PN-AEX-047

RBAP/RBRDFI

MICRO - ENTERPRISE ACCESS TO BANKING SERVICES IN MINDANAO

Short Term Technical Assistance

on MIS Assessment of Candidate Pilot Banks

Provided by

Mr. Peter Glibbery

Assisted by

Anthony P. Petalcorin
MIS/M&E Long-Term Specialist

Final Copy

Submitted by:
Chemonics International Inc.
Davao City, Mindanao, Philippines

August 28, 1998

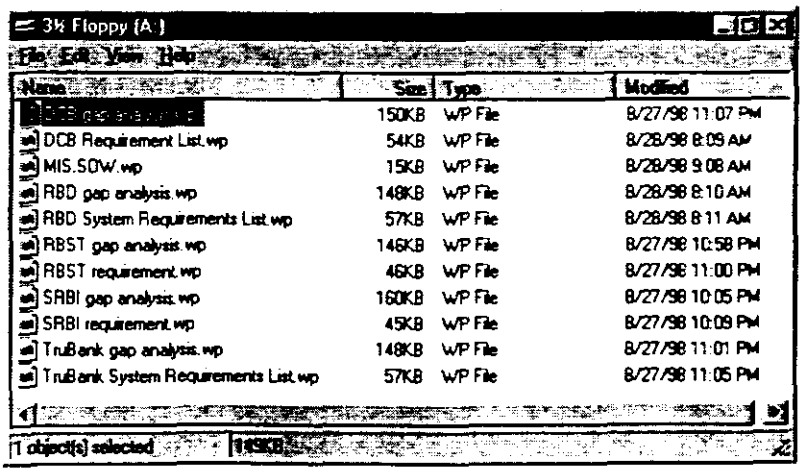
Under Contract No. 492-C-00-98-00008-00
United States Agency for International Development
Office of Economic Development
Manila, Philippines

CONTENTS

Diskette Contents

DCB gap analysis.wp	Gap Analysis for Davao Cooperative Bank
DCB Requirement List.wp	Systems Requirement List of Davao Cooperative Bank
MIS SOW.wp	MIS/M&E Specialists Revised Scope of Work
RBD gap analysis.wp	Gap Analysis for Rural Bank of Digos
RBD Systems Requirements List.wp	Systems Requirement List of Rural Bank of Digos
RBST gap analysis.wp	Gap Analysis for Rural Bank of Sto. Tomas
RBST requirement.wp	Systems Requirement List of Rural Bank of Sto. Tomas
SRBI gap analysis.wp	Gap Analysis for Sarangani Rural Bank, Inc.
SRBI requirement.wp	Systems Requirement List of Sarangani Rural Bank
TruBank gap analysis.wp	Gap Analysis for Tagum Rural Bank, Inc.
TruBank System Requirement List.wp	Systems Requirement list for Tagum Rural Bank

wp - WordPerfect 5.x for Windows format



Visit Report

Short Term Technical Assistance
on
MIS Assessment for Pilot Banks

This visit report provides the following:

i) a summary of the work conducted by Peter Glibbery between the 28th July and 12th August 1998.

ii) outstanding issues

iii) MIS actions required in the pilot phase of the project

Summary of Work Conducted

There were four tasks on the SOW. These are given below with summaries of work completed in italics.

1. Briefing paper and recommendations regarding Microbanker software program and alternative packages which may be appropriate for use by the participating banks.

Of the five banks that are being considered for the pilot phase all but one of them will be using Microbanker. After an initial assessment and due consideration of project timescales, the recommendation is that initially MABS-M should modify each banks existing software to take into account the requirements of the MABS-M program rather than to seek to develop a new software package. Primarily this is because it will take around 18-months to develop a new software package and the project pilot requires systems in-place and able to manage loans and deposits within the next 3-4 months. As the majority of the proposed participants in the pilot use Microbanker there are clear economies of scale to gained in modifying this system to provide almost identical functionality to participant banks. The remainder of the work conducted during the visit has been based upon the recommendation to modify existing software.

The recommendation for the long-term is to develop a new integrated loan and deposit management system. RBRDFI would be in an ideal position to develop this software given their experience with Microbanker, the skills they have at their disposal and given their close relations with target rural banks. Such a relationship with the end-customer will ensure that the RBRDFI is able to develop software that closely fits the needs of the

customer base. One clear benefit to USAID is that the organizaton would be able to use this software for other microfinance programs throughout the world.

2. A brief analysis of the status of MIS within the pilot group of participating banks and recommendations for MABS-M systems support and development.

Each bank in the pilot group is different and uses its computer systems in different ways. A Gap Analysis/System Specification Document for each bank has been produced which contains a detailed analysis of the current state of systems within each bank as well as a clear indication of the changes that will be required.

3. Recommendations for improving the SOW for the long-term MABS-M MIS/M&E Specialist.

The Statement of Work for the long-term MABS-M MIS Specialist was reviewed and recommendations for improvement were made to the COP which have now been incorporated into Anthony Petalcorin's SOW.

4. Guidelines and report format for carrying out a participating bank detailed system diagnostic.

Guidelines for carrying out a detailed system diagnostic have been produced and are attached to this visit report. The report format consists of a Requirements List and Gap Analysis/System Specification Document which has been used to conduct analyses of 5 banks. Details of how the a Requirements List and Gap Analysis/System Specification Document are used may be found in the Guidelines document. All these documents may be found attached to the back of this visit report.

Requirements List

The purpose of a Requirements List is to document the system requirements of each bank. This document serves as a baseline for all future modifications made to the software.

Site visits were conducted to following proposed pilot banks and their existing MIS systems analyzed:

- The Rural Bank of Sarangani
- Davao Cooperative Bank
- The Rural Bank of Santo Thomas
- The Rural Bank of Digos
- Tagum Rural Bank

In each case a Requirements List was agreed and signed-off by the responsible manager.

- A technical meeting was held with Pedro G. Crisostomo of RBRDFI to review the requirements lists of the RBS and RBST and determine the functionality that currently exists within the Microbanker (MBXD version).

- As the Davao Cooperative Bank do not use Microbanker, a technical meeting was held with Constantino Orais and Gil Salido of DCB to determine the functionality that currently exists within their Main Loan System and Grameen Loan System.

Gap Analysis/Specification Document

The Gap Analysis/System Specification document is a comparison between the ideal system (as contained in the Requirements List) and the existing system. The result of the gap analysis is a detailed assessment of the functionality that a system currently possesses and that functionality required.

- Gap Analysis/Specification Document was prepared and agreed by the relevant managers:

  - Rural Bank of Sarangani
  - The Rural Bank of Digos
  - Tagum Rural Bank

- A Gap Analysis/Specification Document was prepared for the RBST. The review of this document by RBST has been delayed by the death of Bong Solis. It is our intention to deliver this document in person to Rosele Solis on the 13th August for review and signature.

- The Gap Analysis/Specification Document was prepared by for DCB and we are currently awaiting senior management review and signature of this document.

- The Gap Analysis/Specification Documents for the following banks using Microbanker were formally presented to RBRDFI for quotation:

  - Rural Bank of Sarangani
  - Tagum Rural Bank

Additional Work Conducted Outside SOW

In addition to the work detailed in the SOW the following tasks were carried out:

- Coordinated the response to the death of Bong Solis to ensure that the Rural Bank of Santo Thomas has adequate computer support until a replacement can be trained.

- The previous consultants MIS Survey report was reviewed and modifications and revisions of the document were suggested.

- An outline plan and resourcing schedule for the development of a new MIS was developed.

- Guidelines for carrying out a detailed systems diagnostic were developed and given to long-term MIS Specialist Anthony Petalcorin who was provided with on-the-job training in the conduct of such an analysis.

- The procedure for MABS-M working with RBRDFI was formalized with Alex Buenaventura. A formal contract will be signed between MABS-M and RBRDFI for software modifications that will be signed by Alex.

Outstanding Issues

DCB currently possesses two systems for managing microenterprise loans. One of these manages individual loans (Main Loan System) and the other group loans (Grameen Loan System). We are still waiting for answers to a number of questions from DCB, but my current estimate is that it will take DCB's programmers between three and six months to add the necessary functionality to these systems to make them MABS-ready.

Within a month, it is planned that DCB's computer department will commence a program to install data communications links between eight offices. The computer manager estimates that this work to take between five to six months to complete. Unless this priority changes, no computer personnel will be available to make the modifications necessary for the MABS-M project as detailed in the Gap Analysis/Specification Document (13th August, 1998) until January 1999 at the earliest.

In addition, there are some major design issues to resolve whose eventual solution will revolve around the recommendations of the Organizational Analysis team. These recommendations will determine whether the Grameen System will need to be rewritten and integrated into the main Loans Management System, or alternatively, whether the Grameen System will continue as a stand alone system which will be further enhanced. Because of the large degree of uncertainty the Gap Analysis can only be a broad approximation of what will eventually be required and further analysis will need to be carried out.

Taking into account the communications infrastructure project it is realistic to assume that the functionality required by the MIS system to manage the Microenterprise Lending program will not be available for at least 10 months from the date of writing and depending upon the recommendations of the Organizational Analysis team it may be as long as 13-months before a suitable system becomes available. The two existing systems

are largely home-grown and it will not be a practical proposition to contract outside technical assistance to carry out this work.

In order to allow DCB to participate in the pilot program the available options are:

a) commence the pilot with a manual accounting system and transfer data from manual ledgers to the modified system once program changes are complete.

b) the Microlending unit could acquire a commercially available system (such as Microbanker) to manage micro loans. There is a question regarding DCB's ability to provide internal support for this system.

MIS-related Actions

Anthony Petalcorin will have responsibility for the following actions:

1) The outstanding Gap Analyses/Systems Specifications for the banks are to be signed off by the participant banks. Ideally recommendations by the Organizational Assessment team to change loan and deposit procedures should be made before the Gap Analysis/Systems Specifications have been signed off. However, as this would introduce an unacceptable delay of months to the program, it is recommended that a dual approach be adopted whereby a gap analysis is conducted on a best estimate of anticipated needs and any additional loan/deposit functionality be added retroactively once the detail becomes clear.

2) The signed-off gap analysis for each bank is to be sent to the relevant software supplier(s) with a request for a formal quotation. The supplier response should contain an indication of the level of effort required and pricing for each item of functionality requested. The supplier's response is to be evaluated with consideration for the functionality requested for other banks. It is already clear that some banks will request the same functionality and this information should be used to prioritize the work that needs to be carried out. (The first quotation from RBRDFI which refers to the modifications required by the Rural Bank of Sarangani will be ready by Friday 14th August).

3) To aid prioritization of the customization process, a functionality matrix should be developed listing the modification required by each bank. The banks should be asked to prioritize the functionality in order of importance - 1 being the most important, 2 the second important, 3 and so on.

4) Once functional prioritization has been completed, a contract will be drawn up between MABS-M and the software supplier stating level of effort and costs.

5) When the software modifications have reached the test phase, Anthony Petalcorin should act as the bank users advocate when reviewing the new functionality.

6) Anthony Petalcorin should provide a project management role in assessing technical training needs, the development of training material and in some cases delivering technical courses.

7) DMS Supervisor override software will need to be researched in detail. DMS are to be contacted regarding price and support.

8) It is important that the Byte-per-Byte product be thoroughly reviewed to see if it can offer a viable alternative to Microbanker. Site visits should be made to Manila and the Business and Consumer Bank in Cebu. The deliverable will be a requirements list and a gap analysis (the same as the prototype banks).

9) Once microenterprise loans and deposits procedures have been finalized and documented and the relevant software changes have been made then system hardware/software can be priced. There is little point specifying hardware/software before these stages have been completed.

10) It is extremely important that Anthony Petalcorin establishes and maintains a close working relationship with participant banks and software suppliers while programming work is underway. Anthony Petalcorin should be responsible for coordinating meetings between banks and suppliers at least once a week to review progress and resolve any outstanding questions and issues. This is a time-consuming process, but such is the nature of programming that questions on detailed business functionality often unexpectedly appear. If not addressed in a timely manner, unanswered questions may delay programming work. Without this close cooperation between the business side and the programmer the danger is that the finished set of programs will not meet the needs of the participant bank or the MABS-M initiative as a whole.

11) There is a need to obtain a contractual commitment from Microbanker that the alterations that we have requested belong to USAID and can be used by USAID throughout the world.

12) Obtain memorandum from the Banko Sentral ng Pilipinas regarding the full provisioning of outstanding loans with 3 or more repayments overdue.

13) Development of a roll-out and training plan for each bank. The training plan will address the different training needs for tellers, managers and technicians.

MABS-M Activity
Scope of Work for Long-Term Technical Assistance
Local MIS Specialist

I. Introduction

The MABS-M Activity is designed to expand the provision of financial services, both lending and deposit mobilization, to micro entrepreneurs and other groups at the lower socio-economic levels in Mindanao through the existing network of Rural Banks (RBs) and Cooperative Rural Banks (CRBs). During the life of the project, a minimum of 20 RBs/CRBs will be selected to participate in the MABS-M initiative. Through the provision of technical assistance, training and other forms of support, the Participating Banks (PBs) will be encouraged to significantly increase the services and deepen their level of financial intermediation in the target sector.

RBs/CRBs are formal financial intermediaries which operate in accordance with the specific supervisory norms and regulatory framework established by the Central Bank. It is expected that as a result of the project, other formal intermediaries in Mindanao and elsewhere in the Philippines, will be encouraged to penetrate the micro enterprise market and incorporate micro lending into their traditional loan portfolios.

MABS-M project implementation has been underway since early 1998. By end June, 1998, 3-6 PBs will have been selected and work will have begun on conducting institutional diagnostics of each intermediary. As proposed in Chemonics' original proposal, these activities will require the services of a full-time local MIS specialist, to begin work in month seven of the contract.

II. The Assignment

The consultant will provide technical assistance in four MABS-M activity components: institutional strengthening, training, RBRDFI, and monitoring and evaluation. As a full time employee, he will also be called upon to contribute to all of the other activity components from time to time. The position will be for 42 months, or 3 and one-half years, with the possibility of a two year extension, as per the MABS-M contract. The details of the assignment are below:

A. Institutional Strengthening

Following the selection of the pilot group of PBs, the MABS-M team will conduct detailed institutional assessments of each intermediary. These diagnostics will provide baseline data regarding the management routines, organizational structure, MIS systems, policies, and procedures currently operative in each Participating Bank (PB). The MIS consultant will assess the MIS capabilities, existing systems, and MIS needs of each PB. For each phase of rolling the program out to banks throughout Mindanao, he will conduct individual bank MIS assessments. The MIS component of the diagnostics will be used to:

a. define the specific MIS training requirements of each PB;
b. define the type of MIS support to be provided through the SAF fund, if any;
c. formulate the individual PB work plans vis a vis MIS;
d. establish benchmarks against which future performance of each PB will be measured;
e. establish the resources which each PB will be required to contribute to the effort;
f. represent MIS perspective at the MABS-M Management Committee meetings.

The consultant will review and assist in the MIS component of the institutional assessments to ensure that all issues have been analyzed appropriately and the necessary baseline data collected. He will then draft the MIS portion of individual work plans, discuss each MIS proposal with PB senior management, revise as necessary, and contribute the MIS portion to the draft PB agreements for Mancom approval and for use as PB action plans for the pilot phase.

B. Monitoring and Evaluation

Monitoring and evaluation is a critical component of MABS-M. First, we must be able to measure our own performance as a US AID results-oriented activity. Second, we must institutionalize a monitoring and evaluation function within each participating bank vis a vis their new micro finance programs and activities.

The MIS specialist will be responsible for ensuring a close liaison between client bank and suppliers during software customization, implementation and data migration phases of the project. During these phases, he will be responsible for chairing weekly project meetings between individual banks and suppliers.

The MIS specialist will assist in developing methods, forms, and systems to collect data to be incorporated to the PBs existing banking software that will enable the bank to monitor and evaluate its performance. The PBs and MABS-M should agree upon the monitoring and evaluation criteria during the action planning phase. Likewise, the system must be able to upload this data to allow MABS-M project team to consolidate the results for submission to US AID.

The MIS specialist will also be responsible that systems are relevant and will oversee adjustments and improvements in response to the changing needs of the project.

At the bank level, these systems will use pre-selected performance indicators and criteria such as loan quality, number of new loans, number of new depositors, size of loans, etc. The MIS specialist will design a monitoring and evaluation system to allow the bank to carefully monitor its new micro finance activities. Simultaneously, this system must upload consolidated data to allow the MABS-M team to monitor and evaluate project progress.

In response to new information or needs, the indicators and criteria used to measure bank and MABS-M performance may change over time. The MIS specialist will be required to adjust and improve the MIS and monitoring and evaluation systems in response to new needs.

10

C. Training

The consultant will be responsible for designing, managing, implementing, monitoring, and evaluating the MIS training provided to each PB. If new MIS software or computer hardware is introduced to the bank, he will be responsible for overseeing installation, liaising with suppliers to ensure correct installation .

At times, MABS-M will offer training to a wide range of rural banks in Mindanao, beyond those selected as participating banks. This training may include MIS related workshops or seminars. As needed, the MIS specialist will design and develop such MIS-related training events.

RBRDFI

Beginning in late 1998, the MABS-M team will begin assisting the RBRDFI in the formulation of a business plan. Limited SAF funds may be used to assist the RBRDFI in strengthening its services. This assistance may include MIS or computer related software, hardware, or systems. If this is the case, the MIS specialist will be called upon to assist in MABS-M assisted MIS improvements called for in the RBRDFI business plan.

Additionally, since the RBRDFI staff are located in the MABS-M office, the MIS specialist will serve as MABS-M liaison to the programmers and systems analysts on the RBRDFI staff. This will include potential work with MicroBanker and/or other software, as needed and agreed upon with the participating banks. MicroBanker is a system sold and supported by the RBRDFI and used by numerous rural banks in the Philippines.

Rural Bank of Sarangani System Requirements List – July 30, 1998

1. Access control and security

1.1. System access is controlled through a user definable password.

1.2. Record-level data security is provided to protect sensitive system information against outside manipulation.

1.3. Audit trail is provided with a hard copy of daily transactions and account listings which shows the number and date of previous transactions.

1.4. The ability to define a users record access authority as any combination of the following - read, write, update.

1.5. The system must be able to allow remote supervisor override.

2. Loan Functionality

2.1. Currently, loans are recorded in the Microbanker Loans Module and a record is made in a manual ledger. The reason for this duplication is because some of the loan functionality required by the bank does not currently exist within Microbanker. The following functionality will need to be added to ensure that the loan process can be fully automated.

2.2. Interests must be calculated into the following different ways:

- Interest deducted from the loan amount before release (disbursement)

- Interest is spread equally across loan repayments

- Special interest payment scheme for salary based loans. With this method interest is calculated as shown in the following example:

Principal: P 10,000
Interest : 10%
Term : 10 months

For the first three months:

	Principal	Interest	Total
Month 1	1,000.00	100.00	1,100.00
Month 2	1,000.00	100.00	1,100.00
Month 3	1,000.00	100.00	1,100.00

Principal Balance after 3 mos. = 7,000

For remaining repayments:

Month 4	1,000.00	70.00	1,070.00
Month 5	1,000.00	70.00	1,070.00
Month 6	1,000.00	70.00	1,070.00

Principal balance after 6 months is P4,000

Month 7	1,000.00	40.00	1,040.00
Month 8	1,000.00	40.00	1,040.00
Month 9	1,000.00	40.00	1,040.00
Month 10	1,000.00	40.00	1,040.00

9. The following loan types needs to be accommodated by the system:

    9.1 Agricultural Loans
    9.2 Commercial Loans
    9.3 Others:
        - PCFC (Peer or Group Lending)
        - Jewelry loans
        - Quedan Guaranteed Loans
        - Salary Loans

10. The following repayment schedule needs to be accommodated

    10.1 Weekly amortization
    10.2 Monthly amortization
    10.3 Single amortization (30 days, 45 days, etc)
    10.4 Quarterly amortization

11. The following payments needs to be stored:

    11.1 Principal payments
    11.2 Interest

12 The system must have the capability to recalculate the following:
    - penalty is 2% of past due
    - documentary stamps
    - service charges of 4%
    - insurance fees
    - notarial fees

12. The system must be able to recalculate the interest amount to facilitate early loan repayment.

13. The following interest computation divisors are required

    13.1. 360 days for loans
    13.2. 365 days for deposits

14. The system must be able to track the following when the loan is approved:

    14.1. A P300 deposit account for each member of a group and/or individual borrowers
    14.2. A P50 deposit for salary loan borrowers

14.3. Indicate post-dated checks (PDCs) where applicable

15. The system must be able to flag microenterprise loans (P 25,000 and under)

16. The system must be able to assign a loan officer to each loan and relate the loan officer to all subsequent corresponding loan transactions.

17. Loans must be tracked by the system from the loan application stage not just from the loan approval stage.

3. Deposits (Savings)

The bank currently uses the savings module of Microbanker (MBX). This module largely meets the requirement of the bank however, the following additions are required:

1. The system must allow users with appropriate access to change parameters such as:

   1.1. Interest rates for savings deposits
   1.2. Fees and other charges
   1.3. Penalty charges
   1.4. Limits on minimum funds in accounts

2. The system must be able to flag or identify microenterprise accounts (those started with P 1,000 and under)

4. Reports

The system must be able to generate the following reports:

1. Number of new loans within a period specified by the user.
2. Number of repeat loans within a period specified by the user.
3. Numbers of loans sorted by loan term within a period specified by the user.
4. Number of loans sorted by loan size within a period specified by the user.
5. Advanced notice list showing repayments due at a specific point in time.
6. Able to generate a delinquency report.
7. Repayment/account aging to enable bank to determine overall portfolio risk.
8. Loan profiles - gender, age, economic activity.
9. Repayment rate of loans to enable account officers (AOs) to be evaluated.
10. Repayment rate by business sector.

11. Total of interest collected from microenterprise program

12. Total doubtful/written-off interest and principal.

13. Active and historical loan portfolio by AO and by client. This is to help determine how a loan portfolio develops and is managed by the AO. For example, did one AO establish 100 loans of P 10,000 but none of the clients returned for a second loan, while another AO established 200 loans of P 5,000 but 150 clients returned for a second loan and 100 clients returned for a third loan.

14. The system must be able to identify which loan cycle the borrower is in.

15. Number and amount of new microenterprise loans made by type of account (initial loan size of P25,000 or under, second loan any size).

16. Number of new micro savings depositors and deposits size by type of account (initial deposit less than P 1000)

17. Number of loans and outstanding loan portfolio per microenterprise loan officer

18. On-time repayment rate

19. Loan loss rate

20. Past due rate and amount

21. Aging of past due loans

22. Effective annual interest rate(s) and overall yield in portfolio

23. Interest rate and maturity

Francisco L. Laiz, Jr.
President
Rural Bank of Sarangani

July 30, 1998

Rural Bank of Sta. Tomas System Requirements List – July 31, 1998

1. **Access control and security**

   1.1. System access is controlled through a user definable password.

   1.2. Record-level data security is provided to protect sensitive system information against outside manipulation.

   1.3. Audit trail is provided with a hard copy of daily transactions and account listings which shows the number and date of previous transactions.

   1.4. The ability to define a users record access authority as any combination of the following - read, write, update.

   1.5. The system must be able to allow remote supervisor override.

2. **Loan Functionality**

   2.1. Currently, loans are recorded in the Microbanker Loans Module and a record is made in a manual ledger. The reason for this duplication is because some of the loan functionality required by the bank does not currently exist within Microbanker. The following functionality will need to be added to ensure that the loan process can be fully automated.

   2.2. Interests must be calculated into the following different ways:

   - Interest deducted from the loan amount before release (disbursement)

   - Interest is spread equally across loan repayments

   2.3. The following loan types needs to be accommodated by the system:

   2.3.1. Agricultural Loans
   2.3.2. Commercial Loans
   2.3.3. Industrial Loans
   2.3.4. Others
      2.3.4.1. Quedan Guaranteed Loans
      2.3.4.2. Salary Loans
      2.3.4.3. Fringe Benefits Loans (Bank Employees)

   2.4. The following repayment schedule needs to be accommodated:

   2.4.1. Daily amortization
   2.4.2. Weekly amortization
   2.4.3. Monthly amortization
   2.4.4. Single amortization (30 days, 45 days, etc)

2.5. The following payments needs to be stored:

2.5.1. Principal payments
2.5.2. Interest
2.5.3. Service charges (5%)

2.6. The system must have the capability to recalculate the following

2.6.1. penalty is 1% of past due
2.6.2. documentary stamps
2.6.3. insurance fees
2.6.4. notarial fees

2.7. The system must be able to recalculate the interest amount to facilitate early loan repayment

2.8. The following interest computation divisors are required
2.8.1. 360 days for loans
2.8.2. 365 days for deposits

2.9. The system must be able to track the following when the loan is approved:

2.10. P300 deposit account for each member of a group and/or individual borrowers

2.11. A P50 deposit for salary loan borrowers

2.12. Indicate post-dated checks (PDCs) where applicable

2.13. The system must be able to flag microenterprise loans (P 25,000 and under)

2.14. The system must be able to assign a loan officer to each loan and relate the loan officer to all subsequent corresponding loan transactions.

2.15. Loans must be tracked by the system from the loan application stage not just from the loan approval stage.

3. Deposits (Savings)

The bank currently uses the savings module of Microbanker (MBX). This module largely meets the requirement of the bank however, the following additions are required:

1. The system must allow users with appropriate access to change parameters such as:

1.1. Interest rates for savings deposits
1.2. Fees and other charges
1.3. Penalty charges
1.4. Limits on minimum funds in accounts

2. The system must be able to flag or identify microenterprise accounts (those started with P 1,000 and

under)

4. Reports

The system must be able to generate the following reports:

1. Number of new loans within a period specified by the user.
2. Number of repeat loans within a period specified by the user.
3. Numbers of loans sorted by loan term within a period specified by the user.
4. Number of loans sorted by loan size within a period specified by the user.
5. Advanced notice list showing repayments due at a specific point in time.
6. Able to generate a delinquency report.
7. Repayment/account aging to enable bank to determine overall portfolio risk.
8. Loan profiles - gender, age, economic activity.
9. Repayment rate of loans to enable account officers (AOs) to be evaluated.
10. Repayment rate by business sector.
11. Total of interest collected from microenterprise program
12. Total doubtful/written-off interest and principal.
13. Active and historical loan portfolio by AO and by client. This is to help determine how a loan portfolio develops and is managed by the AO. For example, did one AO establish 100 loans of P 10,000 but none of the clients returned for a second loan, while another AO established 200 loans of P 5,000 but 150 clients returned for a second loan and 100 clients returned for a third loan.
14. The system must be able to identify which loan cycle the borrower is in.
15. Number and amount of new microenterprise loans made by type of account (initial loan size of P25,000 or under, second loan any size).
16. Number of new micro savings depositors and deposits size by type of account (initial deposit less than P 1000)
17. Number of loans and outstanding loan portfolio per microenterprise loan officer
18. On-time repayment rate

19. Loan loss rate

20. Past due rate and amount

21. Aging of past due loans

22. Effective annual interest rate(s) and overall yield in portfolio

23. Interest rate and maturity

Solis 7/1/98

Rosele R. Solis
President & General Manager
Rural Bank of Sto. Tomas

July 31, 1998

Tagum Rural Bank (TruBank) System Requirements List – August 11, 1998

1. Access control and security

1.1. System access is controlled through a user definable password.

1.2. Record-level data security is provided to protect sensitive system information against outside manipulation.

1.3. Audit trail is provided with a hard copy of daily transactions and account listings which shows the number and date of previous transactions.

1.4. The ability to define a users record access authority as any combination of the following – read, write, update

2. Loan Functionality

2.1. Interest must be calculated using the following methods:

- For individual loans and group loans, interest is deducted from the loan amount before release
- For individual loans and group lending, interest is calculated "add-on"

2.2. The following loan types need to be accommodated by the system:

2.2.1. Agricultural Loan
2.2.2. Commercial Loan
2.2.3. Industrial Loans
2.2.4. Others
  2.2.4.1. Microenterprise loans
  2.2.4.2. Microenterprise individual loans
  2.2.4.3. Salary loans (DECS-IBM)
  2.2.4.4. Salary loans (LGUs)

2.3. The following repayment schedule need to be accommodated

2.3.1. Weekly amortization
2.3.2. Monthly amortization
2.3.3. Quarterly amortization
2.3.4. Single amortization (30 days, 45 days, etc)
2.3.5. 15 – 30 days amortization (for bank employees)

2.4. The following payments needs to be recorded in the database:

2.4.1. Principal payments
2.4.2. Interest
2.4.3. Service charges
2.4.4. Guarantee Fee

2.5. The system must have the capability to recalculate the following:

2.5.1. Penalty
2.5.2. Documentary stamp
2.5.3. Insurance fees
2.5.4. Notarial Fees

2.6. The system must be able to recalculate the interest amount to facilitate early loan repayment (rebate) only for individual loans.

2.7. The following interest computation divisors are required.

2.7.1. 360 days for loans
2.7.2. 365 days for deposits

2.8. The system must be able to track the following when the loan is approved:

2.8.1. Cross reference individual loan account to group's deposit account
2.8.2. Cross reference individual deposit account of group members to group's deposit account
2.8.3. Track the post dated checks (PDC) paid by individual borrowers

2.9. The system must be able to flag initial microenterprise loans (P25,000 and under) for MABS-M project purposes. The system must continue to track subsequent loans over P25,000 as microenterprise loans as long as the initial loan to the borrower was P25,000 or under.

2.10. The system must be able to assign a loan officer to each loan and relate the loan officer to all subsequent corresponding loan transactions.

2.11. Loans must be tracked by the system from the loan application stage not just form the loan approval stage.

2.12. The system must use a single customer id. number that will be used to track all transactions (deposit, loans, and etc). This will enable the system to track not only the current loan account and transaction but the history of loan accounts as well.

2.13. The system must be able to identify the group number of individual group borrowers.

2.14. The system must be able to identify microenterprise loans by means of a flag that is set by the user.

2.15. The system must be able to store a physical locator code i.e. filing cabinet number or folder number. This will assist the loan officer identify paper records associated with a particular customer.

3. Deposits (Savings)

The system savings module is computerized and largely meets the requirement of the bank, however, the following additions are required:

3.1. The system should allow users with appropriate access to change the following parameters:

- 3.1.1. Interest rates for savings deposits
- 3.1.2. Fees and other charges
- 3.1.3. Penalty charges
- 3.1.4. Limits on minimum funds in accounts

3.2. The system must be able to identify microenterprise accounts (those started with P500 and under).

4. Reports

4.1. Number of new loans within a period specified by the user.

4.2. Number of repeat loans within a period specified by the user.

4.3. Number of loans sorted by loan term within a period specified by the user.

4.4. Number of loans sorted by loan size within a period specified by the user.

4.5. Advanced notice list showing repayments due at a specific point in time

4.6. The system should be able to generate a delinquency report.

4.7. Repayment/account aging to enable the bank to determine overall portfolio risk.

4.8. Loan profiles — gender, age, and economic activity.

4.9. Repayment rate of loans to enable account officers (AOs) to be evaluated.

4.10. Repayment rate by business sector.

4.11. Total of interest collected from microenterprise program.

4.12. Total doubtful-written-off interest and principal.

4.13. Active historical loan portfolio by AO and by client. This is to help determine how a loan portfolio develops and is managed by the AO. For example, did one AO establish 100 loans of P 10,000 but none of the clients returned for a second loan, while another AO established 200 loans of P 5,000 but 150 clients returned for a second loan and 100 clients returned for a third loan.

4.14. The system must be able to identify which loan cycle the borrower is in.

4.15. Number and amount of new microenterprise loans made by type of account (initial loan size of P25,000 or under, second loan any size).

4.16. Number of loans and outstanding loan portfolio per microenterprise loan officer.

4.17. Number of new microenterprise savings depositors and deposit size by type of account (initial deposit P5x00).

4.18. On-time repayment rate.

4.19. Loan loss rate.

4.20. Past due rate and amount.

4.21. Aging of past due loans.

4.22. Effective annual interest rate(s) and overall yield of the portfolio.

4.23. Interest rate and maturity matching.

Mr. Alexander C. Cantoy
Manager
TruBank – Sta. Cruz
August 11, 1998

Rural Bank of Digos System Requirements List – August 3, 1998

1. Access control and security

1.1. System access is controlled through a user definable password.

1.2. Record-level data security is provided to protect sensitive system information against outside manipulation.

1.3. Audit trail is provided with a hard copy of daily transactions and account listings which shows the number and date of previous transactions.

1.4. The ability to define a users record access authority as any combination of the following – read, write, update

2. Loan Functionality

2.1. Interest must be calculated using the following methods:

- For individual loans, interest is deducted from the loan amount before release
- For group lending, interest is calculated "add-on"

2.2. The following loan types need to be accommodated by the system:

2.2.1. Agricultural Loan
2.2.2. Commercial Loan
2.2.3. Industrial Loans
2.2.4. Others
  2.2.4.1. Microenterprise loans
  2.2.4.2. Microenterprise individual loans
  2.2.4.3. Salary loans (DECS-IBM)
  2.2.4.4. Tricycle Drivers loans

2.3. The following repayment schedule need to be accommodated

2.3.1. Daily amortization
2.3.2. Weekly amortization
2.3.3. Monthly amortization
2.3.4. Single amortization (30 days, 45 days, etc)
2.3.5. 15 – 30 days amortization (individual borrowers)

2.4. The following payments needs to be recorded in the database:

2.4.1. Principal payments
2.4.2. Interest
2.4.3. Service charges
2.4.4. Guarantee Fee

2.5. The system must have the capability to recalculate the following:

2.5.1. Penalty
2.5.2. Documentary stamp
2.5.3. Insurance fees
2.5.4. Notarial Fees

2.6. The system must be able to recalculate the interest amount to facilitate early loan repayment (rebate) only for individual loans.

2.7. The following interest computation divisors are required.

2.7.1. 360 days for loans
2.7.2. 365 days for deposits

2.8. The system must be able to track the following when the loan is approved:

2.8.1. P14 per week mandatory deposit for each member of a group and/or individual borrowers
2.8.2. Cross reference individual loan account to group's deposit account
2.8.3. Cross reference individual deposit account of group members to group's deposit account
2.8.4. Track the post dated checks (PDC) paid by individual borrowers

2.9. The system must be able to flag initial microenterprise loans (P25,000 and under) for MABS-M project purposes. The system must continue to track subsequent loans over P25,000 as microenterprise loans as long as the initial loan to the borrower was P25,000 or under.

2.10. The system must be able to assign a loan officer to each loan and relate the loan officer to all subsequent corresponding loan transactions.

2.11. Loans must be tracked by the system from the loan application stage not just form the loan approval stage.

2.12. The system must use a single customer id. number that will be used to track all transactions (deposit, loans, and etc). This will enable the system to track not only the current loan account and transaction but the history of loan accounts as well.

25

2.13. The system must be able to identify the group number of individual group borrowers.

2.14. The system must be able to identify microenterprise loans by means of a flag that is set by the user.

2.15. The system must be able to store a physical locator code i.e. filing cabinet number or folder number. This will assist the loan officer identify paper records associated with a particular customer.

3. Deposits (Savings)

The system savings module is computerized and largely meets the requirement of the bank, however, the following additions are required:

3.1. The system should allow users with appropriate access to change the following parameters:

3.1.1. Interest rates for savings deposits
3.1.2. Fees and other charges
3.1.3. Penalty charges
3.1.4. Limits on minimum funds in accounts

3.2. The system must be able to identify microenterprise accounts (those started with P1,000 and under).

4. Reports

4.1. Number of new loans within a period specified by the user.

4.2. Number of repeat loans within a period specified by the user.

4.3. Number of loans sorted by loan term within a period specified by the user.

4.4. Number of loans sorted by loan size within a period specified by the user.

4.5. Advanced notice list showing repayments due at a specific point in time

4.6. The system should be able to generate a delinquency report.

4.7. Repayment/account aging to enable the bank to determine overall portfolio risk.

4.8. Loan profiles — gender, age, and economic activity.

4.9. Repayment rate of loans to enable account officers (AOs) to be evaluated.

4.10. Repayment rate by business sector.

4.11. Total of interest collected from microenterprise program.

4.12. Total doubtful/written-off interest and principal.

4.13. Active historical loan portfolio by AO and by client. This is to help determine how a loan portfolio develops and is managed by the AO. For example, did one AO establish 100 loans of P 10,000 but none of the clients returned for a second loan, while another AO established 200 loans of P 5,000 but 150 clients returned for a second loan and 100 clients returned for a third loan.

4.14. The system must be able to identify which loan cycle the borrower is in.

4.15. Number and amount of new microenterprise loans made by type of account (initial loan size of P25,000 or under, second loan any size).

4.16. Number of loans and outstanding loan portfolio per microenterprise loan officer.

4.17. Number of new microenterprise savings depositors and deposit size by type of account (initial deposit P200).

4.18. On-time repayment rate.

4.19. Loan loss rate.

4.20. Past due rate and amount.

4.21. Aging of past due loans.

4.22. Effective annual interest rate(s) and overall yield of the portfolio.

4.23. Interest rate and maturity matching.

4.24. Computer generated statement of accounts and official receipt (OR).

Mrs. Isabel Abasolo
Manager
Rural Bank of Digos
August 10, 1998

TO: TONTON

4.9. Repayment rate of loans to enable account officers (AOs) to be evaluated.

4.10. Repayment rate by business sector.

4.11. Total of interest collected from microenterprise program.

4.12. Total doubtful/written-off interest and principal.

4.13. Active historical loan portfolio by AO and by client. This is to help determine how a loan portfolio develops and is managed by the AO. For example, did one AO establish 100 loans of P 10,000 but none of the clients returned for a second loan, while another AO established 200 loans of P 5,000 but 150 clients returned for a second loan and 100 clients returned for a third loan.

4.14. The system must be able to identify which loan cycle the borrower is in.

4.15. Number and amount of new microenterprise loans made by type of account (initial loan size of P25,000 or under, second loan any size).

4.16. Number of loans and outstanding loan portfolio per microenterprise loan officer.

4.17. Number of new microenterprise savings depositors and deposit size by type of account (initial deposit P200).

4.18. On-time repayment rate.

4.19. Loan loss rate.

4.20. Past due rate and amount.

4.21. Aging of past due loans.

4.22. Effective annual interest rate(s) and overall yield of the portfolio.

4.23. Interest rate and maturity matching.

4.24. Computer generated statement of accounts and official receipt (OR).

Mrs. Isabel Abasolo
Manager
Rural Bank of Digos
August 10, 1998

Davao Cooperative Bank System Requirements List – July 31, 1998

1. **Access control and security**

   1.1. System access is controlled through a user definable password.

   1.2. Record-level data security is provided to protect sensitive system information against outside manipulation.

   1.3. Audit trail is provided with a hard copy of daily transactions and account listings which shows the number and date of previous transactions.

   1.4. The ability to define a users record access authority as any combination of the following - read, write, update.

   1.5. The system must be able to allow remote supervisor override.

2. **Loan Functionality**

   2.1. Currently, loans are recorded and monitored by the bank's computer system.

   2.2. Interests must be calculated into the following different ways:

   - Interest deducted from the loan amount before release for individual loans

   - Interest is calculated "add-on" for group lending

   2.3. The following loan types needs to be accommodated by the system:

   2.3.1. Agricultural Loans
   2.3.2. Commercial Loans
   2.3.3. Industrial Loans
   2.3.4. Others
   2.3.4.1. Micro finance loans (Grameen Bank Replication)
   2.3.4.2. Micro finance individual
   2.3.4.3. Salary Loans

   2.4. The following repayment schedule needs to be accommodated:

   2.4.1. Daily amortization
   2.4.2. Weekly amortization
   2.4.3. Monthly amortization
   2.4.4. Single amortization (30 days, 45 days, etc)
   2.4.5. 15-30 amortization (individual borrowers)

2.5. The following payments needs to be stored:

2.5.1. Principal payments
2.5.2. Interest (22% for Grameen, 24% for other loans)
2.5.3. Service charges (6%)
2.5.4. Guarantee Fee (2%)

2.6. The system must have the capability to recalculate the following

2.6.1. penalty is 2.5% per month for group lending
2.6.1. penalty is 3% per month for individual
2.6.2. documentary stamps
2.6.3. insurance fees
2.6.4. notarial fees

2.7. The system must be able to recalculate the interest amount to facilitate early loan repayment (rebate) only for individual.

2.8. The following interest computation divisors are required
2.8.1. 360 days for loans
2.8.2. 365 days for deposits

2.9. The system must be able to track the following when the loan is approved:

2.9.1 P14 per week mandatory deposit account for each member of a group and/or individual borrowers

2.9.2 Cross reference of individual loan account to group's deposit account

2.9.3 Cross reference individual deposit account of group members to group's deposit account

2.9.4 Track the post dated checks (PDC) paid by individual borrowers

2.13. The system must be able to flag initial microenterprise loans (P 25,000 and under) for MABS-M project purposes although DCB considers microenterprise loans to be P 30,000 and under. The system must continue to track subsequent loans over P 25,000 as microenterprise loans as long as the initial loan to the borrower was P25,000 or under.

2.14. The system must be able to assign a loan officer to each loan and relate the loan officer to all subsequent corresponding loan transactions.

2.15. Loans must be tracked by the system from the loan application stage not just from the loan approval stage.

2.16. The system must adapt a customer or client number that will be use to all transactions (deposit, loans, and etc.). This will enable the system to track not only the current loan account and transaction but the history of loan accounts as well.

2.17. The system must be able to flag group number of the individual group borrowers.

2.18. The system must be able to track /flag for sub-classification i.e. type of business, etc..

2.19. The system must be able to store a physical locator code i.e. filing cabinet number or folder number

3. Deposits (Savings)

The bank savings module is computerized and largely meets the requirement of the bank, however the following additions are required:

1. The system must allow users with appropriate access to change parameters such as:

   1.1. Interest rates for savings deposits
   1.2. Fees and other charges
   1.3. Penalty charges
   1.4. Limits on minimum funds in accounts

2. The system must be able to flag or identify microenterprise accounts (those started with P 1,000 and under)

4. Reports

The system must be able to generate the following reports:

...

1. Number of new loans within a period specified by the user.
2. Number of repeat loans within a period specified by the user.
3. Numbers of loans sorted by loan term within a period specified by the user.
4. Number of loans sorted by loan size within a period specified by the user.
5. Advanced notice list showing repayments due at a specific point in time.
6. Able to generate a delinquency report.
7. Repayment/account aging to enable bank to determine overall portfolio risk.
8. Loan profiles - gender, age, economic activity.
9. Repayment rate of loans to enable field representatives (FRs) to be evaluated.
10. Repayment rate by business sector.
11. Total of interest collected from microenterprise program

12. Total doubtful/written-off interest and principal.

13. Active and historical loan portfolio by FR and by client. This is to help determine how a loan portfolio develops and is managed by the FR. For example, did one FR establish 100 loans of P 10,000 but none of the clients returned for a second loan, while another FR established 200 loans of P 5,000 but 150 clients returned for a second loan and 100 clients returned for a third loan.

14. The system must be able to identify which loan cycle the borrower is in.

15. Number and amount of new microenterprise loans made by type of account (initial loan size of P25,000 or under, second loan any size).

16. Number of new micro savings depositors and deposits size by type of account (initial deposit P 200)

17. Number of loans and outstanding loan portfolio per microenterprise loan officer

18. On-time repayment rate

19. Loan loss rate

20. Past due rate and amount

21. Aging of past due loans

22. Effective annual interest rate(s) and overall yield in portfolio

23. Interest rate and maturity

24. Computer generated statement of accounts and official receipt (OR)

Joel D. Lagura
Department Manager - Micro Finance
Davao Cooperative Bank

July 31, 1998

The Sarangani Rural Bank, Inc. (SRBI) MABS-M Gap Analysis/System Specification Document - August 3rd, 1998

This document contains details of the customizations necessary to modify the Microbanker (MBXD) system to the needs of The Sarangani Rural Bank, Inc. (SRBI).

The Sarangani Rural Bank, Inc. will need to upgrade its old version of Microbanker to Microbanker MBXD in order to comply with the Banko Sentral ng Pilipinas' mandate that within 17 months, all computerized banking software must be Year 2000 complaint. However, the current Microbanker (MBXD) version still needs to be customized to accommodate the needs of SRBI.

Included in this document are:

1) A list of functionality that is already present within the MBXD system.
2) A description of the additional functionality that will need to be programmed

1) Functionality currently present within the Microbanker (MBXD) system

The functionality current present within MBXD and the determination as to its applicability to the SRBI was provided by Mr. Pedro G. Crisostomo of RBRDFI after review of the SRBI System Requirement List last (July 30, 1998).

Access control and security

a) System access is controlled through a user definable password.

b) Record-level data security is provided to protect sensitive system information against outside manipulation.

c) An audit trail is provided with a hard copy of daily transactions and account listings, which show the number, and date of previous transactions.

d) The MBXD system has the ability to define a users access authority as any combination of the following - read, write, update.

Loan Functionality

The Microbanker System will accommodate:

a) Processing the following loan types:
   - Agricultural Loans
   - Commercial Loans
   - Other Loans:
     - PFCF (Peer or Group Lending)
     - Jewelry Loans
     - Quedan Guaranteed Loans

In addition to modifying the above existing reports, the Microbanker System must be able to generate the following reports:

f) Number of loans sorted by loan term within a period specified by the user.
   i. The user will enter a date range consisting of a begin and end date.
   ii. Report output:

SARANGANI RURAL BANK, INC.
Number of Loans Sorted by Loan Term

July 1 - 31, 1998

Term	No. of Loan Borrowers	% to Total	Amount	% to Total
30 days	35	17.07%	875,000.00	17.07%
90 days	40	19.53%	1,000,000.00	19.53%
6 months	100	48.78%	2,500,000.00	48.78%
1 year	20	9.75%	500,000.00	9.75%
2 years	10	4.87%	250,000.00	4.87%
Total	300	100.00%	5,125,000.00	100.00%

g) Advanced notice list showing repayments due at a specific point in time (statement of account).

   i. Report output:

SARANGANI RURAL BANK, INC.
Repayments Due

Period Covering July 1 - 31, 1998

Due Date	Acct	Account Name	Principal Due	Interest Due	Other Charges	Total
07/04/1998	001	Dela Cruz, Juan	1,200.00	312.00	0.00	1,512.00
07/15/1998	002	Robles, Oscar	800.00	0.00	0.00	800.00
07/23/1998	003	Lim, Pedro	2,400.00	624.00	0.00	3,024.00
07/31/1998	004	Castro, Augusto	1,000.00	260.00	0.00	1,260.00
Total			5,400.00	1,196.00	0.00	6,596.00

h) Loan profile that identify and group loans by gender, age, and economic activity.

i. The user will enter a date range consisting of a begin and end date.

ii. The user will enter a parameter as to what criteria the system will print:
- Gender
- Age
- Economic Activity

iii. Report output:

SARANGANI RURAL BANK, INC.
Loans Profile by Gender

July 1 - 31, 1997

Gender	No. of Borrowers		Amount	
Male	1,300	35%	32,500,000.00	35%
Female	2,370	65%	59,275,000.00	65%
Total	3,670	100%	91,775,000.00	100%

SARANGANI RURAL BANK, INC.
Loans Profile by Age

July 1 - 31, 1997

Age Bracket	No. of Borrowers		Amount	
18 - 25	550	15%	13,762,500.00	15%
26 - 35	1,578	43%	39,452,500.00	43%
36 - 45	734	20%	18,350,000.00	20%
46 - 55	440	12%	11,010,000.00	12%
56 & over	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

35

SARANGANI RURAL BANK, INC.
Loans Profile by Economic Activity

July 1 - 31, 1997

Economic Activity	Number of Borrowers		Amount	
Agriculture	550	15%	13,762,500.00	15%
Commercial	1,578	43%	39,452,500.00	43%
Trading	734	20%	18,350,000.00	20%
Service	440	12%	11,010,000.00	12%
Others	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

i) The repayment rate of loans to enable account officers to be evaluated (collection performance).

i. The user will enter a date range consisting of a begin and end date.

ii. Repayment Rate (Principal Only) = $\frac{\text{Total Principal Paid}}{\text{Total Principal Due}}$

iii. Report output:

SARANGANI RURAL BANK, INC.
Repayment Rate of Loans by Loan Officer

July 1 - 31, 1998

Account Officer	Acct. No.	Loan Amount	Principal Due	Interest Due	Principal Paid	Interest Paid	% Rate
E. Pacana	001	144,000.00	12,000.00	3,120.00	12,000.00	3,120.00	1.00
	002	180,000.00	15,000.00	3,900.00	12,000.00	3,900.00	.80
	003	300,000.00	25,000.00	6,500.00	24,000.00	6,500.00	.96
M. Abellanosa	101	40,000.00	3,333.33	3,120.00	12,000.00	3,120.00	1.00
	102	77,893.00	6,491.08	1,687.68	6,491.08	1,687.68	1.00
	103	24,500.00	2,041.67	530.83	2,041.67	530.83	1.00
Total		300,000.00	12,000.00	3,120.00	12,000.00	3,120.00	

j) Repayment rate by business sector.

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

SARANGANI RURAL BANK, INC.
Repayment Rate by Business Sector

July 1 - 31, 1998

Business Sector	No. of Borrowers		Amount	
Wholesale Trade	550	15%	13,762,500.00	15%
Retail Trade	1,578	43%	39,452,500.00	43%
Manufacturing	734	20%	18,350,000.00	20%
Service	440	12%	11,010,000.00	12%
Others	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

k) Total interest collected from the microenterprise program.

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

SARANGANI RURAL BANK, INC.
Total Interest Collected from Microenterprise Program

July 1 - 31, 1998

Total Loan Portfolio	91,750,000.00
Total Loans Collected	71,565,000.00
Total Interest Collected	1,550,575.00
% Interest Collected	78%

l) Total doubtful/written-off interest and principal within a period specified by the user.

i. Report output:

SARANGANI RURAL BANK, INC.
Total Doubtful & Written-off Accounts

as of July 31, 1998

	Principal	Interest	
Total Doubtful Accounts (In excess of 3 missed due repayments)	4,587,500.00	99,395.83	5%
Total Written-off Accounts	917,500.00	19,879.16	1%

*** Banko Sentral ng Pilipinas (BSP) has recently issued a memorandum for full provisioning of outstanding loans with 3 or more repayment overdue.*

m) Loan cycle the borrower is in and a summary history of loan repayment over previous loan cycles. The historical loan portfolio by AO and by client helps determine how a loan portfolio develops and evaluate the performance of the AO as well. The report address requirement nos. 13 & 14 of the Requirements List as of July 30, 1998.

i. Report output:

SARANGANI RURAL BANK, INC.
Loan Cycle and History of Loan

as of July 31, 1998

Account Officer	Customer Name	Loan Number	Loan Amount	Times Past Due
E. Pacana	Dela Cruz, Juan	1st	144,000.00	0
		2nd	180,000.00	0
		3rd	300,000.00	0
	Robles, Oscar	1st	60,000.00	0
		2nd	85,000.00	2
M. Abellanosa	Dela Cruz, Juan	1st	144,000.00	0
		2nd	180,000.00	0
		3rd	300,000.00	0
	Robles, Oscar	1st	60,000.00	0
		2nd	85,000.00	2

n) Number and amount of new microenterprise loans made by type of loan product.

i. Report output:

SARANGANI RURAL BANK, INC.
New Microenterprise Loans by Type of Loan Product

as of July 31, 1998

Type	Number of Borrowers		Amount	
Product 1	550	15%	13,762,500.00	15%
Product 2	1,578	43%	39,452,500.00	43%
Product 3	734	20%	18,350,000.00	20%
Product 4	440	12%	11,010,000.00	12%
Product 5	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

o) Number of new microenterprise savings depositors and deposit size by type of account (initial deposit less than P 1,000).

i. Report output:

SARANGANI RURAL BANK, INC.
Microenterprise Deposits Sizes

as of July 31, 1998

Deposit Size	Number of Depositors		Amount	
100 - 250	550	12%	96,500.00	12%
251 - 500	600	25%	225,000.00	25%
501 - 750	300	20%	187,800.00	20%
751 - 1,000	440	43%	385,440.00	43%
TOTAL	1,890	100%	894,740.00	100%

p) Number of loans and outstanding loan portfolio per microenterprise loan officer.

i. Loans amounts of P 25,000 or under or Loan amounts of borrowers initial identified as microentrepreneurs

ii. Report output:

SARANGANI RURAL BANK, INC.
Outstanding Microenterprise loan portfolio by Account Officer

as of July 31, 1998

Account Officer	Number of Loans		Amount	
E. Pacana	550	15%	13,762,500.00	15%
M. Abellanosa	1,578	43%	39,452,500.00	43%
C. Avillon	734	20%	18,350,000.00	20%
S. Nabatar	440	12%	11,010,000.00	12%
R. Ratilla	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

q) On-time repayment rate (collection performance)

i. Repayment Rate (Principal Only) = $\frac{\text{Total Principal Paid}}{\text{Total Principal Due}}$

ii. Report output:

SARANGANI RURAL BANK, INC.
On-time Repayment Rate

as of July 31, 1998

Total Microenterprise Loan Due (Principal)	1,750,000.00
Total Microenterprise Loans Paid (Principal)	1,640,000.00
On-time Repayment Rate	94%

r) Loan loss rate. Loan loss rate is the annual loss due to uncollectible loans.

i. Loan Loss Rate = Total ME Loan Portfolio / Total ME Written-off Account

ii. Report output:

SARANGANI RURAL BANK, INC.
Loan Loss Rate

as of July 31, 1998

Total Microenterprise Loan Portfolio	11,750,000.00
Total Written-off Loans	549,000.00
Loan Loss Rate	4.6%

s) Past due rate and past due amount.

i. Day due is calculated the number of days from the actual due date and the date of reporting.

ii. Report output:

SARANGANI RURAL BANK, INC.
Past Due Rate and Past Due Amount

as of July 31, 1998

Acct.No.	Name	Due Date	Principal	Interest	Penalty	Others	Total	Days Past Due
007	Bandong, James	06/30/98	1,200.00	312.00	24.00	0	1,536.00	30
023	Bartolo, Edward	05/15/98	2,400.00	624.00	121.60	0	3,145.60	76
Total			3,600.00	936.00	345.60	0	4,681.60	

t) Effective annual interest rate(s) and over-all yield in portfolio.

Calculating Effective Interest Rates

A microenterprise rate quoted at (for instance) 3% per month may be equivalent to a much higher "effective" monthly rate, depending on how the loan and its repayment are structured. The real cost to the borrower, and the lending institution's real income from its loan portfolio, can be raised significantly by practices such as:

- Computing interest on the original face amount of the loan, rather than on the declining balances that actually remain in the borrower's hands as successive installments of principal are repaid (this method is called a "flat" interest charge);
- Requiring payment of interest at the beginning of the loan (as a deduction from the amount of principal disbursed to the borrower), rather than spreading interest payments throughout the life of the loan;
- Charging a "commission" or "fee" in addition to the interest;
- Quoting a monthly interest rate, but collecting principal and interest weekly, counting four weeks as a "month"; or
- Requiring that a portion of the loan amount be deposited with the lender as compulsory savings or a compensating balance.

As used here, the "effective" interest rate of a particular loan contract is the rate that a client is "really" paying, based on the amount of loan proceeds actually in the client's hands during each period of the life of the loan. It is equivalent to a rate calculated on a declining balance basis.

Report output:

SARANGANI RURAL BANK, INC.
Effective Annual Interest Rate
as of July 31, 1998

Total Microenterpise Loans	11,750,000.00
Average Annual Interest Rate	26.7%
Effective Annual Interest Rate:	
Declining Balance	45.8%
Interest in Advance	37.2%

u) Qualitative analysis of interest rate and maturity matching.

(A sample report is attached for details).

PR. : SRB1

o) Effective annual interest rate(s) and over-all yield in portfolio.

Calculating Effective Interest Rates

A microenterprise rate quoted at (for instance) 3% per month may be equivalent to a much higher "effective" monthly rate, depending on how the loan and its repayment are structured. The real cost to the borrower, and the lending institution's real income from its loan portfolio, can be raised significantly by practices such as:

- Computing interest on the original face amount of the loan, rather than on the declining balances that actually remain in the borrower's hands as successive installments of principal are repaid (this method is called a "flat" interest charge);
- Requiring payment of interest at the beginning of the loan (as a deduction from the amount of principal disbursed to the borrower), rather than spreading interest payments throughout the life of the loan;
- Charging a "commission" or "fee" in addition to the interest;
- Quoting a monthly interest rate, but collecting principal and interest weekly, counting four weeks as a "month"; or
- Requiring that a portion of the loan amount be deposited with the lender as compulsory savings or a compensating balance.

As used here, the "effective" interest rate of a particular loan contract is the rate that a client is "really" paying, based on the amount of loan proceeds actually in the client's hands during each period of the life of the loan. It is equivalent to a rate calculated on a declining balance basis.

p) Qualitative analysis of interest rate and maturity matching.

(A sample report is attached for details).

q) That generate the following mandatory BSP Reports:

- Reserve Position on Government Funds (7-19-01-A.1)
- Schedule of Agricultural and Industrial Loans (7-19-04-A.3)
- Summary of Loans Granted (7-19-06-A.1)
- Statement of Capital Required (7-19-07)
- Utilization of Loanable Funds (7-19-09-A)

Conformed:

Mr. Franciso L. Lutz, Jr.
President
Sarangani Rural Bank, Inc.

August 7, 1998

The Rural Bank of Sto. Tomas (RBST) MABS-M Gap Analysis/System Specification Document – August 7th, 1998

This document contains details of the customizations necessary to modify the Microbanker (MBXD) system to meet the needs of The Rural Bank of Sto. Tomas (RBST).

The Rural Bank of Sto. Tomas will need to upgrade its current version of Microbanker to Microbanker MBXD in order to comply with the Banko Sentral ng Pilipinas' mandate that within 17 months, all computerized banking software must be Year 2000 compliant. However, the current Microbanker (MBXD) version still needs to be customized to accommodate the needs of RBST.

Included in this document are:

1) A list of functionality that is already present within the MBXD system.
2) A description of the additional functionality that will need to be programmed.

1) Functionality currently present within the Microbanker (MBXD) system

The confirmation of the functionality currently present within MBXD and the determination as to its applicability to the RBST was provided by Mr. Pedro G. Crisostomo of RBRDFI after review of the RBST System Requirement List (July 31, 1998).

Access control and security

a) System access is controlled through a user definable password.

b) Record-level data security is provided to protect sensitive system information against outside manipulation.

c) An audit trail is provided with a hard copy of daily transactions and account listings, which show the number and date of previous transactions.

d) The MBXD system has the ability to define a users access authority as any combination of the following - read, write, update.

Loan Functionality

The Microbanker System will accommodate:

a) Processing the following loan types:
   - Agricultural Loans
   - Commercial Loans
   - Other Loans:
     - Quedan Guaranteed Loans
     - Salary Loans
     - Fringe Benefits Loans (to bank employees)

b) Processing the following repayment schedule:
   - Daily amortization
   - Weekly amortization
   - Monthly amortization
   - Quarterly
   - Single amortization (30 day, 45 days, etc....Lump Sum)

c) Capturing and storing the following information as individual data values:
   - Principal payments
   - Interest
   - Other charges
     - Penalty is 2% of past due
     - Documentary stamp
     - Service charges of 4%
     - Insurance fees
     - Notarial fees

d) Recalculating the loan interest amount in the event of early loan repayment.

e) The use of the following computation divisors:

   - 360 days for loans
   - 365 days for deposits

Deposits (Savings) Functionality

a) The Microbanker System (MBXD) allows the user to change the following parameters with appropriate access codes and passwords:

   - Interest rates for savings deposits
   - Fees and other charges
   - Penalty charges
   - Limits on minimum funds in account

2) Functionality to be Programmed

The following list of functionality presented below was arrived at through joint discussion with Mr. Pedro G. Crisostomo of RBRDFI.

For clarity, functionality has been grouped into one of three areas - Loan Functionality, Deposit (Savings) Functionality and Reporting. The first two areas allow data to be entered into the system, while the third allows information to be retrieved.

Access control and security

a) The system must be able to allow remote supervisor override. A third party support software (DMS) is currently used by one of the rural banks to address this requirement. It will be worthwhile to look into this as an option.

Loan Functionality

The following additional functionality must be added to the Microbanker System (MBXD):

a) The ability to check the following conditions before the loan is approved:

- That a P300 deposit has been made for individual borrowers and for each member in the case of group loan accounts.
- That a P50 deposit has been made for salary loan borrowers.
- Notify the user that there are one or more post-dated checks (PDC) related to the loan.

b) Identify microenterprise loans (P25,000 and under) that are stored on the system.

c) Assign a loan officer (LO) or account officer (AO) to a loan and relate the LO/AO to all subsequent corresponding loan transactions.

Deposit (Savings) Functionality

The Microbanker System (MBXD) largely meets the requirements of the bank, however additional functionality that will enable the system to identify microenterprise accounts is also needed.

a) At the time of writing, Microenterprise accounts are those that are opened with P1,000 or less. It is important for the MABS-M program to ensure that these accounts continue to be identifiable even when account balances exceed P 1,000.

Reports

The Microbanker System (MBXD) is capable of producing the following general reports. However, it is important that the following reports inquire solely upon Microenterprise loan information. This may be achieved by presenting the user with a dialogue box to ask the user whether they would like to run the report across the entire loan portfolio or solely across the Microenterprise loan portfolio.

a) Number of new loans within a period as specified by the user.

b) Number of repeat loans within a period as specified by the user.

c) Number of new loans sorted by loan size within a period specified by the user.

d) Delinquency report.

e) Aging of past due loans.

In addition to modifying the above existing reports, the Microbanker System must be able to generate the following reports:

f) Number of loans sorted by loan term within a period specified by the user.

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

RURAL BANK OF STO. TOMAS
Number of Loans Sorted by Loan Term

July 1 - 31, 1998

Term	No. of Loan Borrowers	% to Total	Amount	% to Total
30 days	35	17.07%	875,000.00	17.07%
90 days	40	19.53%	1,000,000.00	19.53%
6 months	100	48.78%	2,500,000.00	48.78%
1 year	20	9.75%	500,000.00	9.75%
2 years	10	4.87%	250,000.00	4.87%
Total	300	100.00%	5,125,000.00	100.00%

g) Advanced notice list showing repayments due at a specific point in time (statement of account).

i. The user will enter a date range consisting of a begin and end date

ii. Report output:

RURAL BANK OF STO. TOMAS
Repayments Due

Period Covering July 1 - 31, 1998

Due Date	Acct	Account Name	Principal Due	Interest Due	Other Charges	Total
07/04/1998	001	Dela Cruz, Juan	1,200.00	312.00	0.00	1,512.00
07/15/1998	002	Robles, Oscar	800.00	0.00	0.00	800.00
07/23/1998	003	Lim, Pedro	2,400.00	624.00	0.00	3,024.00
07/31/1998	004	Castro, Augusto	1,000.00	260.00	0.00	1,260.00
Total			5,400.00	1,196.00	0.00	6,596.00

h) Loan profile that identifies and groups loans by gender, age, and economic activity.

i. The user will enter a date range consisting of a begin and end date.

ii. The user will enter a parameter to determine which sort criteria will be used:
- Gender
- Age
- Economic Activity

iii. Report output:

RURAL BANK OF STO. TOMAS
Loan Profile by Gender

July 1 - 31, 1997

Gender	No. of Borrowers		Amount	
Male	1,300	35%	32,500,000.00	35%
Female	2,370	65%	59,275,000.00	65%
Total	3,670	100%	91,775,000.00	100%

RURAL BANK OF STO. TOMAS
Loan Profile by Age

July 1 - 31, 1997

Age Bracket	No. of Borrowers		Amount	
18 - 25	550	15%	13,762,500.00	15%
26 - 35	1,578	43%	39,452,500.00	43%
36 - 45	734	20%	18,350,000.00	20%
46 - 55	440	12%	11,010,000.00	12%
56 & over	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

RURAL BANK OF STO. TOMAS
Loan Profile by Economic Activity

July 1 - 31, 1997

Economic Activity	Number of Borrowers		Amount	
Agriculture	550	15%	13,762,500.00	15%
Commercial	1,578	43%	39,452,500.00	43%
Trading	734	20%	18,350,000.00	20%
Service	440	12%	11,010,000.00	12%
Others	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

i) Repayment rate of loans to enable account officers to be evaluated (collection performance).

i. The user will enter a date range consisting of a begin and end date.

ii. Repayment Rate (Principal Only) = $\frac{\text{Total Principal Paid}}{\text{Total Principal Due}}$

iii. Report output:

RURAL BANK OF STO. TOMAS
Repayment Rate of Loans by Loan Officer

July 1 - 31, 1998

Account Officer	Acct. No.	Loan Amount	Principal Due	Interest Due	Principal Paid	Interest Paid	% Rate
E. Pacana	001	144,000.00	12,000.00	3,120.00	12,000.00	3,120.00	1.00
	002	180,000.00	15,000.00	3,900.00	12,000.00	3,900.00	.80
	003	300,000.00	25,000.00	6,500.00	24,000.00	6,500.00	.96
M. Abellanosa	101	40,000.00	3,333.33	3,120.00	12,000.00	3,120.00	1.00
	102	77,893.00	6,491.08	1,687.68	6,491.08	1,687.68	1.00
	103	24,500.00	2,041.67	530.83	2,041.67	530.83	1.00
Total		300,000.00	12,000.00	3,120.00	12,000.00	3,120.00	

49

j) Repayment rate by business sector.

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

RURAL BANK OF STO. TOMAS
Repayment Rate by Business Sector

July 1 - 31, 1998

Business Sector	No. of Borrowers		Amount	
Wholesale Trade	550	15%	13,762,500.00	15%
Retail Trade	1,578	43%	39,452,500.00	43%
Manufacturing	734	20%	18,350,000.00	20%
Service	440	12%	11,010,000.00	12%
Others	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

k) Total interest collected from the microenterprise program.

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

RURAL BANK OF STO. TOMAS
Total Interest Collected from Microenterprise Program

July 1 - 31, 1998

Total Loan Portfolio	91,750,000.00
Total Loans Collected	71,565,000.00
Total Interest Collected	1,550,575.00
% Interest Collected	78%

l) Total doubtful/written-off interest and principal.

i. Report output:

RURAL BANK OF STO. TOMAS
Total Doubtful & Written-off Accounts

as of July 31, 1998

	Principal	Interest	
Total Doubtful Accounts (In excess of 3 missed due repayments)	4,587,500.00	99,395.83	5%
Total Written-off Accounts	917,500.00	19,879.16	1%

*** Banko Sentral ng Pilipinas (BSP) has recently issued a memorandum for full provisioning of outstanding loans with 3 or more repayments overdue.*

m) Loan cycle the borrower is in and a summary history of loan repayment over previous loan cycles. The historical loan portfolio by AO and by client helps determine how a loan portfolio develops and allows the performance of the AO to be evaluated as well. The report addresses requirements numbers 13 & 14 of the Requirements List (July 31, 1998).

i. Report output:

RURAL BANK OF STO. TOMAS
Loan Cycle and History of Loan

as of July 31, 1998

Account Officer	Customer Name	Loan Number	Loan Amount	Times Past Due
E. Pacana	Dela Cruz, Juan	1st	144,000.00	0
		2nd	180,000.00	0
		3rd	300,000.00	0
	Robles, Oscar	1st	60,000.00	0
		2nd	85,000.00	2
M. Abellanosa	Dela Cruz, Juan	1st	144,000.00	0
		2nd	180,000.00	0
		3rd	300,000.00	0
	Robles, Oscar	1st	60,000.00	0
		2nd	85,000.00	2

n) Number and amount of new microenterprise loans made by type of loan product.

i. Report output:

RURAL BANK OF STO. TOMAS
New Microenterprise Loans by Type of Loan Product

as of July 31, 1998

Type	Number of Borrowers		Amount	
Product 1	550	15%	13,762,500.00	15%
Product 2	1,578	43%	39,452,500.00	43%
Product 3	734	20%	18,350,000.00	20%
Product 4	440	12%	11,010,000.00	12%
Product 5	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

o) Number of new microenterprise savings depositors and deposit size by type of account (initial deposit less than P 1,000).

i. Report output:

RURAL BANK OF STO. TOMAS
Microenterprise Deposit Sizes

as of July 31, 1998

Deposit Size	Number of Depositors		Amount	
100 - 250	550	12%	96,500.00	12%
251 - 500	600	25%	225,000.00	25%
501 - 750	300	20%	187,800.00	20%
751 – 1,000	440	43%	385,440.00	43%
TOTAL .	1,890	100%	894,740.00	100%

p) Number of loans and outstanding loan portfolio per microenterprise loan officer.

i. Report output:

RURAL BANK OF STO. TOMAS
Outstanding Microenterprise loan portfolio by Account Officer

as of July 31, 1998

Account Officer	Number of Loans		Amount	
E. Pacana	550	15%	13,762,500.00	15%
M. Abellanosa	1,578	43%	39,452,500.00	43%
C. Avillon	734	20%	18,350,000.00	20%
S. Nabatar	440	12%	11,010,000.00	12%
R. Ratilla	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

q) On-time repayment rate (collection performance)

i. Repayment Rate (Principal Only) = $\frac{\text{Total Principal Paid}}{\text{Total Principal Due}}$

ii. Report output:

RURAL BANK OF STO. TOMAS
On-time Repayment Rate

as of July 31, 1998

Total Microenterprise Loan Due (Principal)	1,750,000.00
Total Microenterprise Loans Paid (Principal)	1,640,000.00
On-time Repayment Rate	94%

t) Effective annual interest rate(s) and over-all yield in portfolio.

Calculating Effective Interest Rates

A microenterprise rate quoted at (for instance) 3% per month may be equivalent to a much higher "effective" monthly rate, depending on how the loan and its repayment are structured. The real cost to the borrower, and the lending institution's real income from its loan portfolio, can be raised significantly by practices such as:

- Computing interest on the original face amount of the loan, rather than on the declining balances that actually remain in the borrower's hands as successive installments of principal are repaid (this method is called a "flat" interest charge);
- Requiring payment of interest at the beginning of the loan (as a deduction from the amount of principal disbursed to the borrower), rather than spreading interest payments throughout the life of the loan;
- Charging a "commission" or "fee" in addition to the interest;
- Quoting a monthly interest rate, but collecting principal and interest weekly, counting four weeks as a "month"; or
- Requiring that a portion of the loan amount be deposited with the lender as compulsory savings or a compensating balance.

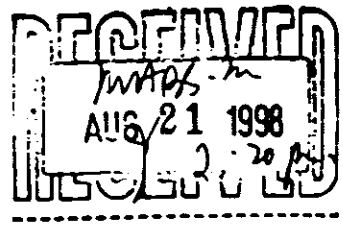
As used here, the "effective" interest rate of a particular loan contract is the rate that a client is "really" paying, based on the amount of loan proceeds actually in the client's hands during each period of the life of the loan. It is equivalent to a rate calculated on a declining balance basis.

Report output:

RURAL BANK OF STO. TOMAS
Effective Annual Interest Rate
as of July 31, 1998

Total Microenterpise Loans	11,750,000.00
Average Annual Interest Rate	26.7%
Effective Annual Interest Rate:	
Declining Balance	45.8%
Interest in Advance	37.2%

650
F. St. Tomas



u) Qualitative analysis of interest rate and maturity matching report.

(A sample report is attached for details).

v) The system should be capable of generating the following mandatory BSP Reports:

- Reserve Position on Government Funds (7-19-01-A.1)
- Schedule of Agricultural and Industrial Loans (7-19-04-A.3)
- Summary of Loans Granted (7-19-06-A.1)
- Statement of Capital Required (7-19-07)
- Utilization of Loanable Funds (7-19-09-A)

Conforme:

Rosele R. Solis
President & General Manager
Rural Bank of Sto. Tomas

August 10, 1998

The Tagum Rural Bank, Inc. (TruBank) MABS-M Gap Analysis/System Specification Document – August 11th, 1998

This document contains details of the customizations necessary to modify the Microbanker (MBXD) system to meet the needs of The Tagum Rural Bank, Inc. (TRUBANK).

The Tagum Rural Bank, Inc. will need to upgrade its current version of Microbanker to Microbanker MBXD in order to comply with the Banko Sentral ng Pilipinas' mandate that within 17 months, all computerized banking software must be Year 2000 compliant. In addition to the existing module (Savings & Time Deposit), TRUBANK will need to install the Loans Module of the Microbanker MBXD. However, the current Microbanker (MBXD) version still needs to be customized to accommodate the needs of TRUBANK.

Included in this document are:

1) A list of functionality that is already present within the MBXD system.
2) A description of the additional functionality that will need to be programmed.

1) Functionality currently present within the Microbanker (MBXD) system

The confirmation of the functionality currently present with MBXD and the determination as to its applicability to the TRUBANK was provided by Mr. Pedro G. Crisostomo of RBRDFI after review of the Systems Requirement List of similar banks.

Access control and security

a) System access is controlled through a user definable password.

b) Record-level data security is provided to protect sensitive system information against outside manipulation.

c) An audit trail is provided with a hard copy of daily transactions and account listings, which show the number and date of previous transactions.

d) The MBXD system has the ability to define a users access authority as any combination of the following - read, write, update.

Loan Functionality

The Microbanker System will accommodate:

a) Processing the following loan types:
   - Agricultural Loans
   - Commercial Loans
   - Other Loans:
     - Microenterprise individual loans
     - Microenterprise group loans

56

- Salary loans (DECS-IBM)
- Salary loans (LGUs)

b) Processing the following repayment schedule:
   - Weekly amortization
   - Monthly amortization
   - Quarterly amortization
   - Single amortization (30 day, 45 days, etc....Lump Sum)
   - 15 - 30 days amortization (for bank employees)

c) Capturing and storing the following information as individual data values:
   - Principal payments
   - Interest (25%)
   - Other charges
     - Penalty is 7% of past due
     - Documentary stamp
     - Service charges of 5%
     - Insurance fees
     - Notarial fees

d) Recalculating the loan interest amount in the event of early loan repayment.

e) The use of the following computation divisors:

   - 360 days for loans
   - 365 days for deposits

Deposits (Savings) Functionality

a) The Microbanker System (MBXD) allows the user to change the following parameters with appropriate access codes and passwords:

   - Interest rates for savings deposits
   - Fees and other charges
   - Penalty charges
   - Limits on minimum funds in account

2) Functionality to be Programmed

The following list of functionality presented below was arrived at through joint discussion with Mr. Pedro G. Crisostomo of RBRDFI.

For clarity, functionality has been grouped into one of three areas - Loan Functionality, Deposit (Savings) Functionality and Reporting. The first two areas allow data to be entered into the system, while the third allows information to be retrieved.

Loan Functionality

The following additional functionality must be added to the Microbanker System (MBXD):

a) The ability to check the following conditions before the loan is approved:

- Borrower should open a deposit account.
- Cross reference individual loan borrower to group's deposit account.
- Cross reference individual depositor of group members to group's deposit account.
- Notify the user that there are one or more post-dated checks (PDC) related to the loan.

b) Identify microenterprise loans (P25,000 and under) that are stored on the system.

c) Assign a loan officer (LO) or account officer (AO) to a loan and relate the LO/AO to all subsequent corresponding loan transactions.

Deposit (Savings) Functionality

The Microbanker System (MBXD) largely meets the requirements of the bank, however, additional functionality that will enable the system to identify microenterprise accounts is also needed.

a) At the time of writing, Microenterprise accounts are those that are opened with P 500 or less. It is important for the MABS-M program to ensure that these accounts continue to be identifiable even when account balances exceed P500.

Reports

The Microbanker System (MBXD) is capable of producing the following general reports. However, it is important that the following reports inquire solely upon Microenterprise loan information. This may be achieved by presenting the user with a dialogue box to ask the user whether they would like to run the report across the entire loan portfolio or solely across the Microenterprise loan portfolio.

a) Number of new loans within a period as specified by the user.

b) Number of repeat loans within a period as specified by the user.

c) Number of new loans sorted by loan size within a period specified by the user.

d) Delinquency report.

e) Aging of past due loans.

In addition to modifying the above existing reports, the Microbanker System must be able to generate the following reports:

f) Number of loans sorted by loan term within a period specified by the user.

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

TAGUM RURAL BANK, INC.
Number of Loans Sorted by Loan Term

July 1 - 31, 1998

Term	No. of Loan Borrowers	% to Total	Amount	% to Total
30 days	35	17.07%	875,000.00	17.07%
90 days	40	19.53%	1,000,000.00	19.53%
6 months	100	48.78%	2,500,000.00	48.78%
1 year	20	9.75%	500,000.00	9.75%
2 years	10	4.87%	250,000.00	4.87%
Total	300	100.00%	5,125,000.00	100.00%

g) Advanced notice list showing repayments due at a specific point in time (statement of account).

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

TAGUM RURAL BANK, INC.
Repayments Due

Period Covering July 1 - 31, 1998

Due Date	Acct	Account Name	Principal Due	Interest Due	Other Charges	Total
07/04/1998	001	Dela Cruz, Juan	1,200.00	312.00	0.00	1,512.00
07/15/1998	002	Robles, Oscar	800.00	0.00	0.00	800.00
07/23/1998	003	Lim, Pedro	2,400.00	624.00	0.00	3,024.00
07/31/1998	004	Castro, Augusto	1,000.00	260.00	0.00	1,260.00
Total			5,400.00	1,196.00	0.00	6,596.00

h) Loan profile that identifies and groups loans by gender, age, and economic activity.

i. The user will enter a date range consisting of a begin and end date.

ii. The user will enter a parameter to determine which sort criteria will be used:
- Gender
- Age
- Economic Activity

iii. Report output:

TAGUM RURAL BANK, INC.
Loan Profile by Gender

July 1 - 31, 1997

Gender	No. of Borrowers		Amount	
Male	1,300	35%	32,500,000.00	35%
Female	2,370	65%	59,275,000.00	65%
Total	3,670	100%	91,775,000.00	100%

TAGUM RURAL BANK, INC.
Loan Profile by Age

July 1 - 31, 1997

Age Bracket	No. of Borrowers		Amount	
18 - 25	550	15%	13,762,500.00	15%
26 - 35	1,578	43%	39,452,500.00	43%
36 - 45	734	20%	18,350,000.00	20%
46 - 55	440	12%	11,010,000.00	12%
56 & over	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

TAGUM RURAL BANK, INC.
Loan Profile by Economic Activity

July 1 - 31, 1997

Economic Activity	Number of Borrowers		Amount	
Agriculture	550	15%	13,762,500.00	15%
Commercial	1,578	43%	39,452,500.00	43%
Trading	734	20%	18,350,000.00	20%
Service	440	12%	11,010,000.00	12%
Others	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

i) Repayment rate of loans to enable account officers to be evaluated (collection performance).

i. The user will enter a date range consisting of a begin and end date.

ii. Repayment Rate (Principal Only) = $\frac{\text{Total Principal Paid}}{\text{Total Principal Due}}$

iii. Report output:

TAGUM RURAL BANK, INC.
Repayment Rate of Loans by Loan Officer

July 1 - 31, 1998

Account Officer	Acct. No.	Loan Amount	Principal Due	Interest Due	Principal Paid	Interest Paid	% Rate
E. Pacana	001	144,000.00	12,000.00	3,120.00	12,000.00	3,120.00	1.00
	002	180,000.00	15,000.00	3,900.00	12,000.00	3,900.00	.80
	003	300,000.00	25,000.00	6,500.00	24,000.00	6,500.00	.96
M. Abellanosa	101	40,000.00	3,333.33	3,120.00	12,000.00	3,120.00	1.00
	102	77,893.00	6,491.08	1,687.68	6,491.08	1,687.68	1.00
	103	24,500.00	2,041.67	530.83	2,041.67	530.83	1.00
Total		300,000.00	12,000.00	3,120.00	12,000.00	3,120.00	

j) Repayment rate by business sector.

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

TAGUM RURAL BANK, INC.
Repayment Rate by Business Sector

July 1 - 31, 1998

Business Sector	No. of Borrowers		Amount	
Wholesale Trade	550	15%	13,762,500.00	15%
Retail Trade	1,578	43%	39,452,500.00	43%
Manufacturing	734	20%	18,350,000.00	20%
Service	440	12%	11,010,000.00	12%
Others	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

k) Total interest collected from the microenterprise program.

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

TAGUM RURAL BANK, INC.
Total Interest Collected from Microenterprise Program

July 1 - 31, 1998

Total Loan Portfolio	91,750,000.00
Total Loans Collected	71,565,000.00
Total Interest Collected	1,550,575.00
% Interest Collected	78%

l) Total doubtful/written-off interest and principal.

i. Report output:

TAGUM RURAL BANK, INC.
Total Doubtful & Written-off Accounts

as of July 31, 1998

	Principal	Interest	
Total Doubtful Accounts (In excess of 3 missed due repayments)	4,587,500.00	99,395.83	5%
Total Written-off Accounts	917,500.00	19,879.16	1%

*** Banko Sentral ng Pilipinas (BSP) has recently issued a memorandum for full provisioning of outstanding loans with 3 or more repayments overdue.*

m) Loan cycle the borrower is in and a summary history of loan repayment over previous loan cycles. The historical loan portfolio by AO and by client helps determine how a loan portfolio develops and allows the performance of the AO to be evaluated as well. The report addresses requirements numbers 4.13 & 4.14 of the Requirements List (August 11, 1998).

i. Report output:

TAGUM RURAL BANK, INC.
Loan Cycle and History of Loan

as of July 31, 1998

Account Officer	Customer Name	Loan Number	Loan Amount	Times Past Due
E. Pacana	Dela Cruz, Juan	1st	144,000.00	0
		2nd	180,000.00	0
		3rd	300,000.00	0
	Robles, Oscar	1st	60,000.00	0
		2nd	85,000.00	2
M. Abellanosa	Dela Cruz, Juan	1st	144,000.00	0
		2nd	180,000.00	0
		3rd	300,000.00	0
	Robles, Oscar	1st	60,000.00	0
		2nd	85,000.00	2

n) Number and amount of new microenterprise loans made by type of loan product.

i. Report output:

TAGUM RURAL BANK, INC.
New Microenterprise Loans by Type of Loan Product

as of July 31, 1998

Type	Number of Borrowers		Amount	
Product 1	550	15%	13,762,500.00	15%
Product 2	1,578	43%	39,452,500.00	43%
Product 3	734	20%	18,350,000.00	20%
Product 4	440	12%	11,010,000.00	12%
Product 5	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

o) Number of new microenterprise savings depositors and deposit size by type of account (initial deposit P 500).

i. Report output:

TAGUM RURAL BANK, INC.
Microenterprise Deposit Sizes

as of July 31, 1998

Deposit Size	Number of Depositors		Amount	
100 - 250	550	12%	96,500.00	12%
251 - 500	600	25%	225,000.00	25%
501 - 750	300	20%	187,800.00	20%
751 - 1,000	440	43%	385,440.00	43%
TOTAL	1,890	100%	894,740.00	100%

p) Number of loans and outstanding loan portfolio per microenterprise loan officer.

i. Report output:

TAGUM RURAL BANK, INC.
Outstanding Microenterprise loan portfolio by Account Officer

as of July 31, 1998

Account Officer	Number of Loans		Amount	
E. Pacana	550	15%	13,762,500.00	15%
M. Abellanosa	1,578	43%	39,452,500.00	43%
C. Avillon	734	20%	18,350,000.00	20%
S. Nabatar	440	12%	11,010,000.00	12%
R. Ratilla	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

q) On-time repayment rate (collection performance)

i. Repayment Rate (Principal Only) = $\frac{\text{Total Principal Paid}}{\text{Total Principal Due}}$

ii. Report output:

TAGUM RURAL BANK, INC.
On-time Repayment Rate

as of July 31, 1998

Total Microenterprise Loan Due (Principal)	1,750,000.00
Total Microenterprise Loans Paid (Principal)	1,640,000.00
On-time Repayment Rate	94%

r) Loan loss rate. Loan loss rate is the annual loss due to uncollectible loans. This must apply to microenterprise loans.

i. Loan Loss Rate = $\frac{\text{Total ME Written-off Account}}{\text{Total ME Loan Portfolio}}$

ii. Report output:

TAGUM RURAL BANK, INC.
Loan Loss Rate

as of July 31, 1998

Total Microenterprise Loan Portfolio	11,750,000.00
Total Written-off Loans	549,000.00
Loan Loss Rate	4.6%

s) Past due rate and past due amount.

i. Days past due is calculated as the number of days between the actual due date and the date of reporting.

ii. Report output:

TAGUM RURAL BANK, INC.
Past Due Rate and Past Due Amount

as of July 31, 1998

Acct.No.	Name	Due Date	Principal	Interest	Penalty	Others	Total	Days Past Due
007	Bandong, James	06/30/98	1,200.00	312.00	24.00	0	1,536.00	30
023	Bartolo, Edward	05/15/98	2,400.00	624.00	121.60	0	3,145.60	76
Total			3,600.00	936.00	345.60	0	4,681.60	

t) Effective annual interest rate(s) and over-all yield in portfolio.

Calculating Effective Interest Rates

A microenterprise rate quoted at (for instance) 3% per month may be equivalent to a much higher "effective" monthly rate, depending on how the loan and its repayment are structured. The real cost to the borrower, and the lending institution's real income from its loan portfolio, can be raised significantly by practices such as:

- Computing interest on the original face amount of the loan, rather than on the declining balances that actually remain in the borrower's hands as successive installments of principal are repaid (this method is called a "flat" interest charge);
- Requiring payment of interest at the beginning of the loan (as a deduction from the amount of principal disbursed to the borrower), rather than spreading interest payments throughout the life of the loan;
- Charging a "commission" or "fee" in addition to the interest;
- Quoting a monthly interest rate, but collecting principal and interest weekly, counting four weeks as a "month"; or
- Requiring that a portion of the loan amount be deposited with the lender as compulsory savings or a compensating balance.

As used here, the "effective" interest rate of a particular loan contract is the rate that a client is "really" paying, based on the amount of loan proceeds actually in the client's hands during each period of the life of the loan. It is equivalent to a rate calculated on a declining balance basis.

Report output:

TAGUM RURAL BANK, INC.
Effective Annual Interest Rate
as of July 31, 1998

Total Microenterpise Loans	11,750,000.00
Average Annual Interest Rate	26.7%
Effective Annual Interest Rate:	
Interest Amortized	45.8%
Interest Paid in Advance	37.2%

u) Qualitative analysis of interest rate and maturity matching report.

(A sample report is attached for details).

v) The system should be capable of generating the following mandatory BSP Reports.

- Reserve Position on Government Funds (7-19-01-A.1)
- Schedule of Agricultural and Industrial Loans (7-19-04-A.3)
- Summary of Loans Granted (7-19-06-A.1)
- Statement of Capital Required (7-19-07)
- Utilization of Loanable Funds (7-19-09-A)

Conforme:

Alexander C. Cantoy
Branch Manager
Tagum Rural Bank, Inc.

August 11, 1998

The Rural Bank of Digos (RBD) MABS-M Gap Analysis/System Specification Document – August 10th, 1998

This document contains details of the customizations necessary to modify the Microbanker (MBXD) system to meet the needs of The Rural Bank of Digos (RBD).

The Rural Bank of Digos will need to upgrade its current version of Microbanker to Microbanker MBXD in order to comply with the Banko Sentral ng Pilipinas' mandate that within 17 months, all computerized banking software must be Year 2000 compliant. However, the current Microbanker (MBXD) version still needs to be customized to accommodate the needs of RBD.

Included in this document are:

1) A list of functionality that is already present within the MBXD system.
2) A description of the additional functionality that will need to be programmed.

1) Functionality currently present within the Microbanker (MBXD) system

The confirmation of the functionality currently present with MBXD and the determination as to its applicability to the RBD was provided by Mr. Pedro G. Crisostomo of RBRDFI after review of the Systems Requirement List of similar banks.

Access control and security

a) System access is controlled through a user definable password.

b) Record-level data security is provided to protect sensitive system information against outside manipulation.

c) An audit trail is provided with a hard copy of daily transactions and account listings, which show the number and date of previous transactions.

d) The MBXD system has the ability to define a users access authority as any combination of the following - read, write, update.

Loan Functionality

The Microbanker System will accommodate:

a) Processing the following loan types:
   - Agricultural Loans
   - Commercial Loans
   - Other Loans:
     - Quedan Guaranteed Loans
     - Microenterprise individual loans
     - Salary loans (DECS-IBM)
     - Tricycle Drivers' loans

b) Processing the following repayment schedule:
   - Daily amortization
   - Weekly amortization
   - Monthly amortization
   - Single amortization (30 day, 45 days, etc....Lump Sum)
   - 15 - 30 days amortization (for individual borrowers)

c) Capturing and storing the following information as individual data values:
   - Principal payments
   - Interest
   - Other charges
     - Penalty is 2% of past due
     - Documentary stamp
     - Service charges of 4%
     - Insurance fees
     - Notarial fees

d) Recalculating the loan interest amount in the event of early loan repayment.

e) The use of the following computation divisors:

   - 360 days for loans
   - 365 days for deposits

Deposits (Savings) Functionality

a) The Microbanker System (MBXD) allows the user to change the following parameters with appropriate access codes and passwords:

   - Interest rates for savings deposits
   - Fees and other charges
   - Penalty charges
   - Limits on minimum funds in account

2) Functionality to be Programmed

The following list of functionality presented below was arrived at through joint discussion with Mr. Pedro G. Crisostomo of RBRDFI.

For clarity, functionality has been grouped into one of three areas - Loan Functionality, Deposit (Savings) Functionality and Reporting. The first two areas allow data to be entered into the system, while the third allows information to be retrieved.

Loan Functionality

The following additional functionality must be added to the Microbanker System (MBXD):

a) The ability to check the following conditions before the loan is approved:

- That a P14 per week deposit has been made for individual borrowers and for each member in the case of group loan accounts.
- Cross reference individual loan borrower to group's deposit account.
- Cross reference individual depositor of group members to group's deposit account.
- Notify the user that there are one or more post-dated checks (PDC) related to the loan.

b) Identify microenterprise loans (P25,000 and under) that are stored on the system.

c) Assign a loan officer (LO) or account officer (AO) to a loan and relate the LO/AO to all subsequent corresponding loan transactions.

Deposit (Savings) Functionality

The Microbanker System (MBXD) largely meets the requirements of the bank, however, additional functionality that will enable the system to identify microenterprise accounts is also needed.

a) At the time of writing, Microenterprise accounts are those that are opened with P 200 or less. It is important for the MABS-M program to ensure that these accounts continue to be identifiable even when account balances exceed P200.

Reports

The Microbanker System (MBXD) is capable of producing the following general reports. However, it is important that the following reports inquire solely upon Microenterprise loan information. This may be achieved by presenting the user with a dialogue box to ask the user whether they would like to run the report across the entire loan portfolio or solely across the Microenterprise loan portfolio.

a) Number of new loans within a period as specified by the user.

b) Number of repeat loans within a period as specified by the user.

c) Number of new loans sorted by loan size within a period specified by the user.

d) Delinquency report.

e) Aging of past due loans.

In addition to modifying the above existing reports, the Microbanker System must be able to generate the following reports:

f) Number of loans sorted by loan term within a period specified by the user.

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

RURAL BANK OF DIGOS
Number of Loans Sorted by Loan Term

July 1 - 31, 1998

Term	No. of Loan Borrowers	% to Total	Amount	% to Total
30 days	35	17.07%	875,000.00	17.07%
90 days	40	19.53%	1,000,000.00	19.53%
6 months	100	48.78%	2,500,000.00	48.78%
1 year	20	9.75%	500,000.00	9.75%
2 years	10	4.87%	250,000.00	4.87%
Total	300	100.00%	5,125,000.00	100.00%

g) Advanced notice list showing repayments due at a specific point in time (statement of account).

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

RURAL BANK OF DIGOS
Repayments Due

Period Covering July 1 - 31, 1998

Due Date	Acct	Account Name	Principal Due	Interest Due	Other Charges	Total
07/04/1998	001	Dela Cruz, Juan	1,200.00	312.00	0.00	1,512.00
07/15/1998	002	Robles, Oscar	800.00	0.00	0.00	800.00
07/23/1998	003	Lim, Pedro	2,400.00	624.00	0.00	3,024.00
07/31/1998	004	Castro, Augusto	1,000.00	260.00	0.00	1,260.00
Total			5,400.00	1,196.00	0.00	6,596.00

h) Loan profile that identifies and groups loans by gender, age, and economic activity.

i. The user will enter a date range consisting of a begin and end date.

ii. The user will enter a parameter to determine which sort criteria will be used:
- Gender
- Age
- Economic Activity

iii. Report output:

RURAL BANK OF DIGOS
Loan Profile by Gender

July 1 - 31, 1997

Gender	No. of Borrowers		Amount	
Male	1,300	35%	32,500,000.00	35%
Female	2,370	65%	59,275,000.00	65%
Total	3,670	100%	91,775,000.00	100%

RURAL BANK OF DIGOS
Loan Profile by Age

July 1 - 31, 1997

Age Bracket	No. of Borrowers		Amount	
18 - 25	550	15%	13,762,500.00	15%
26 - 35	1,578	43%	39,452,500.00	43%
36 - 45	734	20%	18,350,000.00	20%
46 - 55	440	12%	11,010,000.00	12%
56 & over	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

RURAL BANK OF DIGOS
Loan Profile by Economic Activity

July 1 - 31, 1997

Economic Activity	Number of Borrowers		Amount	
Agriculture	550	15%	13,762,500.00	15%
Commercial	1,578	43%	39,452,500.00	43%
Trading	734	20%	18,350,000.00	20%
Service	440	12%	11,010,000.00	12%
Others	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

i) Repayment rate of loans to enable account officers to be evaluated (collection performance).

i. The user will enter a date range consisting of a begin and end date.

ii. Repayment Rate (Principal Only) = $\frac{\text{Total Principal Paid}}{\text{Total Principal Due}}$

iii. Report output:

RURAL BANK OF DIGOS
Repayment Rate of Loans by Loan Officer

July 1 - 31, 1998

Account Officer	Acct. No.	Loan Amount	Principal Due	Interest Due	Principal Paid	Interest Paid	% Rate
E. Pacana	001	144,000.00	12,000.00	3,120.00	12,000.00	3,120.00	1.00
	002	180,000.00	15,000.00	3,900.00	12,000.00	3,900.00	.80
	003	300,000.00	25,000.00	6,500.00	24,000.00	6,500.00	.96
M. Abellanosa	101	40,000.00	3,333.33	3,120.00	12,000.00	3,120.00	1.00
	102	77,893.00	6,491.08	1,687.68	6,491.08	1,687.68	1.00
	103	24,500.00	2,041.67	530.83	2,041.67	530.83	1.00
Total		300,000.00	12,000.00	3,120.00	12,000.00	3,120.00	

j) Repayment rate by business sector.

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

RURAL BANK OF DIGOS
Repayment Rate by Business Sector

July 1 – 31, 1998

Business Sector	No. of Borrowers		Amount	
Wholesale Trade	550	15%	13,762,500.00	15%
Retail Trade	1,578	43%	39,452,500.00	43%
Manufacturing	734	20%	18,350,000.00	20%
Service	440	12%	11,010,000.00	12%
Others	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

k) Total interest collected from the microenterprise program.

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

RURAL BANK OF DIGOS
Total Interest Collected from Microenterprise Program

July 1 – 31, 1998

Total Loan Portfolio	91,750,000.00
Total Loans Collected	71,565,000.00
Total Interest Collected	1,550,575.00
% Interest Collected	78%

l) Total doubtful/written-off interest and principal.

i. Report output:

RURAL BANK OF DIGOS
Total Doubtful & Written-off Accounts

as of July 31, 1998

	Principal	Interest	
Total Doubtful Accounts (In excess of 3 missed due repayments)	4,587,500.00	99,395.83	5%
Total Written-off Accounts	917,500.00	19,879.16	1%

*** Banko Sentral ng Pilipinas (BSP) has recently issued a memorandum for full provisioning of outstanding loans with 3 or more repayments overdue.*

m) Loan cycle the borrower is in and a summary history of loan repayment over previous loan cycles. The historical loan portfolio by AO and by client helps determine how a loan portfolio develops and allows the performance of the AO to be evaluated as well. The report addresses requirements numbers 13 & 14 of the Requirements List (August 3, 1998).

i. Report output:

RURAL BANK OF DIGOS
Loan Cycle and History of Loan

as of July 31, 1998

Account Officer	Customer Name	Loan Number	Loan Amount	Times Past Due
E. Pacana	Dela Cruz, Juan	1st	144,000.00	0
		2nd	180,000.00	0
		3rd	300,000.00	0
	Robles, Oscar	1st	60,000.00	0
		2nd	85,000.00	2
M. Abellanosa	Dela Cruz, Juan	1st	144,000.00	0
		2nd	180,000.00	0
		3rd	300,000.00	0
	Robles, Oscar	1st	60,000.00	0
		2nd	85,000.00	2

n) Number and amount of new microenterprise loans made by type of loan product.

i. Report output:

RURAL BANK OF DIGOS
New Microenterprise Loans by Type of Loan Product

as of July 31, 1998

Type	Number of Borrowers		Amount	
Product 1	550	15%	13,762,500.00	15%
Product 2	1,578	43%	39,452,500.00	43%
Product 3	734	20%	18,350,000.00	20%
Product 4	440	12%	11,010,000.00	12%
Product 5	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

o) Number of new microenterprise savings depositors and deposit size by type of account (initial deposit less than P 200).

i. Report output:

RURAL BANK OF DIGOS
Microenterprise Deposit Sizes

as of July 31, 1998

Deposit Size	Number of Depositors		Amount	
100 - 250	550	12%	96,500.00	12%
251 - 500	600	25%	225,000.00	25%
501 - 750	300	20%	187,800.00	20%
751 - 1,000	440	43%	385,440.00	43%
TOTAL	1,890	100%	894,740.00	100%

11

p) Number of loans and outstanding loan portfolio per microenterprise loan officer.

i. Report output:

RURAL BANK OF DIGOS
Outstanding Microenterprise loan portfolio by Account Officer

as of July 31, 1998

Account Officer	Number of Loans		Amount	
E. Pacana	550	15%	13,762,500.00	15%
M. Abellanosa	1,578	43%	39,452,500.00	43%
C. Avillon	734	20%	18,350,000.00	20%
S. Nabatar	440	12%	11,010,000.00	12%
R. Ratilla	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

q) On-time repayment rate (collection performance)

i. Repayment Rate (Principal Only) = $\frac{\text{Total Principal Paid}}{\text{Total Principal Due}}$

ii. Report output:

RURAL BANK OF DIGOS
On-time Repayment Rate

as of July 31, 1998

Total Microenterprise Loan Due (Principal)	1,750,000.00
Total Microenterprise Loans Paid (Principal)	1,640,000.00
On-time Repayment Rate	94%

r) Loan loss rate. Loan loss rate is the annual loss due to uncollectible loans. This must apply to microenterprise loans.

i. Loan Loss Rate = $\frac{\text{Total ME Written-off Account}}{\text{Total ME Loan Portfolio}}$

ii. Report output:

RURAL BANK OF DIGOS
Loan Loss Rate

as of July 31, 1998

Total Microenterprise Loan Portfolio	11,750,000.00
Total Written-off Loans	549,000.00
Loan Loss Rate	4.6%

s) Past due rate and past due amount.

i. Days past due is calculated as the number of days between the actual due date and the date of reporting.

ii. Report output:

RURAL BANK OF DIGOS
Past Due Rate and Past Due Amount

as of July 31, 1998

Acct.No.	Name	Due Date	Principal	Interest	Penalty	Others	Total	Days Past Due
007	Bandong, James	06/30/98	1,200.00	312.00	24.00	0	1,536.00	30
023	Bartolo, Edward	05/15/98	2,400.00	624.00	121.60	0	3,145.60	76
Total			3,600.00	936.00	345.60	0	4,681.60	

t) Effective annual interest rate(s) and over-all yield in portfolio.

Calculating Effective Interest Rates

A microenterprise rate quoted at (for instance) 3% per month may be equivalent to a much higher "effective" monthly rate, depending on how the loan and its repayment are structured. The real cost to the borrower, and the lending institution's real income from its loan portfolio, can be raised significantly by practices such as:

- Computing interest on the original face amount of the loan, rather than on the declining balances that actually remain in the borrower's hands as successive installments of principal are repaid (this method is called a "flat" interest charge);
- Requiring payment of interest at the beginning of the loan (as a deduction from the amount of principal disbursed to the borrower), rather than spreading interest payments throughout the life of the loan;
- Charging a "commission" or "fee" in addition to the interest;
- Quoting a monthly interest rate, but collecting principal and interest weekly, counting four weeks as a "month"; or
- Requiring that a portion of the loan amount be deposited with the lender as compulsory savings or a compensating balance.

As used here, the "effective" interest rate of a particular loan contract is the rate that a client is "really" paying, based on the amount of loan proceeds actually in the client's hands during each period of the life of the loan. It is equivalent to a rate calculated on a declining balance basis.

Report output:

RURAL BANK OF DIGOS
Effective Annual Interest Rate
as of July 31, 1998

Total Microenterpise Loans	11,750,000.00
Average Annual Interest Rate	26.7%
Effective Annual Interest Rate:	
Interest Amortized	45.8%
Interest Paid in Advance	37.2%

u) Qualitative analysis of interest rate and maturity matching report.

(A sample report is attached for details).

v) The system should be capable of generating the following mandatory BSP Reports:

- Reserve Position on Government Funds (7-19-01-A.1)
- Schedule of Agricultural and Industrial Loans (7-19-04-A.3)
- Summary of Loans Granted (7-19-06-A.1)
- Statement of Capital Required (7-19-07)
- Utilization of Loanable Funds (7-19-09-A)

Conforme:

Isabel Abasolo
General Manager
Rural Bank of Digos

August 10, 1998

The Davao Cooperative Bank (DCB) MABS-M Gap Analysis/System Specification Document - August 13th, 1998

This document contains details of the customizations necessary to modify the current computerized banking system of the Davao Cooperative Bank (DCB) to meet its needs.

Currently, the deposit, loans, and accounting modules of DCB are not integrated. Likewise, there are 2 separate loans module that are not integrated- one for the general purpose loans (loans P30,000 and higher) and the other for microenterprise loan (Grameen replication program and other individual loans P30,000 and under).

Davao Cooperative Bank will need to enhance its current version of its computerized banking system in order to satisfy the Systems Requirements List (July 31, 1998) signed by Mr. Joel Lagura.

Included in this document are:

1) A list of functionality that is already present within the current systems.
2) A description of the additional functionality that will need to be programmed.

Since, DCB has 2 separate loans system, it is necessary to prepare a gap analysis for both loans systems. For purposes of clarity, this document will use **"General Loans System"** for all-purpose loans and **"Grameen Loans System"** for Grameen replication and other microenterprise loan accounts.

1) Functionality currently present within the General Loans System

The confirmation of the functionality currently present with the General Loans System and the determination as to its applicability to the DCB was provided by Mr. Constantino M. Orais - EDPC Manager and Mr. Gil G. Salida - Technical Supervisor after review of the Systems Requirement List (July 31, 1998).

Access control and security

a) System access is controlled through a user definable password.

b) The current system has the ability to define a users access authority as any combination of the following - read, write, and update.

Loan Functionality

The Microbanker System will accommodate:

a) Processing the following loan types:
   - Agricultural Loans
   - Commercial Loans
   - Other Loans:
     - Salary Loans

52

b) Processing the following repayment schedule:
   - Daily amortization
   - Weekly amortization
   - Monthly amortization
   - Single amortization (30 day, 45 days, etc....Lump Sum)
   - 15 - 30 days amortization (for individual borrowers)

c) Capturing and storing the following information as individual data values:
   - Principal payments
   - Interest
   - Other charges
     - Penalty is 2% of past due
     - Documentary stamp
     - Service charges of 4%
     - Insurance fees
     - Notarial fees

d) The use of the following computation divisors:

- 360 days for loans
- 365 days for deposits

Deposits (Savings) Functionality

a) The current deposit systems allows the user to change the following parameters with appropriate access codes and passwords:

- Interest rates for savings deposits
- Fees and other charges
- Penalty charges
- Limits on minimum funds in account

2) Functionality to be Programmed

The following list of functionality presented below was arrived at through joint discussion with Mr. Constantino M. Orais and Mr. Gil G. Salida of DCB-EDPC.

For clarity, functionality has been grouped into one of three areas - Loan Functionality, Deposit (Savings) Functionality and Reporting. The first two areas allow data to be entered into the system, while the third allows information to be retrieved.

Access control and security

The following additional functionality must be added to the General Loans System:

a) Record-level data encryption shall be provided to protect sensitive system information against outside manipulation.

b) An audit trail shall be provided with a hard copy of daily transactions and account listings, which show the following information:

- User ID number
- Date & Time Stamp
- Value before the transaction
- Value of the transaction
- Transaction type (read, write, delete)
- Supervisor ID number (for override transactions)

Loan Functionality

The following additional functionality must be added to the General Loans System.

a) Recalculating the loan interest amount in the event of early loan repayment.

b) The ability to check the following conditions before the loan is approved:

- That a P14 per week deposit has been made for individual borrowers and for each member in the case of group loan accounts.
- Cross reference individual loan borrower to group's deposit account.
- Cross reference individual depositor of group members to group's deposit account.
- Notify the user that there are one or more post-dated checks (PDC) related to the loan.

This functionality can only be addressed if the General Loans System and the Deposit system are integrated.

c) Identify microenterprise loans (P25,000 and under) for MABS-M project purposes although DCB considers microenterprise loans to be P30,000 and under. The system must continue to track subsequent loans over P25,000 as microenterprise loans as long as the initial loan to the borrower was P25,000 or under.

d) Assign a loan officer (LO) or account officer (AO) to a loan and relate the LO/AO to all subsequent corresponding loan transactions.

e) Loans must be tracked by the system from the loan application stage not just from the loan approval stage.

f) The system must adapt a customer or client number that will be used to all transactions (deposit, loans, and etc.). This will enable the system to track not only the current loan account and transaction but the history of loan accounts as well.

g) The system must be able to identify individual group members to its group through a group code.

h) The system must be able to identify the sub-classification of borrowers i.e. type of business, etc.

i) The system must be able to store a physical locator code i.e. filing cabinet number or folder number.

85

Deposit (Savings) Functionality

The current deposit system largely meets the requirements of the bank, however, additional functionality that will enable the system to identify microenterprise accounts is also needed.

a) At the time of writing, Microenterprise accounts are those that are opened with P1,000 or less. It is important for the MABS-M program to ensure that these accounts continue to be identifiable even when account balances exceed P1,000.

Reports

The General Loans System is capable of producing the following general reports. However, it is important that the following reports inquire solely upon Microenterprise loan information. This may be achieved by presenting the user with a dialogue box to ask the user whether they would like to run the report across the entire loan portfolio or solely across the Microenterprise loan portfolio.

a) Number of new loans within a period as specified by the user.

b) Number of repeat loans within a period as specified by the user.

c) Number of new loans sorted by loan size within a period specified by the user.

d) Number of loans sorted by loan term within a period specified by the user.

e) Advance notice list showing repayments due at a specific point in time (statement of accounts).

f) Delinquency report.

g) Aging of past due loans.

h) Repayment/account aging to enable bank to determine overall portfolio risk.

i) Repayment rate of loans to enable field representatives (FRs) to be evaluated.

j) Identify which loan cycle the borrower is in.

k) Past due rate and amount.

l) Aging of past due loans.

In addition to modifying the above existing reports, the General Loan System must be able to generate the following reports:

m) Loan profile that identifies and groups loans by gender, age, and economic activity.

i. The user will enter a date range consisting of a begin and end date.

ii. The user will enter a parameter to determine which sort criteria will be used:
- Gender
- Age
- Economic Activity

iii. Report output:

DAVAO COOPERATIVE BANK
Loan Profile by Gender

July 1 - 31, 1997

Gender	No. of Borrowers		Amount	
Male	1,300	35%	32,500,000.00	35%
Female	2,370	65%	59,275,000.00	65%
Total	3,670	100%	91,775,000.00	100%

DAVAO COOPERATIVE BANK
Loan Profile by Age

July 1 - 31, 1997

Age Bracket	No. of Borrowers		Amount	
18 - 25	550	15%	13,762,500.00	15%
26 - 35	1,578	43%	39,452,500.00	43%
36 - 45	734	20%	18,350,000.00	20%
46 - 55	440	12%	11,010,000.00	12%
56 & over	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

DAVAO COOPERATIVE BANK
Loan Profile by Economic Activity

July 1 - 31, 1997

Economic Activity	Number of Borrowers		Amount	
Agriculture	550	15%	13,762,500.00	15%
Commercial	1,578	43%	39,452,500.00	43%
Trading	734	20%	18,350,000.00	20%
Service	440	12%	11,010,000.00	12%
Others	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

n) Repayment rate by business sector.

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

DAVAO COOPERATIVE BANK
Repayment Rate by Business Sector

July 1 - 31, 1998

Business Sector	No. of Borrowers		Amount	
Wholesale Trade	550	15%	13,762,500.00	15%
Retail Trade	1,578	43%	39,452,500.00	43%
Manufacturing	734	20%	18,350,000.00	20%
Service	440	12%	11,010,000.00	12%
Others	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

o) Total interest collected from the microenterprise program.

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

DAVAO COOPERATIVE BANK
Total Interest Collected from Microenterprise Program

July 1 - 31, 1998

Total Loan Portfolio	91,750,000.00
Total Loans Collected	71,565,000.00

Total Interest Collected	1,550,575.00
% Interest Collected	78%

p) Total doubtful/written-off interest and principal.

i. Report output:

DAVAO COOPERATIVE BANK
Total Doubtful & Written-off Accounts

as of July 31, 1998

	Principal	Interest	
Total Doubtful Accounts (In excess of 3 missed due repayments)	4,587,500.00	99,395.83	5%
Total Written-off Accounts	917,500.00	19,879.16	1%

** *Banko Sentral ng Pilipinas (BSP) has recently issued a memorandum for full provisioning of outstanding loans with 3 or more repayments overdue.*

q) Loan cycle the borrower is in and a summary history of loan repayment over previous loan cycles. The historical loan portfolio by AO and by client helps determine how a loan portfolio develops and allows the performance of the AO to be evaluated as well. The report addresses requirements numbers 13 & 14 of the Requirements List (July 31, 1998).

i. Report output:

DAVAO COOPERATIVE BANK
Loan Cycle and History of Loan

as of July 31, 1998

Account Officer	Customer Name	Loan Number	Loan Amount	Times Past Due
E. Pacana	Dela Cruz, Juan	1st	144,000.00	0
		2nd	180,000.00	0
		3rd	300,000.00	0
	Robles, Oscar	1st	60,000.00	0
		2nd	85,000.00	2
M. Abellanosa	Dela Cruz, Juan	1st	144,000.00	0
		2nd	180,000.00	0
		3rd	300,000.00	0
	Robles, Oscar	1st	60,000.00	0
		2nd	85,000.00	2

r) Number and amount of new microenterprise loans made by type of loan product.

i. Report output:

DAVAO COOPERATIVE BANK
New Microenterprise Loans by Type of Loan Product

as of July 31, 1998

Type	Number of Borrowers		Amount	
Product 1	550	15%	13,762,500.00	15%
Product 2	1,578	43%	39,452,500.00	43%
Product 3	734	20%	18,350,000.00	20%
Product 4	440	12%	11,010,000.00	12%
Product 5	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

s) Number of new microenterprise savings depositors and deposit size by type of account (initial deposit less than P 1,000).

i. Report output:

DAVAO COOPERATIVE BANK
Microenterprise Deposit Sizes

as of July 31, 1998

Deposit Size	Number of Depositors		Amount	
100 - 250	550	12%	96,500.00	12%
251 - 500	600	25%	225,000.00	25%
501 - 750	300	20%	187,800.00	20%
751 - 1,000	440	43%	385,440.00	43%
TOTAL	1,890	100%	894,740.00	100%

t) Number of loans and outstanding loan portfolio per microenterprise loan officer.

i. Report output:

DAVAO COOPERATIVE BANK
Outstanding Microenterprise loan portfolio by Account Officer

as of July 31, 1998

Account Officer	Number of Loans		Amount	
E. Pacana	550	15%	13,762,500.00	15%
M. Abellanosa	1,578	43%	39,452,500.00	43%
C. Avillon	734	20%	18,350,000.00	20%
S. Nabatar	440	12%	11,010,000.00	12%
R. Ratilla	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

u) On-time repayment rate (collection performance)

i. Repayment Rate (Principal Only) = $\frac{\text{Total Principal Paid}}{\text{Total Principal Due}}$

ii. Report output:

DAVAO COOPERATIVE BANK
On-time Repayment Rate

as of July 31, 1998

Total Microenterprise Loan Due (Principal)	1,750,000.00
Total Microenterprise Loans Paid (Principal)	1,640,000.00
On-time Repayment Rate	94%

v) Loan loss rate. Loan loss rate is the annual loss due to uncollectible loans. This must apply to microenterprise loans.

i. Loan Loss Rate = $\frac{\text{Total ME Written-off Account}}{\text{Total ME Loan Portfolio}}$

ii. Report output:

DAVAO COOPERATIVE BANK
Loan Loss Rate

as of July 31, 1998

Total Microenterprise Loan Portfolio	11,750,000.00
Total Written-off Loans	549,000.00
Loan Loss Rate	4.6%

w) Effective annual interest rate(s) and over-all yield in portfolio.

Calculating Effective Interest Rates

A microenterprise rate quoted at (for instance) 3% per month may be equivalent to a much higher "effective" monthly rate, depending on how the loan and its repayment are structured. The real cost to the borrower, and the lending institution's real income from its loan portfolio, can be raised significantly by practices such as:

- Computing interest on the original face amount of the loan, rather than on the declining balances that actually remain in the borrower's hands as successive installments of principal are repaid (this method is called a "flat" interest charge);
- Requiring payment of interest at the beginning of the loan (as a deduction from the amount of principal disbursed to the borrower), rather than spreading interest payments throughout the life of the loan;
- Charging a "commission" or "fee" in addition to the interest;
- Quoting a monthly interest rate, but collecting principal and interest weekly, counting four weeks as a "month"; or
- Requiring that a portion of the loan amount be deposited with the lender as compulsory savings or a compensating balance.

As used here, the "effective" interest rate of a particular loan contract is the rate that a client is "really" paying, based on the amount of loan proceeds actually in the client's hands during each period of the life of the loan. It is equivalent to a rate calculated on a declining balance basis.

Report output:

DAVAO COOPERATIVE BANK
Effective Annual Interest Rate
as of July 31, 1998

Total Microenterpise Loans	11,750,000.00
Average Annual Interest Rate	26.7%
Effective Annual Interest Rate:	
Interest Amortized	45.8%
Interest Paid in Advance	37.2%

x) The system should be capable of generating the following mandatory BSP Reports:

- Reserve Position on Government Funds (7-19-01-A.1)
- Schedule of Agricultural and Industrial Loans (7-19-04-A.3)
- Summary of Loans Granted (7-19-06-A.1)
- Statement of Capital Required (7-19-07)
- Utilization of Loanable Funds (7-19-09-A)

1) Functionality currently present within the Grameen Loans System

The confirmation of the functionality currently present with the Grameen Loans System and the determination as to its applicability to the DCB was provided by Mr. Constantino M. Orais - EDPC Manager and Mr. Gil G. Salida - Technical Supervisor after review of the Systems Requirement List (July 31, 1998).

Access control and security

c) System access is controlled through a user definable password.

d) The current system has the ability to define a users access authority as any combination of the following - read, write, and update.

Loan Functionality

The Microbanker System will accommodate:

e) Processing the following loan types:
   - Agricultural Loans
   - Commercial Loans
   - Other Loans:
     - Salary Loans

f) Processing the following repayment schedule:
   - Daily amortization
   - Weekly amortization
   - Monthly amortization
   - Single amortization (30 day, 45 days, etc....Lump Sum)
   - 15 - 30 days amortization (for individual borrowers)

g) Capturing and storing the following information as individual data values:
   - Principal payments
   - Interest
   - Other charges
     - Penalty is 2% of past due
     - Documentary stamp
     - Service charges of 4%
     - Insurance fees
     - Notarial fees

h) The use of the following computation divisors:

   - 360 days for loans
   - 365 days for deposits

Deposits (Savings) Functionality

b) The current deposit systems allows the user to change the following parameters with appropriate access codes and passwords:

- Interest rates for savings deposits
- Fees and other charges
- Penalty charges
- Limits on minimum funds in account

2) Functionality to be Programmed

The following list of functionality presented below was arrived at through joint discussion with Mr. Constantino M. Orais and Mr. Gil G. Salida of DCB-EDPC.

For clarity, functionality has been grouped into one of three areas - Loan Functionality, Deposit (Savings) Functionality and Reporting. The first two areas allow data to be entered into the system, while the third allows information to be retrieved.

Access control and security

The following additional functionality must be added to the Grameen Loans System:

c) Record-level data encryption shall be provided to protect sensitive system information against outside manipulation.

d) An audit trail shall be provided with a hard copy of daily transactions and account listings, which show the following information:

- User ID number
- Date & Time Stamp
- Value before the transaction
- Value of the transaction
- Transaction type (read, write, delete)
- Supervisor ID number (for override transactions)

Loan Functionality

The following additional functionality must be added to the Grameen Loans System.

j) Recalculating the loan interest amount in the event of early loan repayment.

k) The ability to check the following conditions before the loan is approved:

- That a P14 per week deposit has been made for individual borrowers and for each member in the case of group loan accounts.
- Cross reference individual loan borrower to group's deposit account.
- Cross reference individual depositor of group members to group's deposit account.
- Notify the user that there are one or more post-dated checks (PDC) related to the loan.

This functionality can only be addressed if the Grameen Loans System and the Deposit system are integrated.

l) Identify microenterprise loans (P25,000 and under) for MABS-M project purposes although DCB considers microenterprise loans to be P30,000 and under. The system must continue to track subsequent loans over P25,000 as microenterprise loans as long as the initial loan to the borrower was P25,000 or under.

m) Assign a loan officer (LO) or account officer (AO) to a loan and relate the LO/AO to all subsequent corresponding loan transactions.

n) Loans must be tracked by the system from the loan application stage not just from the loan approval stage.

o) The system must adapt a customer or client number that will be used to all transactions (deposit, loans, and etc.). This will enable the system to track not only the current loan account and transaction but the history of loan accounts as well.

p) The system must be able to identify individual group members to its group through a group code.

q) The system must be able to identify the sub-classification of borrowers i.e. type of business, etc.

r) The system must be able to store a physical locator code i.e. filing cabinet number or folder number.

Deposit (Savings) Functionality

The current deposit system largely meets the requirements of the bank, however, additional functionality that will enable the system to identify microenterprise accounts is also needed.

b) At the time of writing, Microenterprise accounts are those that are opened with P1,000 or less. It is important for the MABS-M program to ensure that these accounts continue to be identifiable even when account balances exceed P1,000.

Reports

The Grameen Loans System is capable of producing the following Grameen reports. However, it is important that the following reports inquire solely upon Microenterprise loan information. This may be achieved by presenting the user with a dialogue box to ask the user whether they would like to run the report across the entire loan portfolio or solely across the Microenterprise loan portfolio.

m) Number of new loans within a period as specified by the user.

n) Number of repeat loans within a period as specified by the user.

o) Number of new loans sorted by loan size within a period specified by the user.

p) Number of loans sorted by loan term within a period specified by the user.

q) Advance notice list showing repayments due at a specific point in time (statement of accounts).

r) Delinquency report.

s) Aging of past due loans.

t) Repayment/account aging to enable bank to determine overall portfolio risk.

u) Repayment rate of loans to enable field representatives (FRs) to be evaluated.

v) Identify which loan cycle the borrower is in.

w) Past due rate and amount.

x) Aging of past due loans.

In addition to modifying the above existing reports, the Grameen Loan System must be able to generate the following reports:

y) Loan profile that identifies and groups loans by gender, age, and economic activity.

iv. The user will enter a date range consisting of a begin and end date.

v. The user will enter a parameter to determine which sort criteria will be used:
- Gender
- Age
- Economic Activity

vi. Report output:

DAVAO COOPERATIVE BANK
Loan Profile by Gender

July 1 - 31, 1997

Gender	No. of Borrowers		Amount	
Male	1,300	35%	32,500,000.00	35%
Female	2,370	65%	59,275,000.00	65%
Total	3,670	100%	91,775,000.00	100%

DAVAO COOPERATIVE BANK
Loan Profile by Age

July 1 - 31, 1997

Age Bracket	No. of Borrowers		Amount	
18 - 25	550	15%	13,762,500.00	15%
26 - 35	1,578	43%	39,452,500.00	43%
36 - 45	734	20%	18,350,000.00	20%
46 - 55	440	12%	11,010,000.00	12%
56 & over	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

DAVAO COOPERATIVE BANK
Loan Profile by Economic Activity

July 1 - 31, 1997

Economic Activity	Number of Borrowers		Amount	
Agriculture	550	15%	13,762,500.00	15%
Commercial	1,578	43%	39,452,500.00	43%
Trading	734	20%	18,350,000.00	20%
Service	440	12%	11,010,000.00	12%
Others	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

z) Repayment rate by business sector.

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

DAVAO COOPERATIVE BANK
Repayment Rate by Business Sector

July 1 - 31, 1998

Business Sector	No. of Borrowers		Amount	
Wholesale Trade	550	15%	13,762,500.00	15%
Retail Trade	1,578	43%	39,452,500.00	43%
Manufacturing	734	20%	18,350,000.00	20%
Service	440	12%	11,010,000.00	12%
Others	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

aa) Total interest collected from the microenterprise program.

i. The user will enter a date range consisting of a begin and end date.

ii. Report output:

DAVAO COOPERATIVE BANK
Total Interest Collected from Microenterprise Program

July 1 - 31, 1998

Total Loan Portfolio	91,750,000.00
Total Loans Collected	71,565,000.00
Total Interest Collected	1,550,575.00

% Interest Collected	78%

bb) Total doubtful/written-off interest and principal.

i. Report output:

DAVAO COOPERATIVE BANK
Total Doubtful & Written-off Accounts

as of July 31, 1998

	Principal	Interest	
Total Doubtful Accounts (In excess of 3 missed due repayments)	4,587,500.00	99,395.83	5%
Total Written-off Accounts	917,500.00	19,879.16	1%

** *Banko Sentral ng Pilipinas (BSP) has recently issued a memorandum for full provisioning of outstanding loans with 3 or more repayments overdue.*

cc) Loan cycle the borrower is in and a summary history of loan repayment over previous loan cycles. The historical loan portfolio by AO and by client helps determine how a loan portfolio develops and allows the performance of the AO to be evaluated as well. The report addresses requirements numbers 13 & 14 of the Requirements List (July 31, 1998).

i. Report output:

DAVAO COOPERATIVE BANK
Loan Cycle and History of Loan

as of July 31, 1998

Account Officer	Customer Name	Loan Number	Loan Amount	Times Past Due
E. Pacana	Dela Cruz, Juan	1st	144,000.00	0
		2nd	180,000.00	0
		3rd	300,000.00	0
	Robles, Oscar	1st	60,000.00	0
		2nd	85,000.00	2
M. Abellanosa	Dela Cruz, Juan	1st	144,000.00	0
		2nd	180,000.00	0
		3rd	300,000.00	0
	Robles, Oscar	1st	60,000.00	0
		2nd	85,000.00	2

107

ff) Number of loans and outstanding loan portfolio per microenterprise loan officer.

i. Report output:

DAVAO COOPERATIVE BANK
Outstanding Microenterprise loan portfolio by Account Officer

as of July 31, 1998

Account Officer	Number of Loans		Amount	
E. Pacana	550	15%	13,762,500.00	15%
M. Abellanosa	1,578	43%	39,452,500.00	43%
C. Avillon	734	20%	18,350,000.00	20%
S. Nabatar	440	12%	11,010,000.00	12%
R. Ratilla	367	10%	9,175,000.00	10%
TOTAL	3,670	100%	91,750,000.00	100%

gg) On-time repayment rate (collection performance)

i. Repayment Rate (Principal Only) = $\frac{\text{Total Principal Paid}}{\text{Total Principal Due}}$

ii. Report output:

DAVAO COOPERATIVE BANK
On-time Repayment Rate

as of July 31, 1998

Total Microenterprise Loan Due (Principal)	1,750,000.00
Total Microenterprise Loans Paid (Principal)	1,640,000.00
On-time Repayment Rate	94%

hh) Loan loss rate. Loan loss rate is the annual loss due to uncollectible loans. This must apply to microenterprise loans.

i. Loan Loss Rate = $\frac{\text{Total ME Written-off Account}}{\text{Total ME Loan Portfolio}}$

ii. Report output:

DAVAO COOPERATIVE BANK
Loan Loss Rate

as of July 31, 1998

Total Microenterprise Loan Portfolio	11,750,000.00
Total Written-off Loans	549,000.00
Loan Loss Rate	4.6%

ii) Effective annual interest rate(s) and over-all yield in portfolio.

Calculating Effective Interest Rates

A microenterprise rate quoted at (for instance) 3% per month may be equivalent to a much higher "effective" monthly rate, depending on how the loan and its repayment are structured. The real cost to the borrower, and the lending institution's real income from its loan portfolio, can be raised significantly by practices such as:

- Computing interest on the original face amount of the loan, rather than on the declining balances that actually remain in the borrower's hands as successive installments of principal are repaid (this method is called a "flat" interest charge);
- Requiring payment of interest at the beginning of the loan (as a deduction from the amount of principal disbursed to the borrower), rather than spreading interest payments throughout the life of the loan;
- Charging a "commission" or "fee" in addition to the interest;
- Quoting a monthly interest rate, but collecting principal and interest weekly, counting four weeks as a "month"; or
- Requiring that a portion of the loan amount be deposited with the lender as compulsory savings or a compensating balance.

As used here, the "effective" interest rate of a particular loan contract is the rate that a client is "really" paying, based on the amount of loan proceeds actually in the client's hands during each period of the life of the loan. It is equivalent to a rate calculated on a declining balance basis.

Report output:

DAVAO COOPERATIVE BANK
Effective Annual Interest Rate
as of July 31, 1998

Total Microenterpise Loans	11,750,000.00
Average Annual Interest Rate	26.7%
Effective Annual Interest Rate:	
Interest Amortized	45.8%
Interest Paid in Advance	37.2%

jj) The system should be capable of generating the following mandatory BSP Reports:

- Reserve Position on Government Funds (7-19-01-A.1)
- Schedule of Agricultural and Industrial Loans (7-19-04-A.3)
- Summary of Loans Granted (7-19-06-A.1)
- Statement of Capital Required (7-19-07)
- Utilization of Loanable Funds (7-19-09-A)

Conforme:

_____

Constantino M. Orais
EDPC Manager
Davao Cooperative Bank

August 12, 1998