DEVELOPING FINANCIAL SERVICES FOR MICROENTERPRISES:

An Evaluation of USAID Assistance to the BRI Unit Desa System

DRAFT

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The Unit Desa system of BRI is a large, complex organization. We have attempted to accurately report factual details and fairly assess the vast quantity of information shared with us. Responsibility for any errors of fact or interpretation rests with the authors.

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GLOSSARY

A.I.D.	Unites States Agency for International Development
BI	Bank Indonesia -- the Indonesian Central Bank
BIMAS	Bimbingan Massal (Mass Guidance) -- the Indonesian Rice Intensification Program
BKD	Bank Kredit Desa (Village Credit Bank)
BKK	Badan Kredit Kecamatan (Sub-district Credit Body)
BPD	Bank Pembangunan Daerah (Regional Development Bank)
BRI	Bank Rakyat Indonesia (Indonesia People's Bank)
CMS	Comprehensive Marketing Systems
CPIS	Center for Policy and Implementation Studies, Ministry of Finance
FID I	Financial Institutions Development Project -- Phase I
FID II	Financial Institutions Development Project -- Phase II
GOI	Government of Indonesia
HIID	Harvard Institute for International Development
KUPEDES	Kredit Pedesaan Umum (General Rural Credit)
MOF	Ministry of Finance
RFI	Rural Financial Institution
Rp	Rupiah
SIMPEDES	Simpanan Pedesaan (Village Savings)
TABANAS	Tabungan Nasional -- a National Savings Instrument
USAID	United States Agency for International Development
USD	United States Dollar

EXECUTIVE SUMMARY

1. Introduction

- **Overview of the Project:** The Financial Institutions Development Project -- Phase II (FID II) is a $16 million project that provides technical assistance, training, construction assistance, and commodities to Bank Rakyat Indonesia, a state-owned bank, to support the transformation of a nationwide system of approximately 3,000 sub-district branches (Unit Desa) from highly bureaucratized, heavily subsidized conduits for agricultural program credit into self-sustaining and profitable commercial financial intermediaries. By all standards, the Unit Desa system is an extraordinary institution. It is without question one of the most successful financial institutions serving rural borrowers and savers anywhere in the developing world.

- **The Evaluation:** The evaluation of FID II was conducted in Indonesia between July 23 and August 16, 1990 under the direction of Mr. John Rogers, Office of Private Sector Development (PSD), USAID/Jakarta. The purpose of the evaluation was to provide the GOI, BRI, and USAID with an assessment of project performance to date and to offer guidance and specific recommendations for project and post-project directions.

- **Summary of Evaluation Findings:** FID II is an excellent project. Project inputs have enabled BRI to build a solid policy foundation; an effective staff training system; and, improved operational systems. Project inputs have underwritten the risk of major decisions at crucial junctures in the development of the Unit Desa system. The Unit Desa system is still maturing and faces a number of important challenges. BRI is positioned, however, to enter the next stage of Unit Desa development without additional USAID assistance. FID II has succeeded in attaining its outputs and purpose, has met the CDSS management and impact criteria, and has had a measurable impact on the development of microenterprise and rural financial markets in Indonesia.

2. Performance of the BRI Unit Desa System

- **Overview:** The BRI Unit Desa system lost more than $24 million in 1984; in 1989 the system earned a profit of more than $25 million. From 1984 through mid-1990, approximately 7.9 million loans have been made and there are currently 1.8 million loans outstanding valued at $614.5 million with an average size of $340 per loan over

the life of the program. Each month 115,000 loans are made with a value of $50.3 million. The average loan size is currently $437. The long term loan loss ratio is 3.26 percent. Savings on deposit have increased from $26 million in 1983 to $646.8 million in mid-1990 in 6.7 million accounts. There is an excess of savings to loans of $58 million. The system is, for all practical purposes, fully self-sustaining without any remaining external subsidy.

- **Financial Performance:** During the past six years, the Unit Desa system has registered impressive growth. Between 1984 and 1989, total assets increased 617 percent from Rp. 180 billion to Rp. 1.29 trillion ($695 million). The outstanding KUPEDES portfolio has increased from Rp. 111.0 million to Rp. 845.6 million ($456 million).

  - Profitability:

    The Unit Desa system reached the breakeven point 18 months after its start and has generated steadily increasing profits ever since.

    Unit Desa profits (before tax) over the last four years have almost quadrupled, rising from Rp. 9.8 billion in 1986 and to Rp. 36.9 billion ($20.3 million) in 1989.

    Return on average assets (ROAA) have shown a steadily upward trend from 1986 to 1989, rising from 2.7 percent to 3.6 percent.

    The ROAA for the Unit Desa system is significantly higher than BRI as a whole which has a ROAA around 1 percent.

  - Liquidity

    The Unit Desa system has adequate liquidity which is provided from external funding sources of Bank Indonesia and donor organizations as well as internal savings mobilization.

    In 1989 the Unit Desa system became a self-funded organization with deposits surpassing loan requirements.

  - Asset Quality

    The asset quality of the Unit Desa loan portfolio is considered to be good on the basis of the declining past due ratio, the conservative loan

loss reserve policy, and the acceptable level of loan losses.

Total amounts past due as a percentage of loans outstanding, while rising for several years from 2.0 percent in 1985 to 7.5 percent in 1988 declined in 1989 to 5.4 percent. The quality of the portfolio has improved during the interim six month period to June 30, 1990 to 5.1 percent. The arrears problem appears to be largely concentrated in a relatively small number of branches and village units, where heightened management attention is needed.

- **End of Project Status:** four targets were established to be met by the PACD in May 1991:

  A. Triple Kupedes loans outstanding to Rp. 800 billion while maintaining a long-term loss ratio of 2.5 percent or less.

  - Kupedes loans outstanding surpassed Rp. 800 billion in November 1989 and reached more than Rp. 1.1 trillion in June 1990.

  - The long-term loss ratio is a ratio of the total amount of the loan portfolio which is overdue divided by the total amount of the loan portfolio which has come due. While this target has not been achieved, the loan portfolio is considered to be in good condition with a long-term loss ratio of 3.3 percent.

  B. Increase Unit Desa savings deposits to cover at least 50 percent of KUPEDES loan volume.

  - Unit Desa savings deposits have increased dramatically since the introduction of the SIMPEDES savings scheme in 1985. By the end of 1988, savings deposits accounted for more than half of the KUPEDES loan volume.

  - The Unit Desa system became a self-funding financial institution as a whole in 1989 with all deposits more than exceeding the loans outstanding. As of March 1990 the ratio of deposits to loans outstanding was 106.3 percent.

C. Reduce Unit Desa administrative cost portion of intermediation cost by 2 percent, e.g. from 14.5 percent to 12.5 percent.

- The labor costs of the intermediation costs have been reduced from 14.4 percent in June 1986 to 10.2 percent as of March 1990. Total intermediation costs have fallen from 16.8 percent in June 1986 to 13.0 percent in March 1990.

D. Establish an on-going research and reporting network.

- The Unit Desa system has a formalized reporting network and BRI has established a research department whose activities include the Unit Desa system.

3. The Developmental Impact of the Unit Desa System

o **Unit Desa customers are roughly similar to the rural population.**

- Total landless and near-landless (less than 2,000 square meters of agricultural land) among borrowers is 73 percent.

- The income distribution profile of borrowers is approximately the same as the rural population - in 1987, 16.4 percent of the rural population was below the poverty line; at the time of their first loan, 15.1 percent of KUPEDES borrowers fell below the poverty line.

- The participation rate of women is relatively high by Indonesian banking standards, but low in comparison with what might be achieved. Just under 25 percent of borrowers are women.

- KUPEDES borrower households are characterized by occupational multiplicity. KUPEDES loans are primarily used for financing working capital requirements of non-agricultural enterprises.

- Prior to borrowing, enterprises supported by KUPEDES loans average 3.4 employees, well within the A.I.D. definition of microenterprise.

o **There is evidence of impact on enterprises financed by KUPEDES loans** - Although not entirely conclusive, recent developmental impact analysis indicates the following:

- The profits earned by the enterprises grew in real terms at an annual rate of 24.6 percent over an average of three years program participation. The fastest growth occurred in enterprises of borrowers in the Rp. 250,000 to Rp. 500,000 loan size range.

- Borrowers' total household income grew over a similar period at an annual rate of 20.7 percent. Per capita incomes increased according to World Bank figures by 3.8 percent per year between 1984 and 1987.

- Total employment in borrower enterprises has increased at an annual rate of 18.2 percent in terms of persons and 22.5 percent in annual labor hours. Workers per enterprise have increased from 3.4 to 5.6 persons.

- It is expected that provision of financial services will have some, albeit minor, influence on individual enterprise performance. The aggregation of these benefits across 8 million enterprises results in immense total program benefit.

o **Loan size is a strong predictor of both net enterprise income and total household income.** Net enterprise income and total household income (before borrowing) rise systematically with loan size. This finding suggests that poorer groups are reached through smaller loans.

o **The impact of savings has not been documented.** Growth in individual savings may improve the asset position of customers, but this is not obvious. The real benefit provided by Unit Desa savings is the integration of the Units with the financial markets and the more fluid movement of savings to those best able to use it.

o **Unit Desa success has promoted entry into rural financial markets** by private sector financial institutions.

o **FID II has continued USAID's successful, long-term efforts to influence national financial policy.** The concrete example of the Unit Desa system and the availability of a proactive advisory team has resulted in significant financial sector reforms.

4. The Contribution of the FID II Project

o **Policy Development**

- Assistance at the policy level is provided by the HIID technical assistance team.

- All indicators suggest that FID II has been extremely effective at this level. In particular, technical assistance has played a major role in shaping BRI's interest rate policy, the structure of lending and savings instruments, and overall BRI policy towards the Unit Desa system.

o **Training**

- Staff development and training continues to be one of the most serious constraints on the development of the Unit Desa system.

- USAID determined that training was an important element in the operation of the Unit Desa system and targeted part of its assistance to the project by providing partial funding in the construction of four of five proposed training centers, providing technical assistance in the development and preparation of training materials and methods, and in subsidizing a portion of training costs. USAID assistance insured that training went forward in an efficient way. It also leveraged some important changes in how training is conducted.

- USAID funds were authorized for reimbursement of up to 50 percent of the cost of constructing and furnishing four BRI regional training centers with a total FAR ceiling of $1,650,000. The balance of the cost as well as any cost overruns were funded by BRI. Bandung (opened January 1990), Padang (April 1990), Yogyakarta (August 1990), Surabaya (January 1991).

- BRI did not have money for investment in the training centers at beginning of project. Without AID support there would be no centers.

o **Automation Equipment**

- As of June 1990, BRI had installed a computer, printer, and an uninterruptable power supply in 340 Unit Desa. The USAID financed FID II procurement will add 565 more sets, bringing the total to 905. BRI now has plans for an additional 400 sets, bringing the total number of automated Unit Desa to 1,305 or 46 percent of all units. This is just short of the total number of all "qualifying" units.

- CMS assistance (funded by USAID) on software refinement, maintenance systems, and training have

been very well received and have contributed to the development of practical systems which are adequate. CMS made important contributions in the training of branch supervisors and in developing an audit manual and software audit capabilities.

- FID II assistance was vital in pushing forward the automation agenda. It would have been difficult for BRI to go ahead with automation at the time it did without the inducement from USAID. Now BRI is fully capable of continuing to automate at whatever rate it chooses.

o **Reporting**

- FID II technical assistance has been instrumental in reducing and streamlining reporting requirements throughout the Unit Desa system. The number of regular reports has been reduced from 27 to 5.

o **An Overall Assessment of the FID II Contribution:** On the basis of this evaluation, the assistance provided to BRI through FID II is judged appropriate, timely, and of high quality.

5. Challenges Facing the Unit Desa System

o **Maintaining a Quality Portfolio:** Portfolio quality is the foundation on which banks are built. The current portfolio of the Unit Desa system is judged to be good. Maintaining the quality of the portfolio will be key to the continued success of the Unit Desa system.

o **Sticking to its Knitting - Serving the Enterprising Poor:** There is some risk that asset quality could deteriorate as the loan ceiling grows and as the system drifts further from progressive, character-based lending. Average loan size appears to be growing. In some Unit Desa, first loan size is outpacing subsequent loans.

o **Recruitment and Staffing:** The rapid growth in credit and savings transactions has stretched the capacity of present Unit Desa staff and operating systems. The Unit Desa system is currently understaffed, with vacancies estimated at around 900 and recruitment needs of over 4,500 persons for 1990. This situation could jeopardize both the continued growth and the quality of Unit Desa operations.

o **Competition:** Until very recently, the Unit Desa system had a virtual monopoly on financial services at the sub-district level which contributed to its strong financial

performance. Growing competitive pressure will test the Unit Desa system and force it to adjust to changing market conditions.

- o **Other Concerns:**

  - Institutionalization of technical assistance is difficult as BRI staff are frequently rotated. Key positions in Unit Desa support functions have not yet been filled.

  - Continued expansion of the Unit Desa system's services (such as money transfers) will result in absorption problems. The adoption of too many services too quickly will hurt efficiency and possibly detract from savings mobilization and prudent, cautious lending.

  - The role of women in the Unit Desa system is improving, but still is less that would be preferred in a USAID supported project.

6. Lessons Learned

Many lessons can be learned from the FID II experience. A sample is presented here.

- o A combination of policy input and hands on technical assistance have been necessary to accomplish the objectives of the project. It is clear that without continual monitoring, policy changes alone would not have induced the kind of system performance that has been achieved.

- o The effectiveness of the project's technical assistance has depended on the long-term relationships that exist between members of the team and senior Indonesian officials. The team never had to address the considerable challenge of establishing their credibility with BRI or GOI.

- o The success of the project has been heavily dependent on an interested, motivated, and receptive BRI management. This is primarily the result, however, of the demonstrated consistency of program goals with overall BRI performance.

- o Government-owned institutions can be used effectively to achieve A.I.D. objectives in selected cases. A key test is the responsiveness of the institution to market signals and the use of market-based performance incentives at all levels of the system.

- Interest rate policy has been an absolutely essential precondition to the success of the Unit Desa system.

- Institutional development and developmental impact cannot be separated. There will be no impact without a viable institution; there will be no institution without perceived value.

- Provision of financial services as opposed to targeted credit offers greater opportunities for developing a large customer base, a self-financed funding base, and institutional self-sustainability.

- The demand for liquidity among the rural population is far more important than the demand for credit. Savings mobilization is just as important as credit in meeting the financial needs of the rural population.

- Low income rural population make good and profitable financial clients.

7. The Role of USAID in the Future of the Unit Desa System

- **The Context**

  - The World Bank has fully provided for continuation of the HIID technical assistance effort to the Unit Desa system. The expectation in BRI is that these loan funds will be used to continue the HIID technical assistance contract. Furthermore, BRI has demonstrated the capacity to directly hire needed technical assistance from its own resources.

  - The rationale on which the FID II project was based is no longer applicable. The Unit Desa system is no longer the only institution with the capacity to provide financial services at the kecamatan level. The justification for continuing to assist only one of several competitive institutions must be carefully assessed.

  - USAID is interested in a maintaining involvement with the BRI Unit Desa system. Likewise, BRI management is comfortable working with USAID and is interested in extending USAID involvement.

- **Findings**

  - The FID II project has achieved its goal as expressed in the project paper of being an opportunistic intervention designed to get the Unit Desa system operating on a solid foundation. The

project also is extremely successful in meeting CDSS criteria of using USAID funds efficiently to leverage GOI and other donor follow-through.

- USAID should take credit for its assistance to the Unit Desa system to date and not commit further resources to the Unit Desa system. The project is successfully completed.

- USAID should carefully consider how it might continue its strong historical presence in the development of rural financial markets in Indonesia through a process of identifying areas in which technical assistance and training can continue to underwrite the risks of further expansion/extension of financial institutions to reach the poor in Indonesia.

o **Options**

- Privatization of the Unit Desa system is not a viable alternative for USAID. BRI is not likely to let go of the Unit Desa system (because of the importance to BRI in profit and savings generation) and the Unit Desa system would lose a great deal if separated from the BRI support structure. Among the most significant losses would be the credibility that state bank ownership affords to the Unit Desa system in the rural areas it serves. Privatization of BRI will depend on dramatically improving the financial soundness of the bank. The World Bank, the GOI and BRI have privatization on the agenda. There would appear to be little rationale for USAID also to enter the field.

- USAID could assist BRI to develop and expand the Bank Kredit Desa (BKD). BKDs are village financial institutions that have been in existence since 1929. The BKD system is the next logical step in widening the availability of credit to the rural poor. The BKD system could extend the reach of BRI to the village level. It would be able to serve those small savers and borrowers outside the geographic net of the Unit Desa, who do not have collateral, and who wish to start new enterprises.

- BRI may be a convenient institutional home for carrying out research that would lay the basis for a sound design for follow-on activities.

Table 0.1 Indonesian Consumer Price Index and Rupiah Exchange Rates

Year	Consumer Price Index (CPI) (Base=1980)	Rupiah/USD Exchange Rate
1967	6.7	149.6
1968	15.1	296.3
1969	17.8	326.0
1970	20.0	362.8
1971	20.6	396.5
1972	21.9	415.0
1973	28.8	415.0
1974	40.4	415.0
1975	48.1	415.0
1976	57.7	415.0
1977	64.0	415.0
1978	69.3	442.1
1979	84.4	623.1
1980	100.0	627.0
1981	112.3	631.8
1982	122.9	661.4
1983	137.4	909.3
1984	151.8	1,026.0
1985	158.9	1,110.6
1986	168.2	1,282.6
1987	183.8	1,643.9
1988	202.5	1,685.7
1989	215.4	1,770.1
1990 (July)		1,855.0

Source: International Monetary Fund

SECTION ONE

INTRODUCTION AND OVERVIEW

In 1987, USAID/Jakarta wagered on one of the most ambitious experiments of modern economic development theory and practice. The challenge was to transform a nationwide system of 3,600 rural branches of a state-owned bank from highly bureaucratized, heavily subsidized conduits for agricultural program credit into self-sustaining and profitable commercial financial intermediaries. Few would have accepted the odds of such a venture. But, quietly and without great fanfare, the Unit Desa system of Bank Rakyat Indonesia (BRI) has achieved and surpassed even the most optimistic predictions of what might be accomplished.

The BRI Unit Desa system lost more than $24 million in 1984; in 1989 the system earned a profit of more than $25 million. From 1984 through June 1990, approximately 7.9 million loans have been made from the Unit Desa and there are currently 1.8 million loans outstanding valued at $614.5 million with an average size of $340 per loan. The system makes 115,000 loans each month with a value of $50.3 million. The average loan size is currently $437. The long term loan loss ratio is 3.26 percent. Savings on deposit have increased from $26 million in 1983 to $646.8 million in June 1990 in 6.7 million accounts. There is an excess of savings compared to loans of $58 million. The system is, for all practical purposes, fully self-sustaining without any remaining external subsidy. By any standards, these are remarkable accomplishments.

In comparison to other programs serving microenterprises, the Unit Desa system stands alone in its achievement. Some comparisons with the three most often cited examples of successful microenterprise programs illustrate the magnitude of the differences. The Grameen Bank in Bangladesh has a (cumulative) total of 800,000 members (borrowers and savers) served by 700 branches. Grameen adds approximately 25,000 new members per month. Its outstanding portfolio of $31.6 million is financed mostly from external sources with savings accounting for roughly 42 percent of the outstanding portfolio. While Grameen may reach a relatively poorer population than BRI, it requires considerable external subsidy to do so. The BKK system in Central Java serves one large province in Indonesia and has an outstanding portfolio of $12.7 million in just over 500,000 loans. Savings account for approximately 20 percent of outstanding loans. ADEMI in the Dominican Republic is an NGO lending program that serves microenterprises with loans that average approximately $450. Approximately 10,000 loans are made per year. ADEMI does not mobilize savings.

In spite of its success, the challenge of developing the Unit Desa system is not over. There are a number of factors that could

potentially undermine the progress that has been achieved. Not least among these is that pressures for growth, expansion of savings, and short-term profitability could overextend the human resource capacity of the organization, and dislodge the system from its foundation -- character-based, progressive lending[1]. This could place the portfolio at risk and jeopardize the orderly development of the Unit Desa system. Alternatively, maintenance of profitability through increased loan size may distance the Unit Desa from the poorer segments of the population. It is difficult to estimate the significance of these concerns, but it will be important for BRI to continue to monitor these issues as the system matures.

This report presents the results of an evaluation of the effectiveness of USAID's contribution to the development of the Unit Desa system provided through the Second Phase of the Financial Institutions Development Project (FID II). The purpose of the evaluation is to provide the Government of Indonesia (GOI), BRI, and USAID with an assessment of project performance to date and to offer guidance and specific recommendations for project and post-project directions. In addition, the success of the BRI Unit Desa system has implications for a broad array of development issues -- financial policy, rural credit, microenterprise, donor cooperation, and how to conduct effective technical assistance. This report will also begin to extract some of the most important lessons learned from the project for this broader audience.

At the outset, it is important to keep in mind that the Unit Desa system has received external assistance from the Government of Indonesia, the World Bank, the Exim Bank of Japan, as well as from USAID. Notwithstanding this external participation, the system is owned, operated, and directed by BRI -- BRI management makes all key decisions and takes responsibility for their consequences. While the FID II project represents a critical and strategic input into the overall effort directed towards developing the Unit Desa system, attribution of particular outputs and benefits (or lack thereof) to the USAID advisory and capital inputs is problematic. As a result, the strategy of the evaluation has been to look, first, at issues involved in the overall development of the Unit Desa system and then to converge on those areas of greatest relevance to the FID II assistance and possible follow-on activities.

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[1] Character-based lending relies on individual credit histories and community recommendations for lending decision. Portfolio risk is generally managed through small initial loan limits that can be progressively increased with successful repayment records. The KUPEDES "lending technology" also includes a collateral requirement, assessment of enterprise viability, and repayment incentives. The lending system will be discussed in detail in Section Three.

This report is divided into nine sections including the introduction. Section Two presents an overview of the development of the Unit Desa system and the FID II project while Section Three provides a detailed description of the Unit Desa system. Section Four reviews the performance of the system and Section Five looks at issues of developmental impact. Section Six examines the contribution of FID II to the development of the Unit Desa. Section Seven analyses several issues that bear on the future of the Unit Desa system. Section Eight discusses the lessons learned and replicability and finally, Section Nine examines USAID's role in the future of the Unit Desa system.

SECTION TWO

FROM PROGRAM CREDIT TO FINANCIAL INTERMEDIATION: THE ORIGINS OF THE UNIT DESA SYSTEM

Overview

In the early 1980's the Indonesian financial sector was a text book example of tight regulation, state-domination, subsidization, and fiscal-orientation. Central planning, buoyed with oil dollars, allowed a financial system to evolve that was designed almost exclusively to channel subsidized resources from the government budget to priority sectors of the economy. Claudio Gonzalez-Vega of Ohio State University reviewed rural financial markets in Indonesia in 1982 and made the following observations:

- There has been little or no interest in an active promotion of domestic savings;
- The price mechanism (interest rates) is not used to allocate loanable funds;
- The annual allocations of resources for specific purposes have deprived the credit programs of any sense of permanency;
- The budgetary treatment of financial processes leads to a proliferation of specific credit programs;
- The programming of credit allocations is undertaken in Jakarta by a centralized bureaucracy that cannot take into consideration the specific needs and requirements of particular borrowers throughout the country;
- One of the consequences of this administrative allocation of loanable funds has been that rigid technological packages are forced upon the borrowers, at the same time that the terms and conditions of the loans are not adjusted to the needs and cash flow requirements of very heterogeneous producers throughout the country;
- There has been little concern with collection and repayment;
- The subsidy makes access to credit particularly attractive, while excess demands make administrative allocations vulnerable to social and political pressures and provide ample room for corruption;
- The participating banks look at the special credit programs as activities that they must carry out given

their social responsibility -- they do no look at them in business terms;

- Finally, the fiscal attitude implies that competition is avoided at all levels in the financial system. (Gonzalez-Vega, 1982, p.59)

The financial sector was (and is) dominated by a central bank (Bank Indonesia -- BI) and five state-owned banks, each with primary responsibility for selected priority sectors.[2] The Indonesia Peoples Bank, Bank Rakyat Indonesia (BRI), has responsibility for providing financial services for rural development. BRI's history dates from 1898 with the establishment of the Dutch-owned Volksbanken, later becoming the Algemene Volkscredietbank (AVB). After independence, AVB was merged with BRI which assumed responsibility for the combined BRI/AVB portfolio.

BRI has grown to become one of Indonesia's largest banks with, as of 1989, total assets of over $6.5 billion, a net loan portfolio in excess of $4.7 billion and pre-tax profits over $62 million. BRI's extensive network is said to be the second largest in the world. Presently, the bank employs nearly 35,000 persons.

BRI and the Unit Desa System

Beginning in 1970, BRI was charged with the responsibility of servicing the financial requirements of Indonesian Rice Intensification Program (BIMAS)[3]. Under the Improved National BIMAS program, each 600 to 1,000 hectares of irrigated rice in Java and Bali, and each 2,000 hectares in the Outer Islands was to be provided with, among other things, a new bank called the BRI Unit Desa (Village Unit), intended to channel credit directly to participating farmers. More than 3,600 Unit Desa were established throughout the country to service BIMAS credit between 1970 and 1983. Most of these were located in sub-district (kecamatan) capital towns and served on average 18 villages (ranging from 3 to 83). Each Unit was staffed with four specially recruited and trained employees.

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[2] In 1986, the five state-owned banks controlled 37 percent of Indonesia's bank assets. The banks and their primary sectoral division of responsibility are Bank Bumi Daya (plantation crops); Bank Dagang Negara (trade finance); Bank Expor Impor Indonesia (export credits); Bank Negara Indonesia 1946 (industrial finance); and Bank Rakyat Indonesia (agriculture, fisheries, and cooperative credit).

[3] A detailed description of BIMAS can be found in Robinson and Snodgrass (1987).

BIMAS credits were provided primarily in kind (chits redeemable for specified rice inputs) with a small cost of living cash component. Repayment was made in cash. Loans were seasonal and made directly to individual farmers. Potential borrowers were "certified" as BIMAS participants by the Agriculture Department's extension workers. While BRI, in theory, retained authority for loan approval, pressures from local governments to achieve targets were strong and few were denied credit. Nonetheless, BRI was solely responsible for collecting repayments.

BIMAS credits reached their peak in the mid-seventies. In 1975 the program reached 3.7 million farmers and over three million hectares of rice land. Loan losses during the first three years of the program were limited to around 5 percent. Thereafter, interest in the program declined rapidly as farmers began to experience problems with pests, flooding and drought or discovered more convenient ways to acquire needed inputs. Bad crops strapped borrowers with debt to be repaid from other income sources. Those who defaulted were bared from further borrowing.

With participation and repayment falling in the late 70's and early 80's the government alternated between selective debt forgiveness and heavy-handed debt collection. Campaigns to enlist farmers in marginal growing areas in the outer islands temporarily boosted participation but further weakened repayment. The number of farmers participating fell by 60 percent between 1975 and 1983 and the percentage of credit ever repaid dropped from 95 percent to less than 80 percent and the percentage repaid on time fell even more sharply. Those who remained in the program were among the richest farmers who sought cheap credit and the poorest ones driven to borrow by their poverty. In October 1983, the government effectively killed the BIMAS program by limiting participation only to those farmers cultivating less than one hectare of land.

While BIMAS was the primary activity of the Unit Desa until 1984, BRI was also asked to manage several other programs through the Unit Desa infrastructure. In 1974, Kredit Mini was established to make subsidized loans of up to Rp. 200,000 (then $482) to individuals involved on any form of rural enterprise. Kredit Midi was established in 1980 for graduates of Kredit Mini and provided loans of up to Rp. 500,000 (then, $797).[4] Both programs charged interest of 12 percent per annum and were financed by 3 percent liquidity credits from Bank Indonesia (the Central Bank). Savings were introduced into the Unit Desa system in 1976. Funds were

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[4] Assignment of Kredit Midi to BRI was purely accidental. After studying the BKK in 1972 and 1973, the GOI allocated Rp. 5 billion ($12 million) in grant funds to support "BKK type" initiatives. In the course of the budgetary process, this grant was inadvertently assigned to the BRI rather than to the provincial governments.

mobilized with the national savings program instrument (TABANAS). Interest rates were initially set at 12 percent, later raised to 15 percent. In spite of the negative spread, TABANAS balances in the Unit Desa system reached Rp. 38 billion ($37 million) at the end of 1984.

Throughout the 1970's and early 1980's the Unit Desa performed well as institutions, but, as a result of the structure of the financial system, were able to cover only a fraction of their operating costs from revenues. Support to the BRI came in the form of cheap (3 percent) liquidity credits from Bank Indonesia; administrative cost subsidies from the Ministry of Finance which initially covered 40 percent of all Unit Desa costs and later all of their operating losses; and, risk-sharing in which the GOI and Bank Indonesia covered 75 percent of BIMAS loan losses.

The Transformation of the Unit Desa System

Faced with growing annual Unit Desa losses (Rp. 8.1 billion in 1982; Rp. 12.6 billion in 1983; and Rp. 25.1 billion in 1984) and a defunct program, BRI and the GOI faced some critical decisions. Falling international oil prices were eroding oil revenues which financed more the 60 percent of the government budget. Continued massive subsidies were not likely forthcoming. On the other hand, closing the BRI Unit Desa would have eliminated formal banking in about 90 percent of all the locations in the country which had such services at the end of 1982. Moreover, there were nearly 14,000 trained Unit Desa employees -- abandonment of the system would have been a massive waste of human as well as physical resources.

The solution was well understood in some circles. While there were a number of hurdles that stood in the way of the transformation of the Unit Desa system, the most critical were legal and political restrictions on interest rates. The Ministry of Finance, and particularly its Center for Policy and Implementation Studies (CPIS), pressed for a significant liberalization of bank regulations that would permit operation of a commercially viable general rural credit scheme through the BRI infrastructure. In June 1983, the GOI introduced deregulation measures and in January 1984 KUPEDES was inaugurated.[5]

The set of decisions that laid the groundwork for the transformation of the Unit Desa system were bold, path breaking, and risky. They represented a significant policy shift within the GOI towards the financial sector and major market-oriented initiatives by the state-owned BRI. The June 1983 liberalization freed banks from quantitative controls on non-program lending, and

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[5] Further details on the factors that influenced the key policy changes at this juncture can be found in Patten, 1987 and Patten and Snodgrass, 1987.

allowed banks to set their own interest rates on commercial loans and on savings (except for TABANAS) (Patten and Rosengard, 1990, p. 72).

BRI's response to the new regulatory environment was adoption of three significant policy changes of its own to revitalize the Unit Desa system:

- o transformation of the Unit Desa from a BIMAS conduit to a full-service rural bank;
- o internal treatment of Unit Desa as semi-autonomous profit-centers rather than simply as postings in the BRI's overall accounts; and,
- o evaluation of the Unit Desa based primarily on their profitability, rather than on hectares covered or money lent.

The primary lending vehicle for the new Unit Desa system was KUPEDES. KUPEDES was built on the foundation of the experience with the grant-funded Kredit Mini and Kredit Midi programs, but differed fundamentally in that KUPEDES was loan financed at interest rates that reflected the cost of funds (market savings rates). This, in combination with lending rates that allowed a positive margin, provided a built-in incentive to mobilize resources from savers. Thus, the groundwork was laid for the creation of a viable rural banking system.

USAID's Opportunistic Intervention -- FID II

USAID has been active in rural credit in Indonesia since the early 1980's. The Provincial Area Development Program spawned and supported a number of experimental credit schemes in its seven targeted provinces. The Central Java Badan Kredit Kecamatan (BKK) system was the subject of a major evaluation by the A.I.D. Bureau for Science and Technology in 1982/3. The mission had also been involved in a series of smaller management information system and computerization efforts with rural credit schemes. The culmination of these activities was the Financial Institutions Development Project, launched in 1984.

The FID project (now called FID I) is a $22.2 million project that set out to improve the BKK-type village-based financial systems in three (later seven) provinces. The project began in 1984 and currently runs through 1991. FID I works through the Ministry of Finance, the Ministry of Home Affairs and the Provincial Development Banks (Bank Pembangunan Daerah - BPD). The project provides training support, technical assistance, commodities, and funds for system capitalization. An institutional and impact evaluation of FID I is currently being undertaken by USAID and further details about the project is available in those reports.

FID II was initiated as an amendment to the FID project in June 1986. FID II is a $16.05 million project designed to support policy and institutional development of the BRI Unit Desa system. The project was an opportunistic intervention necessitated by decisions within the MOF and CPIS to significantly reduce its focus on rural finance. CPIS has been actively working with the BRI Unit Desa system since its inception and was a vital source of technical assistance in the early stages of program development. There was a need for a more substantial effort than CPIS was able to provide and USAID was offered the opportunity to intervene.

The elements of FID II are summarized as follows.

GOAL To encourage enterprise development, increase productivity and generate employment opportunities in rural areas.

PURPOSE 1. To help develop the BRI Unit Desa system in order to provide financial intermediation for middle-level rural borrowers at reasonable cost.

2. To produce loan portfolios of employment generating activities, primarily off-farm.

3. To strengthen BRI savings mobilization programs.

OUTPUTS 1. Policy Development: establishment of policies to integrate and account for Unit Desa operations within an overall BRI operational plan, which ensure the Unit Desa are managed in accordance with sound financial practices in a self-sustaining manner, and which maximize the availability of priority financial services to the general public at the kecamatan level.

2. Training: Establishment of a high-quality BRI regional training system and the institutional capacity to maintain it for the Unit Desa employees and BRI branch supervisors of Unit Desa operations.

3. Operational Development: improvement of Unit Desa accounting, communications, and automation systems to lower the cost of financial intermediation in a cost-effective manner.

4. Research: A major research study to guide the GOI and USAID in further rural financial sector development.[6]

INPUTS

1. Policy Assistance: long-term policy and training advisors.

2. Training System: (A) Technical assistance for the training system; (B) Establishment of four regional training centers; (C) Preparation of course materials; and, (D) Non-recurrent training expenses.

3. Operations: (A) Technical assistance for accounting, reporting, automation, and audit systems; and, (B) Commodity assistance (communication and automation).

4. Research: design and technical assistance.

Financial details of the project are presented in table 2.1 below.

Table 2.1 Financial Institutions Development Project, 497-0341 -- Phase II: Financial Plan (USD 000)

Project Input	USAID (Revised) Grant	USAID (Revised) Loan	Total GOI	Grand Total
Technical Assistance	3,550	0	800	4,350
Training	0	2,150	2,250	4,400
Commodities and Equipment	0	1,000	1,500	2,500
Construction	0	2,000	2,450	4,450
Evaluation	250	0	0	250
Total	3,800	5,150	7,000	15,950

Source: USAID/Jakarta Project Implementation Letter No. 36 (BPD) and No. 18 (BRI), June 16, 1989.

[6] The research components of the project have not been implemented as a result of lack of counterpart funding. This fact has not been well documented and the most recent descriptions of FID II still refer to this set of activities.

SECTION THREE

THE UNIT DESA SYSTEM

This section describes the Unit Desa system starting with the organization of the system and the sources of funding. This is followed by a summary of the two main products of the Unit Desa -- the KUPEDES loan program and deposit programs. The final part addresses the internal controls in the Unit Desa system.

Organization

BRI has organized the Unit Desa system as an autonomous financial entity within the bank which is operated as a separate profit center. An organization chart of the Unit Desa system is shown in Table 3.1.

The Unit Desa

The heart of the KUPEDES program is the village banking unit, which is called the Unit Desa (village unit).[7] The Unit Desa are generally located at the subdistrict (kecamatan) level.

The standard Unit Desa has a four person staff consisting of a general manager, a loan officer, a bookkeeper, and a cashier. The general manager is the unit head and is responsible for all its activities and supervision of staff. The loan officer works mainly outside the office, investigating loan applicants and pursuing delinquent accounts, and promoting savings accounts. The cashier handles all cash transactions in the Unit Desa. The bookkeeper maintains the individual loans and savings accounts, makes normal bookkeeping entries, balances the books and prepares reports which are sent to the branch. The staff generally has a high school or college education.

Standardized workload coefficients (based on number of loans, number of savings accounts and average daily cash transactions) have been developed by the technical advisors which determine the number of additional loan officers, bookkeepers, and cashiers needed in order to operate efficiently a Unit Desa. There is never more than one manager for each Unit Desa. The number of personnel at a Unit Desa can range from a minimum of 4 persons up to 10.

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[7] There is not a Unit Desa in every village. When the number of Unit Desa reached its peak of 3,626 in 1984 there were about 63,000 officially registered villages in Indonesia. Most village units transact around 90% of their loan and deposit business with five or six nearby villages. At its peak, the Unit Desa system essentially covered about one-third of the villages in Indonesia.

Once the volume of Unit Desa operations requires 11 staff members, a Unit Desa is split into two and another Unit Desa is established.

Table 3.1: BRI Unit Desa System -- Organization Chart

Village Service Posts, comprising two-person teams (a bookkeeper and a cashier), are attached to those Unit Desa where there is significant business activity in outlying areas but insufficient transactions to justify the creation of a fully-staffed Unit Desa. The Posts are open from one to six days a week and the teams move between different Posts if each is open less than full time. A Post collects savings and loan payments, receives loan applications but does not make loans. KUPEDES loans are only made from a Unit Desa. When a Post generates sufficient transactions, it is converted to a Unit Desa with the addition of a manager and a loan officer.

When KUPEDES replaced BIMAS as the principal form of loan handled by the Unit Desa, the potential of each Unit Desa was reassessed. Unit Desa determined to have poor potential were consolidated with those regarded as more promising. The former Unit Desa sites were closed or designated as Posts. The number of Unit Desa and Posts decreased from 1984 - 1987, thereafter increasing. As of March 1990, the Unit Desa system constituted 2,866 Unit Desa and 728 Posts. Total employees as of the end of June, 1990 numbered 12,967: 2,764 managers, 3,234 loan officers, and 6,969 bookkeepers and cashiers. The growth of the Unit Desa system is shown below in Table 3.2.

Table 3.2: Growth of the Number of Unit Desa Offices and Personnel

	Unit Desa	Posts	Total	Personnel
December 1984	3,626	0	3,626	13,668
December 1985	2,469	1,135	3,604	12,954
December 1986	2,273	1,226	3,499	12,954
December 1987	2,358	1,070	3,428	11,967
December 1988	2,625	915	3,540	13,099
December 1989	2,844	835	3,679	13,666
June 1990	2,866	728	3,594	12,967

Source: Business Unit Desa Department, Bank Rakyat Indonesia

Branch and Regional Offices

The branch network of the BRI, the most extensive of any bank in Indonesia, consists of 312 branches, most of which are located in district or municipal headquarters towns. There are 306 districts and cities in Indonesia, so the branch network of BRI covers the whole country. The 15 regional offices of BRI are located in the provincial headquarters of Indonesia.

The BRI branches are full service retail banking outlets with a number of loan and savings products. Although the branches have primary responsibility for the day to day supervision of Unit Desa operations, the Unit Desa are only a part of the branch activities.

Each branch has at least one Unit Desa Business Manager (UBM) for every four Unit Desa, who routinely visits and monitors Unit Desa operations, cash balances and financial controls. In those branches where there are more than ten Unit Desa, a Unit Desa Officer (UDO) is assigned to oversee the UBMs. As of June 30, 1989, there were 837 UBMs and 138 UDOs. Although the Unit Desa itself collects data and compiles standard monthly reports, Unit Desa operational and financial data are consolidated and analysis is undertaken at the branch level. The regional offices oversee the operation of the branches.

Head Office

BRI's head office is located in Jakarta. Within the head office, there is a full department, the Business Unit Desa, which oversees the Unit Desa system. BRI's Board of Managing Directors is the main authority for establishing policy regarding Unit Desa activities. Policy directives (in the form of operations circulares) are communicated from the Board through the regional offices and branches to their respective Unit Desa. BRI senior management is assisted on Unit Desa and rural banking related matters by a team of advisors (the advisors are from the Harvard Institute for International Development, "HIID", and are financed with USAID grant assistance) who report directly to the President Director and coordinate on a day-to-day basis with the Business Unit Desa Department.

Funding and Resource Mobilization

Funds available to the Unit Desa System are provided from several sources - grants, liquidity credits, donor loans, and savings mobilization. As of March 31, 1990, total resources available to the Unit Desa system amounted to Rp. 1,496.6 billion (approximately $809 million) as shown in Table 3.3 below.

Equity

This consists of the proceeds of the Government of Indonesia's grant of Rp. 66.7 billion in liquidity credits to BRI for the Kredit Mini[8] program which, in 1984, was reallocated for funding KUPEDES loans. BRI distributed this grant among the Unit Desa in the form of an equity contribution of Rp. 19 million for each Unit Desa and Rp. 5 million for each Post. Each newly established Unit Desa is similarly funded with an initial equity contribution of Rp. 19 million.

The availability of this grant means that the Unit Desa continue to be subsidized to this extent. Other sources of funds

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[8]The Kredit Mini Program was, in effect, the pilot project for KUPEDES.

for the Unit Desa are at market interest rates. The grant is limited to the amount which was already available when KUPEDES began and is a declining percentage of the total resources used.

Table 3.3: Total Resources Available to the Unit Desa System as of the end of March 1990.

Resource	Amount (Rp. billion)		% of Total
External Funds			
Central Bank Equity Grant	66.7		4.4%
Central Bank Liquidity Credit	158.5		10.6%
World Bank Loan	165.7		11.1%
Exim Bank of Japan Loan	50.7		3.4%
Subtotal	441.6		29.5%
Internal Funds (Savings Mobilization)			
Savings Deposits	900.6		60.2%
Tabanas 117.8		7.9%	
Simpedes 747.4		49.9%	
Simaskot 35.4		2.4%	
Demand Deposits	18.4		1.2%
Time Deposits	130.8		8.7%
Other	5.2		.4%
Subtotal	1,055.0		70.5%
TOTAL	1,496.6		100.0%

Source: Bank Rakyat Indonesia, Head Office

Liquidity Credit from Bank Indonesia

This consists of three components as follows: (i) the conversion of Rp. 43 billion in liquidity credits originally provided by Bank Indonesia for the purpose of funding the Kredit Midi program; (ii) an initial Rp. 100 billion of liquidity credits made available to BRI for KUPEDES lending to reach breakeven; and (iii) an additional injection of Rp. 50 billion of liquidity credits to support the growth of KUPEDES beyond the breakeven point. Bank Indonesia is charging BRI an interest rate of 12 percent per annum on these amounts, which is approximately the average rate of interest on all BRI interest bearing accounts at that time. BRI is repaying these liquidity credits on a quarterly basis over seven years, commencing in the first quarter of 1989, and is current in the repayment schedule. The outstanding balance of the liquidity credits as of the end of March 1990 was Rp. 158.5 billion.

Donor Loans

In 1987 the International Bank of Reconstruction and Development of the World Bank approved a loan to the Government of Indonesia of $101.5 million. The purpose of the loan was to replace Bank Indonesia in providing further liquidity credits for KUPEDES lending. The availability of the World Bank funds was limited to 10 percent of the amount loaned or 50 percent of the increase in a quarter, with an upper limit of 65 percent of the increase in outstandings. The upper limit dropped to 60 percent in the second year of the loan agreement. The interest rate to BRI for these funds is the average rate on all BRI's interest bearing accounts. The loan is to be repaid semi-annually over 15 years, beginning in January 1993.[9]

In 1989, the Exim Bank of Japan provided BRI with a loan of Rp. 50.7 billion for "local currency costs" (the 40 percent of the increase in loan amount outstanding not covered by the World Bank loan for the second year of the loan agreement) for KUPEDES. Like the World Bank loan, the interest rate to BRI for these funds is the average rate on all BRI's interest bearing accounts. Repayment of the Exim bank loan is to be made semi-annually over 15 years commencing in September 1991.

Savings Mobilization by the Unit Desa

The most important source of funds for the Unit Desa system is deposits which have experienced a rapid growth. In 1989 the Unit Desa became a self-funding system when deposits exceeded total loans outstanding. The growth of Unit Desa deposits over time and comparison with the growth of the loan portfolio as shown in Table 3.4.

Regionally, the ratio of lending to savings mobilization varies considerably. Table 3.5 breaks out loans, savings, and the difference between the two by region. The provinces with Unit Desa which are net savers are generally not on the island of Java, while those provinces with Unit Desa which are net borrowers are located, for the most part, on Java. It is somewhat surprising that Jakarta is also a net saver. This may be because KUPEDES is a lending instrument designed for rural Indonesia and does not compete well against the alternatives in a highly urbanized setting. While this

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[9] In July 1990, the World Bank approved an additional loan of $125 million to BRI for the Unit Desa system. The loan will provide funds for liquidity credits for increased Kupedes lending, capital expenditures, and technical assistance. Repayment of the loan is to be made semi-annually over 15 years with a 5 year grace period.

Table 3.4: Unit Desa Deposits as a Percentage of Loans Outstanding (Amount in Rupiah billion)

	1984	1985	1986	1987	1988	1989	1990 (March)
Loans Outstanding	111.0	229.0	334.4	429.0	538.8	845.6	992.5
Loan Growth	-	106.3%	46.0%	28.3%	25.6%	56.9%	17.4%*
Deposits	42.2	84.9	175.8	287.5	492.9	959.1	1,055.0
Deposit Growth	-	101.2%	107.1%	63.5%	71.4%	94.6%	10.0%*
Deposits/ Loans	38.0%	37.1%	52.6%	67.0%	91.5%	113.4%	106.3%

* These figures reflect growth in the first quarter of 1990.

Source: Bank Rakyat Indonesia, Head Office

data might suggest that there is movement of funds from less developed outer islands to Java, this is apparently not the case. Excess savings are channeled to local BRI branches. As the BRI branches are uniformly in a deficit funding position, there is no actual movement of funds outside of the local district level.

Table 3.5: Unit Desa Lending and Saving by Regional Office (December 1989)

	Loans			Savings			Loans Minus
Regional Offices	Cust (000)	Out (Rp. Mill)	Ave (Rp. 000)	Cust (000)	Dep (Rp. Mill)	Ave (Rp. 000)	Savings (Rp. Mill)
Banda Aceh	30.2	20,024	662	161.7	26,387	163	(6.4)
Medan	52.6	38,724	736	194.4	46,661	240	(7.9)
Padang	56.8	44,104	776	304.7	49,484	163	(5.4)
Palembang	82.8	60,441	730	278.0	59,190	213	1.3
DKI Jakarta	55.9	53,824	963	342.6	100,192	292	(46.4)
Bandung	331.3	212,266	641	877.7	135,841	155	76.4
Semarang	317.9	166,406	523	1,059.3	164,709	155	1.7
Yogyakarta	232.5	112,310	483	767.9	114,222	149	(1.9)
Surabaya	388.8	252,278	649	1,500.9	238,870	159	13.4
Banjarmasin	33.7	26,475	786	213.0	61,817	290	(35.3)
Denpasar	68.0	50,179	738	196.1	52,493	268	(2.3)
Manado	50.7	32,735	646	245.8	44,517	181	(11.8)
Ujung Pandang	70.2	50,152	714	345.8	69,139	200	(19.0)
Kupang	31.2	17,024	546	153.4	26,364	172	(9.3)
Jayapura	5.6	2,945	525	23.9	9,855	412	(6.9)

Total	1,808.2	1,139,887	630	6,665.0	1,199,741	180	(59.9)
US$ (000)		644	.36		678	.10	(34)

Source: Bank Rakyat Indonesia

Excess savings of Unit Desa are placed with BRI branches where they earn a 18.6 percent transfer fee for the Unit Desa. the BRI branches use the Unit Desa deposits as a source of liquidity for other lending programs. Although deposits exceed loans, there is currently a strong drive to increase savings deposits. The excess of savings over loans outstanding raises the question of whether the Unit Desa system is having the effect of moving funds from the Unit Desa system to BRI which is currently strapped for liquidity.

One potential source of funds that BRI has not been able to utilize to finance KUPEDES lending is reinvested profits. Profits from the Unit Desa system are taken into the general accounts of BRI at year-end. BRI pays a 35 percent tax on its profits and may devote up to 55 percent of its after-tax profits to dedicated uses agreed to by the Ministry of Finance (20 percent to general reserves, 20 percent to specific reserves, and 15 percent for employee benefits and bonuses). Remaining profits have been taken as dividends by the Ministry of Finance.

The KUPEDES Loan Program

The Unit Desa system has one credit instrument, KUPEDES (General Rural Credit) which is available for any credit worthy individual or enterprise. Key aspects of the KUPEDES loan program are presented below.

Loan Purpose

Borrowing may be for any productive enterprise. Loans for consumption purposes such as the purchase of household goods, while not encouraged, are permitted. Although conditions on the World Bank loan state that not more than 5% of the total portfolio is to consist of consumption loans, there is no effective way to prevent a borrower from using a loan for consumption purposes.

Most loans are used by the borrowers for working capital but not necessarily for the purpose stated in the loan application. Borrowers often have multiple enterprises and borrow for whichever is regarded as most credit worthy. Funds are borrowed and diverted to agriculture or other uses. This has resulted in the majority of KUPEDES loans listed as being for trade and most loans are for twelve months with monthly installments.

Borrower Eligibility

The main criteria for loan approval is the creditworthiness of the borrower. KUPEDES loans are essentially character loans. Borrowers are required to provide proof of income sources and/or a certification of their business activities. Most loans require a cosigner, who is normally the applicant's spouse. Borrowers are classified into five categories on the basis of their repayment record and this classification establishes the loan limit for a subsequent loan as follows:

Rating	Criteria	Subsequent Loan Ceiling
A	All payments made on time	Increase of 100% over previous loan amount
B	Final payment on time, one or two installments late	Increase of 50% over previous loan amount
C	Final payment on time, three or more installments late	Same as previous loan amount
D	Final payment late, but paid within two months of due date	Reduction of 50% over previous loan amount
E	Final payment more than two months late	No new loan

Collateral

Indonesian banking law and practice mandate that all loans of a bank be backed by some form of collateral. All KUPEDES borrowers must provide collateral sufficient to cover the value of their loans. While land, buildings or any other property (including assignment of wages) may be accepted, most borrowers use land (including house plots). For an initial loan of Rp. 1 million ($540) or less, any document that indicates ownership of land, such as a signed statement of local officials or evidence of having paid land tax may be used to satisfy the collateral requirement. Loans above Rp. 1 million require a land certificate to prove ownership. Borrowers may use the same collateral for a subsequent loan as used for a previous loan, provided the value of the collateral is sufficient for the new amount.

The Unit Desa holds the land certificate which, in the event of a default, would enable the Unit Desa to take steps to register the land and thence to take title and possession of the property. Since the legal system for realizing collateral in the case of a loan default is time-consuming and complicated, the documentation of collateral for each loan is more for the purpose of establishing the borrower's serious intent to repay than it is to provide a basis for legal action or an alternative source of loan repayment.

Loan Maturity

The KUPEDES program involves two types of loans - working capital and investment. The only difference between the two loans is in the tenor, or length, of the loan. Working capital loans range between three months and 24 months. Investment loans are up 36 months. Over 90% of the loans have been working capital loans as compared to investment loans. This is due to the low loan limit relative to the cost of most capital equipment items and BRI's preference for monthly repayments.

Repayment schedules can include grace periods of three to nine months. Working capital loans also have the option of single balloon payments for three to twelve month maturities. Grace periods and single-payment loans are discouraged. Loans with these features are thought to have lower repayment rates.

Loan Size

The minimum KUPEDES loan is Rp. 25,000 (about $13.50). In practice, few loans of less than Rp. 100,000 ($54) have been made. Based on 1989 average salary levels, a loan size of about Rp. 120,000 covers the staff time to approve a loan, collect the installments and pursue borrowers who default. The maximum KUPEDES loan amount was initially set at Rp. 1 million. This was raised in April 1986 to Rp. 2 million, went to Rp. 3 million in mid-1988, to Rp. 5 million in late 1988 and increased to Rp. 25 million (approximately $13,500) in May 1990. This upper limit is generally available only to repeat customers who have promptly and fully repaid previous loans. The average balance outstanding has risen steadily and was Rp. 468,000 ($ 252) in June 1990.

In visits to several Unit Desa in Java and Bali, the most active areas in Unit Desa system, it was discovered that loan sizes were an average of Rp. 1,088,000 and that no loan was less than Rp. 200,000. The growth in average loan size is shown in table 3.6 below.

Table 3.6: Average KUPEDES Loan Size -- Loan Balance Outstanding (Rupiah thousand)

	1986	1987	1988	1989	1990 (to June)
Ave. Loan Size	199	294	377	391	468

Source: BRI Head Office

Interest Rates

One of the key elements in the development of the KUPEDES program was the market-based approach to setting interest rates which focused on establishing rates that would ensure (a) sufficient amount and prompt delivery of credit and (b) adequate profitability for the financial intermediary. The underlying assumption was that for small borrowers the access to credit is more important than the interest rate. The KUPEDES interest rate is not a market interest rate, but rather a rate that covers the funding and operating costs, including adequate loan loss provisions, and permits the Unit Desa system to earn a reasonable profit. The market rate for credit in the villages is much higher than the KUPEDES rate.

The interest rates on working capital and investment loans are the same. On loans of Rp. 3 million or less, the interest rate is 1.5 percent per month, calculated on a flat rate basis on the original loan principal. For loans of more than Rp. 3 million the interest rate structure is two-tiered - 1.5 percent per month, calculated on a flat rate basis on the first Rp. 3 million of the original loan principal and 1.0 percent per month, calculated on a flat rate basis, on the amount of the original loan principal exceeding Rp. 3 million.

The effective annual interest rate is 31.7 percent for loans of Rp. 3 million and less; for loans of more than Rp. 3 million, the effective annual interest rate ranges from slightly less than 31.7 percent declining to 22.7 percent for a maximum loan of Rp. 25 million. The high loan interest rates permits a profit to be made, even though funds are borrowed at market interest rates and intermediation costs are high due to the large number of small loans and the expenses incurred which accompany that.

While these rates are higher than effective market rates for larger loans (which currently range between 18 and 24 percent), they are much lower than rates charged by informal lenders, which often exceed 10 percent flat rate per month. Commercial banks often lend to the large rural enterprises from their in-town branches; the typical interest rate charged is 20-25 percent. Government-subsidized loans at 12 percent per annum have been made for various special purposes, but these programs have been marked by periodic interruptions in the availability of funds. KUPEDES has been attractive to borrowers because it avoids this problem.

In addition to the basic interest rate, there is a prompt repayment incentive fee of 0.5 percent per month (also calculated on a flat rate basis on the original loan principal) collected monthly. This is essentially an up front penalty for failure to pay loan installments on time. The fee is refunded to the borrower on a semiannual basis if all repayments are made on time as per the original payment schedule for each respective six-month period.

Deposit Program

The Unit Desa mobilize savings through five types of financial vehicles. There are three types of savings deposits plus demand deposits and time deposits.

Three instruments are used to gather savings deposits: TABANAS, SIMPEDES and SIMASKOT. TABANAS, Tabungan Nasional (Small Savings Program) is a national savings program sponsored by Bank Indonesia and available to depositors in all banks, both state and private. The interest rate is currently 15 percent on the minimum monthly balance (no interest is paid on balances of less than Rp. 10,000). Interest is paid annually and not compounded. Withdrawals are restricted to two per month.

SIMPEDES, Simpanan Pedesaan (Village Savings Program) was developed and introduced by BRI as a Unit Desa savings instrument in 1985. SIMPEDES interest rates, calculated on the basis of minimum monthly balances and compounded, are zero percent on balances of less than Rp. 25,000, 9 percent on balances from Rp. 25,000 to Rp. 200,000, 14.4 percent on balances between Rp. 200,000 and Rp. 750,000 and 15 percent on balances above Rp. 750,000. The saver is permitted unlimited withdrawals, which is considered the key factor behind the success of the program. As an additional incentive for the SIMPEDES program, savers receive coupons for participation in a lottery held every six months for prizes.

With the expansion of the Unit Desa system to urban locations, a new savings instrument, SIMASKOT, Simpanan Kota (City Savings Program), was developed for the cities and introduced in December 1989. This instrument is similar to SIMPEDES but in addition, provides an interest rate of 15.6 percent on accounts larger than Rp. 2.0 million. The lottery for SIMASKOT awards cash prizes which are not offered in the SIMPEDES program.

In addition to the savings instruments, Unit Desa offer time deposits and demand or checking accounts. The time deposits have maturities ranging from one month to one year. Checking accounts are held primarily by local government agencies and are principally used to make monthly salary payments and for the transfer of central government funds to village governments for development projects.

It is interesting to note the growth of the savers and borrowers in the Unit Desa system. As table 3.7 shows, the growth in the number of savers has sharply outpaced the number of borrowers in each year (except 1989 when the growth of savers and borrowers was about even). This is not surprising as more people in rural areas tend to be savers than borrowers at any one time. As of the end of 1989, the Unit Desa had almost four times as many savers as borrowers.

Table 3.7: Savers and Borrowers at Unit Desa

	1984	1985	1986	1987	1988	1989
Borrowers/Unit	1,060	1,232	1,315	1,386	1,634	1,997
Borrower Growth	-	16.2%	6.7%	5.4%	17.9%	22.2%
Savers	2,500	3,544	4,184	4,998	6,245	7,500
Savers Growth	-	41.8%	18.1%	19.5%	24.9%	20.1%

Source: Bank Rakyat Indonesia, Head Office

Other Services

In addition to handling savings and credit transactions, the Unit Desa in many areas also perform a number of other services such as collecting bills for electricity, telephone, and property taxes, paying army pensions and teacher salaries, and transferring funds. Since the Unit Desa are acting as agents of the branch in performing these services, the Unit Desa collect fees from the branch for each service (which in turn is reimbursed by the head office of BRI). The Unit Desa have been permitted to hire extra staff on a contract basis to handle the additional services. These additional activities broaden the range of retail banking services provided to Unit Desa customers as well as strengthen the competitive position of BRI.

Internal Controls

The Unit Desa system has never had a complete annual internal audit. In 1989, only 542 of the 2,844 Unit Desa were individually audited. This represents about 19 percent of the Unit Desa and only 15 percent of the Unit Desa and Posts. The reason for the lack of audits is due to the large number of Unit Desa and staffing constraints of BRI's Internal Audit Department. The Internal Audit Department annually audits all of BRI's regional and branch offices. The responsibility for the financial review and supervision of the Unit Desa lies with the BRI branches which are overseen by the regional and headquarters offices. BRI recognizes that this supervision does not replace the internal audit function and is taking steps to increase the number of audit staff. As BRI's Internal Audit Department is expanded and strengthened, it is expected that 700 Unit Desa will be audited in 1990 and all Unit Desa will be audited beginning in 1992.

External auditing at BRI is performed by the Government of Indonesia's Agency for Financial and Development Supervision. While the agency audits all of BRI's regional and branch offices, Unit Desa are audited randomly.

SECTION FOUR

PERFORMANCE OF THE UNIT DESA SYSTEM

This section presents an analysis of the performance of the Unit Desa system in five parts. First, an overall analysis of Unit Desa financial performance. This is followed by the lending and deposit operations. Lastly, a look at the geographic distribution of the Unit Desa system and the significant contribution of the Unit Desa to BRI.

Financial Performance

Highlights of the Unit Desa financial position since 1984 are presented in Table 4.1. During the past six years, the Unit Desa system has registered impressive growth. Between 1984 and 1989, total assets increased 617 percent from Rp.0.18 trillion to Rp.1.29 trillion ($695 million). The outstanding KUPEDES portfolio has increased from Rp.111.0 billion to Rp. 845.6 billion ($456 million). During 1984 - 1987, KUPEDES loans accounted for between 62 percent and 84 percent of total assets. In 1988 and 1989, these figures declined to 60 percent and 65 percent respectively due to the Unit Desa's very successful resource mobilization efforts that produced large net surpluses of loanable funds. Savings deposits have increased dramatically, in particular SIMPEDES, from Rp.40.2 billion in 1986 to Rp.926.6 billion ($509 million)in 1989.

There are four quantitative measures for evaluating banks -- profitability, liquidity, capital adequacy and asset quality. Each of these measures is analyzed for the Unit Desa system.

Profitability

The Unit Desa system has shown favorable profitability trends and ratios. Before the introduction of KUPEDES, the village unit system of BRI made large losses (as much as 50 percent of its expenses), which were covered by direct and indirect subsidies. The KUPEDES program reached the breakeven point 18 months after its start and has generated steadily increasing profits ever since. The Unit Desa profits (before tax) over the last four years have almost quadrupled, rising from Rp.9.8 billion in 1986 and to Rp. 36.9 billion ($20.3 million) in 1989. Pre-tax profits for the first six months of 1990 were a record Rp. 29.8 billion ($16.1 million).

In 1989 two policy changes resulted in a significant increase in personnel and administrative expenses. First, all Unit Desa staff were upgraded to full BRI employee status with the consequence of higher salary and employee benefit expenses. Second, senior management determined that all training costs for Unit Desa personnel were to be charged as expenses against the Unit

Table 4.1: Performance of the BRI Unit Desa System (in Rupiah billions)

	1985	1986	1987	1988	1989	1990 (March)
Total Assets	300.5	427.9	511.9	736.2	1,291.2	1,458.4
Average Assets	-	364.2	469.9	624.1	1,013.7	1,374.8
Cash + Short-term Assets	62.8	97.2	97.2	215.7	452.6	469.6
Gross Loans (before provisions)	243.8	345.0	429.0	538.8	845.6	992.5
Average Loans	-	294.4	387.0	483.9	692.2	919.1
Loans Past Due	4.8	15.0	24.6	40.2	45.7	50.4
Loan Loss Provisions	10.5	20.6	21.3	34.2	39.7	44.9
Transfers to Loan Loss Provisions	2.4	10.1	6.2	25.3	25.8	8.4
Loan Losses	-	-	5.5	12.4	20.3	3.2
Deposits & Borrowings	227.3	351.6	412.5	619.6	1,151.9	1,336.3
Income (Loss)	(.9)	9.8	22.5	30.6	36.9	12.1
Key Ratios:						
Asset Quality						
Past Due Loans/ Gross Loans	2.0%	4.3%	5.7%	7.5%	5.4%	5.1%
Loan Loss Provisions/ Gross Loans	4.3%	6.0%	5.0%	6.3%	4.7%	4.5%
Net Loan Losses/ Average Loans	-	-	1.4%	2.6%	2.9%	1.2%*
Profitability						
Return on Average Assets	-	2.7%	4.8%	4.9%	3.6%	3.5%*
Liquidity						
Cash & Short-term Assets/ Total Assets	20.9%	22.7%	19.0%	29.3%	35.1%	34.2%
Gross Loans/ Dep. & Borr.	107.4%	98.3%	109.2%	92.4%	76.9%	74.3%
Percentage Growth of Unit Desa System						
Total Assets	-	42.4%	19.6%	43.8%	75.4%	51.8%*
Gross Loans	-	41.5%	24.4%	25.6%	56.9%	69.5%*
Deposits & Borr.	-	54.7%	17.3%	50.2%	85.9%	64.0%*
Income	-	-	129.6%	36.0%	20.6%	31.2%*

* annualized figures

Source: Bank Rakyat Indonesia.

Desa system. These policy changes resulted in approximately Rp. 17 billion in additional expenses, as compared to the previous year.

Despite the added expenses, the profit of the Unit Desa system was satisfactory and showed an increase in absolute terms. The upgrading exercise had the further benefit of improving the morale of the Unit Desa staff.

Return on average assets (ROAA) have shown a steadily upward trend from 1986 to 1988, rising from 2.7 percent to 4.9 percent. The ROAA declined in 1989 to 3.6 percent due to the added expenses which were not reflected in previous years. It is estimated that the ROAA without the added expenses would have been over 5.0 percent. An ROAA of 1 percent is considered favorable by international standards. In comparison to this figure, the ROAA for the Unit Desa system is strong.

Liquidity

The Unit Desa system has adequate liquidity which is provided from external funding sources of Bank Indonesia, which is the Central Bank, and donor organizations as well as internal savings mobilization (see section three, Funding and Resource Mobilization). In 1989 the Unit Desa system became a self-funded organization with deposits surpassing loan requirements. The large number of savings accounts provides a stable source of loanable funds. The addition of a proposed World Bank loan of over Rp. 200 billion will provide the Unit Desa system with sufficient liquidity backup.

Savings in excess of lending requirements for an individual Unit Desa is kept with the BRI branch. At present the Unit Desa system is a net provider of funds to BRI. This assists BRI which is dealing with a liquidity squeeze brought on by the non-availability of Bank Indonesia liquidity credits.

Capital Adequacy

It is not possible to gauge the capital adequacy of the Unit Desa system as the Unit Desa system is part of BRI. Capital for the system is maintained with BRI. While the individual Unit Desa are each capitalized with Rp. 19 million, all of their profits are transferred to BRI. Similarly the equity which Bank Indonesia provided for the Unit Desa system in 1984 is housed in BRI.

Asset Quality

The quality of the KUPEDES loan portfolio is good. All of the loans are on an amortizing basis. Loan growth has been strong at 41.5 percent in 1986, 24.4 percent in 1987, 25.6 percent in 1988 and 56.9 percent in 1989. Annualized loan growth for 1990 is expected to be over 50 percent.

Aging of the loan installments past due is done at the Unit Desa level but is not reported to the branch or head office. If a loan is past due beyond the final due date (i.e., the final installment of the loan) then the aging is reported to the branch and head office. Therefore it was not possible to determine the amount of non-performing loans in the loan portfolio (which would include loans past the final due date and loan installments). Typically non-performing loans are overdue loan payments which are more than 90 days past due. Past due loans are in and of themselves not as problematical as non-performing loans. The non-performing loans are more likely to be the loans which go bad and have to charged-off against loan loss reserves.

Total amounts past due as a percentage of loans outstanding, while rising for several years from 2.0 percent in 1985 to 7.5 percent in 1988 declined in 1989 to 5.4 percent. The quality of the portfolio has improved during the interim three month period to March 31, 1990 to 5.1 percent. The level of the past due loans, which includes non-performing loans, is satisfactory and the downward trend in this ratio is favorable. The arrears problem appears to be largely concentrated in a relatively small number of branches and village units, where heightened management attention is needed.

In the fourth quarter of 1989 the loan loss reserve policy was modified to incorporate both general and specific reserves. Previously, loan loss provision were maintained at 6 percent of loan outstanding or 100 percent of all loans more than 3 months beyond the final due date. The loan loss reserve policy was changed so that provisions for loan losses are maintained at 3 percent of total loans outstanding, plus 50 percent of loan amounts overdue up to 3 months beyond the final loan installment due date, plus 100 percent of amounts overdue over 3 months beyond the final loan installment due date. This change is more conservative than the previous policy. While this change resulted in changes in reserves for individual Unit Desa, the overall loan loss provisions were unchanged. At the end of March, 1990, loan loss provisions were Rp. 44.9 billion.

The ratio of provisions to loans has fluctuated between 4.3 percent and 6.3 percent during 1985 and 1988. In 1989 the ratio dropped to 4.7 percent. This is considered to be adequate coverage in view of the loan loss reserve policy.

Loan losses have increased steadily since loan write-offs were instituted in 1987. While the increase in the loan losses is to be expected on a rapidly growing loan portfolio, the increase in the ratio of loan losses to average loans is a negative trend. The ratio, which has increased from 1.4 percent in 1987 to 2.6 percent in 1988 and 2.9 percent in 1989, is still in the acceptable range but continued growth could be of some concern, particularly with the significant increase in the loan ceiling on individual loans.

While the overall level of past due to total loan portfolio is satisfactory, the percentage of borrowers with at least some payment overdue has increased steadily. On average the percentage of borrowers with overdue loans is about twice the percentage of the amount of the past due loans compared to the total loan portfolio. This is shown in the table below:

Table 4.2: Percentage of Past Due Loans to Total Loans

Date	Outstanding	% of Borrowers
December 1985	2.1%	2.6%
December 1986	4.5%	7.0%
December 1987	5.7%	11.4%
December 1988	7.5%	14.2%
December 1989	5.4%	11.6%
March 1990	5.1%	

Source: Bank Rakyat Indonesia, Head Office.

The growing number of borrowers in default makes it difficult (if not impossible) for the loan officer in those Units with much higher than average concentrations of past due loans to properly follow-up on each overdue loan and still attend to other responsibilities of soliciting deposits and loans. Proper follow-up with delinquent borrowers is necessary so that the past due loans do not deteriorate into uncollectible loans. It is recommended that loan collection or work-out teams be formed at the branch or regional level to assist those Unit Desa with large numbers of delinquent borrowers. Without proper follow-up and assistance, the problem loan situation could get worse.

The asset quality of the Unit Desa loan portfolio is considered to be satisfactory on the basis of the declining past due ratio, the conservative loan loss reserve policy, and the acceptable level of loan losses.

Monitoring Loan Portfolio Quality

The Unit Desa age the overdue loan installments and overdue final loan payments. There are four categories for overdue final loan payments as follows:

- The final loan due date is overdue less than three months;
- The final loan due date is overdue between three and nine months and no legal action has been taken;
- The final loan due date is overdue between three and nine months and legal action is being pursed; and,

- The final loan due date is overdue between nine and twelve months.

Various measures of corrective action on overdue loans are taken at different stages. When a loan installment is missed, the loan officer from the Unit Desa is to meet with the delinquent borrower to determine the reason and work out a repayment plan. When the final loan due date is more than six months in arrears the loan proceeds to legal action. When the final loan due date is in excess of 12 months, the loan is written off.

A loan which has been written off is classified into one of three categories as follows:

- Still trying to collect the loan without legal action.
- The loan is in legal action; still trying to collect the loan.
- Attempts to collect the loan are no longer being pursued.

One of the key areas emphasized by the BRI senior management is the quality of the loan portfolio. Management uses several measures to monitor the quality of the loan portfolio. Each Unit Desa records the following information on a monthly basis to assess the performance of their individual loan portfolio:

- The amount of principal paid to date as a percentage of the amount of principal that should have been paid to date on loans extended since August 31, 1988.
- The amount of interest paid to date as a percentage of the amount of interest that should have been paid to date on loans extended since August 31, 1988.
- The long term loan loss ratio which is defined as total amount of the loan portfolio which is overdue as a percentage of the total amount of the loan portfolio which has come due.
- The short term loan loss ratio reflects the amount of the loan portfolio which is overdue for that month as a percentage of the loan portfolio which came due during the month.
- Portfolio status which measures the total amount of the loan portfolio which is overdue as a percentage of the gross total loan portfolio.

On a monthly basis, each Unit Desa reports to its branch the five loan portfolio quality measures cited above and the total loan

amounts past due. The branch monitors the progress of the Unit Desa but emphasis is placed on the amount of principal paid to date as a percentage of the total amount of principal due to date on loans extended after August 31, 1988. This category is emphasized due to guidelines from the head office which has specific instructions for this measure as follows:

- if the percentage of borrowers paying their installments on time remains above 95 percent the Unit Desa is considered to be operating in a satisfactory manner;
- if the percentage declines for two successive months the Unit Desa is to be instructed to collect installments rather than increasing lending;
- if the percentage falls below 95 percent the branch manager is to take disciplinary action against the Unit Desa manager.

The measures of the quality of the loan portfolio are also sent to the regional and head offices. These offices are more concerned with the long-term and short-term loan loss ratios.

There is evidence at the branch and regional level that persons either do not take the time to study the reports from the Unit Desa or do not know what to look for in the reports. The technical advisors are aware of this problem and are planning training sessions to instruct staff at the branch and regional level on reading and understanding the measures of loan quality.

BRI's management is committed to maintaining a quality loan portfolio. A strategy statement adopted by the board of Managing Directors in June, 1990 stated that the portfolio would be considered unsatisfactory when arrears of three months or more past the final installment due date reach 6 percent of the total loan portfolio. As of March 1990, overdue beyond three months of the final installment due date was 1.4 percent of the total loan portfolio.

Lending Operations

During six years of operations, the Unit Desa have disbursed about Rp. 3.4 trillion in KUPEDES loans (almost $1.9 billion equivalent at the end-1989 exchange rate). The growth of the KUPEDES loan portfolio is shown in Table 4.3. The total number of loans made during this time was 6.4 million. Average loan size has increased almost threefold since 1984 from Rp. 287,000 to Rp. 777,000 in 1989. (The consumer price index rose approximately 50% during that period.) The number of annual loans made during this same period has increased twofold from 0.64 million to 1.38 million. After stabilizing at around 1.1 million loans annually over 1986-1988, the number of loans in 1989 increased by 21

percent. The average loan maturity has increased from 12 months over the past two years to the current level of around 16 months.

Table 4.3: Summary of KUPEDES Lending Operations (Rupiah billion)

	1984	1985	1986	1987	1988	1989	1990 (June)
Loans Outstanding (Beginning of Period)	-	111	229	334	429	539	846
Loans Disbursed	172	340	483	598	708	1,073	937
Loan Repayments	61	222	378	498	586	646	639
Loan Write-offs	-	-	-	5.5	12.4	20.3	3.2
Loans Outstanding (End of period)	111	229	334	429	539	846	1,140
Number of Loans (000)	639	991	1,150	1,136	1,137	1,379	1,808

Source: Bank Rakyat Indonesia, Head Office

Deposit Operations

Since the introduction of the SIMPEDES program in 1985, deposit growth has outpaced loan growth in every year. The rapid growth in SIMPEDES, accounting for over 70 percent of total Unit Desa deposits as of March 1990, has been the major factor in total deposits exceeding loans in the Unit Desa system.

The growth in the individual types of deposits is shown below in Table 4.4. The savings deposits have proven to be the most stable source of deposits in the Unit Desa system.

Table 4.4: Deposit Performance at Unit Desa (in Rupiah billion)

	1984	1985	1986	1987	1988	1989	1990 (March)
Savings Deposits							
TABANAS	39	64	78	80	90	114	118
SIMPEDES	-	5	83	183	342	700	747
SIMASKOT	-	-	-	-	-	1	35

Time Deposits	1	2	4	13	44	117	131
Checking Deposits	2	14	11	13	17	26	18
Other	0	0	0	0	0	1	5
TOTAL	42	85	176	288	493	959	1,055

Source: Bank Rakyat Indonesia, Head Office

Geographical Distribution

As of December 1989, 75 percent of KUPEDES loans outstanding and two-thirds of total Unit Desa savings were on the islands of Java and Bali. These figures parallel Indonesian demographics, as more than 60 percent of Indonesia's population lives on Java and Bali and the level of economic activity there is relatively higher than in the other islands. About 85 percent of the Unit Desa profits were generated on Java and Bali.

In terms of asset quality, almost all of the outer islands show worse asset quality of the loan portfolio than Java and Bali. Although loans outstanding on the outer islands is 26 percent of total KUPEDES loans outstanding, 39 percent of loan arrears and write-offs are on the outer islands. This is reflected in the asset quality ratios in which the outer island loan loss ratios are considerably higher than the Java and Bali ratios. Long-term loss ratios for the outer islands are 5.8 percent against 2.5 percent for Java and Bali. Similarly the ratio of past due loans to total loan portfolio outstanding is 7.2 percent for the outer islands versus 4.8 percent for Java and Bali. This would seem to indicate that more attention is needed to monitor loans on the outer islands.

The Unit Desa and BRI

As depicted in the table below, the ROAA for the Unit Desa system is significantly higher than BRI as a whole which has a ROAA around 1 percent.

The table above also indicates the importance of the Unit Desa system to BRI. Over half of all BRI savings accounts and loan accounts are at the Unit Desa. The Unit Desa system contributes significantly to BRI's overall profitability. Although the total assets of the Unit Desa are less than 10 percent of BRI's total assets, in 1987, 1988 and 1989, the Unit Desa accounted for 30 percent of BRI's total net income (before taxes). In 1990, it is expected that the Unit Desa will account for close to 50 percent of BRI's pre-tax income.

Table 4.5: Comparison of Selected Indicators of Bank Rakyat Indonesia and Unit Desa (in Rupiah billion)

	1986	1987	1988	1989
Bank Rakyat Indonesia				
Total Assets	6,743	7,580	10,419	14,230
Average Assets	6,210	7,162	9,000	12,325
Pre-Tax Income	50	70	100	120
Return on Average Assets	.8%	.9%	1.1%	.9%
Unit Desa System				
Total Assets	428	512	736	1,291
Unit Desa Assets/ BRI Assets	6.4%	6.8%	7.1%	9.1%
Pre-Tax Income	10	22	31	37
Unit Desa Income/ BRI Income	20.0%	31.4%	31.0%	30.8%
Return on Average Assets	2.7%	4.8%	4.9%	3.6%

SECTION FIVE

DEVELOPMENTAL IMPACT OF UNIT DESA FINANCIAL SERVICES

Overview

The developmental assumption of the FID II design was that provision of efficient financial services through the Unit Desa system would stimulate the growth of productivity and employment in rural Indonesia (USAID, 1986, p.18)[10]. There are at least five main ways this can occur:

- **Lending** may cause an increase in the net income (value added) and employment (the share of value added distributed to employees) in borrowing enterprises over those levels that would have prevailed in its absence;
- **Deposit facilities** may increase the liquidity of household assets permitting more efficient asset deployment into income and employment generating activities;
- **Financial intermediation** may improve the efficiency or resource allocation in the economy by decreasing the cost of transferring financial resources from savers to investors;
- Successful Unit Desa performance can **reduce the costs of entry** for new purveyors of financial services to areas similar to those served by the Unit Desa system; and,
- Unit Desa operations may influence the **policy environment** in which financial institutions operate to enable expansion of efficient financial services.

There is evidence that all of these results have occurred.

From an enterprise development perspective, the KUPEDES lending program would be classified as an enterprise expansion program.[11] Expansion programs differ from formation- or

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[10] The project paper refers specifically to "off-farm" employment generating activities. It is not clear from the text of the Project Paper that the designers were only interested in off-farm enterprises. KUPEDES is not a targeted program. There is little justification for excluding benefits that may accrue in non-agricultural activities (regardless of location) and agriculture.

[11] See Boomgard, 1989 for a more in depth discussion of different types of microenterprise development programs.

transformation-type programs in that they generally offer financial inputs rather than technical assistance or training to client firms. As such, they do not necessarily seek major changes in the performance of their clients. Rather, a typical expansion program will have a relatively small impact when measured on a per-firm basis. Nevertheless, some expansion programs can have tremendous overall impact because of the large number of firms they assist and the low cost per enterprise assisted. The fact that the Unit Desa system has reached millions of enterprises means that the total program benefits can be presumed to be immense.

In the case of the Unit Desa system, one obvious direct impact is often overlooked -- the development of 2,800 profitable branches with total employment of 13,000 persons. By the standards of most enterprise development programs, these numbers by themselves are substantial.

Descriptive Profile of Unit Desa Customers

Unit Desa customers are referred to in USAID project documents as "middle-level" rural Indonesians. While this description contains an element of truth, it is at the same time, misleading. The rural population served by the Unit Desa system is far more homogeneous than the population at large, and certainly more uniform than the urban population[12]. The middle-level referent was presumably predicated on the assumption that Unit Desa customers are "better-off" than the customers of the rural financial institutions (RFI) assisted under USAID's FID I project.

The RFI serve as a useful bench mark because these institutions are generally thought to reach the poorest of credit-worthy rural Indonesians. There are several reasons to presume that the Unit Desa system serves a better-off group. The Unit Desa are commonly located in the kecamatan capital town -- the RFI's commonly reach into the village. The Unit Desa lending instrument, KUPEDES, requires collateral -- the RFI lend exclusively on the basis of character references. The average loan size of KUPEDES is in the $400 range, several times larger than the RFI average of

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[12] The distinction between urban and rural in Indonesia is not always obvious, particularly on the islands of Java and Bali where more than 60 percent of the population resides. In general, it is probably appropriate to reserve the term urban to refer to Jakarta and the provincial capital cities. The kabupaten (district) capitals are more difficult to classify, but more closely resemble rural towns and than the major urban centers. The kecamatan (sub-district) capital towns are quite clearly rural by Indonesian standards, even though in other contexts they may appear more urbanized than the term rural generally connotes.

less than $100. To the extent that these indicators are accurate predictors of the target population, then middle-level is a reasonable referent for the Unit Desa clientele.

Nevertheless, middle-level is also misleading. Survey-generated profiles of Unit Desa borrowers and RFI customers suggest much less difference between the two groups than is generally presumed. Some of the most salient characteristics of the Unit Desa customers are presented here and compared, whenever possible to RFI clients.[13]

- **The majority of KUPEDES borrowers come from landless and near-landless families.** Forty eight percent of borrower families own no rice land; an additional 25 percent own plots of 2,000 square meters or less. Thus, the total landless and near-landless among borrowers is 73 percent. By comparison, a 1983 impact study of the BKK found that 53 percent of those surveyed owned no land, only 5 percent higher than for KUPEDES. Land owning BKK clients owned 8,000 square meters of agricultural land; 73

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[13] This section draws heavily from a recent study of the impact of Kupedes loans conducted for BRI by Ann Dunham Sutoro (1990). The Sutoro study is based on a sample survey drawn from the loan records of 16 selected Unit Desa in four provinces. The sample was designed to be representative in terms of location, rural income levels, and loan activities. The sample is biased towards "successful" customers because data were only collected from those who had borrowed three times from the Unit Desa.

Information was collected at two stages in the sampling process.

- The first stage sample consisted of all 1,404 customers who borrowed in the months of April or October 1988 (the beginning of the dry and rainy seasons). Data was collected from information contained in the Unit Desa loan file.

- The second stage sample was randomly drawn after stratifying the larger sample by the size of the loan. In-depth interviews were conducted with 12 borrowers from each of the 16 Unit Desa. The total sample size for the second stage was 192.

Borrowers were interviewed concerning their activities during the 12 month period immediately preceding the interview and the 12 month period immediately preceding their first KUPEDES loan.

Information on RFI clients is taken from the 1983 study of Central Java BKK customers by Susan Goldmark and Jay Rosengard.

percent of KUPEDES borrowers own less that 2,000 square meters of agricultural land. (Goldmark and Rosengard, 1983. p. 70) Most KUPEDES borrowers own a small house plot (average size 581 square meters). This is the most common form of loan collateral.

- **The income distribution profile KUPEDES borrower is approximately the same as the rural population.** National survey data for 1987 placed 16.4 percent of the rural population below the World Bank defined poverty line. The Sutoro study found that at the time of their first loan, 15.1 percent of KUPEDES borrowers fell below the poverty line. Goldmark and Rosengard similarly found that BKK customers were fairly representative of Central Java's population.

- **The participation rate of women is relatively high by Indonesian banking standards, but low in comparison with what might be achieved.** Just under 25 percent of KUPEDES borrowers are women, although evidence from Sutoro's in-depth survey suggests the percentage of women owned and operated enterprises financed by the loans may be slightly higher. In contrast, more than 60 percent of BKK borrowers are women.

- **KUPEDES borrowers are members of households that engage in multiple enterprises.** The number of enterprises, which includes agricultural and non-agricultural activities, ranges from one to twelve, with an average of 3.6. Sutoro notes that the increase in the number of enterprises is associated with higher household income. Over time, households increase the number of enterprises to diversify risk rather than enlarging a single enterprise.

- **KUPEDES loans are primarily used for financing working capital requirements of non-agricultural enterprises.** When loans are taken for agricultural purposes, they are used mainly for livestock enterprises. There is no supervision of the actual use of fungible loan proceeds. Table 5-1 illustrates the types of enterprises shown on a sample of individual loan applications.

- **Prior to borrowing, enterprises supported by KUPEDES loans average 3.4 employees.** This is well within the A.I.D. definition of microenterprise of less than 10 employees.

Table 5.1: KUPEDES Borrower Enterprises as Reported on Loan Application

Sector/Enterprise Type	Number	Percentage
AGRICULTURE		
Livestock	86	6.1%
Plantation/Tree Crops	18	1.3%
		7.4%
TRADE		
Grocery, Food Products	246	17.5%
Trade in Ag Products	146	10.4%
Trade Textiles/Garments	145	10.3%
Trade Wood Products	65	4.6%
Small Warung (food stall)	129	9.2%
Trade Building materials	48	3.4%
Trade Metal Products	7	0.5%
Small Petrol Station	11	0.8%
Bamboo, rattan	32	2.3%
Animals, fish	103	7.3%
Other Trade	24	1.7%
		68.1%
MANUFACTURING		
Wood, Bamboo, and Rattan Pr	83	5.9%
Bricks, Rooftiles	51	3.6%
Food Products	8	0.6%
Metalworking	9	0.6%
Textiles and Clothing	36	2.6%
		13.3%
SERVICES		
Salon	14	1.0%
Transport	4	0.3%
Repair	11	0.8%
Rice Mill	1	0.1%
Hotel	1	0.1%
Printing	3	0.2%
		2.4%
OTHER		
Official Loans	123	8.8%
		8.8%
TOTAL	1,404	100.0%

Source : Adapted from Bank Rakyat Indonesia, 1990

Impact on Enterprises Supported by KUPEDES Lending

It is not a simple theoretical or empirical matter to document the effect of access to financial services on enterprise value-added, employment, or household income. Among the most serious issues is what one author has called "the unknowability of the counterfactual," that is, not knowing what would have happened to the enterprise or household in the absence of the loan or other input. Given the broad array of both formal and informal financial services available in rural Indonesia, there are serious institutional attribution questions. Moreover, the fungibility of finance makes it extremely difficult to trace the flow of money through a household in order to attribute changes in the performance of an enterprise to the available of financial services.

Ann Sutoro's study offers some insight into the impact question, but its measurements over time are based entirely on information collected from borrowers. It is not possible, therefore, to compare the performance of borrowers with similar non-borrowers. In addition, since the study only interviewed individuals who had taken multiple KUPEDES loans, the sample is biased towards the most successful program clients. Those who may not have qualified for repeat loans, for whatever reason, were excluded. Finally, one-shot interviews for collecting retrospective household or enterprise financial information are notoriously inaccurate. The following presents what we do know from the Sutoro study.

- **The average KUPEDES borrower interviewed has participated for three years and has had three loans averaging Rp. 466,000 or $251 at current exchange rates.**

- **The profits earned by the enterprises listed as the purpose of the loan grew in real terms at an annual rate of 24.6 percent during the average three years of program participation.** Enterprises demonstrating the fastest growth were those of borrowers in the Rp. 250,000 to Rp. 500,000 range. The reasons for this are: trade enterprises doubled or tripled their throughput; industrial enterprises doubled or tripled production; cash was paid for inputs thus avoiding high interest expenses; work stoppages were avoided due to improved cash flow.

- **Total household income of borrower households grew over a similar period at an annual rate of 20.7 percent.** According to World Bank data reported by Sutoro, average rural per capita incomes increased by 3.8 percent per year between 1984 and 1987. This comparison is interesting, but, because of entirely different methodological approaches, few conclusions can be drawn.

Sutoro also suggests that up to 186,000 participating households may have moved out of absolute poverty (as defined by the World Bank poverty line). The data and sampling procedures simply are not able to support such a conclusion.

- **Total employment in borrower enterprises has increased at an annual rate of 18.2 percent in terms of persons and 22.5 percent in annual labor hours.** Workers per enterprise have increased from 3.4 to 5.6 persons; labor hours per enterprise have increased from 5,590 to 10,080; and hours worked per employee have increased by 23 working days per employee per year. Employment has increased for both unpaid family workers and wage employment. Wage employment has increased faster than use of family labor. Wage rates have increased at a real rate of 2.9 percent per year.

Differential Impact by Loan Size

The Sutoro study analyzed the impact of KUPEDES loans by loan size. Several interesting conclusions emerged from this breakdown and are reported in Tables 5.2 and 5.3.

- **Loan size is a strong predictor of both net enterprise income and total household income.** Net enterprise income and total household income before borrowing rose systematically with loan size. This finding suggests that poorer groups are reached through smaller loans.

- **During the three years of borrowing, enterprise income rose most rapidly in the Rp 250,000 to Rp 500,000 range; household income rose most rapidly for the largest borrowers.** The evidence is not sufficiently conclusive to justify targeting.

- **Total enterprise employment rises with loan size but only as loans exceed Rp 1,000,000.** Employment of unpaid family labor is relatively constant across all loan sizes; hired labor drops as loan size moves from the low to middle range and then increases sharply for loans over Rp 1,000,000.

- **During the three years of borrowing, the share of enterprise income distributed as wages exhibits broad variations.** The wage share rises for the smallest loan size, but declines for larger sizes. Presumably, this is due to the relatively higher capital-intensive enterprises of the larger borrowers.

Table 5.2: KUPEDES Borrower Impact by Loan Size

	Loan Size (Rp. 000)				
	< 250	250-500	500-1,000	> 1,000	All Borrowers
Sample Size	35	51	54	52	192
(%)	18.2%	26.6%	28.1%	27.1%	100.0%
Employment (Persons)					
All Workers	5.4	4.5	4.7	7.4	5.6
Unpaid Family Workers	2.1	2.6	2.3	2.3	2.3
Hired Workers	3.3	1.9	2.4	5.1	3.3
Enterprise Income (Monthly)					
Prior to Loan (Rp.000)	52.3	82.4	165.9	234.3	141.1
Annual Change (Real)	25.9%	34.4%	17.9%	25.4%	24.6%
Household Income (Monthly)					
Prior to Loan (Rp.000)	124.9	159.1	267.1	383.6	244.0
Annual Change (Real)	12.2%	24.2%	14.9%	25.1%	20.7%
Wage Share of Enterprise Income					
Prior to Loan	17.3%	23.1%	21.9%	7.8%	13.6%
Annual Change (Real)	11.4%	-12.5%	-18.2%	-8.5%	-7.4%

Source: Adapted from BRI, 1990.

Equally interesting are the perceived benefits accruing to borrowers in different loan size groupings. Table 5.3 illustrates the responses to questions about how benefits derived from KUPEDES loans were manifest in concrete terms. Both large and small borrowers report increased income and sales and rank them first and second respectively. Avoiding work stoppages due to shortages of working capital was ranked highly by both groups. After these, however, orderings begin to change. Smaller borrowers clearly tend to benefit more from what might be called basic needs -- savings, school, food, and clothing. Larger borrowers also consider these important but report more impact reflected in a broadly-defined notion of luxuries -- particularly the purchase of appliances, furniture and vehicles. Launching new enterprises was important for both groups of borrowers but more so for the larger borrowers. The perception by larger borrowers of benefits from KUPEDES loans was significantly higher than smaller borrowers in their use of proceeds to purchase land and ability to capture lower interest payments.

Table 5.3: Borrowers Perception of Benefits From KUPEDES Loans by Loan Size

Perceived Benefit	Loans < Rp. 500,000		Loans > Rp. 500,000		
	Rank	Pct	Rank	Pct	
Increased Income	1	88.4%	1	87.7%	
Increased Output or Sales	2	75.6%	2	76.4%	
Avoid Work Stoppages	3	55.8%	4	60.4%	
Save More	4	54.7%	8	52.8%	
Pay School Expenses	5	53.5%	7	54.7%	
Eat Better Food	6	51.2%	3	62.3%	*
Wear Better Clothing	7	44.2%	5	56.6%	*
Purchase Entertainment Appliances	8	37.2%	6	56.6%	*
Start New Enterprise	9	33.7%	9	42.5%	*
Purchase New Furniture	10	33.7%	10	42.5%	*
Avoid Money Lenders	11	31.4%	11	34.0%	
Make Housing Improvements	12	29.1%	13	30.2%	
Afford Better Medical Care	13	26.7%	14	27.4%	
Repay Old Debts	14	15.1%	16	17.0%	
Purchase New Vehicle	15	14.0%	12	34.0%	*
Build New House	16	12.8%	18	15.1%	
Buy Land	17	11.6%	15	24.5%	*
Lower Interest Payments	18	9.3%	17	17.0%	*
Buy Livestock	19	7.0%	19	0.9%	*

* indicates difference of more that 10 percent between small and large borrowers.

Source: Adapted from BRI, 1990.

The Impact of Savings and Intermediation

No attempt has been made to document the impact of savings on customers or intermediation at the system-level. Presumably, growth in individual savings improves the asset position of customers, but this is not obvious. Rural Indonesians hold assets in a variety of instruments -- some illiquid (gold), some liquid (rotating credit club -- arisan -- contributions). The real benefit provided by Unit Desa savings is financial intermediation due to the integration of the Units with the financial markets and the more fluid movement of savings to those best able to use it.

Dynamic Benefits: Promoting Entry into Rural Financial Markets

Another impact of the Unit Desa system is that the Unit Desa have shown that providing financial services to the rural areas can be profitable. This has encouraged the creation and expansion of

other banks and financial institutions into the rural areas, thus reaching more of the rural population or providing the rural population with alternative financial services and lowering the cost of financial services through competition.

Since 1986 when the Unit Desa system became profitable under the KUPEDES program, several financial institutions have been established which compete with the Unit Desa system. Most of these financial institutions have been located at the district level, but some have been established at the sub-district level as well.

Policy Benefits: Influencing Policies through Projects

FID II has continued USAID's successful, long-term efforts to influence national financial policy. The concrete example of the Unit Desa system and the availability of a proactive advisory team has resulted in significant financial sector reforms.

The success of the Unit Desa system in providing profitable non-subsidized financial services to the rural poor has strongly influenced recent Ministry of Finance regulations for banks. In January 1990 new banking regulations promulgated by the Ministry of Finance sharply reduced subsidized lines of credit from the Central Bank and required all banks, public and private, to ensure that at least 20 percent of their lending activities was directed to the rural areas. These regulations clearly show the influence of the Unit Desa system not only in the demand for financial services from the rural areas but more importantly that these services can be provided on a self-sustaining profitable basis without subsidies.

SECTION SIX

FID II'S CONTRIBUTION TO THE DEVELOPMENT OF THE UNIT DESA SYSTEM

As described in Section Two, the FID II Project's contribution to the development of the Unit Desa system can be broken down into three primary outputs -- policy development, training, and operational development -- and three primary inputs: policy technical assistance, training systems assistance (technical assistance, construction, materials development and training costs) and operations assistance (technical assistance, commodities). This section evaluates the effectiveness of each of these assistance areas by output.

Policy Development

Assistance at the policy level is provided by the HIID technical assistance team. All indicators suggest that FID II has been extremely effective at this level. It is difficult to systematically classify the policy assistance that has been provided. It is partially proactive and partially reactive. Simultaneously, the advisors work to keep the Unit Desa agenda moving forward in a systematic and way, try to prevent poor decisions from being made and implemented, and act as a sounding board for those making Unit Desa policy.

An important aspect of the success of the technical assistance provided under FID II is that Richard H. Patten, a key person involved in the design of the KUPEDES program and the development of the restructured Unit Desa system, remained with the project, leading the technical assistance team. Mr. Patten has been an active participant in rural finance in Indonesia since 1970 and is widely respected by USAID and the GOI. He brought a thorough and extensive understanding of Indonesia and Indonesian financial markets and institutions to the project. The participation of Mr. Patten under the FID II project has ensured a continuity of philosophy in the development of the Unit Desa system.

Mr. Patten was well known to and had the respect of USAID, the President Director of BRI, the Minister of Finance, the Chairman of the National Planning Agency, and Bank Indonesia, among others. His personal access to policy makers and his credibility have been critical factors in the success of the project and have proven to be effective in influencing financial policy for USAID.

Training

Staff development and training was (and continues) to be one of the most serious constraints on the development of the Unit Desa system. Recognizing that its existing training facilities were

physically incapable of accommodating the magnitude of the training program that was needed, BRI decided in 1986 to establish five training centers exclusively for Unit Desa personnel at Bandung, Padang, Yogyakarta, Surabaya and Ujung Padang. USAID determined that training was an important element in the operation of the Unit Desa system and targeted part of its assistance to the project by providing partial funding in the construction of four of the five training centers, providing technical assistance in the development and preparation of training materials and methods, and in subsidizing a portion of training costs. USAID assistance insured that training went forward in an efficient way. It also leveraged some important changes in how training is conducted.

Unit Desa training functions are principally carried out in training courses at the Training Centers, in short-term seminars, and through on-the-job training at Unit Desa. In addition to the initial training for all new employees, training is provided for persons who are promoted to new positions. Unit Desa training is reported to be far ahead of training efforts at other Indonesian banks in its degree of professionalism and institutionalization.

Formal training commenced in late 1987, with priority given to the Unit Desa managers and loan officers. All of the current Unit Desa managers and loan officers have gone through the training program. Prior to the construction of the five training centers mentioned above, the training was conducted in those five locations at rented premises. Total staff trained in 1988 were slightly less than 3,000 and another 5,200 were trained in 1989. As the new training centers become operational, it is anticipated that 7,950 staff will be trained in 1990, 8,750 in 1991 and 11,850 in 1992.

Training Systems

The current training program primarily involves short, practical how-to courses which are intended to standardize the implementation of Unit Desa activities throughout Indonesia. Future plans call for short refresher courses and courses on specialized topics. The training consists of lectures, role playing, a visit to an operating Unit Desa and concludes with a rigorous exam.

Important changes have been made in the way training is conducted for the Unit Desa staff. In particular, BRI has been persuaded to create a cadre of semi-permanent teachers. Previously, teaching was a part-time avocation. BRI staff-members were appointed to teach for a day or a week. Now, qualified staff are taken out of service for two to three years while they are assigned full-time to teaching. The purpose of this idea was to take good, experienced people from the Unit Desa system and allow them to teach full time rather than adding the teaching to the day-to-day work at the Unit Desa. They also receive training themselves.

To attract the best teachers, incentives were devised such that the teachers received a promotion for teaching, free housing and a guaranteed assurance of a position upon their return to the Unit Desa system. Teaching is now an attractive job within the BRI organization. They live (or will live) on campus in comfortable accommodation with their families. The environment is productive and rewarding. Salaries have been raised. It is anticipated that most of the teachers will be fighting to stay after their three year term. There are currently 87 trainers for the training centers with another group of 30 teachers to be trained in 1991.

There are several issues remaining in refinement of the training systems.

- The technical assistance team is pushing for the adoption of a more participatory approach to training which will include more time for discussion and work in smaller study groups.

- The time required for training, particularly for entry-level staff (the deskperson and cashier) seem excessive. Given the high opportunity cost of tying up slots at the facilities during this catch-up period, every improvement in efficiency has a significant gain. The technical assistance team has been effective at getting some time reductions, but there still may be room for further improvements. It may be appropriate to conduct a training needs assessment to determine course content and amount time necessary for each type of trainee as well as develop training objectives and design programs.

- The HIID team identifies testing as the most important remaining "software" issue. There is a room in the classroom building devoted exclusively to examination. The testing system is similar to that followed in the Indonesia school system. Long tests (up to three days) based almost entirely on memorization. This procedure needs reassessment.

- There needs to be further integration and coordination of all training approaches including training courses, on-the-job training and the system of circular letters from BRI headquarters to the field.

Training Centers

USAID funds were authorized for reimbursement of up to 50 percent of the cost of constructing and furnishing four BRI regional training centers with a total ceiling of $1,650,000. The balance of the cost as well as any cost overruns were funded by BRI. The Bandung training center was the first to open in January 1990 and the training center in Padang commenced operations in

April 1990. The training center for Yogyakarta is scheduled to open in August 1990 followed by Surabaya (January 1991). A fifth training center in Ujung Padang is being rehabilitated by BRI with other funds.

Reimbursement vouchers have been submitted for the two completed centers. Due to higher than estimated construction costs, the USAID contribution will amount to approximately 35 percent of the total cost. BRI has financed the additional costs without protest or complaint. BRI is openly delighted with the high quality and strict engineering standards that USAID requirements specified for the facilities. For example, a major foundation error was avoided in the Surabaya center.

The training centers are impressive facilities. USAID worked with BRI in designing the training centers which consist of classrooms, housing and accommodations for teachers and trainees, and recreational and dining facilities. The centers have a capacity of 90 students and 6 teachers.

The centers provide an excellent focal point for training systems. They are an essential element facilitating implementation of new training systems, particularly in improving teaching. BRI did not have money for investment in the training centers at the beginning of project. Without AID support there would be no centers exclusively for the benefit of the Unit Desa system.

Management systems for the physical facilities are in place. There are still some bugs in the administration systems which can be easily solved. One example is that the library is closed at the end of the working day.

There have been pressures within BRI to open the centers to training not related to the Unit Desa. Since the centers are operating at full capacity to handle the backlog of training needs, this would jeopardize the progress of the program. This will eventually occur, but these pressures have been diverted thus far because of donor participation in the project.

Training Materials

New training materials were under development by HIID, through CPIS, for a year before the initiation of FID II. The materials, comprehensive and detailed, are continually updated. This is necessary to keep the material current, to respond to teacher-identified needs for improvement, and to iron out differences between the materials and standard operating procedures. Recently trained teachers from the training centers are currently performing the third revision of the training materials.

A major constraint on improving the training materials is the shortage of staff in the BRI department responsible for personnel

training. There is no one in charge of training materials development. This problem is recognized and is being addressed.

Materials are dense and not well presented. This is justified by BRI in that the training books also serve as reference materials when trainees are back in the field. BRI should consider separating the training and reference functions by producing a comprehensive set of policy and operational handbooks for each staff member or unit. The training materials could then be augmented (through videos, case studies, improved presentation, etc.) to improve their educational value .

Monitoring and Evaluation

Insufficient effort has been devoted to monitoring and evaluating the effectiveness of training. As a result, there is insufficient information on the trade-offs involved in different mixes of subject matter, teaching methods, and lengths of training courses. At present there is no attempt to measure the long term impact of training at BRI. This is necessary to determine the cost effectiveness of the training. There is also no attempt made to systematically evaluate the effect of training on the performance of the trainee in the work place.

The key constraint on monitoring and evaluation is again that there are no BRI central staff to carry-out this work. The logical group from which to draw such staff is former teachers. At present, given pressures to staff-up the training centers, there is no excess in the potential candidate pool. Efforts are being made to staff the training unit and this problem will be solved eventually.

Operations: Accounting, Reporting, Automation, and Audit Systems

Primary responsibility for accounting, automation, and auditing rested with CMS. Reporting systems were handled by HIID. Since accounting assistance focused primarily on stabilization of existing accounting software, it will be treated in this section under automation and automated equipment.

Automation Equipment

As of June 1990, BRI had installed a computer, printer, and an uninterruptable power supply in 340 Unit Desa. The computers are used to log all transactions, run internal consistency checks, and produce detailed and summary reports. USAID financed 50 percent of the FID II procurement of 565 additional computers. BRI has plans to purchase a further 400 computers, bringing the total number of automated Unit Desa to 1,305 or 46 percent of all units. This is just short of the total number of all "qualifying" units -- those with more than 125 transactions per day and all urban Unit Desas.

Delays in procurement of the USAID computers have been troublesome, but not seriously disruptive. The delays caused by competitive contracting regulations may have allowed BRI to move further up the automation learning curve before undertaking rapid expansion.

CMS assistance on software refinement, maintenance systems, and training have been very well received and have contributed to the development of suitable computer system. The CMS automation advisor has been hired directly by BRI to continue to oversee the automation program.

- The software used in the Unit Desa system is effective and simple to operate. In the automated Unit Desa which was visited, there were no complaints about the operation of the software.

- Maintenance systems are well developed. Both HIID and CMS played an active role in defining maintenance standards, staffing needs, and staffing roles. All maintenance is handled internally by the BRI regional offices. Since most of the computerized units are reasonably close to the regional offices, this has not proven to be a problem. Most technical problems are solved within a day.

- Computer training has proceeded smoothly. Computers are widely used in Indonesia and the BRI staff rapidly adapted to them. At first it was thought that the shift to computers would be a major challenge, but the combination of good software and the interest of the staff has resulted in a smooth transition.

There has been no systematic study of the impact of computerization on Unit Desa operations. This may be a valuable use of BRI resources. There are a number of observations that can be made about computerization.

- Automation has had no clear impact on costs largely because there have been no change in staffing standards to account for productivity changes. Automation results in some increased operational costs, but these are probably insignificant given the benefits that they produce. The operational implications of automation are in the domain of the Booze, Allen and Hamilton advisors to BRI.

- Computerization clearly improves staff morale and has improved the working environment.

- Computerization provides more accurate reports that require less time for checking.

- Reports are generated more quickly. Daily reports are produced and analyzed by the Unit Desa manager. Reports to the Branch are ready in one or two days instead of 5 to ten days at the end of each month.

- BRI staff report that the computers have a very important impact on the customers' image of BRI. People are impressed and feel more secure about keeping their savings in such an institution. Customers are reported to enjoy seeing their name appear on the computer screen.

FID II assistance was vital in pushing forward the automation agenda. State corporations in Indonesia are limited by law on the amount of capital investment they may undertake in any fiscal year.[1] It would have been difficult for BRI to proceed with automation at the time it did without the inducement from USAID. There is no question now that BRI is fully capable of continuing to automate at whatever rate it chooses.

Auditing

Improvement of auditing systems is ultimately hampered by a shortage of qualified staff in the BRI audit department. As noted in section three, Unit Desa are infrequently audited. Each branch is audited two times per year and on each of those occasions, two or three Unit Desa under the branch are selected for an audit which is completed in approximately 80 hours. Thus, only 600 to 900 Unit Desa can be audited each year.

Much actual supervision must be built into the routine responsibilities of the branch staff who supervise the Unit Desa. This is not a substitute for regular audits because of potential conflicts of interest in the management and supervision responsibility of the UBM/UDO at the branches. Efforts have been made to improve the capacity of the UBM/UDO to perform supervisory functions, but this still requires some attention.

CMS made important contributions in the training of branch supervisors and in developing an audit manual and software audit capabilities. Perhaps the most significant single contribution of CMS was the introduction of numbered cash receipts at the Unit Desa level. This has substantially reduced a major source of potential administrative abuse.

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[1] The investment allowed by state corporations is equal to depreciation, 20 percent of after tax profits, overseas borrowing plus borrowing from the Ministry of Finance and Bank Indonesia.

Reporting

The most significant reporting system issues have been the natural tendency to require more information than can be (or is) analyzed and development of the capacity to use and assess the information that is provided. FID II technical assistance has been instrumental in reducing and streamlining reporting requirements throughout the Unit Desa system. The number of regular reports has been reduced from 27 to 5. Considering the costs of information management in a system consisting of more than 2,800 units, these changes have been significant.

End of Project Status

During the development of the project, four targets were established to be met by the PACD in May 1991. The performance of the Unit Desa system is compared to each of the targets below.

- **Triple Kupedes loans outstanding to Rp. 800 billion while maintaining a long-term loss ratio of 2.5% or less.**

Kupedes loans outstanding surpassed Rp. 800 billion in November 1989. Loans outstanding as of June 1990 were Rp. 1,139.9 billion or 42% above the targeted amount.

KUPEDES Loans Outstanding (Rupiah billion):

1984	1985	1986	1987	1988	1989	1990 June
111.0	229.0	334.3	429.2	538.7	845.6	1,139.9

The long-term loss ratio is a ratio of the total amount of the loan portfolio which is overdue divided by the total amount of the loan portfolio which has come due.

KUPEDES Long-Term Loan Loss Ratio:

1984	1985	1986	1987	1988	1989	1990 March
-	1.67%	2.22%	2.53%	3.22%	3.26%	3.26%

While this target has not been achieved, the loan portfolio is considered to be in good condition.

- **Increase Unit Desa savings deposits to cover at least 50 percent of KUPEDES loan volume.**

Unit Desa savings deposits have increased dramatically since the introduction of the SIMPEDES savings scheme in 1985. By the end of 1988, savings deposits accounted for more than half of the KUPEDES loan volume. As of March 1990, the ratio of savings deposits to loans disbursed was 96.1%. The Unit Desa system became

a self-funding financial institution as a whole in 1989 with all deposits more than exceeding the loans outstanding. As of March 1990 the ratio of deposits to loans outstanding was 106.3%. The excess deposits are channeled into BRI at the branch level and used by BRI for liquidity for other lending programs.

UNIT DESA DEPOSITS AS A PERCENTAGE OF LOAN OUTSTANDING

(Amount in Rupiah billion)

	1984	1985	1986	1987	1988	1989	1990 (March)
Loans Outstanding	111.0	229.0	334.4	429.0	538.8	845.6	992.5
Loan disbursed	172.0	339.7	483.4	597.9	707.8	1,072.7	936.8
Deposits	42.2	84.9	175.8	287.5	492.9	959.1	1,055.0
Savings	39.1	68.7	160.8	262.1	431.5	814.3	900.6
Deposits/ Loans Outstand	38.0%	37.1%	52.6%	67.0%	91.5%	113.4%	106.3%
Savings/ Loans Disbursed	22.7%	20.2%	33.3%	43.8%	61.0%	75.9%	96.1%

Source: Bank Rakyat Indonesia, Head Office

- **Reduce Unit Desa administrative cost portion of intermediation cost by 2%, e.g. from 14.5% to 12.5%.**

The Unit Desa system divides intermediation costs between labor and other. Labor costs include wages and salaries, staff incentives, and supervision expenses from branch and regional offices. Other costs include insurance premiums, rent of Unit Desa buildings, taxes, repairs and maintenance, depreciation and miscellaneous. The intermediation costs are computed over the average loans outstanding.

The EOPS does not define administrative costs and thus it is unclear whether administrative costs are labor or labor and other combined. Attempting to determine what was meant when the EOPS were prepared in June 1986 leads one to assume that the labor costs are what is referred to as administrative costs.

The labor costs of the intermediation costs have been reduced from 14.4% in June 1986 to 10.2% as of March 1990. During this period of time, supervision expenses from the branch and regional offices were added to the labor costs. With the charging of supervision costs as of January 1990, all labor and supervision are now being charged to the Unit Desa system with the exception of

some minor BRI senior management expenses which are not broken out by BRI. The Unit Desa pays for its own way. Total intermediation costs have also fallen from 16.8% in June 1986 to 13.0% in March 1990.

INTERMEDIATION COSTS

Year	Labor Costs	Other Costs	Total
1986 (June)	14.4%	2.4%	16.8%
1987 (June)	12.3%	1.3%	13.6%
1988 (June)	11.6%	1.4%	13.0%
1989 (June)	10.7%	2.0%	12.7%
1990 (March)	10.2%	2.8%	13.0%

Source: Bank Rakyat Indonesia, Head Office

- **Establish an on-going research and reporting network.**

The Unit Desa system has a formalized reporting network and BRI has established a research department whose activities include the Unit Desa system.

The Unit Desa prepare detailed monthly reports on their loan and deposit volume and income. This information is sent to the BRI branch offices which supervise the Unit Desa. The branch offices collate the information from all the Unit Desa and forward it to the BRI regional offices which compiles the data from all the branches before forwarding the information to the head office. This process takes about 20 to 25 days after the end of each month for the head office to receive the data from the Unit Desa. The head office prepares a monthly report on the Unit Desa system which is about 45 days after the end of each month. The delay is due to late reporting from some regional offices and corrections of aberrant data.

Recognizing that this reporting process was too lengthy to produce meaningful reports which would enable senior management to react in a timely manner, the technical advisors developed an abbreviated report which is gathered by the BRI branches from the Unit Desa and telexed from the BRI branches to head office within 15 days of the end of the month. This information includes the amount of loans made during the month, the amount of savings, the amount of past due loans and loan losses, the percentage of loan and interest payments made, and the income for the month.

In addition to the reporting network the technical advisors conduct research to develop new products and determine bottlenecks in the Unit Desa system. The research is conducted through periodic mailing of questionnaires and interviews with Unit Desa personnel.

In 1989 BRI established a research unit to analyze the impact of banking services. This unit recently completed a study on the development impact of the KUPEDES lending program on its borrowers.

SECTION SEVEN

FUTURE OF THE UNIT DESA SYSTEM

As indicated in previous sections, the Unit Desa system is performing well. Nonetheless, it is not yet a mature organization. This sections highlights those areas that present continuing challenges for BRI.

Overview: Maintaining a Quality Portfolio and Controlling Costs

The two factors that bear most significantly on the continued success of the Unit Desa system are portfolio quality and cost control. At the present time, we see no significant risks on the cost side. The Unit Desa are lean operations and, in the absence of major changes in policy, will continue this pattern. The bulk of this discussion will focus on portfolio quality.

Portfolio quality is the foundation on which banks are built. The current portfolio of the Unit Desa system is judged to be good. With 1.8 million loans distributed throughout the country, there are few risks that could have a major impact in the short run. Maintaining the quality of the portfolio will be key to the continued success of the Unit Desa system.

During the course of this evaluation, considerable effort was directed towards identifying actual and potential weaknesses in the KUPEDES portfolio and the systems established for monitoring its quality. We do not see any major flaws or reporting problems. Nonetheless, there are several areas that require continual monitoring and more detailed investigation.

Sticking to its Knitting: Serving the Enterprising Poor

The segment of the population served by the Unit Desa system is determined by the interaction of the supply and demand for financial services, prices, transactions costs, the basic characteristics of the products and services offered by the units, and the performance incentives that influence the behavior of bank employees. Even though KUPEDES and SIMPEDES are not targeted programs, these various factors result in an aggregate customer profile is quite attractive from a developmental point of view -- the enterprising poor.

All other things being equal, the significance of the achievement of the Unit Desa system is greater the deeper into the

population it reaches.[2] It is relatively easier to develop a banking system for large borrowers and savers than it is for smaller ones. There is an essential tension between making small loans and serving small savers and profitability. The unit costs of serving an individual customer vary little with loan size. Therefore, profitability incentives naturally induce a search for larger savers and borrowers capable of absorbing larger loans.

There is a clear trend towards larger loan sizes as discussed in section three, table 3.5. Aggregate data show current average loan as Rp. 468,000, more than double the 1986 average. The recent change in the maximum loan ceiling from Rp. 10,000,000 to Rp. 25,000,000 is likely to reinforce this increase. As noted in section five, average loan size appears, in the case of KUPEDES, to be a reasonable good predictor of the economic status of borrowers. A rise in average loan size over time may signal that the system is moving away from serving the needs of smaller/poorer customers.

Data on loan size was collected during the course of this evaluation from a small sample of Unit Desa in two provinces and is reported in table 7.1 and 7.2. Our interest was to look at the size distribution of loans and the differences between the average loan size of first-time loans of new clients and the subsequent loans of old borrowers. Data are for loans made in July 1990.

In West Java and Bali, average loan size in the sample was Rp. 1,088,000 (US$ 587). Table 7.1 illustrates the distribution of these loans. More than 78 percent of all loans made were less than Rp. 1,000,000 (US$ 539); only 5.5 percent were over Rp. 2,500,000 (US$ 1,349). While there were no loans below Rp. 200,000, the increased average size appears to be the result of a limited number of larger loans. To the extent that these are good loans, this portends little problem.

The information collected on new versus old loans is somewhat less reassuring. In one-third of the Unit Desa in the sample, loans to new borrowers are, on average, larger than repeat loans to

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[2] If we knew which segment of the population, unserved by financial services, could make the greatest contribution to development objectives, this statement would rest on much firmer ground. Some, particularly those who in the Grameen Bank school, argue that reaching the absolute poorest has the greatest development payoff. Others would argue that the greatest development impact comes from getting credit to large manufacturers. The theoretically pure position suggests that it is those who can employ capital with the greatest marginal productivity that represent the "ideal target." But given biases in the economic environment this also becomes a normative judgement.

old clients. As will be discussed below, this may expose the portfolio to greater risk.

Table 7.1: Loan Size Distribution in a Sample of Unit Desa: July 1990 (Averages in Rp. 000)

Loan Size	Bali		West Java		Sample	
	Loans	Pct	Loans	Pct	Loans	Pct
Rp.200,000 - 500,000 ($108 - $270)	45	30.8%	675	33.3%	720	33.1%
Rp.500,001 - 1,000,000 ($271 - $539)	41	28.1%	947	46.7%	988	45.4%
Rp.1,000,001 - 2,500,000 ($540 - $1,348)	33	22.6%	315	15.5%	348	16.0%
Rp.2,500,001 - 10,000,000 ($1,349 - $5,391)	25	17.1%	93	4.6%	118	5.4%
Rp.10,000,001 - 25,000,000 ($5,392 - $13,477)	2	1.4%	0	0.0%	2	0.1%

Source: Evaluation Survey

One cannot (and should not) argue with the objective of profitability. Short-term profitability, however, may not be consistent with long-term profitability for the Unit Desa system. This is a real possibility if the factors that raise short-term profits have the result of building greater risk into the KUPEDES portfolio. There is some basis for this hypotheses, particularly if the KUPEDES lending technology is less effective in assessing and managing the risk of larger loans.

The lending technology of the BRI Unit Desa system may well define the state-of-the-art financial intermediation technology for reaching a low-income rural population on a fully self-sustaining, non-subsidized basis. As described in section three, KUPEDES loans are essentially character loans, but, character loans with a twist. Several factors are considered in making a loan including collateral, enterprise cash flow, character references/credit history, and other guarantees such as the right to garnish wages for employees of the government or established companies. An important feature of the KUPEDES character-based lending system built into the design is progressive lending -- subsequent loan ceilings grow with successful repayment. Moreover, the repayment incentive system offers a significant interest differential to prompt and regular repayment.

The relative importance of these various factors in loan quality is not known (BRI will be supporting some studies in this area). As far as we could tell, there has never been a foreclosure in KUPEDES. The costs of foreclosure are likely greater that the value of collectibles, and, it is unlikely that foreclosure would be a politically prudent course for a Unit Desa. Cash flow analyses are cursory, at best, and operating costs are kept low by keeping them that way. Wage garnishes only apply to a very small proportion of customers. It is our assessment that the character element is still fundamental in the KUPEDES system.

Table 7.2: Loan Sizes in a Sample of Unit Desa by New and Old Clients: July 1990 (Averages in Rp. 000)

	New Clients		Old Clients		All Clients		Ratio Old/New
	#	Ave	#	Ave	#	Ave	Value
Bali							
UD 1	9	1,389	21	1,260	30	1,298	0.9
UD 2	3	6,667	17	1,762	20	2,498	0.3
UD 3	12	2,246	34	1,259	46	1,516	0.6
UD 4 (June)	3	667	30	1,183	33	1,136	1.8
UD 4 (July)	6	933	13	2,177	19	1,784	2.3
Total Bali	**33**		**115**		**148**		
Average Bali	**7**	**2,032**	**23**	**1,417**	**30**	**1,554**	**0.7**
West Java							
UD 1	74	939	7	2,550	81	1,078	2.7
UD 2	25	688	68	835	93	796	1.2
UD 3	13	715	46	860	59	828	1.2
UD 4	14	971	44	817	58	854	0.8
UD 5	4	700	25	956	29	921	1.4
UD 6	15	490	10	955	25	676	1.9
UD 7	34	1,125	38	1,625	72	1,389	1.4
UD 8	16	1,259	18	1,933	34	1,616	1.5
UD 9	51	911	62	960	113	938	1.1
UD 10	28	643	33	1,346	61	1,023	2.1
UD 11	117	813	30	1,292	147	911	1.6
UD 12	37	1,014	29	1,443	66	1,202	1.4
UD 13	35	1,387	26	1,804	61	1,565	1.3
UD 14	19	1,095	46	607	65	749	0.6
UD 15	24	854	45	1,110	69	1,021	1.3
Total W.Java	**506**		**527**		**1,033**		
Average W.Java	**34**	**919**	**35**	**1,119**	**69**	**1,021**	**1.2**
Sample Total	**539**		**642**		**1,181**		
Sample Average	**27**	**987**	**32**	**1,172**	**59**	**1,088**	**1.2**

Source: Evaluation Survey

In light of these considerations, the trend towards larger loans combined with relative large first loans, may strengthen short-term profits, but can also subject the portfolio to increased risk. As loan sizes grow, the decision criteria and the decision-making ability of the Unit Desa managers will be tested. It will be necessary to more carefully understand those factors that relate loan size to portfolio quality.

Recruitment and Staffing

Due to the tremendous growth in operations, the Unit Desa system is currently understaffed. Vacancies at the end of 1989 were estimated to be 1,466 persons (Patten, 1990). With projected growth through the end 1990, a total of 4,056 additions to the Unit Desa staff will be required. Detailed estimates of staffing requirements by region are presented in table 7.3.

Table 7.3: Staff Requirements of the Unit Desa System (Persons)

Region	Actual Staff Dec 89	Required Staff Dec 90	Required Additions 1990	Actual Additions To 30 June	Staff Deficit 30 June
Banda Aceh	314	390	76	0	76
Medan	494	685	191	35	156
Padang	614	843	229	3	226
Palembang	897	1,075	178	33	145
DKI Jakarta	755	1,090	335	65	270
Bandung	2,700	3,270	570	296	274
Semarang	2,046	2,610	564	0	564
Yogyakarta	1,410	1,874	464	213	251
Surabaya	2,551	3,139	588	0	588
Banjarmasin	360	535	175	40	135
Denpasar	444	654	210	60	150
Manado	343	499	156	32	124
Ujung Pandang	684	873	189	39	150
Kupang	243	322	79	34	45
Jayapura	34	86	52	7	45
Total	13,889	17,945	4,056	857	3,199

This situation could jeopardize both the continued system growth, the quality of Unit Desa operations, and the addition of needed ancillary services (i.e. money transfers). With a basic staff of four persons, any disruption caused by staff shortages, can be serious. Slight lapses in loan approval, monitoring or collection could have a significant impact on earnings and asset quality.

To address the problem, BRI, at the end of 1989, instituted a new system designed to ensure, in future, that Unit Desa staff vacancies are promptly filled by qualified staff. Each region is routinely asked to identify its total annual Unit Desa personnel requirement. This report takes into account current vacancies, lending and savings growth prospects, internal promotions and natural attrition, as well as establishing a 5 percent reserve at the branch level to fill temporary vacancies resulting from regular Unit Desa staff being sick, on leave or in training. Regional offices of BRI are expected to meet the targets established in these reports.

Nonetheless, recruiting qualified staff is not a simple matter. Standards for BRI are strict and state-ownership places a number of additional constraints on hiring. Positions cannot be advertised because demand for available slots overwhelms the personnel system. One improvement is the recent elimination of psychological testing for candidates. A recent survey of trainee candidates showed that 40 percent of those applicants who passed the oral interview and the security clearance test, failed to pass the psychological test. The combination of easing requirements and greater management attention should produce a larger pool of candidates available for final placement.

Competition

Until very recently, the Unit Desa system had a virtual monopoly on financial services at the kecamatan level which contributed to its strong financial performance. Growing competitive pressure will test the Unit Desa system and force it to adjust to changing market conditions. BRI is likely to maintain a strong competitive edge because it is a government-owned bank. In the Indonesian countryside this is an important confidence-generating attribute.

The risk of competition will be most serious if banks target the most lucrative BRI Unit Desa markets and are able to capture the prime business in those areas. Such "sharpshooting" might be the only way that competition could severely erode Unit Desa profitability in a relatively short time horizon.

Information was obtained on the plans of one private bank that has developed a long-term strategy to enter the kecamatan market. Over a twenty year period, they intend to open 2,000 kecamatan branches. The first nine branches were to open in August 1990. To test the sharpshooting hypothesis, we looked at the performance of the Unit Desa in those nine locations. The results of this comparison are presented in table 7.4.

It is apparent that no such sharpshooting is taking place. There is no consistent pattern between the performance of the Unit Desa in the locations (kecamatan) targeted by the private bank

(Tgt. Kec. in the table) and the Unit Desa averages for each of the individual provinces (Prov. Ave. in the table). In West Java, for example, the private bank will be establishing two branches. The targeted kecamatan do not, as the sharpshooting hypothesis would suggest, exhibit any particular exceptional characteristic. The same is true for the other provinces as well.

Competition is not likely to seriously erode the market of the Unit Desa. Its impact is most likely to be felt in the larger loan sizes (probably a good thing) and in keeping pressure on interest rates and costs. It may begin to reduce the extraordinary profits of the Unit Desa system, but this should not be a major problem, as long as the superior performance of the system is maintained.

Table 7.4: Unit Desa Performance in Kecamatan Targeted by Penetrating Private Bank

	W. Java		E. Java		C. Java		Yogyakarta	
	Tgt Kec.	Prov. Ave.	Tgt Kec.	Prov. Ave.	Tgt Kec.	Prov. Ave.	Tgt Kec.	Prov. Ave.
Units	2	478	3	520	3	432	1	317
Profit/Unit (Rp. Million)	6.3		19.9		9.4		50.1	
Outstanding Loans/ Unit (000)	342	444	319	408	283	385	295	354
Savings/Unit (Rp. Million)	169	284	697	261	463	381	282	360
Long-term Loss Ratio	2.8%	3.2%	1.6%	1.5%	3.8%	1.6%	0.9%	1.7%
Borrowers/ Unit	635	693	628	637	658	767	718	733
Ave Loan Size (Rp.000)	538	641	508	641	430	502	411	483
Savings/ Loans	49%	64%	219%	64%	164%	99%	96%	102%

Source: Evaluation Survey

Other Concerns

There are several other concerns that need to be briefly mentioned.

- Network lending (lending to an enterprise and at the same time lending to suppliers or customers which are solely dependent upon the financial viability of the enterprise), a strategy devised to increase the customer base of the Unit Desa, is risky and needs to be closely monitored.

- Rapid internal staff rotation makes it difficult to develop strong divisional capacity. Institutionalization of technical assistance is difficult as BRI staff are frequently rotated. Key positions in Unit Desa support functions have not yet been filled.

- Costs of increased activities placed on Unit Desa by Head Office and Branches need to be thought though carefully as to cost and efficiency. Branches and Head Office often believe there is no cost involved in adding additional services Continued expansion of the Unit Desa system's services (such as money transfers) will result in absorption problems. The adoption of too many services too quickly will hurt efficiency and possibly detract from savings mobilization and prudent cautious lending.

- The role of women in the Unit Desa system is improving, but still is less that would be preferred in a USAID supported project. Efforts are being made to adjust the gender-balance of the staff, but these could be intensified. Moreover, there are indications that loan conditions -- particularly collateral -- may exclude women borrowers.

- Continuing efforts need to be made to provide consistent and rigorous supervision of Units. Existing systems are improving but still are not adequate.

- The concerted drive to mobilize savings is over emphasized, unnecessary -- there is an excess of savings in the system -- and, potentially counterproductive. Unit Desa staff need to concentrate attention on maintaining portfolio quality -- this is far more critical for the overall performance of the system at this juncture.

SECTION EIGHT

ACCOUNTING FOR THE SUCCESS OF THE UNIT DESA SYSTEM: LESSONS LEARNED AND REPLICABILITY

What Can be Learned from the Unit Desa System?

The BRI Unit Desa system is a rare example of a successful financial institution that profitably reaches the enterprising poor. Its success can primarily be attributed to the fact that, in general, **the BRI Unit Desa system has and has been permitted to adhere to the fundamentals of banking and finance enough of the time to become operationally effective and financially viable.** Patten and Rosengard have summarized these fundamentals as follows:

- responded to market demand based on client characteristics, needs and priorities;
- established a clear market supply niche among competitors;
- engaged in active financial intermediation between savers and borrowers, and established interest spreads accordingly;
- furthered the integration of local, regional, and national financial markets; and,
- excelled at common measures of overall institutional performance, including efficiency, effectiveness, adaptability, personnel quality, autonomy, and accountability (Patten and Rosengard, 1990, p. 99).

At the **system-level**, the Unit Desa success reinforces several additional critical points.

- Interest rate policy has been an absolutely essential precondition to the success of the Unit Desa system. Without the freedom and will to set rates on savings and lending, the Unit Desa system would not have become self-sustaining and profitable.
- Institutional development and developmental impact cannot be separated. There will be no impact without a viable institution; there will be no institution without perceived value.
- Getting incentives right for borrowers, savers, employees, and managers has been a key ingredient in evoking the desired behavior on the part of each set of actors. Competitive interest rates and reasonable

liquidity induce savings; payment incentives and the opportunity for more credit induce repayment; fair salaries, benefits, and performance incentives induce staff to perform efficiently; and, profit-center accounting induces effective management.

- Provision of financial services as opposed to targeted credit offers greater opportunities for developing a large customer base, a self-financed capital base, and institutional self-sustainability.

- The demand for liquidity is far more important than the demand for credit. Savings mobilization is just as important as credit in meeting the financial needs of the rural population.

- Low income rural population make good and profitable financial clients.

What Can be Learned from the FID II Project?

There are several project-level lessons worth noting.

- A combination of policy input and hands on technical assistance have been necessary to accomplish the objectives of the project. It is clear that without continual direct assistance, policy changes alone would not have induced the kind of system performance that has been achieved.

- The effectiveness of the project's technical assistance has depended on the long-term relationships that exist between members of the team and senior Indonesian officials. The team never had to address the considerable challenge of establishing their credibility with BRI or GOI.

- The success of the project has been heavily dependent on an interested, motivated, and receptive BRI management. This is primarily the result, however, of the demonstrated consistency of program goals with overall BRI performance.

- Effective technical advice has been very much process rather than product oriented. The particular systems and products developed have little value outside of the Unit Desa system.

- Government-owned institutions can be used effectively to achieve AID objectives in selected cases. A key test is the responsiveness of the institution to market signals

and the use of market-based performance incentives at all levels of the system.

The Replicability of the Unit Desa System

The Unit Desa system offers an attractive model for replication in other developing countries. Because it is essentially a commercially viable banking system, it is perhaps a superior model than structures that are more adapted to particular local ideological circumstances. There are, however, strong differences of opinion on the replicability of the Unit Desa system.

There are four conditions under which a risk-taker might consider trying to replicate a Unit Desa-type system.

- o If there is an reasonably sound institutional home for such a system with an interested, powerful, and dynamic leader.[3] The institution should probably be a licensed and regulated financial institution. Non-government organizations will not likely have the capacity for expansion and financial intermediation without first becoming such an institution. The institution should also have the authority and will to establish reasonable performance incentives for employees.

- o If interest rates on lending and savings can be set at commercially-viable and cost-based levels by the institution. This may be achieved through general financial policy or through specific exceptions for a particular program.

- o If the institution (or external donors) are able to provide long-term external, expert technical assistance and selected risky capital investment subsidies. External technical assistance is essential to keep the program on-track in the face of the forces that have thwarted previous efforts to do good. Risk capital is required to allow decision makers to invest in the development of the system when outsiders are demanding quick returns.

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[3] The importance of the leader of the institution cannot be underestimated. Mr. Kamardy Arief, President Director of BRI, has been responsible for much of the success of the Unit Desa system. He came to BRI in 1983 as the reform package for KUPEDES was being completed. Throughout, he has strongly supported the Unit Desa system, he has worked to keep the Unit Desa program simple and not cluttered with other activities, and he has been open to the technical advisors and has used them effectively.

- Patience.

Others have identified other factors as essential pre-conditions for replication. These include: high population density that permits units to be located physically close to a large number of potential clients; a social ethic and cohesion that allows for a character-based reference system (unsecured loans) to work; a large pool of talented, educated and unemployed youth that allows staffing with talented but relatively low cost local personnel; good quality, extensive physical infrastructure including roads and communications allow for a density of economic activity which corresponds to the density of population; and, economic growth. It is difficult to know how limiting these restrictions might be.

In a recent review of the performance of 70 small and medium enterprise projects in 36 countries financed by the World Bank, Leila Webster identified four key characteristics shared by successful projects. These are:

- The presence of pre-existing factors that were conducive to project success including strong demand for the services provided by the project; effective institutions and individuals; sufficient levels of leadership and commitment to project goals; and political environments stable enough to allow effective implementation.

- Thorough appraisal of available financial and technical assistance institutions and selection of the strongest ones for participation in the projects.

- Project designs that matched local demands for services and that dovetailed with existing operations and capabilities of implementing institutions.

- Enlistment of particularly capable individuals in key positions in the government or in the major institutions that form the financial and technical assistance delivery system. (Webster, 1989, p. iii)

Replication of any institution from one context to another is a complex and challenging task. The BRI Unit Desa system has achieved such remarkable results that much more attention than can be provided in this evaluation ought to be devoted to understanding what might be replicated and how this might be achieved.

SECTION NINE

ISSUES AND ALTERNATIVES FOR USAID

The Context

There is a clear need (and desire on the part of BRI) for a continuation of technical assistance in the development of the Unit Desa system. As discussed in Section Seven, there is much unfinished business. This section will tackle the question of what, if any, is the role of USAID in the future of the Unit Desa system. Before exploring potential areas for USAID assistance, however, there are several contextual issues that merit consideration.

- BRI's Unit Desa program is profitable and self-sustaining. Furthermore, other donors are offering sufficient assistance to allow USAID to step away. Although there exists a demand (and need) for continued technical assistance and training, the institution will continue to have the same technical assistance in terms of both personnel and philosophy (which has been a key factor in the success of the program). The World Bank is processing a new loan for the Unit Desa system which includes additional liquidity credits to provide funding to expand KUPEDES lending and a technical assistance component which will enable BRI to continue the technical assistance work of the HIID team as well as expand construction of the training centers. BRI has also demonstrated the capacity to directly hire needed technical assistance from its own resources.

- The rationale on which the FID II project was based is no longer applicable. The Unit Desa system is no longer the only institution with the capacity to provide financial services at the kecamatan level. The justification for continuing to assist only one of several competitive institutions will have to be carefully assessed.

- USAID has an interest in maintaining involvement with the BRI and the Unit Desa system for several reasons including: continuation of USAID's highly successful long-term involvement in rural financial development in Indonesia; markets; continuation of support to the Agency's worldwide microenterprise development program; and, continuation of a successful relationship with the most important rural finance institution in the country (and, perhaps, the world).

- Likewise, BRI management is comfortable working with USAID and is interested in extending USAID involvement. The President Director of BRI expressed concern at the

conclusions of the evaluation to the extent that they influenced USAID not to continue to support the Unit Desa program.

Principle Findings

The FID II project has achieved its goal as expressed in the project paper of being an opportunistic intervention designed to get the Unit Desa system operating on a solid foundation. As clearly noted in the project paper,

> "....USAID's plan is quite short-term and specific. We want to ensure that the policy base established at this critical juncture in Unit Desa development is economically sound and development-oriented, and that the training and procedures for this rural bank system are in place and of good quality. In the longer run these efforts and BRI's market-oriented management should result in BRI being able to operate effectively at the Unit Desa level without additional donor assistance." (USAID, 1986, p.9)

The project also is extremely successful in meeting CDSS impact criteria of using USAID funds efficiently to leverage GOI and other donor follow-through.

The principal findings of this evaluation can be stated as follows:

- **USAID should take credit for its assistance to the Unit Desa system to date and not commit further resources to the development of Unit Desa system. The project has been very successful and is complete.**

- **USAID should carefully consider how it might continue its strong historical presence in the development of rural financial markets in Indonesia through a process of identifying areas in which technical assistance and training can continue to underwrite the risks of further expansion/extension of financial institutions to reach the poor in Indonesia.**

Options For USAID

At the outset, it is necessary to dismiss as a non-option the privatization of the Unit Desa system. The Unit Desa do not form an independent organization. Rather, they function as an integral layer in the overall BRI structure. Even if a way were found to structure the Unit Desa system as a salable package, BRI is not likely to sell it because of its importance to BRI in profit and

savings generation. Moreover, the Unit Desa system would lose a great deal if separated from the BRI support structure. Among the most significant losses would be the credibility and legitimacy that state bank ownership affords to the Unit Desa system in the rural areas it serves.

Privatization of BRI as a whole may be a reasonable option. However, given the weak capital adequacy of the bank and Ministry of Finance regulations which severely restrict the ability of BRI to improve its capital base, privatization is not currently viable. Nonetheless, the World Bank, the GOI and BRI do have privatization on the long-term agenda. There would appear to be little justification for USAID to also enter the field.

As USAID begins to consider follow-on activities, it should be noted that BRI may offer a convenient institutional home for carrying out pilot activities and research that can lay the basis for a sound design for follow-on activities. As future plans are laid, the need for careful pre-design work cannot be underestimated. The FID I and FID II projects resulted from long-term strategic and design processes which began during the implementation of the Provincial Area Development Projects. At the same time, however, the mission should be prepared to respond quickly and appropriately as genuine opportunities emerge.

There are a number of interesting and important research topics and questions that merit attention. Several candidates are considered here.

- Where are the gaps in the Indonesian financial system? A cursory view of the Indonesian financial landscape gives the impression of near comprehensive coverage. Is this actually the case? Are there significant unmet demands -- regionally, at particular levels of the economy, for particular types of services and products?
- Among the different institutions that comprise the Indonesian financial system, where are there opportunities for significant performance improvements or expansion with carefully targeted external assistance? What options exist for intervention?

- Which types of institutions and financial products and services cause the greatest developmental impact, including impact on the poorest segments of the population? What are the distributional -- both regional and income-based -- consequences of different products and institutions?

- What changes in financial services can increase the opportunities available to women? Can changes in financial services open greater opportunities for female participation in the economy?

One alternative that merits thorough investigation as this time is the possibility of assisting BRI reach further downwards in the economy through the rationalization and expansion of village-level banking through the Bank Kredit Desa (BKD).[4] BKD are village financial institutions that have been in existence since 1929. The BKD system is the next logical step in widening the availability of credit to the rural poor. The BKD system could extend the reach of BRI to the village level. It would be able to serve those small savers and borrowers outside the geographic net of the Unit Desa, who do not have collateral, and who wish to start new enterprises.

The BKD system has not received as much attention as other rural financial institutions in Indonesia, but it was, in fact, the model on which the BKK system was built.[5] BKD have been in existence since 1929. By law, there may be one BKD per village -- about 60,000 (there are 60,000 services stations in the United States), although only about 3,000 units are active now. Most are located in East Java, but there are also some in West Java, Central Java, and Yogyakarta. (President Soeharto at one time worked in a BKD). BKDs are usually open one day a week and are operated by a local board and a bookkeeper, who has a regular circuit of BKDs.

BRI has been designated by Bank Indonesia to supervise the BKD. Supervision takes place through a BKD loan officer, a BRI employee whose expenses are paid by Bank Indonesia. One supervisor covers 30 BKD; two are visited each day, twelve per week.

BKD make loans of up to Rp. 250,000 (ceiling set by BRI). Average loan size is on the order of Rp. 50,000 to Rp. 100,000. BKD are authorized by law to take savings but they do not. They require compulsory savings and as a result, savings often exceeds loan outstandings. An excess level of savings is not profitable due to lack of intermediation. Each BKD keeps its cash in excess of Rp. 50,000 in a low interest bearing checking account at the nearest BRI branch.

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[4] BRI involvement in the development of the BKD system is, by no means, the only available or reasonable institutional option. In the 1988 financial sector deregulation package, Bank Indonesia reclaimed the responsibility for supervising the BKDs, but then immediately delegated the task back to BRI. This is not an arrangement which is cast in concrete. There are a number of other interesting options that merit consideration -- a separate system could be set up with BRI ownership; local ownership with BRI supervision; BKDs could become village branches of Unit Desa; BKDs could become village posts of FID I rural financial institutions; and, so on.

[5] BKD were among the candidate institutions to be supported under FID I in East Java. For a variety of reasons, the cooperative-based KURK system eventually became the target.

From BRI's vantage point, there are several changes that could be made to improve the operation of the BKD system.

1. For existing BKD, accounts could be shifted to a Unit Desa SIMPEDES account.

2. Voluntary savings could be developed. Interest of 1 percent per month could be offered. Deposits would be held at the Unit Desa and the BKD would earn the small spread.

3. New BKD could be developed at the village level. It is estimated that Rp. 1,000,000 would be required for capitalizing each new unit. One possibility is that village INPRES founds could be used to capitalize the banks. BRI may also be inclined to take an equity position in the units.[6]

The BKD system could extend the reach of BRI to the village level. It would be able to serve those small savers and borrowers outside the geographic net of the Unit Desa, who do not have collateral, and who wish to start new enterprises.
The BKD would reach further down to the rural poor beyond the level of KUPEDES. This is particularly so as the KUPEDES program seems to aiming for increased levels of borrowing (certainly as borne out in 1990).

BKD would extend credit to those without tangible assets as collateral, relying instead on social capital such as the borrower's communal identity and social relations as collateral substitute. The BKD can incorporate and build upon elements of informal finance. As loan requirements increase for borrowers in the BKD system, these borrowers can graduate to the Unit Desa system with a credit history which reduces the risks associated with larger first loans from the Unit Desa. The BKD may be the next logical step in widening the availability of credit to the rural poor in Indonesia.

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[6] It is reported that only BKDs that already exist (in the sense of having licenses) can be recapitalized. Any new institutions that are established would have to meet the Rp. 50 million capitalization requirement of existing financial regulations. Setting up new BKDs would thus be a different sort of challenge with different structural implications.

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