small village	Tandio (9)	Jitamana (8)	Kangné (7)

C. Selection of Individuals for the Impact Suvey

Individual women were randomly selected for the impact survey using information from the credit association registers or community lists together with information provided by the women themselves. Upon arrival at a CA, it would be determined how many women had been in the program for five to six cycles for the two-year sample, and three cycles for the one-year sample. From those women with the desired duration of program participation, women were randomly selected for the interviews in one of two ways.[6]

First, when time was short, clients with the desired period of participation would be randomly selected in the standard way using the CA register that lists the borrowers. Starting at a randomly selected point in the list of names, a counting interval would be selected and, for example, by counting every third or fourth name, a woman would be selected for the impact survey. The counting interval that was used was based on the total number of eligible women and the requirement that they all have an equal probability of being selected.

The second selection method used a more participatory approach that also functioned as a good "ice-breaker" or group warm-up exercise without compromising the requirements of random selection. The same number of women as would have been used in the counting interval would be asked to come forward together. For example, if there were 21 eligible clients for the impact survey and a target number of seven to be interviewed, clients would be asked to come forward in groups of three.

[6] At the first CA visited, one client per solidarity group was randomly selected because solidarity groups were the same size. However, this approach was abandoned when it was realized with the second CA that solidarity groups could have different numbers of eligible women which would undermine the principle of equal probability of selection. Therefore, other than with the first CA visited, the methods described in the text above were used to randomly select the sample.

Each would be offered a small square of paper. One of the papers would have a flower drawn on the side that was not visible, while the other papers were blank. The client who selected the paper with the flower was chosen for the interview. This approach created a sense that the women were "lucky" to select the flower or receive the piece of paper. The pieces of paper were also useful for keeping track of women who were picked to be interviewed but, either because of the business of the meeting or the lack of sufficient interviewers, were not immediately interviewed.

D. Sampling for the Exit Survey

Although there was not enough time in the field test to do a thorough and random sample of women who had left the program to include in the exit survey, a "convenience" sampling approach was used to interview enough ex-clients (20) to test the tool. Field agents helped locate former program clients for exit interviews by walking through the community with a member of the assessment team and simply asking women they knew had left the program if they would be willing to be interviewed. Because of this non-random sampling approach, results from the exit surveys cannot be considered representative of all ex-clients. In addition, the exit survey is meant to be used by a program over time with every client who leaves. Therefore, attempts at sampling ex-clients some time after they quit the program contain inherent biases. For example, even if the sampling had been random, it still would have been impossible to interview those who left the program because they moved out of the area.

E. Selection of Respondents for the Qualitative Tools

Two techniques were used to gather qualitative data for this tools test. For the "loan-use over time" and "empowerment" tools, in-depth individual interviews were conducted. For the "client satisfaction" tool, focus group interviews with entire or sub-groups of credit associations were carried out. In Mali, the sample of clients for all qualitative tools was drawn from credit associations active for approximately two years (in their fifth or sixth four-month loan cycle). Only clients who had themselves been active for five or six loan cycles were selected for the in-depth individual interviews.

A total of six credit associations organized in six different communities were visited by the qualitative team. Of the six credit associations that were visited by the qualitative team, one was located in a category 1–town, three were in category 2–large villages and two were in category 3–small villages.

1. <u>Loan-Use Tool</u>

The selection of clients for the loan-use tool was achieved using a sub-sector approach. Twelve clients, representing four common program loan activities, were chosen in an effort to try and capture similarities and differences by loan activity. Using a client activity list compiled by *Credit with Education* (see appendix 5), the following four categories were chosen as being most common: selling cooked food, selling condiments (salt, garlic, soumbala, etc.), selling *dolo* (local millet beer) and non-food commerce. Upon visiting one of the selected credit associations, women engaged in these four types of enterprise were asked to identify themselves and then were randomly selected to be interviewed. Table 4.2 summarizes the number of clients who completed the loan-use questionnaire by their respective primary enterprise activity and the category of community in which they lived.

Table 4.2 Number of Clients Sampled for Loan-Use Tool by Community Category

Type of enterprise	Category 1– town	Category 2– large village	Category 3– small village
Cooked foods n=4	—	2	2
Condiment(s) n= 3	—	3	—
Dolo (local beer) n=3	—	1	2
Non-food (soap/indigo dye and soap/brooms) n= 2	2	—	—

2. Empowerment Tool

In the six credit associations visited by the qualitative team, two clients were randomly selected to be interviewed using the empowerment tool. The client's principle enterprise activity was not a criteria in this sampling. A total of 12 clients were interviewed with this tool.

3. Satisfaction Tool

A total of six focus group interviews were conducted. Again, only credit associations in their fifth and sixth cycles were sampled because this was the criteria the team used for the in-depth interviews, and the focus group discussions were held with the same credit associations.

F. Summary of the Sample Selected

1. Description of the Sample by Evaluation Tool

Table 4.3 summarizes the number of interviews completed by sample group and evaluation tool. Sample sizes were small for each of the assessment tools. Minimum numbers were selected that would provide adequate experience with the tools and some initial level of analysis. Guided by this principle, the numbers interviewed for each element of the assessment were as follows:

Table 4.3 Samples for Quantitative and Qualitative Tools

	Quantitative Evaluation Tools		Qualitative Evaluation Tools		
Kafo Jiginew's *Credit with Education* program	Impact Survey	Client Exit Survey	Empowerment (In-depth Individual Interview)	Loan use *(In-depth Individual Interview)*	Client Satisfaction Group Discussion
Two-year clients	30	7	12	12	6
One-year clients	33	13			
Incoming clients	31				
Total clients	94	20	12	12	

2. Demographic Information on the Sample

The sampling succeeded in producing three survey groups (one-year clients, two-year clients and incoming clients) with similar demographic characteristics. No significant differences were found in the variety of individual and household-level demographic indicators in comparisons between each of the three client categories included in the impact survey.

Table 4.4 Respondents' Individual Demographic Information

	One-year Clients n=33	Two-year Clients n=30	Incoming Clients n=31
Percent married–monogamous	48	47	29
Percent married–polygamous	39	50	61
Percent not married	12	3	10
Mean age (in years)	33	37	31
Mean years in school	2.0	1.8	1.8
Percent never attended school	73	73	70
Percent able to read a letter	21	17	10
Mean number of children	6.5	5.8	5.4
Mean number living children	4.2	4.6	3.7
Number of children who died	2.3	1.1	1.7

Table 4.4 provides demographic information on the individual women included in the impact survey. The overwhelming majority of these women were married; approximately half of these in polygamous unions. For those able to give their age (only 68 percent of the respondents), the mean age was 34 years with no significant difference between the three sample groups. On average, the women included in the impact survey had completed only two years of school with close to three-quarters of the women in each of the three samples attending no school at all. Although one-year and two-year clients were somewhat more likely to read than incoming clients, the differences were not statistically significant. The high fertility and high child mortality rates common to rural Mali were evident in the survey sample. Women in the three sample groups had given birth on average to 5.5 to 6.5 children but on average one or two of these children had died. Sixty percent of the

respondents had had at least one child die. No significant differences in fertility, current number of children, or number of children who had died, were found between the three client categories.

Table 4.5 summarizes information pertaining to the respondent's household. The demographic information pertaining to household size and members reflects the extended nature and consequently large size of many of the households in the program area. The definition of the household employed by the impact survey was those people *who lived together and ate together at least once per day*. An effort was made to identify those individuals that really pooled economic resources rather than simply living together. Even when applying this relatively narrow definition, households in each group were relatively large, having 6 to 7 adults and a total of 13 to 14 people. The largest household comprised 44 persons. Still, no significant difference was found between the three client categories in any of the household-level demographic information.

Table 4.5 Household Demographic Information

	One-year Clients n=31	Two-year Clients n=30	Incoming Clients n=31
Mean number of adults (persons >18 years)	7.10	5.90	6.40
Mean number of children (persons<18 years)	6.80	7.50	6.50
Mean number in household	13.90	13.30	12.70
Percent female-headed household	6.00	3.00	7.00
Mean years of school completed by head of the household	1.50	1.10	2.5 0
Percent of household heads who attended school	82.00	88.00	67.00
Mean number of household members with salaried	0.52	0.50	0.55
Percent of households without a salaried worker	67.00	63.00	64.00

Tables 4.4 and 4.5 indicate that the three sample groups were similar in terms of their individual and household demographic characteristics. However, the communities included in the assessment had very different characteristics in terms of size, commercial development and services. For this reason, the results for some of the key impact indicators are analyzed by community category.

G. Limitations

The greatest limitation of the sample design relates to the size of the sample for the impact survey. As mentioned earlier, only 94 interviews were completed, meaning that each of the three sample groups comprised just a little more than 30 people. These small sample sizes affect the assessment conclusions because differences between groups have to be very large to be statistically significant.

A second limitation or caveat of the assessment is that the two-year client sample really only represents a sub-group of credit associations inaugurated two years earlier—those CAs that elected not to suspend services during the rainy season. So, although the sub-group included in the two-year client sample may not be representative of the very first credit associations of the program, it may be more representative of what is increasingly becoming the norm for CAs in the program.

V. USE OF LOANS AND ENTERPRISE PROFITS

A central impact assumption of most microenterprise programs is that, through their sustained participation, clients are able to work progressively larger amounts of money, earn higher returns and enjoy greater benefits. For this reason, it is important to know the length of time clients included in the impact survey were in the program, the size of their program loans and the amount of their accumulated program savings. Depending on how credit is used, it can have either direct or indirect effects on consumption and welfare. Another key assumption of the AIMS conceptual framework and of most practitioner organizations is that increased returns to the microenterprise will lead to improvement in household welfare. How increased earnings and savings are used will dictate the type of household-level effects.

Drawing from both quantitative and qualitative tools, this section summarizes clients' reported uses for their loans and their enterprise profits. Some differences were evident by length of time in the program and loan size.

A. Access to Credit and Savings Services

Table 5.1 summarizes the one-year and two-year clients' borrowing experience with the program. In general, program loans are small. The average initial loan is well under the $50 ceiling. The current average loan for two-year clients is almost twice that of the one-year clients. A client's location exerts a strong effect on the amount she borrows. For one-year clients, the average program loan was four times greater in the category 1–town than the category 3–small village. Very few either one-year or two-year clients reported facing difficulties repaying their last loan. Of the three clients who had repayment difficulties, two lived in towns and one lived in a large village.

Table 5.1 Program Loan History for Client Sample and Average Current Loan by Community Category (in $US[7])

	One-year Clients n=33	Two-year Clients n=30
Average number of program loans	3.4	5.9
Average amount of first loan	$35	$29
Average amount of current loan	$48	$85
Town (category 1)	$101	$121
Large village (category 2)	$34	$49
Small village (category 3)	$23	$109
Number reporting difficulty repaying their last program	2	1

As described in section II A. 1, *Credit with Education* clients are required to save $.20 per week but they are encouraged to save more than the mandatory amount. Table 5.2 shows client savings with

[7] Exchange rate of 500 FCFA=$1US can be applied for initial loan of one-year clients and a rate of 490 FCFA=$1US for two-year clients. For "current loan" amounts, apply exchange rate of 572 FCFA=$1US.

the program were relatively small—approximately $10 per client.[8] On average, program savings were approximately 20 percent of the program loan for one-year clients and only 10 percent for two-year clients. As with the program loan, borrowers living in the town had higher savings than those in the villages. Still, close to half of both groups saved more than the mandatory amount.

Table 5.2 Client Samples—Program Savings (in $US)

	One-year Clients n=33	Two-year Clients n=30
Average amount of current savings	$7	$8
Town (category 1)	$11	$14
Large village (category 2)	$6	$3
Small village (category 3)	$6	$10
Percent saving more than the mandatory amount	$64	$41

1. Alternative Credit and Savings Services

Respondents could also be borrowing from or saving with sources other than *Credit with Education*. Only one of the incoming clients included in the impact survey reported taking a loan in the last 12 months, and she had borrowed from a formal lender. Thirteen percent of the one-year and two-year clients had borrowed from alternative sources; five from a CMDT "women in development" program, four from family or friends and one from an informal borrowing group called a *tontine*.

Membership in *tontines* was relatively common in the area. Some credit associations had functioned as a *tontine* before the *Credit with Education* program began in their community. However, it is unlikely women would consider the amounts they contribute to their *tontine* (sometimes cash or in-kind goods like cloth) to be savings. *Tontines* primarily function as an informal source of working capital or accumulated goods rather than as a savings mechanism.

B. Use of Program Loans

In each loan cycle, clients declare to the other members of their credit association how they plan to invest their loan. These enterprise activities are listed on the loan agreement between the program and the credit association that is signed by each member. Like most poverty lending programs, one of *Credit with Education*'s central principles is that borrowers themselves know best how to use a loan. The credit offered is unfixed and no attempt is made to verify that loans are spent on reported loan activities. However, to help clients avoid repayment problems, program policy and field agents encourage women to use their loans for productive purposes. Still, it is recognized that program loans might not solely be invested in enterprise activities.

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[8] Amounts only represent individual savings of clients with their CAs. If clients have their own personal savings outside their group or if they have their own member account with the Kafo Jiginew credit union cooperative, those amounts would not be reflected here.

1. Productive Investment of Program Loans—Expansion and Diversification

Combining the impact survey responses of one-year and two-year clients, table 5.3 summarizes the most commonly mentioned enterprises in which clients invested their most recent program loan.[9] The strong link to the agricultural sector is evident in that the great majority of women were engaged in food processing or foodstuff commerce.

Table 5.3 Principal Enterprises in Which Current Clients Reported Investing Their Last Program Loan

Reported Loan Activities	Percent of Clients (n=63)
Sell condiments (salt, garlic, soumbala, cube magi, shea butter)	37
Make and sell cooked food (restaurant, food stall or road side)	33
Buy and sell cereal(s)	13
Make and sell clothing	11
Make and sell beverages (primarily local beer)	8

The in-depth interviews on loan use revealed that women typically used their initial program loan to expand an existing enterprise, but in later loan cycles they tended to diversify their enterprise activities or take on a new activity. Eleven of the 12 clients who were interviewed with this qualitative tool reported no new income-generating activities were established with their initial loan. Clients simply continued to operate the same businesses they had before or reactivated a business that they had previously. One client explained, "With my first *Credit with Education* loan, I was able to increase the quantity of rice that I sell," and another said, "I was able to buy more flour for my macaroni business."

Although continuing with the same enterprise activity, the loan enabled the women to obtain the necessary inputs more directly or more cheaply. One *dolo* maker explained, "I made *dolo* before, but now I don't have to borrow the money from my husband to buy the millet," while another said, "Although I was making and selling *dolo* before the program, now I am no longer in debt to the millet wholesalers."

The qualitative in-depth interviews reinforce the findings from the impact survey that longer-term participation is associated with greater impact and more profound changes at the level of the enterprise, the individual and the household. Beginning with the second loan, clients started to diversify and even start up new activities. Chart 5.4 summarizes the uses of loans and profits of four women engaged in selling cooked food who selected for the in-depth loan use tool.[10] This summary chart highlights ways in which clients begin to diversify enterprise activities. For example, one client supplemented her cooked food business in loan cycles two and three by buying sacks of beans and millet wholesale and reselling them to other women making bean cakes. Another client started making *bouldakassa* (made of peanuts, sugar and millet) in the fourth loan cycle which she sold next

[9] See appendix 5 for a more detailed list of the reported enterprises loans were invested in for all clients taking a loan from January through March 1997.

[10] See appendix 6 for charts summarizing the loan and profit use of the other sub-sectors of clients who were interviewed: selling condiments, making and selling *dolo* and non-food commerce.

to her cooked food stall. The third woman, a midwife, sold injections which she administered to pregnant women, in addition to selling macaroni. The fourth client never deviated from selling her rice and sauce.

Chart 5.4 Loan Use for Clients Selling Cooked Food—Use of Loan and Profit (Bold = Use of Loan; *Italics* = Use of Profit)

	Loan 1	Loan 2	Loan 3	Loan 4	Loan 5	Loan 6
Client 1 (Karangana)	**Rice, condiments** *Clothing; Savings; School fees*	**Rice, condiments** *Medical Treatment (including transportation)*	**Rice, condiments, peanuts** *Clothing; 1 sheep and 1 goat*	**Rice, condiments, peanuts** *Room for her restaurant*	**Rice, condiments, peanuts** *Clothing*	**Rice, condiments, peanuts**
Client 2 (Karangana)	**Rice, peanut butter** *Kitchen utensils*	**Rice, millet (keeping for rainy season)** *Marmites for restaurant, clothing for herself and for her daughter*	**Rice, beans (to sell to women who make bean cakes)** *Clothing; laundry basket for her household*	**Rice, peanut butter** *1 sheep; Clothing for herself*	**Rice for her daughter** *Knitted baby carrier; small "needs" (e.g., earrings, henna, etc.)*	**Half for herself (to buy rice and peanut butter) and half for her husband (so that he could sell second-hand clothes)**
Client 3 (Kani)	**Macaroni, meat, injections** *Cooking pot for her house*	**Half for herself (macaroni, meat, injections); half for her husband (to make and sell hoes)** *Medication for her sick child*	**Macaroni, meat, injections** *Clothing, shoes*	**Macaroni, meat, injections** *Clothing*	**Macaroni, meat, injections** *Clothing*	
Client 4 (Jitamana)	**Rice, peanuts, condiments** *Utensils/plates for her restaurant*	**Rice, peanuts, condiments, savings** *Clothing*	**Rice, peanuts, condiments, savings** *Ceremonial items*	**Rice, peanuts, condiments, bouldakassa** *Marmites for her restaurant*	**2/3 for her: Rice, peanuts, and bouldakassa; 1/3 for her niece** *Calebasses for the household*	**Rice, peanuts, condiments, keeping a portion at the house**

2. Direct Consumption or Other Nonproductive Uses of Program Loans

Several of the clients depicted in chart 5.4 also chose not to invest all of their loan in an enterprise activity. Three of the four clients gave a portion of at least one loan to their husband or other family member to invest. One of the clients held some of her loan "in her house" to be used later. To gauge the degree to which loans were not directly invested in a client's own productive activities, survey respondents were specifically asked if they had used all or some part of their last loan in the ways outlined in table 5.5.

Table 5.5 Percent of Clients Who Had Used All or Some of Their Last Loan Nonproductively

	One-year Clients n=33	Two-year Clients n=30
To buy clothes or other articles for the family	39*	67*
To save for emergencies or repayment of the loan	24	34
Gave or lent to husband or somebody else	15	21
To buy food for the family	18	7

* Chi square—significant difference between two-year and one-year client samples (p<.05).[11]

A high proportion of clients had used some or all of their last loan to purchase clothing or other articles for the family (see text box on Clothing). More so than food purchases, buying clothing for herself and her children is an expenditure that is traditionally more the obligation of women than men. Also, clothing is both an expression of social status and potentially important to a woman's economic security. Good clothes can help lead to a good marriage and therefore better long-term security. Also, during periods of difficulty, it is common for women to sell their clothes. When demand for new clothing is especially high, such as during major festivals or for other important occasions such as weddings, baptisms and funerals, some women make a business out of renting their clothes to others.

Clothing

Clothing expresses social status. For example, if a woman in the community is well dressed, it is said that her husband is rich, and that he takes good care of her. If the woman is not married and is well dressed, it is said that she is rich.

If a woman is well dressed, it can prevent her husband from going out.

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a. Loan use by length of time in program, loan size and location. A client's duration in the program and loan size are factors that were influential to loan use. Two-year clients were significantly more likely than one-year clients to use part of their loans to buy clothing and other articles for their family. This finding may indicate that as they stay with the program, women lack either the options, the ideas or the desire to work larger loans. Or, this might mean women choose to take their profit "up front" by spending some of the loan and making their repayments from the return on the remainder of the loan.

[11] Throughout the report, a p-value of less than .05 is considered statistically significant. In this test, the p-value is a measure of the statistical significance of the difference in prevalence for the two client samples.

Clients taking loans of more than $50 were significantly more likely to report giving at least some of their most recent loan to someone else to invest than were clients with loans $50 or less ($p<.05$). No difference was evident in spending loan capital on clothing or other articles by loan size; 50 percent of the clients with relatively large loans did so, as compared to 56 percent with small loans.

In terms of location, clients living in towns were more likely than those in villages to save or give some or all of their loan to someone else. However, there were no significant differences comparing the responses of clients in towns and small villages.

In sum, it seems clients taking larger loans were significantly more likely to channel at least some part of that loan to another person, typically their husbands or other family members. However, loan size or a client's location was less influential than length of participation in whether a client used loan capital to purchase clothes or other items for the family. It may be that successful completion of several loan cycles gives women confidence in their ability to repay the program loan. In later loan cycles, they may become more willing to incur the potential repayment risk of spending some of their loan capital up front.

C. Use of Enterprise Profit

The qualitative and quantitative tools also provided good insight into how women used the income they earned from their enterprise. These uses of profit reflect the traditional spending obligations for women in the area. Women are primarily responsible for purchasing clothing for themselves and their children and for buying items for the home, while men have the primary responsibility for food purchases, education costs and housing repair. These uses provide the link between access to financial services meeting basic household needs better.

Chart 5.4 summarizes how the four clients engaged in selling cooked food reported using their profits each loan cycle during the in-depth loan use interviews. Spending on clothing and items for the house (such as a cooking pot and utensils) is evident from the first loan cycle. Spending on medical treatment and/or ceremonies occurs more sporadically in different loan cycles, depending on need.
The text box describes in greater detail the types of items a client might be buying for a ceremony. When a woman has a major role in a ceremony, such as the marriage of a family member, it is likely that she will also plan to use her savings in that way.

It is not until the later cycles (usually from the third cycle on) that clients start to invest a portion of their profits in their primary (or new) economic activity. Of the four clients engaged in selling food, one used some of her enterprise profit to add a room to her restaurant and two bought storage containers called *marmites*.

Ceremonies

Weddings: For wedding ceremonies, people bring cotton blankets, bed sheets, bowls, and calabashes to give the bride. If a *family* member is getting married, and if it is a brother, his siblings contribute a minimum amount of 100, 000 FCFA to the groom. If it is a sister who is getting married, people bring bowls, bed sheets, carpets for the wall, or *pagnes*.

Baptisms: When a woman gives birth, people bring bed sheets, soap or money for the new mother.

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Qualitative Team

The impact survey found similar results. Women were asked to report three ways they had used their enterprise profit in the last 12 months. This question referred to actual (not incremental) profit earned from any enterprise, not just those in which respondents had invested their program loan. Summing all three of their answers in decreasing order of frequency, one-year and two-year clients of the *Credit with Education* program reported using their enterprise profit in the following ways:

- 81% to buy clothing;
- 59% to buy items for the house;
- 26% to buy food;
- 24% to buy medicine or pay other health-related costs;
- 22% to save;
- 10% to pay school expenses; and
- 9% to reinvest in the business.

D. Programmatic Implications

To date, Kafo Jiginew's *Credit with Education* program has enjoyed excellent repayment rates. Still, the program is relatively young. If the tendency to divert loan capital increases with larger loan sizes and longer experience with the program, these practices would presumably become even more prevalent over time. Ultimately, they could represent a threat to the program's repayment performance and sustainability. Field agents should take the opportunity of the loan feasibility assessments carried by the CA before a new loan cycle to emphasize the potential risks loan diversion can have for an individual borrower, there group and the program in general. Education might help borrowers consider more and better ways of using larger amounts of capital productively to increase their returns.