GEO
Guyana Economic Opportunities

Strengthening IPED's Credit Methodology

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I. Introduction

The purpose of this assignment was to provide assistance to IPED in strengthening its credit methodology. The assigned tasks involved the areas of loan structuring, pricing methodology, the process for approving loans, and the management of delinquent loans. The specific tasks required under each of these four areas are covered in detail in the body of this report.

A few general comments regarding these tasks can be made. With reference to loan structuring, the key is to better prepare the loan officers in their knowledge of cash flow analysis. This will be accomplished via training sessions in the first quarter of next year. A set of principles is included in this report which serves as a qualitative methodology for structuring loans.

As to pricing methodology, a procedure is provided in the report which is a first step in giving IPED the ability to include all requisite factors in establishing the interest rates set on loans. This includes factors for subsidies, loan loss reserves, and inflation. IPED may in time add other factors to the methodology. It is also noteworthy that these factors all operate in a dynamic environment and thus will need to be adjusted to changing market conditions as the methodology is utilized.

Concerning the loan approval process, a central issue is the decentralization of the process for lending decisions. A system for the delegation of loan authority down the line all the way to the loan officer level needs to be designed. Management is cognizant of this need and with the new MIS system and the anticipated cash flow training such a policy will commence. Discussions with the General Manager included specifics as to the levels of delegated authority for lending decisions.

On delinquency management, key steps involve establishing guidelines for delinquency targets, provisioning, and write-offs meeting best-practice standards. Delinquency targets compatible with best practices are in place. Guidelines for provisioning in both loan windows will be revised with those for the Micro Loan Window meeting best-practice standards. Write-off policy will be revised with best practices being utilized for the Micro Loan Window.

To accomplish this assignment numerous meetings were conducted with the General Manager. Multiple meetings were also held with the Credit Manager, supervisors, and loan officers as well as the accountant. MIS input was received and a branch visit was arranged.

Documents reviewed included the following:

(1) Manual for Main Loan Window
(2) Manual for Micro Loan Window
(3) GEO Institutional Assessment Report (May 2000)
(4) Main Loan Window Application Form
(5) Micro Loan Window Application Form
(6) IPED 1999 Annual Report
(7) MICRORATE Assessment Report (September 2000)
(8) IBD Donors Memorandum

II. Task #1-Terms

The task is to define a set of procedures detailing the proper methodology for structuring loans.

Such procedures require both a qualitative and a quantitative analysis. The qualitative involves what are referred to as the five c's of credit. The lender would review the *character*, *capital,* and *capacity* of the borrower. The value of the *collateral* would also be established. Once these four factors were considered the necessary *conditions* would be applied to structure a solid loan. The quantitative portion of the analysis involves studying the cash flow of the borrower's business in order to structure a proper loan repayment schedule.

A proper methodology for performing the *qualitative* analysis involves establishing a series of issues for each of the 5 c's mentioned. A checklist is then designed for each issue and a series of questions designed to satisfy the checklist is developed. Such a methodology is provided in the material which follows:

1. Character

Issue - Legal Business Entity

Checklist - Signing authority to bind entity

Questions
- What type of business entity is applying for the loan?
- Is the business entity based on written documentation such as a charter or partnership agreement?
- Is the business properly registered?
- Does the business activity in which the firm is engaged conform to charters, by-laws, regulations, and laws?
- Who is authorized to sign the loan agreement?
- Who is liable for repaying the debt?

Issue - Moral Character

Checklist
- Truthfulness of information provided
- Inflated production, earnings estimate, asset values
- Are these intentional, careless, or show lack of knowledge?
- Is it an acceptable mistake or intent to mislead?
- Commitment to business dealings and debt
- Community reputation
- References

Questions - Is all information provided believed to be truthful?

- Has the borrower/applicant borrowed money before and repaid as scheduled?
- Does the borrower have other outstanding debts?
- Are they current?
- Has the applicant ever been involved in a bankruptcy?
- Is the applicant and his/her family a permanent member of the community?
- Is the applicant considered a community leader?
- Is the applicant currently running a business?
- If so, what is its reputation?
- Are references positive?

Issue - Financial Management Capability

Checklist - Quality of business records

- Must be adequate to analyze business
- Look at production and sales records/budgets
- Borrower must understand profit potential
- Borrower must have ability to support own loan request
- Beware if borrower cannot assemble and construct records
- Borrower must reconcile past performance with future expectations
- Past payment record of borrower

Questions - Do financial records exists?

- Are records appropriate for size of business?
- Has applicant constructed sound business plan showing use of funds and repayment schedule?
- Do forecasts of future business activity reconcile with past performance?
- Have past debts been repaid according to terms?

Issue - Operational Management Capability

Checklist - Analyze business experience and education

- Takes greater skill to run more complex business
- At some point need management team

Questions - Does applicant have related business experience?

- Does applicant have appropriate education?
- What are skill levels and responsibilities of other key personnel?
- How do operational results compare with similar business?
- Are estimated production levels, sales and market prices realistic?

2. Capital

Issue - Structuring Balance Sheet

Checklist - Short-term assets and liabilities turned into cash or paid in 12 months

- Intermediate assets and liabilities consumed over several years
- Long-term assets have life (useful) over 5 to 7 years

Questions - Does balance sheet provide sufficient detail and classification to conduct analysis?

- Does balance sheet represent entity applying for loan and entity liable for repaying loan?
- Do you need opinion of outside accountant?

Issue - Verifying and Adjusting Balance Sheet

Checklist - Determine asset ownership (title, sales receipts, invoices)

- Physical inspection of inventory
- Appraiser may be used for complex assets
- Verify liabilities by contacting creditors, credit checks, inspecting public records
- Compare current and public records

Questions - Has borrower submitted signed balance sheet and granted permission to verify assets and liabilities?

- How were balance sheet values verified?
- Has method for verifying ownership and value of assets and liabilities been documented in loan file?
- Have current and past balance sheets been compared?

Issue - Measuring Financial Strength and Liquidity

Checklist - Financial strength determined by examining structure of assets and liabilities, analyzing liquidity, assessing equity position, and reviewing business past financial trends

- Match assets and liabilities (Short, Intermediate, Long)
- If assets do not contribute to profitability then sell
- Liquidity defined as working capital
- Balance sheet analyzed for source of capital, stability of trends, and causes of change
- Positive trends reflected by business profits not new equity or selling long-term assets to provide positive cash flow

Questions
- Is structure of liabilities relative to assets appropriate?
- How much working capital is available?
- What is current ratio?
- How much equity exists?
- What is the equity/asset ratio?
- Is equity growing and liquidity position of business improving?

3. Capacity

Issue - Alternative Accounting Methods

Checklist
- Accrual versus cash
- Small businesses generally use cash
- Cash method may distort due to timing of activity and receipt of cash
- Accounting must be consistent with industry norms
- To guard against being mislead by differences in methods, must understand approach being used and determine if adjustments needed to reflect true earnings potential

Questions
- Is business using cash basis or accrual basis?
- Is accounting method consistent with industry norms?
- Does business maintain accurate financial and non-financial records?
- Do accounting reports accurately show true earnings capacity of business or are adjustments needed?

Issue - Income Statements versus Cash Flow Statements

Checklist
- Impact of depreciation and other non-cash items
- Cash flow not net income determines ultimate capacity (Example: cash purchase of truck but depreciated over useful life)

Questions - Is business income improving financial strength (equity) of business?

- Does loan officer understand discrepancies of income statement and cash flow statement?

Issue - Earnings Analysis

Checklist - Capacity determined by analyzing past earnings/cash flows and projections of same

- Look at historicals, which show ability to generate revenues over extended period of time
- Cash flow projections constructed for duration of loan but use monthly projections for first year to properly structure debt
- Look for peak borrowing needs
- Cash flow comes from operations, sale of long-term assets, additional borrowings, or additional equity
- Cash flow from operations most important
- Historical trends are basis for projections
- For production assets need to know how they will be paid for when replacement necessary
- Adjust cash flows for economic outlook for industry
- Are time and circumstances for proposed loan favorable (including external influences)?
- Inflation must be accounted for
- Constant prices most conservative approach but not appropriate in high-inflation economy
- Must balance when input and product prices impacted differently by inflation
- Not sound loan if repayment depends upon sale of fixed assets at inflated values

Questions - Are income statements, cash flow statements, and balance sheets from past operations available?

- Do income statements reconcile to change in borrower's equity position?
- Has operating income been major contributor to business growth?
- Is business generating adequate income to cover all costs?
- Does business have adequate financial cushion for adversity?
- Has borrower provided accurate cash flow projection for duration of loan?

- Are operating profits major source of cash in flows?
- Does cash flow projection include sale or acquisition of capital assets?
- Are owner distributions reasonable for size of business?
- Have adjustments been made for significant business changes and macro economic influences?
- Has impact of inflation been factored into analysis on a conservative basis?

<u>Issue - Measurement of Capacity Strength</u>

Checklist
- Debt service coverage ratio tells ability to repay loan
- Sensitivity analysis (Impact of changes on the income statement)

Questions
- What is the value of the debt service coverage ratio?
- Does the debt service coverage ratio indicate borrower's capacity is a strength or weakness?

4. Collateral

<u>Issue - Categories</u>

Checklist
- Financial instruments
- Accounts receivable
- Inventory
- Real estate
- Other

Questions
- Has loan officer accurately assessed the collateral category and common characteristics associated with personal property, financial instruments, depreciable capital assets, and real estate?

<u>Issue - Appraisal Value</u>

Checklist
- Book is not market
- Market value has extra impact in inflationary environment
- Three methods used to establish appraised value (*cost*, *comparative sales*, *capitalization rate*)
- *Cost* is replacement cost
- Be careful of deterioration, obsolescence, or other market pricing influences
- *Comparative sales* looks at like assets recently sold
- Uses database
- Must assure other sales price set by market forces at arms length under competitive supply and demand

- Be careful for external market forces like farmer selling land to son at less than market value
- Hard to find identical items for some equipment or inventory
- Should have three sources as comparables
- *Capitalization rate* looks at future income potential
- By looking at return on investment can ignore other sources of value such as automobile distributor paying extra for ideal location
- Capitalization rate probably most solid of three options

Questions
- Is professional appraiser being used?
- If not, does lender have skills to accurately appraise the collateral?
- Was a formal appraisal method used and what was the primary appraisal approach?
- Is the appraisal approach used the best approach for the category of collateral being appraised?
- Is the appraisal value reasonable?

Issue - Security Agreement

Checklist
- To have security interest, need legal claim
- To have legal claim, need attachment and perfection
- For attachment, borrower signs security agreement, which creates security interest
- Security interest must be in writing and signed by borrower, plus state lender has security interest and has described collateral for identification purposes
- For perfection, must file statement with appropriate governmental authority, which, again, must describe collateral
- Process establishes level of priority in liquidation
- Gives first, second, third rights, etc.

Questions
- Was signed security agreement obtained from borrower?
- Was collateral sufficiently described for identification?
- Was security interest filed with appropriate agency?
- What is lender's priority on the debt claim?

Issue - Types of Collateral

Checklist - Primary

- Additional (Abundance of caution)

Questions - Was the primary collateral of the correct type for the loan?

- Does the primary collateral meet the lender's requirement for properly securing the loan?
- If primary collateral is not adequate, was sufficient additional collateral obtained?

Issue - Ability to Collect

Checklist - Probability of repossessing

- Evasive action can include unwilling court system, strong communal bonds, or threat of physical harm
- Less likely to recover collateral easily moved or difficult to identify

Questions - Is it culturally acceptable to repossess collateral?

- Is collateral easily movable, easily sold, or difficult to identify (such as grain or other commodities)?
- Will collateral have value to lender in event of loan default?

Issue - Measuring Collateral Strength

Checklist - Loan-to-collateral-value ratio depends on the asset being pledged

- Accounts receivable may be as high as 70 percent
- Inventory of 50 percent or less
- Real estate (Varies with class of real estate pledged)

5. Conditions

Issue - Structuring Loan Terms

Checklist - Objectives of structuring loan terms are:

- Be consistent with loan purpose
- Set loan amount within repayment and risk-bearing capacity of borrower
- Set maturity consistent with borrower's ability to repay within life of asset being financed
- Schedule payments that fit cash flows
- Obtain appropriate primary collateral

- Any grace period, if required, should coincide with the start-up phase of the business investment
- Any additional financial obligations of the borrower must be considered in structuring the loan
- Any non-productive assets should be sold to improve the borrower's liquidity

Questions
- Is the loan consistent with the loan purpose?
- Is the loan amount within the repayment capacity of the borrower
- Is the maturity of the loan as short as possible based on the borrower's ability to repay?
- Does the maturity of the loan exceed the operational cycle or useful life of the asset being financed (whichever is appropriate)?
- Do loan disbursements and payment frequencies match the normal cash flows of the business?
- Is the primary collateral adequate and appropriate?
- Is a grace period needed, and if so, does it coincide with the start-up phase of the business investment?
- Is the loan payment type and interest rate type consistent with the needs of the borrower and lending policies of IPED?

Issue - Establishing Conditions

Checklist
- Working capital shortage is liquidity problem
- Long-term asset financed by short-term liability is liquidity problem
- Inadequate equity comes from poor earnings, earnings not retained, rapid business expansion, or being a start-up enterprise
- If concerned with loan structure, the monitoring of a loan can be modified by:
    - Additional reporting requirements
    - More frequent on-site inspections
    - Periodic verification of bank account balances
    - Periodic verification of inventory
    - Requiring lender's approval for major business decisions
    - Controlling loan disbursements can also be modified by
        - Paying borrower's suppliers directly
        - Requiring proof of expenditures before releasing additional loan funds
    - Requiring certain types of insurance such as life, casualty, etc.

Questions

- Are all existing debts properly structured, and if not can they be rescheduled or refinanced?
- Can non-productive assets be sold to improve the borrower's liquidity?
- Are additional collateral or guarantors required?
- Are monitoring requirements appropriate for the level of risk?
- Are disbursement controls needed to ensure funds are used for the loan purpose?
- Is insurance of some sort required?
- Is lender prepared to deny loan application if structuring and conditioning actions cannot achieve an acceptable risk?

The proper methodology for the *quantitative* portion of the loan structuring is to conduct a thorough cash flow analysis of the borrower's business. This is a study of the cash inflows and cash outflows of the business. It is examination of the numbers. The GEO Institutional Assessment of IPED conducted in May 2000 focused only on this aspect and did not take into consideration the qualitative portion just discussed in this report. The May report noted that a number of IPED's loans repaid earlier than scheduled and referenced that more cash flow analysis by IPED officers would better match repayment with original loan terms.

Other considerations could be causing these early repayments such as borrowers repaying early in order to obtain second or more loans. This fact is possibly re-enforced because early loans to any borrower carry lower maximum amounts thus encouraging early payments to increase access to credit. Regardless of these other considerations, it still seems a supportable contention that more cash flow analysis by IPED loan officers would result in loan structurings that reduce early repayment of loans by borrowers.

As a result, cash flow training will be provided to the lending staff of IPED early next year. That training, plus the use of the methodology for qualitative analysis outlined in this report, should result in more solid loan structurings for the IPED portfolio.

One area of loan structuring that could be addressed now is the philosophy employed when establishing repayment of equipment loans under the Main Loan Window. Presently, repayment of this type of loan is set using a "best-case" scenario whereby unforeseen circumstances or less-than-optimum performance by the borrower's business are not given sufficient consideration. Thus, when the unexpected happens or the business of the borrower does not do as well as expected, the repayment requirement is too aggressive and a loan delinquency occurs. Plainly in these instances cash flow is not sufficient to service the loans.

When establishing repayment terms for equipment loans it would be better to use a "most likely" scenario, which has a cushion for things not always going as planned. Such a policy would reduce delinquencies as presently appears to be happening in some cases. Whenever possible, contingencies should be built into the structuring of loans.

III. Alternative Loan Products

As an adjunct to task #1 it was mentioned that, whenever relevant, suggestion of alternative loan product(s) should be made in this report. A suggestion in this regard is warranted as relates to the Micro Loan Window. At the present time this Window is restricting its portfolio to short-term loans for working capital. What should be considered is the extension of longer-term loans under this Window, which would be for investment purposes such as equipment, home improvements, etc. The Main Loan Window now extends these longer-term loans and a natural extension of the Micro Window would be to do the same. IPED has an underwriting philosophy that is comfortable with this type of credit so the potential should be explored.

While discussing the subject of alternative loan products with management of IPED the matter arose of having a systematic approach to marketing a new product. For that reason it was determined to include in this document a nine-step approach to marketing a new product. This approach is useable for either a loan or savings product and, in fact, can be used for any product financial or otherwise.

The nine steps in marketing a product are as follows:

(1) Market Research
(2) Product Development
(3) Developing Client Profile
(4) Develop Goals
(5) Identify Marketing Channels
(6) Develop Marketing Materials/Program
(7) Initiate Marketing Program
(8) Track Progress
(9) Review and Revise

There are multiple factors with each of these steps, as reflected in the following process:

(1) <u>Market Research</u>
- Survey
- Testing
- Focus Groups
- What Consumers/Users Want
- Competitor Products
- Competitor Locations (Distribution Network)
- Consultants

(2) <u>Product Development</u>
- Content (Packaging)
- Pricing
- Competition
- Internal Research (People, Capabilities)

(3) <u>Develop Client Profile</u>
- Size
- Industry

- Products Already Used
- Financial Standing (Requirements)
- Business Characteristics

(4) Develop Goals
- Realistic
- Rewards
- Quantitative
- Qualitative (Attract Certain Clients)
- Assign Goals

(5) Identify Marketing Channels
- Branches
- Internal Sales Force
- Internet
- Financial Partners
- Brokers

(6) Develop Marketing Materials/Program
- Advertising (Radio, Newspapers, Magazines)
- Customer Satisfaction with Product Trials
- Brochures
- Flyers
- Use of Local Stores/Places of Business
- Customer Briefings
- Management Presentations

(7) Initiate Marketing Program
- Announce via Branch Advertising
- Announce via Internal or External Publications
- Radio, Newspaper, TV Announcements
- Have Loan Officers Inform Clients and Prospects
- Invite Larger Clients to Briefing

(8) Track Progress
- Focus Groups
- Questionnaires for Clients/Prospects
- Staff/Loan Officer Product Performance Checks (Quantitative and Qualitative)
- What Works
- What Does Not Work
- Inform Staff of Progress (Get Their Input)
- Match Performance to Goals (Quantitative and Qualitative)

(9) Review and Revise
- Focus Groups
- Changes Needed
  - Product

  - Client Profile
  - Goals
  - Marketing Channels
  - Marketing Materials
  - Marketing Program
- Post Results
- Admit Mistakes
- Reward Success
- Always Look for Improvement

IV. Task #2-Pricing

The task is to define a set of procedures detailing the methodology for setting appropriate interest rates.

The annual report for IPED in 1999 shows a profit. Several consulting reports have run numbers for IPED profitability making adjustments for interest cost subsidies, loan loss reserves, and inflation. As these reports attribute different assumptions to these factors, the final numbers are different but they reach the same conclusion. That conclusion is a lack of profitability from the operations of IPED based on these adjustments.

There are several methods of approximating the effective interest rate IPED will need to charge on its loans to cover all of its costs plus make the requisite profits. The one described in this report comes from a World Bank publication called *Micro-finance Handbook*, written by Joanna Ledgerwood. It must be remembered that IPED operates in a very fluid, dynamic market. The components comprising any pricing model used by the organization will be changing regularly, thus requiring new figures to be input on a regular basis.

The components will be described briefly and a symbol supplied for each. These symbols will then be used in a formula at the end. Using the formula, two examples will be portrayed which will show effective annual interest rates IPED would be earning under two scenarios.

The components of the methodology would be comprised of the following:

(1) *Operating Expenses (OE)* - All expenses are included here except for financing costs and loan loss provisioning. These expenses are taken as a percentage of the average loan portfolio outstanding during the year.

(2) *Cost of Funds (CF)* - This component includes funds obtained from concessional sources or private sector sources. Best practices indicates that the factor used in the formula should be the commercial bank lending rate to medium-quality borrowers. IPED currently uses only concessional sources and is being encouraged to plan for the day when a move will be made to private-sector funding. IPED management takes the position that it is good to plan for this event happening but that it also wants to utilize concessional sources as long as theses are available. The two scenarios portrayed later will take each of these sources into account.

Besides funding sources for debt, the second ingredient in this component is the equity factor. For the equity factor, the projected inflation rate should be used because inflation represents a real annual reduction in the purchasing power of IPED's net worth. Some would advocate that a market rate for equity be used because equity is generally more costly than debt due to the higher risks inherent with equity. In other words, the inflation rate may understate the true cost of the equity.

The debt and equity ingredients are added together to calculate the total cost and this total is again stated as a percentage of the average loan portfolio outstanding during the year.

(3) *Loan Losses (LL)* - This factor represents the write-offs for any year. When modeling, this number can be updated quarterly or more often if conditions dictate. It is also stated as a percentage of the average loan portfolio outstanding to maintain consistency.

(4) *Capitalization Rate (K)* - The capitalization rate represents the real net profit IPED would like to achieve, expressed as a percentage of the average loan portfolio. This target depends on how aggressive IPED wishes to be. Capitalization rates of five to 15 percent of the average loan portfolio are suggested.

(5) *Investment Income (II)* - This is the investment income generated by IPED's financial assets, excluding the loan portfolio. This income expressed as a percentage of the average loan portfolio is entered as a deduction in the pricing equation.

These components comprise the methodology for the pricing model. At this juncture the MIS system is not sufficient to separate the numbers for the Micro Loan Window from the Main Loan Window. It is likely Deloitte and Touche, IPED's accounting firm, can be of assistance in separating these numbers. Once the MIS system can do this better, profitability management can be achieved. In the interim a combined set of numbers can be used for planning purposes starting now.

Using R as the resulting effective annual interest rate symbol, the following formula can be used:

$$\mathrm{R} = \frac{OE + CF + LL + K}{1 - LL} - \mathrm{II}$$

For the purposes of this paper, two scenarios will be portrayed. Remember that these numbers are fluid as IPED operates in a dynamic environment. With the new MIS system, management can model limitless scenarios. The two scenarios are for one point in time using one set of assumptions and are indicative of only those assumptions. They do not represent the effective annual interest rate currently being received by IPED. The current rate being received could only be calculated if one had current operating expense information, loan loss provisioning, etc. Such data was not available. An explanation of the assumptions will be provided as footnotes. The resulting number in each scenario is the resulting effective annual interest rate IPED would receive using those assumptions. The reader should also remember that fees earned for loans are not taken into these calculations and any such fees earned that are collected could be applied in addition towards profitability goals.

Scenario 1

$$R = \frac{.07^{(1)} + .120^{(2)} + .083^{(3)} + .05^{(4)}}{1 - .083} - .038^{(5)}$$

$$R = \frac{.323}{.917} - .038$$

$$R = .352 - .038$$

$$R = .314 \text{ or } 31.4\%^{(6)}$$

(1) The operating expenses as a percentage of loan outstanding at yearend 1999 were 7 percent. The ratio comes from the GEO Assessment of May 2000.

(2) This first scenario reflects the borrowed cost of funds from concessionary sources, as reflected in present circumstances. The GEO Assessment determined the weighted average cost of these funds was 3.4% in 1999. To this was added an inflation factor for 1999 of 8.6%, which comes from Bank of Guyana. Normally an inflation rate this far out of date would not be used; rather, one projected for the near term or the one prevailing at the time of calculation would be used. As an updated inflation rate was not readily available, the 1999 rate was used to create this scenario. Naturally, current actual borrowing costs would be used as available.

(3) As stated earlier, this figure should reflect the actual write-offs for a year. As that figure was not readily available, the loan loss provision for 1999 was used and computed as a percentage of loan outstandings. The important thing to remember is that it is the format of the methodology which is important as the resulting effective annual interest rate will change with each quantitative change to the model.

(4) The low end of the capitalization range was chosen to be conservative. Should IPED wish to be more aggressive in seeking profits this threshold could be adjusted upwards with a resulting increase in pricing goals.

(5) This reflects the percentage of loan outstandings represented by investment income as taken from the 1999 annual report.

(6) This number reflects that IPED would have to earn an effective interest rate (on an annual basis) of 31.4% to cover its costs and have a capitalization rate of 5% (profits as a percentage of loans outstanding).

Scenario 2

The assumptions under this scenario are the same as in Scenario 1 with one major exception. In this case cost of funds (CF) reflect a borrowing cost using private-sector funds as opposed to concessionary funds. This is the methodology recommended in the World Bank model. For this component, a market rate of 13% was chosen as IPED management believes such would be the cost based upon this number being the interbank borrowing rate currently in Guyana financial markets. There is a possibility this number is low and actual borrowing costs for IPED in the private sector could be higher, as a 2% to 4% premium for risk may be applied by the market when providing credit to IPED. This factor could cause IPED's borrowing cost to rise to a range of 15% to 17% in the private sector. At any rate, the formula would now look as follows:

$$R = \frac{.07 + .216 + .083 + .05}{1 - .083} - .038$$

$$R = \frac{.419}{.917} - .038$$

$$R = .457 - .038$$

$$R = .419 \text{ or } 41.9\%$$

Thus, using a private-sector rate for borrowing, the effective annual interest rate required to cover costs and have a capitalization rate of 5% (profits as a percentage of loan outstandings) increases to 41.9%.

In concluding this section a few comments are worthy of note. IPED's operating expenses are low for a micro-finance institution and, given IPED's strategy to increase activity in this window, such expenses will surely grow. This factor will have to be watched closely. Second, the timing for sourcing private-sector funding and moving away from concessional funds will be an integral part of management's strategic planning over the next few years. Finally, as discussed in greater detail under Task #4, IPED will begin a systematic provisioning and write-off policy beginning this yearend. This moving component must be adjusted regularly in the pricing methodology to reflect actual profitability to IPED.

V. Task #3 - Loan Approval Process

The task is to define a more thorough and efficient approval process with regard to inquiries, application forms, loan classification system, decision making/loan approval structure (head office and branches), and disbursements. Each of these will be addressed in this report and comments will be added regarding prescreening of borrowers, the interview process, visiting the borrower's business, gathering and verifying information on the borrower, and identifying warning signs during the approval process. These additional areas were identified during the course of reviewing the loan approval process.

Before addressing these subjects, several points should be made. Any lending institution is best served by having two basic documents to guide their business. The first document is a Credit Policy Manual and the second is a Loan Administration Manual. IPED has been working on a manual which encompasses aspects which would fit into these two manuals. Most of the subjects which are mentioned in the preceding paragraph appear in the document on which IPED is working.

IPED should consider creating these two separate documents. Lenders may address various institution-specific issues in these documents, but certain basic items will be contained by any lending institution. For example, the ingredients of a Credit Policy Manual would contain the following:

(1) <u>General</u>
- Objectives of lending institution
- Credit guidelines
- Credit authorities
- Donor supported programs

(2) <u>Facilities</u>
- Credit facilities
- Personal loans
- Loans against deposits

(3) <u>Conditions</u>
- Pricing
- Secured and unsecured facilities
- Grace periods

(4) <u>Collateral</u>
- Acceptable securities/items
- Valuation
- Insurance
- Parent company guarantees

(5) <u>Internal Considerations</u>
- Conflict of interest
- Loans to directors/shareholders
- Loans to officers/employees

(6) <u>Analysis</u>
- Know your customer
- Discouraged facilities
- Credit investigation
- Financial statements
- Project feasibility studies
- Account profitability analysis

(7) Exposure
- Single borrower limits
- Industry exposure ceilings
- Group exposures

(8) Classification
- Classified and unclassified loans
- Past-due loans
- Write-offs

(9) Non-performing
- Loan restructuring
- Payment extensions, renewals, and rollovers
- Loan recovery or collection
- Capitalized interest
- Items in litigation
- Foreclosures

(10) Provisions
- Provisions for losses

(11) Audit and Administration
- Audit
- Documentation
- Credit and Document Files

(12) Amendments

As can be ascertained from the preceding list, the Credit Policy Manual sets the broad parameters for managing the lending process by the financial institution. The Loan Administration Manual is the guide for the tactical step-by-step procedures for the lending process. The manual commences from the time an inquiry is made by a prospective borrower and continues through the management/administration of the lending process until repayment(s) occur. Included would be sections on:

(1) Prescreening
(2) Loan structuring
- Qualitative analysis (character, capital, capacity, collateral, conditions)
- Quantitative analysis (balance sheet, income statement, cash flow statement)

(3) Loan pricing
(4) Loan approval
(5) Loan documentation
(6) Loan monitoring
(7) Delinquency loan management (including provisioning and write-offs)
(8) Portfolio reporting requirements
(9) Training

More will be said about these two documents in the Recommendations section at the end of the report. The report will now turn to the ten subjects identified at the beginning of this third task.

(1) *Inquiries* - Due to the existing structure of IPED officers in the head office and certain branches, it is not appropriate to institute a time-specific inquiry practice. This is compounded by the client flow being irregular and the offices being open 7:30-4:30. However, in the case of field inquiries in certain remote communities, it may be possible to do this. This will be studied by IPED management.

One thing that will be done to take pressure off the loan officers regarding inquiries is to strengthen the knowledge of receptionists in both the Micro Loan Window and Main Loan Window areas so that they can handle more inquiries.

(2) *Application Forms* - The application form presently used for the Micro Loan Window is working reasonably well. Some modification will be required after the cash flow training is completed. The application form for the Main Loan Window will require greater modification after the cash flow training since a more sophisticated analysis can then be done by the loan officers due to their increased capacity to analyze credits.

A suggestion for the application forms for larger credits would be to add some product-specific comments. For example, when analyzing rice credits the form might say that certain criteria relating to such credits are the “following” - and state what the criteria are.

(3) *Loan Classification System* - The system in place is adequate for the Micro Loan Window. With regard to the Main Loan Window, a more intensive system should be put in place. The new system would grade loans that are paying in a current status as well as those that are past-due.

For example, those loans in a current status could have three grades (high-quality, satisfactory, and marginal). A point system would be established and the loans would be graded using seven criteria. These criteria would be:

(1) Purpose and Amount of Loan
(2) Financial Strength of Loan Applicant
(3) Collateral
(4) Tenor and Repayment Schedule
(5) Credit Information on Borrower
(6) Relationship with Borrower
(7) Pricing

Under each of the criteria would be a series of choices that would rate the strengths and weakness of a loan for that criterion. Points would be given to each choice and these points would be added together to reach a point total for the loan. The total points for each loan would qualify a loan as high-quality, satisfactory, or marginal.

The marginal loans, while still being in a current status, would be the loans most likely to become delinquent. They could be given special attention so as to try and prevent them from becoming past-due.

The current loan classification system only grades past-due loans and that system could be incorporated into the new one. The current system has five grades and that might be reduced to three or four under a revised system for the Main Loan Window.

The devising of a new system for the larger loans is a complex task and will take time to create. This program should not be undertaken lightly and a resource from outside of IPED is needed to properly establish it. This resource should be a person with solid experience in loan administration and one who has in-depth knowledge of the ingredients of a loan classification (rating) system.

(4) *Decision-making/Loan Approval Structure* - IPED management is committed to decentralizing this structure. To accomplish this goal, two major areas need to be addressed. The first is the capacity of the staff to perform under decentralization and the second is the MIS system being strong enough to allow such a decision-making structure.

Training is the central issue with regard to giving the staff the capacity to perform. The loan officers and all management in the chain of command for credit approvals have to have sufficient knowledge of cash flow analysis to make sound decisions. This training will be provided to the staff in the first quarter of next year. Thus, a major step in this regard is only a few months away.

The MIS system will also be upgraded over the next few months, thus taking a second significant step in preparing IPED for greater decentralization in the credit approval process.

Management of IPED has been thinking as to how to commence the decentralization process and has one branch in mind to use as a pilot case. Discussions were also held with the General Manager during the writing of this report regarding the designation of credit authority down the line. These discussions included specific credit authority which might be delegated at each level of the credit decision process.

The initial delegation of authority being considered would be different for the Micro Loan Window and the Main Loan Windows. This seems natural due to the differing complexities of the two programs. At the present time for Micro Loans the Credit Manager - Branches approves all credits up to the G$200,000 limit. As a way to begin delegation, branch managers could be given authority to approve up to G$100,000. Such authority would be granted to each branch manager as each was deemed worthy of such confidence.

For the Main Loan Window the present approval structure allows only the General Manager and Board to have authority. The first step would be to bring the Credit Manager (Main Loans) into the process. It was discussed with the General Manager that a first step might be the following:

(1) All loans above G$1,000,000 would require some Board participation

(2) Loans between G$250,000 and G$1,000,000 would require General Manager approval

(3) Loans under G$250,000 could be approved by the Credit Manager (Main Loans)

(5) *Disbursements* - IPED is not able to consider disbursements of loans at the branch level until the new MIS system is in place. At that time the subject will be undertaken and a process to do this will be put in place when the branches are able to perform this function in a secure manner.

(6) *Prescreening of Borrowers* - During the inquiry phase six pieces of information should be obtained at a minimum. These are:

- Amount of loan requested
- Purpose/use of proceeds
- Size of business
- Brief description of business
- Borrower should be told information needed to process request
- Borrower should be told repayment philosophy of IPED

(7) *The Interview Process* - During this process the loan officer wants to keep closed-end questions to a minimum. Such questions allow a "yes" or "no" answer and do not yield as much information. Open-end questions encourage the free exchange of information while stimulating conversation, and should be effectively mixed with closed-end questions. Open-end questions usually begin with “what,” “where,” “when,” or “how.” Some may begin with “why,” but one has to be cautious with “why” as too much use of it may become offensive to the client.

The interviewer is going to be asking some difficult questions and does not want to get too close to the borrower. The interviewer will be questioning activities of the borrower. The prospective borrower should be made to define the request, evaluate it, and gauge the potential for success. It is essential to get the borrowers to talk about their business (generally people like to talk about their business). All of this will tell the loan officer how much is known about the business and how much planning the borrower has done. It is important that the borrowers have a clear picture of the keys to success for their business. Before the interview is over it is essential that the borrowers articulate the biggest problem or greatest fear they have for their business. If they cannot tell the loan officer this there is a question of how well they understand their business.

The loan officer wants to obtain as specific information as possible. For example, what does it cost to buy or make one unit of a product (not just total costs)? The reverse question is what does one unit sell for (not just total sales)? How many units are bought or sold per month? These types of questions provide the depth of knowledge a borrower truly has.

(8) *Visiting the Borrower's Business* - In the loan approval process the site visit can be the most important portion. Depending on the nature of the loan officer and their inquisitiveness, a great deal can be learned about the borrowers and their businesses. The following list provides just some of the information the loan officer can learn when the visit to the borrower's site takes place:

- Does the business look like what the borrower said
- Help determine whether borrower understands business
- Help determine if the loan officer would buy the borrower's product
- What is physical presence of business
- Crowded/spacious
- Level of business activity
- Cleanliness/orderliness
- Deterioration or obsolescence of assets
- Presence of equipment or inventory
- Does equipment work (production capacity)
- Quality of livestock
- Quality of inputs observed
- Work flow efficiency
- What customers look like
- How customers react to business
- Is business customer-oriented
- Relationship between borrower and employees (if any)
- Does workforce appear efficient
- Work ethic in business
- Employees attitude, appearance, and responsiveness
- Ask employees questions
- Attitude and focus of borrower
- Move around business (open doors)
- What does borrower show or try to hide

(9) *Gathering and Verifying Information* - The loan officer is responsible for processing credits that meet IPED underwriting standards. He/she is further responsible that the proceeds of the credit are used as intended and that collection of the loan takes place. In completing these responsibilities the loan officer performs various tasks including:

- Properly identify the borrower
- Correctly determine eligibility and scope of financing
- Determine degree of analysis necessary to support loan decision
- Adequately investigate and verify borrower history (including credit)
- Obtain financial information
- Adequately verify financial information
- Verify employment
- Assess borrower's ability to carry out business
- Evaluate repayment capacity through financial analysis

- Properly identify and evaluate assets offered as collateral (perform updates as required)
- Recognize economic or market conditions which may harm borrower
- Realistically project prices and costs when needed
- Apply controls and conditions on loans when necessary
- Maintain open communication with borrowers so as to jointly identify problem areas, suggest alternative solutions, and explore borrower's future plans.
- Keep transaction costs to a borrower to a minimum (not levy excessive and time-consuming requests of borrower)

To accomplish these tasks requires the hiring of loan officers with many skills. A few of these skills are:

- Good communication capabilities
- Ability to learn
- Good and positive attitude
- Understanding and knowledge of financing
- Understanding of the industries and businesses being financed

(10) *Warning Signs* - During the loan approval process there are a number of warning signs that can be identified. Such warnings are as follows:

- Cooperation of borrower (too little or too much)
- Disorganization
- Personal expenses (clothing, etc.)
- Telling loan officer what they want to hear
- Evasiveness by borrower
- How borrower reacts to loan officer (nervous, anxious)
- Does borrower look loan officer in the eye
- Bluffing by borrower

The main point during the entire loan approval process is that the loan officer manage the borrower and not let the borrower manage the loan officer.

VI. Task #4 - Delinquency Management, Provisions, Reserves, Write-offs

There are three tasks included in this section:

- Procedures for improving the delinquency management process
- Procedures detailing how and when loan loss provisions are calculated and performed, in order to ensure a prudent, adequate level of loan loss reserves according to industry best practices
- Procedures detailing how and when IPED should calculate and determine the loans to be written off

A. Delinquency Management

(1) *Repayment Incentives* - IPED has made considerable efforts to establish a number of such incentives. These incentives have been articulated to the loan officers including the provision of written material. Each loan officer is encouraged to make borrowers aware of these incentives and to have borrowers use them to their advantage as much as possible.

These incentives were discussed in the GEO Assessment last May and it appears IPED has progressed since then in using them. There are also several incentives not mentioned previously. As a result of activity in regard to incentives a review of them is in order here:

- Loan increases are regularly granted for borrowers with prompt payment records.
- Rapid loan approval for repeat borrowers with prompt payment records is consistently offered. In fact, pre-approvals of loans are used as a tool which is part of the automatic loan product concept.
- A discounted interest rate is offered to borrowers that establish prompt payment records. Borrowers are made aware of this incentive at the time the loan is disbursed.
- A Gold Card is given to borrowers with prompt payment records which entitles them to the various repayment incentives.
- Training is provided for product development services to those borrowers qualifying.
- An attempt is made to link the best-performing micro-enterprises with larger businesses in order to make them more successful.
- Solid borrowers are encouraged to build their asset base, for example, with equipment purchases. This assists their business growth as well as providing additional loan business and security (collateral) bases for IPED.
- It is still not clear what credit IPED gives to borrowers who have savings with them as opposed to those who do not. IPED should ensure that such credit is given in its underwriting process.

(2) *Loan Classification System* - This system is now part of the Loan Manual. It provides a rating system for all past-due loans. It does not attempt to rate performing loans as management takes the position that a current loan is a positive loan and that is sufficient for operating purposes. As discussed earlier, an expanded system should be put in place.

The classification system rates borrowers with a grade between A and E. A and B cover loans up to 15 days in arrears and access to new credits is still available with no reductions in amounts. Grade C which covers loans 15 to 30 days in arrears, and allows new loans at a reduced amount. Grade D covers loans 30 to 60 days in arrears but in addition to lowering the amount of any new loan there is an increase in the interest rate. Finally, Grade E covers loans over 60 days in arrears, and no new loans are allowed. Naturally, all reference to new loans in this classification system assumes ultimate repayment of the loan in arrears prior to the issuance of a new loan.

(3) *Late Fees* - Discussions were held with several members of management on this subject. The impression was given that late fees were applied by the loan officers in as consistent a manner as possible given the existing MIS system. The new MIS system coming from IDB will provide a capability to erase any inconsistencies. The observation was made by several members of management that the only reason not to apply late fees was in situations where late payment of a loan was due to conditions beyond the control of the borrower. They further stated that examples of such conditions would be natural disasters such as flooding and acts of piracy which apparently occur in the fishing industry of Guyana.

There appears no reason to change the late fee policy of IPED including the maximum amounts which can become due under this existing policy.

(4) *Rescheduled Loans* - Such loans are a small percentage of the overall portfolio. Management estimates them at less than two percent. No separate schedule is presently produced on this category of loan. As best practices suggests larger provisioning requirements for rescheduled loans, a tracking system for these loans should be included in the new MIS system. More will be said about this in the provisioning portions of this report.

(5) *Delinquency Targets* - The goal of IPED management is to reduce its portfolio at risk down to less than 10 percent of outstandings by yearend 2000. This presently appears achievable. Further, the ultimate goal is to bring the portfolio at risk to less than 5 percent of outstandings in the Micro Loan Window by yearend.

(6) *Monitoring Delinquencies* - The May GEO Assessment discussed this process to some extent. The process is more stringent than indicated in that report. The report mentioned letters from the General Manager going to borrowers in arrears prior to 30 days of such occurrence and an additional letter from IPED's lawyer at 60 days past due. In actuality, the GM's letter goes out when the second installment is late and the letter from the lawyer when the third installment is late. As many of IPED's loans require weekly or biweekly repayment, this delinquency letter process is frequently accelerated from the timeframes referenced in the previous GEO Assessment.

As indicated in that report, phone contact (where possible) is made with the borrower the day the loan is due and a visit with the borrower takes place one day later.

The overall monitoring of delinquencies appears well-structured and the implementation of this process appears to be functioning accordingly.

B. Loan Loss Provisioning and Reserves

Management recognizes this is an area where policies need to be changed and is prepared to move forward accordingly. In this regard, at yearend 2000 IPED will begin to establish the best practices methodology for loan loss provisioning for the Micro Loan Window. Such a policy would require the following guidelines:

Loans Past Due*	1-30 days	10% reserves
	31-60 days	30% “
	61-90 days	60% “
	>90 days	100% “

* for rescheduled loans, provisioning would be - 0 days, 50% and > 1 day, 100%

Loan loss provisioning would be performed at the end of each quarter and interim provisioning could be done if conditions warranted such action.

A different provisioning for the Main Loan Window is anticipated. Such provisioning would be as follows:

Loans Past Due*	1- 30 days	10% reserves
	31- 60 days	20% “
	61- 90 days	40% “
	91-180 days	50% “
	181-270 days	75% “
	>270 days	100% “

* Rescheduled loan provisioning would remain the same as for Micro Loans.

Loan loss provisioning would remain the same as to scheduling as micro loans, i.e., performed at the end of each quarter with interim provisioning if conditions warranted.

The reason for this different provisioning with regards to the Main Loan Window is that there is more to work with concerning each borrower, including various levels of collateral. Negotiations may be more protracted but there is the potential of collecting as the loan workout proceeds. For this reason a slower graduated provisioning is acceptable compared with the Micro Loan Window.

C. Loan Write-offs

The Micro Loan Window will write-off any loan past due more than 180 days. This is in accordance with best practices for micro-lending. The Main Loan Window will write-off any loan past due more than 360 days. This philosophy follows that of the slower graduated provisioning for main loans. The loans will be written off the day they reach these indicated limits. Past-due loans under either window may be written off earlier than indicated if management determines there is no chance of collection under any circumstances. The write-off policies for both loan windows will commence December 31, 2000.

VII. Recommendations

1. IPED has been working on a Loan Administration Manual for the Main Loan Window. That document could be divided into two documents: a Credit Policy Manual and a Loan Administration Manual. The contents of these two documents were discussed under Task #3 and need not be repeated here. A consultant could come in, use the existing document as a base, and develop the core for each of the two manuals.

   To assist in this process it may be helpful to obtain three documents prepared in 1998 by the Macedonian Banking Operations Center. This was a USAID project in Macedonia and a series of documents on the lending process were generated. The three which might be of particular value are the Credit Policy Manual, Credit Administration Manual, and the Fundamentals of Credit Manual. There are numerous other source materials for these subjects so this is only a suggestion.

2. An expanded Loan Classification System for the Main Loan Window is appropriate. The model for such a system was suggested under Task #3. This model is only one example and other models could be adopted. The important point is to have a grading system for all loans (current as well as past-due) and the system in place only grades the past-due loans.

3. As previously mentioned, a cash flow analysis curriculum will be presented to the IPED loan officers during the first quarter of next year. This will focus on quantitative analysis of the cash inflows and outflows of any business. As discussed under Task #1, this is the quantitative portion of loan structuring. A qualitative portion of loan structuring was provided under Task #1 of this document as well.

   As part of the training curriculum on cash flow, a presentation should be made to the attendees focusing on an understanding of what is behind the numbers. In other words, what is going on in the borrower’s business to have the numbers be what they are. Factors are affecting sales and costs of doing business and causing them to flow as presented. This presentation can be viewed as a qualitative analysis of business risk supporting the quantitative analysis of cash flow.

   A syllabus for such a curriculum could be divided into four areas. The essence of each would be as follows:

   1. <u>Market Characteristics</u>
      - Industry
      - Demand for Product
      - Cyclical/Seasonal
      - International/Domestic Market
      - Target Market
      - Major Customers
      - Reputation of Products
      - Quality
      - Pricing

- Suppliers
- Distribution Channels
- Compensation of Sales Force
- Awareness for Product in Market
- Future Product Innovation
- Research and Development
- Third-Party Interviews

2. Understanding the Competition
   - Factors
     - How much competition
     - Size of competition
     - Market Niche
     - Barriers to Entry
   - Competitive Advantage
     - Organizational structure
     - Human Resources Management
     - Financial Management
     - Research, Development, and Design
     - Purchasing
     - Production
     - Marketing, Sales, and Distribution

3. Management of Borrowers
   - Characteristics
   - Information Technology
   - Ability to Manage Growth

4. Five Competitive Forces
   - Threat of Entry
   - Threat of Substitution
   - Bargaining Power of Buyers
   - Bargaining Power of Suppliers
   - Rivalry among Current Competitors

By providing this presentation on analyzing business risk, IPED loan officers will gain a perspective on what is causing the numbers to flow as evidenced in their quantitative analysis of cash flow. These are factors behind the numbers and an analysis as presented here provides a more complete picture of any borrower's business.