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GROWTH and EQUITY through MICROENTERPRISE INVESTMENTS and INSTITUTIONS
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Morocco Microenterprise Finance Concept Paper

by

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TABLE OF CONTENTS

| | <u>Page</u> |
|---|-------------|
| EXECUTIVE SUMMARY | v |
| SECTION ONE | |
| TECHNICAL ANALYSIS | 1 |
| DEFINITION OF MICROENTERPRISE | 1 |
| POTENTIAL DEMAND FOR MICROFINANCE | 2 |
| Numbers of Microenterprises in Target Regions | 2 |
| Potential Demand for the Type of Microcredit Envisioned in this Project | 2 |
| Potential for Microsavings Instruments | 3 |
| CRITICAL TECHNICAL FACTORS IN THE | |
| MICROFINANCE DELIVERY MODEL RECOMMENDED BY THE TEAM | 3 |
| Interest Rate | 3 |
| Savings | 4 |
| Credit Instruments | 5 |
| THE SPECIAL DISBURSING MECHANISM THROUGH THE PMC | 7 |
| SECTION TWO | |
| ADMINISTRATIVE AND INSTITUTIONAL ANALYSIS | 9 |
| ADMINISTRATIVE BODIES INVOLVED IN PROJECT IMPLEMENTATION | 9 |
| Private Microfinance Company | 9 |
| Bank | 9 |
| Foundation | 10 |
| Other Project Institutions | 11 |
| FUNCTIONS OF THE ADMINISTRATIVE BODIES IN THE PROJECT | 11 |
| Private Microfinance Company | 11 |
| Bank | 13 |
| RECOMMENDED GEOGRAPHIC AREAS FOR PROJECT IMPLEMENTATION | 13 |
| INSTITUTIONS BOTH QUALIFIED AND INTERESTED IN IMPLEMENTING | |
| THE PROJECT | 14 |
| Banks | 14 |
| Ministries | 14 |
| Foundations | 14 |
| Other Institutions and Agencies | 15 |
| LONGER-TERM INSTITUTIONAL ISSUES | 15 |

| | |
|--|-----|
| SECTION THREE | |
| FINANCIAL ANALYSIS | 17 |
| MAJOR FINDINGS | 17 |
| Interest Rate Level | 17 |
| Number of Loans per Officer | 18 |
| Project Finance | 18 |
| DESCRIPTION OF THE TABLES | 19 |
| General Description | 19 |
| Description of Individual Tables | 20 |
| SECTION FOUR | |
| ECONOMIC ANALYSIS | 33 |
| SECTION FIVE | |
| SOCIAL ANALYSIS | 41 |
| BASELINE SURVEY | 41 |
| WOMEN BENEFICIARIES | 42 |
| DEBT REPAYMENT BEHAVIOR | 42 |
| INTEREST RATE LEVEL | 43 |
| SECTION SIX | |
| CONCLUSION: CRITICAL FACTORS IN THE RECOMMENDED MICROFINANCE DELIVERY MODEL | 45 |
| PRICE FINANCIAL PRODUCTS FOR PROFITABILITY | 45 |
| ENSURE FINANCIAL PRODUCTS FIT THE DEMANDS OF MICROENTERPRISES | 45 |
| Savings | 45 |
| Credit | 46 |
| MEET OTHER REQUIREMENTS FOR A SUCCESSFUL MFP | 47 |
| ANNEX A: LIST OF PERSONS CONTACTED | A-1 |
| ANNEX B: TERMS OF REFERENCE | B-1 |
| ANNEX C: THE MICROENTERPRISE SECTOR AND CREDIT DEMAND | C-1 |

LIST OF TABLES

| | <u>Page</u> |
|--|-------------|
| Table 1. Effect of Differing Loan Sizes on Interest Rate | 22 |
| Table 2. Effect of Changing the Number of Loans per Loan Officer on the Interest Rate | 23 |
| Table 3-A. Profitability Projections for Each Microfinance Profit Center-Morocco MFP | 24 |
| Table 3-B. (Same as Table 3-A, but Increase Loan Loss Reserve to 5%) | 25 |
| Table 3-C. (Same as Table 3-A, but Increase Loan Loss Reserve to 10%) | 26 |
| Table 3-D. (Same as Table 3-A, but Add \$17,280 to Equipment Budget to Purchase 6 Motorbikes for the Manager and Loan Officers and Also Increase the Transportation/Repair Budget) | 27 |
| Table 3-E. (Same as Table 3-D but Increase the Number of Loans per Loan Officer to 300 over Time) | 28 |
| Table 4-A. (Same as Table 3-B, but Increase Interest Rate to 42%) | 29 |
| Table 4-B. (Same as Table 4-A, but Add \$17,280 to Equipment Budget to Purchase 6 Motorbikes for the Manager and Each Loan Officer. Also Increase transportation/repair budget to \$500/Month) | 30 |
| Table 4-C. (Same as Table 4-B but Increase the Number of Loans per Loan Officer to 300 over Time) | 31 |
| Table 5. Mock Economic Analysis, Morocco Microenterprise Finance Project (Best Case- Incremental funding, 30% Benefit) | 35 |
| Table 6. (Same as Table 5, but Best Case-Incremental funding, 30% Benefit, only 100 clients/loan officer) | 36 |
| Table 7. (Same as Table 5, but Worst Case-endowment funds up front, 30% benefit) | 37 |
| Table 8. (Same as Table 5, but Worst Case-endowment funds up front, 30% benefit, only 100 clients/loan officer) | 38 |
| Table 9. (Same as Table 5, but Worst Case-endowment funds up front, only 17.5% benefit) | 39 |

EXECUTIVE SUMMARY

The team from the Growth and Equity through Microenterprise Investments and Institutions (GEMINI) Project spent four weeks in Morocco to examine the feasibility of the planned Microenterprise Finance Project (MFP). The scope of work included technical, administrative, financial, economic, and social analysis.

The major findings included in this report are as follows:

- All indications from previous reports and from research conducted on this mission lead the team to conclude that there will be a large demand for microfinance (small lending and savings services); that methods that have supported large-scale, sustainable financial services for the poor elsewhere will work in Morocco; and that legal and regulatory obstacles are not insurmountable.
- The term microfinance is preferred to microcredit. Most previous reports have emphasized the credit side heavily. Experience from around the world, however, indicates that a demand for savings instruments exists as well. The availability of such savings instruments may, in fact, be more important in the long term than the credit instruments. Because of the importance of savings, the team believes that a savings instrument must be an integral part of the project.
- The most critical element affecting the success of the project will be whether the appropriate institutional mechanisms can be designed. Based upon its discussions with banks and existing associations, the GEMINI team feels that suitable institutional mechanisms can be developed, and outlines criteria for developing this mechanism during project implementation. Because the current banking structure cannot command the interest rate structure necessary to cover all costs, the microfinance activities must be managed through another institution. It is recommended that a private microfinance company (PMC) be chosen to conduct the microfinance activities. This company will most likely be a subsidiary of an association. The bank(s) will perform back office functions, including transactions and cash management. Senior bank officials will be on the board of directors for the PMC.
- Pilot microfinance experience in Morocco shows that strong demand for these services exists among women entrepreneurs, and that methods can be developed to promote strong participation by women in microfinance programs.
- The team designed a unique model for the MFP in Morocco. This model incorporates elements of other successful microfinance programs, but its institutional and collateral fund structure have been designed specifically for the Moroccan project.

TECHNICAL FEASIBILITY

The technical analysis portion of this report estimates that demand exists to reach at least 6,000 borrowers in each target region (Fès-Meknès, greater Casablanca, and Rabat-Salé) and in Tétouan. The team feels that the MFP should be able to reach this number of borrowers by the end of Year 4. The

most likely scenario to reach 6,000 borrowers is to open 4-6 PMCs. Each PMC will have the capacity to handle 1,000-1,500 loans.

Both individual and group lending appear to be feasible in Morocco. The team recommends that the method or methods used for promoting repayment be chosen by the implementing organizations through experimentation during the pilot phase of MFP implementation. Currently, the maximum allowable interest rate that can be charged by banks is 12 percent. This is insufficient to cover all operating costs and return on capital. Initial estimates indicate that an interest rate of at least 42 percent will be required. The team recommends splitting the administrative functions of the unit into two — the financial front office functions will be handled by a bank charging 12 percent interest. The back office and loan officer functions will be handled by a second administrative unit charging administrative fees, which effectively will add another 30 percent to the loan charges.

A collateral account must be set up to ensure the participation of the legally required formal financial sector in lending and savings operations (see the administrative and institutional analyses in the report for more details). As mentioned previously, savings services should be included in the MFP. Incentive payments should be used for loan officers and PMC managers to increase portfolio size and ensure portfolio quality. The team feels that competition among PMCs will not be a constructive factor at the outset of the project, and could detract from institution building activities.

ADMINISTRATIVE FEASIBILITY

The administrative analysis in this report presents a project structure based upon the creation of two separate administrative units:

- An independent private microfinance company; and
- A commercial bank.

The PMC will perform all the front office functions of a commercial financial institution, appraising loans, motivating repayment, and mobilizing savings. The back office functions, including loan disbursement, receipt of repayments, and management (receipt and disbursement) of savings accounts will be carried out by a commercial bank selected by the MFP.

The team advocates separating front office and back office functions in two administrative units because current legal banking regulations will not permit a bank or other financial institution to charge enough in interest to cover costs and ensure a reasonable return. In addition, it is impossible for nonfinancial institutions to perform banking functions, so that the PMC could not perform the front office functions required.

In addition to the two administrative units, it may be necessary to add a Foundation to the administrative structure to avoid cumbersome regulatory and fiscal requirements. The Foundation would be a registered Association d'Utilité Publique.

The U.S. Agency for International Development will make an endowment to the Association to cover initial capital requirements for the PMC, and to support a collateral fund to minimize risks for the bank that agrees to take on project back office duties. In the beginning of the project, the bank is likely to require \$1 in this fund to secure every \$1 lent, but over time it should prove possible to obtain greater

leverage for the fund. The consultants feel that at least 3:1 leverage should be possible after four years of successful MFP operations.

Other critical administrative factors are:

- Developing an institutional structure that ensures substantial participation by the banking sector in capital provision, transactions management, tracking of individual clients, and strategic leadership for MFP/PMC operations;
- Taking special measures to promote women's participation in the project, including locating PMC services in medinas (closer to the places where women work), hiring as many women loan officers as possible, and building strong links to local women's associations;
- Avoiding clients who have a history of high delinquency and default (for example, delinquent clients in groups previously targeted for government-sponsored subsidized credit programs); and
- Developing a close working relationship with senior officials from a politically influential ministry, to develop a base for advocating for finance policy reforms to encourage wider dissemination of MFP-type financial services by the formal financial sector.

The team recommends the MFP begin in Fès, because of its strong microenterprise activity and superior institutional structures (to Meknès); expansion to the Rabat-Sale, Casablanca, and Tétouan areas can be considered for later years.

FINANCIAL FEASIBILITY

The financial analysis presents an eight-year projection for PMC activities based on differing assumptions. Based on a portfolio of 1,000 loans, which is achievable in two years, and an interest rate of 42 percent, the PMC can reach self-sufficiency within three years. It can reach profitability sufficient to attract independent private sector investment in expansion (which we assume to be around 20 percent cumulative return on equity) in six years.

ECONOMIC FEASIBILITY

The economic benefits from the MFP arise principally from increased revenue generated by firms having new access to financial services. The Egypt programs report a 36 percent average increase in total sales by borrower firms.¹ The Direction de la Statistique national survey in 1988 reported a mean annual income of \$1,600 for "nonstructured" enterprises.

¹See Linda Oldham et al., "Measuring Socioeconomic Impact of Credit on SMI: Assessment of the Monitoring System Used by the Alexandria Businessmen's Association, Egypt," GEMINI Technical Report No. 76, Bethesda, Maryland, May 1994.

SECTION ONE

TECHNICAL ANALYSIS

DEFINITION OF MICROENTERPRISE

To analyze potential demand, it is necessary to clarify the definition of microenterprise. The Department of Statistics identified more than 245,000 businesses in the nonstructured sector (NSS). Their definition of NSS includes businesses that have fewer than 10 employees, a fixed place of work, and sales volume of more than DH100,000 per year. The study further notes that 90 percent of these businesses have 1-3 persons operating the business (including the owner).¹

The team that prepared this report believes these figures substantially underestimate the number of small businesses. In a 1992 update of the 1989 Ernst & Young Study ("Constraints and opportunities in the SME Sector"), it was noted that of 5 businesses that register their names, only 1 applies for a business license. It is unclear whether the Department of Statistics recorded only businesses with licenses or not. Regardless of the methodology of the study, it is clear that the number of microenterprises is substantially more than 245,000, and most likely 5-10 times this figure.

The microenterprise sector includes these other characteristics:

- The system of organization is simple;
- The accounting system is not usually clearly defined;
- No distinction is usually made between business income and expenses and personal expenses;
- A lot of trade businesses in this sector survive on the buying and selling of goods and not on the production of goods;
- For those firms producing goods, they depend more on manual production methods and use very few machines;
- Microenterprises often do not make fiscal declarations, although a substantial percentage may pay a basic business license tax (*patente*); and
- They usually lack personal assets and therefore do not have bankable collateral.

The Ministry of Artisanat and Social Affairs has redefined its definition of microenterprise, and now has a variety of sectors including artisanat of art, artisanat of services, and artisanat of commerce. This effectively covers the entire range of microenterprise.

¹See the report of the Growth and Equity through Microenterprise Investments and Institutions (GEMINI) Project, "USAID/Morocco: Assessment of Programming Options for Microenterprise Development. Report on Workshop and Field Investigations," Matthew Gamser et al., Technical Report #51b, December 1992.

POTENTIAL DEMAND FOR MICROFINANCE

Numbers of Microenterprises in Target Regions

The Ministry of Artisanat and Social Affairs has identified the following number of microenterprises by regions (according to number of businesses licenses): Fès.—50,000, Meknès.—30,000, and Tétouan.—50,000. These figures are likely underestimated, and, as noted earlier, the actual numbers of microenterprises is substantially greater than this figure.² In addition, the general pattern of population growth and migration from the rural to the urban area will result in growing demand.

Potential Demand for the Type of Microcredit Envisioned in this Project

It should be noted that there have not been any complete studies that have attempted to assess demand for credit by interviews with potential clients borrowers. Most conclusions are based on interviews with institutions. However, even without such an in-depth survey, it is believed that substantial demand exists because of the demand of existing small programs. This demand is reflected in the experience of the Société de Cautionnement Mutuel des Artisans, a credit program administered by the Banque Centrale Populaire (BCP).

However, because this and other microcredit programs are subsidized and have very low interest rates, an argument might be made that there will not be a demand for programs that charge higher rates. This argument was made by several government persons at various ministries. Based on experience in other countries, this argument is refuted by the fact that existing credit programs, even though they charge low interest rates, cover only a very small portion of total loan demand. The phenomenon of "cheap but unavailable" credit can therefore be observed in Morocco, as it is in many other countries.

The more significant argument that effective demand exists for higher interest credit can be made from the new Catholic Relief Services-funded program administered through a newly formed nongovernmental organization (NGO) called AMSED (Association Marocaine de Solidarité et Développement). This program, which charges an effective annual interest rate of 38-42 percent, has no shortage of applicants. With experience like this, and experience in other countries, it is certain that interest rate will not be a barrier to generating effective demand.

Another argument related to demand heard by the team was that there would be no demand for such small loans as the less-than-\$300 loan that USAID has made a priority in its global Microenterprise Initiative. This argument has some merit. The figure of \$300 will be attractive to borrowers only if they can increase the amount when they prove to be a good credit risk. Therefore, the team recommends that the project not limit loan size, or average loan size, to \$300. The definition of a microloan will vary from country to country and area to area depending on specific economic factors. In Morocco, interviews

²This report presents only a summary of key information from previous studies of microenterprise and microfinance in Morocco. For more details, see GEMINI Technical Report #51b, *ibid.*; Housni El Ghazi, "Fundamental Policy and Design Strategy for the Micro Credit Project in Morocco," prepared for USAID, August 1993; and "Memorandum on Site Visit to Beni-Mallal, H. El Ghazi, for USAID, November 1993. See also an extract from this memorandum in Annex C.

with institutions suggest that the definition of a microloan should be expanded, and that the need to offer credit up to \$2,000-\$3,000 will exist.

Even if credit is offered for these higher amounts, it is still suggested that first-time borrowers be limited to smaller loans (\$300-\$500). This limit will help to weed out clients from previous directed credit programs that tended to offer larger loans. Many of these clients were poor re-payers. As a borrower from the MFP proves that she/he is a good credit risk, the amount of succeeding loans can increase.

Potential for Microsavings Instruments

As with credit, there have not been any detailed surveys to determine the potential for small savings instruments. However, in recent years, the government began a program called *bancarisation*, which was administered primarily by BCP, the Caisse Nationale de Crédit Agricole (CNCA), and CEN (Caisse d'Épargne Nationale). The program was designed to induce small savers to transfer some portion of their wealth (currently saved in the form of jewelry, carpets, cattle, and so forth), into financial savings. It is estimated that DH17 billion was captured by these three institutions during 1990-1991. This project, combined with experience in other countries, demonstrates that demand is substantial for savings instruments.

In summary, the relevant question is not so much whether there is a demand for microfinance savings and credit products. The evidence is sufficient to conclude that there is sufficient demand. The more relevant question is: What are the types of savings and credit products that will have substantial demand and yet are manageable from a cost recovery and return on equity perspective?

CRITICAL TECHNICAL FACTORS IN THE MICROFINANCE DELIVERY MODEL RECOMMENDED BY THE TEAM

Interest Rate

The important issues on this point are discussed below:

1. Can the project charge sufficient interest to cover overhead, inflation, cost of money, and a return to capital?

Banks are effectively limited in the maximum interest rate they can charge, which is set every six months by the Central Bank. However, there is apparently no limitation on the fee structure. Therefore, banks can charge fees to cover costs, although any payments required beyond 12 percent cannot be expressed as interest. However, indications received from the Ministry of Finance are that there would still be some limit on such fees if levied by a bank. Therefore, a bank by itself could not charge sufficient fees (24 percent or more in just fees, not including the 12 percent in interest) to ensure that the interest and fees could cover all costs and generate an acceptable return.

The recommended form of administration (see administrative section) involves a private company that does the day-to-day operation). It is this company that will charge fees that will most likely amount to an effective 24 percent of the loan outstanding. Legally, there will be no problem doing this, as long as the implementing body is a private company.

2. What rate of interest should be charged?

As mentioned, there is a legal rate of interest, which is currently 12 percent. However the effective interest rate, which includes the fee structure, will be substantially higher. It is estimated that an effective rate of interest of at least 36 percent will have to be charged. This is described in more detail in the financial section. The mechanism for charging this is described in the administrative section. To summarize, the bank will perform back office functions, including the handling of all cash. The bank will be allowed to charge the maximum 12 percent. The front office functions, to be handled by a private microfinance company (PMC), will charge fees (not interest), but the effective interest represented by the fee structure will be an additional 24 percent.

Savings

As mentioned earlier, too often savings is the neglected side of microfinance. Programs around the world have demonstrated that there is substantial savings capacity even among persons with limited assets. This savings capacity includes longer-range savings, to replace savings in jewelry, animals, and the like. Even persons with limited assets attempt to keep some portion of these assets as savings. Savings are also made to provide a secure place to store temporary excess cash flows from business, for example. There will always be times when even a small business will have excess cash if a customer suddenly pays a large amount.

Several factors influence the form in which persons of small assets save:

- If the inflation rate is high, these people will prefer to save in gold, jewelry, animals, land, or some other form not easily eroded by inflation.
- A shortage may exist of secure banks or other financial institutions that will accept savings. Or if there is a local history of bank failures, people will lose their confidence in banks.
- Even if secure banks exist, attractive savings instruments must be designed. If withdrawals are restricted, or restrictive minimums are placed on opening or maintaining accounts, persons with limited assets will not use banks.

In Morocco, inflation has been controlled for a substantial period. The biggest problem affecting savings is the availability of banks in convenient locations, and the availability of properly designed savings instruments. Properly designed instruments will attract substantially more savings than the banks or local officials think possible. Because of this, an important part of the project will be the design of savings instruments that will attract both the short-term cyclical need for savings, and the longer-term need for stocks of financial savings.

Moroccan law allows only banks to collect savings. Therefore any innovations in savings instruments must be done with banks. Although most of the innovations in microfinance to be recommended in this project will be implemented by the PMC, the savings innovations will be administered by the bank.

The team suggests some truly innovative functions for the bank — for example, managing small individual saving accounts. This savings function would become even more innovative if new savings products were created to better fit the needs of the small saver. The activity of designing such new types of savings accounts should be given high priority in the project. For example, there may be ways of

linking loans and savings through savings accounts. When the PMC issues a check to the borrower to disburse the loan, the check — under one scheme — cannot be cashed, but can only be deposited in the borrower's interest-bearing savings account. The borrower may not need the money immediately, and may keep some amount of funds in the savings account. The bank can have an automatic right of debit on the account for the loan installment.

Channeling program lending through savings accounts in this way can make the client more conscious of the utility of interest-bearing checking savings accounts. The client may become used to paying into the account to repay the loan, and find it easy (as well as beneficial) to continue the same pattern even after the loan is paid off.

Development of other innovative incentives to save is possible. Successful programs in Indonesia have used lotteries; lottery tickets are awarded on the basis of savings levels. Such lottery-based programs should be considered for Morocco. Other approaches, such as giving free gifts (of silverware or china, for example) if deposits reach a certain level, should also be considered.

Another innovation that could be considered would be the design and management of individual current accounts. If such a system existed, it might help the collection process. If a borrower did not pay, for example, the loan officer could get a commitment that he pay on a certain day, and then go to his house on that day and collect a check. Under Moroccan law, such checks must be made good within 20 days, or else the person issuing the check is liable to go to jail. Because there is no collateral element in this program, this procedure might be considered a possible deterrent to nonrepayment. Of course, the borrower still could just choose not to write a check. However, getting a check written out, if possible, would give the loan officer one more weapon in his arsenal.

The loan officer does not have the legal right to collect money from the borrower. But the loan officer can collect a check made out to the bank for the installment amount. It is a very different thing to have the borrower say he will pay by going to the bank on a certain day, versus having him immediately write a check. This entire procedure would only work, however, if there were individual current accounts. The feasibility of using this procedure should be carefully examined by project implementors. It could be something negotiated in the beginning of the project, or could be phased in over time. The key variable to be examined is the transaction cost to the bank by having individual current accounts.

Credit Instruments

Loans will range from DH750 to DH26,400 (approximately \$90-3,300). During the first year, an expected 50 percent of loans will not exceed DH2,640 (\$300), 75 percent will not exceed DH3,520 (\$400), with a maximum loan size of approximately DH4,400 (\$500). These loan sizes are substantially below the current average loan size of commercial banks. As the project progresses, it is estimated that 50 percent of loans will remain at \$300 (in constant dollars). This part of the portfolio will be mainly new borrowers. In addition, 50 percent of the loan portfolio is estimated to increase in size over time, because of the requirement by many borrowers for increasing loan capital as their business grows.

Loan Types

The Project Implementation Team will have to make the final decisions on which types of loan products make most sense in the context of this microfinance project. However, the team has some

suggestions. Loan terms should not exceed one year in the early phase of the program, and the majority of loans may be substantially shorter (possibly 6 months). After some experience is gained through implementation, program implementers will determine whether 6 or 12 month loans are sufficient, or whether there is a need for a longer loan term for good customers.

For simplicity, the team suggests that the program have only a few types of loans in the beginning, possibly a 6-month loan with monthly installments, a 12-month loan with monthly installments, and a 12-month loan with a 3-month grace period.

Loans with grace period should be given only with great caution, since programs throughout the world have demonstrated such loans to involve substantially more risk. Special precautions should be made, such as requiring at a minimum the payment of interest during the grace period, or at least that the borrower report to the administrative office once a month, even though installments are not due.

Loan Purpose

One of the basic principles of successful microfinance programs is that loan type should not be targeted to any particular economic activity. Rather, loans should be available for a wide variety of microeconomic activities. The only targets, as noted by the project parameters, are keeping the loan size small and paying special attention to loans for women. Keeping the loans size small will not a problem, depending on the definition of small. Initially, having loans at \$300 will minimize risk while giving program administrators time to learn more about customers. However, over time, the loan size must increase as the individual businesses expand and increase their capital needs. This is discussed in more depth in the Financial Analysis section.

Loaning to women, because of the large numbers involved, does not violate the no-targeting principle. Based on the initial experience from the AMSED program, giving special emphasis to women may reduce risk. The program will encourage strong participation by women by taking the following special measures:

- Locating PMC services in medinas (closer to their places of work);
- Hiring as many women loan officers as possible; and
- Building strong linkages to local women's associations.

AMSED's experience with pilot credit programs indicates that no shortage of creditworthy women entrepreneurs exists, and that the above measures can attract substantial numbers of women to the program.

The nature of the loan program, with its small loan size, will generally attract only microenterprises. It would be an unnecessary restriction to ask that total microenterprise asset size not exceed DH100,000, or that asset size fall into a range of DH50,000 to DH100,000.

The borrower should have a permanent address, so that the loan officer can visit the borrower at either his place of business or his residence. It is also required by Moroccan law that the borrower have a *patente*. If during the implementation phase it becomes clear that a substantial number of potential borrowers do not have *patentes*, then the project may wish to add an additional function to facilitate the process of securing them, so that a large number of borrowers are not unnecessarily excluded.

THE SPECIAL DISBURSING MECHANISM THROUGH THE PMC

Given Morocco's lack of microfinance experience, the absence of NGOs active in this field (with the exception of AMSED), and the restrictions posed by the current laws and regulations governing the financial sector, this project requires a special disbursing mechanism to ensure the banks' participation in the project and rapid disbursement of funds. This special disbursing mechanism involves both the PMC and the bank.

The procedure for disbursing loans is as follows:

- A potential borrower applies for a loan at the PMC;
- The loan officer reviews the paperwork on the applicant, makes field inspections of the applicant's business, and approves or disapproves of the proposal.
- If the loan is agreed upon, the bookkeeper at the PMC will make a check for the amount of the loan, payable to the borrower, drawn on the bank that is cooperating with the PMC in the project. The PMC will write the check from its own overdraft account with the bank. The PMC does not have initial funds in this account, so the first loans will constitute an overdraft.
- The borrower takes the check to the bank. The bank immediately cashes the check and gives the cash to the borrower. The bank immediately records the loan, by borrower, and also records the amount of debit against the overdraft account of the PMC.

The bank is essentially loaning its own money under this system. Since banks will not initially lend their own funds, it will be necessary to create either a collateral fund mechanism or a guarantee fund. The collateral fund is preferred. This finding is based on discussions with Moroccan banks on difficulties with guarantee funds. With a guarantee fund, the guarantor need not commit any funds to the lending institution. However, a clear set of procedures must be set whereby the bank can collect from the guarantee fund in the case of nonrepayment. In many countries, including Morocco, guarantee funds have been set up, and the results have not always been as good as originally anticipated. Some of the problems have been slow processing of claims, and the numerous forms required to make claims against the guarantee fund (this complaint is often from the bank side). Other problems include slow approval and disbursement of credit (this complaint is often from the donor side).³

To avoid these problems, the team has designed an innovative approach to guaranteed lending which, it believes, allays bank concerns while preventing bank delays. We recommend that a collateral fund be established, and that the fund be established in the banking institution implementing the project. The fund will be set up so that the bank has the right to debit the funds, if there is proof on nonpayment by the borrower, according to predefined criteria. This approach will solve the problem of slow claim processing.

³ACCION International has had better results using a Bridge Fund to guarantee loans to its microfinance programs. However, this fund guarantees large loans to ACCION affiliates, not individual loans to microenterprises. Because Morocco has no active NGO that the team believes is capable of managing a large-scale program that could handle a commercial bank loan, this guarantee model is not appropriate.

Initially, some banks may ask for complete 100 percent backing of loans by establishing a collateral fund equivalent in size to the loan portfolio. However, over time, the banks should be willing to lend some multiple of the collateral fund, possibly 3-5 times the value of the fund, depending on the success of the project in generating good repayment. At least one bank, the Banque Marocaine du Commerce Extérieure (BMCE), indicated it would be willing to provide leverage even in the beginning of the project.

Fund disbursement to cover collateral needs should be based on quarterly plans for loan disbursements provided by the PMCs to the Project Implementation Team, their Board of Directors, participating banks, and USAID/Morocco (the Implementation Team, initially, will help in disbursement plan preparation). Funds should be deposited well in advance, to avoid delays in loan disbursement, and the loss of confidence in the new finance program this would cause.

Regarding slow disbursement of funds to borrowers, this will not happen in this project because this is handled totally by the PMC, which issues a check to the borrower. The borrower has simply to cash the check at the cooperating bank.

The team recommends that the Morocco Mission of the U.S. Agency for International Development treat the collateral fund as an endowment to the Moroccan institution selected to host the project. In effect, the deposit of the collateral fund in the participating bank guarantees loan repayment on loans issued by the PMC. We expect, as outlined in the Administrative Section, below, that this will be a registered Association d'Utilité Publique (AUP). Although the owner of the fund would be the AUP, USAID/Morocco would retain the right to recall these funds should the conditions precedent for their use not be observed.

The issue of conditions precedent for the provision of a collateral fund is extremely important and needs to be carefully worked out between USAID/Morocco and the AUP during the initial phase of the project. These conditions should establish that the fund is to be used only to cover defaults, and that all interest accrued must be reinvested in project activities (preferably in the collateral fund). A number of fine-points about how USAID, the AUP, and the participating bank will handle drawdowns, reporting on fund status, and other matters are best worked out during project implementation.

SECTION TWO

ADMINISTRATIVE AND INSTITUTIONAL ANALYSIS

ADMINISTRATIVE BODIES INVOLVED IN PROJECT IMPLEMENTATION

In this section we present a project structure based upon the creation of two separate administrative units: an independent private microfinance company and a commercial bank. A Foundation (AUP), an institutional contractor, and the Private Sector Office of USAID/Morocco will also play important roles in the project..

Private Microfinance Company

This proposal effectively splits the normal functions of a bank (or other lending institution) into two parts, with each part administered by a different institution. The PMC will perform all the front office functions of a commercial financial institution, appraising loans, motivating repayment, and mobilizing savings. It should be noted that such a PMC, or company, cannot legally disburse credit or accept savings. However, since the bank performs this function, this should be no problem.

The PMC is initially structured to contain nine employees: 1 manager, 5 loan officers, 1 accountant, 1 secretary, and 1 general purpose errand clerk. This unit size can handle 1,000 to 1500 loan accounts, and is large enough from a managerial perspective. The project should be very cautious in expanding the PMC beyond this size. To reach new customers, a preferred strategy is to open a new PMC, rather than adding loan officers to the existing PMC.

It is recommended that the location of the PMC be as close to the borrowers as possible. This most likely will mean locating inside the medina. In the medina, the ideal location would be to rent space (or be given space) by the cooperating bank, if the cooperating bank has offices there.

Bank

The back office functions, including loan disbursal, receipt of repayments, and management (receipt and disbursement) of savings accounts will be carried out by a commercial bank selected by the Microenterprise Finance Project (MFP). These functions are simply cash and account management, and entail no risk to the bank. Because existing banks are judged to be extremely conservative, it is unlikely that the project can expect an expanded role for banks in the beginning. However, some innovations will be expected from the banking sector, primarily in creating new types of accounts (especially savings accounts) for small borrowers. This is discussed in more depth later.

The justification for the proposed administrative structure is that banks currently will not be interested in such microfinance techniques, because they are deemed risky and costly. In addition, the current legal banking regulations will not permit a bank or other financial institution to charge enough in interest to cover costs and ensure a reasonable return. Although theoretically, and legally, the banks could set up a fee structure (that included both interest and other fees) to cover the cost of microcredit, the banks at this stage believe that other activities will be more profitable. Therefore, the banks will

initially be asked to perform mainly back office functions, especially the account administration. In addition, they will be asked to offer innovative savings instruments.

The team has already had discussions with five banks (BMCE, WAFABANK, CNCA, Société Générale Marocaine de Banque [SGMB], and BCP). They are agreeable to this proposal because initially they would not be asked to assume any risk. BMCE's Director said that his bank might be willing to leverage the collateral fund by 1.5:1 or 2:1, but this statement was not made in a formal negotiation, and he may have been under the impression that the collateral fund would involve an initial deposit of several million dollars.⁴

The team feels that BMCE, WAFABANK, and SGMB represent the best prospects for the project, because they are privately held (or are privatizing), and have branch networks in medinas in Fès and other cities of interest to the project. CNCA and BCP, while enthusiastic, and while possessing useful branch networks, have been involved in government-sponsored subsidized credit programs, which will make the task of promoting financially viable microfinance services more difficult through them. The team recommends that a bank choice be made during the initial phase of project implementation by USAID/Morocco and the Project Implementation Team, and that the main criterion for bank selection be the commitment to leveraging the collateral fund either from the outset, or as early as possible in the development of microfinance services.

Foundation

In addition to the two administrative units, it is necessary to add a Foundation to the administrative structure to avoid cumbersome regulatory and fiscal requirements. The Foundation would be a registered AUP, and would serve the following functions: it owns the PMC and therefore clarifies the question of ownership of the PMC, it provides tax benefits to the PMC, and it serves as a conduit for USAID to transfer the collateral fund. It is extremely important that the PMC be an independent profit center. Even if it is owned by the Foundation, or by another private company like a bank, it must be registered as an independent company and account for its income and revenues separately.

The potential weakness of Foundation ownership is that it injects an additional unknown administrative player into the equation. It is by no means clear that the Foundation would have the same operating philosophy as the new PMC.

Under more ideal policy and regulatory conditions, if the PMC could either stand by itself or be owned by another private company such as a commercial bank, this might be a superior strategy. However, it is unlikely that any business in Morocco would undertake this activity, given the absence of any successful precedent in microfinance services. Existing tax and accounting requirements are also a major disincentive for operating through such an institutional structure. To attract private investment, USAID would have to offer clear cost subsidies during the first several years of the activity. The team does not recommend this option now. It may be worth reconsidering should policy reforms end financial repression and ease tax burdens for private companies.

⁴The team proposes that the collateral fund start out far smaller, and increase in relation to the growth of the loan portfolio. Project finance requirements are detailed in the Financial Analysis section.

Other Project Institutions

In addition to the above permanent administrative structures, the temporary administrative units during the active course of the technical assistance component will be a consultant group and USAID. The consultant group will be especially important in the beginning phases of the project.

FUNCTIONS OF THE ADMINISTRATIVE BODIES IN THE PROJECT

Private Microfinance Company

This unit will perform all the front office functions, and will provide all the major management functions for the program. The critical functions are outlined below.

Loan Approval Function

Both the manager of the PMC and the loan officer must sign their approval on the loan approval form. The loan approval function in microfinance is very different from that in normal banks. Costly and time-consuming loan appraisals are not done. Substituting for such appraisals is a process that is characterized by:

- An examination of the potential borrower's character by asking questions of key local residents;
- A discussion with the potential borrower to learn the proposed uses and proposed cash flow;
- A brief visit to the borrower's place of doing business; and
- An initial small loan that, while it does not meet all the borrower's finance requirements, meets part of these requirements, and at the same time minimizes risk to the microfinance institutions.

This first loan becomes a test, and if the borrower pays as scheduled he is granted an additional loan closer to the amount needed. Second and addition loans are automatic, as long as the borrower has maintained a good borrowing record.

Loan Officer and Field Work

In microfinance programs, the job of the loan officer is critical. He/she must spend considerable time outside the microfinance office following up on existing loans. The critical part of this task is to meet with the borrower on a regular basis, at least once a month. The loan officers must carefully manage all their customers, anticipate problems before they become large, and create workable solutions. If loan recovery rates decline, solutions must be found immediately before a critical mass of nonperforming loans is reached, at which point the word spreads rapidly and payment becomes more difficult.

Loan Officer and Savings

It is also the job of the loan officers to educate clients on the value of savings. They should encourage savings both as an alternative to borrowing and also as the provision of additional equity collateral, so that future loan size can increase based on the amount of savings.

PMC Management

A unit manager will be responsible for managing the operations of this profit center, and especially managing the work of the loan officers. There must also be a bookkeeper for the PMC, and all expenditures and revenue must be carefully monitored. Regular reports must also be issued to the Board of Directors.

Board of Directors

The Board has three critical functions: to administer the endowment fund, to set long-term policy direction, and to monitor the program to ensure that it is running smoothly.

Administration. The endowment fund consists of two elements: an initial equity grant to a PMC, which is to cover initial operating costs, and a collateral fund deposited with a local bank, which will be used to guarantee the loans of the PMC. The Board will have to ensure that the funds are obtained in a timely manner. For example, the Board will have to make projections of loan activity for the next three months and submit these projections to USAID, in order for USAID to make the necessary advance deposit to the fund.

Set Long-Term Policy. The Board must set general policy for the PMC. The most important element here is the level of interest and fees to charge the borrower so that the program over time becomes self-sufficient. The Board must also set operational policy for the PMC. This includes deciding the number of staff and number of loan officers to hire and their qualifications, designing job descriptions for these functions, and determining pay levels and incentive schemes. The Board will hire the initial manager for the PMC and, possibly, hire the initial loan officers. In the longer term, the manager will be responsible for hiring the loan officers.

Monitor Operations. The Board should meet on a regular (monthly) basis to ensure that the program is running smoothly. PMC operations should be monitored on a regular basis, and coordinated with the bank to ensure that the bank is providing sufficient service.

Since the long-term objective of this project is to have financial institutions, and especially banks, become interested in microfinance, it is extremely important to have representatives of commercial banks on the Board of Directors, especially the commercial bank administering the collateral fund. Other members of the board can come from other private sector companies that express an interest in microfinance.

It is important to fix certain policy variables in the initial stages. Therefore, the consultant group with USAID, and not the Board of directors, will set initial policy. This will be in the form of Project Agreements that cannot be altered without prior approval of USAID or the Project Implementation Team. Although in the long term the Board will have control over the policy parameters, these initial parameters must have prior agreement. The initial parameters will include:

- Level of interest rate and level of administrative fees;
- Loan approval process;
- Credit requirements;
- Initial administrative systems including numbers and remuneration for employees; and
- Importance of savings.

Because the above critical functions cannot be altered by the Board of the PMC, in the beginning of the project the Board will have little power. In these initial stages, the PMC will operate like a pilot project, and will be controlled largely by the Implementation Team. However, it should be the goal to slowly shift more and more power to the Board over the life of the project.

Bank

The bank will perform all back-office functions. Some of these are to disburse loans, collect loans, disburse savings, collect savings, perform bookkeeping on loans on a project basis, perform bookkeeping on loans on an individual borrower basis,⁵ manage individual savings accounts,⁶ and send reports by fax on a daily basis to the PMC on payments received on that day, and a list of the names of the persons paying.

RECOMMENDED GEOGRAPHIC AREAS FOR PROJECT IMPLEMENTATION

The critical elements in choosing a project area are:

- Sufficient demand for microfinance activities;
- Presence of institutions that will support the project;
- Location consistent with one of the basic principles of microfinance, which is that the actual units of operation should be near to the client, to provide better client access, and to lower client transaction cost; and
- Any special local cultural or social factors should work to support project activities.

From earlier studies, and the results of this study, this team concludes that Fès will be an excellent location to begin the project. This is based on discussions with local government officials, who were extremely enthusiastic about the project. The institutional support base would come from the Provincial Controller, Mr. Filali Belhaj, who has considerable influence over local AUPs and businesses.

⁵It should be emphasized that the banks most likely will be hesitant to perform loan bookkeeping functions on an individual borrower basis. The banks will perceive this as being a high-cost activity. However, in the longer term, the only way the bank is going to become familiar with individuals is to have individual loan records. *This will have to be a major negotiation point with the banks.* It may be possible to phase in this function over time if it is not possible in the beginning.

⁶The banks may also be hesitant on this point. However, the project negotiators should hold firm and require this from the bank. Otherwise it will be impossible to build a truly voluntary savings program.

He also believes there will be a substantial demand for this type of credit. Support would also come from the head of the Chambre d'Artisanat, Mr. Belgha, who also believes there will be significant demand; and from the Vice President of the AUP Fès-Sais, Dr. Amal Jellal, who is also the Rector of the local university, the University of Mohamed ben Abdellah.

Even if the project does not create a PMC within a Provincial AUP, the above persons are judged to be critical personnel to support a variety of institutional formats. The above persons might be considered for members of the Board of Directors, although with the caveat that they will not totally understand or support all of the concepts of microfinance in the beginning of the project.

Within the initial geographic area of Fès, it is recommended that the actual PMC be located in the medina. This dense area contains the majority of the microenterprises that this project will target.

If the proper institutional mechanisms can be set up in Fès, it will be a preferred strategy to locate multiple PMC's within the Fès medina. Each PMC will have the capacity to handle 1500 loan clients. Each PMC will also work closely with the implementing bank. It is likely that the PMC could rent space adjoining to, or inside, one of the banks inside the medina. BMCE was agreeable to this strategy.

INSTITUTIONS BOTH QUALIFIED AND INTERESTED IN IMPLEMENTING THE PROJECT

Banks

The project investigated the possibility of using the following banks: BMCE, WAFABANK, BCP, CNCA, and SGMB. Of these banks, BMCE was most receptive to the ideas of microfinance. It is currently the first choice of the team in choosing implementing banks. BMCE is in the process of being privatized. BCP and CNCA are judged to be too different in operating philosophy to be helpful in implementing this project.

Ministries

The project met with the following ministries: Ministry of Finance, Ministry of Commerce, and Ministry of Employment. The Ministry of Employment was the most enthusiastic about the project. However, in the longer run it is the Ministry of Finance that is going to have to change policies and make new policies related to microfinance. Because of this, it is extremely important to win the support of the Ministry of Finance. Therefore, the team recommends that the Ministry of Finance become the chief coordinating agency in the project.

Foundations

The team met with officers of the Fès-Sais, the Regional Development Foundation. It is judged that this body would support the project. It is the only Foundation with infrastructure in Fès that has AUP status, and, because the only option is to go with a Foundation with AUP status to stand between USAID and the PMCs, we recommend the use of Fès-Sais.

Bank Foundations would have the right governing philosophy, but do not presently have AUP status. Moroccan government officials advise that bank Foundations can apply for this status, and will either get fast-track approval or be forced to go through a long and cumbersome procedure, depending on the actions of USAID and the Ministère de Tutelle. The USAID director should investigate this personally, as a part of the Project Agreement negotiation. Once this issue is clarified, the Implementation Team can encourage interested Foundations to apply for AUP status and carry out negotiations with possible Foundation hosts.

Other Institutions and Agencies

The team met with the Groupement Professionnelle des Banques du Maroc, which was supportive. This organization should be closely involved, or at least closely informed, of developments in this project. By such involvement, the general ideas and approaches of microfinance can be spread to other members of the banking community. The team also met with Peace Corps and with the Caisse Française de Développement. In the case of the latter institution, they are very interested and may be willing to take some role in the project.

LONGER-TERM INSTITUTIONAL ISSUES

Although the project's institutional structure is unique, it incorporates enough elements that have proved feasible in other countries to provide it with a reasonable chance of success. In the longer run, it is hoped that the banks will continue their involvement in microfinance and expand the PMC model, using their own resources. Two critical factors will influence this: reform of banking and financial policies and regulations, and demonstrated success of the initial PMCs.

Making the counterpart ministry the Ministry of Finance will increase the chances that a successful project can speed financial policy reform. USAID support for study tours and other exchanges for senior government policy makers (to Indonesia and Bolivia, for example, which have implemented extensive financial policy and regulatory reforms) may speed the reform process.

SECTION THREE

FINANCIAL ANALYSIS

MAJOR FINDINGS

Major findings are presented below. The financial analysis is presented in the tables that follow this section (pp. 22-31).

Two major controllable variables strongly affect the profitability of the PMC: level of effective interest rate and size of loan. These can be readily adjusted by management, and are critical to the success of the program. The general position of the project related to these variables should be clearly outlined in the memorandum of agreement.

Interest Rate Level

Regarding interest, the simulations, which are explained below, demonstrate that it will be necessary to charge a minimum of 36 percent in effective interest. However, the team recommends an interest rate of 42 percent to cover unforeseen problems, and also to generate a more healthy return. Table 4-A represents the current recommended "starting set of assumptions" to use in the project. This set of assumptions will generate an annual profit in the third year, and a positive internal rate of return (IRR) in the fifth year.

This 42 percent rate includes the 12 percent in interest charged by the bank. In effect, 12 percent in interest is going to the commercial bank, and 30 percent is going to the PMC. The PMC is not referring to its charges as interest, but rather administrative charges. The entire amount of interest plus administrative charge is collected by the bank. The bank then places 12 percent in its own account and credits the PMC account for 30 percent.

The average loan size will have to be at least \$600 to have the project break even in any given year based on a 42 percent interest rate. This is clear from Table 1. If a smaller average loan size is used, for example \$300, the required break-even interest rate increases dramatically to 67 percent, also shown in Table 1.

It should also be noted that the average loan size should increase over time, not just because of inflation but because of the logical evolution of individual businesses. From experience in lending programs to small businesses throughout the world, there is a gradual increase in loan amounts to the same business over time. This is because the business is growing and demanding more capital. To insist on holding the loan size to some small amount like \$300 would mean the program would quickly become of little interest to these growing enterprises. The owners would leave the program, and the program would lose its most valuable asset — good borrowers.

The recommendation made by the team is to assume that some percentage of the loan portfolio will remain small loans, especially because new borrowers should have small initial loans until the PMC develops a history of that borrower. In the simulations (Tables 3 and 4), it is assumed that 50 percent of the loans will remain at \$300 (in constant dollars).

Number of Loans per Officer

Another variable over which the PMC has some control is the number of loans per loan officer. This is a critical number. If the number is too high, the loan officer cannot do the job, and bad debt will increase. If it is too low, there will be a low amount of portfolio per loan officer, and therefore a low revenue base that will hurt profitability.

The recommended base for this project, seen in Table 4-A, assumes a ratio of 200 loans per loan officer. The extent of the burden in carrying out this workload depends on the location of the businesses. If businesses are located primarily in the medina near one another, then loan officers should be able to handle this number.

In other countries, loan officers have handled up to 400 loans per loan officer (for example, in Indonesia). It is suggested that the Implementation Team carefully examine the feasibility of increasing the number of loans per loan officer over time to 300. If this is done, then loan officers will probably need motorbikes. This scenario is presented in Table 4-C.

The simulations of profitability (Tables 3 and 4) demonstrate that as loan size gradually increases over time, the units become extremely profitable at a constant interest rate. The tables demonstrate an increasing average loan size to \$900 by Year 8. This is considered entirely feasible, for reasons noted earlier, because some portion of businesses are going to grow over time, not because of inflation, but because of evolutionary growth. The PMC has to keep these businesses as customers to become a successful microfinance unit.

Project Finance

The tables in this section demonstrate that \$75,000 is necessary to operate a single PMC. The Administrative section notes that it is preferable to limit the PMCs to 5 loan officers, who should be able to serve 1,000 borrowers or 200 per loan officer, on average. After this number of borrowers is reached, it is preferable to start a new PMC. This will help keep the microfinance institutions close to their borrowers' businesses, and avoid the need to develop more complicated management structures for larger units. Other country experience strongly suggests that smaller units, with simpler management requirements, work better. The MFP will need 6 PMCs to reach USAID/Morocco's target of 6,000 borrowers, which will require a total capitalization of \$450,000.

The collateral fund capital requirements are presented in Table 4(a). Each PMC would require \$300,000 for \$1:\$1 coverage of loans outstanding during its first four years of operation. Six PMCs will require \$1,800,000 for this period. USAID should get participating banks to commit to reducing the coverage of the collateral fund to 25 percent or less of outstanding loans as soon as possible, or 4:1 leverage. Under no circumstances should the banks be allowed to hold these funds for more than 4 years without leveraging.

The agreement with the banks should require specific reductions in collateral fund coverage once the project meets predefined portfolio performance criteria. For example, it could be agreed that the ratio of collateral to outstanding loans should decline to 1:2 after 2 years of less than 5 percent delinquency, 1:3 after 3 years at this performance, and 1:4 after 4 years. Alternatively, collateral coverage could be tied to profitability levels (1:2 after 5 percent operating profit, 1:3 at 10 percent, and so forth).

The Implementation Team should include an expert project manager and two financial assistance specialists, plus office support staff.

DESCRIPTION OF THE TABLES

General Description

Only the loan size and the number of loans per loan officer are allowed to vary within any single simulation in the tables. All other figures are assumed fixed. The models are in constant dollars so there is no inflation adjustment. The return on equity is set at 20 percent, which ensures that the current return is well above the current Moroccan inflation rate.

Labor cost structures are assumed fixed. There is no adjustment for increased salaries because this will not have a major effect on the model. The labor structure for each unit is estimated to cost \$36,000 per year. This structure is as follows:

- One manager at \$500/month;
- Five loan officers at \$500/month each;
- One accountant at \$250/month;
- One Secretary at \$200/month;
- One Errand boy at \$150/month; and
- Fringe benefits on salaries at approximately 15 percent of salary.

It is assumed that there is no addition of employees. The model carefully holds the number of loans to the maximum, given the five loan officers. Since the loan officer is the critical person at the PMC, this is a logical assumption. The PMC also has general bookkeeping functions, but these are all related to the number of loans outstanding and this remains constant (after reaching the maximum number of loans per loan officer).

The operational costs are also assumed fixed and are estimated at \$12,000 per year; they consist of building rental (\$500/month); telephone (\$150/mo); electricity (\$100/month); insurance and other services (\$150/month); and office supplies (\$100/month).

Transportation costs are estimated at \$200/month. If the project decides to buy motorbikes, this will increase the cost both of equipment and of transportation, since there would also have to be a budget for gasoline and repair. Tables 3-D, 3-E, 4-B, and 4-C assume this additional equipment cost and transportation/repair cost.

The total equipment budget is estimated at \$25,200, which includes very basic furniture, four computers, two printers, two typewriters, one fax machine, one telephone, software, and other miscellaneous items. For simplicity, these items are depreciated on a straight line method over 36 months. In Tables 3-D, 3-E, 4-B, and 4-C, the equipment budget increases to \$42,480 to enable purchase of six motorbikes.

Description of Individual Tables

Table 1 demonstrates the effect of differing loan sizes on the interest rate, assuming 200 loans per loan officer. This demonstrates the significant effect that loan size has on the level of interest required at the break-even point (including a return to equity). The recommended interest rate for this project, 42 percent, demonstrates that the average loan size must be \$600.

Table 2 demonstrates the effect of changing the number of loans per loan officer on the interest rate. This project has assumed a minimum of 200 loans per loan officer. However, Table 2 demonstrates that the interest rate could be dropped by 5 percent if the loan officers could handle 250 loans (all other factors staying constant).

Table 3-A analyzes one unit over eight years assuming 36 percent interest rate; loans per loan officer stabilize at 200 in the second year; the loan size distribution allows for 50 percent of the loans to increase in size, such that by Year 8 the average loan size reaches \$900 (in constant dollars); and an expense for loan loss reserve of 3 percent. This scenario reaches break-even by Year 4, but a positive IRR is not achieved until the seventh year.

Table 3-B is the same as Table 3-A, but the loan loss reserve is increased to 5 percent. In this scenario, the PMC reaches break-even by Year 5, but does not achieve a positive IRR within the first eight years. It is recommended that this project, because of the uncertainties, allow for a loan loss ratio of 5 percent, at a minimum.

Table 3-C is the same as Table 3-A, but the loan loss reserve is increased to 10 percent. In this scenario, the PMC reaches break-even in Year 8, but is still far from attaining a positive IRR.

Table 3-D is the same as Table 3-B, only \$17,280 is added to the equipment budget to purchase six motorbikes for the manager and loan officers. In addition, the transportation allowance is increased to \$500 per month (in this scenario, it is called the "Transportation/repair" allowance). In this scenario, the PMC breaks even in the sixth year, but cannot achieve a positive IRR after eight years.

Table 3-E is the same as Table 3-D, but the number of loans per loan officer is increased to 300 over time. The assumption is that possibly with the motorbikes, the loan officers can handle more accounts. In this scenario, the PMC breaks even in Year 4, and a positive IRR is achieved in Year 7.

None of the scenarios in the series of Table 3 generate an IRR that would be acceptable to a business. Therefore, the series of Table 4 is described below.

Table 4-A is the same as Table 3-B, except that the interest rate has been increased to 42 percent. In this scenario, the PMC breaks even in the third year, and a positive IRR is achieved in the fifth year. The IRR reaches 18.6 percent in the sixth year.

Table 4-B is the same as Table 4-A, except that \$17,280 is added to the equipment budget to purchase six motorbikes for the manager and each loan officer. The transportation/repair budget is increased to \$500/month. In this scenario, the PMC breaks even in the fourth year, and a positive IRR is achieved in the sixth year.

Table 4-C is the same as Table 4-B, except that the number of loans per loan officer is increased to 300 over time. In this scenario, the PMC breaks even in the third year, and an IRR of 23 percent is achieved in the fifth year.

TABLE 2
EFFECT OF CHANGING THE NUMBER OF LOANS PER LOAN OFFICER
ON THE INTEREST RATE
(ASSUME AVG LOAN SIZE OF \$600)

BASE DATA

| | | | | | | | |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| EQUITY INVESTMENT | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 |
| ESTIMATED NO. LOAN OFFICERS | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| MAXIMUM LOANS PER LOAN OFFICER | 100 | 150 | 200 | 250 | 300 | 350 | 400 |
| MAXIMUM NO. OF LOANS OUTSTANDING | 500 | 750 | 1000 | 1250 | 1500 | 1750 | 2000 |
| ESTIMATED AVG. LOAN SIZE PER CLIENT | \$600 | \$600 | \$600 | \$600 | \$600 | \$600 | \$600 |
| ESTIMATED INDIVIDUAL LOAN OUTSTANDING | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 |
| ESTIMATED AVG. TOTAL LOANS OUTSTANDING | \$150,000 | \$225,000 | \$300,000 | \$375,000 | \$450,000 | \$525,000 | \$600,000 |
| INCOME | | | | | | | |
| YEARLY INCOME FROM INTEREST ON LOANS | \$100,500 | \$113,250 | \$126,000 | \$138,750 | \$151,500 | \$164,250 | \$177,000 |
| ASSUMED INTEREST RATE | 67% | 50% | 42% | 37% | 34% | 31% | 30% |
| INTEREST EXPENSE | | | | | | | |
| BANK INTEREST CHARGES TO BORROWER (%) | 12% | 12% | 12% | 12% | 12% | 12% | 12% |
| BANK TOTAL CHARGES | \$18,000 | \$27,000 | \$36,000 | \$45,000 | \$54,000 | \$63,000 | \$72,000 |
| ADMIN. EXPENSES OF NEW PROFIT CENTERS | | | | | | | |
| LABOR COST (SALARIES, FRINGE, COMMISSIONS) | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 |
| OPERATION COST (BLDG. RENTAL, UTIL, SUPPLY) | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 |
| TRANSPORTATION (\$200/MO) | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 |
| MISCELLANEOUS (\$100/MO) | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 |
| DEPREC. OF EQUIP. (\$25,200 : 36 MOS x 12 MOS) | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 |
| EXPENSE-LOAN LOSS RESERVE (5% x loans outs.) | \$7,500 | \$11,250 | \$15,000 | \$18,750 | \$22,500 | \$26,250 | \$30,000 |
| TOTAL INCOME | \$100,500 | \$113,250 | \$126,000 | \$138,750 | \$151,500 | \$164,250 | \$177,000 |
| TOTAL EXPENSES | \$67,500 | \$71,250 | \$75,000 | \$78,750 | \$82,500 | \$86,250 | \$90,000 |
| RETURN ON EQUITY (%) | 20% | 20% | 20% | 20% | 20% | 20% | 20% |
| RETURN ON EQUITY (\$) | \$15,000 | \$15,000 | \$15,000 | \$15,000 | \$15,000 | \$15,000 | \$15,000 |
| TOTAL PROFIT/LOSS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TABLE 3-A
PROFITABILITY PROJECTIONS FOR EACH MICROFINANCE PROFIT CENTER- MOROCCO MFP

interest 36%
 loans per loan officer: 100 year one, 200 second and succeeding years
 loan size: 50% of loans stable at \$300
 25% of loans start at \$400 and increase \$100/yr.
 25% of loans start at \$500 and increase \$200/yr.
 loan loss reserve = 3%

| BASE DATA | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 | YEAR 7 | YEAR 8 |
|--|-------------------|-------------------|------------------|----------------|-----------------|-----------------|-----------------|-----------------|
| EQUITY INVESTMENT | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 |
| ESTIMATED NO. LOAN OFFICERS | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| MAXIMUM LOANS PER LOAN OFFICER | 100 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| MAXIMUM LOANS OUTSTANDING (NO.) | 500 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| ESTIMATED LOAN SIZE PER CLIENT (50%) | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$400 | \$500 | \$600 | \$700 | \$800 | \$900 | \$1,000 | \$1,000 |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$500 | \$700 | \$900 | \$1,100 | \$1,300 | \$1,500 | \$1,700 | \$1,700 |
| AVERAGE LOAN SIZE | \$375 | \$450 | \$525 | \$600 | \$675 | \$750 | \$825 | \$825 |
| ESTIMATED INDIVIDUAL LOAN OUTSTANDING | \$188 | \$225 | \$263 | \$300 | \$336 | \$375 | \$413 | \$413 |
| ESTIMATED AVG. TOTAL LOANS OUTSTANDING | \$93,750 | \$225,000 | \$262,500 | \$300,000 | \$337,500 | \$375,000 | \$412,500 | \$450,000 |
| INCOME | | | | | | | | |
| YEARLY INCOME FROM INTEREST ON LOANS | \$33,750 | \$81,000 | \$94,500 | \$108,000 | \$121,500 | \$135,000 | \$148,500 | \$162,000 |
| ASSUMED INTEREST RATE | 36% | 36% | 36% | 36% | 36% | 36% | 36% | 36% |
| INTEREST EXPENSE | | | | | | | | |
| BANK INTEREST CHARGES TO BORROWER | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% |
| BANK TOTAL CHARGES (\$) | \$11,250 | \$27,000 | \$31,500 | \$36,000 | \$40,500 | \$45,000 | \$49,500 | \$54,000 |
| ADMIN. EXPENSES OF NEW PROFIT CENTERS | | | | | | | | |
| LABOR COST (SALARIES, FRINGE, COMMISSIONS) | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 |
| OPERATION COST (BLDG. RENTAL, UTIL, SUPPLY) | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 |
| TRANSPORTATION (\$200/MO) | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 |
| MISCELLANEOUS (\$100/MO) | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 |
| DEPREC. OF EQUIP. (\$25,200 : 36 MOS x 12 MOS) | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 |
| EXPENSE-LOAN LOSS RESERVE (3% x loans outs.) | \$2,813 | \$6,750 | \$7,875 | \$9,000 | \$10,125 | \$11,250 | \$12,375 | \$13,500 |
| ANNUAL PROFIT/LOSS | (\$40,313) | (\$12,750) | (\$4,875) | \$3,000 | \$10,875 | \$18,750 | \$26,625 | \$34,500 |
| ANNUAL RETURN ON EQUITY | -53.8% | -17.0% | -6.5% | 4.0% | 14.5% | 25.0% | 35.5% | 46.0% |
| IRR | | | | | -34.9% | -13.1% | 0.5% | 9.3% |

TABLE 3-B
PROFITABILITY PROJECTIONS FOR EACH MICROFINANCE PROFIT CENTER- MOROCCO MFP
(SAME AS TABLE 3-A, BUT INCREASE LOAN LOSS RESERVE TO 5%)

interest 36%
 loans per loan officer: 100 year one,, 200 second and succeeding years
 loan size: 50% of loans stable at \$300
 25% of loans start at \$400 and increase \$100/yr.
 25% of loans start at \$500 and increase \$200/yr.
 loan loss reserve = 5%

| BASE DATA | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 | YEAR 7 | YEAR 8 |
|--|-------------------|-------------------|-------------------|------------------|----------------|-----------------|-----------------|-----------------|
| EQUITY INVESTMENT | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 |
| ESTIMATED NO. LOAN OFFICERS | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| MAXIMUM LOANS PER LOAN OFFICER | 100 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| MAXIMUM LOANS OUTSTANDING (NO.) | 500 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| ESTIMATED LOAN SIZE PER CLIENT (50%) | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$400 | \$500 | \$600 | \$700 | \$800 | \$900 | \$1,000 | \$1,100 |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$500 | \$700 | \$900 | \$1,100 | \$1,300 | \$1,500 | \$1,700 | \$1,900 |
| AVERAGE LOAN SIZE | \$375 | \$450 | \$525 | \$600 | \$675 | \$750 | \$825 | \$900 |
| ESTIMATED INDIVIDUAL LOAN OUTSTANDING | \$188 | \$225 | \$263 | \$300 | \$338 | \$375 | \$413 | \$450 |
| ESTIMATED AVG. TOTAL LOANS OUTSTANDING | \$93,750 | \$225,000 | \$262,500 | \$300,000 | \$337,500 | \$375,000 | \$412,500 | \$450,000 |
| INCOME | | | | | | | | |
| YEARLY INCOME FROM INTEREST ON LOANS | \$33,750 | \$81,000 | \$94,500 | \$108,000 | \$121,500 | \$135,000 | \$148,500 | \$162,000 |
| ASSUMED INTEREST RATE | 36% | 36% | 36% | 36% | 36% | 36% | 36% | 36% |
| INTEREST EXPENSE | | | | | | | | |
| BANK INTEREST CHARGES TO BORROWER | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% |
| BANK TOTAL CHARGES (\$) | \$11,250 | \$27,000 | \$31,500 | \$36,000 | \$40,500 | \$45,000 | \$49,500 | \$54,000 |
| ADMIN. EXPENSES OF NEW PROFIT CENTERS | | | | | | | | |
| LABOR COST (SALARIES, FRINGE, COMMISSIONS) | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 |
| OPERATION COST (BLDG. RENTAL, UTIL, SUPPLY) | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 |
| TRANSPORTATION (\$200/MO) | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 |
| MISCELLANEOUS (\$100/MO) | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 |
| DEPREC. OF EQUIP. (\$25,200 : 36 MOS x 12 MOS) | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 |
| EXPENSE-LOAN LOSS RESERVE (5% x loans outs.) | \$4,688 | \$11,250 | \$13,125 | \$15,000 | \$16,875 | \$18,750 | \$20,625 | \$22,500 |
| ANNUAL PROFIT/LOSS | (\$42,188) | (\$17,250) | (\$10,125) | (\$3,000) | \$4,125 | \$11,250 | \$18,375 | \$25,500 |
| ANNUAL RETURN ON EQUITY | -56.3% | -23.0% | -13.5% | -4.0% | 5.5% | 15.0% | 24.5% | 34.0% |
| IRR | | | | | | -32.4% | -14.9% | -3.6% |

TABLE 3-C
 PROFITABILITY PROJECTIONS FOR EACH MICROFINANCE PROFIT CENTER- MOROCCO MFP
 (SAME AS TABLE 3-A, BUT INCREASE LOAN LOSS RESERVE TO 10%)

interest 36%
 loans per loan officer: 100 year one, 200 second and succeeding years
 loan size: 50% of loans stable at \$300
 25% of loans start at \$400 and increase \$100/yr.
 25% of loans start at \$500 and increase \$200/yr.
 loan loss reserve = 10%

| BASE DATA | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 | YEAR 7 | YEAR 8 |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|------------------|----------------|
| EQUITY INVESTMENT | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 |
| ESTIMATED NO. LOAN OFFICERS | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| MAXIMUM LOANS PER LOAN OFFICER | 100 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| MAXIMUM LOANS OUTSTANDING (NO.) | 500 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| ESTIMATED LOAN SIZE PER CLIENT (50%) | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$400 | \$500 | \$600 | \$700 | \$800 | \$900 | \$1,000 | \$1,000 |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$500 | \$700 | \$900 | \$1,100 | \$1,300 | \$1,500 | \$1,700 | \$1,700 |
| AVERAGE LOAN SIZE | \$375 | \$450 | \$525 | \$600 | \$675 | \$750 | \$825 | \$825 |
| ESTIMATED INDIVIDUAL LOAN OUTSTANDING | \$188 | \$225 | \$263 | \$300 | \$338 | \$375 | \$413 | \$413 |
| ESTIMATED AVG. TOTAL LOANS OUTSTANDING | \$93,750 | \$225,000 | \$262,500 | \$300,000 | \$337,500 | \$375,000 | \$412,500 | \$412,500 |
| INCOME | | | | | | | | |
| YEARLY INCOME FROM INTEREST ON LOANS | \$33,750 | \$81,000 | \$94,500 | \$108,000 | \$121,500 | \$135,000 | \$148,500 | \$162,000 |
| ASSUMED INTEREST RATE | 36% | 36% | 36% | 36% | 36% | 36% | 36% | 36% |
| INTEREST EXPENSE | | | | | | | | |
| BANK INTEREST CHARGES TO BORROWER | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% |
| BANK TOTAL CHARGES (\$) | \$11,250 | \$27,000 | \$31,500 | \$36,000 | \$40,500 | \$45,000 | \$49,500 | \$54,000 |
| ADMIN. EXPENSES OF NEW PROFIT CENTERS | | | | | | | | |
| LABOR COST (SALARIES, FRINGE, COMMISSIONS) | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 |
| OPERATION COST (BLDG. RENTAL, UTIL, SUPPLY) | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 |
| TRANSPORTATION (\$200/MO) | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 |
| MISCELLANEOUS (\$100/MO) | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 |
| DEPREC. OF EQUIP. (\$25,200 : 36 MOS x 12 MOS) | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 |
| EXPENSE-LOAN LOSS RESERVE (10% x loans outs.) | \$9,375 | \$22,500 | \$26,250 | \$30,000 | \$33,750 | \$37,500 | \$41,250 | \$45,000 |
| ANNUAL PROFIT/LOSS | (\$46,875) | (\$28,500) | (\$23,250) | (\$18,000) | (\$12,750) | (\$7,500) | (\$2,250) | \$3,000 |
| ANNUAL RETURN ON EQUITY | -62.5% | -38.0% | -31.0% | -24.0% | -17.0% | -10.0% | -3.0% | 4.0% |
| IRR | | | | | | | | -63.6% |

**TABLE 3-D
PROFITABILITY PROJECTIONS FOR EACH MICROFINANCE CENTER- (OROCO) P**

(SAME AS TABLE 3-B, BUT ADD \$17,280 TO EQUIPMENT BUDGET TO PURCHASE 6 MOTORBIKES FOR THE MANAGER AND LOAN OFFICERS AND ALSO INCREASE THE TRANSPORTATION/REPAIR BUDGET)

interest 36%
 loans per loan officer: 100 year one, 200 second and succeeding years
 loan size: 50% of loans stable at \$300
 25% of loans start at \$400 and increase \$100/yr.
 25% of loans start at \$500 and increase \$200/yr.
 loan loss reserve = 5%

| BASE DATA | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 | YEAR 7 | YEAR 8 |
|--|-------------------|-------------------|-------------------|-------------------|------------------|----------------|----------------|-----------------|
| EQUITY INVESTMENT | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 |
| ESTIMATED NO. LOAN OFFICERS | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| MAXIMUM LOANS PER LOAN OFFICER | 100 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| MAXIMUM LOANS OUTSTANDING (NO.) | 500 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| ESTIMATED LOAN SIZE PER CLIENT (50%) | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$400 | \$500 | \$600 | \$700 | \$800 | \$900 | \$1,000 | \$1,000 |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$500 | \$700 | \$900 | \$1,100 | \$1,300 | \$1,500 | \$1,700 | \$1,700 |
| AVERAGE LOAN SIZE | \$375 | \$450 | \$525 | \$600 | \$675 | \$750 | \$825 | \$825 |
| ESTIMATED INDIVIDUAL LOAN OUTSTANDING | \$188 | \$225 | \$263 | \$300 | \$338 | \$375 | \$413 | \$413 |
| ESTIMATED AVG. TOTAL LOANS OUTSTANDING | \$93,750 | \$225,000 | \$262,500 | \$300,000 | \$337,500 | \$375,000 | \$412,500 | \$450,000 |
| INCOME | | | | | | | | |
| YEARLY INCOME FROM INTEREST ON LOANS | \$33,750 | \$81,000 | \$94,500 | \$108,000 | \$121,500 | \$135,000 | \$148,500 | \$162,000 |
| ASSUMED INTEREST RATE | 36% | 36% | 36% | 36% | 36% | 36% | 36% | 36% |
| INTEREST EXPENSE | | | | | | | | |
| BANK INTEREST CHARGES TO BORROWER | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% |
| BANK TOTAL CHARGES (\$) | \$11,250 | \$27,000 | \$31,500 | \$36,000 | \$40,500 | \$45,000 | \$49,500 | \$54,000 |
| ADMIN. EXPENSES OF NEW PROFIT CENTERS | | | | | | | | |
| LABOR COST (SALARIES, FRINGE, COMMISSIONS) | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 |
| OPERATION COST (BLDG. RENTAL, UTIL., SUPPLY) | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 |
| TRANSPORTATION/REPAIR (\$500/MO) | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 |
| MISCELLANEOUS (\$100/MO) | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 |
| DEPREC. OF EQUIP. (\$42,480/36 MOS x 12 MOS) | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14,160 |
| EXPENSE-LOAN LOSS RESERVE (5% x loans outs.) | \$4,688 | \$11,250 | \$13,125 | \$15,000 | \$16,875 | \$18,750 | \$20,625 | \$22,500 |
| ANNUAL PROFIT/LOSS | (\$51,548) | (\$26,610) | (\$19,485) | (\$12,360) | (\$5,235) | \$1,890 | \$9,015 | \$16,140 |
| ANNUAL RETURN ON EQUITY | -68.7% | -35.5% | -26.0% | -16.5% | -7.0% | 2.5% | 12.0% | 21.5% |
| IRR | | | | | | | -42.0% | -24.0% |

TABLE 3-E
PROFITABILITY PROJECTIONS FOR EACH MICROFINANCE PROFIT CENTER- MOROCCO MFP

(SAME AS TABLE 3-D BUT INCREASE THE NUMBER OF LOANS PER LOAN OFFICER TO 300 OVER TIME)

interest 36%
loans per loan officer: 100 year one, 200 second, 250 third, 300 succeeding years.
loan size: 50% of loans stable at \$300
25% of loans start at \$400 and increase \$100/yr.
25% of loans start at \$500 and increase \$200/yr.
loan loss reserve = 5%

| BASE DATA | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 | YEAR 7 | YE |
|--|-------------------|-------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| EQUITY INVESTMENT | | | | | | | | |
| ESTIMATED NO. LOAN OFFICERS | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75, |
| MAXIMUM LOANS PER LOAN OFFICER | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| MAXIMUM LOANS OUTSTANDING (NO.) | 100 | 200 | 250 | 300 | 300 | 300 | 300 | |
| ESTIMATED LOAN SIZE PER CLIENT (50%) | 500 | 1000 | 1250 | 1500 | 1500 | 1500 | 1500 | 1 |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$ |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$400 | \$500 | \$600 | \$700 | \$800 | \$900 | \$1,000 | \$ |
| AVERAGE LOAN SIZE | \$500 | \$700 | \$900 | \$1,100 | \$1,300 | \$1,500 | \$1,700 | \$ |
| ESTIMATED INDIVIDUAL LOAN OUTSTANDING | \$375 | \$450 | \$525 | \$600 | \$675 | \$750 | \$825 | |
| ESTIMATED AVG. TOTAL LOANS OUTSTANDING | \$188 | \$225 | \$263 | \$300 | \$338 | \$375 | \$413 | |
| | \$93,750 | \$225,000 | \$328,125 | \$450,000 | \$506,250 | \$562,500 | \$618,750 | |
| INCOME | | | | | | | | |
| YEARLY INCOME FROM INTEREST ON LOANS | \$33,750 | \$81,000 | \$118,125 | \$162,000 | \$182,250 | \$202,500 | \$222,750 | \$243,000 |
| ASSUMED INTEREST RATE | 36% | 36% | 36% | 36% | 36% | 36% | 36% | 36% |
| INTEREST EXPENSE | | | | | | | | |
| BANK INTEREST CHARGES TO BORROWER | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% |
| BANK TOTAL CHARGES (\$) | \$11,250 | \$27,000 | \$39,375 | \$54,000 | \$60,750 | \$67,500 | \$74,250 | \$81,000 |
| ADMIN. EXPENSES OF NEW PROFIT CENTERS | | | | | | | | |
| LABOR COST (SALARIES, FRINGE, COMMISSIONS) | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36, |
| OPERATION COST (BLDG. RENTAL, UTIL, SUPPLY) | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12, |
| TRANSPORTATION /REPAIR (\$500/MO) | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6, |
| MISCELLANEOUS (\$100/MO) | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1, |
| DEPREC. OF EQUIP. (\$42,480 : 36 MOS x 12 MOS) | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14, |
| EXPENSE-LOAN LOSS RESERVE (5% x loans outs.) | \$4,688 | \$11,250 | \$16,406 | \$22,500 | \$25,313 | \$28,125 | \$30,938 | \$33,750 |
| ANNUAL PROFIT/LOSS | (\$51,548) | (\$26,610) | (\$7,016) | \$16,140 | \$26,828 | \$37,515 | \$48,203 | \$58,890 |
| ANNUAL RETURN ON EQUITY | -68.7% | -35.5% | -9.4% | 21.5% | 35.8% | 50.0% | 64.3% | 78.5% |
| IRR | | | | -50.6% | -19.7% | -1.5% | 9.8% | 17.2% |

TABLE 4-A
PROFITABILITY PROJECTIONS FOR EACH MICROFINANCE PROFIT CENTER- MOROCCO MFP
(SAME AS TABLE 3-B, BUT INCREASE INTEREST RATE TO 42%)

interest 42%
 loans per loan officer: 100 year one, 200 second and succeeding years
 loan size: 50% of loans stable at \$300
 25% of loans start at \$400 and increase \$100/yr.
 25% of loans start at \$500 and increase \$200/yr.
 loan loss reserve = 5%

| BASE DATA | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 | YEAR 7 | YEAR 8 |
|--|-------------------|------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| EQUITY INVESTMENT | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 |
| ESTIMATED NO. LOAN OFFICERS | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| MAXIMUM LOANS PER LOAN OFFICER | 100 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| MAXIMUM LOANS OUTSTANDING (NO.) | 500 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| ESTIMATED LOAN SIZE PER CLIENT (50%) | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$400 | \$500 | \$600 | \$700 | \$800 | \$900 | \$1,000 | \$1,000 |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$500 | \$700 | \$900 | \$1,100 | \$1,300 | \$1,500 | \$1,700 | \$1,700 |
| AVERAGE LOAN SIZE | \$375 | \$450 | \$525 | \$600 | \$675 | \$750 | \$825 | \$825 |
| ESTIMATED INDIVIDUAL LOAN OUTSTANDING | \$188 | \$225 | \$263 | \$300 | \$338 | \$375 | \$413 | \$413 |
| ESTIMATED AVG. TOTAL LOANS OUTSTANDING | \$93,750 | \$225,000 | \$262,500 | \$300,000 | \$337,500 | \$375,000 | \$412,500 | \$450,000 |
| INCOME | | | | | | | | |
| YEARLY INCOME FROM INTEREST ON LOANS | \$39,375 | \$94,500 | \$110,250 | \$126,000 | \$141,750 | \$157,500 | \$173,250 | \$189,000 |
| ASSUMED INTEREST RATE | 42% | 42% | 42% | 42% | 42% | 42% | 42% | 42% |
| INTEREST EXPENSE | | | | | | | | |
| BANK INTEREST CHARGES TO BORROWER | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% |
| BANK TOTAL CHARGES (\$) | \$11,250 | \$27,000 | \$31,500 | \$36,000 | \$40,500 | \$45,000 | \$49,500 | \$54,000 |
| ADMIN. EXPENSES OF NEW PROFIT CENTERS | | | | | | | | |
| LABOR COST (SALARIES, FRINGE, COMMISSIONS) | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 |
| OPERATION COST (BLDG. RENTAL, UTIL, SUPPLY) | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 |
| TRANSPORTATION (\$200/MO) | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 |
| MISCELLANEOUS (\$100/MO) | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 |
| DEPREC. OF EQUIP. (\$25,200 : 36 MOS x 12 MOS) | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 | \$8,400 |
| EXPENSE-LOAN LOSS RESERVE (5% x loans outs.) | \$4,688 | \$11,250 | \$13,125 | \$15,000 | \$16,875 | \$18,750 | \$20,625 | \$22,500 |
| ANNUAL PROFIT/LOSS | (\$36,563) | (\$3,750) | \$5,625 | \$15,000 | \$24,375 | \$33,750 | \$43,125 | \$52,500 |
| ANNUAL RETURN ON EQUITY | -48.8% | -5.0% | 7.5% | 20.0% | 32.5% | 45.0% | 57.5% | 70.0% |
| IRR | | | | -22.4% | 3.4% | 18.6% | 27.9% | 33.7% |

TABLE 4-B
PROFITABILITY PROJECTIONS FOR EACH MICROFINANCE PROFIT CENTER- MOROCCO MFP

(SAME AS TABLE 4-A, BUT ADD \$17,280 TO EQUIPMENT BUDGET TO PURCHASE 6 MOTORBIKES FOR THE MANAGER & EACH LOAN OFFICER. ALSO INCREASE TRANSPORTATION REPAIR BUDGET TO \$500/MONTH).

interest 42%

loans per loan officer: 100 year one,, 200 second and succeeding years

loan size: 50% of loans stable at \$300

25% of loans start at \$400 and increase \$100/yr.

25% of loans start at \$500 and increase \$200/yr.

loan loss reserve = 5%

| BASE DATA | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 | YEAR 7 | YEAR 8 |
|---|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| EQUITY INVESTMENT | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 |
| ESTIMATED NO. LOAN OFFICERS | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| MAXIMUM LOANS PER LOAN OFFICER | 100 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| MAXIMUM LOANS OUTSTANDING (NO.) | 500 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| ESTIMATED LOAN SIZE PER CLIENT (50%) | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$400 | \$500 | \$600 | \$700 | \$800 | \$900 | \$1,000 | \$ |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$500 | \$700 | \$900 | \$1,100 | \$1,300 | \$1,500 | \$1,700 | \$ |
| AVERAGE LOAN SIZE | \$375 | \$450 | \$525 | \$600 | \$675 | \$750 | \$825 | \$ |
| ESTIMATED INDIVIDUAL LOAN OUTSTANDING | \$188 | \$225 | \$263 | \$300 | \$338 | \$375 | \$413 | \$ |
| ESTIMATED AVG.TOTAL LOANS OUTSTANDING | \$93,750 | \$225,000 | \$262,500 | \$300,000 | \$337,500 | \$375,000 | \$412,500 | \$450,000 |
| INCOME | | | | | | | | |
| YEARLY INCOME FROM INTEREST ON LOANS | \$39,375 | \$94,500 | \$110,250 | \$126,000 | \$141,750 | \$157,500 | \$173,250 | \$189,000 |
| ASSUMED INTEREST RATE | 42% | 42% | 42% | 42% | 42% | 42% | 42% | 42% |
| INTEREST EXPENSE | | | | | | | | |
| BANK INTEREST CHARGES TO BORROWER | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% |
| BANK TOTAL CHARGES (\$) | \$11,250 | \$27,000 | \$31,500 | \$36,000 | \$40,500 | \$45,000 | \$49,500 | \$54,000 |
| ADMIN. EXPENSES OF NEW PROFIT CENTERS | | | | | | | | |
| LABOR COST (SALARIES, FRINGE, COMMISSIONS) | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 |
| OPERATION COST (BLDG.RENTAL, UTIL,SUPPLY) | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 |
| TRANSPORTATION (\$200/MO) | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 | \$2,400 |
| MISCELLANEOUS (\$100/MO) | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 |
| DEPREC.OF EQUIP. (\$42,480 : 36 MOS x 12 MOS) | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14,160 |
| EXPENSE-LOAN LOSS RESERVE (5% x loans outs.) | \$4,688 | \$11,250 | \$13,125 | \$15,000 | \$16,875 | \$18,750 | \$20,625 | \$22,500 |
| ANNUAL PROFIT/LOSS | (\$42,323) | (\$9,510) | (\$135) | \$9,240 | \$18,615 | \$27,990 | \$37,365 | \$46,740 |
| ANNUAL RETURN ON EQUITY | -56.4% | -12.7% | -0.2% | 12.3% | 24.8% | 37.3% | 49.8% | 62.3% |
| IRR | | | | | -16.4% | 1.8% | 13.1% | 20.0% |

TABLE 4-C
PROFITABILITY PROJECTIONS FOR EACH MICROFINANCE PROFIT CENTER- MOROCCO MFP

(SAME AS TABLE 4-B BUT INCREASE THE NUMBER OF LOANS PER LOAN OFFICER TO 300 OVER TIME.

interest 42%
 loans per loan officer: 100 year one, 200 second, 250 third, 300 succeeding years.
 loan size: 50% of loans stable at \$300
 25% of loans start at \$400 and increase \$100/yr.
 25% of loans start at \$500 and increase \$200/yr.
 loan loss reserve = 5%

| BASE DATA | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 | YEAR 7 | YEAR 8 |
|--|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|
| EQUITY INVESTMENT | | | | | | | | |
| ESTIMATED NO. LOAN OFFICERS | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 |
| MAXIMUM LOANS PER LOAN OFFICER | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| MAXIMUM LOANS OUTSTANDING (NO.) | 100 | 200 | 250 | 300 | 300 | 300 | 300 | 300 |
| ESTIMATED LOAN SIZE PER CLIENT (50%) | 500 | 1000 | 1250 | 1500 | 1500 | 1500 | 1500 | 1500 |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 | \$300 |
| ESTIMATED LOAN SIZE PER CLIENT (25%) | \$400 | \$500 | \$600 | \$700 | \$800 | \$900 | \$1,000 | \$1,000 |
| AVERAGE LOAN SIZE | \$500 | \$700 | \$900 | \$1,100 | \$1,300 | \$1,500 | \$1,700 | \$1,700 |
| ESTIMATED INDIVIDUAL LOAN OUTSTANDING | \$375 | \$450 | \$525 | \$600 | \$675 | \$750 | \$825 | \$825 |
| ESTIMATED AVG. TOTAL LOANS OUTSTANDING | \$188 | \$225 | \$263 | \$300 | \$338 | \$375 | \$413 | \$413 |
| | \$93,750 | \$225,000 | \$328,125 | \$450,000 | \$506,250 | \$562,500 | \$618,750 | \$675,000 |
| INCOME | | | | | | | | |
| YEARLY INCOME FROM INTEREST ON LOANS | \$39,375 | \$94,500 | \$137,813 | \$189,000 | \$212,625 | \$236,250 | \$259,875 | \$283,500 |
| ASSUMED INTEREST RATE | 42% | 42% | 42% | 42% | 42% | 42% | 42% | 42% |
| INTEREST EXPENSE | | | | | | | | |
| BANK INTEREST CHARGES TO BORROWER | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% | 12.0% |
| BANK TOTAL CHARGES (\$) | \$11,250 | \$27,000 | \$39,375 | \$54,000 | \$60,750 | \$67,500 | \$74,250 | \$81,000 |
| ADMIN. EXPENSES OF NEW PROFIT CENTERS | | | | | | | | |
| LABOR COST (SALARIES, FRINGE, COMMISSIONS) | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 | \$36,000 |
| OPERATION COST (BLDG. RENTAL, UTIL, SUPPLY) | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 | \$12,000 |
| TRANSPORTATION /REPAIR (\$500/MO) | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 |
| MISCELLANEOUS (\$100/MO) | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 | \$1,200 |
| DEPREC. OF EQUIP. (\$42,480 : 36 MOS x 12 MOS) | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14,160 | \$14,160 |
| EXPENSE-LOAN LOSS RESERVE (5% x loans outs.) | \$4,688 | \$11,250 | \$16,406 | \$22,500 | \$25,313 | \$28,125 | \$30,938 | \$33,750 |
| ANNUAL PROFIT/LOSS | (\$45,923) | (\$13,110) | \$12,671 | \$43,140 | \$57,203 | \$71,265 | \$85,327 | \$99,390 |
| ANNUAL RETURN ON EQUITY | -61.2% | -17.5% | 16.9% | 57.5% | 76.3% | 95.0% | 113.8% | 132.5% |
| IRR | | | | -2.2% | 23.0% | 36.3% | 43.9% | 48.5% |

SECTION FOUR

ECONOMIC ANALYSIS

Calculating the project's economic feasibility involves comparing the benefits to firms that use its new financial services with the costs to USAID and Morocco of supporting project operations.

The project's economic benefits arise principally from increased revenue generated by firms that obtain access to the new financial services. Whether through borrowing, or through being able to manage their cash resources better by operating savings accounts, MFP clients should demonstrate higher gross incomes. The USAID/Egypt program claims a 36 percent average increase in total sales by borrower firms.⁷ Using the Direction de la Statistique enterprise survey figure for 1988 of \$1,600 average annual income for nonstructured firms, this would mean an increase of \$480 per borrower firm per year.⁸ More detailed information on borrower firm income in the project target area may be acquired through a baseline survey (see Social Analysis section, below), and through the cashflow information collected by loan officers as a part of initial client appraisal.

The project's economic costs consist primarily of USAID's outlays for the capitalization and collateral funds for the PMCs. These funds are essential to initiate project operations. However, it is unclear how much funding must be given at project outset to provide participating banks with enough security and incentive to commit their own funds to the project. The more funds USAID must provide during the project's early years, the greater the opportunity cost of this capital. The Financial Analysis section provides data on how much capital is necessary to assure continuously positive cash flow in PMC operations, and to maintain sufficient collateral to support lending at projected rates. This may or may not prove sufficient for the Moroccan banks.

The consultants have not estimated project technical assistance costs. These costs, too, will figure in project cost-benefit calculations.

Some mock economic analyses are presented below to demonstrate how USAID should analyze the project's costs and benefits as and when more accurate data become available (see Tables 5-9 that follow this section). The first analysis assumes that borrower firms can achieve the same income gains as Egyptian firms under USAID/Egypt's finance program. It also assumes that the capitalization and collateral funds are funded in increments, based on the estimated requirements from the financial analysis. The second assumes the same gains for borrower firms, but requires USAID to provide the life-of-project funds for the collateral fund in the first year of the project. This entails the highest possible opportunity cost for project funds. Under no circumstances should USAID be obliged to commit the capitalization funds for the PMCs in advance of their actual capitalization requirements.

⁷See Linda Oldham et al., "Measuring Socioeconomic Impact of Credit on SMI: Assessment of the Monitoring System Used by the Alexandria Businessmen's Association, Egypt," GEMINI Technical Report No. 76, Bethesda, Maryland, May 1994.

⁸Ministère du Plan, Direction de la Statistique, *Enquête Nationale sur les Entreprises Non Structurées Localisées*, 1988, p. 51. This figure is not necessarily a good measure of microenterprise income in the project target area. New surveys should be undertaken, as recommended in the Social Analysis section, to obtain better baseline data for firm income.

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In both cases the model uses a ballpark figure of \$600,000/year for four years for technical assistance services to the project. This figure is not the product of detailed project cost analysis, and needs to be refined before a more accurate economic cost-benefit analysis can be prepared.

These mock analyses show a strong positive rate of return for the project, even when all USAID collateral funds are injected during the first year. However, they are extremely sensitive to changes in both income gain per borrower firm and clients per loan officer. For example, borrower firms must generate a 17.5 percent gross revenue increase to ensure a positive rate of return in the case where USAID collateral funds are committed at project outset. If loan officers can achieve only an average caseload of 100 clients, instead of the 200 projected, the project shows a negative rate of return over its lifetime even if borrower firms increase their gross revenue by the projected 30 percent.

Given the sensitivity of project economic feasibility to benefits to borrower firms, USAID should ensure that the MFP contains a monitoring and evaluation system that can track and quantify such benefits on a periodic basis. At the same time, although loan officers can assist in the determination of baseline income levels, the project should not seek to burden them with any subsequent data collection responsibilities not required for the efficient performance of their duties. It is going to be tempting, because of the proximity of loan officers to useful data, to turn them into impact monitors. *This temptation must be avoided at all costs.* If loan procedures enable prompt re-payers to receive a subsequent loan on a virtually no-questions-asked basis, then no income questions should be asked of these borrowers when they come for subsequent loans. Instead, the consultants recommend that a local market research firm be hired to carry out selective surveys, using the baseline group of firms, to assess firm and household level impacts (income, employment, and so forth). Alternatively, the MFP could create a separate Monitoring and Evaluation Unit, consisting of, at most, two social scientists, who could carry out this task at all microfinance service sites.

The precise strategy for collecting this economic impact data should be developed as a part of the baseline survey of project areas. Information on suitable direct and proxy measures of impact, obtained from this survey, should be used to design the surveys for ongoing impact monitoring. The baseline survey is described in more detail in the Social Analysis section, which follows the tables below.

**ANALYSIS
ENTREPRENEUR FINANCE PROJECT**

BEST CASE

30% BENEFIT

YEAR

1

2

3

4

5

COSTS

| | | | | | |
|-------------------------------|--------|---------|---------|--------|--------|
| COLLATERAL/EQUITY FUND | 337500 | 750000 | 1237500 | 375000 | 225000 |
| TECHNICAL ASSISTANCE | 600000 | 600000 | 600000 | 600000 | |
| SUBTOTAL | 937500 | 1350000 | 1837500 | 975000 | 225000 |

BENEFITS

480 PER BORROWER

| | | | | | |
|-------------------------|--------|--------|---------|---------|---------|
| BORROWERS | 500 | 2000 | 4500 | 6000 | 6000 |
| INCREASED INCOME | 240000 | 960000 | 2160000 | 2880000 | 2880000 |
| SUBTOTAL | 240000 | 960000 | 2160000 | 2880000 | 2880000 |

| | | | | | |
|----------------------|---------|---------|--------|---------|---------|
| NET CASH FLOW | -697500 | -390000 | 322500 | 1905000 | 2655000 |
|----------------------|---------|---------|--------|---------|---------|

IRR **0.63**

TABLE 6

MOCK ECONOMIC ANALYSIS

MOROCCO MICROENTERPRISE FINANCE PROJECT

BEST CASE- incremental funding, 30% BENEFIT, only 100 clients/loan officer

| YEAR | 1 | 2 | 3 | 4 | 5 |
|------------------------|------------------|---------|---------|---------|---------|
| COSTS | | | | | |
| COLLATERAL/EQUITY FUND | 337500 | 750000 | 1237500 | 375000 | 225000 |
| TECHNICAL ASSISTANCE | 600000 | 600000 | 600000 | 600000 | |
| SUBTOTAL | 937500 | 1350000 | 1837500 | 975000 | 225000 |
| BENEFITS | | | | | |
| | 480 PER BORROWER | | | | |
| BORROWERS | 250 | 1000 | 2250 | 3000 | 3000 |
| INCREASED INCOME | 120000 | 480000 | 1080000 | 1440000 | 1440000 |
| SUBTOTAL | 120000 | 480000 | 1080000 | 1440000 | 1440000 |
| NET CASH FLOW | -817500 | -870000 | -757500 | 465000 | 1215000 |
| IRR | -0.13 | | | | |

TABLE 7

MOCK ECONOMIC ANALYSIS

MOROCCO MICROENTERPRISE FINANCE PROJECT

WORST CASE - endowment funds up front, 30% benefit

| YEAR | 1 | 2 | 3 | 4 | 5 |
|------------------------|-------------------------|---------------|----------------|----------------|----------------|
| COSTS | | | | | |
| COLLATERAL/EQUITY FUND | 2550000 | 150000 | 225000 | | |
| TECHNICAL ASSISTANCE | 600000 | 600000 | 600000 | 600000 | |
| SUBTOTAL | 3150000 | 750000 | 825000 | 600000 | 0 |
| BENEFITS | | | | | |
| | 480 PER BORROWER | | | | |
| BORROWERS | 500 | 2000 | 4500 | 6000 | 6000 |
| INCREASED INCOME | 240000 | 960000 | 2160000 | 2880000 | 2880000 |
| SUBTOTAL | 240500 | 962000 | 2164500 | 2886000 | 2886000 |
| NET CASH FLOW | -2909500 | 212000 | 1339500 | 2286000 | 2886000 |
| IRR | 0.315 | | | | |

TABLE 8

MOCK ECONOMIC ANALYSIS**MOROCCO MICROENTERPRISE FINANCE PROJECT***WORST CASE - endowment funds up front, 30% benefit, only 100clients/loan officer*

| YEAR | 1 | 2 | 3 | 4 | 5 |
|------------------------|------------------|---------|---------|---------|---------|
| COSTS | | | | | |
| COLLATERAL/EQUITY FUND | 2550000 | 150000 | 225000 | | |
| TECHNICAL ASSISTANCE | 600000 | 600000 | 600000 | 600000 | |
| SUBTOTAL | 3150000 | 750000 | 825000 | 600000 | 0 |
| BENEFITS | | | | | |
| | 480 PER BORROWER | | | | |
| BORROWERS | 250 | 1000 | 2250 | 3000 | 3000 |
| INCREASED INCOME | 120000 | 480000 | 1080000 | 1440000 | 1440000 |
| SUBTOTAL | 120000 | 480000 | 1080000 | 1440000 | 1440000 |
| NET CASH FLOW | -3030000 | -270000 | 255000 | 840000 | 1440000 |
| IRR | -0.07 | | | | |

TABLE 9

MOCK ECONOMIC ANALYSIS

MOROCCO MICROENTERPRISE FINANCE PROJECT

WORST CASE - endowment funds up front, only 17.5% benefit

| YEAR | 1 | 2 | 3 | 4 | 5 |
|------------------------|------------------|----------------|----------------|----------------|----------------|
| COSTS | | | | | |
| COLLATERAL/EQUITY FUND | 2550000 | 150000 | 225000 | | |
| TECHNICAL ASSISTANCE | 600000 | 600000 | 600000 | 600000 | |
| SUBTOTAL | 3150000 | 750000 | 825000 | 600000 | 0 |
| BENEFITS | | | | | |
| | 280 PER BORROWER | | | | |
| BORROWERS | 500 | 2000 | 4500 | 6000 | 6000 |
| INCREASED INCOME | 140000 | 560000 | 1260000 | 1680000 | 1680000 |
| SUBTOTAL | 140500 | 562000 | 1264500 | 1686000 | 1686000 |
| NET CASH FLOW | -3009500 | -188000 | 439500 | 1086000 | 1686000 |
| IRR | 0.001 | | | | |

SECTION FIVE

SOCIAL ANALYSIS

BASELINE SURVEY

The consultants agree with the premise outlined in the Microenterprise Development Office's "A Framework for the Study of Impact of Microenterprise Interventions at the Level of the Household, the Enterprise, and the Individual" that enterprise and household economies are closely intertwined. This suggests that data collection at the household level will be necessary to understand the socioeconomic impact of project interventions.

Given the necessarily high costs of household-level data collection and analysis, USAID should focus all survey activities, to the maximum extent possible, on information that will assist in the design and marketing of microfinance products while providing information on key socioeconomic parameters. A full baseline survey of microenterprise activity, such as that conducted under the GEMINI project in Kenya, need not be undertaken. Instead, using stratified random sampling techniques, USAID should collect data on household income (actual or proxy), quality of life, and expenditures in the towns served by the microfinance institutions. The surveys, in addition, should explore how the households manage their finances: if and how they obtain credit, if and how they save, and, most important, what sorts of savings products they would like to use. GEMINI's survey work in Bolivia could be used as a model for the latter data collection.

The team proposes that remaining resources in the GEMINI buy-in for Morocco be used to design an impact evaluation strategy for the project, in cooperation with the impact evaluation specialist from USAID's Global Bureau, Economic Growth Division, Microenterprise Office. A Moroccan social scientist could be hired to work with the impact evaluation specialist to:

- Review national household and other survey data (such as the recent World Bank Poverty, Adjustment and Growth study);
- review USAID/Morocco's Country Strategy Statement to identify which strategic objectives will be addressed by the microfinance project;
- Assess the extent to which available data can provide a baseline for impact measurement for the microfinance project against key Mission objectives, and to what extent new data collection is required;
- Conduct interviews with a sample of households in the medina area of Fès and among participating households in the AMSED microcredit programs in Beni-Mallal and Khenifra on household income and quality of life, and (in the latter sample only) on perceived impacts of financial services on households;
- In the same interviews, using GEMINI's Bolivia surveys as a guide, collect information on savings behavior and preferences of these households;

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- Based on these interviews, develop a strategy for measuring household income that specifies which indicators or proxy indicators should be monitored, and how this monitoring could take place at the least cost possible; and
- Also based on these interviews, make recommendations concerning the types of savings products (such as passbook account, semi-liquid account, or time deposit account) most suitable for these households

Given the absence of well-established microfinance programs in Morocco, and the poor performance of the heavily subsidized, targeted small credit programs, the team does not recommend that wider analysis of the impact of financial assistance be undertaken at this time. Because the AMSED program is in a very early stage of operation, information obtained on client-level impact cannot be considered very reliable, and more emphasis should be placed on data from new baseline surveys.

WOMEN BENEFICIARIES

AMSED's pilot projects in microfinance demonstrate that no shortage of creditworthy women entrepreneurs exists in Morocco. The majority of AMSED borrower enterprises are involved in some form of commerce, with a number of rural borrowers taking up animal rearing activities. The team believes that many women entrepreneurs in Fès will work in commerce. It is difficult to determine what other areas of economic activity would be popular.

In any case, identifying major areas of women's economic activity will not be a critical factor in ensuring strong women's participation in the microfinance project. Far more important will be locating project activities close to where women work, hiring women loan officers to minimize sociocultural barriers in making financial transactions, and creating alliances with local women's organizations to assist in the promotion of the new services. AMSED's partnership with local women's associations, its program director feels, is the reason it has had no difficulty attracting women entrepreneurs to its two pilot programs.

DEBT REPAYMENT BEHAVIOR

AMSED's initial experience shows that group guarantees and solidarity can work most effectively to motivate repayment in Morocco, whether done in small (3-6 person) groups, as in its Beni Mallal program, or in larger (20-30 person) groups, as in its village banking operation in Khenifra. AMSED's program director felt that individual credit, without collateral, would be more difficult to implement. She did not think that local government officials could be trusted to act as individual referees or guarantors, as occurs in Indonesia's provincial banking program. The microfinance project should be encouraged to experiment with various techniques for appraising loans and motivating repayment. Individual lending may well prove preferable in dense urban areas where loan officers, selected because of their strong local knowledge, can accurately appraise borrower character (as is the case with ADEMI in the Dominican Republic).

To work with groups or with individuals is not a country-specific issue; it is a local matter. International experience suggests that solidarity groups work more effectively in some communities than in others. The project implementers will have to find the optimum formula for each region of Morocco

they explore. Groups will have no effect on interest rates, nor on borrower acceptance of the project's proposed rates. Prospective borrowers who balk at taking loans at these rates should not receive loans. Loan officers should clearly explain repayment terms for both individual or group loans to all applicants. The team is confident that there will be no shortage of customers for financial services at the rates proposed.

The major sociocultural constraint to debt repayment in Morocco is the widespread knowledge of the existence of heavily subsidized, targeted credit programs (such as those for new university graduates, small and medium industries, and members of the Chamber of Artisans). The microfinance project should avoid, as much as possible, prospective clients from such target groups. This should not prove difficult, because few members of these groups will be interested in \$300 loans at market (effective) interest rates. Based on experience from other countries, the project should give priority to clients who, whether their enterprises have fixed abodes, have lived in the area for a long time.

INTEREST RATE LEVEL

The consultants feel that there will be little resistance to annualized effective interest rates far in excess of the 12 percent now offered by the commercial banking sector, per a ceiling imposed by the Ministry of Finance. AMSED is charging 8 percent for 3-month loans, and has no problem finding applicants and maintaining a 100 percent repayment rate. It is worth noting that, although the local government authorities support its work, its charges, and the way it makes through a Foundation, AMSED is violating Moroccan law.

Legal restrictions make it important that interest charges under the program are limited to 12 percent, with other administrative charges added to bring the total fees for service to a level commensurate with operating costs. Discussions with the Ministry of Finance confirmed that they will have no objection to such pricing structures for financial products offered under the microfinance project.

SECTION SIX

CONCLUSION: CRITICAL FACTORS IN THE RECOMMENDED MICROFINANCE DELIVERY MODEL

PRICE FINANCIAL PRODUCTS FOR PROFITABILITY

Can the project charge sufficient interest to cover overhead, inflation, cost of money, and a return to capital? Banks are effectively limited in the maximum interest rate they can charge, which is set every six months by the Central Bank. However, there is apparently no limitation on the fee structure. Therefore it is totally allowable to charge fees to cover costs. It is just that they cannot be expressed as interest.

Because the recommended form of administration involves a private company (that does the day-to-day operation), this company will be required to charge fees. Legally, there will be no problem doing this, as long as the implementing body is a private company.

What rate of interest should be charged? As mentioned, there is a legal rate of interest, which is currently 12 percent. However the effective interest rate, which includes the fee structure, will be substantially higher. It is estimated that an effective rate of interest of at least 24 percent will have to be charged.

The mechanism for charging this is described in the Administrative section. To summarize, the bank, which will perform back office functions, will be allowed to charge the maximum 12 percent. The front office functions, to be handled by a PMC, will charge fees (not interest), but the effective interest represented by the fee structure will be an additional 12 percent.

ENSURE FINANCIAL PRODUCTS FIT THE DEMANDS OF MICROENTERPRISES

Savings

The guidelines for savings accounts are that they should be voluntary, liquid, provide positive real interest rates, and be convenient and easily accessible to clients.

As mentioned earlier, savings is too often the neglected side of microfinance. Programs around the world have demonstrated that substantial savings capacity exists even among persons with limited assets. This savings capacity includes longer-range savings, to replace savings in jewelry, animals, and the like. Even persons with limited assets attempt to keep some portion of these assets as savings. Savings are also made to provide a secure place to store temporary excess cash flows from business, for example. There will always be times when even a small business will have excess cash — for example, when a customer suddenly pays a large amount.

Several factors influence the form in which persons of small assets save:

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- If the inflation rate is high, these persons will prefer to save in gold, jewelry, animals, land, or some other form that is not easily eroded by inflation.
- Availability of banks that are secure. It may be that there is a shortage of secure banks or other financial institutions that will accept savings. For example, if there is a local history of bank failures, people will lose their confidence in banks.
- Availability of savings instruments. Even if secure banks exist, there must be attractive savings instruments designed. If withdrawals are restricted, or restrictive minimums are placed on opening or maintaining accounts, persons with limited assets will not use banks.

In Morocco, inflation has been controlled for a substantial period. The biggest problem affecting savings is the availability of banks in convenient locations, and the availability of properly designed savings instruments. Properly designed instruments will attract substantially more savings than the banks or local officials think possible. Because of this, an important part of the project will be the design of savings instruments that will attract both the short-term cyclical need for savings, and the longer-term need for stocks of financial savings.

Moroccan law allows only banks to collect savings. Therefore any innovations in savings instruments must be done with banks. Although most of the innovations in microfinance recommended in this project will be implemented by the PMC, the savings innovations will be administered by the bank.

Credit

Loan Size

Loans will range from DH750 to DH26,400 (approximately \$90-3,300). During the first year, the expectation is that 50 percent of loans will not exceed DH2,640 (\$300), 75 percent will not exceed DH3,520 (\$400), and the maximum loan size will be approximately DH4,400 (\$500). These loan sizes are substantially below the current average loan size of commercial banks.

Loan Term

Loan terms should not exceed one year. In fact, the majority of loans may be substantially shorter (possibly 6 months) in the early phase of the program. For simplicity, it is recommended that the program have only a few types of loans in the beginning (possibly a 6-month loan with monthly installments, a 12-month loan with monthly installments, and a 12-month loan with a 3-month grace period. Loans with grace period should be given only with great caution, since programs throughout the world have demonstrated that such loans involve substantially more risk. Special precautions should be made, such as requiring, at a minimum, the payment of interest during the grace period, or at least the requirement that the borrower report to the administrative office once a month, even though an installment is not due.

MEET OTHER REQUIREMENTS FOR A SUCCESSFUL MFP

- Insist on strong participation from banks at outset.
- Support critical front office role of the PMC through technical assistance.
- Carefully define role of Board of Directors of PMC.
- Carefully define role of AUP (how in particular it handles the collateral fund).
- Select clients carefully.
- Do not target the type of loan to be made. Loans should be available for a wide variety of microeconomic activity. The only targets, as laid down by the project parameters, are to keep the loan size small and pay special attention to loans for women. Keeping the loan size small is not a problem, and will minimize risk (especially initially), although it will also increase costs. Regarding loaning to women, because of the large numbers involved, this does not violate the no-targeting principle. In fact, based on the initial experience from the AMSED program, giving special emphasis to women may reduce risk.
- Encourage strong participation of women by locating PMC services in medinas (closer to their places of work), hiring as many women loan officers as possible, and building strong linkages to local women's associations. AMSED's experience with pilot credit programs indicates that no shortage of creditworthy women entrepreneurs exists, and that the above measures can attract substantial numbers of women to the program.
- Do not restrict microenterprise asset size. The nature of the loan program, with its small loan size, will generally attract only microenterprises. It is an unnecessary restriction to ask that total microenterprise asset size not exceed DH100,000, or that asset size fall into a range of DH50,000 to 100,000.
- Identify a permanent address for the borrower, so that the loan officer can visit the borrower at either his place of business or his residence.
- Secure *patentes*, if necessary. Moroccan law requires that the borrower have a *patente*. If during the implementation phase it becomes clear that a substantial number of potential borrowers do not have *patentes*, then the project should add an additional function to facilitate the process of securing one, so that a large number of borrowers are not unnecessarily excluded.
- Select an influential, committed counterpart ministry to increase probability of policy reform.

ANNEX A
LIST OF PERSONS CONTACTED

LIST OF PERSONS CONTACTED BY THE GEMINI
MISSION OF JANUARY 9, 1995 TO FEBRUARY 4, 1995

BANQUE CENTRALE POPULAIRE

101, BD Zerktouni - CASABLANCA

Tel : 902) - 20-25-33 - Fax : (02) 20-08-89

M Faycal ZEMMAMA

Directeur General de l' Exploitation

Mme Aicha SKALLI MANJRA

Directeur des Credits aux PME

M Said LEFOUILI

Directeur des Comptes Speciaux

M Abdelhamid ROUINI

Chef de Service Cautionnement Mutuel

MAGHREBAIL - Societe Maghrebine de Credit-bail (Leasing)

43, rue Othman Bnou Affane (Ex. A. Lafuente) - CASABLANCA

Tel : (02)20-33-04 - Fax : (02)27-44-18

M Chakib BENNANI

Directeur delegue

WAFABANK

163, Avenue Hassan II - CASABLANCA

Tel : (02)20-02-00 - 26-51-51 - Fax : (02)26-62-02

M Abdellah FATH

Directeur de la Direction de reseau

BMCE - Banque Marocaine du Commerce Exterieur

140, Avenue Hassan II - CASABLANCA

Tel : (02)20-04-20 - 20-04-56 - 20-04-67

M Fadel LAHLAISSI

Chief Officer (Director)

SOCIETE GENERALE MAROCAINE DE BANQUE - SGMB

M Mohamed BARGACH

President Directeur General

Tel : (02)27-54-85 - Fax : (02)20-09-61 - CASABLANCA

Mme Souad ZEBDI
178, BD Yacoub El Mansour - CASABLANCA
Tel : (02)23-25-56 Fax : (02)23-25-58

GROUPEMENT PROFESSIONNEL DES BANQUES DU MAROC
71, Avenue de l' Armee Royale - CASABLANCA
Tel : (02)31-16-24 - Fax : (02)31-49-03

Mme Badia BAKKALI
Directeur Central Adjoint

CAISSE NATIONALE DE CREDIT AGRICOLE - CNCA
RABAT

Ms Attou Zedgui
contact: Rector, University of Fès, Amal Jalil

MINISTERE DU COMMERCE ET DE L' INDUSTRIE
RABAT - Tel : (07)76-02-33 - Fax : (07)76-89-33

M Abderazzak El MOSSADEQ
Secretaire General

M Abdelaziz El Caidi
Chef de la cellule d' orientation des investisseurs

MINISTERE DES FINANCES
RABAT - Tel : (07)76-27-17 Fax : (07)76-08-25

Thami EL-BARKI
Directeur du Tresor et des Finances Exterieures

MINISTERE DE L' EMPLOI ET DES AFFAIRES SOCIALES
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M Ahmed BENRIDA
Directeur de l' Emploi

M Essaid SOUKRATI
INSPECTEUR DU TRAVAIL

M Samir AJARAAM
Formation professionnelle

BANOUE AL-MAGHRIB

RABAT - Tel : (07)70-66-45

M Abdelmalek OUENNICHE

Directeur Central du Departement Etranger

AMSED - ASSOCIATION MAROCAINE DE SOLIDARITE ET DE DEVELOPPEMENT

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Mme Badiia Bachar - Responsable de Projets

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M Lahcen ELASFARI

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M Sifedidine AMEZIANE

Directeur

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M Fejjal Ali Tel : (05)60-87-51

M le Recteur de l' Universite

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M Ahmed FILALI BELHAJ - Mohtassib de Fes - Tel : (05)62-43-40

OTHER PERSONS CONTACTED

EXPERDATA COMMUNICATIONS

M Hassan Rifki

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ESPOD - Espace - Point - Depart

Association Marocaine pour la promotion de l' entreprise feminine

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CRS - CATHOLIC RELIEF SERVICES

Mme Kathleen A. Zieg

Directrice

ANNEX B
TERMS OF REFERENCE

NEW

MICROENTERPRISE FINANCE

PROJECT NO. 608-0218

Summary: USAID/Morocco plans to start a new Microenterprise Finance project in FY 1995. As presented in this New Activity Description, the project will address a key part of the Mission's economic growth strategy for Morocco. The project as currently envisaged will have an 8-year implementation period and an estimated cost of \$15 million in grant funds (USAID cost only).

Strategic Objective: The project will be USAID/Morocco's first concerted effort aimed specifically at microenterprise development. It will contribute directly, and particularly at the poorest end of the economy, to the achievement of the Mission's current Strategic Objective No. 2, which is "to expand the base of stakeholders in the economy."

Project Purpose: The specific purpose of the project (see attached preliminary logframe), will be to facilitate microenterprise growth through access to a program of formal, institutionalized and financially self-sustainable microcredit. USAID's experience worldwide supports conclusions reached in the early design of the Morocco project that a reliable, repeat source of reasonably priced credit, principally short-term working capital, is the most critical requirement for microenterprise growth. The impact of the project will be measured in terms of increased jobs and family incomes of microentrepreneurs benefitting directly from access to microcredit, resulting in an expanded and strengthened group of stakeholders in the larger economy.

While focusing on credit, the project also will have an important parallel component addressing the policy environment as it affects microenterprises and the informal sector. On the other hand, the project will not include training or technical assistance programs for microenterprises, reinforcing the primary attention on building one or more viable microcredit institutions which are financially viable and reaching intended numbers of beneficiaries.

Project Components: Two components are planned: microcredit institution building; and microenterprise policy analysis.

Microcredit institution building: Based on considerable analysis already completed, including a November 1992 GEMINI report entitled "Morocco: Assessment of Programming Options for Microenterprise Development," as well as field visits to Egypt to study details of the successful (and in parts transferrable) experience of USAID/Cairo in small and micro credit programs, the project will foster the creation of one or two microcredit institutions in Morocco. Estimates of potential demand for microcredit, as well as field investigations of potential urban areas to be served by the

Meines represent are project. As has been the case in Egypt, and if funding permits, two institutions will be fostered, providing for some regional differentiation in methodology and potentially healthy competition in performance and impact terms. The institution(s) will be independent, private entities, legally established to provide credit to microentrepreneur clients, and linked to one or more commercial banks following models pioneered in Egypt and elsewhere (e.g., Latin America). When capitalized at a planned equivalent of \$5 million (see Project Interventions, below), a minimum of 5,000 microenterprises should be receiving support at any given time. By the end of the project, the objective (while admittedly a difficult one) is that the institution(s) will be financially viable, with revenues exceeding all costs including cost of funds, operating costs, provision for loan losses, and an adequate reserve (profit).

Microenterprise Policy Analysis: The microenterprise sector, and by extension the informal sector, is not well understood in Morocco. Some ground-breaking studies have been produced, providing some indications of its size and complexity, but much more analytical work is needed. Thus, the second component of the project will support a broad program of research, analysis, seminars, and policy recommendations related to the sector. The information produced will be potentially valuable for the microcredit institution(s). More generally, policy reforms undertaken based on better knowledge of the sector can be expected to have very positive indirect effects on microenterprise growth. Three broad areas requiring continuing investigation include detailed microenterprise sub-sector analysis (e.g., garments/textiles, construction, transport, handicrafts, wood products, street vendors), analysis of regulations that affect the operation of microenterprises (e.g., business licenses, tax treatment, access to urban services), and financial sector reforms which will have the effect of increasing the amount of credit available for small-scale and microenterprise (e.g., interest rate structures, access to savings instruments for microentrepreneurs, measures which increase competition among banks for new client groups, other measures which enhance access by government and more established private sector companies to sources of finance other than bank credit).

Project Interventions: The project will be carried out pursuant to a Project Grant Agreement signed with the GOM. Implementation will be divided into three phases with an LOP of eight years. An initial minimum of 6 months will be needed to issue the RFP and select the institutional contractor for the project (see next paragraph). In Phase 1, lasting 12-18 months, the organizational work will be completed necessary to create the microcredit institution(s), hire and train initial staff, and prepare for start-up of lending operations. In Phase 2, lasting 3-4 years, the microcredit institution(s) will be capitalized and lending operations will begin, including specific roles for the

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partic: . In Phase 3, 1-2
 microcredit institution(s) will have reached a financial breakeven point and no longer require outside funding support; they will cease to operate under subcontract to the project's institutional contractor but will continue to receive technical support until the end of the project. Over time, as the program continues to demonstrate its profitability, a preferred outcome for long-term sustainability is the absorption of the program(s) by one or more participating banks, with the banks providing any expanded capital requirements and assuming all risks of lending.

An institutional contract signed by USAID with a long-term contractor will be the vehicle for all three phases of project implementation. A competitive RFP will be issued shortly after the ProAg is signed, with the contract signed approximately six months later. It is anticipated that the successful contractor will be some form of consortium between consulting firms and U.S. PVOs with expertise in microenterprise development. The contractor will be responsible for both the microcredit and policy analysis components of the project. The policy work will be performed both directly and through a substantial sub-contract with a local research or consulting company.

A separate subcontract with the microcredit institution(s), managed by the contractor, will be signed during Phase 1 and continue through Phase 2, to supervise the institution(s) and cover operating costs on a declining scale until a breakeven point is reached on costs and revenues.

Project Design Schedule and Resource Requirements: The GEMINI project will be retained through central funds to assist USAID/Morocco in the final analytical work in order for the Mission to produce the Project Paper. The scope of work has already been prepared, and a GEMINI team is expected to complete its work in Morocco no later than the end of 1994. Principal tasks relate to economic (benefit/cost) and social (participation, impacts on poor) analyses, legal issues related to interest rate structures and the status of the proposed microcredit institutions(s), further refinements of potential size of target populations and demand for microcredit by geographic area, and outlining of requirements for baseline studies and surveys. USAID will prepare and approve the Project Paper by the end of February 1995, the ProAg will be signed by the end of April 1995, and the RFP will be issued by the end of June 1995. Regarding the ProAg, the likely cooperating ministry will be the Ministry of Finance and/or the Ministry of Economy.

Project Management Requirements: A USDH private enterprise officer will be charged with managing the project (to be 50% of the officer's workload). Other Mission staff will have critical roles to play at different junctures, particularly the Regional Contracting Officer and Mission Controller. At this time it is not foreseen that a separate USPSC will be required to provide further technical support.

Baseline Data, Monitoring and Evaluation: In Morocco, available

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data and that may account for at least 60% of urban employment; and that the estimated value added by these enterprises, currently not reflected in GDP figures, may represent at least another 20% in actual GDP. However, the database needs much work to be considered reliable. The best source at present (a report issued in 1992 by the GOM's Statistics Directorate) describes the sector as "localized, non-structured" enterprises, covering micro business entities which have an official address but little or no formal records. It should be noted that the line between "formal" and "informal" activity in Morocco is blurred. Probably a majority of microenterprises in Morocco have a recorded address, are known to the authorities, and have a legal status through payments of very small (\$10-50 equivalent) annual business license fees. However, at the very least the existing statistics do not capture businesses without fixed premises, such as travelling vendors and, more important, women entrepreneurs working out of their homes.

An early task in the project will therefore be the establishing of more accurate baseline data, to be accomplished as part of Phase 1 and/or during the timeframe prior to the arrival of the contract team. Later, appropriate household surveys in project target areas, as well as control groups in other areas, will be performed as an additional baseline against which project impacts can be measured. Key impact indicators will focus on enterprise growth, job creation, family income, and gender-differentiated data.

Other donors activities: At present, the only donor organization engaged in microcredit is Catholic Relief Services (CRS). CRS began a program in 1992 to pioneer the delivery of microcredit in rural areas through a network of local Moroccan NGOs (three so far). While there was no direct USAID involvement at the start, expansion of the program is being supported by USAID. CRS is structuring its program at market rates and is using a formula of interest rates plus fees acceptable to the GOM. It is too early to comment on program success. The new Microenterprise Finance project will not exclude CRS's work; on the contrary, it is envisaged that the CRS work will be further supported in rural areas, and aspects of its methodology now being tested will be relevant to the new, much larger and urban focused project.

Other bilateral donors, notably the German programs, have been involved in building local NGOs, but none have been engaged in microcredit. The World Bank is exploring means to support microenterprise in the context of overall financial sector reforms and USAID will coordinate closely on opportunities for joint efforts.

Linkage to other USAID projects: The new project will be developed in a context of ongoing financial sector reforms involving liberalization of interest rates, capital market development, and more competition among banks and other financial institutions. USAID's current Economic Policy Analysis project is playing an active role in this process. In addition, USAID's current New

Enterprise Development project, focused on small and enterprises, contains several elements which are relevant to the new project, including the establishing a new and financially self-sustaining business services center and the provision of small working capital loans to client companies.

Initial Environmental Examination (IEE): As a PID will not be submitted for this project, an IEE is attached.

Review and Approval Authority: After approval of the New Activity Description, the Mission requests that it receive redelegated authority to approve the Project Paper, authorize the project and sign the ProAg.

Attachment #1: Preliminary Logframe

Attachment #2: Initial Environmental Examination

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ANNEX C

THE MICROENTERPRISE SECTOR AND CREDIT DEMAND
Extract from Memorandum on Site Visit to Beni-Mallal
by Housni El Ghazi for USAID
November 1993

I- MICRO-BUSINESS PERCEPTION

The notion of micro-business has imprecise contours and is part of this complex reality called in Morocco "artisanat". It consists of all businesses that do not respond to modern criterium in exercising economic activities. These businesses occupation correspond to activities specifically located, or affected to people exerting their activities home or in ambulant manner. The lack of conformity is revealed by a number of indicators:

- The small size of businesses and the weakness of operation scales, the number of remunerated employees is less than 10, excluded the owner and family-aids.
- The level of organization is characterized by the lack of specialization of tasks, the absence of a modern accounting system, the non-distinction between personal and business finance.
- The techniques of production are for a great deal labor intensive, the use of machinery or small equipment is light-less 50 Horse-power, which explain the low scale of production and weak productivity.
- The non-affiliation to any type of national accounting aggregate to capture their real contribution to GNP: Social Security, national surveys, Fiscal declaration (Except the Patents which does not assess the volume of the activity)
- The lack of financial access due to an under-capitalization of the activity, and the absence of collaterals to offer. Family and friends as financial support are the most common practices. Institutional finance represent less than 5% for the whole sector (Start-up are insignificant)
- The non-application of labor code requisites, does not offer social or economic protection to employees (absence of work insurance, affiliation to Social Security- CNSS,..)
- Salaries practices obey to the demand-supply law, so as the demand is always superior to supply, salaries are lower than minimum wages required -SMIG.
- The Learning-on-the-spot way of training is the big provider of the sector labor and expertise, yet new flows of trainees from professional school are imposing their know-how.
- Classified activities: Production, Services and Commerce. But these categories should not be approached with the same policy; every category has its own recurrent trends and its own logic.

II-

The cost structure is a good indicator to define the level of financial costs the entrepreneur is capable to bear without reducing drastically its gross margin.

Speaking of a structured business the production factors involved in the processing of a good are as sensed: raw materials, accessories, packaging, energy, labor, social allowances, indirect taxes, maintenance, transportation, and financial expenses. These concepts correspond to those of general accounting used by Moroccan businesses. According to the Ministry of Commerce annual survey, the consolidated accounts in the industry are structured as follow with some sectorial variations:

| | |
|----------------------|-----|
| - Raw Materials | 50% |
| - Labor | 10% |
| - Taxes | 6% |
| - Energy | 4% |
| - Packaging | 3% |
| - Accessories | 3% |
| - Transportation | 2% |
| - Maintenance | 1% |
| - Financial expenses | 1% |
| - Provisions | 18% |

Sectorial variances emanate mainly from:

- The scarcity of raw materials
- The level of processing of the materials
- The cost of labor in terms of qualification.
- The level of concentration and specialization of the activity in the region

The major micro-enterprise activity is production (30%), followed by services (23%) and commerce (21.5%). The non-structured sector is strongly concentrated in certain sub-sectors such as apparel (30% of manufacturers), food and tobacco (30%) and transport (28% of services)

The characteristics of the micro-business is the scarcity of the production factors. This means a contraction in the cost-structure as analyzed within the industry check-list expenses. The common behavior of the entrepreneur in defining its cost of good sold (COGS) is to add a third to raw materials and that makes his selling price. The 30% spread includes labor, overheads, the entrepreneur personal expenses and the net margin. The spread is generally brought down in cases of high competition. The real net margin is estimated to be around 15%.

II- CHARACTERISTIC OF TARGET GROUP

Difficulties in the 3 major economic sectors of micro-businesses: Industry, Commerce, and service are likely to be identical, however we will outline specificities when necessary and evaluate a working potential for the project

1. Definition

From a banker point of view, micro-businesses represent the small accounts, which total assets is low than Dh 1 million.

From the MASA stands, micro-business is considered as an artisanat and the definition is based on the level of technology: any activity that uses machinery of less than 10 horse-power. Modern-scale equipment has rendered the 1949 definition obsolete. MASA has enlarged today its domain of action to upgraded scales and a variety of sector: artisanat of art, artisanat of services, and artisanat of commerce. With this new focus, not a single microbusiness is left-over.

From MCI, and DS stands, the perception is emphasized in terms of business sales and level of accounting organization. A business with no declaration based on net income versus a forfeit lump-sum. The law give the option for business making less than 1 million to remain under a forfeit.

Our target group can be any of these categories of micro-businesses, with an identified business location, and in need of a credit loan in the interval of [Dh 500- Dh 50,000]. Selectivity criterium will be developed by activity, by seasonality, by profile and so forth once the project rode its methodology and its mechanics. Making any restrains on number of employees, sales, or assets could create difficulties in the selection process.

2. Regional Potential

Among the 2 main areas visited, the North (Tanger/Tetuan) and the Center (Fes/Meknes), the later shows a higher potential in terms of microbusiness concentration, business intensity, level of organization, and degree of commitment. As we outlined in this chart:

| Regions | Number | ME Potential | SCM members | Organization |
|---------|--------|--------------|-------------|--------------|
| Fes | 50,000 | 10,000 | 1,300 | High + |
| Meknes | 30,000 | 6,000 | 2,000 | High - |
| Tetuan | 50,000 | 10,000 | 500 | Medium |
| Tanger | 50,000 | 5,000 | None | Low |

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1. **FES**

a/ Position of professional from private sector
and officials of public sectors

From the first sight, our micro credit described with 3 main specificities: fast, with no guarantee, and at market rate, seems to be inadequate comparatively to SCM credits which seems still very competitive. Its characteristics are as described below:

- ▶ fast for an established entrepreneurs (one week),
- ▶ existence of the solidarity guaranty fund
- ▶ attractive interest rate, 5%, 7% and 12% which is the highest figure is low compared to markets which are round 16%.

Our theoretical interest rate which is considered to be more an operating spread than an benefit surplus seems to be our major handicap in selling the project. The estimation of the probability of potential stake for our credit project at different level of

GEMINI PUBLICATION SERIES

GEMINI Working Papers:

1. "Growth and Equity through Microenterprise Investments and Institutions Project (GEMINI): Overview of the Project and Implementation Plan, October 1, 1989-September 30, 1990." GEMINI Working Paper No. 1. December 1989. [not for general circulation]
- *2. "The Dynamics of Small-Scale Industry in Africa and the Role of Policy." Carl Liedholm. GEMINI Working Paper No. 2. January 1990. \$5.50
3. "Prospects for Enhancing the Performance of Micro- and Small-Scale Nonfarm Enterprises in Niger." Donald C. Mead, Thomas Dichter, Yacob Fisseha, and Steven Haggblade. GEMINI Working Paper No. 3. February 1990. \$6.00
4. "Agenda Paper: Seminar on the Private Sector in the Sahel, Abidjan, July 1990." William Grant. GEMINI Working Paper No. 4. August 1990. \$3.00
- *5. "Gender and the Growth and Dynamics of Microenterprises." Jeanne Downing. GEMINI Working Paper No. 5. October 1990. \$10.50
6. "Banking on the Rural Poor in Malaysia: Project Ikhtiar." David Lucock. GEMINI Working Paper No. 6. October 1990. \$3.30
7. "Options for Updating AskARIES." Larry Reed. GEMINI Working Paper No. 7. October 1990. \$3.50
- *8. "Technology — The Key to Increasing the Productivity of Microenterprises." Andy Jeans, Eric Hyman, and Mike O'Donnell. GEMINI Working Paper No. 8. November 1990. \$3.60
9. "Lesotho Small and Microenterprise Strategy — Phase II: Subsector Analysis." Bill Grant. GEMINI Working Paper No. 9. November 1990. \$15.50
- *10. "A Subsector Approach to Small Enterprise Promotion and Research." James J. Boomgard, Stephen P. Davies, Steven J. Haggblade, and Donald C. Mead. GEMINI Working Paper No. 10. January 1991. \$3.10
11. "Data Collection Strategies for Small-Scale Industry Surveys." Carl Liedholm. GEMINI Working Paper No. 11. January 1991. \$1.30

*Publications of general interest

12. "Dynamics of Microenterprises: Research Issues and Approaches." Carl Liedholm and Donald C. Mead. GEMINI Working Paper No. 12. January 1991. \$6.50
13. "Dynamics of Microenterprises: Research Priorities and Research Plan." Carl Liedholm and Donald C. Mead. GEMINI Working Paper No. 13. August 1990. [not for general circulation]
14. "Review of Year One Activities (October 1, 1989 to September 30, 1990) and Year Two Work Plan (October 1 to November 30, 1990)." GEMINI Working Paper No. 14. January 1991. [not for general circulation]
- *15. "The Process of Institutional Development: Assisting Small Enterprise Institutions to Become More Effective." Elaine Edgcomb and James Cawley. GEMINI Working Paper No. 15. February 1991. \$9.70
16. "Baseline Surveys of Micro and Small Enterprises: An Overview." Donald C. Mead, Yacob Fisseha, and Michael McPherson. GEMINI Working Paper No. 16. March 1991. \$2.60
17. "Kenya: Kibera's Small Enterprise Sector — Baseline Survey Report." Joan Parker and C. Aleke Dondo. GEMINI Working Paper No. 17. April 1991. \$6.40
- *18. "A Financial Systems Approach to Microenterprises." Elisabeth Rhyne and Maria Otero. GEMINI Working Paper No. 18. April 1991. \$3.00
- *19. "Agriculture, Rural Labor Markets, and the Evolution of the Rural Nonfarm Economy." Steve Haggblade and Carl Liedholm. GEMINI Working Paper No. 19. May 1991. \$2.50
- *20. "The Microenterprise Finance Institutions of Indonesia and Their Implications for Donors." Elisabeth Rhyne. GEMINI Working Paper No. 20. June 1991. \$3.40
21. "Microenterprise Growth Dynamics in the Dominican Republic: The ADEMI Case." Frank F. Rubio. GEMINI Working Paper No. 21. June 1991. \$3.10
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