

ASIAN DEVELOPMENT BANK
Operations Evaluation Department

PPA: THA 31058
(Final)

PROJECT PERFORMANCE AUDIT REPORT

ON THE

RURAL ENTERPRISE CREDIT PROJECT
(Loan 1540-THA)

IN

THAILAND

October 2004

CURRENCY EQUIVALENTS

Currency Unit – baht (B)

	At Appraisal (July 1997)	At Project Completion (September 2001)	At Operations Evaluation (November 2003)
B1.00	= \$0.0316	\$0.0226	\$0.0249
\$1.00	= B31.56	B44.17	B40.12

ABBREVIATIONS

ADB	–	Asian Development Bank
BAAC	–	Bank for Agriculture and Agricultural Cooperatives
DMP	–	Debt Moratorium Program
EIRR	–	economic internal rate of return
FIRR	–	financial internal rate of return
GTZ	–	German Agency for Technical Cooperation
OEM	–	Operations Evaluation Mission
PCR	–	project completion report
PPAR	–	project performance audit report
RECP	–	Rural Enterprise Credit Project
SFCP	–	Small Farmer Credit Project
TA	–	technical assistance

NOTES

- (i) The fiscal year (FY) of the Bank for Agriculture and Agricultural Cooperatives ends on 31 March. FY before a calendar year denotes the year in which the fiscal year ends.
- (ii) In this report, "\$" refers to US dollars.

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Susan D. Tamondong, evaluation specialist (team leader) was responsible for preparing this report. Agnes Anabo, evaluation officer, and Maria Victoria de la Cruz supported the study in Manila.

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Attachment:	Management Response on the Project Performance Audit Report (PPAR) on the Rural Enterprise Credit Project in Thailand (Loan 1540-THA)
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BASIC DATA
Rural Enterprise Credit Project (Loan 1540-THA)

PROJECT PREPARATION/INSTITUTION BUILDING

TA No.	TA Name	Type	Person-Months	Amount (\$)	Approval Date
2953	Strengthening Project Loan Appraisal and Risk Management of the Bank for Agriculture and Agricultural Cooperatives	ADTA	19.5	600,000	19 Dec 1997

KEY PROJECT DATA (\$ million)	As per ADB	
	Loan Documents	Actual
ADB Loan Amount/Utilization	200.0	93.96
ADB Loan Amount/Cancellation		106.04

KEY DATES	Expected	Actual
Reconnaissance		30–31 Jan 1997
		10 Mar–4 Apr 1997
Fact-Finding		15–28 May 1997
Appraisal		10–20 Jul 1997
Loan Negotiations		13–15 Aug 1997
Board Approval		18 Sep 1997
Loan Agreement		29 Sep 1997
Loan Effectiveness	28 Dec 1997	26 Nov 1997
First Disbursement		28 Nov 1997
Project Completion	31 Aug 2002	11 Oct 1999
Loan Closing	26 Nov 2002	11 Oct 1999
Months (effectiveness to completion) ¹	56.0	22.5

BORROWER Bank for Agriculture and Agricultural Cooperatives

EXECUTING AGENCY Bank for Agriculture and Agricultural Cooperatives

MISSION DATA

Type of Mission	No. of Missions	No. of Person-Days
Reconnaissance	2	74
Fact-Finding	1	41
Appraisal	1	21
Project Administration		
Review	2	13
Special Project Administration	1	6
Project Completion	1	39
Operations Evaluation ²	2	92

ADB = Asian Development Bank, ADTA = advisory technical assistance, no. = number, TA = technical assistance.

¹ The much shorter actual duration between effectiveness and completion (compared to appraisal estimate) could be traced to the earlier than expected closure of the loan account. The Bank for Agriculture and Agricultural Cooperatives (BAAC) requested cancellation of the undisbursed amount because of weak demand for domestic credit, BAAC's abundant liquidity, and costly project funds since domestic interest rates were declining.

² The operations evaluation mission comprised S. Tamondong (evaluation specialist and mission leader), a rural enterprise development economist (consultant), and a rural banking specialist (consultant).

EXECUTIVE SUMMARY

The Rural Enterprise Credit Project (RECP) approved in August 1997 for \$200 million was a follow-up project to finance rural enterprises through the Bank for Agriculture and Agricultural Cooperatives (BAAC). It was intended to build on momentum from an earlier project, the Small Farmer Credit Project which aimed to improve rural incomes and employment. BAAC is a specialized institution under the Ministry of Finance providing loans to farmers, with a network reaching 92% of Thailand's rural households. Its funding and regulation represents the country's most important effort to support small- to medium-sized farms.

RECP's main objectives were (i) to establish about 54,000 profitable rural enterprises owned and operated by farm families by providing medium- and long-term credit; and (ii) to improve BAAC's loan processing, supervision, and customer services for rural enterprise clients. The targeted subborrowers—one third of them expected to be women—were farm families in 44 provinces that the government identified as economically depressed. A technical assistance grant was provided to support the project and to enhance BAAC's overall performance by strengthening its loan appraisal, credit operations, risk management, and training capacity, as well as broadening its range of customer services.

The total project cost was estimated at \$440 million, with foreign exchange cost from the Asian Development Bank's ordinary capital resources estimated at \$200 million and BAAC-funded local currency cost of \$240 million. Subborrowers were expected to fund about 30% of the project cost. The loan was closed on 11 October 1999 with a revised and disbursed amount of \$93.96 million (net of cancellation). The continuing effects of the Asian financial crisis led to the cancellation of the loan balance. Weak demand for domestic credit, BAAC's high liquidity, declining domestic interest rates, and the commitment charge were the main reasons cited for cancellation. The loan was prepaid in August 2002.

The onset of the financial crisis occurred during RECP appraisal, transforming the economic and financial environment in Thailand. The economy experienced severe contraction, loss of employment, cuts in social and rural development expenditure, and increased poverty. In this context, the amount of the RECP loan was doubled from its original amount proposed, and BAAC's request to allow them to disburse short-term loans was accommodated. The financial crisis affected credit demand, government strategies, and lending, profitability, and repayment performance. Despite the financial crisis, BAAC was determined to fulfill RECP objectives.

Following elections in early 2001, BAAC began the Debt Moratorium Program (DMP) to mitigate the negative impacts of the financial crisis on small farmers. This clearly affected RECP. Under DMP, farmers with bank loans of up to B100,000 could either (i) defer repayment for as long as 3 years, without the right to new borrowing (suspension); or (ii) continue repayments but with interest relief of up to 3% per annum and continued right to new borrowings (debt relief). Many farmers took advantage of this program. In March 2002, almost 92% (2.2 million) of eligible BAAC borrowers, including approximately one half of RECP subborrowers, were enrolled in DMP, with outstanding loans of B51.5 billion suspended and B34.8 billion under debt relief.

The possible effect of DMP on repayment by BAAC's borrowers when DMP ended in March 2004 has been debated. Some argued that farmers could not repay because of economic hardship and expectations that the loan would be paid by the Government. Others believe that Thai farmers' strong ethics would compel them to repay at all cost. From discussions with BAAC staff and clients in three regions and nine provinces during the Operations Evaluation Mission (OEM) in October 2003, DMP clients were expected to resume

regular repayments because the economy had improved and they had a close relationship with the institution. Although subsidized credit during economic and financial crises may threaten the viability of financial institutions, BAAC expects overall recovery to reach 85% in 2 or 3 years, the prevailing level before the financial crisis.

The project completion report did not discuss RECP's social and institutional development impacts but did raise concerns regarding sustainability after DMP. The OEM found indications to the contrary. Repayments are currently in process, and the repayment rate is expected to reach 85%. Repayment for BAAC lending to individual farmers already exceeded the threshold in 2003, with unaccounted numbers from DMP prepayments. The OEM found that the project had integrated with the sociocultural setting of its subborrowers, and the Government is committed to sustaining it. The rural enterprises that RECP generated significantly improved farmers' quality of life, provided for children's higher education, better housing, and additional income for better living. It also opened opportunities for women to assume leadership in business and raise their status in the community. Interviews with subborrowers in eight provinces showed that RECP improved the lives of most of them. Studies by other agencies on BAAC's outreach to rural enterprises have indicated success and sustainability of its financing. A recent study by Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ, the German Agency for Technical Cooperation) on BAAC microfinance found that 65% of registered microcredit borrowers were women. Although 10% of registered subborrowers in RECP were women (male heads of households were normally the ones registered), women were active partners in the business and controlled the finances. Thai women are active in household economic activities, as well as in owning and operating rural enterprises under RECP. Their loans were used as working capital to maintain and/or expand businesses and to increase and diversify their products, enhancing sales potential and raising income.

Availability of nonagricultural credit also enabled the small farmers and women micro-entrepreneurs to establish linkages to the formal banking sector. Access to financial services provided broader income generation and employment among the rural poor. BAAC realizes that it needs to further strengthen loan processing, supervision, information, and monitoring, particularly in branches outside Bangkok. However, farmers have more access to rural credit at BAAC than they do at other banks. Access to BAAC's lending is one of the Thai farmer's ways out of poverty and a means to leave the cycle of dependence on private moneylenders. Borrowing from private moneylenders increases costs because of their high interest rates, retarding productivity of small-scale rural enterprises. Microfinance is important throughout farmers' lives, and sustainable institutions, such as BAAC, improve their welfare on a long-term basis.

Farmers generally perceived RECP as successful. The aim to establish 54,000 rural enterprises was exceeded, as 65,193 established rural enterprises supported under the Project were functioning by the time of the OEM. Regardless of the financial crisis, RECP came at the time when farmers were ready to diversify their sources of income. Although farmers were hesitant to borrow for long-term investments because of economic uncertainty, short-term loans were used to augment capital, and medium-term loans for diversifying their businesses. RECP's impact was not clear since it blended well with BAAC's other lending and agricultural activities. But subborrowers acknowledged its value, and its positive impact exceeded financial gains. It improved community interaction and reinforced farmers' social and community relations, including gender relations. Farmers who became rural entrepreneurs brought basic goods and services to the villages at low costs, invigorating local markets. RECP created avenues for social protection by enhancing mutual assistance and providing opportunities for better interaction among community groups.

The major lessons from RECP include (i) higher loan-loss provisioning is required for nonperforming loans to prevent affecting the financial performance of rural banking institutions; (ii) an appropriate credit appraisal system is needed for all loans, as is competent staff; (iii) the financial institution's capacity to respond to client needs in a timely manner is important; (iv) safeguards to market risks are needed as insurance to protect development finance institution loans from unexpected financial crisis; and (v) the asset structure of the development finance institution needs to be balanced. The predominance of short-term lending can lead to increased volatility. A more balanced asset structure, with a larger share of medium- to long-term lending, is necessary to reduce volatility. Careful monitoring is required to avoid increasing maturity mismatch.

Given potential capacity, client responsiveness—particularly during a financial crisis—and the executing agency's willingness to improve, ADB's support to rural financial institutions must be encouraged while safeguards to market risks are maintained. A recent ADB study (2004) estimated that one billion poor people—or 90% of people in developing countries—lack access to institutional savings or credit. This is a significant challenge, and projects similar to RECP that focus on poverty reduction are worth considering.

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I. BACKGROUND

A. Rationale

1. In line with Thailand's Eighth National Economic and Social Development Plan (1997-2001), the Royal Thai Government sought to upgrade agricultural technology, encourage high-value crops and livestock, increase agricultural productivity, and help farmers diversify into new enterprises. At the same time, it recognized that a key constraint to promoting rural enterprises was the availability of medium- and long-term loans. Household incomes in rural areas are only one fourth of those in urban areas, mainly because of low agricultural productivity and a lack of employment opportunities. The establishment of value-added enterprises can help raise the productivity of land and labor among rural families. Lack of access to capital and financial services is a major constraint, and increasing the availability of credit will help overcome it. The Bank for Agriculture and Agricultural Cooperatives (BAAC), being Thailand's dominant source of rural financial services, emerged as the most appropriate agency to promote rural enterprises¹ in view of its (i) countrywide network, (ii) significant outreach, (iii) in-depth knowledge of farm families' income patterns, and (iv) ability to adapt products and services to client needs. It was only in 1993 that BAAC was permitted to extend loans for farm-related activities such as agroprocessing and marketing to form a maximum of 20% of its portfolio.² No other specialized financial institution in Thailand could compete with BAAC's network, which reaches 92% of all farm households (footnote 2). Its penetration in rural areas is more significant than any other single rural financial institution in Asia, and it is recognized as one of the three most successful rural financial institutions in the developing world.³ The Rural Enterprise Credit Project (RECP)⁴ was proposed to expand BAAC's nonfarm portfolio to create employment in line with the Government's efforts to improve rural living standards.

B. Formulation

2. RECP's formulation was influenced by the Small Farmer Credit Project (SFCP)⁵ and did not anticipate the sudden drop in economic and financial activities caused by the Asian financial crisis. RECP was designed to follow SFCP and help small farmers increase their income. The Asian Development Bank's (ADB) relationship with BAAC dates back to 1983, with the first agricultural credit project of \$50 million (Appendix 1). SFCP, 13 years later, was to help farmers create employment opportunities, and help strengthen BAAC's ability to lend money for agricultural-related activities. SFCP showed a strong demand for such credit and its impact on improving rural incomes and employment among farmers. The Government requested a follow-up project. RECP was to build on SFCP's momentum and was appraised in July 1997 at the onset of the financial crisis. During RECP's appraisal, the Asian financial crisis hit Thailand, changing the economic and financial environment. The economy experienced severe contraction, loss of employment, cuts in social and rural development expenditures, and

¹ There are nine specialized financial institutions (four banks and five companies) supervised by the Ministry of Finance. The most notable are the Bank for Agriculture and Agricultural Cooperatives (BAAC), with 588 branches and subbranches; the Government Savings Bank, with 577 branches, mainly in Bangkok and provincial capitals; and the Government Housing Bank, with 128 branches mainly in urban areas.

² Haberberger, M. L., L. Wajananawat, and N. Kuasakul. 2003. *The Challenge of Sustainable Outreach*. German Agency for Technical Cooperation (GTZ).

³ Meyer, Richard L. and Geetha Nagarajan, eds. 2000. *Rural Financial Markets in Asia*. Manila: ADB.

⁴ ADB. 1997. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Bank of Agriculture and Agricultural Cooperatives for the Rural Enterprise Credit Project in the Kingdom of Thailand*. Manila (Loan 1540-THA, for \$200 million, approved on 18 September 1997).

⁵ ADB. 1995. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan and Technical Assistance Grant for the Bank of Agriculture and Agricultural Cooperatives Small Farmer Credit Project in the Kingdom of Thailand*. Manila (Loan 1423-THA, for \$50 million, approved on 16 January 1996).

increased poverty. During RECP negotiations, the size of the loan was increased from \$100 million to \$200 million at BAAC's request.

C. Objectives and Scope

3. The Project had two main objectives: (i) to establish about 54,000 profitable rural enterprises owned and operated by farm families by providing medium- and long-term credit; and (ii) to improve BAAC's loan processing, supervision, and customer services for its rural enterprise clients. The first objective was slightly modified to accommodate short-term loans, to adapt to the changed socioeconomic environment within which RECP was to be implemented. RECP was aimed to benefit farm families in 44 provinces that the Government identified as economically depressed. The Project was expected to create full-time jobs. Establishing profitable rural enterprises would contribute to narrowing the gap in incomes, and attain sectoral and regional balance in growth. Improving BAAC's loan processing, supervision, and customer services would expand and upgrade its services to the rural sector.

4. A technical assistance (TA)⁶ was provided to support the Project and was aimed to enhance BAAC's overall performance by strengthening its credit operations, risk management, and training capacity, as well as broadening its range of customer services.

D. Financing Arrangements

5. RECP's total cost⁷ was estimated at \$440 million, with foreign exchange cost estimated at \$200 million (45%) and local currency cost at \$240 million equivalent (55%). The ADB loan of \$200 million was to finance the total foreign exchange cost, BAAC was to fund local currency costs of a minimum of about \$112 million or 25% of the total project cost. Subborrowers were expected to fund about 30% of the total project cost, equivalent to \$128 million in equity contributions. All subloans were lent in local currency.

6. BAAC's terms of lending to individual borrowers fall into four categories:

- (i) prime borrowers with AAA ratings, and a record of full and timely repayments for 3 consecutive years, can borrow at 8% interest per annum;
- (ii) very good borrowers with AA ratings, maintaining full and timely repayments for 2 consecutive years can borrow at 9% interest per annum;
- (iii) good borrowers with A rating, who have maintained full and timely repayments in the previous year may borrow at 10% interest per annum; and
- (iv) general borrowers with B rating, who may have past-due or restructured loans, or who may be new borrowers, can borrow at 11% interest per annum. The maximum loan amount is B15 million for this final category separate from the first three above.

7. BAAC's credit services have two channels: (i) retail credit to individual farmers (organized in joint liability groups, accounting for 94% of the portfolio); and (ii) wholesale credit to farmer institutions (agricultural cooperatives and farmer associations, accounting to 6% of the portfolio). Retail credit to individual farmers is broken down into (i) normal lending, which accounts for 87% in 2001; and (ii) government secured lending which accounts for 13% on the same year. Normal lending to individual farmers represents the mainstream credit program of

⁶ ADB. 1997. *Technical Assistance Grant to the Kingdom of Thailand for Strengthening Project Loan Appraisal and Risk Management of BAAC*. Manila (TA 2953-THA, for \$600,000, approved on 19 December 1997).

⁷ ADB. 1997. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kingdom of Thailand for the Rural Enterprise Credit Project*. Manila (page 14, Table 1). The estimated total project costs were based on the projected investments of subprojects, comprising local and foreign currency costs.

BAAC and is distinguished by two core credit products: (i) working capital loans, and (ii) investment loans. The working capital loan is for farmers and family members for agricultural purposes, as well as for farmers with nonfarm projects, with a term of 12–18 months. The investment loan is for medium and long periods and can be used to finance agricultural, industrial, commercial, and service enterprises, as long as the borrower is a farmer.

8. The RECP loan closed on 11 October 1999 with a revised and disbursed amount of \$93.96 million (net of cancellation). The balance of the loan was cancelled because of the continuing effects of the Asian financial crisis and the severe contraction of the economy. Weak demand for domestic credit, BAAC's high liquidity level, declining interest rates,⁸ and commitment charge for the loan were the main reasons cited. The balance on the RECP loan was prepaid in August 2002.

E. Implementation

9. The Project was implemented by BAAC with direct participation from its various departments, such as the Credit Department, the Regional Branch Administration, the Monitoring and Evaluation Division, the Training Division, and the Program and Budget Division, which coordinated with all divisions and departments on project implementation.

F. Completion and Self-Evaluation

10. The project completion report (PCR) rated this Project partly successful, mainly because of concerns over sustainability. This concern arose because disbursements were estimated to drop during FY2002–FY2004⁹ because of clients' ineligibility for new loans under the Debt Moratorium Program (DMP), and the high probability of loan accounts under DMP resurfacing as bad debts. The most important concern that the PCR pointed out regarding RECP sustainability was whether the principal amount would be repaid after DMP.

11. The PCR also concluded that RECP's outputs were proportionate to loan utilization, and that the Project promoted rural enterprises, created jobs, enhanced income, and helped reduce regional disparities. It also helped build enterprise loan appraisal skills among BAAC staff. The subprojects created economic opportunities for women and increased family incomes. The PCR did not address the social and institutional impact of RECP on subborrowers, an issue explored in this project performance audit report (PPAR). The PCR recommended follow-up actions to improve BAAC's sustainability, such as (i) providing resources from the Ministry of Finance to develop and implement an institutional restructuring plan; (ii) separating ownership from management, appointing independent directors, adopting internationally acceptable accounting standards, and ensuring audit by reputed agencies; (iii) upgrading and adapting prudential norms to further strengthen good governance; (iv) repaying the principal amount after DMP; and (v) lending to nonfarmers, including microenterprises. All these recommendations are being considered by BAAC and currently in process.

G. Debt Moratorium Program

12. After a new government was elected in early 2001, BAAC was mandated with the introduction of a DMP under which farmers with bank loans of up to B100,000 could either defer repayment for as long as 3 years without right to new borrowing (suspension), or continue

⁸ Declining interest rates were mostly domestic; the Rural Enterprise Credit Project's (RECP) interest rate did not decrease and therefore became costly compared to the Bank for Agriculture and Agricultural Cooperatives' (BAAC).

⁹ ADB. 2001. *Project Completion Report on the Rural Enterprise Credit Project in Thailand*. Manila (para. 45).

repayments but with interest relief of up to 3% per annum and continued right to new borrowing (relief). Almost 92% (2.2 million) of eligible BAAC borrowers, including approximately one half of RECP subborrowers, were enrolled in DMP, with outstanding loans of B51.5 billion under suspension and B34.8 billion under debt relief.¹⁰ The Government compensated BAAC for loss of interest income with approximately B4 billion to B5 billion per year.

13. The principle of extending a debt moratorium to small farmers worst hit by the economic downturn was not inappropriate. The operations evaluation mission (OEM) found cases where DMP had given a small enterprise enough breathing space to survive or restructure (Appendix 2, Profile C). But these cases were the exception and DMP eligibility criteria appear to have been too generous. Moreover, repayments were delayed in anticipation of a debt relief program which, together with generous eligibility criteria, led to a substantial drop in repayment, hurting BAAC's financial performance. The OEM observed that some borrowers enrolled in DMP could have maintained normal repayments without undue hardship. The poorer farmers benefited most from DMP.

14. The OEM found it difficult to predict whether a "moral hazard" would emerge among BAAC borrowers when DMP ended in March 2004. Discussions with BAAC staff and clients in three regions and nine provinces indicated that clients intended to resume regular repayment because of the improved economic situation and BAAC's close relationship with its customers. Some DMP borrowers had even started to prepay their debts. In 2–3 years, BAAC expects recovery to reach 85%, the level prevailing before the financial crisis.

H. Operations Evaluation

15. This PPAR evaluated RECP's effectiveness in meeting its objectives, by assessing the project's formulation, design, implementation, and sustainability. Conclusions were based on (i) the findings of the OEM¹¹ fielded on 6 October to 4 November 2003 with a follow-up visit on 18–19 November 2003; (ii) review of ADB and BAAC documents and files; and (iii) interviews with ADB staff, BAAC officials, and subborrowers. Meetings were held with representatives of the Ministry of Finance and with officials of BAAC, both at the head office in Bangkok and in selected provincial branch offices.¹² Individual interviews and focused group discussions with borrowers¹³ of subloans and pilot projects¹⁴ were conducted. Discussions were also held with other financial institutions (the Government Savings Bank and the Government Housing Bank) and other funding agencies, such as the World Bank, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ—German Agency for Technical Cooperation), and the European Union, as well as nongovernment organizations. During fieldwork, the OEM was accompanied by BAAC staff from the head office and by field officers of the corresponding three regions and nine provinces that were home to the 44 subborrowers selected for in-depth interviews. The

¹⁰ Data as of 31 March 2002.

¹¹ The operations evaluation mission (OEM) comprised S. D. Tamondong (mission leader-evaluation specialist), a rural enterprise development economist (consultant), and a rural banking specialist (consultant). Their activities include (i) assessing the status of project activities, (ii) updating and validating the findings of the project completion report (PCR), (iii) following up the recommendations made by the PCR in consultation with the Bank for Agriculture and Agricultural Cooperatives (BAAC), and (iv) interviewing subborrowers, BAAC officials, representatives of other financial institutions, funding agencies, and nongovernment organizations.

¹² Provincial branch offices visited were (i) North: Chiang Mai, Lamphun, Sukhothai, and Tak; (ii) Northeast: Khon Khaen and Nongkhai; and (iii) South: Krabi, Nakhon Si Thammarat, and Songkhla. Selected district and unit offices of each of these provinces were also visited to interview BAAC staff and subborrowers, as well as to inspect operating business enterprises.

¹³ In-depth interviews with borrowers focused on business organization, management and history, commercial aspects and financial performance, social and environmental aspects, and factors explaining project results.

¹⁴ Pilot projects in BAAC supported by the European Union's Social Support Project were located in Khon Khaen (handicrafts, weaving, and century eggs) and in Krabi (rubber, wine, and women's savings group).

interviews were done for illustrative purposes; stratified sampling to represent varied business enterprises and different geographic areas was applied using the questionnaire in Appendix 3. Subproject analysis on financial internal rate of return (FIRR) and economic internal rate of return (EIRR) is partly based on these interviews. Not all 44 cases interviewed are presented in this document but the rest are available upon request. The OEM's preliminary findings were discussed during the wrap-up meeting with BAAC on 4 November 2003 and their comments were incorporated in this PPAR.

16. The OEM found that the anticipated rate of repayment after DMP was 85%, a level achieved by BAAC's lending to individual farmers in 2003. Repayment was 75% in 1999 and 78–83% during 2000–2002. BAAC reported that DMP borrowers had started paying their loans before the deadline, and repayments are currently in process. The total number of payees will be determined by end of 2004. As DMP borrowers resume payment on their loans, they become eligible for new loans, and this would raise BAAC's disbursement rate.

II. IMPLEMENTATION PERFORMANCE

A. Effectiveness and Relevance of Design

17. The RECP design at time of preparation and appraisal was relevant to Thailand's development needs and ADB country operational strategy objectives.¹⁵ The first onset of the Asian financial crisis occurred in Thailand during appraisal.¹⁶ This crisis changed the financial and economic environment for project implementation, but its full magnitude and implications could not yet be appreciated. Over the next 2 years (1997–1999), Thailand's economy experienced a severe contraction, loss of employment for nearly two million urban workers, cuts in social and rural development expenditures, and increased rural poverty as remittances from urban workers declined. Strategies to cope with the crisis and mitigate its impact on the poor became an overriding priority for BAAC and other government agencies, highlighting the role of RECP in rural poverty reduction. Because of the financial crisis, BAAC obtained ADB's agreement to offer short-term and working capital subloans under RECP, a shift from the original purpose of providing medium- and long-term loans to rural enterprises. The financial crisis affected credit demand, government strategies, BAAC's lending policies, subloan characteristics and profitability, and subborrowers' repayments.

18. RECP was grounded on the socioeconomic development plans and policies of the Government. The Eighth National Economic and Social Development Plan (1997–2001) recognized that low rural incomes arise from poor productivity of land and labor. The Government sought to upgrade agricultural technology, encourage high-value crops and livestock, increase agricultural productivity, and help farmers diversify into new enterprises. A key constraint in promoting rural enterprises was the availability of medium- and long-term loans. Accordingly, the BAAC Act was amended in 1999 to allow lending to nonfarm activities, particularly the financing of rural enterprises owned by farm families.¹⁷ SFCP was the first ADB project to support BAAC's rural enterprise lending, and it was considered successful. BAAC emerged as a suitable institution to promote rural enterprises in view of its (i) countrywide

¹⁵ At the time, these were (i) developing long-term competitiveness to support sustained economic growth, and (ii) achieving more equitable development with an emphasis on decentralization and dispersal of economic activities. Poverty reduction per se did not then comprise a specific objective of the Thailand country operational strategy.

¹⁶ On 2 July 1997, the Bank of Thailand announced the floating of the exchange rate for the baht, following unprecedented outflows of foreign capital.

¹⁷ Rural enterprises include both agriculture-related and nonfarm enterprises. Agriculture-related enterprises include small-scale processing of agriculture produce and byproducts into semifinished and finished goods, production and supply of agricultural inputs, agricultural marketing, and provision of agricultural services.

network, (ii) significant outreach, (iii) in-depth knowledge of farm families' income patterns, and (iv) ability to adapt products and services to client needs. These provided the rationale to continue ADB's support to BAAC for the expansion of its enterprise loan portfolio. RECP is similar to SFCP in objective, scope, and design, and was expected to build on its momentum by creating employment in line with government efforts to improve rural living standards.

19. RECP was conceived as a follow-up to SFCP, the first rural finance project implemented by BAAC. BAAC has a partnership with ADB dating back to 1983 when the first loan was approved.¹⁸ RECP did not target the poorest farmers or groups most severely affected by the crisis, as it was originally designed for eligible borrowers residing in the 44 provinces situated in Thailand's northern, northeastern, and southern regions. However, at appraisal, RECP was modified to accommodate eligible borrowers in all regions outside Bangkok.

20. ADB showed flexibility and agreed to BAAC's request to use the RECP loan funds for short-term working capital subloans. The financial crisis affected demand for longer-term investments: farmers were afraid to embark into long-term investments in an atmosphere of such uncertainty. RECP's aim to generate income among rural entrepreneurs and improve BAAC's capacity and customer services was particularly relevant during the financial crisis.

21. RECP was well placed to take advantage of lessons learned from implementing SFCP and its accompanying TA (footnote 5) and, more generally, from the close relationship between ADB and BAAC. The report and recommendation of the President for RECP (footnote 7) sets out the main lessons learned from SFCP that helped configure the design of RECP.

B. Achievement of Outputs

22. At the time of closing of RECP, a total of B5.56 billion was disbursed, with an average loan size of B85,269 (Appendix 4, Table A4.1). This was significantly below the average subloan amount of B257,140 expected at appraisal, in part reflecting predominance of short-term working capital loans. As of 31 March 2003,¹⁹ 84% of the total subloan amount had been fully repaid, representing an improvement from the comparable rate of 76% as of end-March 2002. This could be partly attributed to government assistance to BAAC clients through DMP.²⁰ As in the previous year, the northern region (which got 39% and 35% of the total number and amount of subloans disbursed, respectively) contributed the biggest share to total loan repayments as of the end of the first quarter of 2003 at 31%, closely followed by the southern and western regions (30%).

23. Improved repayments by the end of the first quarter of 2003 helped ongoing loans drop to B903.9 million, a 32.1% reduction from the preceding year. The outstanding loans are mostly small, 54% of them less than B60,000 (Appendix 4, Table A4.2). This represented an increase

¹⁸ ADB. 1983. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan and Technical Assistance Grant to the Bank of Agriculture and Agricultural Cooperatives for the Agricultural Credit Project in the Kingdom of Thailand*. Manila (Loan 664-THA, for \$50 million, approved on 6 December 1983). BAAC was also the Executing Agency for ADB. 1986. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kingdom of Thailand for Brackish Water Shrimp Culture Development Project*. Manila (Loan 787-THA, for \$11 million, approved on 11 September 1986).

¹⁹ Latest available data from BAAC at the time of PPAR preparation.

²⁰ Under this program, BAAC clients are offered two options: (i) debt postponement, and (ii) debt service reduction. Under the debt postponement, clients' debt repayment to BAAC is postponed for 3 years. During this period, the Government pays the total interest due to BAAC on behalf of the debtors (who cannot borrow from BAAC). On the other hand, under the debt service reduction, the Government subsidizes the debtors' interest payments by 3%. These debtors can again borrow from BAAC provided they repay their existing principal obligations as originally scheduled. Clients with outstanding BAAC debt of not more than B100,000 are eligible to participate in the Debt Moratorium Program (DMP), which started in April 2001.

from the 51% share recorded as of 31 March 2002. More than half of these outstanding loans (57% in terms of amount) were under category B, which includes clients with overdue payments during the previous year or with restructured loans (Appendix 4, Table A4.3). This is greater than the same period the previous year, when only 52% of the ongoing loans were from group B clients. Most of the group B clients (or 47%) are in the northern region.

24. The northern region posted the most significant improvement in terms of repayment of outstanding loans as of end-March 2003. From 64% as of the end of the first quarter of 2002, the share of fully repaid to disbursed loans rose to 75% (Appendix 4, Table A4.1). Although loans from group B clients accounted for the bulk of ongoing loans in the north, this region managed to maintain the proportion of prime accounts to the total outstanding portfolio while the other regions declined from comparable levels in 2002.

C. Scheduling of the Project

25. One month after RECP appraisal in mid-July 1997, SFCP had disbursed 7,087 subloans worth a total of \$46 million (footnote 4, para. 35 of the report). At this pace, full disbursement of SFCP was expected by September 1997, within the project implementation period. Overall repayments by rural enterprise subborrowers were 91% for FY1995–1996, indicating the viability of enterprises financed under SFCP and their increased production and income potential. The experience of this project showed the diversity of opportunities for rural enterprises. RECP design incorporated lessons from SFCP, including (i) an improved loan classification system; (ii) improved subloan appraisal techniques; (iii) more frequent supervision at project site; (iv) strengthening monitoring and evaluation; and (v) training on environmental assessment.

26. Early cancellation of the RECP loan meant that implementation took place largely without the benefit of the accompanying TA. The TA's major contract was signed in October 1998 and completed in July 2000, almost a year after RECP itself was closed.

D. Organization and Management

27. The organizational chart of BAAC as of November 2003 is in Appendix 5. BAAC implemented the Project according to the arrangements agreed at appraisal. The ADB loan covenants were complied with, and those partly complied with during the PCR had been fully complied with at the time of the OEM (Appendix 6). Interviews with BAAC staff at head office and branches show that BAAC has reorganized its authority and operations, and had delegated responsibility to local branches. Management and decision-making have been decentralized, and branch managers have more authority than before. They can approve loans of up to B1 million (\$25,000) and the provincial directors have a loan approval authority of up to B3 million (\$75,000). As 98% of all loans extended by BAAC are below these ceilings, lending decisions are almost completely in the hands of the branch managers. This expedites loan processing.

III. ACHIEVEMENT OF PROJECT PURPOSE

A. Performance of the Bank for Agriculture and Agricultural Cooperatives

28. BAAC's financial performance since project completion has declined in terms of total loans outstanding to total assets (Appendix 7, Table A7.1). Net loans outstanding to total assets also dropped because of rising provisions for loan losses. BAAC's arrears have improved as the age of arrears shortens. One- to two-year old arrears accounted for 65.9% of the total in

FY2002, a marked improvement from 56.7% in FY2000 (Appendix 7, Table A7.2). BAAC's liabilities have also changed. Since 1998, BAAC appears to have relied more on deposits than on borrowings for its funds, with its share to total liabilities rising from 67% in FY1998 to 87% in FY2002. BAAC has increased its reliance on shareholders' equity since FY2000, with its share of total liabilities and shareholders' equity moving from 7.27% in FY2000 to 7.79% in FY2002.

29. BAAC's net income has been rising since FY1999, in some years faster than in others (net income rose 90.1% in FY2000, for example, compared with a low of 3.4% in FY2001). FY2002 proved favorable for BAAC, with net income rising 19.1% from the previous year. (Appendix 7, Table A7.3). This was a result of total income rising 40.2%, which in turn was a result of increased interest income from individual clients (15.8%) at the same time as interest on deposits and borrowings declined (28.0%). The rise in interest income from individual clients could be attributed to government assistance under DMP. BAAC's financial performance since the completion of RECP, however, was characterized by a falling share of total loans outstanding to total assets. A similar declining share of net loans outstanding to total assets was recorded because of a rising provision for loan losses. BAAC's arrears have improved, as the age of the arrears is shortening.

30. Higher interest income from clients vis-à-vis lower interest expenses on deposits and borrowings (basically triggered by declining interest rates resulting from the market's excess liquidity) were instrumental in turning around BAAC's total income. On the other hand, operating expenses similarly went up during FY1999–FY2002, except for the 11.8% fall in FY2000. During FY2001 and FY2002, operating expenses increased faster than total income, resulting in a deceleration in the expansion in net income and a slight deterioration in BAAC's operating ratio²¹ from 0.95 in FY2001 to 0.96 the following fiscal year.

31. Interest expenses dropped because of declining interest rates as the market suffered from excess liquidity. In FY2002, the interest rate that BAAC paid on savings deposits slipped from 1.75% per annum in April, to 1.5% in November, and to 1.25% in March 2003. BAAC's loan rates also fell, from 8% in April 2002 to 7.5% in March 2003. The increase in total income was dampened by a similar expansion in total operating expenses, which rose by 41.3% in FY2002 from the comparable level in FY2001. This was an offshoot of a higher provision for loan losses, which grew by 124.5% in FY2002. The faster increase in operating expenses vis-à-vis total income resulted in a slight deterioration in the operating ratio from 0.95 in FY2001 to 0.96 the succeeding fiscal year. BAAC has a policy of maintaining low interest rates, so it makes relatively little profit as measured by the percentage of net income to average loans outstanding (0.20% in FY2001 and 0.23% in FY2002 [Appendix 7, Table A7.4]). Shareholder's equity is gradually gaining more importance (vis-à-vis the slow decline in the share of total liabilities) as a source of funds since FY2000. This is basically triggered by the slight increase in reserves and retained earnings. The return on equity improved from 2.2% in FY2001 to 2.4% in FY2002.

32. BAAC has been able to cross-subsidize lending with interest income from investments—and, more recently, from fee-based income—to maintain profitability. It has benefited from various types of hidden incentives and indirect subsidies, such as the exemption from minimum reserve requirements and income tax, costless equity from the Government, and preferential interest on Bank of Thailand borrowings.

33. By 2001, 13% of BAAC's funds came from borrowings. Of that amount, 43% was from foreign loans (mainly the Japan Bank for International Cooperation and ADB) while foreign bonds formed 20% of funds and local borrowing 37%.²² For the past 13 years, BAAC has

²¹ Ratio of operating expenses to operating income.

²² GTZ. 2003. *The Challenge of Sustainable Outreach: The Case of BAAC*.

become increasingly self-reliant and was able to significantly reduce its dependence on government funds, mandatory deposits from commercial banks, and loans from domestic and foreign sources. Within only a decade, the deposit-loan ratio doubled to 98% (footnote 22, page 20 of the report).

34. The cause of BAAC's financial situation can be explained by political restrictions on its lending rates. The cap on its lending rates leaves BAAC with a narrow spread of 3.7% to 5% to cover costs. This policy has ensured the viability of BAAC's operations, but has also prevented BAAC from strengthening its capital base through retained earnings and from providing its shareholders with attractive dividends.

B. Performance of Subprojects

35. A qualitative illustration of subproject performance is in Appendix 8 and discussed further below under the heading Summary of Illustrative Cases. From the 10 cases extracted from the 44 interviewees, the success rate was 85%. Although the PCR recommended to closely monitor and computerize information on subborrowers' cash flow, such data was not available and it was therefore impossible to capture performance of all subprojects. The pace of loan utilization did not necessarily indicate delays in subproject implementation. In 1999, for example, \$94 million out of BAAC's total disbursement of B5,559 million (\$139 million, at the rate B40 to \$1.00) was funded by RECP.²³ This figure shows that loan utilization during that period corresponded to more than 70% of BAAC's total disbursements.

36. The subloans under RECP were dispersed across regions reflecting the pattern of BAAC's lending. They ranged from B72,272 to B118,259 with an overall average of B85,269, compared to the initial stages of RECP with a minimum size of the loan at B60,000. This was not an explicit subloan condition, but the relending interest rate must cover the cost of funding. Small loans did not qualify because the interest rate on them had been subsidized. The subsidy was abolished with the restructuring of lending rates, and loans less than B60,000 became eligible under RECP.

C. Summary of Borrowers' Illustrative Cases

37. The OEM conducted in-depth interviews with 44 RECP subborrowers, selected from lists provided by BAAC based on a representative range of subproject types and sizes in nine provinces and three regions (north, northeast, and south). This "purposive survey" had the objectives of (i) providing qualitative information about the RECP subloan portfolio and the BAAC processes used to appraise and monitor them; (ii) verifying as much as possible the findings of two evaluation surveys conducted during project implementation and completion; and (iii) learning about borrowers enrolled in DMP, which ended in March 2004.

38. Selection of interviewees avoided a bias toward clients closer to the BAAC branch offices. Sometimes the process involved looking for clients far from provincial or district centers. RECP subborrowers whose loan files were no longer active (i.e., whose loans had been fully repaid) were excluded. These would have included most of the RECP short-term working capital loans, so all clients visited had taken medium- to longer-term loans. Since the number of observations is small (less than 0.1% of the total number of subloans made under RECP²⁴ and

²³ ADB. 1999. *Special Evaluation Study: Interim Assessment of ADB's Lending to Thailand During the Economic Crisis*. Manila.

²⁴ Total of 65,193 subloans, of which 43,160 or two thirds were classified as working capital loans.

an insignificant fraction of BAAC's total client base²⁵), it is not possible to draw statistically valid conclusions from the survey results. Qualitative findings were made for illustrative purposes.

39. The OEM confirmed the PCR's assessment. Most subloans were successful in achieving their objectives of raising rural incomes, creating rural employment, and helping sustain and diversify rural economies. In practice, there was little difference between RECP subloans and those that BAAC funded from other sources.²⁶ Illustrative profiles of a sample of 10 rural enterprises financed under the Project, and a summary of economic data from these enterprises, are presented in Appendixes 2 and 8.

40. These 10 profiles illustrate a wide range of outcomes, including eight successful and two mixed, one of which (Appendix 2, Profile I) was restructured and may end up successful, while the other (Appendix 2, Profile J) faces an uncertain future. Subborrowers in all 10 profiles demonstrate a strong commitment to make their investments succeed, and the most successful bring with them a good knowledge of their enterprises.

41. As one might expect, there are unsuccessful and successful projects in each of the four categories of enterprise (marketing, cottage industries, agroprocessing, and farm services). In the 10 selected for detailed study, the rates of return on marketing projects were higher than average and those for farm services and agroprocessing were lower than average.

Rates of Return by Subproject Category

Subproject Category	No.	FIRR (%)	EIRR (%)	IREQ (%)
Marketing	2	64	81	153
Cottage Industry	1	70	57	85
Agroprocessing	2	26	35	40
Farm Services	5	17	26	28
Overall Average (of individual subloan results)		34	42	61

EIRR = economic internal rate of return, FIRR = financial internal rate of return, IREQ = internal rate on equity, no. = number.

Source: Operations Evaluation Mission estimates.

42. Projects located in the south had the highest rates of return and those in the north the lowest, consistent with the fact that the south has better resources and access to markets.

43. Although there was no correlation between loan amount and the success of the subproject, there was an interesting inverse correlation between subproject rate of return and the owner's age.²⁷ The oldest borrower (68) took out the largest subloan (B1.4 million to purchase a combine harvester) for a subproject that proved vulnerable, while three of the subproject owners with the top five rates of return were in their 30s.

44. There was no apparent correlation with performance or rate of return according to gender, although it happens that the highest performing subproject of all, for rubber marketing, is owned and operated by a woman (Appendix 2, Profile A).

²⁵ Comprising 3.64 million individual farm families as of March 2002.

²⁶ Other than a B5 million (about \$167,000) limit on individual subloans under the Rural Enterprise Credit Project (RECP).

²⁷ Given the limited size of the sample, its statistical significance cannot be ascertained.

D. Performance of the Technical Assistance

45. The second objective of RECP was “to improve loan processing, supervision, and customer services by BAAC for its rural enterprise clients” (footnote 7, para. 44 of the report). Under the accompanying TA 2953-THA financed from the Japan Special Fund, BAAC hired international and local consultants²⁸ in October 1998 to enhance its overall performance and in particular its capacity to undertake lending for rural enterprises by

- (i) strengthening subloan appraisal and supervision procedures;
- (ii) developing and introducing risk management policies and procedures;
- (iii) formulating a strategy for diversifying the range of banking services offered to customers; and
- (iv) preparing a long-term training plan, including evaluation of proposals for a BAAC training center.

46. The analysis and findings of the TA were documented in 10 reports delivered between October 1998 (inception report) and July 2000 (final report), and 12 sets of training materials and manuals were delivered between October 1998 and November 1999. Detailed recommendations and action plans for implementation over 3 years (FY2000–2003) were prepared in each of the following five areas:

- (i) credit operations;
- (ii) risk management;
- (iii) training development;
- (iv) environmental due diligence; and
- (v) banking services development.

47. BAAC was satisfied with consultants’ outputs and cooperation, but not all TA recommendations were accepted because the economic and policy environment was changing. The pace of implementation has been much slower than recommended in the TA action plans.

48. Nevertheless, action was taken in a number of key areas the consultants recommended. Since BAAC was receiving technical advice from several sources at the same time, the attributing institutional changes to credit is risky, especially when the Project was carried out in a context where BAAC and government priorities were shifting quickly.

49. Three of the more important institutional changes made by BAAC for which the TA project provided support or at least helped to prepare the way were

- (i) 1999: Introduction of **risk-based loan pricing**, based on a repayment performance classification of borrowers, instead of the previous system under which small loans were charged a subeconomic price and cross-subsidized by income from larger loans, a pricing distortion which made it more difficult for BAAC to remain competitive and financially sustainable;
- (ii) February 2002: **Internal reorganization of BAAC** to strengthen human resources development, decentralize and streamline administration, and prepare the bank to offer a broader set of products. Reorganization included creating new departments to promote learning, for both staff and client development; branch administration (eliminating one layer between head office and the branches); and marketing support, created to help with various new government programs for rural areas and to work with agricultural marketing cooperatives; and

²⁸ Enterplan Limited, in association with PricewaterhouseCoopers, Thailand; and DAI/MAS International.

- (iii) April 2003: **New loan provisioning policy** introduced with immediate effect, after protracted study and discussion with the Ministry of Finance and the Bank of Thailand, and 5 years after the RECP target date.

50. TA implementation was satisfactory and the consultants' advice useful, but priority was not given to helping BAAC select, plan, and implement information systems improvements. SFCP recommended urgent improvements in this area. For example, the financial management information system for which the feasibility study was prepared in 1997 and the software packages procured in 1998–1999 were applied only in late 2001. The introduction of a core banking system was studied in 1998 and a request for proposals prepared in 2000 but contractors were being evaluated only in late 2003, the time when the TA completion report²⁹ said full implementation was expected to be completed. The TA could have made a bigger impact had it provided BAAC with adequate support in planning and implementing changes.

51. The TA is rated partly successful because of its relevance and partial achievement of objectives.

IV. ACHIEVEMENT OF IMPACTS

A. Impact of the Debt Moratorium Program

52. The DMP initiated in April 2001 was widely discussed in Thailand, as one of a number of electoral promises for about 2 years before that date. As stated in the PCR, it is likely that anticipation of DMP was at least partly responsible for BAAC's declining recovery rate beginning in 1997. Other contributing factors were lower commodity prices, loss of nonfarm income, and depressed demand because of the financial crisis.

53. At the time of the OEM, it was difficult to predict how much the end of DMP in March 2004 would affect the repayment behavior of BAAC borrowers. However, discussions with BAAC staff and clients in three regions indicated that DMP clients would resume regular repayments (para. 13). Some DMP borrowers had in fact prepaid. BAAC expects overall recovery to reach 85% within 2 or 3 years.

54. BAAC limited the potential harm to its financial situation after DMP by

- (i) increasing intensity of contact with and education of DMP borrowers;
- (ii) careful reclassifying borrowers to identify potential defaulters; and
- (iii) adequately providing for loan losses.

55. DMP may be viewed as a potential threat to BAAC's long-term sustainability. However, BAAC has built up its reserves continually from B622 billion in 1997 to B1,102 billion in 2002³⁰ (Appendix 7, Table A7.1). This growth accelerated in 2000–2002, and prepayments of 10% of DMP recipients do not hint at a moral hazard. BAAC did not encourage these prepayments; debtors were simply eager to borrow again since a requirement for debt postponement was that they could borrow again unless they had paid off previous BAAC debts. The prepayments demonstrate credit discipline and client loyalty. Overall, clients appreciated DMP.

56. The income statistics in 2001–2002 (Appendix 7, Table A7.3) should not be misinterpreted given considerable government assistance in DMP. Part of the growing interest

²⁹ ADB. 2002. *Technical Assistance Completion Report on the Strengthening Project Loan Appraisal and Risk Management of the Bank for Agriculture and Agricultural Cooperatives in Thailand*. Manila.

³⁰ Latest available data from BAAC, at the time of PPAR preparation.

income in 2001–2004 came from the Government, which subsidized DMP clients. Sustainability depends largely on BAAC's financial management, and specifically more realistic loan pricing. From July 1999, the progressive interest rate structure and the inherent cross-subsidies were abolished and replaced with a minimum lending rate irrespective of the loan size. Interest rates are also linked to performance, so that lower rates are offered to borrowers with better performance and track records (para. 6).

B. Development and Social Impacts

57. RECP's development impacts were measured according to the overall effect on BAAC's ability to use its human and financial resources to help the rural poor. Impacts on farmers' lives include positive changes³¹ in norms and practices,³² attitudes, women's empowerment, and social organization. Institutional skills and capacities, as well as community relations, were reported by the interviewees to have improved because of RECP. The Project gave rise to the establishment of village stores that became venues for trading among farmers and informal gatherings after the day's work. RECP's institutional development impacts were measured considering improved customer relations and operations management, and also considering the effect on farmers' lives. No environmental impact was identified.

58. RECP had beneficial institutional and social impact for subborrowers and the community at large. The OEM's qualitative interviews illustrate these impacts. Of the 44 subborrowers interviewed, 85% were found successful (Appendix 8). This is consistent with the PCR's estimated success rate. RECP significantly helped to improve farmers' quality of life, providing the means for higher education, better housing, and better quality of life. Although less than 10% subborrowers were women, they were active and equal business partners. Thai women are active in household economic activities, as well as in operating, controlling, and managing rural enterprises.

V. OVERALL ASSESSMENT

A. Relevance

59. The project design at the time of preparation and appraisal was highly relevant. The long-term investment did not take place within the project timeframe, however. Most farmers used their subloans for short-term purposes because they lacked confidence in the market after the financial crisis. Appendix 8 shows the loan amounts and purposes from the subborrowers interviewed. Implementation occurred when the economy contracted severely, per-capita income declined, social and rural development expenditure dropped, and rural poverty rose. Strategies to cope with the crisis became BAAC's priority. It obtained ADB's consent to provide short-term and working capital loans under RECP instead of credit for medium- to long-term investments. This shift was partly a result of a rise in rural poverty, and partly a shift in credit demand toward the short-term to cope with the financial crisis. This was not anticipated during project design. The crisis also prompted cancellation of the loan balance, as commitment charge had to be paid against the depreciated baht. The financial crisis and BAAC's response affected lending policies, subloan characteristics, and repayments. RECP was still consistent with the Government's aim to diversify the rural economy and increase rural income, and consistent with ADB's thematic priorities. The Project is rated relevant.

³¹ This means better community interaction and more sharing of resources within the community members.

³² Norms and practices are unique ways of interaction among individuals and groups in a community.

B. Efficacy

60. RECP financed more than the expected number of subprojects (target was 54,000 rural enterprises, and 65,193 were functioning as of the OEM) and enhanced BAAC's capacity for enterprise financing. Economic activity was dispersed and rural incomes increased. Although TA recommendations were applied late, the second objective to improve BAAC's loan processing, supervision, and customer services for its rural enterprise clients was also met. The Project is therefore rated efficacious.

C. Efficiency

61. For subprojects where it is possible to calculate rates of return, the PCR found weighted average FIRRs and EIRRs of 17–21%. OEM estimates were 26–33% for the subprojects it visited. There was little difference between the rural enterprises financed from RECP and those funded by BAAC from other sources. However, the FIRR and EIRR estimates suggest that the Project and BAAC enterprise core lending had a significant and positive impact in countering the effects of financial and economic crisis on the livelihoods of Thai farmers, who comprise 92% of BAAC clients. Evaluation of staff performance and awarding of bonuses and promotions are linked to good savings mobilization, and BAAC branches have become increasingly self-financing. The RECP investment and process were efficient. The Project is rated efficient.

D. Sustainability

62. Most subloans were used productively, and clients did not forget their debts. Thai farmers, the reason for BAAC's existence, have shown enormous resilience and tend to honor their debts. Some of them had paid their loans before the end of DMP,³³ and there is a steady increase in repayment for BAAC lending. Savings mobilization, which provides liquidity, was 80% in 2003. BAAC's loan portfolio has a secure ethical basis, sustaining BAAC operations despite narrow profit margins. Low interest rates maintain BAAC's customer base. Farmers interviewed during the OEM demonstrated long-term loyalty to BAAC. The relationship between farmers and BAAC has a family feeling unchanged even during the financial crisis. With the resumption of payments after DMP ended in March 2004, farmers become eligible for new loans, raising BAAC's disbursement level. Sustainability is therefore likely.

E. Institutional Development and Other Impacts

63. RECP blended well with lending at BAAC, which has products tailored to rural clients (funeral aid associations, personal accident insurance, women's savings programs, and savings to make pilgrimages to Mecca). The Project improved farmers' quality of life and community interaction. It provided for higher education and better housing. It also provided opportunities for women to lead businesses, raise their community status, and work in their home communities rather than urban areas. It allowed senior citizens to make profitable and satisfying use of their leisure time. Institutional development and other impacts were moderate.

F. Overall Project Rating

64. The Project is relevant, efficacious, and efficient, with likely sustainability. Its institutional development and other impacts have been moderate. Therefore, the Project is rated as successful. The main reason for the higher rating than in the PCR is the more positive assessment of sustainability, with continued repayment after DMP ended.

³³ BAAC had reported this information, however since DMP payment is still in process, the total number of payees is not yet known.

G. Assessment of the Asian Development Bank and Borrower Performance

65. Both ADB's and BAAC's performances were satisfactory. Close monitoring was carried out, with the first review conducted 5 months after loan effectiveness and another 5 months later. The last review was done 6 months after the second review, followed by the PCR 6 months later. Regular monitoring and review missions contributed to successful project implementation. Adequate ADB supervision helped ensure that conditions were met and the Project proceeded efficiently. BAAC complied with loan covenants, and was responsive to its clients' needs. To address sustainability, it cross-subsidized lending with interest income from investments and, more recently, added fee-based income to maintain profitability.

VI. LESSONS LEARNED AND FOLLOW-UP ACTIONS³⁴

A. Lessons Learned

66. The major lessons from RECP include

- (i) **Higher loan-loss provisioning.** Nonperforming loans require higher loan-loss provisioning so they don't adversely affect financial performance;
- (ii) **Appropriate credit appraisal system for all loans and competent staff.** This is necessary to implement the system to ensure a quality loan portfolio and lead to more sustainable lending;
- (iii) **Capacity of the financial institution to respond to client needs.** An institution's timely response contributes to success and sustainability.
- (iv) **Safeguards to market risks.** Insurance against unanticipated financial crises needs to be in place to protect development finance institution loans.
- (v) **Balanced asset structure.** The predominance of short-term lending can increase volatility. A more balanced asset structure, with a larger share of medium- to long-term lending, is necessary to reduce volatility. This would require careful monitoring to avoid maturity mismatch.

67. The OEM supports the following lessons drawn from the PCR, as well as from SFCP:

- (i) requiring development finance institutions to hedge foreign exchange positions with expertise provided along with the ADB loan;
- (ii) a variable local benchmark, transparently determined, should be used as reference for re-lending and onlending interest rates;
- (iii) the use of full or partial guarantees and other instruments along with credit lines must be consistent with the country's financial sector development;
- (iv) assessment of the factors affecting availability of internal resources and demand for credit to be undertaken during appraisal;
- (v) supportive project inputs must accompany gender outreach goals; and
- (vi) linkage and coordination with other lending agencies on policy reforms should be included in the loan covenant.

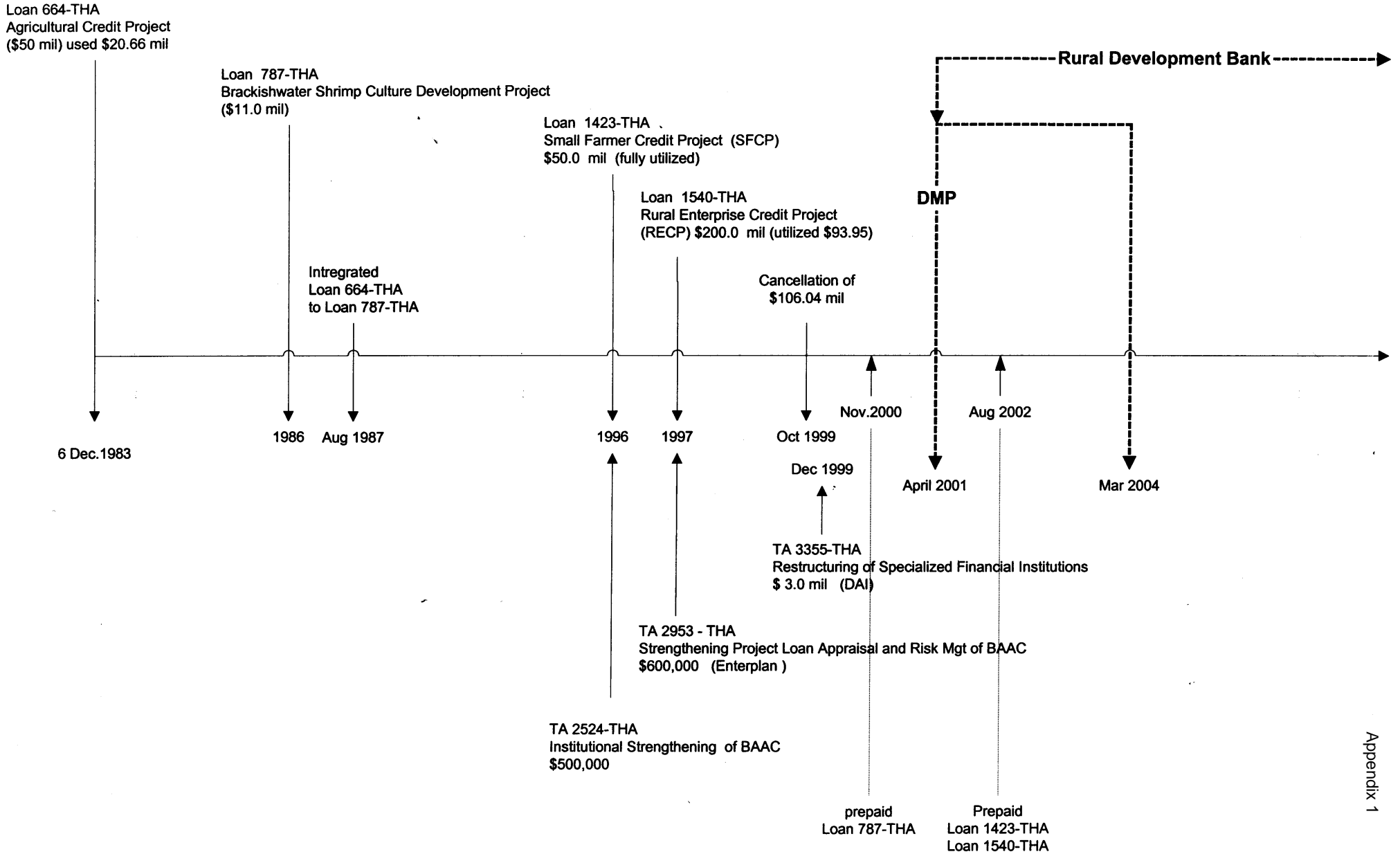
B. Follow-Up Actions

68. Because DMP has ended and BAAC is diversifying operations beyond rural development, more attention needs to be given to the following, as soon as possible:

³⁴ Key issues for the future are in Appendix 9.

- (i) further training of BAAC staff, particularly for those deployed in the field, by qualified trainers hired by management on an intermittent basis in the areas of project management, monitoring and evaluation, and information technology;
 - (ii) closer monitoring of the lending process (project appraisal, credit disbursement, progress reporting, and discreet plus impartial auditing) by BAAC staff;
 - (iii) collaboration with other state financial institutions, maximizing use of network and staff capabilities; and
 - (iv) training to BAAC clients in entrepreneurial skills.
69. BAAC is likely to gain if it devotes enough attention in the next 3 years to
- (i) studying experiences of rural development banks in other countries, particularly on corporate governance and asset liability management;
 - (ii) investigating how alternative loan pricing will affect BAAC and its clients, compared with the average cost pricing that has long been practiced;
 - (iii) examining in detail its experience of group lending to community enterprises to determine whether it gained or lost. While various theoretical rationales are quoted for group lending to community enterprises, BAAC credit officers in some provinces doubt its effectiveness; and
 - (iv) reconsidering its strategy—practitioners or credit officers argue that community enterprise members (a) paid too many dividends and ahead of schedule, (b) did not comply with appropriate accounting standards, and (c) employed nonfunctioning relatives. Many community enterprises are considered family businesses, but they lack comparative advantage, expertise, and sometimes experience. Offering credit to community enterprises carries more risk and threatens asset quality. BAAC may be better served by resorting to its traditional lending to joint liability groups since group members can help recapture funds due. Joint liability group lending has been BAAC's comparative advantage over other state financial institutions.
70. ADB could consider supporting microfinance projects in collaboration with other funding agencies on a pilot basis using grant funds. The Microfinance Linkage Project supported by GTZ, for example, had strong potential for poverty reduction.

HISTORICAL BACKGROUND OF THE RELATIONSHIP BETWEEN BANK FOR AGRICULTURE AND AGRICULTURAL COOPERATIVES (BAAC) AND THE ASIAN DEVELOPMENT BANK (ADB)



BAAC = Bank for Agriculture and Agricultural Cooperatives, DMP = Debt Moratorium Program, Mgt = management, mil = million, SFCP = Small Farmer Credit Project, TA = technical assistance.

Source: Fund Management Division, Bank for Agriculture and Agricultural Cooperatives

ILLUSTRATIVE PROFILES OF SELECTED BORROWERS

A. Rubber Marketing (Successful)

1. The first example is one of a successful woman farmer and commodity trader. This subproject was the top-performing one visited by the Operations Evaluation Mission (OEM).

1. Subborrower

2. Wandee Khongpan, 36, is married with two school-age children and lives in Songkhla province in southern Thailand. She owns and operates a 20-rai (one rai is equivalent to 16% of a hectare) rubber plantation, and also buys rubber from nearby growers.

2. Subproject

3. Wandee bought a 10-wheel truck in 1996 to transport latex to processing factories. For this purpose, she took a B800,000 loan from the Bank for Agriculture and Agricultural Cooperatives (BAAC). In 1998, she took another BAAC loan (a subloan under the Rural Enterprise Credit Program [RECP]) for B290,000 and bought a 6-wheel truck for B590,000. She traded this in for a second 10-wheeler last year because she found it more suitable.

4. The 1996 and 1998 subloans together (B1,090,000) represent 29% of Wandee's total assets (valued at B3.7 million). This subproject represented a major undertaking for both borrower and lender. The borrower's equity contribution of B500,000 was quite high, amounting to 31% of the total investment. The subproject has created full-time work for two drivers, two assistants, and four other workers.

3. Commercial Aspects and Financial Performance

5. Although the latex-buying business is very competitive, Wandee is doing well and she is thinking of investing in a small ribbed smoked sheet (RSS) factory, which would make her enterprise more vertically integrated. Such an investment would involve about B650,000 in machinery, B350,000 to renovate a building on her property, plus B500,000 in working capital.

6. The financial internal rate of return (FIRR), economic internal rate of return (EIRR), and internal rate on equity (IREQ) for the subproject (taking into account the 1996, 1998, and 2003 investments) are estimated at 55%, 72%, and 176%, respectively. The average income from the subproject during the subloan period was B470,000 and is projected at an average of B875,000 over the next 3 years, rising to B1,000,000 in 2007 after the respective loans have been fully repaid. This compares with an estimated income of only B120,000 per year (essentially from production from Wandee's rubber plantation) without the Project, or an increase of 833% with the Project.

4. Client Feedback on the Bank for Agriculture and Agricultural Cooperatives

7. This client said she had not received adequate advice from the BAAC credit officer in FY2001/02 about the options for taking an additional BAAC loan to buy a new vehicle for her business. In the end, she purchased this with her own funds, causing temporary illiquidity and resulting in two late repayments on a previous BAAC loan for land purchase. BAAC should have advised its client more clearly.

5. Factors Explaining Subproject Results

8. The following factors explain the successful result to date of this subproject:
- (i) the owner's knowledge of the rubber business;
 - (ii) the marketing enterprise chosen was complementary with the existing farm enterprise;
 - (iii) the owner was motivated and committed; and
 - (iv) the owner made a substantial equity contribution.

B. Pig Marketing (Successful)

1. Subborrower

9. Thirayut Khunphoung, 37 years old, lives with his wife and 15-year old daughter in Sukhothai province in northern Thailand. Thirayut's 10 rai of land normally produces about 5 tons of paddy rice per year. The family keeps about 1.5 tons for domestic use and sells the remainder. Most years, Thirayut takes out a B10,000 crop loan from BAAC, primarily to maintain an AAA credit standing with the bank and keep solidarity with the local farmers' association. In 2002 and 2003, his land and many of his neighbors' plots were inundated by floods from the Yom River. The paddy crop largely destroyed (see also Profile J).

2. Subproject

10. Thirayut borrowed B230,000 from BAAC in 1999 to invest in a pig marketing enterprise. The main items purchased were a used 6-wheel truck costing B290,000, fabrication of 27 steel cages to secure the pigs in the truck, and other supplies for a total of B400,000. He had been engaged in pig buying on a small scale and had built contacts with pig farmers in central Thailand, so his investment was carefully planned. The subloan of B230,000 and total investment of B400,000 corresponded to about 16% and 27%, respectively, of Thirayut's estimated total assets at that time, so the subproject was a major commitment for him.

3. Commercial Aspects and Financial Performance

11. Thirayut's enterprise is quite profitable but involves substantial investment, know-how, hard work, and some risk. Twice a week he loads the truck and drives 9 hours south to Nakhon Pathom, where many commercial pig farms are located. He visits his regular suppliers, pays them in cash, and returns overnight to Sukhothai with a full load of pigs (about 3,000 kilograms [kg]) which he delivers to the slaughterhouse. After paying for fuel, food, and his assistant's wages, the profit from one trip comes to about B7,500. There are more traders starting to compete in supplying the slaughterhouse but he can make up to two deliveries a week, earning up to B60,000 per month. He is making an average of six trips a month this year, earning an average of B45,000 per month or B540,000 per year.

12. With earnings from the business, Thirayut is paying for extra books and tuition for his daughter's education, as well as for home improvements. He has built and furnished a large, modern house for about B500,000. He and his wife saved money on construction by recycling timber from the old house and by doing much of the demolition and building themselves. Their daughter uses a home computer to help her father keep the business accounts.

13. The FIRR, EIRR, and IREQ for this subproject are high (73%, 89%, and 129%, respectively). The estimated net income during the first 4 years of the subloan period has been

B313,000 per year, after debt service. This is projected to level off to about B300,000 per year in the post-subloan period as a consequence of increased competition. This compares with an estimated household income of only B30,000 without the project, an increase of 1,000%.

4. Social and Environmental Aspects

14. Thirayut left school in the fourth year of primary and did not inherit much land. He is improving his family's standard of living and giving his daughter a range of future opportunities. This subproject exemplifies the positive social transition taking place in parts of rural Thailand.

5. Client Feedback on the Bank for Agriculture and Agricultural Cooperatives

15. Thirayut is satisfied with lending, but only keeps a small portion of his savings at BAAC since they do not yet provide the automatic teller machine (ATM) services he needs to withdraw cash to pay suppliers on his pig-buying trips.

6. Factors Explaining Subproject Results

16. The following main factors explain the successful result of this subproject:
- (i) the subborrower knows his business,
 - (ii) he and his family are strongly committed,
 - (iii) there is a good local market for his product and/or service, and
 - (iv) he made a substantial equity contribution.

C. Furniture-Making (Successful)

17. A small nonagricultural enterprise is succeeding as a result of the owner's skills and dedication.

1. Subborrower

18. Amphon is 43 and lives with his wife and three children in a village near the district center of Romphibun in Nakhon sri Thammarat province, southern Thailand. Their income is modest, but they own a spacious, two-story house that they have renovated themselves. The only land is a 3-rai plot for vegetables. Amphon has been employed in woodworking since leaving school at age 15.

2. Subproject

19. When his employer closed down in 1998 as a result of the Asian financial crisis, Amphon decided to set up his own business and used a B27,000 loan from BAAC to buy wood, materials, and tools to equip a workshop. Main cost items were B15,000 for a power saw, B10,000 for an electric planing machine, B10,000 to build a simple shed, and B15,000 for wood and other materials. He makes modern furniture to customers' specifications, as well as hand-carved hardwood doors for prices starting at B4,500 (\$105). His wife helps when he installs furniture at customers' houses, and he employs no labor. He has not bought a vehicle and rents a pickup when he needs to buy timber or deliver furniture. During the first 2 years, Amphon repaid his loan on time but he applied to join the Debt Moratorium Program (DMP) in 2001 because the economy was still depressed and demand for furniture was poor. He appreciated the debt relief and foresaw no problem in repaying the outstanding balance of his loan (B17,000) after DMP ended in 2004.

3. Commercial Aspects and Financial Performance

20. All Amphon's work is custom-made and he has to estimate how much time and money to invest in each piece of furniture. During the first 4 years, his earnings varied and averaged only B40,000 per year. Last year he earned about B80,000 and business is continuing to improve. On a typical job, he earns about B5,000 in profit for about 10 days' work. He is now employed about two-thirds of the time, so he earns about B10,000 per month. Without the workshop, he would rely on odd carpentry and repair jobs that might only bring in B4,000 per month. At the current scale of operation and when the loan is fully repaid, net income from the subproject is projected at B125,000 per year. Without-project income is estimated at B50,000 per year. The subproject represents an income improvement of 250%. The FIRR, EIRR, and IREQ are estimated at 70%, 57%, and 85%, respectively. The lower EIRR is the result of shadow-costing Amphon's labor at B200 per day.

4. Social and Environmental Aspects

21. The workshop is near Amphon's house but away from neighboring houses. He takes normal safety precautions like wearing a mask when power-sanding wood and keeping the children away from the power saw and other tools.

5. Client Feedback on the Bank for Agriculture and Agricultural Cooperatives

22. In 2001, there was very little demand for Amphon's furniture so he applied to join the DMP. He has since seen a strong recovery in demand and is thinking of how to expand his business. With a loan of B120,000 he thinks he could double turnover by enlarging his workshop, taking on hired help, and buying a second-hand truck. He has not applied for a loan from the new government-administered Village Fund because he says there are too many households in the village (400) and the earliest borrowers have not yet repaid their loans.

6. Factors Explaining Subproject Results

23. Main factors explaining the success of this small enterprise are:

- (i) the subborrower's strong woodworking skills,
- (ii) appropriate technology and business process,
- (iii) honesty and work ethic, which bring in more customers,
- (iv) good product quality, and
- (v) an improving local market for handmade furniture.

D. Paddy Threshing Machine (Successful)

1. Subborrower

24. Sudchai Nathamthong, aged over 60, is the head of a household that includes 8 children and 13 grandchildren. They live in Khon Kaen province in northeast Thailand and farm 10 rai of irrigated paddy land which normally produce two rice crops a year. The first crop is usually 5 tons and the second 7 tons. Their income is uncertain, however: last year, floods destroyed the crop, so two sons went to Bangkok to find construction work. Average annual household income before the subproject, excluding remittances from outside the household, is B50,000.

2. Subproject

25. Labor for paddy threshing is a bottleneck for farmers in the area, so Sudchai decided to buy a new threshing machine in 1998 for B150,000 with the help of a loan of B100,000 from BAAC. He mounted the thresher on his village-built lorry. The thresher operates during the main crop season, for a fee of B2 per 10 kg of paddy. Combine harvesters arrive for the dry season harvest so there is less demand than for threshing service, but income during the main harvest is sufficient to make the project worthwhile. Given the satisfactory results with the first machine, Sudchai's eldest son bought a second-hand thresher in 2000 for B40,000, which he repaired and mounted on another equipment the family already owned.

26. The subloan of B100,000 corresponds to 9% of Sudchai's total assets of B1.2 million, consisting mostly of the value of his land and house. He has repaid B70,000 over 5 years, on time, and B30,000 remains to be paid over the next 3 years. Sudchai could have joined the DMP but said he preferred to repay his loan early because of his age.

3. Commercial Aspects and Financial Performance

27. Revenue is variable but each machine earns about B40,000 in an average year during the main crop harvest and may earn up to B20,000 during the dry season harvest, net of fuel and other costs. Some family members are good mechanics and can take care of maintenance and repairs. Various family members earn another B3,000–4,000 per month from handicrafts and other work.

28. The FIRR, EIRR, and IREQ for this subproject (counting only the first threshing machine) are estimated at 22%, 34%, and 61%, respectively. The average net income during the subloan period has been B32,000, and is projected to average B39,000 over the next 3 years, increasing to B50,000 in 2007, after the loan is fully repaid. The with-subproject household income is projected at B100,000, compared with B50,000 without the Project, an increase of 100%.

4. Social and Environmental Aspects

29. The enterprise has employed two of Sudchai's sons, who have no alternative employment opportunities in the northeast, to operate and maintain the threshers. This also provides an opportunity for his grandchildren to acquire mechanical skills to help them to find future employment.

5. Factors Explaining Subproject Results

30. The main factors explaining the satisfactory results of this subproject are:
- (i) owner's management and mechanical skills of the borrower,
 - (ii) subproject complements existing farming enterprises,
 - (iii) subproject uses technology appropriate to the local situation, and
 - (iv) serves an adequate local market.

E. Rubberwood Logmill (Successful)

1. Subborrower

31. This is an unusual case of a young woman in Songkhla province in southern Thailand who has become successful in a business normally run by men. In 1992, at age 20, Nongnoot

Sanitjaro started out collecting latex and cup-lump rubber from local plantations for delivery to the processing factory. After a few years she married and had a son and kept working on her latex collection business. She took at least four short-term loans from BAAC of B50,000 for rubber marketing and paid them all back on time. By 1998, she had established AAA credit status with BAAC and substantial savings.

2. Subproject

32. In late 1998, Nongnoot decided to invest B1 million of her savings with a B500,000 long-term (10-year) loan from BAAC to build a log mill to cut rubber logs into timber for furniture. Main costs were lease of land (B400,000); purchase of rubber concession (B500,000); building and fencing (B250,000); and equipment and power generator (B350,000). Subsequent investments include a heavy tractor worth B200,000 and payment for a new concession of B1,500,000. Nongnoot's husband, a former sawmill employee, manages the mill and the timber concessions—a full-time job—while she looks after the financial and commercial side of the business. This includes latex rubber production and marketing from her own 80-rai rubber plantation, charcoal-making from log mill waste, and direct sales of cosmetics.

33. The subloan of B500,000 represented only 5% of Nongnoot's total assets, then valued at about B10 million. Other outstanding BAAC loans in Nongnoot's name are B150,000 to buy a tractor (August 2001), B50,000 to buy a car for personal use (April 2003), and B300,000 to buy a pick-up truck for latex collection (June 2003). Repayment and interest on all loans is current. Her total indebtedness to BAAC is currently B880,000, representing about 7% of total assets now valued at B13 million.

3. Commercial Aspects and Financial Performance

34. The business is based on prospecting and acquiring a concession from plantation owners to cut and remove old rubber trees which are then processed for sale to local timber factories who season the wood before export. Early on, Nongnoot's enterprise could earn large profits because plantation owners charged very high prices for old rubberwood concessions: they did not appreciate the market value of the timber. This has now changed. Malaysian companies in Songkhla have bid up the market price of rubberwood concessions to more than three times the level a few years ago, so profits are now smaller.

35. The FIRR, EIRR, and IREQ for this subproject are estimated at 38%, 48%, and 62%, respectively. The average net income during the subloan period is estimated to have been about B700,000 and is projected to average about B500,000 over the next 5 years. The decline is due to changed market conditions since the enterprise was started. With-subproject household income is estimated at B750,000 per year compared to B250,000 without the Project, an increase of 200%.

4. Social and Environmental Aspects

36. Logging of rubber trees is permitted under Thailand's forestry laws. The log mill pays tax to the local district council for the use of natural resources. It has created about 20 full-time paid jobs at an estimated cost of B160,000 per job per year. The log yard lacks a hard standing for the timber lorries and presents some environmental risk in terms of eroding soil into the nearby stream. Nongnoot planned for improvements and soil conservation work if she is able to buy the 17 rai of rented land that the log mill stands on.

5. Client Feedback on the Bank for Agriculture and Agricultural Cooperatives

37. The client says BAAC gives good service: the branch development officer comes to the house and helps with the accounts. She considers the lending rate of 7% too high and wants a discount since she is a good customer.

6. Factors Explaining Subproject Results

38. The following main factors explain the very successful performance of this enterprise:

- (i) exceptional business skills on the part of the subborrower,
- (ii) complementarity with her existing enterprise,
- (iii) use of appropriate technology and business process,
- (iv) strong motivation and commitment, and
- (v) substantial equity contribution made from the subborrower's savings.

F. Tractor Service (Successful)

1. Subborrower

39. Jai Kaeopradapphet, 52, is a small-scale rubber farmer in southern Thailand who expanded his operation and has a successful tractor rental business. He has a wife and three grown sons, two of whom live at home and work on the farm (the third has a hotel job in Hat Yai). Jai came to his present village from another district and acquired 40 rai of farm land, now planted with rubber, of which 28 rai are in production and 12 rai still immature. Net farm income from the area already in production, excluding revenue from the tractor service enterprise, averaged about B150,000 during the last 5 years and is expected to increase to about B250,000 over the next 5 years.

2. Subproject

40. Agricultural labor has increasing scarcity in the south, encouraging mechanization of operations where possible. In 1999, Jai borrowed B320,000 plus B50,000 of his own to buy a used tractor and a set of cultivation and other implements, as he found contract tractor services expensive or unavailable when he needed them. In 2001, he borrowed another B96,000 to purchase more equipment and pay for tractor repairs. These amounts are all paid off, and in 2003 he borrowed another B300,000 to purchase a second tractor (costing B500,000). The 1999 subloan corresponds to 6% of Jai's assets, as well as 6% of total indebtedness to BAAC. The subproject has created full-time work for two of Jai's sons who operate and maintain the two tractors.

3. Commercial Aspects and Financial Performance

41. Jai rents out his tractors at B120/rai for cultivating between rubber, B150/rai for plowing paddy land, B150/rai to cut grass, and B3 to make holes (compared with a market price of B5-7 for hand-dug holes). Demand for these services is strong and it is estimated that the two tractors together earn about B200,000 per year. Loan repayment is almost completed for the first tractor and amounts to B60,000 per year for the second. Subproject FIRR, EIRR, and IREQ are estimated at 24%, 39%, and 34%, respectively. Average net income during the subloan period has been only B11,400, mainly because of accelerated loan repayment: 94% of the 1999 subloan is already repaid. Average net income is projected to average B126,000 over the next 3 years and to increase to B200,000 in 2008 after the second tractor loan is repaid. With-

subproject income is estimated at B450,000, compared with B250,000 without the Project. This is an increase of 80%.

4. Social and Environmental Aspects

42. As an outsider to the area, Jai consults closely with the local farmers' group to ensure that his enterprise has support from the community. No environmental impact is evident. Jai takes care not to cultivate too close to stream banks and drainage courses.

5. Client Feedback on the Bank for Agriculture and Agricultural Cooperatives

43. Jai said he was satisfied with BAAC service and that he consults with the credit officer when he comes for the twice-yearly meetings with the local farmers' group.

6. Factors Explaining Subproject Results

44. The positive results of the subproject are due to
- (i) good knowledge of the business,
 - (ii) complementarity with farming enterprises,
 - (iii) appropriate technology and business processes,
 - (iv) strong motivation and commitment by the subborrower, and
 - (v) substantial equity contribution.

G. Tractor Hire (Successful)

45. A long relationship with BAAC has helped the borrower's family during difficult times.

1. Subborrower

46. Lek Deemek, 54, widowed with an adult daughter and son, lives in an agricultural area predominantly devoted to maize, paddy rice, and cattle. Lek's husband, who died in 1999, had been a BAAC customer for the previous 10 years. Since her husband's death, Lek manages the family farm of 70 rai and a tractor-hire business with the help of her son. This year she also financed the purchase of a new pickup truck for her daughter's mattress sales business.

2. Subproject

47. Lek's 1999 subloan of B180,000 was a refinancing in her name of the outstanding balance of a tractor purchase loan that her late husband had taken in 1996. The subloan represents about 4% of the borrower's total assets and is being repaid in six annual installments of B30,000 with interest charged at 8%. Lek's late husband had borrowed B460,000 from BAAC to buy the tractor. The investment had been undertaken at his wife's suggestion after she had seen others doing well in the tractor rental business. However, others had the same idea and the tractor rental business has become a lot more competitive.

3. Commercial Aspects and Financial Performance

48. The tractor is now about 10 years old and is operated by Lek's son who takes care of maintenance, which is now becoming quite costly (B30,000–40,000 per year). Fortunately, there are only two more B30,000 installments due on the tractor. To plough 10 rai of paddy land, which may take half a day's work, the charge is only B1,200, fuel and driver included, so there is

not much profit. Last year the tractor earned only B120,000, of which half went to repairs, maintenance, and loan repayment, so the net income was about B60,000. However, the machine is still in good order and can operate for many years after the loan is paid off, as well as remaining an essential piece of equipment for cultivating the 70-rai home farm, which in a good year earns about B100,000.¹ The tractor should still prove a good investment.

49. The FIRR and EIRR for this subproject are 21% and 29%, respectively, and the estimated IREQ is 31%. The annual net income during the subloan period is B53,000, projected to rise to B80,000 after the loan is fully repaid. The with-subproject annual income is estimated at B180,000, compared with B100,000 without the subproject, an increase of 80%.

4. Social and Environmental Aspects

50. Lek's family, although not rich, has established a reasonably secure livelihood and AAA borrower status with BAAC, which has helped them through the difficult period following her husband's death. The BAAC funeral association was also very helpful in meeting the unexpected expenses.

5. Factors Explaining Subproject Results

51. The following factors explain the successful outcome of the subproject:
- (i) good business and mechanical skills of the borrower and her family,
 - (ii) subproject enterprise fully integrated with existing farming enterprise,
 - (iii) strong solidarity of borrower's family, and
 - (iv) substantial equity contribution to the subproject.

H. Longan Drying Plant (Successful)

1. Subborrower

52. Duangdee Pampang is a farmer and businessman, aged about 45, who is married with two school-age children. He inherited about 9 rai of land in an agricultural area in the Mae Ping valley southwest of Chiangmai in northern Thailand. In 1996 he bought a 3.75-rai longan orchard on adjoining land, with 93 mature trees yielding an average of 60 kg of fruit, bringing his total area of land owned to 13 rai.

2. Subproject

53. In 1999, Duangdee took a 10-year loan of B250,000 from BAAC to set up a plant on his property to process dried longans for export to China because the market for the fresh fruit appeared uncertain. The plant was equipped with three Taiwan-made gas-fired dryers with a capacity of about 750 kg and mechanical handling equipment. Duangdee manages the drying plant with help from his wife, with up to five seasonal laborers hired for maintenance and harvesting.

¹ This year about half of the crop was lost because of flooding.

3. Commercial Aspects and Financial Performance

54. In 2003 Duangdee was obtaining an average of B60/kg for dried longan, selling through the paragonovernmental Agricultural Marketing Organization, which exports the product to China. This price is profitable: Duangdee estimates that, with careful control, costs for raw material, labor, and energy can be kept below about B45/kg. He pays careful attention to product quality, trying to maximize the percentage of fruit in the AA grade which fetch a guaranteed price of B72/kg, and to minimize damage during harvesting and drying to avoid breaking the shells or scorching the fruit. Duangdee has started using chemical stimulants to control fructification and provoke a second harvest in December.

55. The FIRR and IREQ for this subproject are 25% and 75%, respectively. The annual net income during the subloan period is B37,500, projected to rise to B71,250 after the loan is fully repaid. The with-subproject annual income is estimated at B 221,250, compared with B150,000 without the project, an increase of 47.5%. These estimates are based on processing only the the amount Duangdee can produce from his own orchard (about 19 tons/year). Technically, his drying plant has capacity to process nearly double this quantity over a 6-month season so the returns could be higher. Duangdee is managing his project well and the assured supply of fruit from his own orchard is sufficient to protect against having to buy fresh fruit from other growers.

4. Social and Environmental Aspects

56. Duangdee is using part of the profits from his project to pay for private school fees for his two children (about B3,000 per month). He hopes they will both go on to university and that his project will then earn enough to cover the costs. Anything left over he is now saving for re-investment in the farm. There are no waste products generated by the drying plant and no impact on the environment.

5. Factors Explaining Project Results

57. Positive results of this Project are attributed to

- (i) subborrower's strong knowledge of the business,
- (ii) the subproject's complementarity with a farming enterprise,
- (iii) subproject's use of appropriate technology and business processes,
- (iv) strong motivation and commitment of owner, and
- (v) substantial equity contribution.

I. Threshing Machine/Livestock Breeding (Partly Successful)

1. Subborrower

58. Prakob, 40, lives in Muang Tak district in northern Thailand. He finished the fourth year of primary school and is married with two children. He cultivates 50 rai of land, approximately half with paddy rice and half with maize, and some years rents an additional 7 rai for paddy. He operates the farm with the help of his wife, hiring tractor services for land preparation and cultivation, and employs casual labor only for harvest. He uses his own pickup truck for farm transport and marketing.

2. Subproject

59. In 1998, Prakob borrowed B150,000 and contributed B190,000 of his own money to buy a threshing machine for B340,000. Demand for threshing was strong from many neighboring farmers. Prakob used the machine intensively for 4 years, earning B30,000–50,000/year, but encountered persistent mechanical problems which emerged after the 1-year warranty period had expired so that maintenance and repair costs started to eat up most of the profit. He then decided to sell the thresher. He paid about B50,000 to have it repaired and sold it last year to a farmer in another village, obtaining B250,000. With part of the money, he bought 11 beef cows for only B10,000 each from his father-in-law. He uses a neighbor's bull for breeding. The cows have all produced calves, which he will keep for another year and sell for about B5,000 each. He gets free vaccine and technical advice from the Livestock Department and financial advice from the BAAC credit officer. He employs a young person to look after the cows in the day when they range away from the village. He feels satisfied with the new project, which fits well with his existing farm enterprise, and says he is relieved to have sold the threshing machine. He still has B56,000 outstanding on his loan, which he plans to pay off after this year's harvest.

3. Commercial Aspects and Financial Performance

60. Net farm income without the subproject averages B70,000 per year. In 2002, maize grown on 17 rai yielded about 14 tons, at average price of B3,500/ton earned nearly B50,000, less production costs of about B10,000, giving net income of B40,000. Paddy grown on 27 rai yielded nearly 12 tons, at average price of B4,250/ton earned about B50,000, less production costs of about B20,000, giving net income of B30,000. Maize was more profitable. In 2003, yields are adversely affected by uneven rainfall and Prakob may lose 7 rai of maize due for harvest in December. The FIRR, EIRR, and IREQ for the subproject (including the livestock breeding enterprise) are 5%, 10%, and 5%, respectively, which are unsatisfactory. Because of the high maintenance costs for the threshing machine, the net income during the subloan period was barely enough to cover loan repayment and interest charges. However, the livestock breeding enterprise is expected to earn B50,000 per year, giving a with-project annual income of B120,000, compared with B70,000 before the Project, an increase of 71%. The internal return on Prakob's equity investment is still only 5%, but would have been negative if he had not sold the thresher and moved into a more profitable activity. The subproject is rated partly successful.

4. Social and Environmental Aspects

61. Although the original subproject proved unsuccessful, the timely sale of the machine and the shift into livestock breeding should permit Prakob to substantially raise the productivity and value of his land, which he hopes one of his children to inherit and continue farming.

5. Factors Explaining Project Results

62. The factors that helped Prakob turn the project around were

- (i) good judgment in deciding to cut his losses and sell the threshing machine,
- (ii) the new livestock enterprise is complementary with the existing farming enterprise,
- (iii) good knowledge of farming and commitment in the face of difficulties, and
- (iv) a substantial equity contribution which kept loan repayments down while income from the existing enterprise helped cover maintenance and repair costs.

J. Combine Harvester (Partly Successful)

1. Subborrower

63. In Thongchua, 68 years old, farms 140 rai of rice on the plain between the Yom and Ping rivers in Sukhothai province, northern Thailand. Unfortunately, his house and land had been severely flooded for more than 2 weeks when we visited in mid-October and most of his crop was destroyed. (His land was also flooded last year and he earned only about B45,000 from the paddy he could still harvest). He lives with his wife, two sons, and two unmarried daughters, plus the youngest daughter who has temporarily given up her accounting job in Rayong to care for her father, who has been diagnosed with leukemia and is having monthly hospital treatment. Such a concurrence of disasters would be very discouraging for most people, but Thongchua is carrying on as well as possible under the circumstances, moving to and from his house by boat, and preparing to replant the rice fields as soon as the floods have subsided. He hopes to harvest in March and repay his B110,000 crop loan from BAAC on time.

2. Subproject

64. The subloan of B1,400,000 (the largest in the evaluated sample) represents about 16% of the total value of Thongchua's assets, which mainly consist of land. The combine harvester, which cost B1.7 million 4 years ago, is now worth only about B1 million. In the first 3 years, when the machine was performing well, Thongchua used almost all its earnings to pay down the loan ahead of schedule (average B309,000/year). Unfortunately, in both 2002 and 2003, the area including his own farm was severely flooded and the harvester could operate only in the dry season, severely limiting its earnings. Because of this double natural disaster, BAAC rescheduled Thongchua's loan repayments and the remaining balance of B473,000 is to be repaid at B95,000/year over 5 years, making a revised term of 10 years. The harvester cannot do much work this year since most of the paddy land in the area has been flooded. No one in the area wants to buy a used combine harvester, especially when equivalent new machines from cheaper sources such as Eastern Europe are on the market for only B1.2 million. He plans to hold on to the machine until next year.

3. Commercial Aspects and Financial Performance

65. In a normal year, Thongchua's land would produce about 90 tons of paddy, worth about B330,000 and he earns net income of about B220,000 from the farm after deducting costs for seed, fertilizer, labor, and machinery operation. This alone would hardly be enough to live on and make loan payments, so his son operates and rents the combine harvester out to neighboring farmers, at a fee of B280/rai. The fee was B350/rai but now there is more competition and the price has come down. For the first 2 years, the machine earned more than B300,000 a year. But since demand dropped and maintenance costs rose (B60,000), income from the subproject fell last year to about B60,000, most of it absorbed by interest of B38,000 due on the loan.

66. The FIRR, EIRR, and IREQ for this subproject are 4%, 10%, and 3%, respectively, the lowest in the evaluated sample for which the internal rate of return could be calculated. Average net income after loan amortization and interest over the first 4 years of operation was only B16,000, but assuming that the disastrous floods of 2003 do not recur and allowing for maintenance costs at B60,000 per year, average net income for the next 4 years is projected at B127,000, rising to B240,000 in the tenth year after the loan is fully repaid.

67. Mainly because of the floods, but also because of increasing competition, the combine harvester has not proved a good investment. It is still a working asset, worth more than the amount still owed to the bank (B473,000), and potentially capable of earning a surplus over the remaining years of debt service. However, the ever-present risk of serious flooding in the area, the increasingly competitive local market for mechanized farm services, and the age and uncertain health of the borrower all constitute significant risks for the outcome of this subproject that may not have been given due weight at the time of appraisal.

4. Social and Environmental Aspects

68. Five districts of Sukhothai province were affected by flooding in 2003. Until the government decides to build a dam upstream on the Yom River at Kaeng Sua Ten (a project that has been discussed for more than 10 years), many farms remain vulnerable to flooding.

5. Factors Explaining Project Results

69. The main factors explaining why this subproject has been unsuccessful are
- (i) overly optimistic expectations of the local market for this type of farm machine,
 - (ii) unforeseen floods over 2 consecutive years, and
 - (iii) inappropriate and excessively costly technology.
70. The main factors which could nevertheless lead to a successful outcome are
- (i) **Complementarity with existing enterprise.** The machine can be used to intensify output on the borrower's farm, which generates sufficient cash flow to more than cover the loan service; and
 - (ii) **Strong family solidarity.** They are able and willing to work together to keep the farm going.

STRUCTURED INTERVIEW QUESTIONNAIRE

Province:	District:	Place:	Interviewer:	Date:
Subloan #	Amount:	Outstanding:	Suspension Under DMP: []	
Project:		Type:	Working Capital Loan: []	
Borrower Name:		Previous BAAC Borrower: []	BAAC Savings A/C: []	[M/F]

A. Organization, Management, and History

Describe briefly the project, its origins, financing, ownership, management, and how it has performed during and since the crisis. Record who else participates in management of the project and how many people are employed, indicating whether full, part-time, or seasonal. Give estimates for main investment cost items, indicating whether they were financed from a BAAC loan or from own resources. Any other loan outstanding with BAAC or other bank?

B. Commercial Aspects and Financial Performance

Describe how the project operates and the processes by which it creates income for the owners. Who supplies the inputs and who buys the outputs? What market trends are observed for outputs and inputs? How much competition is there in this business? Roughly how much income (profit) does project earn for the owner in a normal year? How much more (or less) is this than owner was earning before project started? Does (s)he consider it a successful project? What would owner do differently if starting over again today? Without pressing to see them, ask if owner keeps accounts of the project; if so, did BAAC staff help set them up? How, in the borrower's view, could BAAC have provided a better service for this project?

C. Social and Environmental Aspects

How is the project benefiting the owner's family? Benefits for anyone else? Any negative social effects (e.g. court cases or other disputes)? Does the project generate polluting waste products? How disposed of? Were there any recommendations by BAAC staff?

D. Factors Explaining Project Results [check five most important factors]

Successful Factors:	Unsuccessful Factors:
Good knowledge of this/similar business []	Lacked knowledge of this business []
Received good advice from BAAC []	Incorrect advice given by BAAC staff []
Complementary with farming enterprise []	Project unrelated to existing activities []
Appropriate technology/business process []	Over-invested in plant, machinery, or building []
Strong motivation and commitment of owner []	Poor management or indifferent attitude of owner []
Good local market for product/service []	Over-optimistic marketing expectations []
Owner maintains high product quality []	Problems with product quality []
Other income sources stabilize cashflow []	Unforeseen financial crisis disrupted project []
Project revenue easily covers debt service []	DS consumes most of project revenue []
Other (specify): []	Other (specify): []

A/C = account, BAAC = Bank for Agriculture and Agricultural Cooperatives, DMP = Debt Moratorium Program, DS = debt service.

SUBLOAN CHARACTERISTICS

Table A4.1: Financial Status of Subloans
(as of 31 March 2003)

Region	Disbursement		Fully Repaid Loans		Ongoing Loans	
	No. of Subloans	Amount	No. of Subloans	Amount	No. of Subloans	Amount
Northern Region	25,434	1,945,546	18,699	1,460,644	6,735	484,902
Northeastern Region	17,813	1,287,384	14,802	1,096,539	3,011	190,845
Central and Eastern Regions	8,794	770,693	7,824	696,397	970	74,296
Southern and Western Regions	13,152	1,555,340	11,377	1,401,464	1,775	153,876
Total	65,193	5,558,963	52,702	4,655,044	12,491	903,919

No. = number

Source: Bank for Agriculture and Agricultural Cooperatives records.

Table A4.2: Loans Outstanding, Classified by Loan Size
(as of 31 March 2003, in baht)

Range	Northern Region		Northeastern Region		Central and Eastern Regions		Southern and Western Regions		Total	
	No. of Subloans	Amount	No. of Subloans	Amount	No. of Subloans	Amount	No. of Subloans	Amount	No. of Subloans	Amount
<60,000	3,527	113,100,364	1,650	44,258,585	639	21,242,020	964	33,077,209	6,780	211,678,178
60,001–150,000	1,649	107,054,773	775	46,530,470	117	7,784,060	379	30,095,325	2,920	191,464,628
150,001–300,000	1,178	155,667,791	452	57,793,844	141	20,470,396	300	43,978,297	2,071	277,910,328
300,001–500,000	287	67,849,581	84	18,531,118	52	13,261,745	101	29,292,128	524	128,934,572
500,001–1,000,000	88	34,757,964	47	18,430,989	20	11,224,864	31	17,432,975	186	81,846,792
1,000,001–5,000,000	6	6,471,414	3	5,300,000	1	313,000	0	0	10	12,084,414
>5,000,000	0	0	0	0	0	0	0	0	0	0
Total	6,735	484,901,887	3,011	190,845,006	970	74,296,085	1,775	153,875,934	12,491	903,918,912

No. = number.

Source: Bank for Agriculture and Agricultural Cooperatives records.

Table A4.3: Loans Outstanding, Classified by Rating of Farmer Client
(as of 31 March 2003, in baht)

Group	Northern Region		Northeastern Region		Central and Eastern Regions		Southern and Western Regions		Total	
	No. of Subloans	Amount	No. of Subloans	Amount	No. of Subloans	Amount	No. of Subloans	Amount	No. of Subloans	Amount
AAA (Prime)	2,881	191,699,108	1,152	60,308,445	168	14,098,573	436	40,237,054	4,637	306,343,180
AA (Very Good)	216	18,311,557	62	5,048,813	17	2,142,742	65	7,163,135	360	32,666,247
A (Good)	455	33,978,955	185	9,638,670	25	2,772,244	86	5,965,022	751	52,354,891
B ^a	3,183	240,912,267	1,612	115,849,078	760	55,282,526	1,188	100,510,723	6,743	512,554,594
Total	6,735	484,901,887	3,011	190,845,006	970	74,296,085	1,775	153,875,934	12,491	903,918,912

No. = number.

^a Clients with overdue loans in the previous year or with restructured loans.

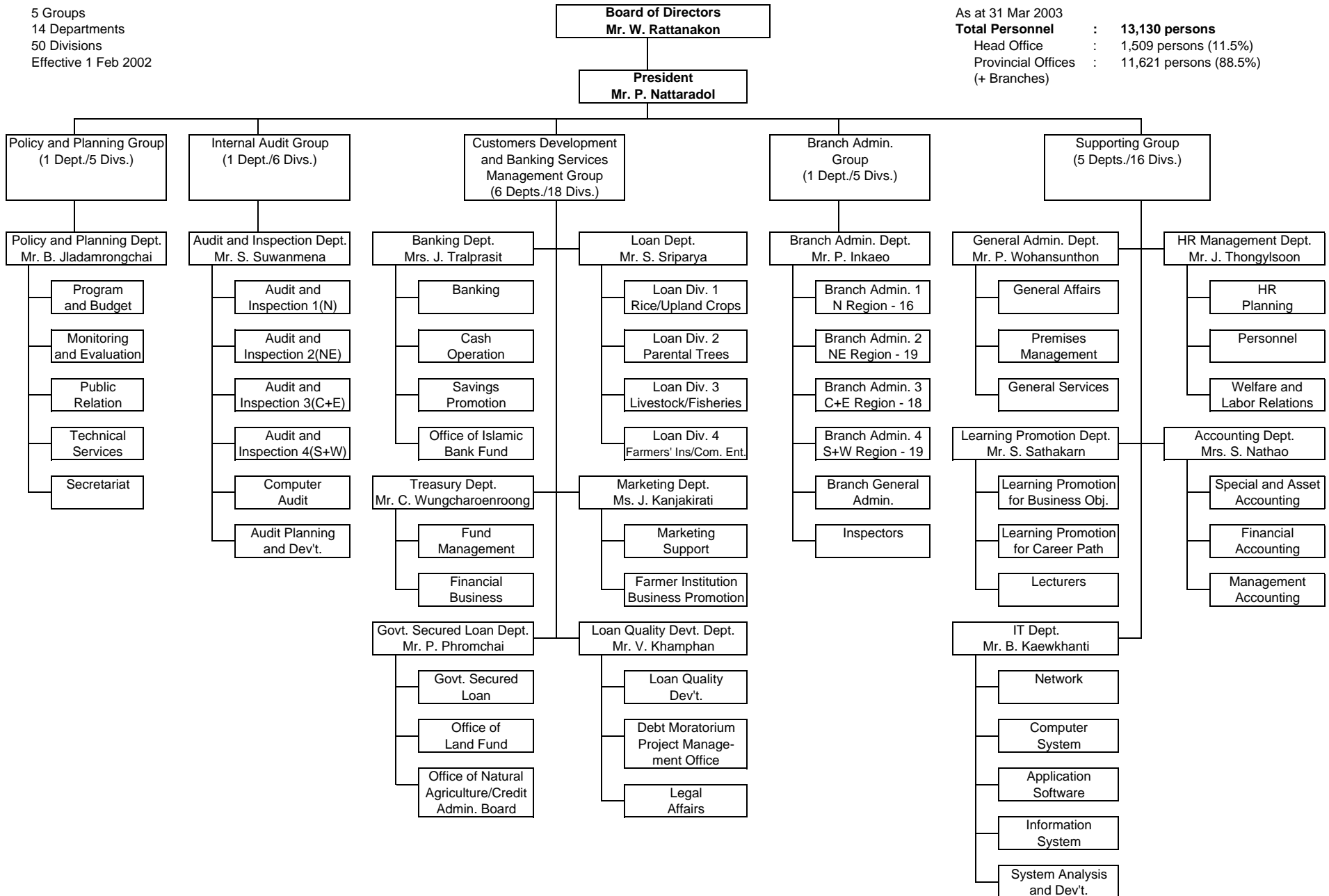
Source: Bank for Agriculture and Agricultural Cooperatives records.

BANK FOR AGRICULTURE AND AGRICULTURAL COOPERATIVES' ORGANIZATIONAL CHART

(as of 8 October 2003)

5 Groups
14 Departments
50 Divisions
Effective 1 Feb 2002

As at 31 Mar 2003
Total Personnel : 13,130 persons
Head Office : 1,509 persons (11.5%)
Provincial Offices : 11,621 persons (88.5%)
(+ Branches)



Admin. = Administration, C = central, Dept. = department, Dev't. = development, Div. = division, E = east, Govt. = government, HR = human resource, IT = information technology, N = north, NE = northeast, Obj = objective, S = south, W = west.

BANK FOR AGRICULTURE AND AGRICULTURAL COOPERATIVES' STATUS OF COMPLIANCE WITH LOAN COVENANTS

Reference	Covenant	PCR Status (January 2002)	Status (November 2003)
A. Particular Covenants			
Article IV Section 4.01 (a)	The Bank for Agriculture and Agricultural Cooperatives (BAAC) shall carry out the Project with due diligence and efficiency and in conformity with sound administrative, banking, financial, and environmental practices.	Complied with.	Complied with.
Article IV Section 4.03	BAAC shall maintain records and accounts adequate to record the progress of the Project and of each subproject (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, the operations and financial condition of BAAC.	Generally complied with. Although subproject details are available at branches, only the transactions and loan balances are recorded regularly in BAAC's centralized computer system for bank-wide analysis. As such, customer analysis and analysis of the portfolio according to customers is difficult. Additional data has to be collected for specific analysis, which is both time consuming and costly.	Generally complied with.
Article IV Section 4.04 (a)	BAAC shall furnish to the Asian Development Bank (ADB) all such reports and information as ADB shall reasonably request concerning the loan, the Project, the subborrowers, the subprojects, and the subloans; the administration, operations and financial condition of BAAC; and any other matters relating to the purposes of the loan.	Complied with.	Complied with.
Article IV Section 4.04 (b)	BAAC shall furnish ADB with quarterly reports.	Complied with.	Complied with.
Article IV Section 4.04 (c)	Promptly after the loan closing date or not later than 6 months after the closing date, BAAC shall submit to ADB a project completion report.	Complied with.	Complied with.
Article IV Section 4.05 (a)	BAAC shall (i) have its accounts and financial statements audited in accordance with appropriate auditing standards; (ii) furnish to ADB within 9 months of the close of the related fiscal year (a) certified copies of audited accounts	Complied with. Separate audits were conducted and the auditor's opinion obtained on the loan from 29 September 1997 to 31 March 1999.	Complied with.

Reference	Covenant	PCR Status (January 2002)	Status (November 2003)
	and financial statements, and (b) the report of the auditors relating thereto (including the auditors' opinion on the use of the loan proceeds and compliance with the covenants of the loan agreement), all in the English language; and (iii) further related information as ADB shall from time to time reasonably request.		
Article IV Section 4.06	BAAC shall enable ADB's representatives to inspect any subborrower, any subproject, the goods financed out of the proceeds of the loan, and any relevant records and documents maintained by BAAC.	Complied with.	Complied with.
	B. Imprest Account		
Schedule 3 Para. 5	Immediately after the effective date, BAAC shall establish an imprest account at a commercial bank acceptable to ADB.	Complied with.	Complied with.
	C. Project Implementation		
Schedule 4 Para. 1 (a)	Within 1 month of the effective date, BAAC shall establish a project management unit (PMU) under the Office of Technical Services and Planning. The PMU shall be headed by the Vice President in charge of the Monitoring and Evaluation Division and the Program and Budget Division.	Complied with. A Project Management Committee for Environment Conservation Credit Projects was established in December 1997. The Committee was chaired by the Executive Vice President in charge of the Office of Technical Services and Planning. The Fund Management Division (formerly the Program and Budget Division) was responsible for the Project.	Complied with.
Schedule 4 Para. 1 (b)	The PMU shall include representatives from BAAC's Credit Department, Regional Branch Administration Departments, Monitoring and Evaluation Division of the Office of Technical Services and Planning, Training Division of the Human Resource Management Department, and Program and Budget Division.	Complied with. Committee members included representatives from Regional Branches Administrative Department, Computer Department, Project Development Division, Training Division, Technical Services Division, Monitoring and Evaluation Division, and Fund Management Division.	Complied with.

Reference	Covenant	PCR Status (January 2002)	Status (November 2003)
Schedule 4 Para. 1 (c)	<p>Within 3 months of the effective date, BAAC shall establish a Credit Department in the Head Office, which shall be staffed with qualified and experienced credit officers. BAAC shall restructure its branches by establishing specialized credit evaluation units to carry out more detailed subproject appraisal and supervision.</p>	<p>Complied with. BAAC restructured its organization from April 1998. An Individual Farmer Loan Department was created under the Loan Group and made responsible for credit operations.</p>	Complied with.
<p>1. Relending Terms and Subproject Financing Arrangements</p>			
Schedule 4 Para. 2 (a)	<p>BAAC shall: (i) relend loan proceeds in baht to eligible subborrowers at an interest rate which shall at all times be not less than an amount adequate to provide BAAC recovery of its cost of funds, intermediation costs, foreign exchange and interest variation risks, and operating costs; (ii) align its interest rates to market interest rates for its medium term loans (1 to 3 years) and long-term loans (more than 3 years) to agriculture enterprises in rural areas; (iii) use not more than 10% of the loan proceeds finance subloans exceeding B2 million; (iv) not finance any subloans exceeding B5 million; (v) evaluate proposed subloans in accordance with its established practices, supplemented by discounted cash flow and debt service analysis wherever necessary; and (vi) maintain comprehensive credit files on all subloans in accordance with its customary procedures.</p>	<p>Partly complied with. During the project period, the lending interest rate was based on minimum lending rate comprising cost of funds, operating costs, and margin. The foreign exchange risk premium relating to the ADB loan was not factored in the lending interest rate because the Asian financial crisis was unprecedented and unforeseen. Instead, losses were charged to an income statement as per the procedure approved by the Ministry of Finance. From February 2001, the lending interest rate varied between 8% and 12% per year depending on subborrowers' credit rating. There were no subloans exceeding B2 million. Subloans were evaluated in accordance with BAAC's established practices including cash flow and debt service analyses. Subborrower information is available at branches in accordance with BAAC's customary procedures.</p>	<p>Complied with. There are no subloans exceeding B2 million. BAAC multiple lending rate is based on cost of funds, cost of operation, and margin. The loss from foreign exchange due to borrowings in foreign currencies is included in the cost of fund. In November 2003, BAAC's multiple lending rate was 7% per year.</p>
Schedule 4 Para. 2 (c)	<p>BAAC shall use at least 30% of the loan proceeds to finance new enterprises.</p>	Complied with.	Complied with.

Reference	Covenant	PCR Status (January 2002)	Status (November 2003)
2. Subloan Agreement			
Schedule 4 Para. 3	Each subborrower shall enter into a subloan agreement with BAAC, the terms and conditions of which shall include, but not be limited to (i) subloan maturity shall be consistent with the project implementation period and debt service capacity of the relevant subproject; (ii) grace period shall be consistent with the expected subproject cash flow; (iii) ordinary and penalty interest rates shall be determined by BAAC on a commercial basis and shall not be less than the rates offered by BAAC on its ordinary loans for similar activities which utilize other sources of funds; and (iv) the repayment schedule shall be consistent with the expected subproject cash flow, where possible at quarterly or shorter intervals.	Complied with.	Complied with.
3. Subborrower Selection Criteria			
Schedule 4 Para. 4 (a)	Subborrowers shall (i) be registered as clients of BAAC pursuant to its standard registration procedures; (ii) have a satisfactory overall financial condition; (iii) have a satisfactory credit history and not have any currently rescheduled borrowings or have defaulted on any previous loan (except due to natural calamity); (iv) be able to provide the security typically required by BAAC; (v) be able to contribute at least 20% of the relevant subproject cost in the form of equity (including equity in kind); (vi) be able to maintain appropriate financial records of income and expenditure for BAAC's periodic inspection; and (vii) comply with the requirements of applicable environmental laws and regulations and undertake appropriate environmental improvement measures concerned, including reduction of waste emissions, and installation of energy saving technology.	Generally complied with. In some instances, subborrowers did not keep records of income and expenses.	Generally complied with.
Schedule 4 Para. 4 (b)	BAAC shall use its best efforts to ensure that women are given priority access to subloans, and that at least one third of the project beneficiaries are women.	Generally complied with.	Generally complied with.

Reference	Covenant	PCR Status (January 2002)	Status (November 2003)
4. Subproject Selection Criteria			
Schedule 4 Para. 5	Subprojects shall (i) have small-scale processing of agricultural produce into semifinished or finished goods and the production of agricultural inputs or provision of agricultural services as one of its primary activities; (ii) be located in the designed project area; (iii) be technically, managerially, and environmentally sound; (iv) comply with applicable national and local environmental laws and regulations; (v) have a projected cash flow and subproject implementation plan for the subloan maturity period demonstrating the financial viability of the enterprise; and (vi) have projected net cash income from the operation of the subproject equal to a minimum of 1.5 times the required debt service.	Generally complied with.	Generally complied with.
5. Excluded Subprojects			
Schedule 4 Para. 6	BAAC shall not utilize any of the loan proceeds to fund the purchase of land or land-use rights, tobacco-related projects, wood processing projects that use timber from virgin or primary forests, or any refinancing of existing obligations of BAAC.	Complied with.	Complied with.
6. Benefit Monitoring and Evaluation (BME)			
Schedule 4 Para. 7	BAAC shall monitor the financial and economic aspects of the Project and evaluate the socioeconomic benefits of subprojects. BME procedures shall be in accordance with its current procedures for agricultural enterprise lending and with ADB's <i>Guidelines on Benefit Monitoring and Evaluation (A Handbook for Bank Staff, Staff of Executing Agencies and Consultants, March 1992)</i> .	Partly complied with. Monitoring of socioeconomic aspects was difficult because of inadequate baseline information on subborrowers. However, additional studies (annual evaluation and project completion report undertaken by) based on random sampling was carried out to analyze the socioeconomic impact of the project.	Same as January 2002.
Schedule 4 Para. 8	Project implementation shall be monitored through standard financial accounting practices describing disbursement of funds, as well as the collection of data on normal client registration and credit application forms of BAAC. This data shall be summarized on a yearly basis for subborrowers	Complied with.	Complied with.

Reference	Covenant	PCR Status (January 2002)	Status (November 2003)
Schedule 4 Para. 9	<p>under the loan and shall (i) describe the major socioeconomic characteristics of subborrowers; and (ii) classify subborrowers by subloan size, subloan type (medium- and long-term) and the use of funds.</p> <p>Benefits of BAAC's lending under the Project shall be assessed through a study of selected subborrowers to be undertaken by BAAC's Monitoring and Evaluation Division. Such study shall evaluate a randomly selected sample of 2% of the subborrowers. This study shall (i) concentrate on estimating the effects of subloans on income generation, increasing the productivity of labor or assets, and employment creation; (ii) generate standard measures of economic impact (such as cost/benefit ratios, net present value and internal rate of return); and (iii) where possible, compare expected financial and economic returns with those actually achieved. The sample used for this study shall also be stratified by region, loan size, subloan type, and major activity undertaken.</p>	<p>Generally complied with. However, only 0.5% of the subborrowers could be evaluated because of the large number of subprojects financed. BAAC was confident that selected sample was representative and the evaluation results are consistent with their own assessment of the overall rural enterprise portfolio.</p>	<p>Generally complied with.</p>
Schedule 4 Para. 10	<p>6. Environmental Aspects</p> <p>BAAC shall</p> <p>(a) ensure that subprojects comply with the requirements of all applicable environmental laws and regulations and use environmentally friendly technology;</p> <p>(b) ensure that the environmental protection of natural resources and the choice of appropriate environmental technologies are included in subproject designs and that such designs are utilized during implementation;</p> <p>(c) within 3 months from the effective date, create an environment unit reporting to a Senior Vice President, which shall be responsible for formulating policies, disseminating best practices to branch officers and overseeing environmental aspects of subprojects financed under the loan;</p>	<p>Complied with.</p> <p>Complied with.</p> <p>Complied with. A Rural and Environmental Loan Division under the Individual Farmer Loan Department has been created.</p>	<p>(Schedule 4, Para. 10 a–e) According to the information provided by BAAC, BAAC continues to comply with these provisions.</p> <p>Complied with.</p> <p>Complied with.</p>

Reference	Covenant	PCR Status (January 2002)	Status (November 2003)
	(d) give due importance to environmental issues during subproject appraisal and supervision, and reflect such policy in its 5-year corporate plan for 1998–2002; and	Complied with. Consistent with all BAAC loans, the subprojects are required to meet the Government's environmental criteria. BAAC has also started a "Green Bank" initiative to mainstream environmental awareness within the organization. A revised and upgraded environmental guideline is likely by end of 2001.	Complied with.
	(e) establish an in-house capability charged with increasing environmental awareness among BAAC's staff and subborrowers, and for developing a capability within BAAC to undertake summary initial environmental examinations for environmentally sensitive subprojects as part of its subloan application procedures.	Complied with.	Complied with.
	7. Financial Matters		
Schedule 4 Para. 11	BAAC shall maintain a total collection rate for the Project, calculated before subloan rescheduling, of at least 80%.	Not complied with. Repayments were delayed by subborrowers in the expectation of the Debt Moratorium Program (DMP).	Complied with. The total collection rate of subloans as of November 2003 is 88%.
Schedule 4 Para. 12	With regard to its overall operations and before the closing date for withdrawals from the loan account, BAAC shall (i) develop clear guidelines concerning the eligibility of potential clients for policy and subsidized loan operations; and (ii) design and implement an improved chart of accounts and a management information system, in order to identify the costs of such operations to BAAC and to improve cost recovery from the guarantor of such operations.	Partly complied with. The design of a financial management information system has been completed and system installation commenced in 2001. Bank-wide implementation is, however, expected to take 2 years. BAAC also has a functional credit information system, financial information system, and credit analysis system. However, these systems are not adequately coordinated for real-time analysis. BAAC is cognizant of the inadequacies in the present management information system and is finalizing a proposal for installation of a "core banking system" for	As of November 2003, a request for proposals for the Cooperative Banking System (CBS) had been completed and vendors invited for program demonstration. CBS is scheduled to be complete and fully functional in FY2005.

Reference	Covenant	PCR Status (January 2002)	Status (November 2003)
Schedule 4 Para. 13	BAAC shall continue to ensure the cost recovery and sustainability of small and cooperative loans of less than B60,000 each by imposing, as necessary, non interest charges, including service charges.	streamlining and integrating the entire information architecture. Complied with during the project period. A service charge of 1% was imposed on all loans to ensure the cost recovery and sustainability of small loans of less than B60,000. From February 2001, interest rates applied to all loans varied between 8% and 12% per year depending on the subborrower's credit rating.	Complied with.
Schedule 4 Para. 14	Within 12 months from the effective date and in consultation with ADB, BAAC shall conduct a study to determine whether to adopt a policy of not recognizing as income the interest accruing after 6 months on loans for rural enterprises for which the payment of interest is overdue by more than 6 months.	The Ministry of Finance and Bank of Thailand have yet to decide on the prudential norms appropriate for BAAC. World Bank technical assistance entitled "Strengthening Supervision of Specialized Financial Institutions" is facilitating the process. The report of the consultants, currently being reviewed, has recommended a full onsite inspection by 31 December 2002 based on the prescribed standards, followed by training and eventual adoption of the recommended standards by September 2003.	Complied with.
Schedule 4 Para. 15	BAAC shall modify its loan provisioning policy by fully providing for bad and doubtful loans within 5 years, instead of the current practice of 10 years.	Not complied with. The Ministry of Finance and Bank of Thailand are currently reviewing the prudential norms appropriate to BAAC as well for other specialized institutions. Technical assistance for the purpose provided by the World Bank is ongoing. Revised prudential norms are expected by mid 2003.	Complied with. BAAC implemented a new provisioning policy by fully providing for bad and doubtful loans within 3 years.
Schedule 4 Para. 16	BAAC shall create a reserve fund to be used exclusively for meeting losses arising from exchange rate variations. Each year during the term of the loan, BAAC shall credit into the	Complied with during project implementation. A reserve fund for foreign exchange losses was set up	Complied with.

Reference	Covenant	PCR Status (January 2002)	Status (November 2003)
	fund an amount equal to 1.5%, or such greater percentage as would be required to cover the anticipated exchange rate losses, of the total amount of outstanding loans. At the end of the year, BAAC shall make adjustments for the actual gains or losses to the fund during such year.	and an amount equal to 2% of the loan outstanding was provided for 1997 and 1998. The Office of the Auditor General, however, recommended that BAAC apply the market rate to loans outstanding at the end of the fiscal year and to realize the gain or loss from exchange rate variations in that operating year.	
Schedule 4 Para. 17	BAAC shall maintain for each fiscal year an equity risk-adjusted assets ratio of not less than 1:12.5 (8%) as required by the Basle Accord on International Convergence of Capital Measurement and Capital Standards.	Complied with. As of 31 March 2001, the capital adequacy ratio was 8.45% as per the prudential norms applied to BAAC. The ratio will be below the required threshold if prudential norms prescribed for commercial banks by the Bank of Thailand are applied.	Complied with.

Sources: ADB. 1997. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kingdom of Thailand for the Rural Enterprise Credit Project*. Manila; ADB. 2002. *Project Completion Report on the Rural Enterprise Credit Project in Thailand*. Manila; and Operations Evaluation Mission findings from the Bank for Agriculture and Agricultural Cooperatives, October–November 2003.

FINANCIAL TABLES

Table A7.1: Balance Sheet
(B million)

Item	FY1992	FY1993	FY1994	FY1995	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002
A. Assets											
Cash	83	165	229	397	741	760	893	1,275	1,549	1,810	2,223
Deposits with Commercial Banks	3,869	7,419	4,701	7,296	5,022	2,623	8,857	2,694	1,690	1,519	1,134
Other Deposits, Payments in Transit	218	80	0	199	60	31	78	57	66	176	183
Total Cash and Bank Deposits	4,170	7,664	4,930	7,892	5,823	3,414	9,828	4,026	3,305	3,505	3,540
Securities:											
Government Bonds	5	840	1,036	110	3,270	25,430	32,300	30,580	21,173	47,629	43,865
Other Securities (e.g. Promissory Notes)	3,130	7,190	11,400	5,717	8,190	0	300	2,500	15,324	5,159	6,757
Total Cash and Investments	7,305	15,694	17,366	13,719	17,283	28,844	42,428	37,106	39,802	56,293	54,162
Loans Outstanding:											
Farmer Clients	66,137	75,608	97,680	127,243	162,640	177,545	192,824	217,690	242,861	259,041	265,317
Agricultural Cooperatives	6,892	7,493	8,305	10,747	14,242	15,759	16,354	15,473	16,053	14,564	14,537
Farmer Associations	193	191	169	180	183	172	173	184	166	107	93
Other Loans	0	0	0	0	0	0	0	5,224	8,320	8,757	9,149
Total Loans Outstanding	73,222	83,292	106,154	138,170	177,065	193,476	209,351	238,571	267,400	282,469	289,096
Less: Loan Loss Provision	3,296	3,679	3,754	3,640	5,100	7,664	10,980	15,109	23,685	37,497	48,091
Net Loans Outstanding	69,926	79,613	102,400	134,530	171,965	185,812	198,371	223,462	243,715	244,972	241,005
Accrued Interest Receivable	3,073	3,775	4,093	4,918	6,414	8,404	10,556	9,279	8,638	10,408	8,987
Account Receivables	0	0	0	0	0	0	0	772	10,431	23,756	43,396
Equity Investments	16	25	25	26	100	125	123	123	123	123	125
Less: Provision for Possible Losses	0	0	0	0	0	0	0	(10)	(31)	(90)	(93)
Net Equity Investments	16	25	25	26	100	125	123	113	92	33	32
Fixed Assets (Net)	2,656	3,002	3,319	4,758	5,200	5,429	5,263	4,977	4,925	4,942	4,753
Other Assets	1,988	7,219	5,301	5,258	6,041	6,796	8,557	972	1,327	2,016	2,948
Total Assets	84,964	109,328	132,504	163,209	207,003	235,410	265,298	276,681	308,930	342,420	355,283
B. Liabilities and Equity											
Deposits (from Public)	37,343	52,218	68,770	91,164	126,271	132,172	165,028	180,564	214,742	262,423	283,685
Interbank Accounts	11,713	7,556	7,570	7,137	3,981	3,611	45	0	0	0	0
Total Deposits	49,056	59,774	76,340	98,301	130,252	135,783	165,073	180,564	214,742	262,423	283,685
Accrued Interest Payable	758	885	1,053	0	1,640	2,376	1,957	1,411	1,304	1,480	1,127
Government Scheme Creditors	0	0	0	0	0	0	0	10,369	10,165	10,072	10,055
Borrowings	26,265	34,642	37,875	42,277	52,741	79,614	67,157	60,283	53,183	39,828	27,997
Other Liabilities	2,429	5,621	7,279	11,660	10,203	10,948	12,675	3,499	7,068	3,593	4,728
Total Liabilities	78,508	100,922	122,547	152,238	194,836	228,721	246,862	256,126	286,462	317,396	327,592
Shareholders' Equity											
Share Capital	3,745	4,958	6,205	7,500	8,953	9,382	11,172	22,768	25,444	25,700	26,014
Supplementary Capital from Government	834	1,034	1,034	1,034	1,034	1,034	10,034	34	34	34	34
Reserves	102	186	310	458	533	622	693	735	820	948	1,102
Retained Earnings	2,526	2,797	3,090	3,067	3,498	3,641	3,461	2,900	3,179	3,351	3,549
Deferred Foreign Exchange Gain/(Loss)	(1,728)	(1,551)	(1,670)	(2,082)	(2,853)	(9,003)	(7,954)	(6,918)	(8,010)	(6,008)	(4,005)
Surpluses on Grants Received	977	982	988	994	1,002	1,015	1,030	1,036	1,001	999	997
Total Shareholder's Equity	6,456	8,406	9,957	10,971	12,167	6,691	18,436	20,555	22,468	25,024	27,691
Total Liabilities and Equity	84,964	109,328	132,504	163,209	207,003	235,412	265,298	276,681	308,930	342,420	355,283

FY = fiscal year.

Source: Bank for Agriculture and Agricultural Cooperatives.

Table A7.2: Classification of Arrears According to Age^a

Year	FY2000	FY2001	FY2002
	(%)	(%)	(%)
1 year	34.76	47.42	43.99
2 years	21.92	16.27	21.90
3 years	19.70	11.84	9.70
4 years	13.24	11.70	7.41
5 years	5.23	7.66	7.89
6 years	2.45	2.86	5.44
7 years	1.17	1.24	2.04
8 years	0.51	0.52	0.91
9 years	0.30	0.25	0.36
10 years	0.71	0.24	0.36

FY = fiscal year.

^aAs a percentage of total arrears for individual farmer loans.

Source: Bank for Agriculture and Agricultural Cooperatives.

Table A7.3: Income Statement
(B million)

Item	FY1992	FY1993	FY1994	FY1995	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002
A. Income											
Interest Income											
Loans:											
Client Farmers	6,673	8,608	8,970	12,182	15,401	19,704	21,187	19,768	16,907	14,935	17,300
Farmer Cooperatives and Associations	663	673	698	793	929	1,191	1,723	1,497	1,160	1,011	921
Total Loan Interest	7,336	9,281	9,668	12,975	16,330	20,895	22,910	21,265	18,067	15,946	18,221
Bank Deposits	188	152	189	191	172	124	203	78	49	39	43
Government Securities and Notes	156	244	668	579	1,014	2,040	2,393	1,444	1,780	2,641	3,237
Total Interest Income	7,680	9,677	10,525	13,745	17,516	23,059	25,506	22,787	19,896	18,626	21,501
Less:											
Interest Expenses on:											
Deposits	3,358	3,584	4,301	6,652	8,279	9,605	10,296	6,055	4,707	4,206	3,470
Borrowings	1,068	1,877	2,110	2,599	2,877	5,222	5,321	3,987	3,488	2,759	1,543
Total Interest Expense	4,426	5,461	6,411	9,251	11,156	14,827	15,617	10,042	8,195	6,965	5,013
Losses from Exchange Rate Fluctuation	169	321	136	190	151	557	550	1,983	1,979	1,168	1,165
Other Expenses	23	76	50	54	62	163	27	31	15	-	222
Total Expenses	4,618	5,858	6,597	9,495	11,369	15,547	16,194	12,056	10,189	8,133	6,400
Net Interest Income	3,062	3,819	3,928	4,250	6,147	7,512	9,312	10,731	9,707	10,493	15,101
Other Income	267	602	706	1,182	1,346	1,607	1,663	1,225	1,127	965	966
Total Income	3,329	4,421	4,634	5,432	7,493	9,119	10,975	11,956	10,834	11,458	16,067
B. Operating Expenses											
Personnel Expenses	1,618	1,812	2,163	2,588	2,889	3,310	3,909	4,094	4,323	5,483	5,487
Provision for Loan Losses	414	441	29	441	1,609	2,779	4,842	5,672	3,752	3,577	8,030
Depreciation	280	327	380	461	543	600	616	592	568	549	503
Other Expenses	352	907	938	849	1,003	1,054	1,406	1,316	1,655	1,295	1,387
Total Operating Expenses	2,664	3,487	3,510	4,339	6,044	7,743	10,773	11,674	10,298	10,904	15,407
Net Profit	665	934	1,124	1,093	1,449	1,376	202	282	536	554	660

FY = fiscal year.

Source: Bank for Agriculture and Agricultural Cooperatives.

Table A7.4: Revenues, Expenses, and Net Profit as a Percentage of Average Loans Outstanding

Item	FY1995	FY1996	FY1997	FY1998	FY1999	FY2000	Average 1995-2000	FY2001	FY2002
Interest Earned on Loans	10.04	9.77	10.46	10.97	9.67	7.49	9.73	6.14	6.59
Interest Earned on Deposits with Other Banks	0.15	0.10	0.06	0.07	0.02	0.01	0.07	—	—
Miscellaneous Earnings	1.36	1.41	1.82	1.97	1.23	1.22	1.50	1.03	1.23
Total	11.55	11.28	12.34	13.01	10.92	8.72	11.30	7.17	7.82
Cost of Funds	7.34	6.80	7.78	7.75	5.48	4.22	6.56	2.98	2.23
Operating Cost	3.97	4.19	4.32	5.15	5.31	4.27	4.54	3.99	5.36
Total	11.31	10.99	12.10	12.90	10.79	8.49	11.10	6.97	7.59
Net Profit	0.24	0.29	0.24	0.11	0.13	0.23	0.21	0.20	0.23

— = not available, FY = fiscal year.

Source: Bank for Agriculture and Agricultural Cooperatives.

**Table A7.5: Bank for Agriculture and Agricultural Cooperatives'
Operating Fund Classified by Source**
(as of end of fiscal years 1998-2002, B million)

Source	1998		1999		2000		2001		2002		Ave. Growth
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
Shareholder Equity	17,712	6.7	20,555	7.4	22,468	7.3	25,024	7.3	27,691	7.8	11.8
Deposits	165,007	62.2	180,563	65.3	214,742	69.5	262,423	76.6	283,685	79.9	14.5
Deposits from Commercial Banks	45	0.0	0	0.0	0	0.0	0	0.0	0	0.0	(100.0)
Borrowings	41,657	15.7	41,783	15.1	41,183	13.3	35,828	10.5	27,997	7.9	(9.5)
Bank of Thailand	1,000	0.4	1,000	0.4	0	0.0	0	0.0	0	0.0	(100.0)
BAAC Bonds	24,500	9.2	17,500	6.3	12,000	3.9	4,000	1.2	0	0.0	(100.0)
Others	15,369	5.8	15,279	5.5	18,537	6.0	15,145	4.4	15,910	4.5	(0.9)
Total	265,290	100.0	276,680	100.0	308,930	100.0	342,420	100.0	355,283	100.0	7.58

Ave. = average, BAAC = Bank for Agriculture and Agricultural Cooperatives.

Sources: ADB. 2002. *Project Completion Report on the Rural Enterprise Credit Project in Thailand*. Manila; and Bank for Agriculture and Agricultural Cooperatives. 2002. *Annual Report 2001*. Bangkok.

Table A7.6: Statistical Highlights
(as of end of fiscal years 1998-2002)

Item	Average 1993–1997	1998	1	2	3	4	5-yr Ave. Growth Rate (%)	Increase/ Decrease from FY2001 (%)
1. Net Profit (B million) ^a	1,196	203	280 ^b	536	554	660	39.62	19.13
2. Number of Provincial Offices and Branches ^c	473	658	659	659	660	664	0.19	0.61
3. Number of Field Offices	848	885	887	887	888	889	0.10	0.11
4. Number of Districts the Branches Served Directly to Client Farmers	818	876	877	877	877	926	1.12	5.59
5. Number of Officers at Branches and Field Offices	10,747	11,634	11,570	11,273	11,492	11,621	(8.98)	1.12
6. Number of Officers at Head Office	1,506	1,555	1,512	1,481	1,463	1,509	(0.92)	3.14
7. Number of Farmers Registered as Branch Clients (households)	3,217,455	3,412,443	3,502,051	3,548,626	3,637,739	3,688,673	1.96	1.40
8. Loans Extended to Client Farmers (B million)	93,355	107,468	124,097	130,365	86,413	93,614	(6.21)	8.33
9. Loans Outstanding to Client Farmers (B million)	128,149	192,823	212,797	214,464	228,065	241,715	5.35	5.98
10. Number of Client Agricultural Cooperatives	863	885	894	897	969	969	2.65	0.00
11. Membership of Client Agricultural Cooperatives (households)	1,259,004	1,443,398	1,483,058	1,547,221	1,567,601	1,567,601	2.23	0.00
12. Loans Extended to Agricultural Cooperatives (B million)	15,705	19,919	22,100	23,859	21,334	26,974	5.88	26.44
13. Loans Outstanding to Agricultural Cooperatives (B million)	11,309	16,354	15,473	15,487	14,076	14,170	(3.74)	0.66
14. Number of Client Farmer Associations	339	258	258	253	234	234	(2.89)	0.00
15. Membership of Client Farmer Associations (households)	48,799	23,083	21,562	18,489	13,709	13,709	(13.88)	0.00
16. Loans Extended to Farmer Associations (B million)	40	51	70	120	30	34	(15.28)	13.33
17. Loans Outstanding to Farmer Associations (B million)	179	173	183	154	96	93	(17.19)	(3.12)

Ave. = average, BAAC = Bank for Agriculture and Agricultural Cooperatives, FY = financial year, yr. = year.

^a Net profit less bonuses paid to the board of directors and employees.

^b The discrepancy from the comparable net income figure in Table A7.3 is due to rounding off.

^c Includes provincial offices, branches, small branches, mini-branches, and subbranches since FY1998. In 2003, BAAC had 667 branches.

Sources: ADB. 2002. *Project Completion Report on the Rural Enterprise Credit Project in Thailand*. Manila; and BAAC. 2002. *Annual Report*. Bangkok.

Table A7.7: Repayment Rate^a

Lending Category ^b	FY1995	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001 ^c	FY2002 ^c	FY2003
Short Term	88.09	89.77	86.85	81.26	83.18	86.67			
Medium Term	84.57	84.89	78.35	67.90	65.38	66.69			
Cash Credit Lines	86.25	87.22	82.47	74.87	76.27	80.08			
Long Term for Refinancing Prior Debt	59.64	50.75	41.03	27.65	23.94	24.78			
Long Term for Investment in Agriculture	78.13	79.03	70.20	58.25	59.22	67.77			
Loans for Agriculture-Related Activities (enterprises) of which for subprojects	91.60	90.19	81.90	68.63	68.97	69.66 71.87			
Overall	86.07	87.17	82.61	74.67	75.06	78.22	83.60	80.79	85.76

BAAC = Bank for Agriculture and Agricultural Cooperatives.

^a Collection as a percentage of amount due.

^b For individual farmer loans.

^c Since FY2001, BAAC has stopped publishing data on the various lending categories.

Source: BAAC.

Table A7.8: Credit Services Implemented in Response to Government Policy
(as of 31 March 2003; amounts in B million)

Project	Initial Year of Operation	Targeted Loan Amount	No. of Farmers Enrolled in Project	Principal Outstanding Brought Forward	Loan Disbursements During the Year	Accumulated Loan Disbursements	Loan Repayments During the Year	Accumulated Loan Repayments	Principal Outstanding	Repayment Rate for the Year (%)
1. Agricultural Rehabilitation Plan, 1992/1993	1992	3,948.30	107,526	1,473.60	0.07	3,684.96	85.85	2,297.14	1,387.81	5.83
2. Agricultural Rehabilitation Plan, 1994	1994	1,600.00	42,644	498.50	0.08	1,346.70	51.77	899.89	446.80	10.38
3. Agricultural Rehabilitation Plan, 1995	1995	2,498.00	21,523	726.40	0.05	1,665.31	92.48	1,031.34	633.97	12.73
4. Agricultural Rehabilitation Plan, 1996	1996	1,080.34	25,744	296.82	0.00	656.46	47.70	407.34	249.12	16.07
5. Agricultural Restructuring Plan , 1994	1994	5,251.00	72,422	2,234.11	0.26	3,504.91	202.01	1,472.55	2,032.36	9.04
6. Agricultural Restructuring Plan , 1995	1995	7,273.01	53,858	3,202.83	0.48	4,225.35	240.83	1,262.87	2,962.48	7.52
7. Agricultural Restructuring Plan , 1996	1996	2,924.36	21,736	1,687.19	0.51	2,025.99	121.19	459.48	1,566.51	7.18
8. Agricultural Restructuring Plan , 1997	1997	186.38	836	130.86	0.15	187.05	13.84	69.88	117.17	10.56
9. Substitution of Beef Cow Production for Cassava Pilot Project	1993	36.00	400	30.84	0.06	35.24	1.02	5.36	29.88	3.30
10. Substitution of Perennial Tree Production for Cassava Pilot Project	1993	15.00	135	3.05	0.00	4.50	0.15	1.60	2.90	4.94
11. Chao Phraya Basin Agricultural Restructuring Project	1993	29.00	514	10.89	0.00	25.28	1.47	15.86	9.42	13.51
12. Field Level Water Source Development Project	1993	20.27	1,805	0.37	^a 0.00	8.59	0.06	8.28	0.31	16.88
13. Loans for the Postponement of the Sale of Produce Project	1987–2001	—	2,327,535	16,485.77	33,110.24	125,750.71	39,320.25	115,474.93	10,275.76	79.28
14. Paddy Threshing and Harvesting Machine Project	1998	400.00	45	13.04	0.00	46.98	9.82	43.76	3.22	75.28
15. Revolving Fund for Official Teachers' Problem Solving Project	1998	600.00	7,399	683.55	332.14	1,295.85	168.99	449.15	846.70	16.64
16. Farmer Persuasion for Cassava Root Production Slowdown Project	2000	3,276.00	10,748	71.14	0.00	467.67	6.10	402.63	65.04	8.57
17. Informal Loan Problem Solving Project under BAAC's Regulation No. 16 & the Government's Policy Phase 1	1994	1,620.00	8,084	710.55	0.00	1,333.95	71.21	694.61	639.33	10.02
18. Informal Loan Problem Solving Project under BAAC's Regulation No. 16 & the Government's Policy Phase 2	1994	1,000.00	243	24.47	0.00	31.65	2.30	9.48	22.18	9.38
19. Informal Loan Problem Solving Project of the Office of the Prime Minister, 1985	1985	—	863	17.35	0.03	27.03	2.25	11.90	15.12	12.97
20. Informal Loan Problem Solving Project of the Office of the Prime Minister, 1990	1990	—	883	43.92	0.19	94.69	4.21	54.79	39.91	9.54
21. Informal Loan Problem Solving Project of the Office of the Prime Minister, 1993	1993	—	13,564	1,280.43	71.48	1,678.62	99.20	425.91	1,252.71	7.34
22. Fertilizer Providing Assistance for Farmer Project	1992–1998	—	—	3.22	0.00	3,131.69	0.94	3,129.41	2.28	29.14
23. Land Fund Project	2001	—	3,377	1,347.87	23.86	1,474.39	3.62	106.28	1,368.11	0.26
Total		31,757.66	2,721,884	30,976.77	33,539.60	152,703.57	40,547.26	128,734.44	23,969.09	62.85

— = not available, BAAC = Bank for Agriculture and Agricultural Cooperatives, no. = number.

^a Account adjustment for credit project implemented in response to government policy.

Source: BAAC.

BORROWER'S TABLE OF SELECTED SUBLOAN RESULTS

Subproject	Subproject Category ^a	FIRR %	EIRR %	IREQ %	Value of Assets (B'000)	RECP Subloan (B'000)	Equity Contrib'n (B'000)	Subloan as % of:			Projected:				
								W/out Proj Assets	W/out Proj Income (B'000)	Subproject Income (B'000)	Subproject Assets	Subproject Income as % of: W/out Proj Income			
Successful:															
A	Rubber Marketing	2	54	71	176	3,700	1,090	500	29	69	120.0	1,000.0	27	63	833
B	Pig Marketing	2	73	89	129	1,600	230	170	14	58	30.0	300.0	19	75	1000
C	Furniture-Making	3	70	57	85	845	27	23	3	54	50.0	125.0	15	250	250
D	Threshing Machine	4	32	42	67	1,175	100	50	9	67	50.0	50.0	4	33	100
E	Rubberwood Logmill	1	38	48	62	13,150	500	1,000	4	33	250.0	500.0	4	33	200
F	Tractor Service	4	24	39	34	5,500	320	80	6	80	250.0	200.0	4	50	80
G	Tractor Service	4	21	29	31	4,595	180	280	4	39	100.0	80.0	2	17	80
H	Longan Drying Plant	1	14	21	18	3,400	250	100	7	71	150.0	71.3	2	20	48
Partly Successful:															
I	Threshing Machine/ Livestock Breeding	4	5	10	5	3,100	150	190	5	44	70.0	50.0	2	15	71
J	Combine Harvester	4	4	10	3	8,800	1,400	280	16	83	220.0	240.0	3	14	109
Average Values			33.5	41.6	61.0	4,586.5	424.7	267.3	9.7	59.8	129.0	261.6	8.0	57.1	203

ADB = Asian Development Bank, BAAC = Bank for Agriculture and Agricultural Cooperatives, EIRR = economic internal rate of return, FIRR = financial internal rate of return, IREQ = internal return on equity, Proj = project, RECP = Rural Enterprise Credit Project, W/out = without.

^a The subproject category includes agroprocessing, marketing, cottage industry, and farm services.

Source: BAAC.

KEY ISSUES FOR THE FUTURE

A. The Shifting Role and Direction of the Bank for Agriculture and Agricultural Cooperatives (BAAC)

1. The Extent and Distribution of Funds Recycled by the Bank for Agriculture and Agricultural Cooperatives

1. After the Asian financial crisis beginning in 1997, BAAC changed the composition of its funding sources drastically. BAAC raised its dependence on deposits from 62.2% of total operating funds in FY1998 to 79.85% in FY2002 (Appendix 7, Table A7.5) because of excess domestic liquidity, shaken confidence in private financial institutions, and volatility of the baht. BAAC lowered its cost of funds by prepaying local and foreign borrowing, and reduced exchange risks by prepaying foreign loans. BAAC has become increasingly self-reliant. The ratio of deposits from the general public to total loans jumped from 80% in 2000 to 93% in 2001 and 98% in 2002.

2. BAAC shifted its credit policy in the late 1970s toward retail lending because of frequent and severe problems in lending to agricultural cooperatives. Attention turned toward farmers organized in small, joint-liability groups because this yielded closer monitoring and better retrieval of funds. Wholesale lending through cooperatives dropped from 70% of total lending in the 1970s to only 6% in 2001. Because of this shift, BAAC's interest income from individual clients rose from 68% of total interest income from loans in the 1970s to 91% in 1992 and 95% in 2002. Interest income from cooperatives and associations declined from 32% in the 1970s to 9% in 1992 and 5% in 2002.

3. In 1992, BAAC received permission to broaden its credit extension to cover farm-related activities. As a second step, in 1999 the Government approved an amendment to the BAAC Act¹ to allow lending to nonfarm activities of up to 20% of the total portfolio.

4. Since March 2001, as part of the Social Support Project,² BAAC has been reviving wholesale lending with the objective of developing "groups" of clients. BAAC will experiment with this community master plan at 25 branches in 9 provinces. The rationale for wholesale or group lending is that (i) it will ease tasks of credit officers in attending to clients; (ii) loan risks within each group can be pooled; (iii) experiences of group members will also be instructive to each other; (iv) savings of group members will be tapped and used as capital funds matching credit extension; (v) the method will give BAAC a better access to information and lower prices of commodities or credits in negotiation; and (vi) BAAC can utilize these community enterprise credits or group lending as an opportunity to provide more than credit (e.g., advice on production, accounting, marketing, and management) to customers in agriculture and related activities. In short, group lending could be promising for BAAC.

¹ The BAAC Act of 1966 established BAAC as a government-owned agricultural development bank. Its mandate has been to provide agricultural credit to farm households and agricultural cooperatives. After decades of operation, BAAC has gradually changed from a specialized agricultural lending institution to a more diversified rural bank, providing a range of financial services to rural areas. The BAAC Act has been gradually amended to reflect this change.

² The Social Support Project has been a BAAC project to create wholesale banking relationships with groups of clients. The underlying basis of this project is that rural residents should be assisted with means other than money to cope with the financial crisis and its aftermath. The Social Support Project follows experiences of similar agencies around the world by providing support other than credit to groups of rural people.

5. At the end of 2003, BAAC planned to undertake group lending and a number of prospective groups had already filed applications. Once pursued, group lending will require personal guarantee, instead of collateral, from group committees. Each group loan will not exceed B500,000 and the interest rate that BAAC requires will depend on the group's credit rating. Groups with grades 1, 2, and 3 will be charged interest rates of 5.5%, 6%, and 6.5%, respectively. Typically, group lending will be repaid and rolled over in 1–1.5 years, since the credit is meant to be used or relent to group members as revolving funds or working capital. BAAC plans to put group lending into effect by the middle of 2004.

6. BAAC has been impressively alert and innovative in adjusting its sources and uses of funds, but the bank remains faithful to short-term lending as a primary credit format, and prefers working capital loans (or following agricultural harvesting schedules) to long-term investment loans. BAAC extended more working capital credit than it did investment-term loans after 1997 (70:30) than it did before (60:40). Although BAAC may cite several reasons (demand for short-term funds, volatility in money and exchange rate markets), long-term investment projects are inevitable for their comprehensive rural development approach.

2. Dispersion of Branches and Services

7. BAAC has expanded its services in several fashions. For example, they have provided more mobile units accepting deposits, life insurance, accidental insurance, and organizing teleconferences among regional branches to provide new knowledge on production and marketing. Appendix 7, Table A7.6 shows that although the ratio of served districts to branches remained at 1.3 throughout 1998–2002, the ratio of branch clients to branch officers grew from 293 in 1998 to 317 in 2001–2002. The BAAC savings product that has recently attracted strong public attention is the 3-year savings bond (*thawi sin*), which carries an interest rate of only 1.33% per annum but also quarterly prize drawing. This savings program was supported by the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ, or the German Agency for Technical Cooperation).

8. Two points should be noted about the BAAC deposit profile. First, 47% of deposits come from institutions, as there is a rule requiring that local government offices keep their budget funds at state financial institutions. This could create volatility problems depending upon budgetary allocations and expenditures. Second, while a majority of accounts (97%) belong to the low-income segment (below B50,000 per account), these accounts generated only 36% of total deposit volume. In contrast, a few large depositors (0.1% of all clients) held up to 24% of total deposit volume. This concentration has increased after 1997, indicating that a number of investors have resorted to BAAC as a safe haven. As these funds are highly volatile, BAAC need to be aware of the liquidity risk from sudden withdrawals.

3. Diversification of Services and Customer-Oriented Products

9. Since 2001, BAAC has paid greater attention to fee-based services, like private commercial banks after the financial crisis. But while private banks focused on urban and better-off rural customers, BAAC targeted the rural poor with its extensive branch network. Examples of fee-based income products are life insurance, accidental insurance, interbranch money transfers, bill payment, and funeral funding.

10. BAAC has given strong emphasis in numerous staff training programs to the issue of accommodating customer needs. For instance, BAAC trained more than 10,000 of its staff in 1997–2000 and established a service-oriented mindset. Implementing this service culture

yielded positive results in an annual performance appraisal by the Thai Rating and Information Services: 90–95% of BAAC clients are satisfied or very satisfied with BAAC services. BAAC continues this training program focusing on service culture, competency, cash-flow-based lending techniques, and interview skills. BAAC has also implemented cash-flow-based lending to a growing proportion (now 10%) of total lending, instead of requiring collateral. GTZ and the European Union assisted in offering microcredit to small nonfarm enterprises. Client training was used to improve client relationships and enhance borrowers' repayment capacity.

4. Decentralization and Technological Advancement

11. BAAC has decentralized its authority, operations, and responsibility. Both management and decision-making have been decentralized and branch managers have more authority. They can approve loans of up to B1 million (\$25,000) and the provincial directors have a loan approval authority of up to B3 million (\$75,000). As 98% of all loans extended by BAAC are generally below these ceilings, lending decisions are almost completely in the hands of the branch managers. The statistics in Appendix 7, Table A7.6 reveal that notwithstanding practically the same number of field offices (888–889) in 2001–2002, the number of districts that branches served directly to client farmers rose from 877 in 2001 to 926 in 2002. Unsurprisingly, the loans extended to individual clients climbed 8.3% in 2002.

B. Sustainability of the Bank for Agriculture and Agricultural Cooperatives and Rural Financing

1. Profitability, Asset Quality, and Efficiency

12. BAAC's FY2002 net profit rose 19% from the level in FY2001 to its highest level since the 1997 financial crisis (Appendix 7, Table A7.3). The entire increase of expenses in FY2002 was a result of provisions for loan losses. However, when one screens consolidated revenues, expenses, and net profit as a percentage of the average of total loans outstanding in FY1998–2002 (Appendix 7, Table A7.3), the results may be less optimistic. Compared with the average of the preceding 4 years (1998–2001), the profit increase in FY2002 (+0.06%) was the outcome of a reduction in total expenses (2.25%) exceeding a reduction in total income (2.19%). Examining the composition of expenses, one could see that the fall in FY2002 expenses was a result in a decrease in the cost of funds (-2.90%). This was largely attributed to short-term excess liquidity in both domestic and global money markets. On the other hand, operating costs in FY2002 rose (0.65% above the 4-year moving average) to a 5-year high of 5.36% of the average loan outstanding. This combination means that better profitability in FY2002 is unlikely to be sustainable as higher interest rates erode the primary driver of profit growth in FY2002.

13. Two other points on the income statement (Appendix 7, Table A7.3) deserve attention. First, the 40% leap of total income in FY2002 was a result of government assistance for clients registered in the Debt Moratorium Program (DMP). Under the DMP, the Government compensated BAAC for clients' unpaid interest payments. Second, this DMP partly explained the recovery of repayment to 84% in FY2001 and 81% in FY2002 (Appendix 7, Table A7.7), since a condition of the DMP was for debtors to repay their existing principal obligations to BAAC. Nevertheless, these figures in Appendix 7, Table A7.7 also reflect better debt servicing capacity by BAAC's healthy clients. This recovery means that BAAC can now comply with the loan covenant that states that BAAC must maintain a total collection rate of at least 80%. Whether a collection rate of 80% will be sustainable depends on factors such as weather, crop production, market conditions, global competition, and prices.

14. On stability, BAAC was able to expand its capital adequacy from 7.3% in FY2001 to 7.8% in FY2002 (Appendix 7, Table A7.5) even though it dramatically increased loan-loss provisioning (Appendix 7, Table A7.3). BAAC is targeting a capital adequacy ratio of 8.5%. The capital adequacy ratio was adopted after the 1997 crisis as another component of prudential requirements. BAAC has tightened its asset classification and loan loss provisioning, mandating provisioning of 40%, 70%, and 100% for debts overdue by less than 1 year, less than 2 years, and more than 2 years, respectively. This compares with a previous policy under which a provision of 10% was set aside for the first year overdue and another 10% was added every year until the tenth year. The new rule has been implemented since FY2003/04. BAAC headquarters has informed all regional branches and the midyear aggregate record in September 2003 shows compliance. In other words, BAAC is trying to improve its asset quality, and the repayment rate augurs well. The change in loan-loss provisioning is not expected to adversely affect the financial conditions of BAAC, as bad debts will be gradually written off over 3 years.

15. What is more promising is efficiency and staff productivity. While asset quality improves, BAAC's ratio of loans extended to loan officers employed sprung back from 7.5 in FY2001 to 8.1 in FY2002 (Appendix 7, Table A7.6). Each BAAC officer was serving more clients, as the ratio of branch clients to officers grew steadily from 293 in 1998 to 317 in 2002.

2. State Subsidies and New Pricing Policy

16. BAAC is trying to develop a new risk evaluation system to accompany its new risk-based pricing policy by examining five issues: borrowers' operations, strategy, marketing, liquidity, and credit. These issues are considered at the same time since they are equally important determinants of debt service capacity. For instance, operational efficiency helps enhance competitiveness. However, borrowers' business prospects also depend on their marketing plans, liquidity support, and existing credit lines. Overall, borrowers should have reasonable strategies of business establishment, penetration, and expansion. Some 38 indicators have been experimented which cover these five areas, but no solution has been reached yet. In the past, BAAC branches have lacked staff capable of evaluating borrower risk. However, BAAC's Audit and Inspection Department has given clients direct access. This should help assess operation risks and actual uses of funds. The Audit and Inspection Department still has to develop the risk evaluation methods appropriate to a rural development bank's broad needs.

C. The Role of State Financial Institutions in Agricultural and Rural Development

1. Provision of Accommodative Knowledge and Services

17. In the past 2 years, BAAC made efforts to strengthen agricultural marketing cooperatives (AMCs) in several aspects:

- (i) created an AMC network by cooperating with groups of producers and consumers;
- (ii) collaborated with AMCs and fruit exporters in search of markets in the People's Republic of China;
- (iii) linked production and marketing to avoid a glut and plunging prices; and
- (iv) coordinated effective uses of resources within local communities (e.g., formulating local rice markets in Ratchaburi Province to interlink producers, transformers, and consumers).

2. Systematic Coordination Among State Financial Institutions

18. Historically, the Government Savings Bank (GSB) was known for collecting deposits while BAAC for its credit programs. The Government is currently trying to encourage cooperation among the various state financial institutions (SFIs). Examples include

- (i) participation in monthly meetings,
- (ii) sharing information about clients and markets,
- (iii) referring clients to each other, and
- (iv) formulating syndicated loans for large borrowers.

19. The latest promising effort of collaboration was between SFIs and the post offices. Post offices can serve as stations where numerous financial transactions can be executed—including deposits, disbursement, and repayment of funds—as long as they are standardized with respect to regulations and proper identification. Long-distance telecommunication or linkage is a primary post office interest, so increasing cooperation with SFIs will definitely create mutual benefit.

20. Coordination among SFIs is challenging since each has different expertise, branch locations, influences, and customer relationships. However, they all share one characteristic that is different from private commercial banks: all SFIs care about economic development plus profit maximization. The Ministry of Finance encourages SFIs to cooperate by exploiting each other's branch networks. One plan the Ministry of Finance is considering is having BAAC focus on rural areas and GSB on urban ones. Other sources told the Operations Evaluation Mission (OEM) that BAAC, GSB, and the Small and Medium-Sized Enterprise (SME) Bank can participate in supply chain cooperation, where BAAC provides support in production, SME Bank in processing or transformation, and GSB in marketing. It should be noted that neither the "rural/urban" nor "supply chain" format of cooperation has formally taken place but informal cooperation is already happening.

21. During implementation of the Rural Enterprise Credit Project (RECP), some of these aspects were handled better than others:

- (i) **Need for an improved rural enterprise classification system.** The recommended system comprising 15 types of enterprise within four broader categories was adopted and used by BAAC. The system seems satisfactory, but BAAC's records for 43,160 short-term subloans granted as rural enterprise working capital (58.5% of the total value of RECP subloans disbursed) and 12,392 other subloans (18.7% of the total value) were not appropriately classified according to the system. Because there is no fully integrated database on BAAC's loan portfolio, it is impossible to break down the data on RECP financing by type of enterprise without going back to branch and sub-branch records. BAAC faced the same problem when performing evaluation surveys for the project in 1998 and 1999, even though there was then a better chance of finding relevant field-level records than there would be now. This highlights BAAC's continuing need for an improved management information system (MIS).
- (ii) **Subloan appraisal techniques to be improved through creation of a credit department within the Bank for Agriculture and Agricultural Cooperatives and provision of special training for credit officers in appraisal and supervision of rural enterprises.** Both actions were taken under the Project, but results were limited by the shortened project duration. The OEM heard frequently that most BAAC credit officers still need more training in rural

enterprise appraisal and monitoring,³ especially in estimating the impact of nonagricultural enterprise lending on household income and cash flow. There also seems a need to develop greater awareness of market risk, and of ways to help borrowers obtain better market information. BAAC has to follow commodity development policies set by the Ministry of Agriculture and Cooperatives but should be careful not to overpromote particular products where market demand is inelastic and a glut ruins the market for everyone. If BAAC plans to lend to local government (e.g., to the *tambon* or village administration organizations and village funds) then it also needs to train some staff to appraise small-scale infrastructure and community projects, an area outside BAAC's area of traditional competence.

- (iii) **Onsite supervision of subloans to be carried out more frequently.** Considerable effort is put into organizing regular visits to clients with problem projects or those enrolled in DMP. However, with an average of 400–500 active clients, the business development officers (BDO) cannot visit them all regularly. BAAC frequently claimed that BDOs spend at least 3 days per week visiting clients, but the OEM felt they relied too much on office meetings and group meetings in the village where it can be awkward to address individual problems. BAAC's credit department should focus on practical solutions: firstly, it should follow closely the experiences of the European Union-funded Social Support Project and the GTZ-funded Microfinance Linkage Project in introducing group microcredit to extend outreach to smaller borrowers economically and effectively. Another possible solution might be to promote the use of simple personal digital assistants (PDAs) to help BDOs access and update client information without having to find, use, and then re-file client records currently in use. A third recommendation would be to improve compensation to BDOs who use their own transport to visit clients. BAAC's frontline staff needs to maintain direct client contact and not to become office-bound, which would be fatal to BAAC's mission.
- (iv) **Bank for Agriculture and Agriculture Cooperatives' monitoring and evaluation needed to be further strengthened.** The technical assistance (TA) accompanying the Small Farmer Credit Project (SFCP) provided some training for evaluation officers, but no further assistance or training was provided to strengthen evaluation under the RECP or its TA. The project completion report (PCR) noted that "While the inflexibility of the MIS vis-à-vis subloan monitoring and evaluation were recognized, no support was built-in to adequately address the issue." Since BAAC's evaluation division could not fulfill its obligations and lacked support from other sources, the absence of such support under RECP was a shortcoming.
- (v) **Appropriate guidelines for environmental assessment yet to be formulated.** BAAC revised its environmental guidelines with help from the National Environment Board, and these are now used to judge subprojects that provincial credit committees feel present an environmental risk. This is a good start and BAAC now helps to spread environmental awareness among Thailand's rural population and tries to screen out environmentally risky subprojects.

³ Credit officers are now called business development officers (BDO) to underline their responsibility for developing new lines of business.

- (vi) **The success in targeting women under the Small Farmer Credit Project should be continued and strengthened in future lending operations of the Bank for Agriculture and Agriculture Cooperatives.** The OEM cannot judge how successful the targeting of women was, but the mission learned there was a difference of opinion on this issue between the Asian Development Bank and BAAC. BAAC told the OEM that there was no need to target women borrowers because Thai women faced few cultural constraints in business, as evidenced by the fact many of them are successful entrepreneurs. BAAC did not consider it useful to record subloan data by gender, but women participate extensively as borrowers or co-owners of rural enterprise subprojects—especially for marketing and cottage industry—and as savers. BAAC could try to make its products more appealing to women. It could also try to recruit and/or promote more women credit officers and branch managers, positions which appear to be male dominated. This could be more useful than the "best efforts" clause in RECP to target at least one-third women clients.

MANAGEMENT RESPONSE ON THE PROJECT PERFORMANCE AUDIT REPORT (PPAR) ON THE RURAL ENTERPRISE CREDIT PROJECT IN THAILAND (LOAN 1540-THA)

On 2 November 2004, the Director General, Operations Evaluation Department, received the following response from the Managing Director General on behalf of Management:

“The 13 October 2004 OED memo on the report requested Management’s response. We have reviewed the report and found its findings consistent with the project completion and associated technical assistance completion reports. We appreciate that OED consulted with ADB departments and held detailed discussions in preparing its report. Specifically, MKRD was given the opportunity to review and comment on the draft report.

Management and staff support the key lessons and follow-up actions, as well as key issues for the future, identified in the PPAR and will take them into account for similar interventions in the future. The most important lessons are the need for higher loan-loss provisioning for non-performing loans and safeguards against unanticipated financial crises (para. 66 of the report). In this context, the TA (2953-THA) accompanying the loan project recognized these weaknesses at the outset and assisted the Bank for Agriculture and Agricultural Cooperatives (BAAC) in developing and introducing appropriate risk management policies and procedures to mitigate against non-performing loans and market risk and to undertake financial reforms to bring its operations closer to international standards. Very short but critical assistance was provided, including training of staff to strengthen BAAC’s capacity to undertake lending for rural enterprises. This assistance was timely and BAAC was prepared when the crisis occurred. These are reflected in the findings of the PPAR (para. 49).

Quick response of Management and staff to changes in the Project’s lending criteria mitigated the negative impact of the crisis on BAAC’s financial position while meeting the urgent requirements of the subborrowers for shorter-term loans to keep afloat. Because of this the number of enterprises that benefited from the loan exceeded the appraisal estimate (65,000 subprojects vs. 54,000 subprojects). As well, because of the timely implementation of the debt moratorium program (DMP) and close supervision thereafter, on-time repayment reached 85% or pre-crisis level which insulated BAAC from another financial crisis. Overall, because of the risk-management training provided to BAAC under the TA and BAAC’s “impressively alert and innovative (ways) in adjusting its sources and uses of funds” (Appendix 9, para. 6 of the report), BAAC successfully took action against liquidity and credit risks that arose during the crisis. Notwithstanding this success, it remains a truism, which the PAR emphasizes under Key Issues for the Future, that “long term investment projects are inevitable for their comprehensive rural development approach” (Appendix 9, para. 6 of the report). The key issues and lessons learned are very relevant and will be taken into account in the design of new initiatives in the sector.”