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ALLEVIATING THE EFFECTS OF POVERTY ON WOMEN AND CHILDREN: An Expansion of Project HOPE's Village Health Bank Approach

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PROJECT HOPE
FOUNDED IN 1958

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SUMMARY

Project HOPE has been very successful in achieving significant progress towards the grant objectives:

Goal: Strengthened Capacity of Project HOPE to Implement Successful Village Health Bank Programs

- We have established Village Health Bank programs in 3 new countries (Malawi, Guatemala, and Peru), and expanded it to a regional scale in another (Ecuador).
- We have implemented the methodology, learned from our preliminary experiences in each country, and modified the methodology as warranted.
- So far in the grant, we have provided increased access to credit to 8,000 women through 289 new Village Health Banks. We are indirectly impacting over 40,000 persons.
- Project HOPE completed a successful mid-term evaluation using an innovative peer-to-peer review approach, whereby one VHB program visits another and assesses their progress. This yielded significant dialogue, self-analysis, and learning between the VHB programs.

Goal: To Provide Valued Financial Services and Health Education in a Sustainable Manner

- We have disbursed over 15,800 loans to impoverished women totaling over $1.7 million.
- We have implemented appropriate financial control mechanisms to ensure quality loan operations as evidenced by a combined 4% rate for arrears more than 30 days old.
- Quarterly operational sustainability of the VHB activities funded under this grant has reached a combined 59%.
- We have provided over 3,600 educational sessions to participants in this grant to date.
- We have formed a local NGO in Ecuador, and transferred assets over so they can succeed HOPE/Ecuador and operate independently.

Goal: To Improve Income and Health Levels of Impoverished Women and Children

- We have instituted a program impact assessment system in order to ensure that we are reaching the targeted clientele, and to document the impact on participants. Our follow-up information reports an average improvement of income of 23% over one year (combined result). Please see Attachment D.
- We have internally collected baseline and follow-up health data in 3 countries. These findings report an average 35% improvement across a variety of health indicators.
- We have also commissioned a rigorous health study of the Ecuador VHB program by a researcher from Virginia Tech University. Specifically she found: statistically significant improvements in household expenditures on health care, cervical cancer screening, treatment of children for intestinal parasites, use of family planning methods, incidence of malaria and dengue. This report is found in Attachment F.

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Attachment F: Evaluation Report on the Health Impact of the Ecuador VHB Program

I. Background to Grant and Project Context

The over 40 year mission of Project HOPE has been to assist developing countries to implement cost effective health care interventions to improve the health of vulnerable groups, while developing indigenous capacity to provide and sustain these services. During our prior USAID Matching Grant, Project HOPE was able to launch the Village Health Bank (VHB) methodology, which integrated access to credit with health education for impoverished women. Two pilot VHB programs were created in Honduras and Ecuador. These VHB projects represented a significant, experimental change for Project HOPE in its programming strategy and project implementation.

Project HOPE traditionally has focused on building health infrastructure, strengthening primary health care, and training medical professionals and paraprofessionals. By contrast, these VHB projects added a grassroots "means for health" approach: poor women themselves, not the health delivery system, would be provided the means to improve their health status. Research has demonstrated that given scarce resources and high opportunity costs, health education alone do not necessarily lead to an adoption of health promoting life styles. Conversely, raising the incomes of populations does not automatically result in improved health status. Project HOPE's Village Health Bank programs, attempts to address some of the conditions that contribute to poverty: lack of income, poor health, and low social status. Through access to small loans provided by VHBs, poor women would invest more in their microenterprises and ideally realize increased incomes, thus enabling them to purchase more nutritious foods, medicines, or health services. In turn, the income generated through such poverty lending would provide self-sustaining program financing of local operating costs.

The success of our pilot VHB programs (in Honduras and Ecuador) provided the basis for expansion of the outreach and scale of this methodology. These programs have directly benefited over 11,000 women with positive economic and health impacts (at the time this new Matching Grant began). Both programs have reached operational sustainability and represent a progressive strategy for Project HOPE to continue to provide valuable health services in developing countries.

These VHB programs have also contributed greatly to organizational change at HOPE in providing greater focus on cost recovery elements, high performance program characteristics, and cost-efficiency standards in other activities. These involved the adoption of an entirely new set of financial management skills and systems, program activities, and mindset. Programming strategies now encompass sustainability issues and cost efficiencies. The Village Health Bank programs are also contributing to a change in how HOPE works with field offices in favor of greater autonomy and local capacity for sustainability. These developments, and their continued progress, are significantly transforming how Project HOPE operates.

Several on-going challenges provided the basis for this Matching Grant and warranted a new investment on the part of USAID and Project HOPE: 1) Strengthen Project HOPE's ability to provide effective technical support to institutional affiliates implementing the Village Health Bank program; 2) Expand the VHB approach to benefit more people; 3) Adapt the model to fit the needs

of new areas with very different operating characteristics; and 4) Build the capacity of HOPE field offices to operate independently, sustainably, and become national NGO partners.

By the end of this Matching Grant, Project HOPE will have gained the expertise to become a leading organization in the promotion of innovative strategies for poverty alleviation and health improvement and capable of implementing (or facilitating partners) integrated credit/health interventions in a variety of settings.

II. Project Methodology

PROJECT SUMMARY

Overall Objective:

To alleviate poverty and it's effects on women and children by increasing incomes and improving health conditions and personal well-being.

Program Goals to Achieve Objective:

1. Strengthened Capacity of Project HOPE to Implement Successful Village Health Bank Programs
2. To Provide Valued Financial Services and Health Education in a Sustainable Manner
3. To Improve Income and Health Levels of Impoverished Women and Children

Strategy:

Our project strategy is to expand our Village Health Bank (VHB) methodology in one country (Ecuador) and replicate it in three new countries (Guatemala, Peru, Malawi). This strategy consolidated prior lessons learned, and focused on the most successful practices for the new sites. It requires the development of new information systems and use of them in management decision making. It involves the coordination of staff with varied expertise in support of the efforts of our implementation teams. In summary, we intend to become a more progressive institution.

Through the program, Project HOPE's field offices will develop the capacity to recover program costs and generate income to ensure continued delivery of the program services. Their growth and development directly benefits the target population through activities that provide access to credit, training and education, new program opportunities, and increased self-esteem, all of which can be sustained beyond the duration of the grant. All VHB programs are expected to achieve operational sustainability during this grant.

An underlying strategy for this grant is a change in how HOPE works with it's country partners. Historically, HOPE has implemented programs through field offices. Our intention with this grant was to facilitate transformation of our field offices into national NGO's with partnership to Project HOPE (strategy has been modified, see accomplishments section). We believed this would promote sustainable delivery of the program benefits. This strategy allows for local control of resources, and the autonomy to mobilize additional resources. Our partners would be in a position to establish market niches, increase local revenues, be more responsive to local needs, and service greater populations. During this process, we are focusing on improving their planning and management systems, defining institutional strategic objectives, development of business plans, enhanced administrative controls, and improved internal evaluation systems.

Approach:

Project HOPE's Village Health Bank program represents a successful modification of the traditional village banking model of poverty lending. The program begins when interested women in targeted communities, self-select each other to form a community organization that HOPE trains to function as a Village Health Bank. Project HOPE makes one loan to the VHB which then makes individual loans to its members to enhance the earning potential of their income generating activities. The VHB guarantees these loans and relies on personal honor, peer pressure, and peer support among members to ensure payment. Each bank is comprised of about 25 members, who elect a Management Committee to handle all operating roles including disbursement of loans, collection of payments, administration and management. HOPE trains this management committee to perform this role, and empowers the VHB to operate as a community institution. Each VHB is member-run following democratic principles, operates under established by-laws with defined rules and procedures, enables members to generate personal savings, facilitates improved business skills, and functions to benefit their members and community. To maintain a focus on the poorest, borrowers start with a small loan of about $80 and upon each successful repayment, qualify for higher loan amounts. Non-payment restricts qualification for subsequent loans and puts considerable pressure on compliance. Loan terms are 4 months with payments every 2 weeks, and the funds used for working capital purposes. Members are also required to set aside a portion of their earnings as personal savings. Member's savings are consolidated by the VHB and deposited into a commercial bank account. Commercial interest rates are charged on the loans to contribute to full cost recovery and the ability to sustain the program.

Project HOPE also facilitates health education classes during the bi-weekly VHB meetings, where the members receive information and knowledge to better the health of their families and communities. As the members of the Village Health Bank succeed, the bank becomes a catalyst for community health by creating a pool of empowered women who advocate financial responsibility, preventive health and promote health awareness.

The VHB project works by empowering women, giving them more opportunity and the ability to take advantage of those opportunities. It is successful because it enables women to better overcome constraints and promote more secure livelihoods. The tools it uses are increased income, better self-confidence and self-esteem, greater household bargaining power, improved knowledge, and the capability to effect changes in their lives. Although the program directly benefits it's participants, their growth and improvement also benefits many others. The health education component extends to the broader community. There is also a significant trickle down economic impact from the income gains of the many women. The improved income increases local purchases, the ability to hire more workers, and a variety of economic benefits. Each VHB becomes a new community organization capable of managing itself, maintaining records, and providing services to its members and community. Additionally, the VHBs begin to take on leadership roles in their communities to help promote and achieve community objectives. Finally, the individual bank members also become a resource and an example to their neighbors. Although the VHB program directly targets participating women, entire communities benefit.

Through the proposed program, Project HOPE's local partners will develop the capacity to recover program costs and generate income to ensure continued delivery of the program services. Their growth and development will directly benefit the target population through activities that provide access to credit, training and education, new program opportunities, and increased self-esteem, all of which can be sustained beyond the duration of the grant.

Key Inputs:

Staffing – In most project sites we will be relying upon existing senior management (Country Director), and hiring completely new staff to actually run the VHB program. These will be qualified individuals with prior experience and/or skills in an appropriate field.

Equipment – Office equipment and computers to manage the information needs are required. Also, motorcycles and vehicles are needed to facilitate transportation to the communities where participants will be based.

Loan Capital – Loan capital is an essential input as it represents the resources that will be loan to participants and subsequently improve their incomes and generate revenues to the program. The amounts of loan capital needed each year will vary according to the actual number of VHBs being organized each year and the number of participants within each bank.

Training – Substantial initial and follow-up training is needed to introduce the VHB methodology to the new program sites. This will be facilitated through an annual meeting of VHB programs to share experiences, learn from each other, and strengthen our practitioner network. Additionally, our staff members will attend in-country workshops and seminars to enhance their professional skills.

Technical Assistance –The technical staff from HOPE Center and the other experienced programs will help each of the new programs implement the methodology. On-going program monitoring from HOPE Center will focus on development of capabilities and ensure the program is managed and operated properly. Additionally, external consultants will be utilized for staff training and improved institutional capabilities.

Target Groups:

At one level the primary target group is impoverished women, their children and families. We are working directly with women, while the benefits of participation extend to their entire family. At another level, our target group is the new community institutions in the form of Village Health Banks that are being formed. These groups will become capable of managing themselves, maintaining records, and providing services to their members and community. Additionally, the VHBs begin to take on leadership roles in their communities to help promote and achieve community objectives. Although the VHB project directly targets participating women, entire communities benefit.

OVERALL ACCOMPLISHMENTS

While many accomplishments have been achieved during the year, these are the most significant results.

- **Significant Impact by the VHB Programs:**

During the past year we generated a number of different findings that support the significant positive impact the VHB programs are having on participants. We completed an external evaluation of the health component in our Ecuador VHB program, we generated substantial data about the socio-economic changes experienced by participants through our member profile systems, and we completed follow-up health surveys in 3 countries (Malawi, Guatemala, Peru). These have demonstrated about a 35% improvement in health with between 20% - 40% growth in income.

Ecuador Health Evaluation

The findings from this evaluation are included in Attachment F submitted along with this report. A summary is provided here.

In March 2001, a research anthropologist from Virginia Polytechnic Institute & State University, Mary Margaret Weigel, Ph.D., carried out an evaluation of the health impact of the village health bank program in Ecuador. The study sample was current clients of the Manabí VHB project, and a number of control women—those who were about to enter the program—of similar demographic and economic characteristics. A total of 482 subjects were interviewed, and biological samples and anthropometric measurements were taken on this group. It was comprised of 156 control women and children who were in their first VHB loan cycle, and 326 women and children in their 4th or higher VHB loan cycle.

The major research questions and findings were:

1) What is the impact of the Village Health Bank Program on health practices and access to health care by women participants and their immediate households?

The program intervention appears to have had a positive impact on the cervical cancer screening, family planning, household mosquito control, child intestinal parasite treatment practices of women who had been in the program for $\geq$ 3 bank cycles. It also appeared to enhance the ability of subject households to finance the health care expenses of sick family members. Participants also reported spending more of their household income on health care compared to women who were new to the program.

2) What is the impact of the Village Health Bank on women's health knowledge?

The intervention had an apparent positive effect on participant knowledge regarding insect-borne tropical disease transmission and prevention. It had little or no apparent effect on knowledge about intestinal parasitic infection and the transmission of HIV and other STD's.

3) What is the impact of the Village Health Bank program on the health and nutrition status of women and their households?

The reported risk for mosquito-transmitted tropical diseases (dengue fever and malaria) was decreased by half among the households of women who had been in the VHB program for three or more cycles compared to those who had not yet completed their first bank cycle. The prevalence of iron-deficiency anemia in the children of the former was also slightly reduced. The program also appeared to have a positive influence on one indicator of child safety since fewer women reported leaving their young children at home alone or with another minor while they worked or ran errands. On the other hand, the intervention had no apparent impact on the other indicators of child or adult morbidity, which were measured such as the prevalence of breastfeeding, other chronic and infectious illnesses, malnutrition, and overweight/obesity.

4) What is the impact of the Village Health Bank on household water, diet, and food security indicators?

The impact of the program intervention on household diet and food security indicators appeared to be negligible. However, it did appear to influence participant resourcefulness in utilizing a low-cost clean water resource (rainwater) for use by their households. This is important since a shortage of clean water is reported to be one of the most significant problems faced by poor families in Manabi Province.

5) What is the impact of the Village Health Bank on indicators of women's empowerment?

The program intervention did not appear to have any measurable impact on women's reported degree of self-efficacy nor their beliefs about whether their health status is determined by chance, themselves or by other persons.

We recognize from this report that while many statistically significant positive impacts were documented, surprising little change was noted on other variables. We concluded that the educational approach used was not as effective as the anecdotal comments provided by participating women suggested. And that we need to embark on a process to upgrade and strengthen the quality of the educational activities.

VHB Program Follow-Up Health Surveys

During the past year, each of the new VHB programs formed under this grant (Malawi, Guatemala, Peru) completed a follow-up health survey to compare results to the baseline surveys collected in previous years. Overall, the results of these surveys show about a **35% improvement** across a variety of health indicators. While additional details are included under each country report below, a table summarizing the common findings is presented here.

	Malawi			Guatemala			Peru		
	2000	2001	Δ	2000	2001	Δ	2000	2001	Δ
Percentage of mothers providing more/equal amounts of liquid during last episode of infant diarrhea	45%	79%	74%	69%	75%	9%	50%	55%	11%
Percentage of mothers able to name pregnancy danger signs	76%	91%	20%	57%	61%	7%	94%	98%	4%
Percentage of mothers understanding need for at least 2 prenatal visits during pregnancy	95%	98%	4%	41%	74%	80%	85%	97%	14%
Percentage of mothers with at least one postnatal visit	28%	56%	100%	36%	46%	28%	85%	92%	8%

VHB Member Socio-Economic Profiles

We have been able to implement a system to document participant impact as a result of their participation in this project. We have implemented both data collection instruments based on demographic and socio-economic profiles of participants, and a database system to manage the information and contribute to better decision making. We have collected baseline information on women as they enter the program, and then follow-up data as they completed 4 loan cycles or about 1 ½ years of participation. The indicators we use represent the possible use of enhanced income (such things as food purchases, household assets, home improvement) and are likely to not be sensitive over the short term. Additionally we monitor changes in expenditures (frequently used as a proxy for income) as increased spending suggests more resources to spend. Although some of the data collection has been inconsistent, the findings are quite positive.

We have found that the women we are working with this year are similar (at least their socio-economic profiles) to those in previous years. This means that we are reaching similarly impoverished women with the loans not being dominated by better off women.

For all 3 countries, women reported an improvement in score for socio-economic indicators of 4% in Guatemala, 8% in Malawi, and 7% in Peru. These indicators represent the possible use of enhanced income in such things as food purchases, household assets, and home improvement. They also reported increases in income over the period of 20% in Guatemala, 9% in Malawi, and 18% in Peru. Furthermore, their expenditures grew by 3% in Guatemala, 37% in Malawi, and 7% in Peru. Finally, significant majorities of participants reported their income as being better or much better than previously: 88% in Guatemala, 62% in Malawi, and 66% in Peru.

All this information confirms that we are having a significant and positive impact on the economic status of these impoverished women.

- **Enhanced Capacity for Critical Self-analysis and Learning:**

During the year we embarked on a series of initiatives utilizing structured self-analysis to review and improve the quality of our VHB programs. This process was directed at all our VHB activities but focused specifically on the health education component. Although we have been able to generate positive results, our own belief was that the quality of our educational activities could be improved. The result of this process was to confirm our belief and allow us to launch a major effort across countries to strengthen our educational activities. The processes were so successful in defining the problems and gaining buy-in by all involved, that it will certainly be repeated for these VHB programs, and likely used by other HOPE programs.

The major components of our initiative included:
1) Annual VHB workshop bringing together participants from all VHB programs
2) Peer-to-Peer review mechanism used to collect data for the Matching Grant Mid-Term evaluation, whereby one VHB conducted a structured review of another VHB program.

Annual VHB Workshop

We conducted an annual workshop for all HOPE Village Health Bank programs in Guatemala during the year. This unique opportunity for learning brought together representatives from 5 countries that are also operating Village Health Bank programs. We were able to each make presentations about our own activities and solicit feedback from the others. We were also able to present our achievements and progress in Guatemala by visiting numerous banks and benefit from the observations and perspectives of our fellow colleagues. This workshop is tremendously valuable because it enables sharing of very detailed lessons learned among practitioners of similar program operating in different environments. We were able to gain helpful input about various implementation challenges including controlling arrears, training of bank members and staff, and structure of the health education component.

As a result of the VHB workshop, we were also able to define a common vision for the health component in all of Project HOPE's VHB programs. This document provides guidance to determine how, where, and with whom we will operate the VHB program.

Mid-Term "Peer-to-Peer" Evaluation

We wanted to use the opportunity of the matching grant mid-term evaluation to not just conduct an evaluation of progress, but to create a learning experience for our staff. The criteria and indicators of the evaluation were determined by our Detailed Implementation Plan and by USAID. However, we were able to determine the process of how this information was collected.

Our strategy was to conduct a peer to peer review whereby senior technical staff of one VHB program would visit another VHB program in a different country to conduct the review. They would use pre-established tools and instruments to guide the inquiry, ensure that it was comprehensive, and promote consistency. Finally, we hired a US based consultant to supervise use of the tools and provide oversight to the evaluation.

Our staff from Peru visited Guatemala to conduct the review, and staff from Ecuador also participated to observe and learn the process. Then, staff from Guatemala used the same tools and instruments in conducting the review of Ecuador. Finally, staff from Ecuador visited Peru to complete the review there.

In order to structure the review, we established a matrix that identified areas of inquiry along with types of techniques to be used. The review focused on all aspects of the program including staff, information systems, observing activities, focus group discussions with program beneficiaries, and assessing extent of implementation and quality of activity. Then we developed a series of tools that included instructions, discussion and interview guides, inquiry tools, observation checklists, and other instruments to help generate appropriate information. The intention of the instruments was to generate critical self-analysis and foster dialogue between the participants about elements of the program. These discussions would not only be about assessing progress, but delve into very practical matters about making the program a success. It would create a valuable exchange of perspectives and ideas.

The role of the consultant was not to directly participate, but supervise, oversee, and review the results.

We believed that by having our own staff conduct the evaluation it provided a tremendous opportunity to see the details about how another (but similar institution) works, and identify their strengths and weaknesses. They also have the opportunity to self-reflect on their own program using this experience as a basis to institute changes.

This peer review process also contributes to greater "buy-in" on the part of the program being reviewed, because the information is being generated by peers who are familiar with the same day-to-day challenges and problems. This evaluation strategy also eliminates the common problem whereby a consultant evaluates you against their perceived way of doing things, and avoids their bias.

The report on this evaluation has already been provided to USAID, and the Consultant was also contracted by USAID to prepare a separate report about the peer-to-peer approach. The findings show we have made substantial progress in our grant objectives.

- **Advances as Result of Internal Analysis and Learning:**

It is clear that substantial value was generated from the peer-to-peer approach. We are quite pleased by the quality and usefulness of the information. Not only did this approach validate much of our progress, but it yielded valuable findings that benefited HOPE Headquarters and more importantly, significant numbers of detailed recommendations on operational matters for the field programs.

We believe the most significant outcome of the peer-to-peer review process was the overall recognition by all VHB programs about their weaknesses, particularly that their health education activities could be improved. Part of the problem was that what was being done in the VHB

programs were based upon and equivalent to that of other HOPE programs. However, in reviewing a different VHB program, it was much easier for staff to gain the perspective that the activities could be improved.

During our annual VHB workshop, we collectively concluded that our health education approach needs to be modified. Up to now, the VHB programs used an educational approach whereby the primary deliverer of health education information within the banks has been the VHB Health Officers. These are persons elected by the membership to undertake this role. Project HOPE staff has worked to train these officers so that they facilitate and teach the other members. While this is a very sound approach – in reality it is complex and difficult to implement. Especially when participants in the program are primarily motivated by access to the loans. We have experienced high turnover of the VHB Health Officers – necessitating replacement and retraining. We are generally working with women with little education and great hesitance to become teachers. It is difficult to maintain control over quality, when the persons responsible for the education are not staff members.

As a result of staff initiative, we have modified the educational approach towards a more direct model. With this approach, our Bank Promoters now become responsible for the educational activities. Their role will be to strengthen the bank in both the credit and health education components. As such, their titles have been changed to reflect their responsibilities to Community Development Promoters. The Promoters will provide direct education, facilitate discussion among the members about health matters drawing from their own experiences, and initiate problem solving exercises using key health information. With this approach, we have more control over the quality of the educational process.

At a headquarters level, we have also realized the need to strengthen our backstopping of the educational processes and develop educational curricula based solely upon the needs and conditions of VHB clients, and not based upon those used in other educational settings, specifically Child Survival programs. Part of our problem has been to focus upon technical assistance on health matters at the expense of the educational processes. We have skilled persons, but no in-house expertise in education for semi-literate adults. To respond to these needs we are now recruiting an Educational Specialist to strengthen the overall quality of our educational activities (from curriculum design to improving staff skills as educators). This position will primarily focus upon the VHB programs and allow greater consistency and shared processes and materials across programs.

- **Definition of Strategic Direction for HOPE's VHB programs:**

It was an original goal of our Matching Grant application to develop the capacity of our VHB programs to operate independently and transform them into national NGO's. We have achieved this with respect to Ecuador. However, their situation is unique and we don't anticipate doing the same in other countries.

It was anticipated that HOPE's increasing number of VHB programs (funded under this grant) would contribute to a modification in HOPE's by-laws to allow the utilization of debt financing

to support the continued growth of the VHB programs. It is customary in the micro-credit industry to evolve from grant financing to commercial financing, and HOPE thought it would follow this path.

Additionally, it was our original plan for each of the countries where we are operating VHB programs to gain legal registration as a national NGO operating under a different name. Then, as the VHB program expanded and reached sustainability, we would transfer control of the program over to the local NGO. We had already established such a local NGO in both Honduras (not covered by this matching grant) and Ecuador. However, they would be without assets until the anticipated hand over.

As HOPE has moved closer to implementing these – we have reconsidered the strategy. The VHB programs are indeed strengthening their capacity to operate, and they have made significant progress in achieving sustainability. Yet, we have now concluded that to ensure the success, quality, and benefit of the VHB program beyond the matching grant, it is better to not transfer this project to local NGO partners, and instead continue to operate it as Project HOPE. Furthermore, this contributes to the institutional presence and sustainability of Project HOPE those countries.

This decision was due in part to changes in several senior management positions including the Regional Director for the Americas, Vice President of Finance, the Chief Operating Officer, and Chief Executive Officer. With the new senior management team in place, we began a process to define the strategic direction for the VHB programs. The major questions to resolve dealt with the acceptance of debt to finance growth and whether to transfer over control of the VHB programs to local NGO's that we formed. Both of these issues were included as goals in our Matching Grant application.

As a result of extensive discussions among senior management and the Country Directors where we have VHB programs, we concluded that it was in the best interest of HOPE's sustainable presence in the target countries, to include the VHB programs in our portfolio of national activities. We have defined our direction to focus upon building a long term, sustainable, presence within each country through a diversified portfolio of projects with multiple funding sources. Instead of handing over to a local partner, the most sustainable element, it is our intention to maintain control.

We believe the increased operating capacity of Project HOPE due to the VHB programs being operated there enables the organization to respond to other health needs identified in the country. Also, the knowledge gained, experiences, and lessons learned from in each country contribute to strengthening of Project HOPE's activities world-wide. Likewise, by keeping the VHB program with HOPE in specific countries, we will assure that they continue to improve by benefiting from other HOPE experiences.

The best example of this strategy has been Honduras. Since the end of our previous matching grant in 1997, we have been able to effectively serve the people of Honduras by maintaining ownership and quality control responsibility for the VHB program there for the 3 years since it's initial grant expired. By managing the program directly, we have ensured the continuance of the

health focus, which our clients report is one of the main benefits of this approach. At this time, we have no other activities, but do have several strong prospects to establish other health activities. If we had transferred the program over to a local NGO, it is possible that the program would have been managed differently, and perhaps an independent management would have discarded the valuable health activities. Furthermore, we are now in a position to rebuild our presence in Honduras as a result of the VHB program maintaining an institutional presence.

The result of the planning process is that we will now modify several of our grant objectives so that in general, HOPE's VHB programs will not strive to become independent, national organization; nor will they seek commercial financing to support growth.

This position was reviewed and supported by our Mid-Term Evaluation Consultant - Frank Sullivan. He states in his report "A carefully thought-out decision has been taken to 'graduate' HOPE Ecuador and create a fully independent indigenous Non-Government Organization. In the three start-up countries, that goal should be abandoned for the remainder of this grant."

- **Successful Transition from Field Office to National NGO in Ecuador:**

It is important to highlight that HOPE has not abandoned the concept of building local independent organizations. In Ecuador, we have formed a successor NGO, and have recently completed the process of handing over assets for their independent operation. But, this is a unique situation whereby it is in the best interests of the program beneficiaries based upon local circumstances (such as level of experience and in-country resources) for this type of action. Our approach is to develop a strategy appropriate to the individual country, program, situation, and opportunity.

In the case of Ecuador, our program staff there has been quite successful in building relationship with local donors and the USAID mission. During the past 4 years they have obtained over $1 million in additional resources to expand their VHB activities. At the conclusion of the previous matching grant, HOPE/Ecuador had 55 VHBs. While now, they have over 300 with about 10,000 clients serving 4 regions of the country from a network of 8 offices.

During this matching grant term, we have focused upon building the institutional capacity of HOPE/Ecuador to operate a large scale, multi-region program. Simultaneously, we embarked on a process to acquire legal registration as a national NGO. The sheer scale of the program, combined with the ability to operate with limited assistance or support from HOPE headquarter, and the capacity to benefit from utilization of commercial financing resource; has resulted in a unique situation whereby it is in the best interests of the clients to transfer control to the local NGO.

We are quite pleased with the success of this transition. The succeeding partner, ESPOIR has their own independent Board of Directors, and established financing relationships with organizations such as Inter-American Development Bank, Banco Solidario, and others. They are fully capable of operating the VHB program and will be able to benefit clients of the program for

many years to come. Furthermore, they will still participate under the matching grant in achieving the goals and objectives of the grant.

III. Review of Project Results by Country - MALAWI

Summary:

The past year can be characterized as a period of internal improvement and growth to better serve the needs of participants. We have continued to expand our operations by forming 51 new Village Health Banks and currently have 97 in operation. We have worked with over 2,000 women during the year, and disbursed over $150,000 in loans. We have greatly improved loan repayments by modifying our policies and strengthening our collection techniques. Loans past due more than 30 days has dropped from 9% of loans outstanding to only 3.8%. We have also found a 35% improvement across a variety of health indicators according to our recently completed follow-up health survey. Finally, while we see modest growth in amounts of income reported (9%), we see much evidence (such as higher expenditures, improvement in socio-economic indicators, and perceptions that income is better) that participants have experienced a positive economic impact.

During the year we have experienced some turnover of staff, but have been able to replace them with persons of greater capacity for the job. This is particularly important since we have now modified our educational approach within the VHBs to a more direct model with the education conducted by our staff. To do this we have focused upon improving staff skills to be educators. We are finding this new approach very effective in ensuring effective transmission of important health lessons. Although an updated health survey is not yet completed, many members have provided anecdotal evidence of their many benefits of participation.

Finally, we continue to experience problems with the low level of economic activity in our target area of Mulanje District. This is somewhat due to the continued economic problems in the Malawian economy, but more so it is a characteristic of the area. As a result we are not seeing significant growth in loan amounts and therefore little progress towards sustainability. In response, we are now developing plans to expand the program to the more commercial areas of Blantyre and Limbe.

Wider Context:

Two major economic factors have continued to occur in the program area that indirectly affects the activities. The first factor is the continued decline of the Malawi economy since the previous report. The Malawi currency was devalued from MK65 to MK80 to USD, representing a 23% devaluation since the previous report. The corresponding increase in prices in all sectors of the economy has negatively impacted the well-being of Malawians. In response, the program has increased the maximum initial loan by 67% so that an equivalent purchasing power for the recipients is maintained. The economic changes have also negatively impacted the demand for larger loans, as borrowers avoid risk during times of uncertainty. If the Malawi economy continues to decline in the future (please note that at the time of this writing, the exchange rate has improved to MK61 to USD), it will be difficult to achieve the targeted operational

sustainability; and it will be necessary to increase expand the program to more economically active areas.

Monitoring & Evaluation:

i) Mid-term Evaluation Findings

The formal mid-term evaluation for Malawi was conducted in April 2000 and submitted with last years annual report. That separate evaluation and report was required at the time by another funder of the Malawi VHB program, the Department for International Development (DFID). However, we did utilize the peer review mechanism described in the mid-term evaluation report prepared by Frank Sullivan in Malawi. To conduct this, we sent Fernando Zambrano, an English speaking Regional Coordinator from our Ecuador VHB program, to Malawi. He was able to complete the peer review and provide additional technical assistance based upon his many years of experience with the VHB methodology. The Malawi staff greatly enjoyed and benefited from the feedback from a fellow practitioner. The executive summary and status on DIP indicators are presented here.

Executive Summary:

The Village Health Bank Program of Project HOPE/Malawi is being executed in the Mulanje district for over two years and is getting encouraging results, but they should consider targeting more commercial areas were they can generate more income to gain sustainability, and still be working with poor people. They need to strengthen the model in the functioning of the VHB, and to correct some deficiencies found during the VHB meetings.

The Program has overcome most of the problems and constraints faced in the earliest stage of the program, they are implementing new procedures to avoid or minimize arrears and delinquencies. The VHB Program has develop a very good relationship with the other NGO working with micro-credit (FINCA).

The health education in the banks is giving by the health officers elected by the membership, and trained by the health promoter. By experience this approach it is not the most appropriate for the model, they are considering in change it to provide a better service to their clients. During the visit only 78% (69 out of 89) of the VHB were receiving health education – banks in first cycle do not receive health education.

The program seems to have all the resources needed to the execution of the model at this level. The staff is very proactive, and they are committed to the job, nevertheless they need training on adult education and monitoring. The activities of the program are growing, and new resources will be needed, they need a field supervisor and to develop all the tools and procedures for his job. They need new Management Information System to track the growing activities of the program.

The relationship with partners is very good, they meet frequently, and they update each other of the progress of the programs. They share information about defaulters and clients to avoid delinquencies, and to establish precedents in the community about the joint efforts to discourage members to borrow money from both institutions at the same time.

A limitation during the bank meetings and health officers training was the language. In Malawi the official language is Chechewa, and during the training and meetings they spoke Chechewa, for this reason it was difficult to measure the quality of the health officers training and the health education. All the suggestions and recommendations expressed in this document are based on the technical advisor experience gained working with the same program in Ecuador, and the exposure to other Project HOPE VHB programs in other countries (Guatemala, Perú).

Malawi Specific Objectives	**Critical Indicators**	**Mid-Term Status**	**Grant End Prospects**
VHB model adapted to socio-economic characteristics of Mulanje District	• VHB policies and procedures defined for successful implementation in this area;	100%	1
	• Completed lesson plans for health and business education that is appropriate to the needs of the beneficiaries;	75%	1
Expansion of the VHB program to Malawi	• 120 new VHBs will be created;	74%	1
	• 5,500 women will receive loans;	55%	1
Maintenance of high program quality	• Arrears over 30 days less than 5% of outstanding loans;	3.6%	2
	• Loan loss rates of less than 2% of average portfolio;	0%	3
Improved institutional capabilities	• 25 new staff trained and oriented in VHB methodology;	60%	1
	• Development of planning, administrative, and management systems and documentation to support a growing institution;	On progress	2
	• Upgrade of the Financial Management Information System to assess economic impact on beneficiaries;	Achieved	1
	• Development of an Impact Assessment System;		2
Self-Sufficiency	• Achieve a 100% level of operational sustainability;	39%	4
	• Accessing in-country resources to complement program operating and growth needs;		3
Increased beneficiary impact	• Income of participating women increases by 20% annually;		2
	• 70% of VHB members will be engaged in improved home-based health practices;		3

Grant End Prospects Key:
1 = Highly likely to be achieved
2 = Likely to be achieved
3 = Uncertain to judge
4 = Unlikely to be achieved in full
5 = Highly unlikely to be achieved
NA = Not Applicable

ii) Health Survey Results

We have conducted research to measure the health impacts as a result of this program. Our baseline data was collected in July 2000 and presented in last years annual report. Follow-up data collection took place during September 2001 with 256 members of active banks that were beyond the first loan cycle (thus having received some health education). A formal report of the exercise is being prepared. Overall the findings are very positive with an average improvement of 35% across a variety of indicators. The results below directly relate to findings in the baseline survey.

Indicator	July 2000 Baseline	September 2001 Follow-up	Change
Percentage of mothers who gave their child (<60m) more/equal amounts of liquid during the last episode of diarrhoea (last 2 weeks).	37/82 = 45%	136/173 = 79%	74%
Proportion of mothers with children <5y that can name pregnancy danger signs	126/166 = 76%	217/239 = 91%	20%
Proportion of mothers experiencing pregnancy danger signs that sought medical attention from trained providers (formal health services)	24/33 = 73%	62/68 = 91%	25%
Proportion of mothers who understood the need for prenatal visits during pregnancy	141/149 = 95%	252/256 = 98%	4%
Proportion of mothers who had their last delivery in a formal setting (hospital or traditional birthing shelter)	146/164 = 89%	238/256 = 93%	4%
Proportion of mothers with at least one postnatal visit.	45/160 = 28%	144/256 = 56%	100%
Percentage of women not desiring a pregnancy in the next two years that are using a modern family planning method	80/112 = 71%	154/187 = 82%	15%

iii) Participant Economic Impact

An Impact Assessment System is being implemented. Data on the members' socio-economic changes and profiles is being captured into the system as an on-going process; although data collection is inconsistent. Please see the reports presented in Attachment D.

We have found that the women we are working with this year are similar (at least their socio-economic profiles) to those in previous years. This means that we are reaching similarly impoverished women with the loans not being dominated by better off women. Average socio-

economic score for incoming women was 2.40 in calendar year 2000, and 2.38 in 2001. Average monthly income was KW1,325 in 2000 and KW1,202.

In comparing a variety of socio-economic information collected from women as they entered the programme to the results reported as women entered the 4th loan cycles (essentially after one year of participation), they reported a modest 9% growth in income. Additionally, they reported an improvement in socio-economic indicators (from 2.38 average score (4 is max) to 2.57) of 8%. These indicators represent the possible use of enhanced income (such things as food purchases, household assets, home improvement) and are likely to not be sensitive over the short term. Furthermore, they reported an increase in expenditures (frequently used as a proxy for income) of 37% - meaning they spent more (therefore suggesting more resources to spend). In addition, 62% of the women reported their incomes as being better than in the previous year, while 17% said it was the same. Lastly, 31% of women starting the programme stated their contribution to household income was at least half; while 48% women in the 4th loan cycle stated the same. All these indicators taken together suggest a general trend of improved income over 4 loan cycles of participation.

However, it should be noted that these data samples are over the life of the project. The base sample contains information from banks formed during the past year – banks which are in different villages than before. A more effective analysis would be comparisons of the same women as the entered the programme and then later as they reached the 4th loan cycle. We have not yet collected sufficient data to conduct this analysis.

Achievements & Accomplishments:

The program has made a number of achievements and accomplishments during this year. The major ones are as follows:

i) Staff Changes

During the past year, the program has experienced some turnover of staff, however the core management staff remains the same (Howard Bowa - ProgramManager; Emmanuel Chizinga – Accountant/Administrator, Monica Chalulu – Health Coordinator). Two Bank Promoters resigned to take positions with large commercial businesses in the city. Another Bank Promoter was dismissed due to misconduct. Additionally, one security guard passed away after a long illness, with a driver also unable to work full time due to health reasons. All of these persons have been replaced. We have also added additional staff to support the growth of the program: 2 new Bank Promoters and an Assistant Accountant. We are currently recruiting for a Senior Health Co-ordinator and have developed plans to hire a Credit Supervisor. Please also note that we have changed the title for the Bank Promoter position to Community Development Promoter to better reflect their integrated credit & health role in working with the VHBs.

ii) Staff Training

All the above new members of staff, except for the driver, were trained on the program methodology. Additionally, the field staff underwent a one week formal motor bike ridding training course that was organized by the National Road Safety Council of Malawi. Monica Chalulu, Aubrey Kamunga and Colles Nyirenda attended a one-week external training on appreciative inquiry. The Program Manager went to Ghana and Ivory Coast on a study tour with six other people from micro-finance institutions in Malawi. The main objective for the tour was for the delegates to learn from Ghamfin's (Ghana Micro-finance Networks) experience in organizing MFIs. This was necessary for the Malawi delegation since micro-finance institutions in Malawi were in the process of establishing a similar network. Project HOPE recently joined this network. The program also hired a local consultant to provide training sessions for all field staff in adult education methodologies. This will improve their skills in working with the banks. Most recently, the program staff participated in a workshop on Theatre and Participatory Communication in Development provided by faculty from the University of Malawi.

iii) Modification of Credit Policies

To best serve our clients, we continue to modify our policies in response to their input and a changing environment. The maximum initial loan was increased from MK3,000 ($38) to MK5,000 ($63) because the costs for running businesses rose due to the devaluation of the Malawi Kwacha. Initial member savings contribution was raised from MK100 to 10% of the loan amount with a minimum of MK100. This was necessary to increase the member commitment. We also modified our process for collecting loan interest from deducting it from the loan disbursement to having it paid by the clients during their first two installments. This gives them more loan capital to use.

The members are now requested to pledge some collateral for the loans. The program is not concerned with the value of the collateral item but wants to see how committed the borrower is. The items can be seized and sold in the event that a member defaults on the loan. This was necessary because the borrowers lacked seriousness and loan defaults did not impact personal possessions. The members themselves generated the idea and HOPE staff has implemented it.

The program has introduced an Individual Loan product for those members who have demonstrated high capability and demand for capital. Superior members are allowed to borrow an amount directly from HOPE in addition to the group loan. The maximum is an amount equal to the loan taken through the VHB. The individual loan borrowers are not forced to save 16% of the loan amount as it applies to the group loan. The rest of the conditions are those that apply to the group loan. Individual loans are given to the members on merit depending on how she has performed in the group for the previous three loan cycles. This individual loan has allowed us to keep some excellent bank members who business needs exceed the groups. 20 women have benefited from it with loans up to MK10,000 ($127).

iv) Program Growth

The program has formed 51 Village Health Banks this year. This is double the amount in the previous reporting period. The total number of banks formed has now reached 105 and 2,712 in total number of participants since the program started. We have expanded our operations to the

nearby trading centers of Luchenza and Phalombe and conducted promotional activities in the town of Tyolo.

Out of the 105 banks, we have closed 8, have 97 in operation, of which 81 are considered active. These 81 banks are comprised of 1,213 active members. During the year we added 1,002 new bank members, with 582 women departing the program for various reasons (including closing of their banks).

During the year we made 2,081 loan disbursements to women through 133 loan disbursements to VHBs totaling MK11,280,710 ($153,951). This represents growth over the previous year of 33% and 81% respectively. Our current loan portfolio balance is the highest yet at MK3,378,503 ($55,222). Please see the report in Attachment C.

During the year we have been vigilant in the collection of loans. The current past due loan payments over 30 days equals 3.8% of the loan portfolio (compared to 9% a year ago), and the loan portfolio at risk (total loans outstanding with payments past due > 30 days) is only 5.3% of the total portfolio. As a result of these efforts, we have closed 8 banks due to non-performance and with modest loan defaults (MK19,972). We have another 4 banks in the process of dissolution due to disorganization without any loan amounts outstanding. This is very minor considering we have disbursed over MK20,694,934 since inception of the program (0.09%).

Part of the success of this improvement is attributed to our decision last year to allow the reduction in average membership per bank from 25 to as low as 12. As a result, the repayment meetings have been shortened, thus providing sufficient time for the health education session. It also allows the Promoters to pay close attention to each member and solve personal problems.

The old beneficiaries have increased their working capital in their businesses. As previously reported, these beneficiaries have embarked on various small scale businesses such as: selling cooked food, selling farm produce, running a butchery, running a hawker, selling fish, selling soft drinks, selling clothes, raring chickens, running hair dressing saloon, selling green vegetables, selling fruits, and running a grocery. The beneficiaries have registered a lot of achievements out of their participants in the program. Stories of their success include: building houses, paying school fees for their children, buying food, practicing family planning methods, practicing exclusive breast feeding, buying clothes for themselves and family members, expanding their businesses, helping parents financially, etc.

v) Health Education Component

Health education activities have continued this year with a focus upon maternal health. Specific lessons developed include: Pregnancy Related Danger Signs, Family Planning, and Safe Delivery. Observation checklists were also prepared for the above topics.

A total of 172 Health Officers from 80 VHBs have been trained. The Health Officers have in-turn trained 1,400 fellow women in their VHBs through 219 sessions. It is planned that Child Health topics will start next year after Maternal Health topics are finished. While these results are good, we have been hampered by difficulties in recruiting a second Health Education Co-

ordinator. As a result, we have not been able to provide health education to all banks on all topics.

While we have experienced various challenges to fully implementing the health component, we have conducted research to measure the impact we are having. These results were presented previously in this report. Overall the findings are very positive with an average improvement of 35% across a variety of indicators.

With respect to this positive progress in the health education component, Project HOPE has embarked on a strategy to strengthen and improve the quality and benefit of health education in all of our VHB programs world-wide. The major element of this strategy is to modify the educational approach. Up to now, the VHB program in Malawi has used an educational approach whereby the primary deliverer of health education information within the banks has been the VHB Health Officers. These are persons elected by the membership to undertake this role. Project HOPE staff has worked to train these officers so that they facilitate and teach the others members. While this is a very sound approach – in reality it is complex and difficult to implement. Especially when participants in the program are primarily motivated by access to the loans. We have experienced high turnover of the VHB Health Officers – necessitating replacement and retraining. We are generally working with women with little education and great hesitance to become teachers. It is difficult to maintain control over quality, when the persons responsible for the education are not staff members.

As a result of staff initiative in Malawi and other countries, we have modified the educational approach towards a more direct model. With this approach, our Bank Promoters now become responsible for the educational activities. Their role will be to strengthen the bank in both the credit and health education components. As such, their titles have been changed to reflect their responsibilities to Community Development Promoters. The Promoters will provide direct education, facilitate discussion among the members about health matters drawing from their own experiences, and initiate problem solving exercises using key health information. With this approach, we have more control over the quality of the educational process.

The VHB Health Officers will still play an important role; but as assistants to the educational process instead of direct educators. We intend to use many role-playing exercises and small group problem solving activities and the VHB Health Officers will be key participants and leaders in these exercises.

In order to implement this new educational approach, we have planned extensive training and staff development in adult education methodologies. We have also benefited from the staff turnover by being able to hire persons with a different skill set than before. We also intend to install a senior level educational expert either within HOPE's staff in Malawi, or within the VHB program specifically.

VHB program staff in Malawi is very excited about this development. They had felt frustrated in maintaining a quality education component; and now they will have more direct control and influence over it. All believe this will result in substantial increased benefit and value to participants.

vi) Other

The program has acquired the following assets this year: one motor vehicle (Toyota Twin cab 4x4 Raider), four motorbikes, two computers (for the Accountant/Administrator and the Assistant Accountant), and office furniture for the new staff. One motorbike was involved in a road accident and it was damaged beyond repair.

The program has continued looking for a Loan Tracking System. Discussions with a prospective vendor, m/s NCR, continued but were frustrated because the company merged with another company soon after the system was developed. This led to the staff who were directly involved in developing the system to split. Fortunately, those who were directly involved have formed their own company and discussions have resumed. It is hoped that by next year a deal will be concluded.

Problems & Limitations / Strategies & Solutions:

During this reporting period, the program continued to experience similar problems as previously reported (poor road conditions, unavailability of commercial banks, high illiteracy among members). In addition to those, we have worked to overcome the following:

i) Staff Turnover

During the past year the VHB program has lost a number of staff. Some were due to unrelated health problems. However, many have chosen to relocate to the city and join commercial companies. This turnover can be problematic because of the loss of experience and consistency, and the need for retraining. However, our change in educational approach requires a willingness to be responsible for both the credit and education activities. As a result, we used this opportunity to hire persons with more appropriate skill sets. We also monitor our salary and benefits package to ensure that staff are compensated according to the market.

ii) Loan Recovery

Many banks have expected HOPE staff to use force on defaulting members so that they can repay the long outstanding loans. This approach is being used by some MFIs that are operating in the region such as FINCA and Malawi Rural Finance Company. However, our philosophy calls for motivating the banks to take action and solve the problem themselves. To boost their efforts, we have introduced collateral pledges for the member to qualify for a loan. In the event of loan default the first option is selling the collateral item(s). The program has also intensified the use of solidarity groups in the methodology.

iii) Member Turnover

One of the challenges for all micro-credit programs is to balance the focus on benefiting the most impoverished while maintain good loan repayment rates. The greatest cause of membership turnover is due to loan repayment problems. While we continue to experience loan demand,

many participants have had problems with their business activity and ultimately fall behind on their payments. This results in the bank having difficulties and high turnover of members as they non-payers are pushed out.

The consequence of this is that loan sizes don't grow because members depart (which also affects our sustainability). Plus, we lose their experience and familiarity with the methodology. They also are unable to benefit from the project activities. Therefore, we closely monitor member turnover and focus upon keeping it modest.

In general, our loan repayment rates are respectable and at or below industry benchmarks. Additionally, our member turnover rate for the year was 52%. This is also about average for micro-credit programs in Africa. We continue work to improve the participant experience with the program by strengthening staff skills and procedures. This is some of the impetus for our many training activities to build the capabilities of our staff in creating an excellent experience for participants.

iv) Progress towards Sustainability

It was projected in our application, that by grant end the income earned from the loans will be sufficient to meet operational cost and hence the program will be self-sustaining. However, our results to date suggest that this will be difficult to achieve. A number of factors influence the progress towards sustainability: number of clients, growth in loan amounts (impacted by member turnover), and loan repayment.

Number of clients – We have modified how we view number of clients in the program. Previously we focused upon the actual number of banks that have been formed. However, that total included banks which had completed a loan cycle and had internal problems that delayed or prevented their taking additional loans. It also included banks that had loans outstanding even if they were significantly behind in their payments (and therefore the members were no longer actively participating). In contrast, we are now tracking the number of active banks and active clients. These better reflect the actual number of on-going beneficiaries of the program.

Loan Amounts – While it is very positive that our total loan disbursements for the year were twice that of the previous year, we are not experiencing solid growth in loan amounts. In fact, our average loan disbursement in hard currency has been flat ($74 for this year, compared to $78 the previous year). The main causes of this are the general state of the rural economy and the poverty levels for our area of operation. Both ourselves, and another micro-credit institution (FINCA) working in the same area are experiencing little loan growth. We don't want impoverished women to take a loan greater than they can benefit from, yet we are cognizant of the need to grow loan amounts to achieve sustainability.

During the past year, to address this we have expanded the program to many new commercial trading centers in Mulanje district and have also expanded to areas accessible from our office in Thyolo and Phalombe districts. We have also introduced Individual Loans to allow excellent members with an opportunity to borrow substantial amounts.

Nevertheless, we are doubtful for achieving sustainability working only in Mulanje District.

In response, we are now developing plans to expand the program to the commercial cities of Blantyre and Limbe. These areas have much more commercial activity and will enable us to increase our loan amounts and sustainability. It will also likely mean a change in target population to women who are not as impoverished as in Mulanje.

v) Other

While we have collected impact data, particularly about the changes in health, our efforts with regard to socio-economic benefits is more based upon anecdotes and stories provided by members than hard data. We have received many stories of members purchasing houses or being able to withstand the hungry season. However, the implementation of our Impact Assessment System has been inconsistent. While we have lots of data about member demographics (1,656 demographic profiles out of 2,712 total women participating), we have much less about their socio-economic profiles. We do have 604 profiles as women entered the program (baseline) and 111 profiles on women as they entered their 4th member loan cycles (approximately one year of participation). However, our data collection has been inconsistent across time, making useful analysis difficult. For example, we only collected 54 socio-economic profiles on 1st cycle women during the 2000 calendar year. This is an insufficient sample to later compare the results for 4th cycle women in the year 2001 (where we only have 68). However, we are better this year with 538 base profiles collected so far. We expect to improve this by striving to make the information more useful to our program staff by having quarterly debriefings about the results so they are fully aware of the results of their work. We have also clarified expectations for data collection.

Sadly, during the reporting period, the program experienced 5 deaths of its members. This brings the number of dead members to 15 since the program started. This is indeed a reflection of the poor health conditions in the area and the need for this type of program. The member's personal savings and contributions of other members were used to repay the outstanding loans for the dead members.

<u>Lessons Learned:</u>

i) Beneficiaries

The beneficiaries have continued to learn the following lessons:

- That for one to run a successful business, she needs to be dedicated and be equipped with business management skills.
- That they have managed to acquire some assets like bicycles and houses because of their participation in the program.
- That they have become more educated after learning the program methodology that has exposed them to the commercial world. For example they are now able to transact with commercial banks, they are able to handle cash transactions at village level, they are able to secure cash.

- That they are able to lead others and can participate in decision-making.
- That they have taken responsibility for their own affairs. Many banks now resolve their internal problems on their own.
- That they are aware of their health status.

ii) Project HOPE Staff

The program staff and the entire HOPE Malawi have learned the following lessons:

- That peer pressure which is the backbone of the program methodology really works among the community members.
- That the demand for loans is very high among the community members.
- That illiteracy is very high among the community members which is directly affecting the program implementation.
- That for any good VHB to work successfully there should be solidarity among the members.
- That for one to work in a community based program he must be a hard worker and self motivated. The work is very challenging.
- That when a VHB member has a delinquent loan she avoids coming to meetings and as a result she misses health education sessions.
- That small groups are better managed than the big ones.
- That some husbands are very helpful to their wives and play a key role in the performance of the businesses that the women are running.

Changes in Project Design:

- To increase the overall target number of VHBs to be formed through this grant from 110 to 200. This is because loan amounts and VHB sizes are lower than anticipated and the available credit capital will be sufficient for more clients.
- To continue expanding the program to Thyolo and Phalombe Districts and the peri-urban parts of Limbe and Blantyre. This will involve establishing a new office to operate in the new areas.
- To continue giving individual loans to women who need more capital for their businesses.
- To continue increasing the number of VHBs in areas where members are enterprising.
- To increase the initial loan amount whenever necessary because of the high inflation which is forcing the cost of goods to rise.
- To continue to provide loans only to women.
- To continue reviewing the loan policies whenever necessary.
- To increase the member contribution to 10% of the loan amount.
- To let Community Development Promoters teach the health education while the health officers facilitate the sessions.
- To start Health Education Sessions during the second half of the first loan cycle.

III. Review of Project Results by Country - GUATEMALA

Summary:

During the past year, the Guatemala VHB program has experienced a great deal of change. While the program has doubled in size, maintained good quality credit activities, and practically achieved operational sustainability; it has dealt with a number of problems stemming from the poor management practices of the Program Coordinator. The consequence of this has been weak staff relations, inconsistent application of policy, turnover of staff, and most critically, dysfunction in implementation of the health component. We have addressed these problems by replacing the Program Coordinator, implemented a new management structure, improved staff capabilities, and clarified expectations and objectives for the program. Much progress has been shown over the past few months with great optimism for continued achievements. Notwithstanding these issues, the Guatemala VHB program is reporting significant improvements in economic and health status for participants (20% and 36% growth respectively).

Wider Context:

During the past year we have not been adversely affected by the external context of the project. However, the economic conditions in Guatemala are continuing to decline mostly due to the international economic slow down and a depression in the price of coffee locally. The result of these factors will likely be further decline in formal economic activity thus pushing many people to be dependent on informal economic activities that are served by projects such as ours.

Monitoring & Evaluation:

i) Mid-Term Evaluation Findings

The following results about Guatemala are drawn from the mid-term evaluation report. This activity was a peer-to-peer review process that focused upon operational issues. Two persons from our Peru VHB program reviewed Guatemala. The executive summary and status on DIP indicators are presented here.

Executive Summary:

The Guatemala team in spite of their challenges is very aware of their weaknesses and has initiated changes and improvements. The bank meetings are long, the time is not used efficiently, the paperwork is disorganized, and there is no debate about problems. However, the members are very clear that the program is good and has helped them much. Regarding the education component, there is a need to improve the quality of training materials and execution of the activity. It is also important to improve staff communication and increase capabilities.

Guatemala Specific Objectives	Critical Indicators	Mid-Term Status	Grant End Prospects
VHB model adapted to socio-economic characteristics of the San Marcos Department including the Altiplano and Boca Costa regions	• VHB policies and procedures defined for successful implementation in this area;	70%	1
	• Completed lesson plans for health and business education that is appropriate to the needs of the beneficiaries;	40%	2
Expansion of the VHB program to Guatemala	• 85 new VHBs will be created;	Completed	1
	• 3,500 women will receive loans;	70% progress	1
Maintenance of high program quality	• Arrears over 30 days less than 5% of outstanding loans;	3%	2
	• Loan loss rates of less than 2% of average portfolio;	0%	2
	• Operational efficiency of less than 15% by grant end;	38%	2
Improved institutional capabilities	• 15 new staff trained and oriented in VHB methodology;	60%	2
	• Development of planning, administrative, and management systems and documentation to support a growing institution;	50%	2
	• Upgrade of the Financial Management Information System to assess economic impact on beneficiaries;	50%	2
	• Development of an Impact Assessment System;	40%	2
Self-Sufficiency	• Achieve a 100% level of operational sustainability;	62%	1
	• Commercial funding is utilized to finance expansion of the loan portfolio;	NA	
	• Accessing in-country resources to complement program operating and growth needs;		2
Increased beneficiary impact	• Income of participating women increases by 20% annually;		2
	• 70% of VHB members will be engaged in improved home-based health practices;		2

Grant End Prospects Key:
1 = Highly likely to be achieved
2 = Likely to be achieved
3 = Uncertain to judge
4 = Unlikely to be achieved in full
5 = Highly unlikely to be achieved
NA = Not Applicable

ii) Health Survey

We have conducted research to measure the health impacts as a result of this program. Our baseline data was collected in July 2000 and presented in last years annual report. Follow-up data collection took place during October 2001 with 258 members of active banks that were beyond the first loan cycle (thus having received some health education). A formal report of the exercise is being prepared. The results below directly relate to findings in the baseline survey. Overall the findings are very positive with an average improvement of 36% across a variety of indicators.

Indicator	**July 2000 Baseline**	**October 2001 Follow-up**	**Change**
Percentage of mothers who gave their child (<60m) more/equal amounts of liquid during the last episode of diarrhoea (last 2 weeks).	69%	79%	9%
Proportion of mothers with children <2 y who can name danger signs for diarrhea that would make them seek help immediately	74%	88%	19%
Proportion of mothers of children (<60m) that sought help when the child had cough and fast breathing	63%	89%	41%
Proportion of mothers with children <5y that can name pregnancy danger signs	57%	61%	7%
Proportion of women with children <5 years that had at least 2 prenatal visits in their last pregnancy.	41%	74%	80%
Proportion of mothers with children <5y that can name danger signs during postpartum.	43%	55%	28%
Proportion of mothers with at least one postnatal visit.	28%	56%	100%
Proportion of mothers with at least 2 dose of TT.	65%	89%	36%
Proportion of women that can name a way HIV/AIDS can be transmitted	78%	85%	9%

iii) Participant Economic Impact

We have collected baseline socio-economic information on over 1,000 women as they entered the program, and then collected the data on 312 women as they completed 4 loan cycles or about 16 months of participation. Over this timeframe, participants in the second group reported a 20% increase in income as compared to the first group. In addition, the participants in the second group reported a 47% increase in income over their own initial income levels. Furthermore, 88% reported their income was better or much better. This information is also consistent with changes reported in other variables that are sensitive to income such as consumption of food, household assets, and expenditures. Additionally, women reaching their 4th member cycle during 2001 reported incomes 6% higher than women starting during the year. Thus providing a control group to validate the positive changes reported above. Please see the reports in Attachment D.

All this information confirms that we are having a significant and positive impact on the economic status of these impoverished women.

Achievements & Accomplishments:

The grant objectives for the Guatemala Village Health Bank program for this reporting period have remained the same:

a) VHB model adapted to socio-economic characteristics of the San Marcos Department including the Altiplano and Boca Costa regions:

We have been successful in adapting the VHB model to this area of Guatemala because we recognize the differences in each region. This project covers two neighboring geographic areas: the Altiplano and the Boca Costa (transitional zone between the high plateau and coast). While they both have generally poor economic and health conditions, they have different potentials for this program. The Altiplano region is characterized as mountainous, with mostly indigenous people who don't have an entrepreneurial culture. The coastal region is tropical, it contains the international highway, and the inhabitants mostly migrated there from other areas of the country. As a result, they demonstrate a more entrepreneurial culture with high numbers of small scale businesses. Because the potential for this program is greater in the coastal region, we envision a ratio of project participants of 2/3 Boca Costa and 1/3 Altiplano. We continue to support the Altiplano because of the high need for this type of intervention. In recognition of the geographic and cultural differences, we allow flexibility in our loan policies so those clients in each area can benefit from the policies most appropriate for them.

b) Develop HOPE/Guatemala's institutional capacity to successfully implement a VHB program

During the second year, HOPE/Guatemala has been strengthened through expansion of the geographical scope, scale, and operational sophistication of the project. They have opened a new field office to facilitate growth of the project. The project has doubled in size over the year, working with twice as many participants as in the previous year. New staff has been brought in, they have implemented new operational systems, particularly an impact assessment system, and an integrated financial management system, all to better manage a growing project. These new systems have enabled increased efficiency and better sustainability.

Plus, HOPE/Guatemala has also begun to take ownership over the project by their staff undertaking critical self-analysis in the problems related to the health education component, and in developing strategies to improve it. They also embarked on the difficult decision and process (with our complete support) to replace the Project Coordinator due to management problems

All of these changes contribute to an increasingly complex project and with the many successes during the year are evidence of a strengthened organization.

c) Maintain high program quality

The Guatemala VHB program has had excellent loan quality. Over the past year of operations, we disbursed 3,016 loans to 2,087 women, totaling $505,859, and averaging $168. We have

experienced minimal loan defaults ($438); past due rate for payments over 30 days were 3.1% of the loan portfolio as compared to a goal of less than 5%. Furthermore, our portfolio at risk was also only 3% of the loan portfolio versus a target of less than 15%. These indicators demonstrate the high quality of performance to date.

d) Directly benefit over 3,500 women

We are well on our way to achieving this benefit. Through the first two years of this project, we have worked with 2,665 women. With an average household size of 5.2 persons, we have directly impacted over 13,000 persons. We have also disbursed over 6,200 loans totaling over $900,000. We have experienced an average loan growth of 85% for women who have participated for the two years. This demonstrates their ability to expand their economic opportunities.

We also know that the women we are working with are still drawn from the most impoverished sections of their communities. We have found that women joining the program during 2001 have an average 4.8 years of schooling compared to 4.3 for women joining in 1999. That 19% are considered to be illiterate. That 80% rely upon publicly available sources of water. That only 38% are usually able to pay their household expenses. Furthermore, average monthly incomes for women entering the program during 2001 were reported as $54

All this information confirms that we are indeed working with needy women, and that we are having a profound impact on their lives.

e) Increase incomes of long-term participants by 20% annually

We have been able to implement a system to document participant impact as a result of their participation in this project. We have implemented both data collection instruments based on demographic and socio-economic profiles of participants, and a database system to manage the information and contribute to better decision-making. This system was described in previous reports.

We have collected baseline socio-economic information on over 1,000 women as they entered the program, and then collected the data on 312 women as they completed 4 loan cycles or about 16 months of participation. Over this timeframe, participants in the second group reported a 20% increase in income as compared to the first group. In addition, the participants in the second group reported a 47% increase in income over their own initial income levels. Furthermore, 88% reported their income was better or much better. This information is also consistent with changes reported in other variables that are sensitive to income such as consumption of food, household assets, and expenditures. Additionally, women reaching their 4th member cycle during 2001 reported incomes 6% higher than women starting during the year. Thus providing a control group to validate the positive changes reported above. Please see the reports in Attachment D.

f) Measurably improve the health status of participating women

While we have conducted a large number of training sessions with project participants, we have only partly achieved this task. During the year we conducted over 780 training sessions of different types with many focused upon building the capacity of the Village Health Banks to operate and strengthening the ability of their members and management committee to manage themselves successfully. However, only 216 sessions were devoted to health education. We have trained 142 Health Officers from banks and completed a nutrition topic with all banks. Our problem is that we have not implemented all the health lessons with 100% of the banks.

Notwithstanding implementation problems with the health education component, we have completed a follow-up health survey that yielded generally positive results (as reported previously in this report) on those areas that had been covered by our education.

g) To reach monthly operational self-sufficiency during the term of this grant

The increased scale in the program has meant that we have worked with more women than originally planned. This combined with good growth in loan amounts has positively impacted our sustainability. Revenues from loan activity have grown by 97%, while our operating expenses have only increased by 29%. As a result, our sustainability for the year has reached 105%!

This was a result of our focus upon expansion (establishing a new field office, adding new staff, implementing a new financial information system) that almost doubled the number of active clients in the program. Additionally, existing participants were able to utilize higher loans productively so that our average loan disbursement grew by 38%. At the same time we did not have much growth in expenses, in part because we experienced savings due to rotation of staff. We also did not make certain investments to support the larger program scale until after the grant year.

h) Transform Project HOPE/Guatemala into a national NGO

The most significant change to our original project plan relates to our new perspective related to this goal. HOPE's original strategy was to build the capacity of Project HOPE Guatemala so they could operate more efficiently and independently. Furthermore, our intention was to transfer the activities of this Village Health Bank program over to our partner organization ADDIS. Therefore, as the capacity and the sustainability of the VHB program grew, it would be taken over and operated by ADDIS. This would have involved transferring all the staff, systems, and resources related to this project from Project HOPE Guatemala to ADDIS. It was believed that this was an appropriate development strategy to ensure sustainability.

However, as we have moved closer to actually achieving this – we have reconsidered the strategy. The Guatemala VHB program is indeed strengthening their capacity to operate, and they have made significant progress in achieving sustainability (with a 76% rate of operational sustainability for the year). Yet, we have now concluded that to ensure the success, quality, and benefit of the VHB program beyond the USAID grant, it is better to not transfer this project to ADDIS, and instead continue to operate it as Project HOPE. Furthermore, this contributes to the institutional presence and sustainability of Project HOPE Guatemala.

The increased operating capacity of Project HOPE Guatemala benefits all programs being operated there and enables the organization to respond to other health needs identified in the country. Also, the knowledge gained, experiences, and lessons learned from Guatemala contribute to strengthening of Project HOPE's activities world-wide. Likewise, by keeping the VHB program with HOPE in Guatemala, we will assure that they continue to improve by benefiting from other HOPE experiences.

Therefore, in order to preserve the unique benefits of this integrated approach, and to better ensure the highest level of benefit to the Guatemalan people, we are now following a strategy to build capacity of our partner but not to transfer the VHB program to them. No other goals or expected benefits are being modified – only the strategy to achieve them.

It should be noted that HOPE continues to help ADDIS to grow. They have been successful in attracting some modest funding for health activities. Plus, as Project HOPE Guatemala is able to become stronger institution, ADDIS is able to learn as well.

Problems & Limitations / Strategies & Solutions:

While some small issues continue (such as a lack of cooperation among other micro-credit projects, inconsistencies in data collection) our main problem during the year has been with implementation of the health component. As previously noted, we have not had consistent, high quality education taking place with the VHBs.

The primary reason contributing to this relates to an excessive focus on the credit elements of the project by our Project Coordinator. The consequence of this has been a lack of attention paid to the health education component, and relationship problems between our Project Coordinator and staff regarding their responsibilities towards the health activities. This conflict caused the resignation of our Health Coordinator and it took us almost 4 months to find a replacement. This significantly delayed the training of staff in the new health education approach mentioned below.

Therefore, we replaced our Project Coordinator, Geovanny Guillen in June 2001. He was the primary cause of the problems in execution of the health component through his dictatorial management style and poor staff relations. Subsequently, his replacement, Juan Manuel Palacios, came on board in August 2001. We also hired 2 Health Coordinators so we are not dependent any single individual. With a new management team in place, a revised educational approach, and a rededication to the effort, we are confident in achieving these goals.

Another important change we made during the year was to switch our educational approach from working through educators drawn from each bank to having our Bank Promoters provide the education directly. This change came about from a detailed review of the educational approach in Nov. 2000. Staff advocated for this change because they would have greater control and influence over the implementation. The preliminary results of this new approach are quite positive with over 150 educational sessions completed in the last 4 months of the year.

Lessons Learned:

The most important lesson learned this year was the importance of management and oversight that incorporates feedback from persons at all levels. Both our in-country and international management maintained close communication to the Guatemala VHB program. However, subordinate staff when placed in an uncomfortable position that contradicted either established policy or the instructions of a direct supervisor, did not have the access to higher authorities for reporting of improper practices.

We reorganized our field offices as geographic project teams with designated supervisors (one team in San Marcos, one in Malacatan). This creates a decision-making and responsibility level that is close enough to activities to know all the issues. Yet, provides the authority to bypass hierarchy if need be.

Changes in Project Design:

- As was mentioned previously, we have modified our strategy in transferring the resources of this project to the local NGO partner, ADDIS. Instead, we will continue to work to build the capacity of Project HOPE/Guatemala so that they can become sustainable and operate on their own. Our goals for the partner won't change, only the partner.

- As a result of the changeover in management and recognition of the problems with implementing the health component, we have reduced our growth plans for the next year. This will enable our new management team to rebuild staff relations, pay attention to staff training, focus upon implementation of the health activities, and improve overall quality. We will also defer much of the growth originally planned for this next year to the following year. This means that the Guatemala VHB program will remain included under the Matching Grant for the 5th grant year.

III. Review of Project Results by Country - PERU

Summary:

In our second year of implementing the Village Health Bank program in Peru, we have expanded to the provinces of the high Amazonas in the departments of Loreto; and Moyobamba, in the department of San Martin. In this last year, we have formed 58 new banks, 25 in Tarapoto, 3 in Lamas and 25 in Yurimaguas, and 5 in Moyobamba. We now have a network of 3 offices with the main office in Tarapoto, and branch offices in Yurimaguas and Moyobamba serving those areas. Furthermore, we have expanded the VHB activities to some of the more isolated communities served by HOPE's Child Survival program through agricultural credits.

We are demonstrating good results with growth and repayment rates slightly better or equal to our targets. More importantly, we have documented very good impact on the part of our beneficiaries. Through our member profile system we have found a 14% growth in income which is confirmed by positive changes in socio-economic indicators. Additionally, we have measured results of our health education activities by completing a follow-up survey. This showed an average 35% improvement across a variety of health indicators.

Wider Context:

The country has been in political turmoil since September 2000, when corruption in the government was brought to light. During that period there were many changes made in the local government leadership, which has affected adversely the coordination and implementation of the program. Today, after a pre-electoral period, the country has elected a new President that brings hope for an improvement in the country's overall economic condition.

Monitoring & Evaluation:

Referring to the Performance Monitoring Report presented in Attachment C, progress in the Peru VHB program is mostly on target. Growth has been faster than originally planned. However, loan disbursements were lower, plus the average loan amount was a bit below the goal at this phase. This has been offset by good revenues and costs efficiency, resulting in better than targeted operation sustainability for the year. Overall quality remains good.

Educational targets have been greatly exceeded. This is due to our lessons learned from the other VHB programs started under this grant. As a result, we knew to phase in our educational staff at the same time as all other staff even though their activities are planned to commence later. This enabled an earlier start to the educational activities, and a better implementation of this component.

i) Mid-Term Evaluation Findings

The following results about Peru are drawn from the mid-term evaluation report. This activity was a peer-to-peer review process that focused upon operational issues. Two persons from our Ecuador VHB program reviewed Peru. The progress and status on DIP indicators are presented here.

Peru Specific Objectives	Critical Indicators	Mid-Term Status	Grant End Prospects
VHB model adapted to socio-economic characteristics of San Martin Region	• VHB policies and procedures defined for successful implementation in this area;	80%	2
	• Completed lesson plans for health and business education that is appropriate to the needs of the beneficiaries;	70%	1
Expansion of the VHB program to Peru	• 80 new VHBs will be created;	90%	1
	• 3,300 women will receive loans;	65%	1
Maintenance of high program quality	• Arrears over 30 days less than 5% of outstanding loans;	4.8%	2
	• Loan loss rates of less than 2% of average portfolio;	100%	1
	• Operational efficiency of less than 15% by grant end;	35%	3
Improved institutional capabilities	• 15 new staff trained and oriented in VHB methodology;	60%	1
	• Development of planning, administrative, and management systems and documentation to support a growing institution;	80%	1
	• Upgrade of the Financial Management Information System to assess economic impact on beneficiaries;	70%	2
	• Development of an Impact Assessment System;	70%	1
Self-Sufficiency	• Achieve a 100% level of operational sustainability;	30%	2
	• Commercial funding is utilized to finance expansion of the loan portfolio;	NA	
	• Accessing in-country resources to complement program operating and growth needs;		3
Increased beneficiary impact	• Income of participating women increases by 20% annually;		3
	• 70% of VHB members will be engaged in improved home-based health practices;		3

Grant End Prospects Key:
1 = Highly likely to be achieved
2 = Likely to be achieved
3 = Uncertain to judge
4 = Unlikely to be achieved in full
5 = Highly unlikely to be achieved
NA = Not Applicable

ii) Health Survey

We have conducted research to measure the health impacts as a result of this program. Our baseline data was collected in March 2000 and presented in last year's annual report. Follow-up data collection took place during February 2001 with 164 members of active banks that were beyond the first loan cycle (thus having received some health education). The results below directly relate to findings in the baseline survey. Overall the findings are very positive with an average improvement of 35% across a variety of indicators.

Indicator	**2000 Baseline**	**2001 Follow-up**	**Change**
MATERNAL HEALTH	n = 94	n = 164	
Percentage of women who are sexually active with a gynecological examination (PAP) in the last year.	69%	76%	10%
Percentage of women of fertile age (18-49) with at least 2 doses of TT.	38%	80%	111%
Percentage of mothers using modern family planning method.	87%	86%	-1%
Percentage of mothers not desiring a pregnancy in the next 2 years or are not sure	65%	82%	26%
Percentage of women who had at least 2 pre-natal visits in their last pregnancy.	92%	98%	3%
Percentage of women who can identify pregnancy danger signs.	94%	98%	4%
Percentage of women who were attended by a trained provider during postpartum.	85%	91%	7%
FAMILY HEALTH			
Percentage of women using an improved latrine	61%	99%	62%
Percentage of women identifying vaginal discharge as a sign of STDs	55%	79%	44%
Percentage of women identifying abstinence as means of preventing HIV	24%	51%	113%
Percentage of women identifying sexual activity with multiple partners as method of contracting HIV	16%	39%	144%
INFANT HEALTH			
Prevalence rate of diarrhea in the two weeks preceding the survey	36%	20%	-44%
Percentage of mothers who provided foods more frequently and it smaller quantities when children were recovering from episodes of diarrhea.	50%	55%	10%
Percentage of children with signs of ARI in past 2 weeks	50%	38%	-24%
Percentage of mothers who recognize danger signs for diarrhea that would make them seek help immediately.	35%	54%	54%

iii) Participant Economic Impact

We have collected socio-economic information on over 1,500 women as they entered the program thus providing significant baseline data. However, we have far less data on women as they complete their 4th loan cycle or about 16 months of participation. One interesting characteristic is that women joining in the past year are much poorer (according to their socio-economic indicators) than in previous years. This is mostly because we have expanded the VHB program to more distant localities such as Yurimaguas, where poverty is higher. For example, participants in Tarapoto report average SE score of 2.94 and income of s/ 474, while in Yurimaguas they report average scores of 2.76 and income of s/ 360.

Although we don't have a significant sample size for the follow-up group (only 87 women), they do report an improvement in score of 7% and income growth of 18%. These results are not due to the influence of the poorer new clients as the sample size of the base is very high. More importantly, the participants in the second group reported a score change of 3% and an average 14% increase over their own initial income levels. Furthermore, 66% reported their income was better or much better.

All this information confirms that we are having a significant and positive impact on the economic status of these impoverished women.

Achievements & Accomplishments:

a) VHB model adapted to socio-economic characteristics of the San Martin Region

i) Credit policies

We continue to adapt our policies to the needs of clients in each geographic area. We have also formed a few VHB with a different payment schedule primarily in the rural areas and directed toward agricultural activites.

- Loan Amount: the initial loan amount is now S/.350.00 (Approx. $100.00). This increase came as a request of the VHB members.
- Interest Rate: In Tarapoto the rate continues to be 12% per 4-month cycle. In Yurimaguas and Moyobamba the interest rate is of 14%. We continue to request the interest payment in advance.
- Loan Growth: We have noticed that starting in the 4th cycle, it starts to decrease or remain the same, since the members are aware that larger loans will be harder to repay, since their business do not grow at the same rate as the credit increase.
- Size of the VHBs: Our average bank size at the close of the year was 21 women per VHB. At this time many of the banks are being formed with only 15 members because of the distrust that exists amongst the women.
- Repayment: In the majority of the VHB we continue the repayment schedule of every two weeks. We have accepted monthly payments in 2 of the VHB in the rural areas and a 6-month repayment for the agricultural loans. But, we continue the bi-weekly or monthly meetings to hold the health education sessions as well as the savings component.

ii) Health Education Component

During this year, the VHB promoter has assumed the Health Education responsibility. The Health coordinator has thus been free to dedicate time to creation of the educational materials, promoter training, and to supervise the health training. We have created a health education curriculum consisting of 4 educational cycles and 16 health topics. This curriculum structure better matches the expected length of participation of members and is organized to address specific priorities in each region.

b) Develop HOPE/Peru's institutional capacity to successfully implement a VHB program

Personnel: We have doubled the number of employees in the program. 1 new person in the Tarapoto office, 2 in the Yurimaguas office, and 2 in the Moyobamba office; thus making it 11 full time employees in the program: 7 promoters with experience working with organized women, 1 Health coordinator with experience in health education, and 3 support staff. The entire team has received training in the VHB methodology with emphasis on service training.

Formation of New Offices: For the formation of the new office in Yurimaguas, we have signed an agreement with the Regional Health Board of Loreto (DIRES/Loreto) with the aim of receiving support for the health component. In August, we opened the office in Moyobamba. Both our offices are housed within the decentralized locals of MINSA.

These offices are running with minimum personnel. One supervisor whose responsibility is to oversee all administrative aspects of the program, coordinate activities at the regional level, and to form and oversee VHB as well as provide the health education; and one VHB promoter whose main responsibility is to form VHBs and provide the health education. These offices coordinate their activities with the central Tarapoto office.

Personnel Training: We continue to train the personnel using the various methodology manuals. Our focuses include: a) VHB implementation which includes its policies and loan components; b) Training members in the formation and operation of a board; c) collection of data and health indicators; d) Health baseline study manual review, which has been improved with the assistance of the entire team.

Collaboration with MINSA (partner): The VHB program participated in a prevention campaign due to the threat if Dengue in the area. This included a training component (lesson modules creation) directed toward the DIRES – San Martin personnel. This turned out to be a very positive experience for the HOPE team given that both the PGI and the PSI participated. This exchange allowed us to get to know the sanitation reality of the PGI intervention zone as the strengthening of the bond amongst institutions.

Information Systems: During this year we have aimed at improving our information systems. This arose out of the need to analyze the program results and prepare an action plan to solve the problems. Our new information system allows our personnel to have updated information on the status of the program.

Loan Activity: We have managed to integrate the input and output VHB reports into a single form saving the promoters time in calculating the final balance for each meeting. We have also improved the loan disbursement process by using a master member list. This list allows the office to keep member information at hand. We also created a database of all members of the regional micro-finance board with the goal of not duplicating loans as well as keeping track of members with arrears. We should also mention that we continue to categorize members into A and B categories for analysis purposes.

Health: Creation of an information system for the health component: This will allow us to visualize the curricula at a program level. It will also provide information on the number of health sessions completed, number of participants, themes by cycle, who is responsible for the session, theme date, etc.

We hold weekly team meetings with the purpose of sharing information as well as holding review sessions. We hold quarterly meeting with the child survival team to exchange information, discuss problems and solutions as well as coordinate activities.

c) Maintain high program quality

i) Credit component

Our original goal for this period was of 55 VHB and 1,265 clients. To date we have formed 83 VHBs with a total of 1,800 members. However, 19 banks are in various stages of repayment problems and are not functioning properly. Therefore, we currently have 64 active banks with 1,398 members.

Although we haven't experienced any loan defaults, some of our clients are having difficulties in repaying. Currently, our arrears rate over 30 days is 6.9% and portfolio at risk is 10%. These still compare favorably with both our targets and industry standards. The primary causes of this relate to the deteriorating economic situation and the lack of a repayment culture in this region of Peru.

Another result of these repayment problems is membership rotation. The majority of our members leave due to non-payment. This impacts loan disbursement amounts and portfolio growth. However, we have focused on being efficient, and matching our costs with expected revenues so that our annual operational sustainability of 50% is still higher than our target for this period of 41%.

d) Directly benefit over 3,300 women

We are well on our way to achieving this target. Through the first two years of this project, we have worked with over 2,600 women. With an average household size of 5 persons, we have directly impacted over 13,000 persons. We have also disbursed over 4,800 loans totaling over $490,000.

We have expanded the project outside the main geographic area surrounding Tarapoto, the capital of San Martin. We have established two new offices, the first in the city of Yurimaguas, capital of the province of the Alto Amazonas in the Department of Loreto. The second is in the city of Moyobamba, also in the department of San Martin. These field offices allow us to reach more rural areas where most impoverished families live. Because of our experience working in the rural areas with the child survival program as well as the need identified by the field personnel, we decided to venture into rural loans specifically targeting the agricultural sector.

e) Increase incomes and improve health status of long-term participants

i) Income

We have collected socio-economic information on over 1,500 women as they entered the program this providing a significant baseline data. However, we have far less data on women as they complete their 4th loan cycle or about 16 months of participation – only 87 women. They do report an improvement in score of 7% and income growth of 18%. More importantly, the participants in the second group reported a score change of 3% and an average 14% increase over their own initial income levels. Furthermore, 66% reported their income was better or much better.

ii) Health

During the year we have held over 920 health education sessions with VHB members. These activities contributed to the positive results of our follow-up health survey (presented earlier in the Monitoring & Evaluation section). These demonstrated a 35% improvement. Additionally, we have achieved the following with regard to our health activities:

- Healthy Bank Contest: this contest motivated members to have their Pap smears done (an overall coverage rate of 87% was achieved), to use child spacing methods (use rate among women of fertile age achieved 87%) and complete tetanus immunization schedule (coverage 84%). The contest also explored knowledge on prevention of STDs/AIDS, cancer, domestic violence and the adequate management of chronic diseases including menopause. The participation of the Municipality and the MOH ensured ownership of health promotion among local leaders, it is helping to put health issues in the agenda of the local government. 67% of the VHBs participated in the contest.

- Drama: VHB members produced scripts and presented in local fairs/holidays short drama pieces representing health issues they are concerned about: domestic violence, cervical cancer, balanced feeding, and prenatal care. Support from MOH workers ensured that the educational messages were adequate. The community enjoyed those dramas, since informal, participatory education is preferred by locals.

- Health Campaigns: the MOH conducted health campaigns with the support of VHB members. the objective was to promote services provided by the MOH and increase coverage of basic maternal services. Campaigns included reliable procedures such as visual inspection of the cervix and treatment of cancer. One VHB member with cancer was treated, other 5

were treated as suspected cases. 611 VHB members attended the campaigns. Other services provided included tetanus immunization, family planning and physical exams (including breast cancer screening).

- VHB members were invited to participate in a contest of nutritious meals. Criteria included: based in local products, nutritious, balanced, inexpensive, good presentation, good taste and aroma. This contest has been followed by further exploration of nutritious preparations/dishes that are socially acceptable and easy to promote. HOPE local staff has produced a cookbook/child feeding guide based on those preparations.

- Implementation of the new intervention model "Integrated approach" (PGI, PSI). This was an effort launched by Project HOPE in order to maximize the activities of each program. This is a pilot approach that is being tried in the rural area of Lamas – a native community of Chiricyacu.

- Discussion and approval of a training proposal between the center for Transmitted Diseases (CCET), the regional Board of San Martin, and the VHB program. This training proposal targets the VHB women, for whom an action plan has been developed in the prevention of STD including AIDS in the city of Tarapoto. (July – August 2001)

Problems and Limitations:

During our second year in operation, we have been faced with the following challenges, which have limited our progress.

VHB Organization:
- Rotation of management committee members that has contributed to delays in bank organization and procedural problems.
- High rotation of members.
- Poor regard for obligations, worsened by the country's increase in corruption that has brought with it a lack of solidarity and unity in the banks.
- Low self-worth of target population which, makes them conformists and lack the desire to fight for their self improvement.

Loans:
- Increased arrears as well as a high percentage of member rotation.
- Low levels of business management knowledge. The majority of our beneficiaries started their business because of the economic crisis, without any previous knowledge of how to handle or run the business.
- The electoral climate brought with it the notion of non-payment by presenting the possibility of bringing back government run financial systems that foster pardoned loans.

Health:
- A 45% rotation of VHB health coordinators.

- 10% of the VHBs (6) have an insufficient number of educational health sessions because of the substitution of such sessions for loan activities and problem resolution activities.
- 64% of the VHB health coordinators have difficulty planning and organizing the educational sessions.
- 90% of the VHB health coordinators have difficulty developing the education sessions.
- It is necessary to review participatory learning methodologies with our promoters.

Strategies and Solutions:

Loans:

- To reduce the high percentage of member rotation it is necessary to improve the program quality. We believe that the addition of an improved health component will put us on our way to overall programmatic improvement. We hope to create a health component that is more in tune with the needs of the members; we will encourage experience exchanges between bank boards and VHB coordinators, as well as promote peer learning.
- We will work with the members on issues of organization and solidarity. We will also increase promoter training to include community group organization and adult education.
- We have seen the need to include a self-worth/self-esteem training during the first cycle of the VHB. We will also include training on organization.
- To avoid late payments, our objective is to improve the sense of group, through constant monitoring and the enforcement internal regulations. We have also sought the help of a legal advisor to improve the collateral documents. We are also relying on the help of the Regional Roundtable of Micro-finance Organizations to update the member list on a monthly basis. We have also found that members need additional training on the result of payment arrears. We have been forced to take legal action against some members that refuse to cancel their debt. This is also to be used as an example for other members. At this time we have the support of a legal assessor who is overseeing the judicial cases.
- To avoid underutilized time during the VHB meetings, we will be promoting dialogue on business management issues.

Health:

- The development and use of a participatory methodology on the educational sessions.
- Strengthening of the skills possessed by the IG personnel and health coordinators.
- Use of a checklist to follow-up on health coordinators and members of the VHBs.
- Joint efforts between the VHB program and the CS program
- Expansion to the areas serviced by the CS program
- Health service promotion campaigns
- Close coordination between MINSA and other local institutions such as CEDISA, TATI Project, Provincial Municipality, Civil Defense, etc.

Lessons Learned:

Loans:

- The timely knowledge of the needs of the members allows the program to adapt to the need of the beneficiaries.
- By strengthening the VHB boards, we save on retraining and conflict resolutions.
- By providing a varied health education curricula we improve the retention rate of the members.
- Constant supervision will assure all members of the program are working to their potential.
- By working closely with other like organizations, we assure the optimum use of our resources.
- The amount of the loan needs to be determined by the area's market and the loan policies should be flexible and in line with the demands.
- The educational curricula needs to reflect the needs of the members and should focus on attitude and practice changes.
- Experience exchange between members and personnel promotes the development of capacities, while topic reviews promotes member and personnel empowerment.

Health:

- By eliciting member opinion on the educational topics to be held, the program assures greater participation and retention of the topics.
- The use of a participatory methodology makes learning easier.
- The partnership between the VHB promoters and coordinators promotes a greater sense of compromise, integration and responsibility between them.
- The commitment of the coordinators to stay with the program for at least a year.
- By coordinating with other institutions such as MINSA, we are able to bring a greater programmatic spectrum to our members.
- The on-going meetings between the VHB program and the CS program brings about prompt effective solution to programmatic problems.
- The use of the management guide clarifies difficulties and helps define essential maters that need to be tackled.

Changes in Project Design

- The biggest change has been the target areas. According to the DIP, the program would be located in the Provinces of San Martin Lamas and El Dorado. Today we are operating in the Provinces of San Martin, Lamas, Moyobamba, Rioja, and Alto Amazonas in the Department of Loreto.

- Health component: The health component design has been modified in its educational approach. As of May of this year, the Bank Promoters have assumed the responsibility of providing the health education. This gives us greater control over the quality of the interaction. We have also reduced the number of health topics in order to better match expected length of participation.

- After the peer-evaluation and talking it over with the entire staff, we have concluded that during this second program phase we must put emphasis on the health component. This

would include, but not be limited to : evaluate the quality of the health sessions, improve the educational material, and make better use of the management guide

III. Review of Project Results by Country - ECUADOR

Summary:

The past year has been challenging but successful in Ecuador. The economic situation continues to be poor with increased poverty, problems in transition to the dollarization of the economy, and collapse of several commercial banks. However, we have experienced high demand for growth on the part of our clients. So much so that it exceeded our resources. Loan repayments also were good during the year with minimal loan defaults and an arrears rate of only 3%.

During the year we continued implementation of a new management information system linking our 4 regional offices to the new central office located in Quito. We are now well placed to not only supervise and visit all the regional sites, but we can create greater linkages with peer institutions and the donor community.

We also participated in a rigorous study of the health impacts of the Ecuador VHB program by a researcher from Virginia Tech University. Specifically she found: statistically significant improvements in household expenditures on health care, cervical cancer screening, treatment of children for intestinal parasites, use of family planning methods, incidence of malaria and dengue. Although many of the results were positive, some were mixed and we continue to strive to improve our health activities.

Wider Context:

In the post dollarization period, the Ecuador economy continues to struggle with inflation in the prices of all the goods and services. Unfortunately, our clients and our program see their business and their incomes affected by this phenomenon. Between August 2000 and August 2001, the cost of the basic food basket rose from $229 to $293, an increase of 27.7%. The inflation rate for this year is estimated to be 21% and 13% for 2002. The monthly income of an average Ecuadorian family is of $200.

Poverty has risen and the inequitable distribution of wealth is apparent. The poorest 20% of the Ecuadorian population in 1999 received in 2.46% of the national income, while the richest 20% received 61.2%. Poverty has expanded in the last 6 years from the 34% of the population to 71% this year. The number of indigent increased from 12% to 35%. The country has also experienced negative interest rates. The government attempted to establish limits to credit rates, but in December 2000 had to accept that the financial sector returned to charging based upon costs that exceeded the ceiling on their interest rates.

Economic turnaround will come about when global petroleum prices rise to their previous levels, thus allowing increased investment in all industries.

Monitoring & Evaluation:

i) Mid-Term Evaluation Findings

The following results about Ecuador are drawn from the mid-term evaluation report. This activity was a peer-to-peer review process that focused upon operational issues. Three persons from our Guatemala VHB program reviewed Ecuador. The summary status on DIP indicators is presented here.

Ecuador Specific Objectives	Critical Indicators	Mid-Term Status	Grant End Prospects
Formation of a new management structure encompassing multiple geographic regions.	• Relocation of a centralized headquarters office;	100%	1
	• Establishment of a new management team of technical professionals to ensure quality control;	100%	1
	• Development of information and communication systems within the network of field operations;	80%	2
	• Development of management reporting and performance monitoring systems;	90%	2
Maintenance of high program quality	• Arrears over 30 days less than 5% of outstanding loans;	100%	1
	• Loan loss rates of less than 2% of average portfolio;	100%	1
	• Operational efficiency of less than 15% by grant end;	100%	1
Improved institutional capabilities	• Development of planning, administrative, and management systems and documentation to support a growing institution;	90%	2
	• Upgrade of the Financial Management Information System to assess economic impact on beneficiaries;	90%	1
	• Development of an Impact Assessment System;	30%	1
Self-sufficient Ecuadorean institution	• Registration as a national NGO;	100%	1
	• Achieve a 100% level of operational sustainability;	100%	2
	• Expansion of the loan portfolio is funded commercially;	30%	3
	• Utilizing in-country resources to complement program operating and growth needs	70%	2
Increased beneficiary impact	• Income of participating women increases by 20% annually;	20%	4
	• 70% of VHB members will be engaged in improved home-based health practices;	20%	4

Grant End Prospects Key:
1 = Highly likely to be achieved
2 = Likely to be achieved

3 = Uncertain to judge
4 = Unlikely to be achieved in full
5 = Highly unlikely to be achieved
NA = Not Applicable

ii) Health Survey

In March 2001, a research anthropologist from Virginia Technical University, Mary Margaret Weigel, Ph.D., carried out an evaluation of the health impact of the village health bank program in Ecuador. The study sample was current clients of the Manabí VHB project, and a number of control women—those who were about to enter the program—of similar demographic and economic characteristics. A total of 482 subjects were interviewed, and biological samples and anthropometric measurements were taken on this group, 326 VHB and 156 control women and children. The study (enclosed as a separate document) is powerful. Among the most positive findings are the following:

- There was an enormous statistical significant difference in VHB members using rainwater run-off for drinking purposes (p. 0.001).
- There was a substantial significant difference in VHB's household expenditures on health care (p. 0.02).
- There was a statistically significant difference in VHB members' screening for cervical cancer (p. 0.019) and those screened in the last 12 months (p. 0.035).
- There was a statistically significant difference in VHB members' children being treated for intestinal parasites (p. 0.037) in the last six months (p. 0.02).
- There was a statistically significant difference in VHB members' use of <u>any</u> family planning (p. 0.017) but not modern family planning methods.
- There was a statistically significant difference in VHB members reporting being able to finance health care needs during the past month (p. 0.016).
- There was an enormous statistically significant difference in VHB members reporting reduced incidence of mosquito-borne malaria and dengue (p. 0.0000003).

<u>Achievements & Accomplishments:</u>

The main objective of this grant is to build a local NGO capable of taking over the activities of the program and structuring it in a way that accommodates a multi-regional presence across 4 provinces. Through the assistance of the USAID Mission, we have been able to expand from 1 office in 1 province, to 6 field offices in 4 provinces. Furthermore, we have formed a local NGO to take over operations of the VHB program. As of the date of this writing, a full handover of program assets to ESPOIR has been completed. ESPOIR is now an independent organization that is implementing the VHB program in Ecuador. We have successfully created a successor organization.

***a)** Formation of a new management structure encompassing multiple geographic regions*

During the past year we have established a central office in Quito for management of the VHB program in Ecuador across the 4 different provinces. We moved the National Director, Senior

Administrator, Information Technician, and Deputy Director from Manabi to Quito. This central office facilitates better coordination of all activities (because of enhanced transportation linkages) as well as greater interaction with peer institutions and the donor community. We also installed a sophisticated information management system to consolidate results from all regions and allow improved supervision and management.

b) Improved institutional capabilities

During the year we have worked to design, test and implement the new integrated system for accounting and loan portfolio management. We also found ourselves carrying out a new revision of the institutional processes and procedures as well as updating administrative manuals. We also hired the services of a business consultant to prepare the program accounting for reporting in dollars (due to the dollarization of the economy). We have also decentralized management of the program, giving all responsibility to regional offices for their own operation. Lastly, staff participated in a number of training workshops.

- Annual meeting of all national staff to improve the health component of the program.
- Regional meetings to exchange experiences.
- Management course attended by the Regional Coordinator and Accountant for Manabi.
- Participation in IMCI training, and HIV/AIDS (by Kimirina, a specialist organization).

c) Self-sufficient Ecuadorean institution

Not only has ESPOIR assumed responsibility for sustainable operation of the VHB program in Ecuador, but also they have been successful in obtaining additional resources to grow with. They received a combination grant/loan from the Inter-American Development Bank that will allow them to further strengthen their institutional capacities in using debt to finance growth. This is an exciting new relationship. Furthermore, ESPOIR is participating with CARE in the execution of the USAID Mission "Programa Sur" in the frontier areas bordering Peru. These represent significant new resources that further the sustainability of the program benefits to Ecuadorian women.

d) Maintenance of high program quality

Arrears over 30 days, less than 5% of the current portfolio - Arrears rates for the period were only 3%. The only problem was in El Oro where a Bank Promoter stole VHB funds. Our arrears rates are lower than targeted and much better than for commercial banks in Ecuador.

Rate of Defaulted Loans Less than 2% of the average portfolio - During the last twelve months we have only written off $1,038 in defaulted loans. To date we still have $2,303 in reserve capital for defaulted loans.

e) Increased beneficiary impact

Certainly the health study completed by Meg Weigel of Virginia Tech University provides evidence of the general impact of the VHB program. Specifically, she stated the intervention

appeared to have had a positive influence on the health of women participants and their households. She found statistically significant improvements in household expenditures on health care, cervical cancer screening, treatment of children for intestinal parasites, use of family planning methods, incidence of malaria and dengue.

Additionally, we continued with the annual Healthy Bank Contest. In the Province of Manabí, 100% of banks participated. On a national level for HOPE, participation is 65% of banks. In the next year, emphasis will be placed on improving effectiveness of education.

It is important to note that the economic crisis has paralyzed many health institutions and affected the household economy and consequently life and health conditions. As the economic rebounds, we expect participants to show better improvement as well.

Lastly, officers of VHBs participated with their personal stories of triumph in the national contest "Mujer Images and Testimonies" organized by fourth year by a group of NGOs with support from the United Nations. This promotes the themes of women rights, empowerment and equity.

f) Coordination with other institutions

Our formal relationship with the USAID Mission came to an end as we completed our project with them. All goals were reached and Project HOPE was especially noted in the formal USAID evaluation for our success in developing the capacity to execute activities in multiple regions and for implementing systems of control and supervision. We also continue to benefit from USAID through a sub-contract to CARE in the border project. Finally, we participate a forum of micro-enterprise organizations within Ecuador.

g) Other Important Activities

- HOPE/Ecuador staff participated in the 2nd annual meeting of HOPE VHB programs held in Guatemala. This provided an important opportunity for exchange of experiences.
- The Department of Health provided us with information related to the interest of some petroleum businesses to develop projects directed to the prevention and education in HIV/AIDS for the personnel that work in camps and we are preparing a proposal for them.
- We established a collaborative activity with Kimirina (institution specializing in HIV/AIDS) to explore new opportunities for health projects execution. In Manabí we completed a diagnosis of the situation for our bank members regarding HIV/AIDS. We are now working on a full report for submission of additional support.
- HOPE/Ecuador staff participated in the mid-term evaluation of the USAID matching grant. Two persons attended the training sessions in Guatemala to learn the peer-to-peer approach, with a third person joining them to conduct the evaluation of Peru.

Problems and Limitations:

During the year we experienced several operational problems that challenged the organization but did not prevent our success:

Lack of Capital – The stabilization of the economy resulted in high demand for loans. So much that it exceeded our resources available. Individual women wanted much higher loans than previously. Unfortunately, due to HOPE legal restrictions, we were unable to borrow the necessary capital from a financial institution. As a result, we were forced to reduce our client base from 10,000 to 8,500 to satisfy the demands for capital. However, if this problem continues, ESPOIR has the flexibility to pursue debt financing in support of this growth.

Arrears in Loja – Loja is our newest regional operation and it has experienced some growing problems. We had to replace the Coordinator and transfer one of our experienced staff from Manabi to supervise the office. Part of the problem related to a culture that lacks respect for commitment and repayment instead of a misunderstanding of the VHB methodology.

Fraud in El Oro – For the first time, HOPE/Ecuador experienced a significant theft of funds ($7,315) through a fraud scheme by one of our staff in El Oro. Unfortunately, existing supervisory systems were not enforced thus allowing this to escape detection. As a result, we have thoroughly audited our policies and procedures, re-trained staff, and replaced a Supervisor.

Close of Filanbanco – The instability of the Ecuadorian economy over the past year caused Filanbanco, one of the leading commercial banks, to collapse. Although they do have resources, it is quite a mess to sort out the liquidation of the accounts. Project HOPE has about $29,000 frozen and about 90 banks have their personal savings locked. The Forum of NGO's to which we belong has taken action against the President of the Republic to authorize release of the funds.

Strategies and Solutions:

- In working to improve the quality of the health education activities, we embarked on a strategy whereby the Bank Promoter assumed responsibility for the education. The VHB Health Officer became a co-facilitator will continue to teach the others on simple themes. This also brings the health activity directly under the authority of the Regional Coordinator, which strengthens supervision (instead of from the Central Office). Finally, training instruments are being designed by those who will actually use them; with input from technical staff.
- We will continue with the Healthy Bank Contest as it serves to motivate both staff and participants in promoting improved health practices.
- We are also experimenting with a new approach in El Oro where the loan cycles are generally longer (6 months). There we have contracted a couple of health professionals to work part time in only providing the education to the banks. This allows us to have the highest quality level person providing the education without involving them in the other operations of the bank.

Lessons Learned:

- The introduction of the new accounting and loan portfolio systems took much longer than we were prepared for. Although we tested the system as we built it, during final implementation problems emerged. It was also very important to have a person with great knowledge of the software language in order to make adjustments and modifications as needed.
- The decentralization of the information system and delegation of management responsibility to the regional offices required substantial training and working with staff. To do this at the same time we relocated our central office became extremely complex. We would advise others to be less ambitious.
- The results of the health education carried out by the Bank Promoters is much better than with the bank members even though they are being trained to do the education. However, this is not yet optimum inasmuch as it is a great deal to ask of a Bank Promoter to do all the credit work, and now to become experts in education of adults as well as learn the health themes.

Changes in Project Design:

In this next year, ESPOIR will continue to operate the VHB program in Ecuador. HOPE is prepared to invest some resources by hiring a part time representative to continue to seek funding so that HOPE can rebuild it's own portfolio of health activities in the country.

IV. Review and Analysis of Headquarters/Support

The below comments are in reference to the specific grant objectives for Headquarters. Much of the response (italicized comments) has been extracted from the Mid-Term Evaluation Report completed by an external reviewer, Frank Sullivan in September 2001.

A) Formation of an Income Generation department at HOPE Center

Accomplished - By the start of the current grant, project documentation spoke of the formation within HOPE HQ of a distinct Income Generation Department staffed with a project director. Beyond that, interviewees reflected that HOPE's institutional commitment to Village Health Banking projects has improved in the period under review.

Interviewees cited a growing sense of synergism between Child Survival and VHB, and that the two programs should be learning from one another even more—and perhaps be piggybacked one to the other. Also, VHB broadens HOPE's focus on health by directing attention to health related issues: empowerment, group solidarity, and civil society. It also guides HOPE to direct attention to other women-oriented topics like self-esteem, economic opportunities, spousal relations, and living conditions.

Project HOPE has structured this IG department so that the capacity to support the VHB programs is not concentrated in persons who only assist the VHB programs (other than at a senior level with the IG Director). Instead, we are building the capacity to backstop the VHB programs within all regional teams (organized around geographic regions). Within each regional team there are a Regional Director, and Assistant Directors for both operational and financial matters. Therefore, the ARD-Finance is a person with an appropriate skill set to monitor the loan activity, conduct financial and efficiency analysis and provide financial assistance to both the programs the IG Director. The result of this is that backstopping is more wide spread within the institution, and not dependent solely upon the expertise of the IG Director.

At the same time, there are standardized procedures, tools, and practices being utilized regardless of region. This promotes consistency, facilitates training, and assures higher quality support.

Additionally, within the Americas region we are now recruiting for an Educational Specialist. This is due mostly to the self-analysis the VHB programs have done in recognizing that the quality of our health education activities can be improved. This person will focus on the VHB programs, but also work to better the quality of all educational activities within the region. This Educational Specialist is another example of building a valuable technical expertise within the umbrella of the IG department, yet benefits other activities as well.

B) Development of a common, yet flexible methodology building upon successful experiences

Accomplished - Travel to three country operations demonstrates that a common, yet flexible methodology has been implemented. The overall principles of VHB have been respected: market rate interest, portfolio quality guidelines, women's participation, VHB Board of

Directors formation, loan monitoring mechanisms, health education as an integral part of the project, etc. A number of country variations were also observed: change in the planned repayment schedule from every fifteen days to every thirty; change in how loan "points" are charged; change in the average size of the solidarity group; change in the average size of the loan; and others. The program has adapted appropriately to local conditions without sacrificing any essential element.

C) Implementation of the VHB methodology in varied settings

Accomplished - The Ecuador program expanded from approximately 2,800 clients at the start of the current grant to a maximum of 10,000 clients at the height of loan activities. To tighten loan portfolio quality, participant rosters are now being reduced to about 8,000 clients. The Guatemala, Peru and Malawi programs have been opened as a result of this grant and current client rosters as of August 30, 2001 are 1,596, 1,408 and 1,292 respectively.

D) Greater sustainability of the VHB programs through diversification of funding sources

On Target - The project has interested donors who like the 'economic' side of the project as well as those more inclined to the 'empowerment' side. The project has attracted two new international grants and several local grants since the start of the matching grant. The British Development Agency, DIFID, awarded Project HOPE a grant of $412,000 in support of the VHB project in Malawi, and a second grant was forthcoming for $426,000 from the National Lotteries Charity Board of the U.K. in support of the VHB project in Guatemala.

VHB has fostered access to new donors and financing. The gradual expansion of the VHB portfolio has also been a positive development: from two country operations in 1997 to five now. Controlled expansion with program quality has occurred. Other HOPE countries have expressed keen interest in undertaking a VHB project.

We would add that additional focus on developing local/national level resources is continuing.

E) Increased sustainability of HQ technical services

Doubtful accomplishment - Delete as project indicator. The purpose of this indicator was to generate a fee-for-service from country operations to defray part of HOPE HQ costs. Project management explains that the project proposal envisaged taking country loan portfolios "to scale" and in doing so generate a surplus, part of which could be repatriated. In banking terms, the idea is attractive. In development terms, it may be somewhat inappropriate to ask low-income rural women to finance a part of HOPE Headquarters costs. In any case, senior HOPE management is currently studying the concept that HOPE's role is in working with start-up VHB organizations, and 'spinning off' more mature ones. This will have the effect of making revenues re-flows to HOPE HQ unlikely.

F) Development of independent, national organizations that operate the VHB program

The project proposal and the Detailed Implementation Plan call for the creation of four independent national organizations at the conclusion of the grant. In Ecuador, this 'spinning off' is about to take place; with the others, the situation is less clear.

As previously mentioned, the significant growth of the Ecuador VHB program in expanding from 3,000 to 10,000 clients over the term of this Matching Grant has challenged Project HOPE to develop an appropriate strategy to maintain quality assurances yet provide the legal structure for continued growth of a large scale credit program. As a result of extensive discussions, we have concluded that it will not be our primary intention to transition the VHB programs into independent, national organizations. We have embarked on this process for the Ecuador VHB program (indeed at the time of this writing, the VHB program has been turned over to our local NGO partner, ESPOIR) in recognition that their scale demands utilization of commercial financing for on-going growth. However, (and unless the other VHB programs access substantial additional resources) it is not our plan at this time to do the same with the other programs.

Therefore we are eliminating this objective.

G) Establishment of a program performance monitoring system

Accomplished - Performance monitoring in financial realms is a project strength. Each country prepares a number of monthly reports for Millwood review. A format called the 'VH-TRACK' monitors banks formed, number of participants, target number of loan disbursements, amount of disbursements, total loan portfolio, savings, "operational" and "financial" sustainability," arrears, and a number of other indicators. Country field staff report they receive detailed feedback as well as request for additional information based on these documents. The perception of the field staff, HOPE HQ and the donor is that this follow-up tracks project financial performance almost to the penny. Evaluator opinion is that it is hard to imagine a financial question the project has not already considered and on which data have not already been collected.

Please see the Program Performance Monitoring Reports presented in Attachment C.

H) Establishment of an internally managed program impact system

Not yet accomplished - Accomplishment in program impact seems less strong. The project reports that this task is "mostly accomplished" except for health impact that need "upgrading." The evaluator forms a somewhat different opinion.

We agree that a "system" to regularly document impact on the programs is not functioning as well as possible. All programs have developed instruments and database systems but the utilization of these has not been fully achieved. Many of the programs have not maintained current levels of data collection – so sample sizes are not sufficient or the information is not yet comparable across time. Clearly, we need to focus upon making this information and the value it provides more relevant to all staff involved. Nevertheless, we are able to demonstrate positive socio-economic and health impacts in all of our VHB programs.

V. Financial Report

These comments are in reference to the budget information presented in Attachment A.

Please note that we have prepared this financial report in accordance with the financial reporting requirements stipulated by the USAID Office of Procurement as expressed in our Cooperative Agreement. Specifically, we are following the reporting of form SF269A which is filed each quarter with the Office of Procurement. Furthermore, the budget values are drawn from form SF424A which accompanies our Cooperative Agreement. This ensures that all financial information submitted to USAID will be consistent.

In our execution of this grant, Project HOPE invests it's own funds for all program expenditures. Once expenditures are incurred, Project HOPE seeks reimbursement from USAID in accordance with the appropriate guidelines. The effect of this is that all expenses are with HOPE funds. USAID funds are only then used to reimburse Project HOPE. Therefore, this financial report concurs with that funding process.

Another important note is that we have modified our operational plans based upon the actual experiences and results from the different countries operating under this grant. Therefore, the line totals for each country don't correlate to our operational strategy. This is the reason for high variances on a country level. We anticipate achieving all country specific goals, albeit with a different funding level than originally projected.

With regard to USAID funding, we are pretty much on target with a 6% variance level through the third grant year.

Overall expenditures are significantly below budget, with much of the variance coming from HOPE's side. Much of this change is a result of our activities in Malawi. We had originally anticipated much higher loan amounts and usage of credit funds than we are presently experiencing.

Finally, not only are we now using a lower indirect cost rate than was used in the original budget (due to greater institutional efficiencies), but HOPE has modified it's NICRA formula to be based upon overall costs. This represents significant reductions in indirect costs for this project.

Project HOPE has not nor anticipates any difficulty in meeting the matching obligations. This is mostly due to our success in leveraging the USAID funds (as an initial investment to start the projects) into funding from other donors (both institutional and foundation).

Attachment A

Budget

Attachment B

Planning Matrix with Year 3 Status

PROJECT HOPE – USAID MATCHING GRANT
PLANNING MATRIX STATUS AS OF YEAR 3 (Sept. 01)

Program Goal: **Improve Incomes and Health Levels of Impoverished Women and Children**

OBJECTIVES	INDICATOR	BASELINE & TARGET	YEAR 3 STATUS
A) Form financially viable, democratically managed community institutions	1) # of new Village Health Banks formed	1) Baseline: n/a EOP: 285 new VHBs	1) 289 new VHBs have been formed (100% of EOP).
B) Improved economic opportunities for impoverished women	1) # of women receiving loans 2) # of loans disbursed 3) % of loan disbursements less than $300 4) Participation by impoverished women	1) Baseline: n/a EOP: 13,000 Women 2) Baseline: n/a EOP: 55,000 loans disbursed 3) Baseline: n/a EOP: 75% 4) Baseline: n/a EOP: 75% of participants report incomes below poverty line	1) 8,029 women to date (62% of EOP). 2) 15,860 loans disbursed totaling $1,734,474. 3) 100% - average loan disbursement in year of $116 4) 100%
C) Increased incomes of program participants	1) Average change in sample of participant incomes	1) Baseline: n/a EOP: 20% improvement	1) Average changes: Malawi 9% Guatemala 47% Peru 14%
D) Increased exposure of impoverished women to health education lessons	1) Number of educational sessions provided 2) Participation by impoverished women 3) Average # of health education sessions received	1) Baseline: n/a EOP: 12,000 education sessions 2) Baseline: n/a EOP: 75% of participants report incomes below poverty line 3) Baseline: n/a EOP: 15	1) 3,675 education sessions to date. 2) 100% 3) An average of 8 educational sessions received to date.
E) Improved health status of participating women	1) Changes in consolidated health score	1) Baseline: n/a EOP: 75% of participants report 25% or better improvement	1) Average changes: Malawi 35% Guatemala 35% Peru 36%

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PROJECT HOPE – USAID MATCHING GRANT
PLANNING MATRIX STATUS AS OF YEAR 3 (Sept. 01)

Program Goal: **Provide Valued Financial Services and Health Education in a Sustainable Manner**

OBJECTIVES	INDICATOR	BASELINE & TARGET	YEAR 3 STATUS
A) Develop local staff capacity to implement the VHB methodology	1) # of new staff trained in VHB methodology 2) % of new VHB programs with documented policies & procedures	1) Baseline: n/a EOP: 50 2) Baseline: 0 EOP: 100% (3 programs)	1) 47 new staff trained in methodology. 2) Policies and procedures have been defined, and formal manuals are complete.
B) Create local NGO institutions to continue the program beyond the grant end	1) Number of independent national organizations	1) Baseline: 0 organizations EOP: 4 organizations	1) 2 institutions have been formed. Strategy is no longer appropriate.
C) Achieve sustainability of operations	1) % of partner organizations that are operationally self-sufficient	1) Baseline: n/a EOP: 75%	1) 100% (1/1)
D) Serving a significant population	1) # of new VHB program participants reached with resources of this grant 2) # of beneficiaries (participants + family members) of the resources of this grant 3) # of VHBs within Project HOPE	1) Baseline: 0 EOP: 13,000 participants 2) Baseline: 0 EOP: 75,000 beneficiaries 3) Baseline: 230 VHBs EOP: More than 800	1) 8,029 participants to date. 2) Approximately 40,000 beneficiaries to date. 3) 289 new VHBs have been formed under this grant. HOPE's current total is 702.
E) Develop access to resources to support long term growth	1) % of VHB programs utilizing commercial or investment capital	1) Baseline: 0% (2 VHB programs) EOP: 75% (5 VHB programs)	1) Strategy changed. Indicator no longer relevant.
F) Maintain high program quality	1) Arrears more than 30 days old 2) Annual loan losses	1) Baseline: n/a EOP: < 10% of portfolio 2) Baseline: n/a EOP: < 5% of portfolio	1) Combined 4% 2) Combined 0.3%

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PROJECT HOPE - USAID MATCHING GRANT
PLANNING MATRIX STATUS AS OF YEAR 3 (Sept. 01)

OBJECTIVES	INDICATOR	BASELINE & TARGET	YEAR 3 STATUS
D) Greater sustainability of the VHB programs through diversification of their funding sources	1) % of USAID support 2) % of VHB programs utilizing commercial or investment capital as evidenced by leverage ratios of greater than 0.25	1) Baseline: 50% of resources from USAID EOP: 20% of resources from USAID 2) Baseline: 0 of 2 programs using commercial capital EOP: 80% of 5 programs	1) We have made good progress in diversifying the funding sources beyond USAID by successfully receiving 2 major grants from other institutional donors for the HOPE contribution. 2) No longer relevant. HOPE has made a deliberate decision to not pursue this type of financing at this time.
E) Increased sustainability of HQ technical services	1) % of USAID support in annual budget 2) % of funding from client payments in annual budget	1) Baseline: 50% of resources from USAID EOP: 25% of resources from USAID 2) Baseline: 0% EOP: 25%	1) New grants reduce the dependence upon USAID support. 2) Change in strategy, no longer relevant.
F) Development of independent national organizations that operate the VHB program	1) Number of independent national organizations 2) % of partner organizations that are operationally self-sufficient on monthly basis by grant end	1) Baseline: 0 organizations EOP: 4 organizations 2) Baseline: n/a EOP: 100%	1) 2 national organizations have been formed (Guatemala, Ecuador). Transfer of assets to Ecuador partner is completed and now operates independently. This strategy has been changed and indicator is no longer relevant. 2) 100% (1/1)
G) Establishment of a program performance monitoring system	1) Functioning performance monitoring system	1) Baseline: None EOP: Functioning system	1) Completed. This system utilizes quarterly performance targets and monthly results to monitor progress.
H) Establishment of a program impact assessment system	1) Functioning impact assessment system	1) Baseline: None EOP: Functioning system	1) Mostly completed.

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PROJECT HOPE – USAID MATCHING GRANT
PLANNING MATRIX STATUS AS OF YEAR 3 (Sept. 01)

Program Goal: **Strengthened Capacity to Implement Successful Village Health Bank Programs**

OBJECTIVES	INDICATOR	BASELINE & TARGET	YEAR 3 STATUS
A) Formation of an Income Generation department at HOPE Center	1) Team of technical specialists working together to advance the VHB methodology	1) Baseline: 1 full time person EOPS: 3+ persons working together for an equivalent of 1.5 full time positions	1) Core staff are in position, with additional recruitment for an educational specialist.
B) Development of a common, yet flexible methodology building upon successful experiences	1) Development of technical & operational guidelines 2) Definition of core health objectives for all VHB programs 3) Development of MIS for program monitoring and impact 4) Creation of a network of VHB practitioners	1) Baseline: No guidelines EOP: Technical manuals for the methodology, with specific modifications by each program 2) Baseline: No core health objectives EOP: Defined objectives and common educational processes 3) Baseline: None EOP: Functioning systems 4) Baseline: Minimal interaction EOP: Exchange opportunities 2 times per year with mentoring responsibilities	1) Technical manuals at HOPE Center have been developed based upon previous lessons learned and industry best practices. Program site manuals are also completed and will be modified as needed. 2) Core health objectives of all HOPE VHB programs have been defined. Implementation strategy has been modified with an on-going focus on highly effective education. 3) Impact monitoring system is mostly completed. Data collection instruments have been implemented, and data loaded into a database. Inconsistent data collection yields mixed utility of output reports. 4) All VHB programs (6) attended our 2nd annual VHB meeting in March 2001 in Guatemala. All Program Directors also met again in September.
C) Implementation of the VHB methodology in varied settings through replication to 3 new countries, and expansion in 1, all with successfully operating programs	1) VHB model adapted to the unique characteristics of each new implementation site as evidenced by: - % that are operationally sustainable on monthly basis by grant end; - % with high program quality of 30 day arrears < 5% and annual loan losses < 2%	1a) Baseline: 0% EOP: 100% 1b) Baseline: 1 program EOP: 4 programs, all with 30 day arrears less than 5% of outstanding loans and annual loan losses < 2%	1a) Operational sustainability (avg. for last quarter): - 59% - Malawi 29% - Guatemala 95% - Peru 52% - Ecuador 103% 1b) High program quality is being maintained (arrears > 30 days is < 5%) in 3 out of 4 programs. - Malawi 4% - Guatemala 3% - Peru 7% - Ecuador 3%

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Attachment C

Performance Monitoring Report with Year 2 Results

USAID Matching Grant Performance Monitoring Report

Project HOPE/Malawi
Village Health Bank Program

	Quarter Ending				Year 3 (00/01)	
Outreach Indicators	**Dec-00**	**Mar-01**	**Jun-01**	**Sep-01**	**Total**	**DIP**
Number of New VHB	3	5	14	29	51	24
Total Number of VHB	57	54	68	97	97	79
Target Number of VHB	55	54	75	91		
Number of Clients	1,232	1,151	1,282	1,554	2,037	2,133
Target Number of Clients		1,134	1,575	1,911		
% Women	-	-	-	-	100%	100%
Avg. Loan Disbursement	$56	$59	$78	$87	$74	$101
Performance Indicators						
No. of Loan Disbursements in Yr.	345	443	447	846	2,081	5,751
Target # Loan Disbursements	483	714	1,260	1,239		
Amt. of Loan Disbursements in Yr.	$19,189	$26,309	$34,697	$73,756	$153,951	$583,591
Target $ Loan Disbursements	$19,595	$33,967	$61,803	$82,067		
Loan Portfolio	$25,571	$20,281	$23,550	$55,222	$55,222	$161,267
Savings Amount	$12,943	$14,025	$16,215	$14,313	$14,313	$87,539
Operational Sustainability	18%	24%	24%	29%	24%	59%
Target Sustainability	18%	11%	20%	30%	20%	59%
Quality Indicators						
Arrears > 30 days	8.5%	3.7%	7.4%	3.8%	3.8%	<5%
Portfolio at Risk	10%	4%	8%	5%	5%	<15%
Loan Loss Rate	-	$252	-	-	0.6%	<2%
Efficiency Indicators						
No. of VHB per Promoter	11	11	11	12	12.0	13.0
No. of Clients per Staff	137	82	85	173	173	133
Operational Efficiency	133%	88%	89%	63%	93%	38%
Education Indicators						
No. of New Staff Trained		5	1	3	9	5
No. of Staff Trainings		5	4	3	12	20
No. of Educational Sessions	81	164	159	163	567	1,028

USAID Matching Grant Performance Monitoring Report

Project HOPE/Guatemala
Village Health Bank Program

	Quarter Ending				Year 3 (00/01)	
Outreach Indicators	**Dec-00**	**Mar-01**	**Jun-01**	**Sep-01**	**Total**	**DIP**
Number of New VHB	17	3	9	14	43	20
Total Number of VHB	75	78	87	101	101	68
Target Number of VHB	54	56	62	68		
Number of Clients	1,628	1,651	1,750	1,890	1,890	1,700
Target Number of Clients	1,350	1,400	1,550	1,700		1,700
% Women	-	-	-	-	100%	100%
Avg. Loan Disbursement	$160	$175	$175	$167	$168	$193
Target Avg. Disbursement	$159	$174	$201	$220		
Performance Indicators						
No. of Loan Disbursements in Yr.	1,033	368	834	781	3,016	4,550
Target No. Disbursements	950	900	1,250	1,450		
Amt. of Loan Disbursements in Yr.	$165,037	$64,359	$146,149	$130,314	$505,859	$878,100
Target Loan Disbursements	$151,419	$156,594	$250,984	$319,102		
Loan Portfolio	$173,196	$102,599	$127,713	$118,119	$118,119	$218,714
Target Loan Portfolio	$117,441	$102,369	$146,501	$218,714		
Savings Amount	$48,693	$58,973	$71,385	$81,129	$81,129	$131,715
Operational Sustainability	148%	97%	81%	95%	105%	66%
Target Sustainability	61%	61%	66%	82%		66%
Quality Indicators						
Arrears > 30 days	0.3%	0.9%	1.8%	3.1%	3.1%	<5%
Portfolio at Risk	0%	1%	2%	3%	3%	<15%
Loan Loss Rate	-	-	438	-	0.4%	<2%
Efficiency Indicators						
No. of VHB per Promoter	10.7	9.8	10.9	11.0	11.0	13.0
No. of Clients per Staff	125	118	125	172	172	163
Operational Efficiency	7%	34%	23%	20%	21%	16%
Education Indicators						
No. of New Staff Trained	2		1	4	7	3
No. of Staff Trainings	22	12	17	13	64	14
No. of Educational Sessions	192	133	228	232	785	904

USAID Matching Grant Performance Monitoring Report

Project HOPE/Peru
Village Health Bank Program

	Quarter Ending				Year 3 (00/01)	
Outreach Indicators	**Dec-00**	**Mar-01**	**Jun-01**	**Sep-01**	**Total**	**DIP**
Number of New VHB	19	11	14	14	58	20
Total Number of VHB	44	55	69	83	83	48
Target Number of VHB	44	50	55	55		
Number of Clients	915	1,192	1,537	1,800	1,800	1,296
% Women	-	-	-	-	100%	100%
Avg. Loan Disbursement	$113	$113	$108	$99	$107	$145
Performance Indicators						
No. of Loan Disbursements in Yr.	713	552	1,072	979	3,316	3,294
Amt. of Loan Disbursements in Yr.	$80,274	$62,215	$115,246	$96,909	$354,644	$477,367
Target Loan Disbursements	$111,352	$107,633	$120,713	$154,329		$477,367
Loan Portfolio	$67,487	$53,956	$86,696	$84,631	$84,631	$120,949
Savings Amount	$5,665	$8,210	$10,615	$14,845	$14,845	$71,605
Operational Sustainability	32%	47%	68%	52%	50%	41%
Target Sustainability	33%	45%	54%	39%		41%
Quality Indicators						
Arrears > 30 days	0.2%	1.9%	3.1%	6.9%	6.9%	<5%
Portfolio at Risk	0%	4%	3%	10%	10%	<15%
Loan Loss Rate	-	-	-	-		<2%
Efficiency Indicators						
No. of VHB per Promoter	11	11	11	12	12.0	13.0
No. of Clients per Staff	92	117	140	138	138	150
Operational Efficiency	48%	34%	23%	39%	36%	26%
Education Indicators						
No. of New Staff Trained	1	1	0	2	4	2
No. of Staff Trainings	5	3	6	4	18	10
No. of Educational Sessions	240	226	214	240	920	596

Attachment D

Beneficiary Profile Information

Project HOPE/Malawi - VHB Program
Comparison of Socio-Economic Profile Results - Total Sample

Socio-Economic Profile I Results		Socio-Economic Profile II Results		Change in Results
Sample Size:	604	Sample Size:	111	
Children at School Avg:	2.86	Children at School Avg:	3.01	5%
Hungry Season Avg:	3.08	Hungry Season Avg:	3.43	11%
Food Consumption Avg:	2.64	Food Consumption Avg:	2.88	9%
Household Asset Avg:	1.88	Household Asset Avg:	2.01	7%
Housing Avg:	2.54	Housing Avg:	2.77	9%
Average Member Score:	2.38	Average Member Score	2.57	8%
Sample Size:	559	Sample Size:	80	
Average Member Income:	1,192	Average Member Income:	1,297	9%
Expenditures Avg:	358	Expenditures Avg:	491	37%

Income Contribution:		Income Contribution:	
1-None	6%	1-None	1%
2-Very small part	12%	2-Very small part	5%
3-Some but less than half	51%	3-Some but less than half	47%
4-Half of it	16%	4-Half of it	24%
5-Most of it	9%	5-Most of it	18%
6-All of it	6%	6-All of it	6%

Change in Income:		Change in Income:	
1-Much worst	4%	2-Worse	19%
2-Worse	38%	3-Same	17%
3-Same	27%	4-Better	57%
4-Better	24%	5-Much better	5%
5-Much better	2%	9-Don't know	3%
9-Don't know	5%		

Thursday, January 31, 2002

Project HOPE/Malawi - VHB Program
Comparison of Socio-Economic Profile Results - Same Individuals

Socio-Economic Profile I Results		Socio-Economic Profile II Results		Change in Results
Sample Size:	15	Sample Size:	15	
Children at School Avg:	2.63	Children at School Avg:	3.00	14%
Hungry Season Avg:	2.73	Hungry Season Avg:	3.13	15%
Food Consumption Avg:	2.61	Food Consumption Avg:	3.11	19%
Household Asset Avg:	1.89	Household Asset Avg:	1.83	-3%
Housing Avg:	2.63	Housing Avg:	2.83	8%
Average Member Score:	2.32	Average Member Score	2.55	10%
		Average of Individual Score Changes:		12%
Sample Size:	9	Sample Size:	10	
Average Member Income:	461	Average Member Income:	1,015	120%
		Average of Individual Income Changes:		269%
Expenditures Avg:	313	Expenditures Avg:	605	93%

Income Contribution:		Income Contribution:	
1-None	80%	3-Some but less than half	69%
4-Half of it	10%	4-Half of it	8%
6-All of it	10%	5-Most of it	23%

Change in Income:		Change in Income:	
3-Same	78%	2-Worse	7%
4-Better	11%	3-Same	21%
5-Much better	11%	4-Better	71%

Thursday, January 31, 2002

Project HOPE/Malawi - VHB Program
Base Profile Results by Year

Year	No.	Avg. YOB	Avg. No Adults	Avg. No Child.5-19	Avg. No Child.<5	Avg. Size Household	Average Yrs. School	Avg. No. Generating Income	Avg. Socio-Economic Score	Average Monthly Income	Average Weekly Expense
1999	1042	1966	2.0	2.5	0.1	4.6	5.1	1.7	2.33	654	174
2000	133	1967	2.0	1.8	0.5	4.2	5.6	2.0	2.53	612	281
2001	481	1964	2.1	2.2	0.6	4.9	5.4	1.9	2.37	1,550	419

Project HOPE/Malawi - VHB Program
Socio-Economic Profile I Results by Year
Scores range from 1 (poor) - 4 (good)

Year	Sample size	Children at school avg.	Hungry Season Avg.	Food Consum-ption Avg.	House-hold Asset Avg.	Housing Average	Average Member Score	Avg. Mo. Member Income	Avg. Weekly Expend.
1999	14	2.43	2.64	2.53	1.80	2.59	2.29	144	165
2000	54	2.57	3.15	2.62	1.95	2.59	2.40	1,325	235
2001	536	2.89	3.09	2.65	1.88	2.53	2.38	1,202	370

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Project HOPE/Malawi - VHB Program
Changes in Socio-Economic Profile Results - By Year

	Sample Size		Profile Average Score		Average Income	
Data Year	Base	2nd	Base	2nd	Base	2nd
1999	14	2	2.29	2.71	144	
2000	54	41	2.40	2.66	1,325	1,404
2001	538	68	2.38	2.51	1,202	1,276

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Project HOPE/Guatemala - VHB Program
Comparison of Socio-Economic Profile Results - Total Sample

Socio-Economic Profile I Results		Socio-Economic Profile II Results		Change in Results
Sample Size:	1018	Sample Size:	312	
Children at School Avg:	2.96	Children at School Avg:	2.37	-20%
Hungry Season Avg:	2.92	Hungry Season Avg:	2.90	-1%
Food Consumption Avg:	2.33	Food Consumption Avg:	2.65	14%
Household Asset Avg:	1.80	Household Asset Avg:	1.99	11%
Housing Avg:	2.60	Housing Avg:	2.65	2%
Average Member Score:	2.35	Average Member Score	2.43	4%
Sample Size:	1018	Sample Size:	308	
Average Member Income:	376	Average Member Income:	452	20%
Expenditures Avg:	161	Expenditures Avg:	166	3%

Income Contribution:		Income Contribution:	
1-None	2%	1-None	2%
2-Very small part	5%	2-Very small part	2%
3-Some but less than half	17%	3-Some but less than half	20%
4-Half of it	53%	4-Half of it	49%
5-Most of it	17%	5-Most of it	19%
6-All of it	7%	6-All of it	8%

Change in Income:		Change in Income:	
1-Much worst	5%	1-Much worst	1%
2-Worse	4%	3-Same	11%
3-Same	27%	4-Better	53%
4-Better	34%	5-Much better	35%
5-Much better	27%	9-Don't know	1%
9-Don't know	3%		

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Project HOPE/Guatemala - VHB Program
Comparison of Socio-Economic Profile Results - Same Individuals

Socio-Economic Profile I Results		Socio-Economic Profile II Results		Change in Results
Sample Size:	136	Sample Size:	136	
Children at School Avg:	3.06	Children at School Avg:	2.13	-30%
Hungry Season Avg:	2.32	Hungry Season Avg:	2.61	12%
Food Consumption Avg:	2.08	Food Consumption Avg:	2.67	28%
Household Asset Avg:	1.57	Household Asset Avg:	1.97	25%
Housing Avg:	2.39	Housing Avg:	2.57	8%
Average Member Score:	2.12	Average Member Score	2.37	12%
		Average of Individual Score Changes:		12%
Sample Size:	136	Sample Size:	135	
Average Member Income:	317	Average Member Income:	469	48%
		Average of Individual Income Changes:		62%
Expenditures Avg:	153	Expenditures Avg:	181	18%

Income Contribution:		Income Contribution:	
2-Very small part	4%	3-Some but less than half	29%
3-Some but less than half	12%	4-Half of it	43%
4-Half of it	57%	5-Most of it	20%
5-Most of it	25%	6-All of it	8%
6-All of it	1%		

Change in Income:		Change in Income:	
1-Much worst	1%	3-Same	1%
2-Worse	3%	4-Better	89%
3-Same	33%	5-Much better	10%
4-Better	56%		
5-Much better	3%		
9-Don't know	4%		

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Project HOPE/Guatemala - VHB Program
Base Profile Results by Year

Year	No.	Avg. YOB	Avg. No Adults	Avg. No Child.5-19	Avg. No Child.<5	Avg. Size Household	Average Yrs. School	Avg. No. Generating Income	Avg. Socio-Economic Score	Average Monthly Income	Average Weekly Expense
1999	686	1962	2.4	2.2	0.7	5.3	4.3	2.0	2.16	340	144
2000	1	1966	2.0	2.0	0.0	4.0	0.0	2.0	2.43	500	1,603
2001	827	1965	2.3	2.1	0.6	5.0	4.8	2.0	2.58	417	176

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Project HOPE/Guatemala - VHB Program
Socio-Economic Profile I Results by Year
Scores range from 1 (poor) - 4 (good)

Year	Sample size	Children at school avg.	Hungry Season Avg.	Food Consum-ption Avg.	House-hold Asset Avg.	Housing Average	Average Member Score	Avg. Mo. Member Income	Avg. Weekly Expend.
1999	485	2.97	2.57	2.02	1.65	2.43	2.16	340	144
2000	1	1.00	4.00	2.00		3.00	2.43	500	1,603
2001	372	2.94	3.41	2.70		2.79	2.58	417	176

Thursday, January 31, 2002

Project HOPE/Guatemala - VHB Program
Changes in Socio-Economic Profile Results - By Year

	Sample Size		Profile Average Score		Average Income	
Data Year	Base	2nd	Base	2nd	Base	2nd
1999	533		2.15		339	
2000	2	139	2.21	2.37	550	466
2001	483	173	2.56	2.48	416	440

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Project HOPE/Peru - VHB Program
Comparison of Socio-Economic Profile Results - Same Individuals

Socio-Economic Profile I Results		Socio-Economic Profile II Results		Change in Results
Sample Size:	87	Sample Size:	87	
Children at School Avg:	3.82	Children at School Avg:	3.43	-10%
Hungry Season Avg:	3.98	Hungry Season Avg:	3.71	-7%
Food Consumption Avg:	3.31	Food Consumption Avg:	3.33	1%
Household Asset Avg:	2.44	Household Asset Avg:	2.51	3%
Housing Avg:	2.97	Housing Avg:	3.08	4%
Average Member Score:	2.97	Average Member Score	3.04	2%
		Average of Individual Score Changes:		3%
Sample Size:	87	Sample Size:	87	
Average Member Income:	520	Average Member Income:	519	0%
		Average of Individual Income Changes:		14%
Expenditures Avg:	78	Expenditures Avg:	81	4%

Income Contribution:		Income Contribution:	
La Mayor Parte	33%	La Mayor Parte	36%
La Mitad	25%	La Mitad	29%
Menos de la Mitad	3%	Menos de la Mitad	16%
Muy Poco	20%	Muy Poco	13%
Todo	18%	Todo	7%

Change in Income:		Change in Income:	
Igual	40%	Igual	32%
Mejor	44%	Mejor	57%
Mucho Mejor	5%	Mucho Mejor	9%
Mucho Peor	3%	No Sabe	1%
No Sabe	5%		
Peor	3%		

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Project HOPE/Peru - VHB Program
Comparison of Socio-Economic Profile Results - Total Sample

Socio-Economic Profile I Results		Socio-Economic Profile II Results		Change in Results
Sample Size:	1502	Sample Size:	87	
Children at School Avg:	3.53	Children at School Avg:	3.43	-3%
Hungry Season Avg:	3.51	Hungry Season Avg:	3.71	6%
Food Consumption Avg:	3.23	Food Consumption Avg:	3.33	3%
Household Asset Avg:	2.35	Household Asset Avg:	2.51	7%
Housing Avg:	2.83	Housing Avg:	3.08	9%
Average Member Score:	2.85	Average Member Score	3.04	7%
Sample Size:	1502	Sample Size:	87	
Average Member Income:	440	Average Member Income:	519	18%
Expenditures Avg:	76	Expenditures Avg:	81	7%

Income Contribution:		Income Contribution:	
La Mayor Parte	25%	La Mayor Parte	36%
La Mitad	37%	La Mitad	29%
Menos de la Mitad	11%	Menos de la Mitad	16%
Muy Poco	19%	Muy Poco	13%
Nada	2%	Todo	7%
Todo	7%		

Change in Income:		Change in Income:	
Igual	48%	Igual	32%
Mejor	37%	Mejor	57%
Mucho Mejor	5%	Mucho Mejor	9%
Mucho Peor	1%	No Sabe	1%
No Sabe	3%		
Peor	5%		

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Project HOPE/Peru - VHB Program
Base Profile Results by Year + Cycle

Year	No.	Avg. YOB	Avg. No Adults	Avg. No Child.5-19	Avg. No Child.<5	Avg. Size Household	Average Yrs. School	Avg. No. Generating Income	Avg. Socio-Economic Score	Average Monthly Income	Average Weekly Expense
1999	4	1973	3.3	0.3	0.3	3.8	5.0	2.0	2.84	1,350	113
2000	041	1964	2.8	1.5	0.5	4.9	8.5	2.2	2.86	446	73
2001	290	1965	2.8	1.9	0.6	5.3	8.8	2.1	2.84	382	83

Project HOPE/Peru - VHB Program
Socio-Economic Profile I Results by Year + VHB Loan Cycle
Scores range from 1 (poor) - 4 (good)

Year	VHB Cycle	Sample size	Children at school avg.	Hungry Season Avg.	Food Consum-ption Avg.	House-hold Asset Avg.	Housing Average	Average Member Score	Avg. Mo. Member Income	Avg. Weekly Expend.
1999	01	4	4.00	4.00	3.17	2.38	2.60	2.84	1,350	113
2000	01	841	3.54	3.53	3.23	2.34	2.81	2.84	429	72
2000	02	103	3.62	3.83	3.18	2.42	2.91	2.92	510	79
2000	03	61	3.45	3.80	3.38	2.53	2.96	3.01	586	79
2000	04	36	3.09	3.67	3.22	2.51	2.91	2.93	416	73
2001	01	208	3.40	3.33	3.24	2.19	2.77	2.79	355	78
2001	02	30	3.44	2.61	3.41	2.51	2.90	2.90	475	114
2001	03	12	3.67	3.73	2.75	2.48	3.20	2.95	427	89
2001	04	23	3.75	3.74	3.42	2.55	2.97	3.03	430	76
2001	05	17	3.67	3.47	3.28	2.56	3.22	3.04	465	85

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Project HOPE/Peru - VHB Program
Changes in Socio-Economic Profile Results - By Year

	Sample Size		Profile Average Score		Average Income	
Data Year	Base	2nd	Base	2nd	Base	2nd
1999	18		2.68		542	
2000	124	59	2.86	3.05	452	556
2001	358	28	2.84	3.00	397	442

Thursday, January 31, 2002

Attachment E

Form 1550-11

PVO REPORTING INFORMATION ON A.I.D. SUPPORTED PVO PROJECTS

FOR OFFICIAL USE ONLY		
PVO Type	Project Number	
Appropriation	Level	
Country Code	Fund Type	Technical Code
Project Officer	Key 1	Key 2

PROJECT INFORMATION (PRIMARY)

Name of Organization The People-to-People Health Foundation, Inc. (Project HOPE)		Grant/Contract Number	FAO-A-00-98-00028-00
Start Date *(MM/DD/YY)* 9/1/98	End Date *(MM/DD/YY)* 8/31/03	AID Project Officer's Name	Regine A. Douthard

A.I.D. OBLIGATION BY A.I.D.-FY ($000)

FY	AMOUNT	FY	AMOUNT

LOP →

ACTIVITY DESCRIPTION

Goal: To alleviate poverty and its effects on women and children by increasing incomes and improving health conditions and personal well-being in Latin America and Africa.

Purpose: Strengthen Project HOPE's ability provide effective technical support.

- VHB policies and procedures defined for successful implementation in each country and area.
- Manuals for policies and procedures, training, and program administration completed.
- Replication of VHB program in 3 countries.
- Improved institutional capability at Project HOPE to implement high-quality VHB programs through training, development of financial management information systems to monitor program performance; development of internal Impact Assessment Systems to measure beneficiary benefits; development of defined strategic objectives for each local institution; and development of an active network of VHB practitioners.

STATUS - YEAR 3 (09/01):

- Project HOPE completed a successful mid-term evaluation using an innovative peer-to-peer review approach, whereby one VHB program visits another and assesses their progress. This yielded significant dialogue, self-analysis, and learning between the VHB programs.
- We have formed a local NGO in Ecuador, and transferred assets over so they can succeed HOPE/Ecuador and operate independently.
- We have also commissioned a rigorous health study of the Ecuador VHB program by a researcher from Virginia Tech University. Specifically she found: statistically significant improvements in household expenditures on health care, cervical cancer screening, treatment of children for intestinal parasites, use of family planning methods, incidence of malaria and dengue. We have also internally collected baseline and follow-up health data in 3 countries. These findings report an average 35% improvement across a variety of health indicators.

COUNTRY INFORMATION (SECONDARY)

Country **Headquarters**	Location in Country *(Region, District, Village)*
PVO Representative's Name John Bronson, Director, IG Programs	Local Counterpart/Host Country Agency

COUNTRY FUNDING INFORMATION ($000)

YEAR	1999-Actual	2000-Actual	2001-Actual	2002-Projected	2003-Projected
A.I.D. $	84,015	168,793	205,967	186,068	85,000
PVO $	113,370	139,440	193,049	220,068	338,105
INKIND					
LOCAL					
TOTAL →	197,385	308,233	399,016	406,136	423,105

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PVO REPORTING INFORMATION ON A.I.D. SUPPORTED PVO PROJECTS

FOR OFFICIAL USE ONLY

PVO Type	Project Number	
Appropriation	Level	
Country Code	Fund Type	Technical Code
Project Officer	Key 1	Key 2

PROJECT INFORMATION (PRIMARY)

Name of Organization The People-to-People Health Foundation, Inc. (Project HOPE)		Grant/Contract Number FAO-A-00-98-00028-00	
Start Date *(MM/DD/YY)* 9/1/98	End Date *(MM/DD/YY)* 8/31/03	AID Project Officer's Name Regine A. Douthard	

A.I.D. OBLIGATION BY A.I.D.-FY ($000)

FY	AMOUNT	FY	AMOUNT

LOP →

ACTIVITY DESCRIPTION

Goal: To alleviate poverty and its effects on women and children by increasing incomes and improving health conditions and personal well-being in Latin America and Africa.

Purpose: Strengthen Project HOPE's ability provide effective technical support.

- VHB policies and procedures defined for successful implementation in each country and area.
- Manuals for policies and procedures, training, and program administration completed.
- Replication of VHB program in 3 countries.
- Improved institutional capability at Project HOPE to implement high-quality VHB programs through training, development of financial management information systems to monitor program performance; development of internal Impact Assessment Systems to measure beneficiary benefits; development of defined strategic objectives for each local institution; and development of an active network of VHB practitioners.

STATUS - YEAR 3 (9/01):

The past year can be characterized as a period of internal improvement and growth to better serve the needs of participants. We have continued to expand our operations by forming 51 new Village Health Banks and currently have 97 in operation. We have worked with over 2,000 women during the year, and disbursed over $150,000 in loans. We have greatly improved loan repayments by modifying our policies and strengthening our collection techniques. Loans past due more than 30 days has dropped from 9% of loans outstanding to only 3.8%. We have also found a 35% improvement across a variety of health indicators according to our recently completed follow-up health survey. Finally, while we see modest growth in amounts of income reported (9%), we see much evidence (such as higher expenditures, improvement in socio-economic indicators, and perceptions that income is better) that participants have experienced a positive economic impact.

COUNTRY INFORMATION (SECONDARY)

Country **Malawi**	Location in Country *(Region, District, Village)* Mulanje District
PVO Representative's Name Dr. Dorothy Namate	Local Counterpart/Host Country Agency

COUNTRY FUNDING INFORMATION ($000)

YEAR	1999-Actual	2000-Actual	2001-Actual	2002-Projected	2003-Projected
A.I.D. $	77,858	75,065	122,355	119,152	153,349
PVO $	111,696	41,226	48,313	119,152	153,349
INKIND					
LOCAL					
TOTAL →	189,554	116,291	170,668	238,304	306,698

PVO REPORTING INFORMATION ON A.I.D. SUPPORTED PVO PROJECTS

FOR OFFICIAL USE ONLY

PVO Type	Project Number	
Appropriation	Level	
Country Code	Fund Type	Technical Code
Project Officer	Key 1	Key 2

PROJECT INFORMATION (PRIMARY)

Name of Organization The People-to-People Health Foundation, Inc. (Project HOPE)		Grant/Contract Number	FAO-A-00-98-00028-00
Start Date *(MM/DD/YY)* 9/1/98	End Date *(MM/DD/YY)* 8/31/03	AID Project Officer's Name	Regine A. Douthard

A.I.D. OBLIGATION BY A.I.D.-FY ($000)

FY	AMOUNT	FY	AMOUNT

LOP →

ACTIVITY DESCRIPTION

Goal: To alleviate poverty and its effects on women and children by increasing incomes and improving health conditions and personal well-being in Latin America and Africa.

Purpose: Strengthen Project HOPE's ability provide effective technical support.

- VHB policies and procedures defined for successful implementation in each country and area.
- Manuals for policies and procedures, training, and program administration completed.
- Replication of VHB program in 3 countries.
- Improved institutional capability at Project HOPE to implement high-quality VHB programs through training, development of financial management information systems to monitor program performance; development of internal Impact Assessment Systems to measure beneficiary benefits; development of defined strategic objectives for each local institution; and development of an active network of VHB practitioners.

STATUS - YEAR 3 (9/01):

During the past year, the Guatemala VHB program has experienced a great deal of change. While the program has doubled in size, maintained good quality credit activities, and practically achieved operational sustainability; it has dealt with a number of problems stemming from the poor management practices of the Program Coordinator. We have addressed these problems by replacing the Program Coordinator, implemented a new management structure, improved staff capabilities, and clarified expectations and objectives for the program. Much progress has been shown over the past few months with great optimism for continued achievements. Notwithstanding these issues, the Guatemala VHB program is reporting significant improvements in economic and health status for participants (20% and 36% growth respectively).

COUNTRY INFORMATION (SECONDARY)

Country **Guatemala**	Location in Country *(Region, District, Village)* San Marcos Department
PVO Representative's Name Dr. Victor Calderon	Local Counterpart/Host Country Agency

COUNTRY FUNDING INFORMATION ($000)

YEAR	1999-Actual	2000-Actual	2001-Actual	2002-Projected	2003-Projected
A.I.D. $	35,959	91,209	123,623	125,428	153,349
PVO $	67,896	59,271	62,117	125,428	153,349
INKIND					
LOCAL					
TOTAL →	103,855	150,480	185,740	250,856	306,698

PVO REPORTING INFORMATION ON A.I.D. SUPPORTED PVO PROJECTS

FOR OFFICIAL USE ONLY

PVO Type	Project Number	
Appropriation	Level	
Country Code	Fund Type	Technical Code
Project Officer	Key 1	Key 2

PROJECT INFORMATION (PRIMARY)

Name of Organization The People-to-People Health Foundation, Inc. (Project HOPE)		Grant/Contract Number	FAO-A-00-98-00028-00
Start Date *(MM/DD/YY)* 9/1/98	End Date *(MM/DD/YY)* 8/31/03	AID Project Officer's Name	Regine A. Douthard

A.I.D. OBLIGATION BY A.I.D.-FY ($000)

FY	AMOUNT	FY	AMOUNT

LOP →

ACTIVITY DESCRIPTION

Goal: To alleviate poverty and its effects on women and children by increasing incomes and improving health conditions and personal well-being in Latin America and Africa.

Purpose: Strengthen Project HOPE's ability provide effective technical support.

- VHB policies and procedures defined for successful implementation in each country and area.
- Manuals for policies and procedures, training, and program administration completed.
- Replication of VHB program in 3 countries.
- Improved institutional capability at Project HOPE to implement high-quality VHB programs through training, development of financial management information systems to monitor program performance; development of internal Impact Assessment Systems to measure beneficiary benefits; development of defined strategic objectives for each local institution; and development of an active network of VHB practitioners.

STATUS - YEAR 3 (9/01):

In our second year of implementing the Village Health Bank program in Peru, we have expanded to the provinces of the high Amazonas in the departments of Loreto; and Moyobamba, in the department of San Martin. In this last year, we have formed 58 new banks, 25 in Tarapoto, 3 in Lamas and 25 in Yurimaguas, and 5 in Moyobamba. We now have a network of 3 offices with the main office in Tarapoto, and branch offices in Yurimaguas and Moyobamba serving those areas. We are demonstrating good results with growth and repayment rates slightly better or equal to our targets. More importantly, we have documented very good impact on the part of our beneficiaries. Through our member profile system we have found a 14% growth in income which is confirmed by positive changes in socio-economic indicators. Additionally, we have measured results of our health education activities by completing a follow-up survey. This showed an average 35% improvement across a variety of health indicators.

COUNTRY INFORMATION (SECONDARY)

Country **Peru**	Location in Country *(Region, District, Village)* Tarapoto, Region of San Martin
PVO Representative's Name Sandra Contreras	Local Counterpart/Host Country Agency

COUNTRY FUNDING INFORMATION ($000)

YEAR	1999-Actual	2000-Actual	2001-Actual	2002-Projected	2003-Projected
A.I.D. $	5,960	95,304	89,813	150,699	140,695
PVO $	41,440	59,824	84,510	150,699	140,695
INKIND					
LOCAL					
TOTAL →	47,400	155,128	174,323	301,398	281,390

PVO REPORTING INFORMATION ON A.I.D. SUPPORTED PVO PROJECTS

FOR OFFICIAL USE ONLY		
PVO Type	Project Number	
Appropriation	Level	
Country Code	Fund Type	Technical Code
Project Officer	Key 1	Key 2

PROJECT INFORMATION (PRIMARY)

Name of Organization The People-to-People Health Foundation, Inc. (Project HOPE)		Grant/Contract Number	FAO-A-00-98-00028-00
Start Date *(MM/DD/YY)* 9/1/98	End Date *(MM/DD/YY)* 8/31/03	AID Project Officer's Name	Regine A. Douthard

A.I.D. OBLIGATION BY A.I.D.-FY ($000)

FY	AMOUNT	FY	AMOUNT

LOP →

ACTIVITY DESCRIPTION

Goal: To alleviate poverty and its effects on women and children by increasing incomes and improving health conditions and personal well-being in Latin America and Africa.

Purpose: Strengthen Project HOPE's ability provide effective technical support.

- VHB policies and procedures defined for successful implementation in each country and area.
- Manuals for policies and procedures, training, and program administration completed.
- Replication of VHB program in 3 countries.
- Improved institutional capability at Project HOPE to implement high-quality VHB programs through training, development of financial management information systems to monitor program performance; development of internal Impact Assessment Systems to measure beneficiary benefits; development of defined strategic objectives for each local institution; and development of an active network of VHB practitioners.

STATUS - YEAR 3 (9/01):

The past year has been challenging but successful in Ecuador. Loan activity has continued strong with good repayment rates. During the year we continued implementation of a new management information system linking our 4 regional offices to the new central office located in Quito. We are now well placed to not only supervise and visit all the regional sites, but we can create greater linkages with peer institutions and the donor community. Finally, The benefit of the Ecuador VHB program has been confirmed through a study completed in 2001 by a researcher from Virginia Tech University. Specifically she found: statistically significant improvements in household expenditures on health care, cervical cancer screening, treatment of children for intestinal parasites, use of family planning methods, incidence of malaria and dengue.

COUNTRY INFORMATION (SECONDARY)

Country **Ecuador**	Location in Country *(Region, District, Village)* Manabi, Azuay, El Oro, Loja Provinces
PVO Representative's Name Dr. Francisco Moreno	Local Counterpart/Host Country Agency

COUNTRY FUNDING INFORMATION ($000)

YEAR	1999-Actual	2000-Actual	2001-Actual	2002-Projected	2003-Projected
A.I.D. $	59,349	18,956	20,093	34,000	22,600
PVO $	0	78,305	56,504	0	0
INKIND					
LOCAL					
TOTAL →	59,349	97,261	76,597	34,000	22,600

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Attachment F

Evaluation Report on the Health Impact of the VHB Program in Ecuador

EVALUATION OF THE HEALTH IMPACT OF THE VILLAGE HEALTH BANK PROGRAM IN MANABI PROVINCE, ECUADOR

Final Technical Report
June 2001

Prepared by: M. Margaret Weigel, Ph.D.*

Submitted to: Project HOPE, The People-to-People Health Foundation, Inc.
Millwood, Virginia 22646

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PROJECT HOPE
FOUNDED IN 1958

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EXECUTIVE SUMMARY

This report presents the major findings from a study which conducted to assess the health impact of Project HOPE's Village Health Bank Project in Manabi Province, Ecuador, on women participants and their immediate households. The results presented in this report are based upon survey and other data collected during March-April 2001. The report is focused on answering five major research questions developed by the investigator and Project HOPE. These questions and the key survey results are presented as follows:

1. What is the impact of the Village Health Bank program on health practices and health care access by women and their households?

The program intervention appears to have had a positive impact on the cervical cancer screening, family planning, household mosquito control, child intestinal parasite treatment practices of women who had been in the program for ≥ 3 bank cycles. It also appeared to enhance the ability of subject households to finance the health care expenses of sick family members. Participants also reported spending more of their household income on health care compared to women who were new to the program. On the other hand, no significant impact was found regarding participant breast cancer screening, dental examination and intestinal parasite treatment practices.

2. What is the impact of the Village Health Bank program on women's health knowledge?

The intervention had an apparent positive effect on participant knowledge regarding insect-borne tropical disease transmission and prevention. It had little or no apparent effect on knowledge about intestinal parasitic infection and the transmission of HIV and other STD's.

3. What is the impact of the Village Health Bank program on the health and nutrition status of women and their households?

The reported risk for mosquito-transmitted tropical diseases (dengue fever and malaria) was decreased by half among the households of women who had been in the VHB program for three or more cycles compared to those who had not yet completed their first bank cycle. The prevalence of iron-deficiency anemia in the children of the former was also slightly reduced. The program also appeared to have a positive influence on one indicator of child safety since fewer women reported leaving their young children at home alone or with another minor while they worked or ran errands. On the other hand, the intervention had no apparent impact on the other indicators of child or adult morbidity which were measured such as the prevalence of breastfeeding, other chronic and infectious illnesses, malnutrition, and overweight/obesity.

4. What is the impact of the Village Health Bank on household water, diet, and food security indicators?

The impact of the program intervention on household diet and food security indicators appeared to be negligible. However, it did appear to influence participant resourcefulness in utilizing a low-cost clean water resource (rainwater) for use by their households. This is important since a

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shortage of clean water is reported to be one of the most significant problems faced by poor families in Manabi Province.

5. What is the impact of the Village Health Bank on indicators of women's empowerment?

The program intervention did not appear to have had any measurable impact on women's reported degree of self-efficacy nor their beliefs about whether their health status is determined by chance, themselves or by other persons.

In addition to the above, the present report also discusses specific aspects of client satisfaction, dissatisfaction and their suggestions for improving the VHB program's health and other impacts. Finally, it concludes with an observation on the general impact of the VHB program. Specifically, the intervention appears to have had a positive influence on the health of women participants and their households. The most consistent and strongest health effects were identified in the areas of health care access and tropical disease prevention

SUMMARY OF FINDINGS

The most significant findings of the evaluation are summarized below:

Health Education Content and Delivery

- Most VHB participants reported that they appreciated having a health education component as part of the program. However, many also indicated that they would like to see changes made in the content of the current lessons and the manner in which these are delivered in order to make them more relevant to their priorities, interests, and daily lives.

- Many also specifically mentioned that they preferred to have more active types of learning experiences and to have health professionals on hand to answer their questions or further explore specific health topics.

Access to Health Care & Health Practices

- Village Health Bank program intervention group subjects were significantly more likely to report that health care constituted one of their household's major expenses during the previous month although other reported household expenditures were similar to those of the control group.

- The intervention group was significantly less likely than the control group to indicate that they had been unable to finance needed health care or medicines for sick household members during the previous month.

- Intervention group subjects were significantly more likely to report having been screened for cervical cancer during previous 12-months compared to those in the control group.

- The intervention and control groups were more alike than different with respect to their reported breast cancer, dental screening/treatment and intestinal parasite treatment behaviors.

- The intervention group subjects were significantly more likely than those in the control group to indicate that their children had been treated for intestinal parasites during the past 6-months.

- The intervention and control groups were more alike than different regarding their reported prenatal and postpartum care practices.

- Among fertile women ($\leq$ 49 years) who reported that they did not want to conceive within next 2 years, those belonging to the intervention group were significantly more likely to indicate that they were using some family planning method.

- On the other hand, the prevalence of "modern" family planning was similar between the two group subject groups, the apparent consequence of a somewhat greater reliance of the intervention group women on "natural" contraceptive methods

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- The majority of all the subjects in the study reported that they had breastfed their children (≤ 24 months) either partially or exclusively for at least 6 months; the length of breastfeeding averaged around 11 months.

- The intervention group was significantly more likely to report that their households practiced mosquito control measures compared to the control group.

Health Knowledge

- The intervention group women appeared to have greater knowledge about how insect-born tropical diseases are transmitted and how to prevent them compared to those who were new to the program.

- The reported knowledge of the intervention and control groups regarding intestinal parasites and how HIV and other STD's are transmitted were similar but HIV/STD prevention was slightly but significantly reduced in the former.

Morbidity

- The intervention group was significantly less likely than the control group to characterize their current health status as good/very good.

- The intervention and control group subjects were not significantly different regarding their reports of whether or not one or more members of their household had been sick during the previous month.

- The intervention group were significantly less likely to report that they or other household members had been ill with an insect-borne tropical disease (i.e., dengue, malaria) during the past month.

- Mothers in the intervention group were significantly less likely to only half as report that they leave their young children (< 5 yrs) alone or with one of their other minor children while working or running errands outside home.

- Fewer children with mothers in the intervention group were identified with iron deficiency anemia compared to those whose mothers were in the control group, a difference was on the borderline of statistical significance ($p= 0.052$)

- The prevalence of intestinal parasitic infection among the subjects and their children was relatively low for that reported for similar Ecuadorian groups with most infection contributed by pathogenic protozoal rather than helminthic species.

- Approximately seven of every ten non-pregnant, non-lactating subjects in the sample were classified as either overweight (42.2%) or obese (23.6%) according to their body mass index; only 2% were underweight.

- The prevalence of overweight, growth stunting, wasting and global malnutrition was similar among the children of intervention and control group mothers.

Household Diet, Water & Food Security

- Household food security was similar in the intervention and control groups.

- Intervention group subjects were much more likely than those in the control group to report that they engage in the collection of free rainwater to help supply some of their household water needs (i.e., more resourceful).

- The intervention group was just as likely to characterize their current diet as good/very good compared to the control group.

- A majority of sample reported that the diets of their households had neither improved nor deteriorated during the prior year; the proportion reporting improvements or deteriorations was similar in the two subject groups.

- The two groups reported that their households used mostly similar strategies to cope with dietary deteriorations experienced during the prior 12 months. Most of these involved attempts to increase income and getting help from family members rather those associated with reducing expenses or taking out loans.

Empowerment

- No significant differences were encountered between the two groups regarding their mean self-efficacy scores. However, the average scores of the sample were among the highest reported for diverse international groups.

- No significant between-group differences were found with respect to the internal, chance and powerful other mean scores on the multidimensional health locus of control scale.

INTRODUCTION

This report gives a summary of the major findings obtained from a survey study conducted during April-May 2001 which assessed the health impact of Project HOPE's Village Health Bank Program in Manabi Province, Ecuador. The document is divided into three major sections. These include: (1) a brief overview of the study project, its design, hypothesis, research questions and methodology, (2) the results of the evaluation, and (3) summary and conclusions based on the study data.

Background

Project HOPE's Village Health Bank (VHB) program began in Manabi Province, Ecuador, in 1993. It evolved out of the organization's prior experiences in child survival where it was observed that the success and sustainability of MCH programs are often constrained because their low-income clients lack the sufficient means needed to improve their health. Project HOPE envisioned that an integrated approach which combined health education with income-generation would ameliorate some of the weaknesses associated with conventional MCH programs by: (1) supplying the financial means plus knowledge needed to improve health care access, diet and nutrition, and positive health behaviors, (2) utilizing peer pressure and group solidarity to encourage positive health practices, (3) providing some financial sustainability for households, and (4) fostering personal empowerment.

The VHB Intervention

The VHB banks operate on "loan cycles" with each cycle lasting for a 16-week period during which the loans are repaid. The present maximum loan permitted per cycle is US$400. No new loans are allowed until all outstanding loan obligations are repaid at the end of the banking cycle. In addition to getting credit, VHB participants learn basic business knowledge and develop skills designed to facilitate their participation in productive activities and receive health education at the biweekly meeting sessions. These sessions were designed to begin with the second cycle of participation and follow a proscribed sequence of set topics that change with every new cycle. Some provisions were made for the adoption of other themes of utility and interest to individual VHB's in later cycles.

During recent years, however, certain changes occurred in the health education component of the program. According to VHB administrative personnel, some of these were reported to have involved changes over time in health education content and delivery in order to make the lessons more relevant and interesting for the participants. Other changes were reported as having been necessary due to logistical constraints and other problems associated with tumultuous economic, political, and social conditions present in the country especially during this period. Specifically, according to VHB program personnel, it was decided to adopt a more efficient "blanket" scheme in which all VHB's and their members receive the same health theme at the same time regardless of which cycle they are in instead of the original plan described above. During this time, the health education activities conducted among the various banks are reported to have mostly focused on the topics of women's empowerment and sexuality. Some local banks also are reported to have received education on themes related to sanitation/control of infectious diseases while others were reported have received education on women's health and infant growth/growth

monitoring themes. Moreover, due to logistical constraints, little or no community health promotion activities were reported to have taken place during recent years among the various VHB's in the province.

Hypothesis

The major hypothesis which guided the study design was that the income generation and health education activities constituting the VHB program intervention will have a significant and positive impact on the health of the women participants and their immediate households. Specifically, it was hypothesized that the combined income-generation/health education intervention has a positive health impact through improving family financial status, assisting participants to take responsibility for their own health and nutrition status and that of their households, increasing household food security, providing basic knowledge about common health problems and their solutions, and by fostering self-efficacy and other forms of empowerment. Moreover, participation was hypothesized to promote increased problem-solving abilities that enhance the access of participants and their households to formal health care services.

The survey was designed to evaluate the health impact of the Village Health Bank (VHB) Program in Manabi Province, Ecuador. The major question investigated was: Does the VHB have a positive, significant impact on the health, as broadly defined, of program participants and their households? The five basic questions asked were:

(1) What is the impact of the Village Health Bank Program on health practices and access to health care by women participants and their immediate households?

(2) What is the impact of the Village Health Bank on women's health knowledge?

(3) What is the impact of the Village Health Bank on the health and nutrition status of women and their households?

(4) What is the impact of the Village Health Bank on household water, diet, and food security indicators?

(5) What is the impact of the Village Health Bank on indicators of women's empowerment?

Study Groups

The impact of the VHB program was investigated by comparing the "health" outcomes of the control and intervention groups. The control group consisted of new VHB clients who are in their first loan cycle. The first control group was composed of VHB clients in loan cycles 3-4 (intermediate-term group) and the second of clients in loan cycles 8-9 (mature intervention group). The sample of 482 women was drawn from the population of ~5,000 current clients in Project Hope's VHB program in Manabi Province, Ecuador. This was accomplished by using a random numbers table to select individual banks from the list of all of those that had operated for at least 8 cycles. Within each of the 43 selected banks, all clients who were in cycles 1, 3-4, and 8-9 loan cycles were asked to participate in the survey. The rationale for this was that the comparison undertaken requires that new and mature clients come from similar types of

communities and have similar characteristics (AIMS, 2000). In addition, the children, male partners and other family members who lived in the households of the control and intervention group subjects were selected for participation in specific portions of the data collection process. Specifically, all adult and child household members were asked to participate in the anthropometric screening. One minor child (< 18 yrs) of each subject was also selected at random by the study team to have their blood hemoglobin levels taken and their stool samples screened for the presence of intestinal parasites.

Data Collection

The data were collected using a structured questionnaire contained a mix of closed- and open-ended questions developed to compare between-group differences regarding the health and nutrition status and practices, formal health care access and utilization and measures of empowerment. The first part of the survey instrument collected information on subject and household sociodemographic characteristics. It also gathered data on reported recent household expenditures, recent household morbidity, maternal-child health indicators, and disease transmission and prevention knowledge. This portion was developed in Spanish.

The 6-question abbreviated core subset of the USDA core-module indicators (USDA 2000) constituted the next portion of the survey. The instrument was designed to reliably capture the threshold of identifiable household food insecurity and identifiable hunger among household members. The USDA was translated into Spanish and then back-translated into English to assure linguistic accuracy. Other questions about recent household dietary changes and coping strategies used, as appropriate, were added to this section of the survey. These were adapted from the AIMS (2000) survey instrument.

Self-efficacy was evaluated using the Spanish version of the abbreviated 10-item standardized psychometric scale developed and validated by Jerusalem and Schwarzer (1992), Schwarzer and Jerusalem, (1989) and their colleagues for diverse cross-cultural settings (Bäßler and Schwarzer 1999). Subject health locus of control (HLC) was evaluated using the standardized 18-item multidimensional scale (version A) developed by Wallston, Wallston and DeVellis (1978). This instrument is used to describe the extent to which persons believe that their health is controlled by internal or external factors. The scale was translated into Spanish and then back-translated into English.

The anthropometric data collected on the women subjects and other adult members of their households included body weight, standing height, and mid-upper arm circumference (MUAC). Body mass index (BMI) was calculated from the weight and height data using Quetlet's index. The BMI cutoff points recommended by the CDC (2000) were used for the classification of adult underweight, normal weight, overweight, and obesity. The anthropometric data gathered on household children aged < 24 months included body weight, recumbent crown-heel length, head circumference and MUAC. The measurements collected on other children and adolescents < 18 years included body weight, standing height, and MUAC. The child weight and height data were analyzed with the EpiNut Program and classified as low weight-for-height (acute malnutrition), low height for age (growth stunting) and low weight for age (global malnutrition) as per CDC/WHO recommendations (CDC 2000).

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Hemoglobin concentration was assessed from capillary blood using the HemocueB analyzer (Hemocue, Inc., CA). Individuals were classified as positive or negative for iron-deficiency anemia according to their age, sex, and reproductive status using established the maximum hemoglobin concentration cutoff-points for anemia published by the CDC (MMWR 47: No. RR-3; 1998):

Fresh fecal samples were examined for the presence pathogenic protozoal and helminthic parasites by a trained laboratory technologist who read them in the field the same day. Specimens were first examined microscopically under low power by wet mount using saline and stained with an iodine stain (Lugol's solution) with the rest of the sample then being concentrated via centrifugation. The quantities of mature parasite forms, cysts and ova were estimated from the concentrated samples by counting the numbers per microscope field.

Additional data regarding the infectious disease control practices of households were obtained by direct observation of a randomly selected subset of 20% of subject homes.
The 18 indicators observed mostly focused on the prevention of infectious illnesses caused by contaminated water and food, rodents, insects, and bacteria.

A short 3-question open-ended client satisfaction survey was used to gather information on what clients like and dislike about the VHB Program and their suggestions for improvement and to help establish client priorities regarding the various components of the program including that of health education and health promotion.

The survey was developed by the investigator in conjunction with the Project HOPE staff and the local partner NGO. It was pre-tested prior to and during the pilot study, modified, and standardized prior to the main study data collection. Additional qualitative data were collected by interviewing local VHB leaders (n=30) and VHB-Manabi administrative staff who served as key informants (n=20).

Data Management & Analysis

The survey database was designed by the principal investigator using the SPSS (version 10) database management and statistical package. Data entry was performed by a Virginia Tech doctoral student who was trained in its use. The data were reviewed, cleaned and verified by the principal investigator prior to analysis.

The descriptive data are reported as means $\pm$ standard deviations, frequency counts, and percentages. The initial analyses used 2 x 2 or 2 x 3 contingency table analysis with corrected X^2 or Fisher's exact test to investigate differences between proportions. Mean differences were examined with either Students' t-test or analysis of variance, as appropriate. Multiple logistic regression analysis was employed to examine between-group differences in proportions, with adjustments for confounders. Variables were retained in final statistical models only if they significantly increased the model's predictive power. The crude and adjusted odds ratios obtained respectively from the X^2 and multiple logistic regression analyses are presented in this report with their 95% confidence intervals.

A total of 482 subjects participated in the main study survey during the 4-week data collection period. One hundred, fifty-six of these were in the "control" group, i.e., they were new

participants still in their first VHB loan cycle. Another 156 and 170 comprised the two intervention groups, i.e., women who were in 3-4 and 8-9 loan cycles, respectively. An additional 50 individuals served as key informants. These included the presidents or other leaders in local VHB's (n=30); they did not participate in the survey interviews. The other 20 informants were Project HOPE administrative personnel.

Data Analytic Strategies

The underlying approach of the present study was to consider the potential health education and monetary effects of VHB participation as one intervention rather than attempting to sort out the separate effects of the two components. The reason for this was that although the VHB loan portion of the intervention seems to have been regularly administered, for reasons discussed previously, delivery of the health education component was reported to have been uneven during the previous two years.

The survey data were initially analyzed using a 3-way comparison of the control and the two intervention groups. Subsequent analyses involved 2-way comparisons. These included comparisons of: (1) the 3-4 cycle intervention group versus the control group, (2) the 8-9 cycle intervention group versus the control group, and (3) the 3-4 cycle intervention group versus the 8-9 cycle intervention group. The fourth and final 2-way comparison combined the two intervention groups and contrasted these with the 1st cycle control group. This final comparison yielded the most consistent and meaningful pattern of intervention effects. Thus, the data in this report are presented contrasting the control group (n=156) with the two intervention groups combined, hereafter referred to as the intervention group (n=326) except for the instance noted in the results section.

There are several possibilities that may account for the results noted above. One is that the hypothesized intervention effect may have been less robust than was expected *apriori* so that the differences among the groups were reduced. Thus, the statistical power may have been decreased. Another possibility is that the two intervention groups are distinct populations with the 8-9 cycle women composed of VHB "survivors", or alternatively, those that are less successful and have fewer economic options so they stay in the bank rather than embarking on more successful commercial ventures.

Quality Control

The personnel who collected the survey data were from the Fundacion Biociencias, a non-profit research, education and community service organization whose headquarters are located in Quito, Ecuador. The multidisciplinary team included experienced field supervisors, interviewers, anthropometric examiners, and laboratory technicians. Prior to the initiation of data collection, the principal investigator conducted an intensive series of training sessions in Quito. The sessions included orientation and training that focused on survey objectives, sampling procedures, logistical and planning issues, questionnaire administration and standardization, and a review of and the standardization of laboratory and anthropometric examination procedures.

After completion of the initial training phase, a pilot study was conducted at a local VHB in Manabi Province by the study team. This phase was carried out under the direct supervision of the principal investigator who performed observations of the subject flow through the study

stations and evaluated the performances of individual study team members. Observed errors and strategies for improvement were discussed with the team members. Sessions also were held in order to review the pilot study procedures and outcome. Problems encountered with individual survey questionnaire items were reviewed and modified as appropriate. The principal investigator and study team communicated by email or phone on a regular basis throughout the main study to resolve any problems that arose during the course of data collection. The principal investigator also trained the Virginia Tech doctoral student in entry of the study data into the database. She also regularly reviewed and corrected data entry procedures to ensure quality.

Limitations

One of the most obvious limitations of the survey is that of a possible selection bias since the study sample was composed of women who first petitioned to join the VHB (i.e., self-selection) and subsequently had to have been voted in by existing group members. Such groups are assumed to have selected other women with similar characteristics and who were perceived as being "good financial risks" in that they would be able to pay back their loans in a timely fashion and not cause a delay or negation of loans for the rest of the socias in their particular bank.

Although it would have been preferable to have had the control group composed of women who been elected but not yet begun their 1st VHB cycle, i.e., they would have similar sociodemographic characteristics but no exposure to the intervention. Unfortunately, this was not possible at the time the study was conducted due to a reported lack of sufficient capital in the main VHB office to finance either new banks or socias. However, since the most recent cycle had begun only a few weeks before, the period of time that the control group was exposed to the VHB intervention was very short so any financial or educational impact should have been minimal.

Another caveat that should be taken into consideration when evaluating the results of the survey is the use of self-reports on health knowledge, status, and practices for some of the data. Self-reported information has well known limitations, one of which is recall bias. Another limitation is that there may be significant under- or over-reporting of information depending on whether the knowledge, practices, or other traits are perceived by subjects as being desirable to the person conducting the interview. However, most of the events that subjects were asked to recall involved relatively short time periods (e.g., no longer than 24 months) or they involved significant life events (e.g., pregnancy). In addition, the interviewers were well-trained in collection of the study data and the interviews were conduced in private away from neighbors, family members and VHB personnel.

Other possible sources of bias could be those which relate to the collection and analysis of laboratory and anthropometric data. However, the techniques used to collect and analyze the laboratory and anthropometric data were carefully standardized. In addition, the instruments used in the study to measure weight, height, and hemoglobin were calibrated prior to use with each new subject.

Furthermore, it is possible that the uneven application of the health education intervention component and some delays in local banks obtaining fresh capital which were the apparent result of the unstable socio-economic-political situation in Ecuador and other logistical problems may have affected the results.

RESULTS

Subject Characteristics

The sociodemographic and other characteristics of the 482 subjects who constituted the final sample are presented in Table 1. The intervention group was significantly more likely to report that they had their adult children and/or grandchildren residing with them in their homes. This is most likely the result of the older mean chronological age of the group (37.3 $\pm$ 10.9 yrs. vs. 34.5 $\pm$ 10.4 yrs.; p= 0.009). They also were significantly more likely to be 40 years of age or older compared to their control group counterparts (40.5% vs. 30.1%; p=0.036).

In contrast, no significant between-group differences were identified with respect to the other subject indicators measured. For example, a comparable proportion (~80%) of subjects in both groups indicated that were currently living in some type of legal or common law marital union. The intervention and the control groups also were similar regarding their reports of how many years of formal schooling they had completed (9.5 $\pm$ 4.1 yrs. vs. 10.0 $\pm$ 3.8 yrs; $p > 0.05$). In addition, around one-fifth of the women in both groups reported that they had attended a university or technical school after graduation from high school. The two groups also had a similar mean household size. Specifically, the intervention group averaged 5.2 $\pm$ 2.1 members and the control group, 5.1 $\pm$ 1.9 members ($p > 0.05$). Furthermore, except for being more likely to have their adult children and grandchildren living with them, the composition of their households was not significantly different. Both groups also were similar with respect to whether or not they had any children who were attending elementary or high school nor the average number of child school attendees.

The mean number of hours that the intervention and control groups reported working outside the home was also comparable (5.8 $\pm$ 2.9 vs. 6.0 $\pm$ 2.9 hrs; $p > 0.05$). As Table 1 shows, roughly equal proportions of the subjects in the two groups indicated that they were presently engaged in commercial sales from either fixed locations or moving ("ambulante") locations. They reporting selling diverse types of products and services including prepared street foods, ice cream, agricultural products, bakery items, candies, cigarettes, fish, liquor, meats, groceries, jewelry, beauty services and products (e.g., Avon, Yanbal), drugs and other remedies, video rentals, toys, shoes, and clothing, among others. Likewise, a similar proportion of the intervention and control group women noted hat they were tradeswomen. These said that they produced such items as arts and crafts for sale to the tourist market, clothing and other items. Others indicated that they worked as beauticians, seamstresses, or in the construction or other trades. Unexpectedly, around a tenth of the subjects reported they were presently engaged in white collar or professional occupations. These included civil engineer, elementary/high school teacher, secretarial/public relation's worker, cancer hospital nurse, laboratory and computer technician. Although more control than intervention group subjects reported working in these professions, these differences were not statistically significant.

Table 1 also indicates that a similar proportion of subjects in the two study groups said that the major financial and other decisions in their families were made by a joint female-male head of household team; fewer than one-quarter reported that a male or female head of household was in charge of decision-making. Over half of the subjects in both reported that their household

income was based on a combination of their income-generating activities as well as that of their male partners and/or children. A relatively small percentage, i.e., < 8% noted that their household income was solely based upon their own income generating activities.

One of the major problems that confront poor households in Manabi Province is the lack of sufficient and good quality water. Most of the subjects in the study noted that they were forced to rely upon more than one source to supply the basic water needs of their households. For instance, even though almost half had access to municipal water, its distribution was described by subjects as being irregular, unreliable, and usually contaminated with fecal material, mud and other substances. Table 2 shows that the proportion of subjects in both groups who specified that they used either municipal water or non-municipal piped water, well water, or water purchased from commercial tankers were not significantly different. However, a significantly greater proportion of subjects in the intervention group compared to control group reported that they regularly collected rainwater, a free clean water source, in large containers to help supply their household needs.

The study subjects were asked to rank the top five major monetary expenditures made by their households during the prior month. The results of these rankings are displayed in Table 2. Expenditures for food, basic utility services (e.g., electricity, water, gas, telephone), and transportation, health care and business expenses were mentioned the most frequently, followed by those used for the repayment of debts and loans, children's educational expenses, purchase of home items and home improvement, and purchase of children's shoes and clothing. As Table 2 indicates, the proportion of reported household expenditures was not significantly different between the two groups except for health care, a category that included health services and medicines. Specifically, subjects in the intervention group were significantly more likely than their control group counterparts to indicate that health care constituted one of their household's major expenditures during the last 30-days.

Health Care Access

Cervical Cancer Screening

Table 3 displays the results of the simple bivariate analyses, which examined between-group differences in the reported prevalence of lifetime and cervical cancer screening. As shown, the proportion of subjects in both groups who reported that they had been screened for cervical cancer at least once during their lifetimes was comparable, i.e., ~ 80%.

The remainder who reported that they had never undergone screening for cervical cancer were questioned why. The two subject groups were not significantly different regarding the reasons they gave to explain their behavior. The most frequent explanations offered were a belief that the exam is unnecessary for them (43.5%), a general lack of motivation to go for the exam (25.9%), fear or shame, (16.5%), unfamiliarity with the exam (8.2%), or a lack of money to pay for it (5.9%).

However, women in the VHB intervention group were over 1.5 times as likely to report that they had been screened by a health care professional during the previous 12-month period compared to those in the control group. This difference remained significant even after controlling for subject age. Furthermore, long-term participants, i.e., those in the VHB for 8-9 cycles (56.5%)

were even more inclined than control group subjects who were still in their first cycle (41.7 %) to report that they had been screened for cervical cancer during the past year (OR=2.00; 95% CI=1.26-3.16); p= 0.003).

Breast Cancer Screening

Table 3 shows that the reported prevalence of breast cancer screening was relatively low among the study subjects. Fewer than 20% of the total sample indicated that they had been screened for breast cancer during their lifetimes and even fewer (< 7%) said that they had been screened anytime during the previous 12-months. The data analysis revealed that the two subject groups were comparable regarding the proportion of women who reported that they had ever been screened as well as those who said that they had been screened in the past 12 month period.

The explanations given by never-screened subjects to explain their behavior why they had never been screened for breast cancer were similar to those given to explain the lack of cervical cancer screening including the reported belief that the exam is not necessary for them (42.5%), a lack of motivation to have the exam (27.5%), fear or shame (4.9%), exam unfamiliarity (7.8%), and the lack of money to cover the exam cost (17.4%). The proportion of women who gave these explanations was not significantly different in the intervention versus control group.

Dental Services

All but a small handful of women in the two subject groups reported that they had been seen by a dental care professional at least once during their lifetimes and 60% said that they had been examined during the past year (Table 3). The proportion in both who said that they had ever been seen nor those who had been seen recently were not significantly different.

As Table 3 also indicates, nearly two-thirds of the women in the control and intervention groups reported that at least one of their children aged < 18 years had visited the dentist at least once in the past; 56% said that this had occurred during the past year. No significant between-group differences were found regarding either of the above indicators. The women who reported that they had never taken a child to the dentist were asked to explain why this was so. Close to one-half (47.5%) said that it was not necessary, 38.5% cited a lack of money to do so, 11.5% linked their behavior to a lack of motivation, and the remainder to their child's fear of the dentist. The proportion of women in each group who gave these different explanations were comparable.

Intestinal Parasite Treatment

Many persons in Ecuador presumptively self-treat for intestinal parasites twice a year. Most of the medications that they use are for intestinal worms rather than protozoal parasites. The data displayed in Table 3 appear to substantiate this practice among the study subjects since over 95% of reported that they had been treated on at least one past occasion and over a third indicated that they had done so during the past 6-months. As is shown in the table, the proportion of subjects in the intervention and control groups was not significantly different regarding whether they reported having ever been treated for intestinal parasites and those who said that they had done so recently.

Table 3 indicates that around 95% of subject minor children were reported by their mothers to have been treated with medications for intestinal parasites at least once during their lifetimes. The proportion of children reported as treated was comparable in the two groups. On the other hand, the children of intervention group subjects were more than 1.5 times as likely than those of the control group to have been deparasitized during the previous 6 months according to their mothers. This difference remained significant even after controlling for maternal age.

Ministry of Public Health Card

Approximately 80% of the sample reported that they were in possession of a Ministry of Public Health (MSP) card for their youngest child under the age of 24 months. The proportion of intervention (83.7%) and control group subjects (80.6%) who reported that they had their child's health card was not significantly different (OR=1.23; 95% CI= 0.37-4.11).

Prenatal and Postpartum Care

The prenatal and postpartum health care patterns of subjects whose last pregnancy had ended $\leq$ 24 months ago (excluding first trimester miscarriages) were examined. Table 4 reveals that the proportion of women in the intervention group who reported having received any prenatal care was slightly but not significantly increased compared to that noted by control group subjects (95% vs. 87%). The two groups also were more alike than different with respect to the mean number of prenatal visits they reported they had received (5.1 $\pm$ 2.4 visits vs. 5.4 $\pm$ 3.0 visits; $P <$ 0.05) and those who said that they had gone in for their first professional prenatal care visit by the end of the second semester.

On the other hand, the simple bivariate analysis results also revealed that control group subjects were significantly more likely than their intervention group counterparts to report that they had had a first prenatal visit during the first trimester of gestation (see Table 4). However, the prior reproductive experience of adult women (i.e., parity) is known to often influence the timing of the first prenatal visit. Specifically, those with greater parity often wait until later than women who are pregnant for the first or second time to receive prenatal care. When a parity proxy (no. of minor children) was controlled for as a potential confounder during the multiple logistic regression analysis, the previously observed difference was no longer apparent (Table 4).

As is also noted in Table 4, most subjects reported that labor and delivery care during their most recent pregnancy ($\leq$ 24 months ago) had been received from a professional private or public health care provider while relatively few, i.e., < 9% mentioned having used the labor and delivery services of a "comadrona" or other layperson. The proportion of women in the two subject groups who said that they had utilized the services of a private health provider was increased somewhat in the control group but these reported differences were not statistically significant. It should be noted that the public-private health care distinction has become less important increasingly in recent years with the imposition of mandatory fee-for-services in all Ministry of Public Health institutions.

Table 4 also shows that less than half of all women who had given birth during the previous $\leq$ 24 months stated that they had not received any postpartum care. The intervention and control groups were not significantly different regarding the proportion who reported that received any postpartum care. Likewise, among those who stated they had not received any type of

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postpartum care, the explanations that they gave for their behavior were similar between the two subject groups. These all attributed their lack of postpartum care to it being a lower priority than other more pressing matters (56.5%) or the cost of the care itself (43.5%).

Family Planning

Table 4 reports that around 80% of fertile age subjects ($\leq$ 49 years) who stated that they did not wish to conceive a child within the next two years said that they were currently using some family planning method. These included female sterilization (51.8%) which accounted for over half of all contraceptive methods mentioned. Oral or injectable hormonal contraceptives accounted for 19.3%, the IUD for 14.6%, and barrier methods (male condoms or spermicidal creams) for 3.3% of reported methods. The remainder indicated that they relied upon "natural" methods (rhythm, coitus interruptus, male withdrawal).

Table 4 also shows that fertile women in the intervention group were twice as likely as those in the control group to report that they currently practiced contraception, a difference which remained significant even after control for confounders. On the other hand, the two groups were not found to be significantly different regarding the proportion of subjects who reported relying upon modern family planning methods. The apparent discrepancy appears to be due to a larger proportion of intervention group subjects who said that they used non-modern, i.e. "natural", i.e., non-modern methods compared to that of the control group (12.4% vs. 8.0%).

Financing of Household Health Care Needs

Table 5 shows that subjects in the intervention group were only half as likely as those in the control group to report that $\geq$ 1 members of their households had been unable to access needed health care services or medicines during the past month due to a lack of money (23.1% vs. 13.8%). Among households reported to have been able to access needed health care for $\geq$ 1 family members during the past month, most of this occurred at private professional services/institutions (49%), Ministry of Public Health facilities (30.8%), or a medicines purchased from a commercial pharmacy (18%). The remainder involved consultation of traditional healers or the purchase of items from other sources that were then used to prepare home remedies. The reported source of health care obtained was similar for both subject groups.

The principal sources of financing reported for that health care also are noted in Table 5. The most commonly reported source was the income or health insurance of the male partners of study subjects, followed by that of subjects themselves. Loans, family savings and governmental programs for children (INFA) or for the elderly (Bono Solidario) accounted for only a quarter of the reported financing. The proportion of intervention and control group subjects who reported that their households had relied upon the various sources of health care financing were not found to be significantly different in the bivariate analyses.

Infectious Disease Transmission and Prevention Knowledge

The study subjects were questioned as to their knowledge about infectious disease transmission and prevention. The intervention and control groups gave similar proportion of correct responses when they were asked to name signs and symptoms of HIV and other sexually transmitted diseases (58.3% vs. 55.6%; $p > 0.05$). In contrast, when the subjects were asked to describe how

HIV and other STD's can be prevented, the proportion of correct responses reported by the control group subjects was increased compared to that of the intervention group (82.4% vs. 75.6%; p= 0.013).

However, the intervention group appeared to be more knowledgeable about the transmission of insect-borne tropical diseases common in the study area. Specifically, the proportion of correct responses given by the intervention group on this question was increased compared to the proportion reported by the control group (60.5% vs. 54.3%; p=0.038) as was that regarding tropical disease prevention (94.1% vs. 90.5%; p=0.011).

In contrast, no significant differences ($p > 0.05$) were observed between the two subject groups regarding the proportion of correct responses on how to prevent of water- and food-borne illnesses and on what constitutes appropriate hand washing behaviors. Specifically, the proportion of correct responses about the water- and food-borne illness prevention was 92.8% in the intervention group and 93.9% in the control group. Likewise, the proportion of correct responses about correct had-washing behavior was 90.7% and 92.7% in the intervention and control groups, respectively.

Household Infectious Disease Prevention Practices

The two subject groups were asked about what specific measures, if any, their households practiced in order to prevent or control infectious disease. The specific measures they reported comprised five major categories: water and food safety, mosquito control, rodent control, control of intestinal worms, and home and personal hygiene.

A significantly greater proportion of the practices mentioned by the intervention group compared to control group (55.1% vs. 48.5%; p=0.008) involved the use of measures designed to kill (e.g. home fumigation) or control the proliferation of mosquitoes (e.g., draining standing water, cutting vegetation overgrowth, using "Abate" and other anti-larval agents, covering water storage tanks) or directly prevent mosquito bites (mosquito nets, skin insecticide). However, the proportion of responses given by the intervention group subjects mentioning the prevention and control of intestinal worms (e.g., wearing shoes outside, medication) was reduced compared to those given by the control group (4.8% vs. 8.2%; p=0.003). No significant differences between the intervention and control groups were observed with respect to the proportion of responses which cited practicing rodent (7.3% vs. 6.2%), water and food safety (31.9% vs. 36.4%), and home and personal cleanliness control measures (0.9% vs. 0.7%), respectively.

Additional data regarding the infectious disease control practices of households were obtained by direct observation of a randomly selected subset of 20% of subject homes. The results, presented in Table 6, lend support to subject reports obtained with the survey questionnaire. As shown, a majority of the subject households were observed to engage in practices to control infections transmitted via food and water and by mosquitoes, flies, sandflies, and rodents. Unfortunately, the reduced power associated with the small subsample size may have been responsible for the lack of significant between-group distinctions seen during direct observation.

Morbidity Indicators

Self-Ranking of Health Status

The subjects were asked to rank their current health status using a 5-point Likert-like scale. Women in the intervention group were only half as likely as those in the control group to rank their health as good or very good compared to control group subjects (OR= 0.5; 95% C.I.= 0.33-0.83; p=0.011). This association remained significant in the multiple logistic regression analysis even after control for confounders (AOR= 0.56; 95% C.I.= 0.35-0.88; p=0.018).

Recent Household Illness

The results of the simple bivariate analysis in which women in the intervention group were shown to be almost twice as likely as their control group counterparts to report that they or another member of their immediate households had suffered from a health problem during the 30-day period prior to being interviewed. On the other hand, when potential confounders were included in the multiple logistic regression analysis, the previously identified association between subject group and the reported occurrence of recent household illness was no longer significant.

Table 7 displays the various types of infectious and chronic illnesses from which either the subjects and/or other of their household members were reported to have suffered from during the previous 30-days. As the table indicates, infectious conditions comprised the bulk of the recent health problems reported. The most prevalent of these insect-borne tropical diseases (dengue fever, malaria), upper-respiratory illness, and food- and water-borne conditions (e.g., typhoid fever, acute amoebiasis, enterocolitis). Also common were non-specific signs and symptoms characteristic of infectious processes. However, chronic diseases (e.g., arthritis, diabetes, gastritis, ulcers, cancer, strokes, hypertension, and other cardiovascular diseases were also reported to have affected the subjects and their households.

As Table 7 indicates, the intervention group households were only half as likely to indicate report that either they or another member(s) of their immediate households had suffered from a mosquito-borne tropical disease during the previous 30-day period even after controlling for confounders. On the other hand, their risk for arthritis and other muscular-skeletal conditions was significantly increased compared to the control subjects. No other meaningful between-group differences were identified regarding the proportion reported to have had food- and water-borne infections, respiratory illnesses, diabetes or other conditions during the prior month.

Intestinal Parasitic Infection Examination

Table 8 compares the results of the intestinal parasitic infection examinations performed on each subject and one of their randomly selected minor children. Fewer than one-quarter of the stool samples provided by subjects were found to be infected with one or more pathogenic species of intestinal parasites; all but three of these were caused by pathogenic protozoa. As shown in the table, no significant between-group differences were observed regarding the proportion of subjects identified with any intestinal parasitic infection nor whether these were caused by pathogenic protozoa or helminthic species.

The proportion of the minor children whose mothers were in the intervention group were identified with intestinal parasitic infections compared to those of control group moms (21.9% vs. 29.1%), the observed difference did not reach statistical significance (Table 8). Furthermore, like their mothers most of the identified infections were caused by pathogenic protozoa rather than helminthes such as hookworm, whipworm or roundworm. Moreover, the proportion infected by either parasite category was not significantly different between the two child groups.

Iron-Deficiency Anemia

The mean serum hemoglobin levels and the prevalence of iron-deficiency anemia were compared between the intervention and control groups. The average blood hemoglobin values were observed to be identical in the two groups, i.e., 12.8 $\pm$ 1.3 g/dL. The proportion of women in the intervention group identified with iron-deficiency anemia (23.1%, n=75) was not significantly different from that of the control group (26.9%, n=42). As is noted in Appendix 2 (Methods), the cutoff points for iron-deficiency anemia were adjusted for subject age and reproductive status (where appropriate) in accordance with CDC (2000) recommendations.

The blood hemoglobin values of the minor children of subjects who were selected at random to participate in the screening were close and not statistically significant. Specifically, children whose mothers were in the intervention group had average hemoglobin values of 12.2 $\pm$ 1.3 g/dL while those whose mothers were in the control group had average values of 12.1 $\pm$ 1.4 g/dL. Close to one-third of these children were identified with iron-deficiency anemia. The prevalence of iron-deficiency was reduced in the children of intervention (29.3%, n=78) compared to those whose mothers were in the control group (39.2%, n=48), a difference which hovered on the border of statistical significance (p=0.052).

Breastfeeding Practices

Several proxy measures of child morbidity were compared between the intervention and control groups. The subjects reported that ~90% of their infants and toddlers aged < 24 months who had been weaned by the time of the interview had been either fully or partially breastfed for at least six months. The respective proportion of intervention (88.9%) versus control groups subjects (93.3%) who reported that their child had been breastfed $\geq$ 6 months was not significantly different (OR=0.05-7.00). Likewise, the reported mean length of breastfeeding for these children was not significantly different between the intervention and control groups, respectively averaging 11.2 $\pm$ 4.1 mos. and 10.7 $\pm$ 4.0 mos.

Child Care

The subjects were questioned about the child care arrangements they have for their youngest offspring aged five years and under. The respective proportion of subjects in the intervention compared to control groups who reported that they usually took their children with them to their worksites was 41.8% and 27.7% (OR= 1.29; 95% CI=0.92-3.85). The proportion in the two groups who said that they left them in the care of the children's grandparents or other adult family member was 38.2% and 32.3% (OR= 1.29; 95% CI=0.65-2.60). The proportion in the intervention and control groups who indicated that they went to daycare or were taken care of by an adult friend or neighbor was 1.8% vs. 7.7%. As the OR's and the 95% CI's indicate, none of these between-group differences was statistically significant. In contrast, it was found that the

intervention group subjects were significantly less than their control group counterparts to report that they left their young children alone or with another of their minor offspring while they worked outside the home (18.2% vs. 32.3%; p=0.028).

Anthropometric Indicators of Nutritional Status

Subjects

The mean body weight (62.4 ± 13.2 kg vs. 60.8 ± 12.3 kg), height (151 ± 6.3 cm vs. 150.9 ± 6.5 cm), BMI (26.9 ± 5.0 vs. 26.6 ± 5.0) and mean upper-arm circumferences (29.1 ± 4.2 cm vs. 28.7 ± 3.7 cm) of the intervention group was slightly but not significantly increased compared to that of the control group. As Table 9 shows, the subjects in the intervention and control groups had comparable mean weights, heights, mid-upper arm circumferences and body mass index (BMI) measurements. The prevalence of underweight or undernutrition (BMI <18.5) in the overall subject sample was less than 2%. In contrast, the identified prevalence of overnutrition was elevated since 42.2% and 23.6% of the women were classified as being either overweight (BMI=25.0-29.9) or obese (BMI ≥ 30), respectively.

The bivariate analyses results indicated that intervention group women were nearly 1.6 times as likely as those in the control group to be identified as overweight although the proportion of obese individuals was not statistically different. Since the intervention group was distinguished by being older than the control group and because a strong positive association is known to exist between age and BMI, this potential confounder was controlled for in the subsequent multiple logistic regression analysis. As Table 9 shows, the results revealed that the previously identified association between VHB group membership and the risk overweight was found to be no longer apparent.

Other Adults

Table 9 also compares the proportion of underweight, overweight, and obesity among the other adults living in the subject's household (i.e., male partners, children ≥ 18 yrs, other family members). As shown, the results of the bivariate analyses indicated that the proportions of underweight, overweight and obese adults belonging to the households of the intervention and control groups were not significantly different.

Children

The prevalence of under- and over-nutrition were next compared in the minor children of women who were in the intervention and control groups. As shown in Table 9, the prevalence of overweight (defined as weight-for-height > $^{+}$2 SD) was relatively low (~6%). However, as the table also indicates, nearly one-third of the children were identified as being growth stunted (low-height-for age), around 9% with global malnutrition (low weight-for-age), and fewer than 3% with wasting (low weight-for-height). The simple bivariate analyses were unable to identify any significant between-group differences regarding the proportion of overweight, stunting, wasting or global malnutrition among the minor children of the study subjects. Likewise, as Table 9 reveals, the results of the subsequent set of analyses that considered a subset of only children aged ≤ 5 years revealed similar results.

Diet and Food Security Indicators

Dietary Self-Ranking

Table 10 shows the results of the analyses in which subjects were asked to qualify their present diet. A majority of the sample ranked their diet as being good or very good (31%) or more or less OK (60%). Only a small minority, i.e., ~6%, ranked their present diet as being bad or terrible. As noted in the table, no significant between-group differences were identified with respect to the proportion of subjects who ranked their diet as good/very good, more or less ok or bad/terrible.

Household Dietary Change & Strategies

The study subjects were also questioned about whether the diet of their households had improved, stayed the same or deteriorated during the previous 12 months. Over two-thirds of the sample reported that the diet of their households had not changed significantly during the past year, 14% said it had improved, and 17.5% said that it had deteriorated. As Table 10 shows, no statistically significant differences were identified regarding the respective proportions of subjects in the intervention and control groups who reported an improvement, deterioration, or no change in their household's diet during the prior 12 months.

The subjects who reported that their household diet had improved during the past 12-months were further asked to describe how their diets had improved. Most of the improvements they mentioned included that they had been able to buy a greater quantity of food (25%), more meats, fish and eggs (22.7%), fresh fruits and vegetables (20.3%), dairy products (14.5%), or margarine, cooking oils and fats (9.4%) for home consumption. In contrast, relatively few reported being able to purchase more cereals, legumes and flours (5.9%) and convenience foods, "extras", and restaurant or street foods (2.3%). No significant between-group differences were identified regarding the specific types of dietary improvements cited.

The subjects who reported that their household diet had worsened during the past 12-months were further asked to describe the deterioration. They reported that they had been forced to purchase less food in general than their households required to meet their basic needs (25%) or they had to buy less meat, fish, eggs (21.3%), dairy products (17%), fresh fruits and vegetables (16.1%), or fats and oils (10.9%). The subjects also were questioned about what types of strategies that their households had undertaken in response to this adverse situation. These subjects reported that they had used five major strategies to deal with the deterioration of their household's diet. The most frequent strategy reported was that their households had attempted to increase their income by obtaining outside employment or starting a small business. Two others involved getting loans of food and/or money to purchase food from relatives or outside sources. No statistically significant differences were found between the intervention and control groups regarding whether or not they reported that they had received family support in the form, of money gifts or interest free loans (17.4% vs. 3%), used personal reserves (4.3% vs. 3%), attempted to increase their income through obtaining outside employment (34.8% vs. 36.4%) , getting an outside loan of food or money (13.8% vs. 9.1%) or reducing their food intake (5% vs. 3%). However, an increased proportion of women in the control group reported that starting up a small business was one of the strategies that their households had used to deal with the situation (24.3% vs. 45.4%); p=0.03

Household Food Security

Table 10 presents the results of the USDA 6-item abbreviated household food security survey instrument. As shown, over half of the households in the sample were classified as food insecure either without hunger (~25%) or with hunger (~33%). were classified as food insecure with hunger. The results of the simple bivariate analyses suggested that intervention group households were only half as likely as those in the control group to be identified as being food secure and were 1.6 times more likely to be classified as food insecure with hunger. The multiple logistic regression analyses considered the influence of potential confounders on these associations. The results indicated that neither subject age nor family size altered either of the previously identified significant associations between subject group and food security status. However, when the presence of grandchildren in the home was taken into consideration, the previously identified associations between subject group and that of being a food secure household or a food insecure household with hunger were no longer evident.

Multidimensional Health Locus of Control Scale

The subjects were administered the 18-item multidimensional health locus of control (HLC) scale developed by Walliston et al. (1978). The summed and scored responses are used to describe the extent to which the subjects said that they did or did not believe that their health is controlled by internal or external factors. Internal HLC is the extent to which one believes that internal factors are responsible for health/illness. Powerful others HLC is the belief that one's health is determined by powerful others, especially health care professionals. Chance HLC measures the extent to which one believes that health illness is a matter of fate, luck or chance.

The respective mean internal HLC scores of the 326 intervention and 156 control group subjects were 27.6 ± 5.7 and 26.7 ± 4.9. Their chance HLC scores averaged 20.7 ± 7.6 and 20.2 ± 7.6 and their powerful others HLC scores were 27.7 ± 6.0 and 28.0 ± 5.8. None of these differences were found to be significantly different when analyzed with Students' t-test. However, analysis of the three scale components indicated that the overall sample had a higher mean internal HLC than a chance HLC. This suggested that they seemed to be more inclined to believe that their health is under their own control rather than that of chance, luck or fate. On the other hand, their high powerful others scores also appeared to reflect a strong belief in the ability of other persons to affect their health. The supplemental study data lends support that the powerful others belief was focused on beliefs about the power of conventional medical doctors to determine the health of individuals.

Self-Efficacy Scale

The study subjects also were administered the abbreviated version of the 10-item Schwarzer and Jerusalem psychometric self-efficacy scale which has been validated by Jerusalem and Schwarzer (1992) for use in diverse cross-cultural settings. The 4-point scale scores subject statements in order to characterize their apparent level of self-efficacy. Levels of self-efficacy are reported to either strengthen or restrict motivation. People with high self-efficacy have been found to elect to perform tasks that are more challenging, set higher goals for themselves, and persevere longer than persons with lower self-efficacy. They are also reported to recover more quickly from obstacles in life and maintain commitment to achieving their goals.

The results of the analysis revealed that the mean score of the overall sample was in the low 30's, denoting an apparent higher level of self-efficacy compared to most of the other international groups previously evaluated using this instrument (Schwartzer 2001). However, the scores of the intervention and control groups were not statistically significant, averaging 30.9 $\pm$ 6.5 and 32.0 $\pm$ 5.8, respectively.

Client Satisfaction Survey

The results of the client satisfaction survey are shown in Tables 11-13. This instrument was designed to elicit information about what clients like and dislike about the VHB Program and their specific suggestions for improvements.

Table 11 shows that the responses of the sample regarding the positive features of the VHB program. Forty-five percent of the responses specified a liking for the VHB's loan, repayment & other charge policies and 34% mentioned that they liked the way the VHB is organized and administered. The third most frequent response noted was a liking of the program's health education component including the lessons and the quality of the health promoters themselves. The occupational and technical training assistance that the VHB offers was also mentioned as a positive feature of the program.

The responses of subjects regarding what they do not like about the VHB are reported in Table 12. Most of the complaints noted (61%) revolved around loan, repayment & other charge policies. These included not liking the loan amounts, interest rates and repayment policies, or certain administrative issues (29%) involving communication or interpersonal problems among the socias in the local banks or between the socias and the executive board in local banks or the local banks and central administration (29%). Only 4.6% of the responses mentioned specifically that the health education component of the VHB was not understandable, boring or superficial or that the lessons were not being presented as promised.

Table 13 presents the suggestions of the study subjects on how the VHB could be improved. As shown, their responses were grouped into the following categories. These involved changing or upgrading the content of health education lessons (20%), improving how health lessons are delivered (7.4%), implementing health-related services for the socias and their families (7%), having more vocational or microenterprise training (2%), changing current loan, loan repayment and other charges (38%), and instituting organizational and administrative changes (17%).

The most frequently mentioned specific need for improvement in the area of health education revolved around interpersonal relations and civility lessons to improve the social atmosphere in the local banks. Many of the interviewed VHB members complained that they felt uncomfortable with the frequent interpersonal conflicts, including verbal insults and abuse, which is frequent within their local banks. A number of the subjects also mentioned that they would like to see some of the focus of the health education lessons to shift to topics dealing with the prevention and management of obesity, diabetes, and other chronic diseases. Others reported that the use of videos, interesting written materials, and interactive, i.e., participatory methods would improve the quality of and interest in the lessons. Furthermore, many of the subjects reported that they would like to see more professional health care personnel involved in the delivery of the health education lessons as they were more knowledgeable and could answer any questions or quell

doubts as well as provide more in-depth information on topics which the socias wished to explore more in-depth.

Informant Interviews

Interviews were conducted with 30 local VHB leaders who were not participants in the survey portion of the study and 20 personnel from Project Hope-Ecuador. There was a general consensus among the informants that the health education component of the program was a valuable asset. Only a small handful of the interviewees said that it should be dropped from the program. On the other hand, most also agreed that the education component required substantial changes in both content and delivery to improve its usefulness and make it more interesting and stimulating. The informants suggested a number of new themes which they felt could enhance women's knowledge, life skills, and motivate them to make positive changes while still agreeing that there was a need to continue and upgrade classic maternal-child health (MCH) education topics (e.g., breastfeeding, growth monitoring and family planning). The suggested change of focus is important since as the sociodemographic characteristics of the sample also show, many of the women in the larger sample are approaching or are already in mid- or late-life. Thus, a substantial proportion of the local VHB members appear to have health problems, priorities, and interests that are different from those which form the core of MCH education.

Another interesting finding was that many of the VHB informants mentioned that health education lessons which taught them practical skills would be very useful and of much interest to the socias. The specific skills they mentioned as useful included how to take and interpret body temperature, take blood pressure, administer first aid, perform cardiopulmonary resuscitation, administer insulin and other injections, and place dextrose IV's. Many also reported that they would like to see the health education lessons on specific topics expanded to include the entire families of socias and/or selected family subgroup, e.g., sex education for adolescents. Food and nutrition education were topics that were also mentioned frequently as being of interest and use.

Content: The specific topics mentioned by the informants include the following:

- Prevention and detection of osteoporosis, osteoarthritis, menopause, care and nutrition of the elderly

- Organic gardening, production, selection & preparation of nutritious family foods; high protein, vitamin and mineral foods; preparation and use of yogurt; weight-control diets; exercise for controlling weight, healthy recipes, prevention and recuperation, how to recognize "good" and "bad" foods, prevention, control and management of anemia

- Breastfeeding prenatal care; signs and symptoms of prenatal problems, labor & delivery prophylaxis; detection and treatment of ob-gyn problems; child malnutrition prevention & recuperation; child recuperation after illness, child feeding, cervical cancer detection, family planning, personal hygiene, pregnancy nutrition, vaccination in pregnant women, how and when to use condoms.

- Prevention & treatment of malaria, dengue, typhoid, hepatitis, leptospirosis, colds, prevention of intestinal parasitic infections, sanitation insect control, proper garbage disposal; kitchen sanitation; home hygiene, sanitation and how to clean house

- How to prevent AIDS & STD's; how to prevent cancer, vaginal hygiene, illness prevention, how to properly use medicines, how to treat emergency medical problems, how to take care of ill people, sexual education for adolescents, prevention and treatment of diabetes and high blood pressure.

- How to improve civility and human relations; prevention of spousal abuse; how to prevent extramarital relations

- Practical skills: How to use a thermometer and monitor vital signs including blood pressure, how to administer First Aid, injections and IV's Other nursing skills: how to place dextrose IV's, how to do injections, how to lower fevers, how to heal infections, and pain control management.

Health Education Delivery: Suggestions made by the local VHB leaders and VHB personnel for improving the delivery of health education included using videos and slide shows, conducting more participatory activities, implementing practical demonstrations and workshops including how to select low-cost, nutritious foods, food preparation and serving demonstrations; use of colorful and interesting posters, books and brochures to supplement the health education lessons; group lectures; sociodramas, and using mime shows to present the topics.

Other Health Improvements: In addition to changes in the content and delivery of the VHB health education component, the informants made a number of suggestions which they reported could help to improve the health of the socias, their households, and local communities. Many of these reflected the suggested made by the other women who participated in the survey. The suggested changes included improving communication among the socias, the local bank leaders/administrators and the larger VHB administration; implementing a low cost community pharmacy for VHB members and their families, contracting the services of a permanent medical, dental, and laboratory technician team to make monthly or bi-annual visits to serve the VHB socias and their families; starting a health maintenance organization run by the VHB; starting community health or hypertension and diabetes brigades, initiating a food or vitamin-mineral supplement program for VHB socias and their families

CONCLUSIONS

The Republic of Ecuador has experienced considerable socio-economic and socio-political instability and unrest during the past decade. It has a large external debt and high rates of inflation, corruption and out-migration. Governmental authorities have attempted several restructurings of economy including the most recent, "dolarization". To date, these changes do not appear to have the positive impact that was hoped for. The proportion of Ecuadorians living below the poverty line has steadily risen during the past ten years according to official statistics. In addition, their access to formal health care services has decreased over the years due to inflation, a shrinking national health care budget, and the implementation of the "fee for service" scheme adopted by the public health system. This situation is reported to have an especially severe adverse impact on already poor health care access of impoverished groups like those served by Project HOPE in Ecuador.

Project HOPE's integrated health education and income generation program was initiated in Manabi Province in 1993. It was conceived to assist poor women and their households to find their own solutions to improve their economic situations. The specific Village Health Bank (VHB) approach evolved out of Project HOPE's direct experience with the situation in Ecuador and similar countries. Specifically, they found that the success and sustainability of traditional MCH programs are often constrained. This is because even though low-income participants in such programs may experience significant improvements in their health knowledge or attitudes, they often cannot translate these into desired behavioral changes because they lack the economic means to do so. Thus, it was expected that the combined VHB health education with income-generation program would rectify some of the weaknesses associated with conventional health education only MCH programs.

The survey data from the present data strongly suggest that indeed, the VHB program intervention has had a positive impact on the health of women participants and their households. These strongest and most consistent of these apparent effects pertains to improved access to formal health care services and prevention of serious mosquito-borne tropical diseases. This is important since these were found despite the uneven application of the health education component of the program that occurred in recent years. Thus, it does not seem unreasonable to suggest that under more ideal circumstances, the program's impact could be even greater than that measured in this study. Upgrading the consistency, delivery styles and content of the health education component is expected to result in a greater intervention effect. In particular, the results of data obtained by survey and informant interviews suggests that a more interactive and participatory approach in health education may be particularly effective.

TABLES

Table 1. Comparison of Reported Subject & Household Characteristics

Characteristics	Control Group (156)	Intervention Group (326)	X^2	*P*
Subject Age				
• < 20 yrs	10 (6.4)	10 (3.1)	9.3	> 0.05
• 20-29 yrs	45 (28.8)	77 (23.6)		
• 30-39 yrs	54 (34.6)	107 (32.8)		
• 40-49 yrs	32 (20.5)	83 (25.5)		
• 50-59 yrs	14 (9.0)	37 (11.3)		
• > 60 yrs	1 (0.6)	12 (3.7)		
Formal Education				
• 0-3 yrs	7 (4.5)	27 (8.3)	4.5	> 0.05
• 4-6 yrs	41 (26.3)	84 (25.8)		
• 7-9 yrs	25 (16.0)	47 (14.4)		
• 10-12 yrs	46 (29.5)	109 (33.4)		
• > 12 yrs	37 (23.7)	59 (18.1)		
Marital Status				
• Legally married	81 (51.9)	186 (57.1)	2.9	> 0.05
• Common law union	43 (27.6)	70 (21.5)	2.2	> 0.05
• Single	19 (12.2)	41 (12.6)	< 1.0	> 0.05
• Divorced or separated	9 (5.8)	16 (4.9)	< 1.0	> 0.05
• Widowed	4 (2.6)	13 (4.0)	< 1.0	> 0.05
Reproductive Status				
• Currently Pregnant	5 (3.2)	13 (4.0)	< 1.0	> 0.05
• Currently Breastfeeding	15 (9.6)	22 (5.1)	< 1.0	> 0.05
Household Composition				
• Male partner (%)	123 (78.8)	247 (75.8)	< 1.0	> 0.05
• Children ≤ 18 yrs (%)	122 (78.2)	239 (73.3)	1.3	> 0.05
• Adult children (%)	33 (21.2)	111 (34.0)	8.2	0.002
• Siblings (%)	25 (16.0)	42 (12.9)	< 1.0	> 0.05
• Parents (%)	31 (19.9)	54 (16.6)	< 1.0	> 0.05
• In-laws (%)	4 (2.6)	14 (4.3)	< 1.0	> 0.05
• Grandchildren (%)	13 (8.3)	50 (15.3)	4.6	0.03
• Other family (%)	23 (14.7)	70 (21.5)	3.1	> 0.05

Table 1 (cont). Comparison of Reported Subject & Household Characteristics

Characteristics	Control Group (156)	Intervention Group (326)	X^2	*P*
Households with Children in School	78 (50.0)	144 (44.2)	1.4	> 0.05
Head of Household				
• Male	43 (27.6)	105 (32.2)	1.1	> 0.05
• Female	31 (19.9)	80 (24.5)	1.3	> 0.05
• Shared responsibility	82 (52.6)	141 (43.3)	3.3	> 0.05
Current Occupation				
• Store vendor (non-food items)	52 (33.3)	120 (36.8)	< 1.0	> 0.05
• Street vendor (non-food items)	6 (3.8)	25 (7.7)	2.0	> 0.05
• Food production, selling & serving	33 (21.2)	53 (16.3)	1.7	> 0.05
• Other trades	29 (18.6)	50 (15.3)	< 1.0	> 0.05
• Housewife or student	17 (10.9)	38 (11.7)	3.0	> 0.05
• White collar & professional work	19 (12.2)	23 (7.1)	3.5	> 0.05
Source of Household Income				
• Subject only	7 (4.5)	23 (7.1)	1.2	> 0.05
• Subject & her male partner only	90 (57.7)	160 (49.1)	3.1	> 0.05
• Subject & her children only	8 (5.1)	16 (4.9)	< 1.0	> 0.05
• Subject & her parents only	15 (9.6)	17 (5.2)	3.3	> 0.05
• Subject, male partner & children	22 (14.1)	62 (19.0)	1.8	> 0.05
• Subject, her male partner & parents or in-laws	9 (5.8)	23 (7.1)	< 1.0	> 0.05
• Subject & other	5 (3.2)	17 (5.2)	< 1.0	> 0.05

Table 2. Comparison of Other Household Characteristics Reported by the Subjects

Characteristics	Control Group	Intervention Group	X^2	*P*
Major Household Water Sources Reported as Used	(236)	(534)		
• Municipal piped-in water	115 (48.7)	234 (43.8)	1.6	> 0.05
• Non-municipal piped-in water	20 (8.5)	58 (10.9)	1.0	> 0.05
• Purchased from vendor	67 (28.4)	122 (22.8)	2.7	> 0.05
• Rain water	28 (11.9)	105 (19.7)	7.0	0.001
• Well water	6 (2.5)	15 (2.8)	< 1.0	> 0.05
Major Household Expenditures Reported for Prior Month	(462)	(965)		
• Food purchases	143 (31.0)	304 (31.5)	< 1.0	> 0.05
• Basic services & transportation	72 (15.6)	153 (15.9)	< 1.0	> 0.05
• Health care expenses	50 (10.8)	148 (15.4)	5.3	0.02
• Business expenses (excluding loans)	67 (14.5)	106 (11.0)	3.1	> 0.05
• Payment of outstanding debts & loans	53 (11.5)	102 (10.6)	< 1.0	> 0.05
• Educational expenses	40 (8.7)	67 (6.9)	1.1	> 0.05
• Home improvement	20 (4.3)	47 (4.9)	< 1.0	> 0.05
• Shoe & clothing purchases	17 (3.7)	38 (3.9)	< 1.0	> 0.05

Table 3. Comparison of Cervical Cancer Screening and Other Reported Household Health Care Access Indicators

Indicator	Control Group (156)	Intervention Group (326)	OR (95% CI) [AOR (95% CI)]	*P*
Cervical Cancer Screening: Socias				
• Proportion ever screened	123 (78.8)	274 (84.0)	1.41 (0.87-2.30	> 0.05
• Proportion screened during prior 12-month period	65 (41.7)	173 (53.1)	1.58 (1.10-2.30) [1.52 (1.03-2.24)]	0.019 0.035
Breast Cancer Screening: Socias				
• Proportion ever screened	27 (17.3)	68 (20.9)	1.26 (0.77-2.10)	> 0.05
• Proportion screened during prior 12-months	11 (7.1)	25 (7.7)	1.10 (0.52-2.20)	> 0.05
Dental Services: Socias				
• Proportion ever screened or treated	152 (97.4)	315 (96.6)	0.75 (0.24-2.41)	> 0.05
• Proportion screened or treated during the prior 12- months	94 (60.3)	193 (59.2)	1.00 (0.65-1.52)	> 0.05
Dental Services: Children				
• Proportion ever screened or treated	83 (65.9)	166 (63.8)	0.96 (0.62-1.49)	> 0.05
• Proportion screened or treated during the prior 12- months	72 (55.8)	147 (55.7)	1.00 (0.65-1.50)	> 0.05
Intestinal Parasite Treatment: Socias				
• Proportion ever treated	149 (95.6)	313 (96.0)	1.13 (0.44-2.90)	> 0.05
• Proportion treated during past 6-months	59 (37.8)	114 (35.0)	0.88 (0.60-1.31)	> 0.05
Intestinal Parasite Treatment: Children				
• Proportion ever treated	126 (93.3)	260 (94.5)	1.38 (0.60-3.15)	> 0.05
• Proportion treated during past 6-months	81 (62.3)	192 (71.9)	1.60 (1.02-2.49) [1.72 (1.1-2.72)]	0.037 0.02

OR= Odds ratio
AOR= Adjusted odds ratio (adjusted for subject age (> 40 yrs)

Table 4. Comparison of Prenatal Care and Other Reported Household Health Care Access Indicators

Indicator	Control Group (156)	Intervention Group (326)	OR (95% CI) [AOR 95%CI)]	P
Professional Prenatal Care During Recent Pregnancy*: Socias				
• Proportion who received any prenatal care	26 (86.7)	36 (94.7)	2.77 (0.36-32.3)	> 0.05
• Proportion who had their first prenatal visit by the 1st trimester	10 (38.5)	5 (13.5)	0.25 (0.06-0.99) [3.1 (0.84-11.3)]	0.046 > 0.05
• Proportion who had their first prenatal visit by the 2nd trimester	20 (76.9)	26 (70.3)	0.71 (0.19-2.57)	> 0.05
Labor & Delivery Care During Recent Pregnancy: Socias**				
• Private health care	20 (83.3)	15 (62.5)	3.00 (0.66-15.6)	> 0.05
• Public institution	2 (8.3)	7 (29.2)	------	> 0.05*
• Layperson	2 (8.3)	2 (8.3)	------	> 0.05*
Postpartum Care After Recent Pregnancy: Socias**				
• Proportion who received any professional postpartum care	12 (50.0)	11 (44.0)	0.79 (0.26-2.40)	> 0.05
Family Planning* **				
• Proportion using ***any*** family planning	88 (75.2)	186 (85.7)	1.98 (1.10-3.48) [1.94 (1.10-3.40)]	0.017 0.027
• Proportion using ***modern*** family planning method	81 (69.2)	163 (75.5)	1.37 (0.83-2.25)	> 0.05
Proportion of Households Reported as Being Unable to Finance Needed Health Care Services During Past Month	36 (23.1)	45 (13.8)	0.53 (0.32-0.89)	0.016

OR= Odd's Ratio; AOR= Adjusted Odd's Ratio (adjusted for subject age (> 40 yrs)

* Fisher's exact test P-value
** excluding women with a first trimester miscarriage
*** fertile-aged women who stated that they didn't want to conceive in next 2 yrs

Table 5. Comparison of Health Care Sources and Other Reported Household Health Care Access Indicators

Indicator	Control Group	Intervention Group	X^2	P
Sources of Any Health Care Received During Previous Month for Ill Household Members	(175)	(441)		
• Private professional	82 (46.9)	220 (49.9)	< 1.0	> 0.05
• Public professional	58 (33.1)	132 (29.9)	< 1.0	> 0.05
• Pharmacy	33 (18.9)	80 (18.1)	< 1.0	> 0.05
• Home remedies; curandero	2 (1.1)	9 (2.0)	-----	> 0.05*
Principal Source of Health Care Financing for Households During Prior Month	(168)	(436)		
• Socia's income	40 (23.8)	96 (22.0)	< 1.0	> 0.05
• Husband/children income	96 (54.1)	260 (59.6)	< 1.0	> 0.05
• Loan	25 (14.9)	56 (12.8)	< 1.0	> 0.05
• Family savings	4 (2.4)	16 (3.7)	< 1.0	> 0.05
• Governmental aid	3 (1.8)	8 (1.8)	----	> 0.05*

* Fisher's exact test *P*-value

Table 6. Comparison of Directly Observed Household Sanitary Practices

Indicator	Control Group (46)	Intervention Group (76)	OR (95% CI)	*P*
Drinking water boiled or chlorinated (% yes)	39 (84.8)	59 (78.7)	0.66 (0.25-1.76)	> 0.05
Kitchen knives clean (% yes)	33 (73.3)	55 (73.3)	1.00 (0.43-2.31)	> 0.05
Kitchen cutting boards clean (% yes)	31 (68.9)	55 (72.4)	1.18 (0.53-2.65)	> 0.05
Kitchen counters clean (% yes)	30 (66.7)	54 (72.0)	1.29 (0.58-2.86)	> 0.05
Leftovers kept in refrigerator (% yes)	33 (71.7)	43 (59.7)	0.58 (0.2-1.30)	> 0.05
Drinking water covered when not in use (% yes)	28 (63.6)	46 (63.0)	0.97 (0.45-2.11)	> 0.05
Bathroom or latrine clean (% yes)	31 (70.5)	51 (68.0)	0.89 (0.40-2.00)	> 0.05
Bathroom or latrine lid kept closed when not in use (% yes)	27 (61.4)	39 (54.2)	0.74 (0.35-1.60)	> 0.05
Domestic animals (except dogs or cats) observed inside home (% yes)	3 (7.3)	9 (13.6)	2.00 (0.51-7.87)	> 0.05
House windows had screens (% yes)	9 (22.5)	20 (26.3)	1.23 (0.50-3.03)	> 0.05
Bednets present in bedrooms (% yes)	38 (88.4)	60 (80.0)	0.53 (0.18-1.57)	> 0.05
House appears recently sprayed with insecticide (% yes)	23 (60.5)	43 (66.2)	1.28 (0.56-2.92)	> 0.05
Rodent control devices present (% yes)	15 (48.4)	19 (47.5)	0.97 (0.38-2.47)	> 0.05
Adequate home garbage disposal (% yes)	35 (89.7)	58 (96.7)	3.31 (0.58-1.90)	> 0.05
Food animals caged or fenced (% yes)	11 (40.7)	20 (50.0)	1.46 (0.54-3.90)	> 0.05
Food animal cages or fenced areas clean (% yes)	13 (46.4)	19 (51.4)	1.22 (0.46-3.26)	> 0.05
Adults wear shoes to go outside home (% yes)	34 (82.9)	58 (89.2)	1.71 (0.55-5.20)	> 0.05
Children wear shoes to go outside home (% yes)	35 (81.4)	61 (88.4)	1.74 (0.60-5.10)	> 0.05

* proportions may vary in some columns due to missing data

Table 7. Comparison of Reported Household Morbidity Indicators

Indicator	Control Group Households (242)	Intervention Group Households (625)	OR (95% CI) [AOR 95%CI)]	*P*
Proportion of Household Members Reported as Ill with:				
Infectious Illnesses				
• Mosquito-borne tropical diseases (malaria & dengue)	81 (33.5)	124 (19.2)	0.49 (0.35-0.69) 0.51 (0.37-0.72)]	0.000003 0.0001
• Food- & water- borne infections	22 (9.1)	57 (9.1)	1.00 (0.58-1.74)	> 0.05
• Upper respiratory infections	35 (14.5)	114 (18.2)	1.32 (0.86-2.04)	> 0.05
• Lower respiratory infections	16 (6.6)	31 (5.0)	0.74 (0.38-1.44)	> 0.05
• Ear, nose, throat infections	16 (6.6)	48 (7.7)	1.18 (0.63-2.21)	> 0.05
• Non-specific infection signs & symptoms	32 (13.2)	83 (13.3)	1.00 (0.64-1.60)	> 0.05
Chronic Illnesses				
• Non-infectious gastrointestinal conditions	8 (3.3)	22 (3.5)	1.07 (0.44-2.65)	> 0.05
• Dermatological problems	2 (0.8)	18 (2.9)	3.56 (0.79-22.4)	> 0.05
• Urogenital	9 (3.7)	29 (4.6)	1.26 (0.56-2.91)	> 0.05
• Muscular-skeletal	7 (2.9)	42 (6.7)	2.42 (1.03-6.47)	> 0.05
• Neurologic	6 (2.5)	22 (0.4)	1.44 (0.54-4.00)	> 0.05
• Cardiovascular disease	2 (0.8)	6 (1.0)	------	> 0.05*
• Metabolic (diabetes)	6 (2.5)	13 (2.1)	0.84 (0.29-2.71)	> 0.05
Other Misc. Conditions	0 (0.0)	16 (2.6)	------	0.008

OR= Odd's ratio; AOR= Adjusted odd's ratio (adjusted for family size)

Table 8. Comparison of Observed Morbidity

Indicator	Control Group	Intervention Group	OR (95% CI)	*P*
Intestinal Parasitic Infection: Socias				
Proportion Identified with Any Pathogenic Intestinal Parasitic Infection	30 (20.1)	74 (23.8)	1.24 (0.77-2.00)	> 0.05
≥ 1 Pathogenic Protozoal Species	30 (20.1)	71 (22.8)	1.17(0.73-1.90)	> 0.05
≥ 1 Pathogenic Helminthic Species	0 (0.0)	3 (1.0)	----------	>0.05*
Intestinal Parasitic Infection: Index Children				
Proportion Identified with Any Pathogenic Intestinal Parasitic Infection	34 (29.1)	54 (21.9)	0.68 (0.41-1.13)	> 0.05
≥ 1 Pathogenic Protozoal Species	34 (29.1)	53 (21.50	0.67 (0.40-1.10)	> 0.05
≥ 1 Pathogenic Helminthic Species	2 (1.7)	1 (0.4)	0.23 (0.21-2.60)	> 0.05

* Fisher's exact test *P*

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Table 9. Comparison of Anthropometric Indicators of Nutritional Status

Indicator	Control Group	Intervention Group	OR (95% CI) [AOR 95% CI]	*P*
	(135)	(289)		
Study Subjects (NPNL)				
Proportion classified as underweight	5 (3.7)	3 (1.0)	0.27 (0.05-1.33)	> 0.05
Proportion classified as normal weight	49 (36.3)	88 (30.4)	1.30 (0.83-2.05)	> 0.05
Proportion classified as overweight	47 (34.8)	132 (45.7)	1.57 (1.01-2.46) [1.01 (0.99-1.03)]	0.035
Proportion classified as obese	34 (25.2)	66 (22.8)	0.88 (0.53-1.46)	> 0.05
Other Household Adults	(34)	(99)		
Proportion classified as underweight	3 (8.8)	4 (4.0)	1.63 (0.29-8.75)	> 0.05
Proportion classified as normal weight	20 (58.8)	49 (49.5)	0.85 (0.46-1.55)	> 0.05
Proportion classified as overweight	9 (26.5)	33 (33.0)	0.55 (0.24-1.25)	> 0.05
Proportion classified as obese	2 (5.9)	13 (13.0)	0.32 (0.05-1.51)	> 0.05
All Minor Children**				
Proportion classified with overweight	8 (4.8)	22 (6.8)	1.45 (0.60-3.64)	> 0.05
Proportion classified as growth stunted	53 (23.8)	85 (18.1)	0.71 (0.47-1.06)	> 0.05
Proportion classified as wasted	4 (2.4)	10 (3.1)	--------	> 0.05*
Proportion classified with global malnutrition	22 (9.7)	40 (8.3)	0.84 (0.47-1.50)	> 0.05
Children ≤ 5 yrs **				
Proportion classified as growth stunted	23 (26.4)	18 (17.6)	0.60 (0.28-1.26)	> 0.05
Proportion classified as wasted	2 (2.5)	3 (2.9)	------	> 0.05*
Proportion classified with global malnutrition	11 (13.3)	8 (7.7)	1.29 (0.36-4.94)	> 0.05

OR= Odd's ratio; AOR= Adjusted odd's ratio (adjusted for subject age)

NPNL= non-pregnant, non-lactating

* Fisher's exact test *P*

Table 10. Comparison of Household Diet and Food Security Indicators

Indicator	Control Group (156)	Intervention Group (326)	OR (95%CI) [AOR (95% CI)]	P
Household diets during prior 12 months				
• Improved	20 (12.8)	47 (14.4)	0.87 (0.48-1.58)	> 0.05
• Stayed the same	114 (73.1)	216 (66.3)	1.38 (0.89-2.16)	> 0.05
• Deteriorated	22 (14.1)	63 (19.3)	0.69 (0.39-1.20)	> 0.05
Household Food Insecurity & Hunger During Past 12-Months				
• Proportion of food secure households	83 (53.2)	118 (36.2)	0.50 (0.33-0.75) [0.60 (0.16-2.22)]	0.0004 > 0.05
• Proportion of food insecure households w/o hunger	32 (20.5)	88 (27.0)	1.43 (0.88-2.33)	> 0.05
• Proportion of food insecure households with hunger	41 (26.3)	120 (36.8)	1.63 (1.05-2.55) [2.42 (0.62-9.37)]	0.022 > 0.05

OR= Odd's ratio
AOR= Adjusted odd's ratio

Table 11. Characteristics of the VHB that Clients Reported That They Like

Response Categories	f (%)
Health Education	**452 (26.5)**
• Give health education lessons	443 (26.0)
• Have good health promoters	9 (0.5)
Other Education	**239 (14.0)**
• Give occupational training & technical business assistance	
Loan, Repayment & Other Charges	**421 (24.7)**
• The loans are less complicated	343 (20.1)
• Lower interest than other credit sources	58 (34)
• Improve financial stability	20 (1.2)
Organization & Administration	**585 (34.3)**
• Group solidarity & dynamics	352 (20.7)
• More efficient, organized & attentive to clients compared to other lending institutions	173 (10.2)
• Give motivation and stimulate one to succeed; teach responsibility	60 (3.5)
Other Characteristics	**7 (0.4)**

Table 12. Characteristics of the VHB that Clients Reported That They Don't Like

Response Categories	f (%)
Health Education	**46 (4.6)**
• Health education & promotion activities not understandable, boring, superficial	41 (4.1)
• Aren't presenting lessons	5 (0.5)
Loan, Repayment & Other Charges	**606 (61.0)**
• Current loan repayment policies	210 (21.1)
• Loan cycles too short	99 (10.0)
• Interest rate too high	153 (15.4)
• Loan amount too small	64 (6.4)
• Loans take too long	58 (5.8)
• Loan cycles too long	22 (2.2)
Organization & Administration	**286 (28.8)**
• Unpleasant atmosphere due to poor group dynamics & social relations among socias	93 (9.4)
• Meetings too frequent or long	141 (14.2)
• Meeting times and sites inconvenient; loan repayment site inconvenient	21 (21.1)
• Service charges unfair	13 (1.3)
• Inadequate explanation of service & other charges	
• Disorganized, inattentive socias in meetings &health education lessons	18 (1.8)
Like Everything About the Bank	55 (5.5)

Table 13. Client Suggestions for VHB Improvements

Response Categories	f (%)
Health Education Lesson Content	**126 (19.9)**
• Interpersonal relations & civility promotion	66 (10.4)
• Family relations and domestic violence	4 (0.6)
• Human sexuality	8 (1.2)
• Older women's health & nutrition issues	
• Chronic disease prevention & control (obesity, diabetes, osteoporosis, CVD)	35 (5.5)
• Infectious disease prevention & control (leptospirosis, typhoid)	5 (0.7)
• Child health and nutrition	8 (1.2)
Health Education Delivery	**47 (7.4)**
• Have trained health professionals deliver lessons	17
• Change lesson delivery (e.g., videos, brochures, etc)	30
Establish Vocational or Microenterprise Training Lessons	**14 (2.2)**
Health-Related Services	44 (7.0)
• Establish health insurance, medical & prescription services for socias & families	39 (6.2)
• Have main VHB control distribution of donated medicines to ensure that socias really receive them	5 (0.8)
Loan, Repayment & Other Charges	**238 (37.7)**
• Faster, more punctual and frequent	28 (4.4)
• Higher amount loans	35 (5.5)
• Lower interest rate	70 (11.1)
• Extend loan repayment period	59 (9.3)
• More flexible loan & repayment policies	22 (3.5)
• Reduce or eliminate service & other charges	24 (3.8)
Organization & Administration	**107 (16.9)**
• Less frequent or shorter reunions	41 (6.5)
• Allow substitutes to attend meetings when socias have legitimate excuse	8 (1.2)
• Throw out socias who don't pay and keep the ones who do; don't penalize those who pay	12 (1.9)
• Establish & publish uniform & consistent set of rules and regulations for all VHB's	15 (2.4)
• Establish more convenient & permanent meeting site (not in socia homes)	27 (4.3)
• Improve communication	4 (0.6)
No Improvements Needed	**56 (8.9)**