Microfinance and Health Protection Initiative Research Summary Report: RCPB

FREEDOM FROM HUNGER RESEARCH REPORT NO. 9E

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EXECUTIVE SUMMARY

Introduction

Many microfinance institutions (MFIs) have witnessed the significant impact that all-too-common health shocks can have on their clients' ability to repay, save and flourish in their microenterprise endeavors. These MFIs seek sustainable approaches that help safeguard their clients' health while also protecting the institutions' bottom line. In 2006, Freedom from Hunger launched the Microfinance and Health Protection (MAHP) Initiative and partnered with Réseau de Caisses Populaires de Burkina Faso (RCPB) to research, develop, and implement a set of health protection services with two main benefits in mind: 1) to improve client health outcomes, both from a physical and financial perspective and 2) to improve RCPB's financial bottom line or, at a minimum, develop products that would be cost-neutral to the institution.

During the MAHP initiative, RCPB continued to develop and refine three products that make up the MFI's health protection package: health savings accounts to cover primary care and medicine for common illnesses; health loans to cover treatment that exceeds clients' health savings; and a health solidarity fund managed by RCPB to invest in health protection services in the communities it serves. As RCPB is one of Freedom from Hunger's longest-standing *Credit with Education* partners in West Africa, RCPB additionally continued to provide health education to its village banking clients, particularly health education pertaining to health costs and rational use of health services. By the end of December 2009, 12,099 clients had health savings accounts amounting to almost US$55,000 in current deposits, 84 health loans had been disbursed, and 1 village had benefited from a water pump with support provided by the solidarity fund.

The purpose of this report is to highlight and summarize[6] the key client-level and institutional-level results from five main research components implemented during the four-year MAHP initiative with RCPB: 1) an impact survey conducted with clients in the MAHP target area as well as a comparison area; 2) a health savings and loan-use study; 3) qualitative client "impact" stories; 4) a client satisfaction and client exit study; and 5) an institutional assessment.

Results

The impact survey compared clients in the MAHP area (n=96) to clients in a non-MAHP area (n=96). The results suggest that MAHP clients were more likely to seek preventive care during the program period (24 percent of MAHP clients compared to 9 percent of non-MAHP, $p<.01$); they were 2.6 times more likely to feel very or somewhat confident that they would be able to pay for future health expenses ($p<.01$); and 3.7 times more likely to feel very or somewhat confident that they would be able to save for future health expenses ($p<0.05$). There were no meaningful differences in number of times family members complained of an illness and needed to seek treatment.

The health savings and loan-use studies (n=47) were qualitative and quantitative in nature and focused only on those clients in the MAHP area. These interviews revealed overall satisfaction with and active use of the health savings accounts as well as a perceived level of reduced stress due to

[6] There are individual reports for each of the studies documented in this final report; thus, not all results are provided in this report.

having access to and building up a health savings account. Although health loans were not as actively used, health savings clients appreciated the fact that a health loan could be made available to them in the event their health savings was unable to cover all medical expenses. Clients most appreciated the fact that through the health savings and loan products, they could keep their health matters private and it reduced the likelihood that they would have to borrow from family or friends, who are considered less reliable than RCPB would be for the financial support.

The client satisfaction (n=120), client exit (n=35), client impact stories (n=30), and staff satisfaction (n=44) studies support the quantitative findings from the impact survey and the health savings and health loan use studies. Most of the respondents felt that they were in good health, but still worry about family members falling ill because they are not sure whether they will have the means to cover all medical costs. Some mentioned that they were not worried about getting sick because they have access to credit from RCPB and the knowledge about prevention measures to keep them from falling ill. Clients were very pleased with their health savings accounts, even when they had a regular savings account with RCPB because they said health savings accounts instill discipline to save for anticipated health expenses, reduce the likelihood that all of their savings will be used for non health-related costs, and can be used for any family member. The added benefit of the health loan was an additional safety net on which they could rely. Feedback from clients who had left RCPB in the past year indicated that most were generally satisfied with their experiences as an RCPB client and left for unrelated reasons. Staff overall feel the provision of the health savings and loan products support RCPB's social mission and recommended improved promotion of these products.

Analysis

Research conducted by Russell,[7] Sauerborn[8] and Freedom from Hunger show that health costs among the Burkinabe population and RCPB clients can be considerable, anywhere from 2 to 70 percent of a household's income to cover expenses for one significant incidence of illness. RCPB's offer of health savings and loan products helps their clients plan for and cover these health expenses when they occur, and our research results suggest they have a positive influence on preventive care as well as their confidence and ability to cover future medical expenses. RCPB experienced rapid growth of the health savings accounts when they made an active and effective push to promote them more broadly. Given that a platform for providing a health savings or health loan product already exists, the health savings accounts appear to result in a positive net financial benefit for RCPB, while the health loans appear to be cost-neutral. By providing these products, it would appear that RCPB has a competitive advantage over its competitors, owing to clients' perception that RCPB cares about their health. These two health protection products are expected to result in long-term benefits for RCPB and for its clients.

Conclusion

Due to RCPB's satisfaction and client satisfaction with and demand for the health savings and health loans (and the added benefit of the solidarity fund), RCPB is expanding this program to all of its

[7] Russell, S. 2004. "The Economic Burden of Illness for Households in Developing Countries: A Review of Studies Focusing on Malaria, Tuberculosis, and Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome." *Am. J. Trop. Med.,* 71(Suppl 2), pp. 147-155.
[8] Sauerborn, R., A. Nougtara, M. Hien and H.J. Diesfeld. 1996. "Seasonal Variations of Household Costs of Illness in Burkina Faso." *Soc. Sci. Med.* Vol. 43, No. 3, pp. 281-290.

affiliated credit unions in Burkina Faso over the coming years. In 2010, RCPB aims to reach an additional 15,000 people with health savings accounts and disburse 100 additional health loans, thereby providing access to and benefits for more than 670,000 clients and their family members in the next year alone.

INTRODUCTION

Many microfinance institutions (MFIs) have witnessed the significant impact that all-too-common health shocks can have on their clients' ability to repay, save and flourish in their microenterprise endeavors. These institutions seek sustainable approaches that help safeguard their clients' health while also protecting the institutional bottom line.

Freedom from Hunger, a recognized expert in integrated financial and nonfinancial services for the poor, launched the Microfinance and Health Protection (MAHP) initiative in January 2006 with funding from the Bill & Melinda Gates Foundation. This initiative enabled Freedom from Hunger and its partner MFIs to add new health protection options to existing microfinance services, including health education, health savings, health loans, health micro-insurance, healthcare provider linkages and access to health products. The pilots for these new services were implemented in Bénin with PADME, in Bolivia with CRECER, in Burkina Faso with RCPB, in India with Bandhan, and in the Philippines with CARD. In keeping with Freedom from Hunger's longstanding commitment to proving progress and documenting effectiveness, the grant also underwrote impact studies and other assessments of MAHP-related innovations.

Types of Health Protection Services

The following types of health protection services were pilot-tested as part of the MAHP initiative.

Health education services

- Interactive education sessions on topics such as prenatal health, malaria, dengue fever, common childhood illnesses and HIV/AIDS
- Interactive education on coping with health-related financial shocks, using health financing services and getting the most out of local healthcare services

Health financing and insurance

- Health loans
- Health savings
- Health micro-insurance
- Community investments in health protection services and products

Linkages to healthcare providers and products

- Mobile healthcare providers offering health education, preventive and diagnostic services in rural areas
- Referrals to private and public providers for primary and secondary care
- Preferred provider program with discounted primary care for rural microfinance clients
- Sale of health products by a network of volunteers in rural areas

Freedom from Hunger emphasizes holistic, cohesive and sustainable approaches to tackling the pressing needs of the chronically hungry poor. With technical support from Freedom from Hunger's MAHP initiative, each MFI developed a unique package of health protection services based on market research and institutional capacity. These packages were reaching more than 300,000 microfinance clients combined by the end of 2009.

With the creation of the MAHP initiative, Freedom from Hunger is initiating a new era in microfinance, one that responds to the desires of MFIs to help their clients stay healthy, flourish in their microenterprises and meet the most pressing health needs of families living in poverty.

This report will focus on the findings and experiences with one of the MAHP partners, the Réseau des Caisses Populaires du Burkina (RCPB), which is a federation of credit union networks and the largest MFI in Burkina Faso.

RCPB

RCPB's mission is to improve the living conditions of its members and the greater community by applying principles of solidarity and individual and collective responsibility. RCPB mobilizes savings, offers a range of profitable credit products, promotes appropriate and accessible financial services for all, and is committed to democratic administration and management. RCPB was Freedom from Hunger's first *Credit with Education* partner in West Africa, and RCPB's *Credit with Education* portfolio continues to be the largest and strongest in the region. Table 1 highlights basic institutional and health protection services data as of December 2009. The health protection services data will be explained throughout this paper.

Table 1: RCPB—Burkina Faso Institutional Data as of December 2009

MFI-wide	
Year MFI Established	1992
Number of Active Borrowers	111,005 (25% women)
Outstanding Gross Portfolio (US$)	110,794,596
Portfolio at Risk (30 days)	8.55%
Number of Active Savers	671,909
Total Savings Deposits	$117,758,839
Operational Self-Sufficiency	144%
Year Started *Credit with Education*	1993
Number of *Credit with Education* Clients	96,415
Health Protection Services	
Number of Health Savings Accounts	12,099
Health Savings Deposits ($)	54,593
Number of Health Loan Accounts	23
Outstanding Health Loan Portfolio Balance ($)	3,465

RCPB leadership maintains a serious commitment to product innovation, resulting in ongoing market research, experimentation, product development and a growing range of products and services. Such efforts are greatly enhanced by the technical support of the Financial Innovation Center (CIF), a regional organization specializing in financial product development and adaptation, and based in Ouagadougou (Burkina Faso).

Healthcare Concerns in Burkina Faso[9]

Burkina Faso is among the poorest countries in the world. More than 80 percent of the population lives on less than $2 per day, and 45 percent lives on less than $1 a day, with the poorest residing in rural areas. It is ranked only 177 out of 182 countries in the United Nations' 2009 Human Development Index.[10] National health data shows high infant (192 deaths per 1,000 infants) and maternal mortality (1,000 deaths per 100,000 females[11]) and malnutrition rates (36 percent of children under the age of five suffer from moderate to severe stunting[12]). Frequently occurring infectious diseases such as malaria, respiratory infections, skin diseases and diarrhea account for the vast majority of health problems, while the chronic condition of high blood pressure is a growing threat. HIV/AIDS affects about 4 percent of the population, although rates among young pregnant women have recently declined.

According to both national data and market research data with RCPB clients, malaria is the most widespread and costly disease faced by the Burkinabe people. Some RCPB clients and their families reported spending as much as 30 percent of their annual income to treat malaria alone. Although malaria occurs year-round, it strikes most frequently during the rainy season, when many rural peoples' incomes—based on agricultural cycles—are at their lowest. Without cash on hand to purchase insecticide-treated mosquito nets and medicine to treat the disease in its early stages, people often wait, pray and self-treat, which can lead to serious complications, resulting in hospitalization and even death.

In this context of extreme poverty and frequent lower-impact illnesses, RCPB clients during the market research study reported spending 20 to 50 percent of their income on health. Health insurance is unavailable to the vast majority of the population, although community-based mutual health organizations have been growing in popularity. The government provides health care via community health centers, referral clinics and district or regional hospitals. While primary care consultations at public facilities are available at low cost, people must pay out-of-pocket for transportation, medicines, laboratory work, hospital fees and surgical supplies. Private health care is available in cities and some larger towns and is considered high-quality; however, it is prohibitively expensive for most of the population.

In order to pay for health expenses, market research data revealed that RCPB clients usually rely first on any savings they have on-hand or on revenue from their microenterprises. When excess cash is not available, they draw on business capital, including loan proceeds, or they liquidate assets. As a last resort, they turn to relatives or moneylenders.

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[9] Section references work done by Marcia Metcalfe. Metcalfe, M. 2006. "Burkina Faso Health Economy Profile." Freedom from Hunger : Davis, CA.
[10] "Human Development Report 2009." United Nations Development Program. <http://hdrstats.undp.org/en/countries/country_fact_sheets/cty_fs_BFA.html> (June 17, 2010)
[11] "Mortality Country Fact Sheet. 2006." World Health Organization. <http://www.who.int/whosis/mort/profiles/mort_afro_bfa_burkinafaso.pdf> (June 17, 2010)
[12] "Burkina Faso." UNICEF. <http://www.unicef.org/infobycountry/burkinafaso_statistics.html> (June 17, 2010)

MAHP Products and Services for RCPB

Prior to collaborating with Freedom from Hunger through the MAHP initiative, RCPB had already worked with CIF to develop and pilot-test a health savings product that was launched in April 2006. Under the MAHP initiative, RCPB further refined this health savings product and developed and tested a health package that included the following:

- **Health savings to cover primary care and medicine for common illnesses**: RCPB offers a voluntary health savings product whereby clients agree to deposit a set, minimum amount (at least $1)[13] per month into a special account devoted only to health expenses. During the first six months after opening the account (or until a minimum of $20 is accumulated, whichever comes first), the client may not access these funds. After the six-month capitalization period, clients may withdraw health savings only upon presentation of proof of health expense (such as a receipt or a doctor's order specifying cost of treatment). The health savings account does not earn interest, but possession of an active, up-to-date account entitles clients to apply for a health loan in cases of a verifiable, major health cost for the client or any family member.
- **Health loans to cover treatment that exceeds clients' health savings:** RCPB's health loans carry a 6 percent flat rate of interest regardless of loan term, for up to a maximum 12-month term. A six-month history of regular health savings is a prerequisite for health loan eligibility; therefore, all health loan clients also have health savings.
- **A health solidarity fund** managed by RCPB to invest in health protection services in the communities it serves.
- **Training** on planning for better health, rational use of local health services, advocating for quality healthcare, prevention and management of common diseases.

RCPB recognizes that financial services alone cannot alleviate poverty. Through these health protection services, which were tested and studied for impact from April 2007 through December 2009, RCPB seeks to better accomplish its mission of improving the living conditions of clients and their communities while protecting its own financial sustainability and longevity as an MFI. RCPB anticipates that its health protection products will contribute to its mission by achieving the following outcomes:

- Individual clients will be financially able to plan for better health and rational use of health services.
- Individual clients will have better access to quality health care (modern and formal health care) and timely treatment.
- Overall, family medical expenditures will decrease as family practice of preventive and timely care increases.
- Use of microenterprise loan proceeds for healthcare expenses will decrease as access to health savings and health loan products increases.

RCPB and its clients were highly satisfied with pilot-test results, and as of mid-2010, RCPB had begun massive scale-up of this health protection package, with the goal of eventually making health savings and accompanying services available to all of its clients.

[13] The exchange rate used throughout this report (unless otherwise noted) is US$1=FCFA 450.

RCPB's Research and Evaluation Goals and Activities for MAHP

A key component of this phase of the MAHP initiative was research to provide evidence of the impacts that integrated microfinance and health protection services have on MFIs and their clients. The MAHP evaluation activities for RCPB included the documentation of both quantitative and qualitative results. Research design and data collection for client-level and institutional-level indicators began in 2007 and continued through December 2009.

Table 2 shows the growth of RCPB's health protection services from the start of the project in December 2007 through the end of the project in December 2009.

Table 2: MAHP Outreach

	2007	2008	2009
People receiving full MAHP package	14,936	17,688	59,593
Number of active borrowers	147,872	123,735	111,005
Number of members with access to health education (in pilot region)	14,936	16,813	47,107
Number of health savings accounts	493	875	12,099
Number of Individual health loans	1	27	56
Use of loan proceeds by borrower	Hospitalization for malaria	Prescriptions, hospital fees	Consultations, exams, prescriptions, surgeries, hospitalizations

For RCPB, as with all five MAHP partners, the evaluations drew on data collected from individual client interviews, focus-group discussions (FGDs) and MAHP institutional indicators to examine two primary questions:

1. Does the provision of integrated microfinance and health protection services by an MFI have a positive impact on client health and financial status?
2. Does this provision of services result in stronger institutional performance as measured by growth rate, client loyalty and retention, repayment rates, demand for and effective use of MFI services, and overall competitive position?

Research on RCPB's health protection services included five components designed to answer the two questions above. Research components included the following:

1. Impact Survey
2. Health Loan and Health Savings Use study
3. Client Impact Stories
4. Client Satisfaction and Client Exit
5. Institutional Assessment

METHODS AND RESULTS

This section provides the method descriptions and results for each of the five components listed above.

Impact Survey

This study was undertaken by a West African-based research firm, L'Institut de Recherche Empirique en Economie Politique (IREEP) during the dry season of November–December 2009[14] to determine, "To what extent does access to health savings and health loans improve the well-being of clients?" The study compared those who had access to the MAHP package of health services to those who didn't have access, using Lot Quality Assurance Sampling (LQAS) methodology. The LQAS methodology makes it possible to use small sample sizes when conducting surveys in small geographical or population-based areas (lots). Six areas of interest were sampled, three in the MAHP area (Gourcy, Ouahigouya, Yako) and three in the non-MAHP area (Korsimoro, Kaya, Pissila). For each area, 32 interviews were conducted for a total of 96 interviews per zone and 192 interviews in total. While every effort was made to select participants in the MAHP area who were representative of the different product categories, such as individual loan clients, women's small-group credit (Crédits Aux Femmes Commerçantes [CFC]) and village banking clients (Caisse Villageoise [CV]), the majority of the people interviewed were individual loan clients and therefore had not received the health education. See Appendix 1 for data referenced in this section.

Key Results

It should be noted that the dataset for the non-MAHP area is much more rural (43%) than the dataset for the MAHP areas (19%, $p<0.05$). Where there were statistically significant differences between the two areas, a regression analysis was used to control for urban/rural differences. It is important to note, however, that although clients were categorized as being urban or rural, the northern part of the country, in which both the MAHP and non-MAHP populations are located, is quite rural compared to the southern part of the country. For example, Ouagadougou, the capitol city of Burkina Faso has a population of 1.5 people, while Ouahigouya, one of the main MAHP communities, is the third largest city in Burkina Faso with a population of only 122,000 people. The categorization of urban and rural was also left to the surveyors to determine. An important counter-factor to the urban/rural differences in the dataset is that there is no real difference in food-security levels or income levels between the two zones. This would suggest that while there are differences in some basic demographics, the clients look financially similar.

One of the key findings that cuts across two of the five components in the MAHP research plan is preventive care-seeking behavior. Preventive medicine is a core element of any health system. The findings in this study and in the Health Savings and Health Loan Use study suggest that more clients in the MAHP area are seeking preventive care compared to those in the non-MAHP area. Twenty-four percent of MAHP clients and 9 percent of non-MAHP clients sought preventive care in the last 30 days ($p<0.01$). After controlling for urban/rural differences, the probability that a non-MAHP client sought preventive care was 72 percent less likely than the MAHP clients (significance $p<0.005$). Of those who sought preventive care in the MAHP area, 39 percent sought out general

[14] Research by Sauerborn et al. on seasonal variations of the time and financial costs of illness for rural households in Burkina Faso suggest that the economic parameters of households, which influence health-seeking behavior, changed substantially between the dry and rainy seasons. It is hypothesized that during the rainy season, cognitive and behavioral changes reflect the high opportunity costs of time and the low availability of cash.

medical checkups, 30 percent vaccinations, 13 percent blood pressure and diabetes screenings as well as prenatal and dental care. The average amount of all costs incurred to seek preventive care was 4,863 FCFA ($11) in the MAHP area versus 988 FCFA ($2.19) in the non-MAHP area.

Separate research[15] suggests that in Burkina Faso, medicines can account for approximately 80 to 94 percent of all medical costs, with more costs in urban than in rural areas. This seems to be the case for this study, with MAHP-area clients spending on average 33,354 FCFA on medicines ($74) compared to non-MAHP spending on average 5,979 FCFA ($13) for one medical episode. Given an average stated annual income of $1,817 in the MAHP area, the average cost of one medical episode could account for 5 percent of an individual's income. In the non-MAHP area, if the average stated annual household income is $2,022, one medical episode might account for less than 1 percent. However, these are based on the averages. When individual cases for the MAHP area were assessed, the data showed that for some families, one medical episode could account for 10, 34 or as much as 70 percent of the annual household income. It has yet to be seen whether overall family medical expenditures will decrease as family practice of preventive care increases. Over time, this would be something to measure.

Another component that was examined in this study was whether clients had better access to quality health care and timely treatment. In Burkina Faso, a tiered system of health facilities was envisioned by the government to improve access to both primary care and referral services. The first level of care is the primary health post (Poste de Sante [PSP]), designed for staffing by a community health worker and a traditional birth attendant. The second level of care, the health center (Centre de Sante et de Promotion Sociale [CSPS]), is intended to provide a small maternity center and dispensary with staffing to include a trained midwife and nurses. The third level is the medical center (Centre Medical [CM]), to be staffed by at least one doctor. The fourth and fifth levels of care are the provincial and national hospitals, respectively.

Ideally, clients should seek treatment at the onset of an illness at an appropriate facility. A significant burden of disease in Burkina Faso is caused by time-sensitive illnesses such as malaria. One of the questions posed to respondents pertained to illnesses in the last three months. Almost an equal number of clients in the MAHP and non-MAHP areas (46 and 43 percent, respectively) were sick in the last 30 days. Most of the clients were sick with malaria (46%) followed by fever (11%) and a variety of other ailments. For those who had malaria in the MAHP area, 81 percent of the clients sought treatment for malaria. Of those 81 percent, 27 percent went to the hospital, 35 percent to a PSP and 23 percent to a CSPS. For the non-MAHP area, 93 percent sought treatment for it, which is higher than in the MAHP area. Of those 93 percent, 24 percent went to the hospital, 10 percent to a PSP and 3 percent to "a friend's house." However, the highest percentage of respondents to the question regarding where they sought treatment (30%) chose "other," which was not specified. (Note: Participants were allowed multiple answers; thus the percentages will not add up to 100 percent.) No one in the non-MAHP area indicated visiting a CSPS. For those who sought treatment in both areas, most sought treatment in the first three days after onset of illness.

Regarding clients' health attitudes toward financial planning for better health and rational use of health services, MAHP clients were 2.6 times more likely to feel somewhat to very confident that they would be able to pay for future health expenses compared to non-MAHP respondents ($p<0.005$). Additionally, MAHP clients were 3.7 times more likely to feel somewhat to very

[15] See footnote 10.

confident that they would be able to save for future health expenses compared to non-MAHP respondents ($p<0.05$).

From this study, it would appear that there is no meaningful difference in frequency of illness episodes and how and when treatment is sought. There is a slight difference in where respondents seek treatment and this may be due to the proximity of families to certain healthcare facilities. There is also a slight but not significant difference in whether they sought treatment for malaria, the most frequently reported illness. Although there is no clear difference from this study in how clients seek curative care, the health savings and health loans still appear to provide a healthcare safety net that improves the emotional, mental and physical well-being of clients. This study found that people with the opportunity to set funds aside for health purposes are more likely to access preventive care. The feeling of security and control over healthcare matters provides a positive sense of emotional and mental well-being for clients. As a result, RCPB may begin to see healthier clients and lower spending on health care in the long term as clients and their families seek early treatment and avoid serious and costly health episodes. This would be an interesting area for further research.

Alice, RCPB client in Gourcy, would much rather have a health savings account than to have to rely on friends or family for money when there are health expenses she can't cover. She opened a health savings account for the purpose of helping her "take charge in case of illness and to avoid going to borrow money from a relative who can refuse me." Her savings goal is to save more than 1,000 FCFA as often as she can because "one never knows. Illness is unpredictable and moreover, you can't estimate the medical costs."

In her personal savings with RCPB, she has approximately 25,000 FCFA. She deposited 10,000 in the last month. She withdrew 5,000 of that savings to cover a business expense. When asked if she ever used her voluntary savings for health, she replied, "Before, I didn't know that it was important to save for health. If a member of the family falls ill, I am obligated to borrow money if I don't have enough money. Therefore, I am exposed." Now that she has a health savings account, she "no longer fears health expenses." When asked if having access to a health savings account has met her expectations, she says, "Yes. I would normally have to take money from my business funds, which is not good. Before, I had to expose my problems to others."

Health Savings and Health Loan Use Study

This study was undertaken by IREEP, during the dry season of November–December 2009. The study examined whether access to health loans and health savings changed the behavior of clients in terms of the following:

- How clients used their microenterprise loans and savings
- When clients sought medical care (are they seeking early treatment?)
- Where clients sought medical care
- Whether client medical expenses were reduced

The design of the questionnaire was such that it was partially quantitative and partially qualitative. A random sample of clients was selected for the questionnaire from among those who had access to, signed up for and used 1) health savings, and 2) the combination of health savings and health loans. The intent of the study was to interview 30 clients who had used health savings (ten clients from each of the three areas in the MAHP zone) and 30 clients who had used both health savings and health loans (ten different clients from each of the three areas in the MAHP zone). However, at the time of the study, there were more health savings-use clients then health loan-use clients. Only eight clients were interviewed who actually used the health loans in addition to the health savings. As a result, more health savings-only clients (39) were interviewed and

fewer clients (8) who had used both health savings and health loans were interviewed. Despite the selection bias, key results could still be gleaned from the data.

Key Results of Health Savings Use

As with the Impact Study described above, preventive care-seeking behavior was one of the key outcomes examined in this study. In the Impact Survey, 24 percent of the MAHP-area clients indicated they had sought preventive care, which, after controlling for urban/rural differences, was still statistically different from the non MAHP-area clients. In the Health Savings and Health Loan Use study, by comparison, 40 percent of health savings clients indicated they sought preventive care and 34 percent of the combined health savings and health loan use clients sought preventive care, suggesting that the clients who used the health savings and loan product sought preventive care 10 percent more of the time than the MAHP clients who had access but might not yet have used the health savings or loans.

Health savings was found again in this study to be a popular product. Of the respondents who opened a health savings account, 85 percent preferred to have a health savings account with RCPB rather than borrow money from friends or family for medical expenses. One of the primary reasons they gave for opening a health savings account was to have money available in the event of a health problem. Other reasons they provided included the following:

- Provide a sense of security
- Avoid borrowing money in the event of an illness
- Friends and family may not always be able to help
- Medical issues are kept private
- Can use their incomes and other sources of money for other productive means
- Preventing health needs of the client and her children
- Easy withdrawal of savings without others needing to know their problems

The maximum amount that was in an individual client's health savings account at any given time during the 1.5 years prior to the study ranged from 2,000 FCFA ($4) to 175,000 FCFA ($388). When 15 out of 39 (40%) clients withdrew money from their accounts for the first time, they withdrew between 1,500 FCFA ($3) and 150,000 FCFA ($333). The average amount withdrawn was 26,000 FCFA ($57); the most frequent withdrawn amount was 5,000 FCFA ($11) and the median was 9,000 FCFA ($20). Of those 15 clients, eight of them said the money covered all their medical expenses; seven clients said it did not and had resorted to also using money they had at home, borrowing from a family member or using other savings from RCPB accounts to pay the remaining expense.

One of the expected outcomes related to RCPB's mission was that the use of RCPB microenterprise loans for healthcare expense would decrease as access to health savings and health loan products increased. Prior to opening health savings accounts, many respondents paid for healthcare expenses from money earned from other activities, borrowed money from friends and family to pay for medical expenses or took out microenterprise loans from a bank. Some resorted to traditional medicine. Results from the Impact Survey indicated that respondents in both MAHP and non-MAHP areas, 10 and 5 percent, respectively, used a portion of their current microenterprise loan to pay for health costs. For the health savings clients interviewed in the Health Savings Use study, only 1 out of 39 respondents (2%) had used their current microenterprise loan for health purposes. Given this information, it would seem that the expected outcome of decreasing the use of

microenterprise loan proceeds to pay for healthcare expenses for health savings users (from 10% to 2%) was headed in the expected direction, although such low numbers for both studies make it difficult to suggest a strong trend.

Similar to MAHP clients in the Impact Survey study, 72 percent of health savings clients were more confident about their ability to pay for future medical expenses. In addition, the clients mentioned that the health savings gives them an important sense of security because they never know when illness can strike. They also felt they could use their incomes and loans for other productive means, supporting the finding that so few reported using their microenterprise loan for health expenses.

Key Results of Health Savings and Health Loan Use

The low usage of the health loans might suggest that because health savings clients were so efficient at saving, treatment costs never exceeded the amount in their health savings accounts to warrant the need of a health loan. However, it could also be that health savings clients had not yet faced a health expense that required funds beyond their savings capacity. It could further be hypothesized that future illnesses of health savings clients could be reduced as a result of improved preventive care-seeking behavior.

In comparing the data of the eight Health Savings and Health Loan Use clients to the 39 Health Savings Use-only clients, as might be expected, the current average health savings amount differed somewhat between the two groups. The Health Loan Use clients saved an average of 10,200 FCFA ($22) while the Health Savings Use-only clients saved a slightly higher average of 13,687 FCFA ($30). The average medical expense for the eight Health Loan users was 53,000 FCFA ($117) while the average medical expense for the Health Savings users-only was much lower at 20,411 FCFA ($45). For the eight Health Loan users, the average loan size ranged from 7,000 FCFA ($15) to 200,000 FCFA ($444), with an average of 45,000 FCFA ($100). For an example of a complete client case study, please see Appendix 2.

The findings from this study suggest a few important future research questions: 1) Are health savers better savers in general? 2) Are health savers already users of preventive care? 3) Is the need for health loans reduced or eliminated through use of health savings? 4) Are those who used the health loans in the short term seeking treatment for pent-up medical needs, and over the long-run will the use for health loans be less as they build up savings? and 5) What percentage of total medical costs can be covered by health savings over various time frames?

Client Impact Stories

The client impact methodology for the most part is evaluation-free, meaning most questions covered a cross-section of clients' life hopes and aspirations, perceptions of health and well-being and generational change; however, part of the interview aimed at garnering how RCPB's MAHP products met the participants' expectations and their overall experience with RCPB's MAHP program. Thirty impact stories were completed, ten stories for each of the MAHP areas (Ouahigouya, Yako, Gourcy). Participants were randomly selected and included representatives of three main client types: individual loan clients, CFC (women's small-group credit) and CV (village banking) clients. IREEP collected the data and provided transcripts of all interviews, and University of Utah student Dwight Parker wrote the stories.

Key Results

When asked about "the good life," most clients in the study indicated that "well-being" or "the good life" could be described not only as having good health and close family, but also good food. Other elements mentioned were money, employment, family cohesion, success of their children and ability to own one's home. Most of the respondents felt as though they could achieve the good life. The few who felt they could not achieve the good life cited their debt load, lack of shelter and deprivation in general as obstacles.

Most of the respondents felt that they have good health, but they still worry about people in their families getting sick because they aren't sure whether they will have the means to cover all medical costs. Some mentioned that they were not worried about getting sick because they have access to credit from RCPB and access to the knowledge about preventive measures to keep them from falling ill.

> *"How would you describe the good life? It's health! Because if you are healthy, then you will have money."*
> —Fati Ouedraogo

In general, the respondents feel they have a better life now than their mothers' generation. Respondents felt that there are better health options and more people turning to modern medicine.

When responding to questions pertaining to program impact, some respondents articulated that they expected improvements in their lives when they first joined RCPB. For some, this has happened, and they cited their ability to take credit from RCPB and avoid taking small loans from multiple people. Some feel that they are more knowledgeable and have the ability to expand their activities. Many have seen an increase in their assets such as land, homes and motorcycles. Others feel they have experienced no significant change in their lives and pointed to interest rates, fees and service delays as some reasons for not seeing more impact from their RCPB membership. Some also feel they do not have enough food or money to manage their activities or cover their medical expenses.

> *"Though I am not in perfect health, every man walks with many small problems that he must ignore most of the time."*
> —Mahamadou Rouamba

Many respondents indicated an appreciation for RCPB because they have been able to obtain loans from RCPB and avoid borrowing money from family and friends. Respondents feel more able to cover medical expenses. Most would readily recommend RCPB to others, citing reasons such as having a secure place to save, access to loans (both health and business loans) and other services such as education.

> *"Every human being, whatever his responsibilities, must always save money to be able to face future struggles."*
> —Minata Sawadogo

For examples of full client impact stories, see Appendix 3.

Client Satisfaction and Client Exit Study

This study was undertaken by RCPB, Freedom from Hunger and IREEP in March 2009 and again in November 2009. The objective of the study was to examine whether clients were satisfied with MAHP financial innovations and whether there were different levels of satisfaction between respondents in MAHP and non-MAHP areas. Qualitative and quantitative methods were used, including FGDs and one-on-one interviews with CV and CFC clients. A quantitative survey instrument and FGDs were used to determine why some clients had left the program altogether. In

addition, FGDs with staff members in both MAHP and non-MAHP areas were conducted to understand their perspectives and experiences in providing the health protection services. A total of 120 clients participated in the client satisfaction study, 35 in total for the client exit study and a total of 44 staff members in the staff satisfaction study. The key results for this study take the form of client and staff feedback and have been broken down into four sections: Client Satisfaction, Client Exit, Staff Perspective, and Solidarity Fund and Health Education.

Client Satisfaction

Results from this study indicate that clients who have access to the health savings and health loan products are highly satisfied with them. They see these products as playing a very important role in their management of health costs and crises and appreciate the opportunity to save their money for this specific need. Although they see the importance of the health documentation needed to access their health savings and loans, many of them also fear that this does or will inhibit the process of gaining access to their funds when they might need them the most. The CV clients expressed continual concern about accessing their funds, largely due to the requirement that members of the group management committee be present when clients access their funds. This means that CV members must coordinate and travel with numerous others to withdraw funds at the branch, resulting in a loss of time and privacy. This administrative design flaw, owing to MFI-wide policies about group-based clients, has been recognized by RCPB since the implementation of MAHP began, and efforts continue to rectify the problem—either by creating a post-pay cashless system by linking with providers in rural areas or by relaxing the requirements for individual membership when it comes to health savings.

When assessing client satisfaction in general between clients in MAHP and non-MAHP areas, clients are overall satisfied with RCPB's general microfinance program. When rating RCPB with its competitors, clients rated RCPB's interest rate and loan duration behind its competitors. Clients indicated they would like to earn interest on their savings; however, most understood that RCPB must be viable as well, indicating they appreciate access to the product and wanted RCPB to be around to provide these services to them. During the interviews in November, some clients felt that because they don't earn interest on their health savings, they should have an even lower interest rate on the health loan (health loans are already offered at a lower rate than microenterprise loans).

Client Exit

Feedback from clients who have left RCPB in the past year indicates that most were generally satisfied with their experiences as an RCPB client. Former clients gave multiple reasons for leaving, indicating there was often not one single reason why they left the program. The main reason across both MAHP and non-MAHP areas was RCPB policies and procedures, which includes being asked by the group or RCPB to leave due to repayment issues, not attending repayment meetings as required, or not meeting the minimum village bank membership size. The second main issue was due to client dissatisfaction with the program elements such as credit length being too short, mandatory savings, high interest rates, having to repay the loans of deceased members and treatment from RCPB staff.

Almost all of the former clients interviewed (95 percent in MAHP and 94 percent in non-MAHP areas) indicated that the programs offered by RCPB helped their family, and the leading benefits were more and better food, education for self and/or children and the ability to pay for medical expenses.

A key indicator of loyalty to the organization is the degree to which a client would recommend a program to a family member or friend. Despite having left RCPB themselves, an average of 81 percent interviewed in both the MAHP and non-MAHP areas indicated they had recommended RCPB to someone else. Sixty-seven percent were very likely to recommend RCPB to a friend or family member in the future, and eighty-five percent were somewhat to very likely to recommend RCPB to others in the future. Thus, even clients who had left remained very loyal to the MFI.

Staff Perspective

RCPB staff members working in the pilot region were interviewed in a focus-group format about their perceptions about how the provision of the new health protection services supported RCPB's mission, whether they were adequately prepared to deliver the new services, and any increased workload. They were also asked to provide their thoughts on what worked/didn't work well, and their recommendations to RCPB before rolling these products out to clients in other areas of Burkina Faso.

During these discussions, RCPB staff indicated they felt the provision of health savings and loans were important contributions to RCPB's mission.

> *"The health savings and health loans are supplementary elements that help the clients because when the clients are sick, their activities diminish and that results in fewer resources for them. The products also reduce the risk that they are unable to pay back their regular loans."*
>
> —RCPB staff member

Staff also indicated during FGDs that they wished they had access to the same services. Shortly thereafter, RCPB made the health savings and loan accounts available to its employees as well. Most of those interviewed felt that their workload had not significantly increased as a result of the MAHP products.

Staff did feel it was important to improve the internal training on these products as well as the marketing of these products to the clients. In addition to this recommendation, staff felt that RCPB should revamp the health savings to better serve the needs of village-banking clients and do a better job of promoting the health protection services in general.

> *"Neither health savings nor health loans have created extra work for staff. The health savings accounts do not present more challenges or difficulties than any other financial products at RCPB."*
>
> —RCPB branch directors

Solidarity Fund and Health Education

Although a solidarity fund and health education were small components of the MAHP program with limited outreach, they received very positive feedback from the respondents interviewed. Feedback from RCPB clients, staff and community members who benefited from the solidarity fund (which paid for a community water pump) indicated an eagerness to see this strategy rolled out further to benefit other communities. When interviews were conducted in November, there was some concern that the solidarity fund was somehow mismanaged because not everyone benefits from this service.

Those who had access to the health education were very happy to receive the education, but some indicated the content was not rich enough and voiced interest in having additional education to supplement what they were already receiving. Some individual loan clients and others who had not received health education or education in general found that this was a "laudable" effort by RCPB and indicated they would be interested in receiving health education as well.

Data from both the client and staff satisfaction and client exit studies indicate an overall positive impression of RCPB and a high level of satisfaction with the provision of the health savings and loan products, in particular. The overall impression from the research team conducting this study was that clients in the MAHP area appear to be more satisfied overall than those in the non-MAHP area, but it is not clear that this is attributable to the additional health financing products offered.

The key suggestion that came from clients and field staff alike was the need to raise more awareness about these products and to improve the accessibility of the health savings and health loan products for group-based clients. Former clients emphasized the need for improved education and details about RCPB products, improved interest rate, and more health, business and financial education. Recommendations to improve the program are themselves indicative of a high degree of satisfaction and/or could be indicative of a greater level of satisfaction for future clients.

Institutional Assessment

The institutional assessment compared the economic benefits of clients' health and financial well-being with the costs of implementing health protection services to determine whether the provision of health financial products has improved institutional performance in terms of expenses, revenues and other nonfinancial benefits and costs to RCPB. Data was provided on a 6-month basis by RCPB headquarters and the regional office overseeing the MAHP areas (the Northern Regional Credit Union -- URCPN). Data was also collected from in-depth discussions with branch directors and other staff during field visits, as well as from FGDs in which 50 clients participated from 2007 through 2009. A client survey was also administered to 70 clients. The institutional assessment was conducted by Freedom from Hunger's Myka Reinsch Sinclair and Frederic Ruaz.[16]

The cost-benefit analysis found the following:

- RCPB spent approximately $5,200 in direct, marginal costs to offer the health savings and loan package in 2008–2009, the second year of its operation.
- When allocating a proportion of branch and management staff time, as well as direct costs, RCPB spent over $20,000 over the course of that year.
- The health savings and loan package earned about $5,100 in revenues during the year.
- The package cost the MFI about $100 in net direct costs, and trends indicate that it will break even—in terms of direct costs—during the third year of operation.

Exploring anecdotal reports from RCPB staff that the health savings and loan package leads to enhanced client growth, client retention, client financial security and client capacity to save, the study showed that if even a small level of client growth (5 percent in one region) could be attributed to the package, this would constitute an additional value of nearly $3,000 over one year to RCPB—thereby making the package profitable in 2008–2009.

In conclusion, the cost-benefit analysis shows the following:

- The combination of health savings and health loans can provide a net financial benefit to an MFI, assuming health savings deposits are also on-lent as regular microenterprise loans and when considering only direct costs.

[16] Reinsch, M. and F Ruaz. 2010. "Costs and Benefits of Health Savings and Health Loans: RCPB's Experience with Microfinance and Health Protection in Burkina Faso." Freedom from Hunger: Davis, CA.

- The health savings and health loan package is not financially viable when taking into account allocations of branch and management staff time involved.
- The health savings product increases both branch liquidity and client satisfaction, leading to financial and nonfinancial benefits for the MFI.
- The health loan product, carrying a lower interest rate than RCPB's microenterprise loans, is not profitable by itself, but may be cost-neutral; and when linked to health savings, this creates a powerful incentive for clients to set aside savings for health.
- RCPB leadership is satisfied with and plans to expand this health protection package because it views health savings and loans as a high-value service for clients that contributes to the MFI's social mission while also paying for itself, or better, over the longer term.

When examining the cost-effectiveness of the MAHP initiative with the expected outcome of improved client health and financial well-being, there have been positive outcomes that ultimately can impact RCPB's profitability. Health savings clients are demonstrating preventive healthcare behavior, and health savings clients' perceptions of their own financial status are better than non health savings clients' perceptions. As the program coverage expands and more people are served, the cost per outcome should drop. Ultimately, time series data will need to be examined, as current health savings accounts mature and new accounts increase, to determine the cost-effectiveness of health savings products.

ANALYSIS

The discussion section synthesizes key results from the client-level and institutional assessment research activities to provide a more holistic understanding of the performance and reception of these health protection products and services. Although the research designs and data collection methods vary in rigor, the outcomes are described in general terms as indications of program performance. As mentioned before, we are cautious not to overstate the meaning of the data but attempt to use it to provide insight into understanding how the clients use the products and services and their general satisfaction with them.

Health Costs

It is apparent from the market research and the program evaluation research that health costs represent a considerable cost burden for RCPB clients. Other research conducted in 1999 in rural Burkina Faso revealed that the annual cost of seeking treatment for illnesses to be approximately 30,401 FCFA (or about $67 per year)[17] or approximately 11.8 percent of household income, accounting for direct and indirect costs for treating illnesses.[18],[19] If we apply the 1999 percentages to current estimated average annual income levels, which is $1,817 for the respondents in the impact survey in Burkina Faso, this impact can mean as little as 2 percent of a family's income. However, if the RCPB client lives below the national poverty line (82,672 FCFA per capita per year or $183),[20] this could mean almost half of their yearly income. And this burden is one that is expected among RCPB clients. Our research has revealed the overall concern clients have about protecting their

[17] See footnote 8.
[18] See footnote 7.
[19] In rural Burkina Faso, indirect costs account for 67% of the overall cost and time.
[20] "Burkina Faso: Poverty Reduction Strategy Paper—Progress Report." 2005. International Monetary Fund. <http://www.imf.org/external/pubs/ft/scr/2005/cr05340.pdf> (June 17, 2010)

health and avoiding burdensome associated costs to seeking treatment for illnesses and the role that the health savings and loan products provided by RCPB can play to help smooth these health costs over time—either through saving over time for them or paying them over time with use of the health loan.

Health Savings

The health savings accounts were designed to anticipate these health costs and help clients save money specifically for their costs. Clients were overwhelmingly pleased with their health savings accounts, even when they had regular savings accounts with RCPB, because the health savings account allowed them to build savings especially for health and created a level of discipline for saving for costs they knew they would eventually incur. They could also keep their health problems more private by not having to borrow money from family members or neighbors in the event of a health event for which they did not have the money on hand to cover the costs. Clients consequently felt more secure about unpredictable illnesses they might face in the future. Even though clients would like to earn interest on the health savings account, they also wanted RCPB to be viable and to continue to be in the position to provide these services.

When people have access to health savings, they do indeed fund their accounts and use them actively. These studies accounted for up to four withdrawals during the 1.5-year time period of active implementation and continual deposits. For those clients interviewed who had not yet used a health loan, we also see clients choosing to use other funds or borrow small amounts from other people to cover any additional costs that their health savings account might not cover. In many events, however, their health savings account covered the entire amount. Of all health savings withdrawals, 60 percent of the time all costs were covered. Although the health savings didn't cover all costs, clients were able to avoid borrowing full amounts from family members, taking out microenterprise loans for health purposes, or having to sell assets. In the long run, this saves the household money and protects their privacy because they are not incurring interest cost from a loan and are not selling assets at times when they are possibly least profitable for the family (such as selling an animal at a low cost due to expediency and not when the most profit is expected).

Health Loans

Health loans are much like the health savings in that clients know that it is a source of secure funding for future medical expenses. The loans can help them avoid having to borrow from friends or relatives and enable them to keep their health issues private. Family and friends are not seen as a reliable or preferred source of funding for health expenditures, even though they are normally the first source when it comes to covering health expenses.

Based on the health loan-use study and the client satisfaction report, although there is some dissatisfaction with the processes and requirements for health loans, most have indicated that accessing the funds has been relatively easy and have indicated their understanding about the required medical documents needed to access the loan. Most dissatisfaction has been regarding the access to health providers—people either had to travel for appropriate care or the provider did not have the technology available to complete treatment.

By December 2009, less than 1 percent of all health savings clients had taken out a health loan. This low uptake could be due to the marketing challenges RCPB faced early on in the project, which

might have hampered take-up early on. Additionally, the majority of the 12,000 health savings accounts were opened between July and December 2009 and these clients would not have yet been eligible for acquiring a health loan. For the small percentage of health savings clients who had been or were eligible for health loans, this might be attributed to clients effectively funding and using their health savings accounts or by the simple fact they had not yet faced a significant health cost.

Of the cohort of clients who did take a health loan, most successfully repaid their loans on time, with a portfolio at risk (PAR) being no more than 5.8 percent at its highest point in November 2009 (which accounted for only one RCPB health loan client) during the MAHP initiative. As of December 2009 and at the writing of this report, the PAR was at 0 percent. Thus, from a risk standpoint for providing health loans at a lower interest rate than the microenterprise loan and for providing a loan for an "unproductive[21]" use, there was no more risk from non-repayment of the health loan compared to the entire portfolio at its highest point (9 percent in November 2009).

RCPB's Health Protection Package

In developing, testing and researching RCPB's health protection services, we sought to answer two primary questions:

1. Does the provision of integrated microfinance and health protection services by an MFI have a positive impact on client health and financial status?
2. Does this provision of services result in stronger institutional performance for the MFI?

Our research to date suggests that clients with access to these services are planning more for their future health expenses and feel more confident about meeting them. Clients are also more likely to demonstrate preventive care-seeking behavior and have a positive sense of emotional and mental health, both of which are fundamental to good general health and well-being. We are unable to draw any conclusions about their ability to access quality health care; however, qualitatively, clients indicate they are able to seek treatment more quickly and avoid having to make their illnesses a more public matter by borrowing from other family and friends to cover their health expenses. We are also unable to detect whether overall family medical expenditures decreased, but given the gain in use of preventive services, the long-term linkage can be argued.

Data from the impact survey suggested that very few clients used their first or current microenterprise loans for health expenses and even fewer of those who had a health savings account or health loan indicated they had used their first or current microenterprise loans for health expenses. Although quantitatively it was difficult to confirm that having access to the health savings and health loans helps a client avoid using their microenterprise loans for health purposes, qualitatively, RCPB clients revealed that with access to the health savings and loans, they are able to use their loans more for their intended purposes, and they know they will not have to resort to using their microenterprise loans for health purposes.

In addition to the possibility that clients are using their microenterprise loans for more "productive" uses and therefore potentially influencing their ability to repay and grow a business and, therefore, grow as a client, the additional benefits to RCPB of providing these products are 1) it contributes to

[21] We call out the use of the term "unproductive" to reflect on the long-standing argument that microfinance organizations should or do focus their attention on giving loans for "productive" uses, such as helping grow microenterprises versus for consumption needs, risky health needs, etc.

client satisfaction, which can have long-term effects on client retention, and 2) the provision of these products has been estimated to either be cost-neutral (as in the case of the health loan) for RCPB or to provide a net financial gain, as in the case of the health savings accounts, particularly if health savings accounts are on-lent as commercial loans.[22]

CONCLUSION

RCPB's leadership is satisfied with and plans to expand this health protection package because it views the health savings and loan package as a high-value service for clients that contributes to the MFI's social mission while also paying for itself, or better, over the longer term. As of May 2010, RCPB set a 2010 goal of reaching an additional 15,000 clients with health savings accounts and disbursing 100 additional health loans. It had already begun expanding these two products across all of its credit unions in Burkina Faso, providing possible access to more than 670,000 clients and their families in the next year alone.

Some have questioned why clients would demand a health savings account when they might have access to a regular savings account (with more flexibility). Experience with RCPB reveals that the discipline of the health savings product is an attractive feature at least in a West African context, as families face the challenge of setting aside money for much-anticipated health costs. The product serves as a way to budget for and safeguard their money for health expenditures. It has also been questioned how an MFI can take the risk of providing a health loan, with an interest rate lower than its commercial loan and with the added risk of non-payment. RCPB's experience demonstrates that a lower interest rate and more flexible repayment terms assist in loan repayment and can potentially help clients or their family members either seek treatment earlier, seek better care or simply allow them to borrow from RCPB versus other less reliable and less private sources.

More time and research are needed to truly understand the long-term health impacts (for example, is the improved use of preventive care actually a result of having access to the health savings accounts, or is this likely attributable to the fact that clients who take up health savings accounts are already more effective users of preventive care services?) and the long-term institutional benefits (for example, whether clients with health savings accounts over a year old still actively fund and use their health savings accounts and contribute to RCPB's financial portfolio). Yet, RCPB's health savings and loan products, as well as its health solidarity fund and health education, are promising strategies for both clients and the institution to improve client health and the institutional financial and social bottom-line.

[22] See footnote 16.

APPENDICES

Appendix 1: Impact Survey Results

Measure	MAHP Area Results N=96	Comparison Area Results N=96
BASIC CLIENT INFORMATION		
Clients living in rural areas	19%	43%*
Individual loan clients	81%	83%
Average total household income	817,803 FCFA	910,174 FCFA
Clients who are chronically food-insecure	22%	21%
PREVENTIVE CARE		
Sought preventive care in last year	24%*	9%
Primary reasons for preventive care		
General medical checkups	39%	22%
Vaccinations	30%	22%
Blood pressure screening	13%	0%
Average cost for seeking preventive care	4863 FCFA*	988 FCFA
Able to pay for all costs incurred	94%	67%
Methods used for payment		
Personal savings at home	32%	43%
Business earnings	26%	14%
RCPB Regular savings	5%	14%
RCPB Health savings	5%	0%
Other	32%	29%
CURATIVE CARE		
Households with someone sick in last 30 days	46%	43%
Sought treatment for illness	81%	93%
Reasons for treatment		
Malaria	46%	53%
Fever**	11%	11%
Diarrhea	6%	7%
Difficulty breathing	7%	2%
Typhoid	6%	0%
Heart problems	4%	0%
Kidney problems	4%	2%
Cough	7%	4%
Vomiting	7%	2%
Breast pain	2%	0%

*Statistically significant at $p<0.05$ or less.

**Because it is obligatory to deplete health savings before getting a health loan, it is very likely, at a minimum, that the same percentage of people with health loans used their health savings.

Appendix 1: Impact Survey Results (continued)

Measure	MAHP Area Results N=96	Comparison Area Results N=96
Sought treatment outside of the home	79%	89%
Where they sought treatment		
Hospital	36%	24%
PSP	32%	8%
CSPS	30%	34%
Friend's house	0%	2%
Traditional healer or seller	9%	0%
Other	0%	38%
When they sought treatment		
Same day	62%	55%
Next day	21%	24%
3 days +	17%	18%
Average cost of seeking treatment	44,238 FCFA	7,543 FCFA
Average cost of consultation	949 FCFA*	89 FCFA
Average cost of medicines	33,354 FCFA	5,979 FCFA
Able to pay for all costs incurred	91%	98%
Methods used for payment		
Personal savings at home	41%	39%
Business earnings	0%	0%
RCPB Regular savings	5%	0%
RCPB Health savings	0%**	0%
RCPB Commercial loan	10%	5%
RCPB Health loan	2%	0%
Loan from tontine	41%	39%
Family member/friends	5%	4%
Family members' savings	24%	20%
Other	7%	10%
Average number of days RCPB client sick	7.4 days	8.18
Average number of missed days at work	3.04	4.78
FACING THE FUTURE		
Feel very confident they can help their children avoid getting malaria or other illnesses	17%	14%
Feel very confident they can negotiate with medical professionals for the care they need	50%*	39%

*Statistically significant at $p<0.05$ or less.

**Because it is obligatory to deplete health savings before getting a health loan, it is very likely, at a minimum, that the same percentage of people with health loans used their health savings.

Appendix 1: Impact Survey Results (continued)

Measure	MAHP Area Results N=96	Comparison Area Results N=96
Feel very confident they can give their children the food they need	38%*	29%
Feel very satisfied with their own preparations for future health expenses	36%	29%
Have calculated their medical expenses in last six months	56%	45%
Calculated their medical expenses before six months ago	33%	26%
Feel somewhat to very confident they will be able to pay for future health expenses	29%*	20%
Feel somewhat to very confident they will be able to save for future health expenses	58%*	39%

*Statistically significant at $p<0.05$ or less.
**Because it is obligatory to deplete health savings before getting a health loan, it is very likely, at a minimum, that the same percentage of people with health loans used their health savings.

Appendix 2: Client Health Savings and Loan Use Case Study

Alice[23]

Alice lives in Gourcy and has four children. She's been a member of RCPB for six years. She feels she's in average health but feels quite confident in her ability to take care of her health or that of her family. She indicated she sees three doctors regularly and takes four medicines regularly. In the past three months, she's estimated that she's spent approximately 3,000 FCFA ($75).

She'd much rather have a health savings account than have to rely on friends or family for money when there are health expenses she can't cover. She took out a health savings account for the purpose of helping her "take charge in case of illness and to avoid going to borrow money from a relative who can refuse me." Her savings goal is to save more than 1,000 FCFA as often as she can because "one never knows. Illness is unpredictable and, moreover, you can't estimate the medical costs."

In her personal savings with RCPB, she has approximately 25,000 FCFA. She deposited 10,000 in the last month. She withdrew 5,000 of that savings to cover a business expense. When asked whether she ever used her voluntary savings for health, she replied, "Before, I didn't know that it was important to save for health. If a member of the family falls ill, I am obligated to borrow money if I don't have enough money. Therefore, I am exposed." Now that she has a health savings account, she "no longer fears health expenses." When asked whether having access to a health savings account has met her expectations, she says, "Yes. I would normally have to take money from my business funds, which is not good. Before, I had to expose my problems to others."

She belongs to one tontine to which she contributes 500 FCFA on a monthly basis. The last time she had her "turn" was in October of 2009 and she used the funds from the tontine to pay for a business expense. She's never used the funds from the tontine for a health expense.

When asked how much she has in her health savings account right now, she doesn't know. However, at its maximum, she's had 35,000 FCFA. She's withdrawn money from her health savings account once, to help pay for medical expenses for her sister who had abdominal pain. She withdrew 15,000 FCFA. The total medical cost was 50,000 FCFA ($111). She took out an RCPB loan to cover the remaining expenses. She indicated that her savings were unable to cover costs of medications.

Alice first joined RCPB because of the "sensibilisations" or trainings. Her first loan was for 25,000 FCFA for her business. Her current loan is for 250,000 FCFA. She's felt both loans are within her capacity to repay. She indicates she stays with RCPB because it provides many services, including health savings and health loans.

She has taken out one health loan for 75,000 (here she indicates the total expenses were for 65,000) to help pay for her sister's care for abdominal pain. The loan covered the total amount of the medical expenses. Had she not had access to this loan, she would have borrowed money from a friend or taken some other type of loan.

[23] The name of the client has been changed to protect her privacy.

Appendix 3: Client Impact Story Example

Mamounata Nanema[24]

Mamounata, 31, lives with her three children and partner, working as a gardener and selling her produce.

She manages to contribute to her family's well-being even during the dry season, off-setting the farming difficulties with other activities to generate revenue, though she didn't explain exactly what she does. When difficulties do arise, she stays happy. "I am in good health, even when I get up in the morning and have nothing. Because I can say this, my life is good." Eating every day is her standard of happiness and they haven't had any serious problems.

When money problems have arisen in the past, her family has sold livestock to alleviate the financial stress. If this proves insufficient, they have a healthy family relationship and have asked extended family members for help. Mamounata also explains that if someone does get sick and she has money from her loan on hand, she doesn't hesitate to use it for medication and health care, reasoning that as a healthy woman, she will be able to pay the money back with little difficulty.

She is incredibly optimistic about her family's future. "I am confident that my children will have a good life, because you always need hope and you need to stay optimistic. Plus, if a child sees his parents doing a lot for his education, he will adopt a comportment that will allow him to live happily as well as making his parents happy." Hope is good, as they have been known to lack food from time to time. Mamanouta explains that when that happens, it is the parents that suffer and not the children, because they will sacrifice so that the children don't go hungry. The toughest time, she says, is usually during the rainy season, right before the harvest.

Generally, she feeds her family three times a day, eating "bouillie," a plain gruel, and varies between tô, beans and nuts for the later meals. She thinks this is a good diet and says that as long as nobody gets sick, they are eating healthily. She says her family is in average health at the moment—they are fragile because of the wind and dust they confront when travelling. Uncertainty is difficult to bear, and Mamounata says she worries anytime anyone gets sick, even when they do have sufficient medication. Unlike her mother, who preferred traditional treatments, Mamounata likes the fact that she can use modern healthcare facilities and has access to a hospital.

Every financial decision she makes is first discussed with her husband. She and her husband take care of different plots of land. Before working in her own garden she must help him with his land. Despite many other advances, she feels that women's position in society has actually decreased in recent years. This, she says, is because the rains were much more consistent and the harvests more plentiful, allowing for women to receive more money and overcome financial problems with greater ease than is possible today.

Mamounata is happy to have begun with RCPB five years ago. "Ever since we began to work with the bank, we have noticed a big change in our lives because through the loan we took out, we were able to increase our activities and make a lot of profit. This profit allows us to take care of school fees for our children and medical expenses." She sells a higher volume of vegetables and it is the

[24] Client agreed to share personal story, her name has not been changed.

money stemming from her own commerce that pays for all of her children's needs. She tries to save money, but finds it convenient to keep some in the house for everyday use.

Participation in RCPB's education has been essential to her having a good experience. She feels that she has discovered a new side of her personality and enjoys making group decisions and being able to debate issues with others. Some of the workshops she has attended are reforestation, better farming techniques and farm irrigation. She has also been able to share what she has learned with the other women of her community who do not participate in the program.

Mamounata believes that the best way to motivate more women to join is simply to offer to help them with their fieldwork, which is already something that her group facilitates.