

XII RURAL FINANCIAL MARKET DEVELOPMENT IN THAILAND: MAXIMIZING OUTREACH, MINIMIZING SUBSIDIES

OVERVIEW OF THE FINANCIAL SYSTEM

State officials in Thailand have intervened in the economy and the financial sector to a lesser degree than in most other Southeast Asian countries. The monetary authorities have generally maintained positive interest rates, mandated few credit allocation requirements, and imposed only loose controls on international capital movements. State-owned financial institutions have played only a modest role in the banking system (Doner and Unger, 1993). The banking sector, however, has been given considerable protection from competition, and the agricultural sector has benefited from a long history of special credit policies and subsidies. The crisis beginning in 1997 revealed considerable financial sector weaknesses that are being addressed through policy and institutional reforms.

Until the late 1980s, the central bank's (Bank of Thailand, BOT) banking policy focused largely on the stability and solvency of financial institutions and the use of credit instruments to promote agriculture and exports. Occasionally, the BOT promoted competition and reduced concentration among the commercial banks, but simultaneously maintained policies that reduced competition as a way to support the solvency of weaker banks. Commercial banks were encouraged to cooperate on interest rates by creating in effect a cartel because

of the fear that price competition for deposits would drive up interest rates and threaten the solvency of smaller banks. Existing banks were protected from competition by the refusal of the authorities to issue new licenses for additional domestic or foreign banks (Muscat, 1995).

Historically, financial operations in Thailand were subject to interest rate ceilings on both deposits and loans, to regulations on portfolio and branching, and to various types of compulsory credits. Deregulation was first undertaken in a gradual way, beginning with interest rate reform after the second oil shock (1979–1980). The ceiling on lending rates was raised from 15 percent to a level deemed appropriate by the Ministry of Finance. The ceiling rate on term deposits with maturity greater than one year was lifted in 1989 followed by the abolition of ceilings on all time deposits in 1990. The cap on savings deposits was removed in 1992 and all interest rates were liberalized except for agriculture (Vichyanond, 1995). These and other major policy changes are listed in Table XII.1.

The BOT implemented a reform plan in the 1990–1992 period that further deregulated interest rates, relaxed portfolio requirements and foreign exchange controls, improved the supervision and examination system, adjusted capital requirements, promoted financial innovations, and improved the payments system. The second three-year BOT plan beginning in 1993 focused on savings mobilization, development of the country into a regional financial center, and improvement of the central bank's operations (Vichyanond, 1995). Liberalization of the financial system without appropriate regulatory safeguards, however, contributed to the country's currency and financial crisis in 1997.

Growth of the total financial system has been impressive as measured by the broad money supply (M_2) and total assets of financial institutions (TAFI) shown in Table XII.2. The banking sector grew steadily from 1977 to 1986 as M_2 /GDP rose from 37 to 59 percent while TAFI/GDP grew from 64 to 99 percent. Growth accelerated thereafter and by 1992 the two ratios reached 79 and 139 percent, respectively. The rapid

Table XII.1: Selected Financial Policy Changes in Thailand

Year	Policy
1966	Creation of BAAC
1967	BOT is authorized to rediscount promissory notes arising from agricultural transactions
1971	BOT begins to discount notes for agricultural marketing loans
1975	BOT adopts a quota system in which 5 percent of commercial banks' loans should go to agriculture. Rural branches of commercial banks directed to provide credit equivalent to at least 60 percent of deposits in the local area with one third mandated for agriculture
1976	Commercial bank lending to agriculture set at 7 percent of 1975 deposits
1977	Agricultural quota set at 9 percent of 1976 year-end deposits
1977	Bank branches are required to lend at least 60 percent of their local deposits in the local market area and at least one third must be lent to farmers
1978	Quota set at 11 percent of 1977 year-end deposits
1979-1980	Ceiling on lending rates raised
1987	Broadening of definition of agricultural activities to include small-scale rural industries
June 1989	Lifting of interest rate ceilings on term deposits with maturity greater than one year
March 1990	Removal of interest rate ceilings on time deposits
May 1990	Lifting of foreign exchange controls on current account transactions
January 1991	Broadening rural credit to include wholesale trading and regional industrial estates
January 1992	Removal of interest rate ceilings on savings deposits
June 1992	Removal of interest rate ceilings except on mortgage lending to low-income households
1992	Broadening of rural credits to include credit for farmers' secondary occupations and farm exports
March 1993	Establishment of Bangkok International Banking Facilities

Sources: Meyer, Baker, and Onchan (1979); Vichyanond (1995); Sacay, Randhawa, and Agabin (1996); Vajragupta and Vichyanond (1998).

growth of the economy as well as financial liberalization contributed to these trends (Vichyanond, 1995).

Commercial banks, the majority of which are privately owned, dominate the financial sector. Historically, they accounted for some 70 percent of the total assets of the financial system. Bank concentration is quite high and major banking families control the dominant banks (Donor and Unger, 1993). The five largest commercial banks owned 55 to 70 percent of

Table XII.2: Financial Deepening: M₂, TAFI, and GDP
(B Billion)

	1977	1980	1983	1986	1989	1992
M ₂	151.1	251.8	450.5	672.8	1,207.1	2,123.0
TAFI ^a	257.6	449.6	758.5	1,123.2	2,022.3	3,716.7
GDP	403.5	662.5	921.0	1,133.4	1,856.5	2,671.4
M ₂ /GDP (percent)	37.4	38.0	48.9	59.4	65.0	79.5
TAFI/GDP (percent)	63.8	67.9	82.4	99.1	108.9	139.1

^a TAFI: total assets of financial institutions.

Source: Vichyanond (1995, p. 310).

total commercial bank assets from 1962 to 1990. In 1990, they had 64 percent of the branches and mobilized almost 73 percent of total deposits.

An important feature of Thailand's financial history has been the relative autonomy of the BOT and its ability to restrain the growth of preferential or directed credit, with agriculture being the primary exception. In spite of the import substitution strategy in the 1960s, the manufacturing sector relied on foreign and domestic financial resources without receiving directed credit. Commercial banks functioned largely as merchant banks financing trade and domestic distribution of imported manufacturing goods. The share of manufacturing in total commercial bank credit rose slowly from 10 to 25 percent during 1958–1990, while the foreign trade share declined from 37 to 11 percent (Table XII.3).

Table XII.3: Allocation of Commercial Bank Credit by Selected Sectors, 1958–1990 (percent)

Sector	1958	1966	1974	1979	1983	1988	1990
Foreign trade	37.0	30.4	29.5	26.2	16.2	13.6	10.7
Domestic trade	16.8	15.5	21.1	22.4	24.6	18.9	17.6
Manufacturing	10.1	16.3	18.5	17.3	21.5	25.8	25.1
Construction and real estate	7.3	13.8	9.3	8.1	8.3	10.6	15.9
Agriculture	3.4	3.8	1.9	5.4	7.4	6.6	6.7

Source: Doner and Unger (1993, p. 105).

Government regulators in Southeast Asia have generally not regulated nonbank financial institutions as closely as commercial banks. Thailand faced major insolvencies in the 1980s and, at a cost of \$190 million (about 0.48 percent of GNP), bailed out 50 finance companies that collapsed because of fraud and speculation on real estate and exchange rate transactions. The Government liquidated some finance companies, merged others, and sold some to new investors (Stiglitz and Uy, 1996). In another financial crisis, five commercial banks experienced financial difficulties in 1986–1987 due to a high concentration of unsecured insider loans and high international interest rates. The BOT established a pattern of supporting commercial banks in times of trouble by providing them with soft loans (Christensen et al., 1993). There was no explicit deposit insurance, nor any formal mechanism to take over insolvent institutions. Legal restrictions made it difficult to foreclose on debtors or to collect overdue debts once a commercial bank commenced legal action. The realistic option, therefore, was to provide low-interest loans to failing banks to prevent their failure. Many such loans are still on BOT's books. By bailing out troubled banks, the BOT limited the risks for depositors and shareholders but may have created moral hazard problems that contributed to the 1997 crisis.

APPROACH TO RURAL AND AGRICULTURAL FINANCE

Thailand has traditionally been a food-surplus country and has never implemented major, highly subsidized agricultural credit programs such as the Bimas program in Indonesia or the Masagana 99 program in the Philippines. However, financial support for agriculture has a long history. Since 1916, the Government has experimented with different institutional frameworks to provide cheap credit to the rural sector. The usual method was to encourage farmers to set up credit cooperatives and provide them with funding. The default

rate was high and eventually the finance would dry up (Ammar et al., 1993).

Targeted financial support through the banking sector began with the rediscount facility, first introduced in 1958 to support exports, which were essentially agricultural. Initially it financed only rice exports, but was later broadened to include agricultural export products. In 1967 and 1971, the BOT was authorized to rediscount various types of promissory notes involving agricultural operations.

The creation in 1966 of the Bank for Agriculture and Agricultural Cooperatives (BAAC) as a specialized institution under the Ministry of Finance to provide loans to farm households, and its subsequent funding and regulation, represent the country's most important effort to support small and medium-sized farmers. An interesting aspect of financial development in Thailand is how the country has managed to avoid the errors of other countries that also created specialized agricultural finance institutions. The rapid growth of agriculture and the rural economy provided a strong demand for rural financial services, but several problems, including the land tenure system, have constrained the development of competitive financial institutions.

Political pressures in the 1970s pushed the BOT towards a more expansionary and developmental set of economic strategies. This resulted in the first large-scale sectoral credit allocation policy for agriculture, based on the widespread perception that the rural population was not benefiting equitably from the development process. Beginning in 1975, commercial banks were required to lend to agriculture an amount equal to 5 percent of their previous year's total lending. This allocation was gradually increased to its current level of 20 percent of total deposit liabilities outstanding at the end of the previous year. Shortfalls have to be deposited with BAAC where they earn a lower return than is available from alternative uses. Also in 1975, a condition for branch opening was imposed, in which the equivalent of at least 60 percent of deposits must be lent in the local area with one third allocated to agriculture. In 1978, the quota was divided into two categories: the larger one as

“agriculture” with individual farmers as the target, and the smaller one being a new category of agribusiness and agro-industries. In 1987, the definition of agriculture was broadened to include small-scale rural industries. The commercial banks have not met their agricultural quotas in several years, but the BOT has chosen to ignore the problem. It is also believed that banks have submitted inflated reports on their quota adherence (Muscat, 1995). As noted in Table XII.4, the reported share of commercial bank credits to agriculture rose after the allocation policy was put into effect in the late 1970s; thus, the quota may have made some impact.

Table XII.4: Bills, Loans, and Overdrafts Outstanding to the Agricultural Sector and to Farm Households^a, 1970–1998
(B Million)

Year	Commercial banks (1)	BAAC (2)	Agricultural coops (3)	Total 1+2+3 (4)	Agricultural GDP (at current prices) (5)	Ratio agricultural credit/ GDP (6)
1970	637	1,209	456	2,302	38,786	0.059
1975	2,824	4,715	1,898	9,437	92,842	0.102
1980	12,588	12,464	3,877	28,929	173,806	0.166
1985	39,355	21,632	5,246	66,233	169,895	0.390
1990	99,354	38,821	7,739	145,914	279,268	0.522
1995	158,940	129,686	18,124	306,749	454,700	0.675
1996	164,019	169,767	20,770	354,556	502,600	0.705
1997 Feb.	161,695	197,372				
1998		195,465				

^a Some double counting may exist in these data. Some commercial bank loans are extended to BAAC and agricultural coops. Similarly, some BAAC loans are extended to agricultural cooperatives.

Sources: Bank of Thailand, Department of Cooperatives Promotion, and Ministry of Agriculture and Cooperatives.

Several schemes have been established to channel funds to small and medium-sized enterprises (SMEs) that employ less than 200 workers. Rural areas benefit from SME incentives to the extent that they are located outside Bangkok. A Small

Industries Finance Office was created in the 1970s, but it extended very small volumes of credit and fell into serious arrears. Special SME credit windows and guarantees were set up in the 1980s and the funds and guarantees extended grew rapidly, but represented only a small fraction of the total financial system credit for industry (Muscat, 1995). A strong locational bias in favor of Bangkok and the lack of an effective promotional program made it difficult to develop strong support for rural industries. Credit policies were strongly oriented towards agriculture at the time (Akraanee et al., 1983).

A study of provincial industries in the late 1980s found that interest rate ceilings encouraged financial institutions to concentrate their lending on larger firms with lower unit lending costs and lower perceived risks. Moreover, collateral was usually required in the form of land, plant, machinery, or equipment. It was also found that many firms needed to improve their bookkeeping in order to provide better financial information to financial institutions (Aungsumalin, 1990). Several programs have emerged in recent years to encourage industrial decentralization and rural enterprises. The Ministry of Industry provides workshops and training for small business operators, promotes specific occupational groups, strengthens small enterprises such as rice mills and handicrafts, and arranges contracting between private sector companies and village groups. The Ministry of Agriculture and Agricultural Cooperatives supports farmers in enterprises that add value to rural products (ADB, 1997b).

The broadening of the definition of rural credit in the early 1990s increased the scope for commercial banks and BAAC to lend for nonfarm activities. The BAAC charter was amended in 1992 to allow a fixed percentage of lending for agricultural-related activities operated by farmers. It began such lending in 1994 and in 1997 quickly disbursed an Asian Development Bank loan of \$50 million to make medium- and long-term investment loans for activities to increase value-added production. The project also supported BAAC through training and operational reforms. At least one third of the beneficiaries were to be women. More than 7,000 subloans were made with a total value of

\$46 million (average of approximately \$6,500). A follow-on \$200 million project was proposed in 1997 to be disbursed in the poorest 44 provinces (ADB, 1997b).

The country's land tenure system has been a constraint for commercial banks and other financial institutions that use traditional collateral-based lending to screen borrowers and enforce loan contracts. Many farmers on private lands and squatters on public lands do not have legal documents that lenders will accept as collateral. Security of tenure has a substantial effect on the agricultural performance of farmers, since an important determinant of greater productivity on legally owned land is better access to cheaper and longer-term institutional credit enjoyed by titled owners (Feder et al., 1988). Collateral substitutes are needed in this situation. BAAC lends to informal borrowing groups as a way to help resolve the loan collateral problem. Lending to cooperatives and farmers' associations is another way, provided that the members exert peer pressure on borrowers to repay.

THE EVOLUTION AND CURRENT STATUS OF KEY RURAL FINANCIAL INSTITUTIONS AND PROGRAMS

Information is presented here on rural finance in aggregate and on BAAC because of its exceptionally important role in rural areas. There have been no nationwide rural surveys to determine who has and who does not have access to financial services. It is generally believed that market segmentation occurs, in which commercial banks serve large farms and agroindustries; BAAC largely serves small and medium farms, cooperatives, and associations; the poor and landless are served mainly by informal finance and a few government programs and NGOs. Agricultural cooperatives and village-level credit unions may also reach poorer segments of the rural population.

Unfortunately, little can be said about either the top or bottom end of the rural financial market because there is a dearth of information about financial services provided by commercial banks, agricultural cooperatives, and rural credit unions. The limited information available about informal finance is presented below.

Thailand is one of the few Asian countries for which it is possible to track total agricultural lending over time. The total value of loans outstanding to agriculture at the end of 1996 was about baht (B) 355 billion (approximately \$14 billion) relative to an agricultural GDP of B503 billion (about \$20 billion) (Table XII.4). Since 1970, the volume of agricultural lending has grown faster than agricultural GDP. The ratio of agricultural credit outstanding to agricultural GDP steadily increased from 0.06 to over 0.70 by 1996. The most rapid increase occurred from 1989 to 1993 when the ratio doubled from 0.36 to 0.73. Even discounting some double counting in the data, the increase in total agricultural lending has been large. This finding is consistent with the technological change that has occurred in Thai agriculture, increased mechanization and onfarm capital formation, the emergence of medium- and long-term loans, and the expansion of large agribusinesses that have successfully penetrated export markets.¹

Participants

Commercial banks, BAAC, and cooperatives are the most important rural financial institutions. The data on commercial bank lending to farmers may be inflated because of a bias in

¹ The rapid expansion in lending in recent years may have also contributed to the diversion of fungible funds into nonagricultural activities. This occurred in Brazil in the 1980s under a heavily subsidized credit regime when the agricultural credit/GDP ratio approached 0.80. Therefore, perhaps the expansion in agricultural lending contributed to Thailand's urban real estate bubble of the 1990s.

reports provided to BOT to show compliance with the agricultural lending quota. The commercial banks' total rural lending shows consistent growth in lending to farmers, as well as a rapid expansion in lending to agribusinesses, rural small-scale industries, and other purposes included in the changing definition of rural credit (Table XII.5). By 1996, the reported loans to farmers represented less than 20 percent of the total, while 20 percent went to agribusinesses, and almost half represented loans to unspecified other target groups. The share of bank lending in total agricultural lending rose from 27 percent in 1970 to 68 percent in 1990. Thereafter, the share of BAAC lending increased marginally until it reached 48 percent of total rural lending in 1996. The trend continued into 1997 when commercial banks' total nominal lending actually fell while that of BAAC rose. Lending by agricultural cooperatives has been small by comparison, and represented only 6 percent of the total in 1996.

The number and distribution of banking outlets have a strong influence on access to banking services in rural areas. Transaction costs for savers and borrowers fall when banking outlets expand and move closer to rural businesses and residences. There was a six-fold increase in commercial bank branches from 1970 to 1996 (Table XII.6). The major expansion in BAAC outlets occurred in the 1990s, when the number of provincial and district branches rose from less than 200 to more than 500, and the number of field offices increased from 615 to 875. Not surprisingly, this period coincides with the rapid increase in BAAC market share.

Outreach

The best insights on access to formal rural finance are obtained by analyzing BAAC. It has recently received a great deal of international attention because of its impressive performance in outreach, lending portfolio, savings mobilization, efficiency, profitability, and subsidy independence. The penetration of BAAC in rural areas is more significant

Table XII.5: Outstanding Rural Loan Portfolio of Commercial Banks, 1987–1996
(B Million)

Year	Loans made to:							Total rural loans
	Farmers	Minor occupations	Small-scale industries	Other target groups	Agri-businesses	Deposits at BAAC		
1987	45,838	-	10,026	-	35,988	12,340	104,192	
1988	56,765	-	16,446	-	43,357	14,118	130,687	
1989	72,490	-	27,493	5,910	51,473	14,486	171,852	
1990	96,203	-	37,803	7,328	63,397	14,503	219,234	
1991	115,737	-	46,109	34,361	77,756	17,092	291,055	
1992	130,138	862	55,944	81,927	94,150	11,488	374,509	
1993	141,539	5,456	70,190	136,906	116,075	4,556	474,722	
1994	142,268	7,677	79,338	205,213	132,048	7,556	574,100	
1995	149,239	8,029	92,859	310,187	151,358	7,137	718,808	
1996	151,148	9,246	103,617	375,322	171,380	3,981	814,693	

Source: Bank of Thailand.

Table XII.6: Number of Commercial Bank Branches, BAAC Outlets, and Agricultural Cooperatives, 1970–1996

Year	No. of commercial bank branches	BAAC		Agricultural Cooperatives	
		No. of provincial and district branches	No. of field offices	No. of cooperatives	No. of members
1970	647	45	205	1,910	226,526
1975	895	58	317	575	363,115
1980	1,478	58	498	875	778,175
1985	1,835	68	580	1,059	837,434
1990	2,358	168	615	1,464	1,007,637
1994	3,194	365	840	2,461	3,717,609
1995	3,235	494	847	2,832	3,942,416
1996	3,718	535	875	3,097	4,338,095

Sources: Bank of Thailand, BAAC, Office of Agricultural Economics in the Ministry of Agriculture and Cooperatives.

than any other single rural financial institution in Asia. Some 4.7 million of the country's five million plus farm households are registered for its services, although in any one year not all have loans. In 1996, 3.4 million households (72 percent) were registered as individual branch clients, while the remaining 28 percent were registered as members of 877 agricultural cooperatives and 295 farmers' associations that borrowed from BAAC. Therefore, directly or indirectly, it reached about 90 percent of the country's farmers.

The depth of outreach, referring to the wealth or poverty level of the clients, has not been measured and can only be inferred from BAAC loan size information. In 1995, the average disbursement per client for individual loans was B24,176 (\$971) or about 35 percent of the country's GDP per capita that year of almost B70,000. This ratio has remained fairly constant during recent years suggesting that the rapid expansion of its portfolio has not occurred only through making larger loans, but also by expanding its client base. Moreover, over 1.1 million (51 percent) of the 2.1 million loans made in fiscal year 1996 were in the loan size category of B30,000 or less. The average loan in this category was about B16,500 (\$660) or 24 percent of GDP.

The average size of all BAAC loans outstanding in 1995 was \$1,161, or 42 percent of GDP (Muraki, Webster, and Yaron, 1998). These relatively small loan sizes suggest that BAAC must be reaching fairly poor clients, if not the poorest of the poor. Moreover, the cooperatives and associations that on-lend BAAC funds possibly reach members who may be even poorer. Over the past five years, more than 50 percent of BAAC loans have been made in the lower-income northeastern and northern regions, which is further evidence of its support to the poor.²

The total BAAC loans outstanding have grown dramatically, especially from 1990 to 1996 when loan volume quadrupled and the total portfolio reached B177 billion (about \$6.9 billion) (Table XII.7).³ The mix of loans has changed considerably. For example, loans to cooperatives and associations represented 64 percent of the total in 1975, but 20 years later that share had fallen to only 8 percent. Overall, the repayment rate rose from about 70 percent to close to 90 percent during this same period. Repayment rates have been much lower on cooperative and association loans; thus, the shift to more individual lending contributed to raising the repayment rate.

BAAC's main loan products include short-term, cash credit, medium-term, and long-term loans. Medium- and long-term loans have been expanding as a reflection of the increased capital intensity of agriculture and several government programs implemented by BAAC. BAAC is fairly unique in rural Asia because of the relatively large share of its portfolio in longer-term loans. In 1995, 60 percent of loan disbursements

² If the data were available, average loan sizes should be disaggregated by region and compared with regional GDP because of the wide regional disparities in income. From the present analysis, it is impossible to learn how far down into the poverty profile BAAC reaches in the poorer compared to the richer regions.

³ BAAC is a large institution. According to Asiaweek statistics on the 500 largest Asian banks, BAAC is about equal in size to Thailand's seventh largest commercial bank (Asiaweek, 11 September, 1998.).

Table XII.7: BAAC Loans Outstanding
(B Million)

Year	BAAC clients				Repayment rate (%)
	Farmers	Agricultural cooperatives	Farmers' associations	Total	
1970	754	409	0	1,163	
1975	2,473	1,642	441	4,556	69.0
1980	7,134	3,614	415	11,163	73.3
1985	17,032	4,068	243	21,343	72.5
1990	36,850	4,870	203	41,923	85.8
1991	47,766	5,995	198	53,959	87.9
1992	66,137	6,892	193	73,222	88.8
1993	75,608	7,493	191	83,292	88.6
1994	97,680	8,305	169	106,154	88.2
1995	127,243	10,747	180	138,170	86.1
1996	162,640	14,241	183	177,064	87.2

Source: BAAC

went for short-term and cash credit loans, 20 percent for medium-term and 17 percent for long-term, while 57 percent of loans, outstanding were medium- or long-term (Muraki, Webster, and Yaron, 1998). Short-term loans have maturities of 12 months and are used mostly for agricultural production and related activities such as food processing. Cash credit loans are lines of credit that borrowers withdraw only as needed. Medium-term loans have maturities of more than one year up to three to five years, and are used for purchasing machinery and livestock. Long-term loans have maturities of up to 15 years and are typically used for purchasing agricultural equipment. The arrears rates have been somewhat higher for medium- and long-term loans (Fitchett, 1997).

BAAC administers several policy-based lending programs on a fee basis for the Government. These programs have included the Land Reform Efficiency Improvement Plan under the Land Fund, the Agricultural Rehabilitation Plan under the Ministry of Agriculture and Cooperatives, and the Revolving Fund for Refinancing Old Debts of Poor Farmers under the Office of the Permanent Secretary to the Prime Minister. They have highly subsidized interest rates, each has specific financial

policies and procedures and, for some programs, the selection of borrowers and loan approval are not BAAC's responsibility (Sacay, Randhawa, and Agabin, 1996). These loans often have lower recovery rates than BAAC's regular loans.

The problem of access to loans by persons without loan collateral has been resolved by BAAC for working capital loans by making joint liability group loans, in which the farmer-members guarantee each other's loan repayment. The minimum number of borrowers per group is five and the average is 15. First-time borrowers are provided with small loans and loan size is increased with repeat loans. The loan ceiling per borrower is B50,000 but average loan size has been less than half this amount. Group members are also eligible for additional individual loans of up to B50,000 on the basis of two guarantors. Farmers with titled land can also use it as collateral for individual loans. BAAC staff hold group meetings to encourage timely loan recovery and increase peer pressure (Muraki, Webster, and Yaron, 1998). Borrower transaction costs may be lower for BAAC than for commercial bank loans because BAAC loan officers work in the field in closer proximity to their clients, although there are additional transaction costs in attending group meetings. The groups screen their own members and this process plus peer monitoring may reduce lending risks. To qualify, loan applicants need to have been engaged in an agricultural activity for at least one year in the market area of the local branch, should receive more than half their total income from farming, and should not be indebted to an agricultural cooperative, farmers' association, or commercial bank (GTZ, 1997).

Relatively little is known about the outreach of agricultural cooperatives and village credit unions. Supposedly their loans are in addition to those made directly by BAAC to individual farmers. In the mid-1970s some 40,000 informal groups with an average of 15 members borrowed directly from BAAC. Each of the 600-plus agricultural cooperative societies in operation at the time had about 700 members, while each of the 3,000-plus farmers' associations had an average of about 100 members (Meyer, Baker, and Onchan, 1979). This would imply that some

700,000 farmers were reached indirectly by BAAC. The number of agricultural cooperatives oscillated until 1990 as the system went through periods of consolidation and reform. Steady growth occurred in the 1990s, when the number of cooperatives doubled from almost 1,500 to over 3,000, and the membership grew four-fold from one million to over four million. Part of this expansion in cooperative membership may have been because farmers expected to get loans by becoming members.

A recent study by Preedasak and NaRanong (1998) provides some insights into cooperative lending. Lending to members has always been the main activity of general agricultural cooperatives. In 1995, they were reported to have B13.8 billion outstanding, an amount roughly equal to 11 percent of BAAC's outstanding loans to individual farmers that year. The cooperatives rely mostly on loans received from BAAC, which is consistent with BAAC's reported B10.7 billion in loans to cooperatives in 1995. Cooperatives charge interest rates slightly higher than those charged by BAAC, but a few percentage points below those of commercial banks. Most cooperatives require that 5 percent of the loan must be deducted and assigned to the borrower's shares in the cooperative. About 60 percent of the loans are short term, i.e. for one year or less. Most of the rest are intermediate loans of one to three years. Cooperative lending was reported to have grown from B4.4 billion in 1988 to B13.8 billion in 1995, an increase roughly equivalent to the increase in BAAC lending to cooperatives. The cooperatives have had a checkered history. Quality leadership, active participation by members, optimum size and scope of operations, stable income of members, and avoidance of top-down promotion by the Government were factors found to influence their performance.

No comprehensive rural household surveys have been conducted to determine who have and who do not have access to financial services. Some insights are available from two rural household surveys by the Thailand Development Research Institute (TDRI) conducted in northeastern Thailand. The proportion of rural households that reported formal loans in a 1995/96 survey was significantly larger than in a 1986 survey,

while the proportion reporting only informal loans declined. It is surprising that the proportion that did not obtain loans was 42 percent in both surveys. The large proportion of the total rural population reportedly served by BAAC makes it hard to interpret this result. Perhaps both the information about BAAC outreach and the level of borrowing reported in these surveys were somehow biased. Or perhaps this particular study area is unique with respect to the rest of the country. If some 40 percent of the rural population regularly do not borrow, in spite of the wide network of BAAC branches and cooperatives, it casts doubt on the argument that additional special institutions and programs are needed to increase outreach.

According to the surveys, most households that demanded credit obtained it somewhere. No evidence was presented on the degree of credit rationing the households experienced from formal or informal sources. The nonborrowing households were not disaggregated so there is no way to determine how access to finance might vary by income or wealth category. The share of loan contracts provided by BAAC increased from 17 to 25 percent of total loans between the two surveys, cooperatives increased their share from 8 to 11 percent, while the commercial bank share declined from 5 to 2 percent. Likewise, the BAAC share of loan volume rose from 19 to 39 percent, that of cooperatives rose from 9 to 14 percent, and that of banks fell from 14 to 5 percent. The average size of commercial bank loans was B71,000 (\$2,840). Cooperative loans averaged B25,135 (\$1,005), and BAAC loans averaged B23,720 (\$949). These results suggest, as expected, that commercial banks serve wealthier clients, but BAAC and cooperatives may compete for a similar market niche. Locational considerations may determine whether BAAC or a cooperative serves a particular client. Cooperatives, however, do not supply the savings services that rural households demand. Poorer rural households and households that engage primarily in nonfarm enterprises probably have less access to formal sector loans.

Data from the 1995/96 TDRI survey in the province of Nakhon Ratchasima in northeastern Thailand also showed the relative loan shares and average loan sizes of the various sources

of loans reported by farmers (Table XII.8). As expected, commercial banks made the largest loans (B71,350) but had less than an 8 percent market share. BAAC accounted for more than half the loan volume but the cooperatives actually had slightly larger loans (B25,135 = \$1,008). Most cooperatives offer savings and time deposits. Interest rates are slightly higher than commercial banks and interest is tax exempt. Total savings rose rapidly from 1988 to 1995, and the loan-to-savings ratio fell from a high of 2.67 in 1988 to 1.33 in 1995.

Table XII.8: Total Loans and Average Size of Loans in Rural Nakhon Ratchasima, 1995

Source of loan	Total loans (B)	Share (%)	Average size of loan per contract (B)
Formal lenders	5,106,403,059	80.13	25,675
BAAC	3,293,858,210	51.69	23,720
Commercial banks	503,660,339	7.90	71,350
Agricultural cooperatives	1,139,504,182	17.88	25,135
Village credit unions	13,372,040	0.21	3,527
Other cooperatives	132,714,536	2.08	128,705
Government fund	18,119,652	0.28	8,206
Insurance companies	5,174,100	0.08	8,652
Informal lenders	1,265,986,559	19.87	16,264
Lenders inside the village	278,815,987	4.38	13,457
Lenders from other villages	320,795,295	5.03	22,105
Lenders in the district	100,073,152	1.57	20,340
Lenders in the province	6,773,433	0.11	16,401
Relatives	480,394,636	7.54	14,566
Village funds	144,033	0.00	1,000
Others	78,990,023	1.24	19,026
Total	6,372,389,618	100.00	

Source: Preedasak and Naranong (1998).

Sustainability

The issue of sustainability of rural financial institutions largely concerns BAAC and the agricultural cooperatives. BAAC is dependent on subsidies, although not as heavily as many specialized agricultural lending institutions in developing countries. The subsidies include soft loans from donors, preferential interest rates for rediscounting loans with BOT with a guarantee from the Ministry of Finance, exemptions from reserve requirements on deposits, and exemptions from income and other taxes and certain documentation fees (Sacay, Randhawa, and Agabin, 1996). Moreover, the requirement that Thai Government offices hold their deposits in Government-held financial institutions implies an additional subsidy of unknown magnitude.

Muraki, Webster, and Yaron (1998) estimated the subsidy dependence index (SDI) for BAAC for several years. The SDI is a ratio that calculates the percentage increase in the present average on-lending rate required to eliminate all subsidies in a given year, while keeping the return on equity equal to the approximate nonconcessional borrowing cost. In 1995, for example, the average interest rate earned on the loan portfolio was 11.0 percent and the SDI was estimated at 35.4, such that all subsidies could have been eliminated by obtaining an average yield on portfolio of 14.89 percent ($11.0 \text{ percent} \times 1.35 = 14.8$). That is, if interest rates on loans were 3.89 percentage points higher, all else being equal, subsidies would have been zero.⁴ Over the past decade, the SDI rose (i.e., subsidies were greater)

⁴ This type of analysis ignores the interest rate elasticity of demand for loans. Borrowers of larger loans with better access to commercial banks might reduce their demand for loans if their interest rates were increased by 3–4 percentage points. However, the large number of borrowers of small loans that represent 50 percent or more of the total portfolio have fewer options, so a simple leveling of interest rates across loan sizes would probably have little impact on demand, but a large effect on reducing subsidies. Furthermore, it would tend to bring the interest rate structure more in line with the transaction costs of making smaller loans.

during periods when the rate of inflation rose, and it fell when inflation fell. This pattern was explained as stickiness in lending rate adjustments. As a price taker, when inflation rises, BAAC has to pay competitive rates on deposits, but because of political pressures, it does not immediately adjust lending rates sufficiently upwards. When inflation falls, it doesn't immediately reduce lending rates consistent with falling deposit rates. Using an average- rather than marginal-cost pricing policy for setting lending rates is another explanation for this pattern.

BAAC's need for subsidies cannot be attributed to low levels of efficiency. In fact, it is noted for its high productivity and efficiency and several measures demonstrate improvements made in recent years. Evaluation of staff performance and the awarding of bonuses and promotions are linked to energetic savings mobilization, and some BAAC branches have become self-financing. Although there was a slight decline, from 384 to 363, in loan accounts per employee from 1989 to 1995, the value of loans outstanding rose from B4.24 million (\$170,300) to B10.5 million (\$421,480).

Three main factors contributed to the growth of BAAC loans. First, inflation represented about one fifth of the total growth. Second, average loan sizes increased because of the larger share of medium- and long-term loans. Third, employees increased their efficiency in response to the incentive systems. The number of accounts per branch fell, but the average loan balance per branch rose while the number of staff per branch stayed roughly constant. During this same 1989 to 1995 period, total administrative and financial expenses as a share of average loan portfolio fell from 16.1 to 12.3 percent. This occurred even as BAAC's resources shifted from large commercial bank deposits toward more expensive savings mobilization from the public. Personnel expenses fell from 2.9 to 2.3 percent of loans outstanding during this same period (Muraki, Webster, and Yaron, 1998).

Incentives are used to improve staff efficiency. Staff promotions are tied to performance. Staff compensation consists of fixed basic salaries plus bonuses based on verifiable indicators. The basic salaries are higher than the payment structure of

Government institutions but lower than banking industry standards. Financial incentives are significant and allow for bonus payments up to a maximum of five months of salary. The system is based on a) number of clients served by the bank, b) the amount of loans made, and c) other criteria related to quality of services and cost control. At the branch level, performance indicators include credit targets, repayment, savings mobilization and profits (Sacay, Randhawa, and Agabin, 1996). Average salaries including bonuses doubled from 1989 to 1995 so that an average salary was roughly 3.5 times GDP per capita. A unique feature of the incentive system is that the Thai Rating Information Service reviews BAAC performance at the end of the year and determines the systemwide level of bonuses to pay.

In 1995, 82 percent of BAAC's revenue came from loans to farmers, 5 percent from loans to cooperatives and associations, 5 percent from deposits and investments, and 8 percent from other income. The share of income from farmers has risen relative to that of cooperatives and associations as the share of farmer loans has risen. In 1995, almost 70 percent of total expenses were due to interest costs and other financial expenses. Administrative expenses made up the other 30 percent with 21 percent attributed to salaries, wages, and bonuses. Return on equity (ROE) ranged from 6.5 to 7.1 percent from 1989 to 1994, then fell to 3.9 percent in 1995. Likewise, returns on assets were low, varying between 0.52 and 0.55 percent, then fell to 0.28 percent (Muraki, Webster, and Yaron, 1998).⁵ By comparison, net profits of Thai commercial banks rose from 0.7 percent of total assets in 1989 to 1.58 percent in 1996 (Vajragupta and Vichyanond, 1998).

⁵ As a generalization, US banks with 8 percent equity can be expected to earn a return on assets of 1 to 1.5 percent and a return on equity of 12 to 20 percent. Another point of comparison is the highly profitable bank for the poor, BancoSol, in Bolivia. It is much smaller, with \$63 million in loans in 1997 serving 76,000 clients. Its return on equity ranged from 13.3 to 23.7 percent between 1994 and 1997. What is also problematic about the BAAC returns is that its policy on making provisions for bad debt may not be realistic given the past record of loan losses.

These relatively poor financial results are in part due to five pricing policies of BAAC. First, it tries to maintain low interest rates. On average in 1995, it paid depositors a nominal rate of 7.6 percent on savings but only charged 11 percent on loans. After adjusting for inflation, real deposit rates were 1.7 percent and lending rates were 4.9 percent. Second, it charges higher rates for larger loans and cross-subsidizes its small clients. For example, in 1995, nominal interest rates for short- and medium-term loans were 9 percent for loans of B30,000 or less, 11 percent for B30,000 to B60,000, 12.5 percent for B60,000 to B1 million, and 14.5 percent for more than B1 million.⁶ The average rate structure for long-term and agriculture-related loans was a little lower. Third, the interest rate spread of 3.8 percent in 1994 fell to 2.6 percent in 1995 because interest rates were not adjusted enough to cover the rise in inflation.

The fourth pricing policy was the requirement for BAAC in October 1995 to reduce nominal interest rates from 11 to 9 percent for loans less than B30,000. In April 1996, the reduction was extended to loans less than B60,000. As a result, there was a decline in very small loans from 50 percent of total loans made in 1995 to 38 percent in 1996, with a corresponding fall in total loan volume from 17 to 10 percent. BAAC also imposed a surcharge of B500 for loans between B100,000 and B1 million, and B1,000 for loans more than B1 million. Fifth, BAAC charges 3 percent less on wholesale loans made to cooperatives and associations than on retail loans to individual borrowers. Lower transaction costs for these larger loans justify a somewhat lower rate, but a 3 percent discount may be too large to cover costs and risks (Muraki, Webster, and Yaron, 1998).

⁶ The distribution of volume of loans to individual clients by rate of interest in fiscal 1995-1996 was: 9 percent of clients were paying 36 percent interest; 11 percent were paying 13 percent interest; 12.5 percent were paying 44 percent interest; and 14.5 percent were paying 7 percent interest. In the event of natural calamities, unpaid loans are restructured and no penalty is assessed. Unauthorized arrears are assessed a 3-percent-per-annum penalty.

DEPOSIT MOBILIZATION

Rural savings mobilization has not been a particularly strong feature of financial policy in Thailand. Commercial banks are the most important financial institutions in providing demand and savings services in rural areas. The banking system held about B4.3 trillion (about \$140 billion) in total deposits in late 1997 and early 1998 (Table XII.9). Provinces outside Bangkok held 34 to 38 percent of the total deposits from 1980 up to 1997, suggesting that the Bangkok bias of economic activity did not change much during that period. In recent years, the provinces outside Bangkok held proportionately more savings and time deposits, but fewer demand deposits, suggesting a slightly greater preference for savings than for transactions instruments.

BAAC's total deposits are small by comparison with those of the other banks (Table XII.10). At the end of 1997, they totaled about B73 billion (approximately \$2.6 billion), which was less than two percent of total bank deposits, or about 5 percent of total deposits of commercial banks outside Bangkok. Total

Table XII.9: Commercial Bank Deposits: Total and for Provinces Outside Bangkok
(B Million)

Year	Total commercial bank deposits	Provinces outside Bangkok			
		Percentage of total deposits	Percentage of demand deposits	Percentage of savings	Percentage of time deposits
1970	31,885				
1975	86,559				
1980	214,994	38.2	22.9	50.9	38.8
1985	557,044	37.1	21.7	35.7	38.7
1990	1,436,514	35.2	20.8	31.9	37.5
1995	3,227,697	36.9	13.3	38.0	38.2
1996	3,666,028	37.3	15.1	37.7	38.6
1997	4,304,040	34.0	9.9	37.7	38.6
Mar 1998	4,342,407	34.7	16.0	32.9	35.9

Source: Bank of Thailand

Table XII.10: Sources of BAAC Deposits
(B Million)

Year	Total	Percentage				
		Demand	Savings	Compulsory	Time	Commercial bank
1970	266	0	6.3	21.3	35.3	37.0
1975	2,845	0	10.0	10.8	20.5	58.8
1980	9,079	0	5.1	0.0	17.7	77.1
1985	15,348	0	12.4	0.0	17.9	69.7
1990	32,484	<1	26.7	0.0	31.7	44.6
1995	89,795	<1	52.0	0.0	40.0	7.9
1996	63,809	<1	62.3	0.0	31.3	6.2
1997	73,033	<1	74.6	0.0	26.2	4.9

Source: Bank of Thailand

BAAC deposits actually peaked in 1995 at close to B89 billion (about \$3.6 billion at the time). The volume of commercial bank deposits in BAAC has declined in recent years and it has mobilized deposits from other sources. Commercial bank deposits represented over 70 percent of BAAC deposits in the 1980s. These deposits reached a peak of B17 billion in 1991 (equal to 41 percent of BAAC's deposits that year), then started to fall such that at the end of 1997 they totaled B3.6 billion, representing only 5 percent of BAAC deposits. Savings deposits have been the most popular instrument offered by BAAC, and their share now reaches close to three fourths of all deposits. Time deposits have varied from 20 to 40 percent of total deposits.

Information on the source and size of savings and time deposits provides insights into the nature of BAAC depositors, and reveals the potential noninterest costs and risks of savings mobilization. Thai Government offices are required to deposit their funds in Government-owned financial institutions. Because of its aggressive savings campaign and the political preference of some organizations to choose BAAC over other State-owned banks, BAAC has been successful in capturing a large proportion of these deposits (Muraki, Webster, and Yaron, 1998). This represents another implicit subsidy to BAAC. The composition of BAAC savings and time deposits for 1995 (Table XII.11) shows

that private individuals held 4.1 million savings accounts with a total balance of B1.1 billion, which represented 99.5 percent of all savings accounts and about 62 percent of total savings. Public sector agencies held less than one percent of total savings accounts, but they represented almost 36 percent of total savings. A similar pattern exists for time deposits.

The size distribution of savings accounts reveals that the very large number of small accounts represents an important but small share of total savings (Fitchett, 1997). At the end of 1995, some 3.4 million savings accounts out of a total of more than 4.1 million (83 percent) were private individual accounts with balances of only \$201 or less. These small accounts represented only 6 percent of total savings. The average size of these accounts was \$33. More than half a million additional savings accounts in the range of \$201–2,008 were held by private individuals. Clearly, poor people must have held some of these small accounts. If each person held just one savings account, then the 4.1 million accounts held

Table XII.11: BAAC Savings and Time Deposits, 1995

Item	Savings	Time	Total
Private individuals			
No. of accounts	4,148,041	246,498	4,394,539
Percentage of total	99.5	99.3	99.5
Amount (\$'000)	1,156,638	674,582	1,831,220
Percentage of total	61.7	46.8	55.2
Cooperatives and associations			
No. of accounts	5,366	679	6,045
Percentage of total	0.1	0.3	0.1
Amount (\$'000)	47,259	8,759	56,018
Percentage of total	2.5	0.6	1.7
Public sector agencies			
No. of accounts	16,520	1,046	17,566
Percentage of total	0.4	0.4	0.4
Amount (\$'000)	671,933	756,698	1,428,631
Percentage of total	35.8	52.8	43.1
Total			
No. of accounts	4,169,927	248,223	4,418,150
Amount (\$'000)	1,875,830	1,440,039	3,315,869

Source: Adapted from Fitchett (1997).

by private individuals surpassed the total number of BAAC loans outstanding at the end of 1995 (3.1 million) by about a million. At the other end of the size distribution, BAAC had just under 1,900 private savings accounts in the size category of more than \$40,161 that represented over 10 percent of total savings. The situation is even more striking with larger public-sector agency accounts. There were only 787 of these large accounts, but they represented one third of total savings.

A similar size distribution holds for time-deposit accounts. Accounts with \$201 or less held by individuals represented 43 percent of total accounts, but only 0.4 percent of total volume of time deposits. Conversely, the 348 larger-size deposits (more than \$40,161) for public-sector agencies accounted for only 0.1 percent of total time deposits, but more than 50 percent of the total value of all time deposits. Attracting large public sector accounts may be a cheaper way to mobilize savings but, at the same time, it exposes BAAC to the risk of a large loss in savings if only a few are withdrawn. This occurred in 1997/98 when Government entities and State enterprises responded to the Government's austerity measures by drawing down their BAAC deposits. From 1996/97 to 1997/98, individual deposits grew from 50 to 58 percent of the total while those of Government and State fell from 48 to 40 (BAAC/GTZ, 1998).

BAAC has introduced a variety of specialized savings products tailored to the rural environment including funeral aid associations, personal accident insurance, women's savings programs, and savings for the haj pilgrimage. However, no information is available on how many clients use these products or the volume of savings mobilized. A recently designed product, OM SAP THAWI CHOKE (multiple fortune savings account), was created and marketed by BAAC in conjunction with the GTZ Self-Help Linkage Project. The minimum opening balance is only \$2, the interest rate is 4 percent per annum, and the account holder participates in semi-annual lotteries that offer as prizes goods that are popular in rural areas. Savings accounts have unlimited withdrawals but accounts below B2,000 (\$79) are not eligible for the lottery

(Fitchett, 1997). By January 1997, the number of savers had risen to more than half a million nationwide with total savings of \$70 million. There are questions, however, about the ability of this type of instrument to significantly raise savings in the long run. Since average deposits are close to the minimum level required to join the lottery, the depositors' primary motivation may be to gamble rather than accumulate financial savings in the long run (Poapongsakorn, Ammar, and Charoenpiew, 1998; BAAC/GTZ, 1998).

Since 1974, the Department of Community Development (DCD) of the Ministry of Interior has persuaded villagers to form thousands of village level credit unions (*Kloom Orm Sup*), small-scale financial institutions operated by villagers. Most serve only one village and most successful credit unions do not register because they do not want to follow DCD rules on interest rates. They serve an important market niche by gathering savings from people who want to or can only save in amounts too small to justify a trip to a bank or even a cooperative. Each member pledges to save a certain amount each month. The members meet once a month, accumulate the savings, and almost immediately lend them out; thus, their operation is similar to informal rotating savings and credit associations (RoSCAs). By 1995, there were over 11,000 credit unions with almost 900,000 members (average of 79 members) reporting a total of B1.8 billion in savings (about \$74 million). Profits from lending and other businesses are divided among members according to the magnitude of their savings. On average, about half the savings mobilized are lent out and the balance is deposited in the banking system. Many charge borrowers 2 to 3 percent per month on loans and pay interest rates on savings that are higher than banks. Since credit unions require regular savings, they are more successful in southern Thailand where villagers have steadier incomes.⁷ Many credit

⁷ Village-level research in Thailand in 1979/80 showed that households smoothed their seasonal crop expenses and revenues by complex strategies involving nonfarm income, capital sales and purchases, and borrowing (Meyer and Alicbusan, 1984).

unions fail, however, because they are created in a top-down approach and are run by village administrators with little village participation. (Poapongsakorn, Ammar, and Charoenpiew, 1998).

The TDRI surveys of rural households in northeastern Thailand in 1995/96 provide the only recent information available about rural household savings. Some 70 to 90 percent of households reported savings deposits with some financial institution, but savings in kind were much larger than financial savings. The determinants of household savings were found to be income per capita, number of dependents, and social status of household head. Households that purchased property on an installment basis had less savings than other households because of their monthly debt burden. BAAC's branch expansion was found to explain part of its deposit growth, but it is still more convenient for farmers to use commercial banks, particularly if they want to transfer money to and from Bangkok. This is an important service because of the large number of rural households with family members that have migrated to Bangkok. Agricultural cooperatives have few incentives to mobilize savings because of the cheaper sources of funds available from BAAC, and the village credit unions have limited capacity to mobilize savings (Poapongsakorn, Ammar, and Charoenpiew, 1998).

MICROFINANCE

Specialized microfinance services are not important in Thailand. One reason is that BAAC has achieved such a large outreach. A second reason is that poverty is not as serious in Thailand as in some other Asian countries. The poverty that exists is heavily concentrated in rural areas, especially in the northeastern and northern regions. Several cash and in-kind transfers are made to the poor through Governmental agencies, and special support has been given to microfinance for the poor.

Increased attention is now given to microfinance as part of the package of activities directed at easing the social problems

associated with the financial crisis (Ammar and Sobchokchai, 1998). The Community Development Department provides funds to villages for on-lending to poor households. By 1995, nearly B1 billion (\$40 million) were reported in loans outstanding to nearly 200,000 households. The Government Savings Bank and the Urban Community Development Office of the National Housing Authority provide loans to community organizations (sometimes referred to as savings and credit organizations) for on-lending to individual members. Together they have provided loans to nearly 1,500 community organizations with a combined membership of around 200,000 households. Some of these organizations are registered as cooperatives, but most are not registered. It is unknown how many are in rural areas.

A few private bodies and NGOs are involved in microfinance, but they have a more limited role than in most other countries in the region (McGuire, Conroy, and Thapa, 1998). Presumably these initiatives reach a somewhat poorer clientele than is served by BAAC. However, if they are similar to such programs elsewhere, they have limited outreach, provide subsidized loans, and are not sustainable. Whatever financial services they provide may be useful to the recipients, but will make only temporary, rather than permanent, contributions to poverty alleviation. The GTZ project, which helped develop the OM SAP THAWA CHOKE savings product, began as an effort to develop self-help groups into financial intermediaries, but the concept became obsolete once most of the members had savings accounts in and became borrowers of BAAC (Maurer, 1997).

INFORMAL FINANCE

Various informal financial arrangements have been reported in Thailand but there is little detailed information about total volume or the characteristics of the participants in these financial transactions (Ghate, 1992). Moneylenders, landlords, traders, farmers, input suppliers, friends, and relatives are

sources of informal finance in rural areas. People participate in ROSCAs and other types of group saving and lending arrangements. Land pawning or usufruct loans are found in poorer areas where land values are low, local markets are relatively inactive, and cash surpluses are less likely to exist.

Two logical questions can be raised about informal finance in light of the rapid expansion in formal finance. Has informal finance declined in importance? Have interest rates and other terms and conditions improved for informal finance? Onchan (1992) summarized several rural surveys that seemed to show that the proportion of borrowers reporting informal loans and the relative market share of informal loans declined over the period 1961/62 to 1986/87. Loans from friends and relatives were reported most frequently, followed by loans from traders, farmers, and rice merchants. Informal loans were often used for consumption purposes, and the lenders were more likely to make loans without collateral or group guarantees than occurred in formal finance.

Poapongsakorn, Ammar, and Charoenpiew (1998) analyzed information obtained from the two TDRI surveys in the province of Nakhon Ratchasima in 1986 and 1995/96. They concluded that the reported share of informal contracts fell in number from 69 to 50 percent of total loan contracts reported, while the volume of funds lent declined from 56 to 40 percent of the total. Moreover, the proportion of farm households reporting only informal loans fell from 32 to 11 percent, while the proportion reporting only formal loans rose from 16 to 38 percent, and the proportion borrowing from both sources was roughly unchanged at 8 to 10 percent. At the time of the 1986 survey, there was no clear downward trend in informal interest rates (Ammar et al., 1993), but by the time of the second survey, a decline seemed to have occurred. In 1986, the interest rate for cash borrowers was 4.5 percent per month, but it had fallen to 2.8 percent per month in 1995. Likewise, the rate for installment credit fell from 4.45 percent per month to 2.63 percent per month.

There are few reasons to expect that, because of expanded formal finance, informal finance will completely disappear or that informal interest rates will be much lower than their historic

levels. First, the transaction costs of getting a small formal loan for emergency or consumption purposes may be so high that it is cheaper for borrowers to use informal lenders for this type of borrowing. Second, although an average of three resident and two nonresident informal lenders were reported per village in 1986, it may be difficult for a borrower to obtain better loan terms by switching lenders because of information costs. It takes time to establish creditworthiness with an informal lender; thus, switching lenders must be done slowly and may involve costs and risks to the borrowers (Ammar et al., 1993). The information accumulated by an informal lender about clients represents a sunk cost so an existing lender can afford to temporarily cut interest rates to forestall the entry of a new informal lender into a local market. The result is highly segmented markets with long-term customer relationships between borrowers and lenders and fairly high interest rates for small, short-term loans.

IMPLICATIONS OF THE FINANCIAL CRISIS

The financial and economic crisis in Asia first began in Thailand, then the contagion spread to Indonesia, Malaysia, and the Philippines in Southeast Asia, then to East Asia, and eventually to Russia and Brazil. The problems in Thailand led international investors to conclude that several Asian countries had similar weaknesses, namely weak financial sectors with poor prudential supervision, large external deficits, appreciating exchange rates, declining quality of investments, export slowdowns, and overexpansion in certain key industries including urban real estate (Goldstein, 1998).

The impact of the crisis has been very severe in Thailand. Real GDP growth was 5.5 percent in 1996, fell to -0.4 in 1997, and was projected at -3 to -5 percent for 1998. The inflation rate was 4.8 percent in 1996, and was estimated to rise to 7.7 percent in 1997, and to around 10 percent in 1998 (Anon., 1998a). Imports were expected to contract sharply while exports were projected to increase slowly, but much of that increase is

dependent on the economic performance of its regional trading partners.

The financial sector has been hard hit because of sharp increases in nonperforming loans. The central bank intervened in four banks and 58 finance companies were closed (56 permanently), which is likely to have affected financing for small business and consumer credit (Ding, Domac, and Ferri, 1998; IMF, 1998b). The eventual net cost to taxpayers of the attempt to fiscalize the cost of the financial bailout is large. The amount lent out by the Financial Institution Development Funds (FIDF) to prop up banks and financial companies was reported to be B1 trillion, and the interest cost on this sum alone is B100 billion. Estimates suggest that, at most, half of this money will be recovered through liquidation of seized assets. The eventual cost of this problem and bank recapitalization may total B100–200 billion annually, compared with a total B800 billion budget (Ammar and Sobchokchai, 1998).

Recent IMF estimates of these costs are even larger. It projects the total State obligations for the bail out at the end of 1999/2000 to be B2.1 trillion equal to 38 percent of GDP. The interest cost for servicing this debt is projected to rise from 3 percent of GDP in 1997/98 to about 4 percent in 1998/99 and 1999/2000 (Lane et al., 1999). This fiscal burden can be related to total budgetary support for agriculture of about \$4.5 billion in the mid-1990s, when the total Thai GDP, measured in 1987 dollars, was about \$100 billion (Rosegrant and Hazell, 1999). Therefore, it would be necessary to wipe out almost all support for agriculture in order to finance the bank problem. Obviously, this will not occur but the example provides a rough order of magnitude of the banking problem and reveals the huge cost that society must bear when inadequate financial and macroeconomic policies are pursued. How these costs are eventually allocated will influence the future development of the rural economy.

The crisis had an impact on savings mobilization in BAAC. Whereas the growth rate in savings and time deposits ranged between 33 and 38 percent in 1996 and 1997, it fell to 5 percent in 1998. The share mobilized by the head office fell relative to

other regions of the country and Government and State enterprise deposits fell relative to those of private individuals (BAAC/GTZ, 1998).

Employment and unemployment have been significantly affected by the crisis, and the positive trend of the past few years of declining poverty has been reversed. Analysis of labor-force surveys through the first quarter of 1998 revealed the nature of the problem. After accounting for seasonal and annual trends, it was shown that the crisis contributed to a decline of 1.2 million in wage and salary earners. Employment on farms actually increased by over 600,000, but some of this increase may simply represent disguised unemployment (Kakwani, 1998). Moreover, unemployment increased by over 800,000 with the impact greatest on young men with limited education and recent migrants. The average number of hours worked and average real wages have fallen. There has also been an increase in child labor and a reduction in real income among children in the workforce. Close to 200,000 persons have been identified as return migrants and over half returned to the northeastern region (Chalamwong, 1998).

Depreciation of the baht has boosted prices for some agricultural products, mitigating the effects of the crisis for farm households. Rice farmers in particular have benefited from the currency depreciation and increased demand due to El Niño-impacted production in other countries. Prices for rubber farmers rose for a time but fell to their previous levels (Ammar and Sobchokchai, 1998). As a result, BAAC officials reported that 1997 and 1998 loan repayments were largely unaffected by the crisis (Table XII.12). The BAAC 1997 Annual Report, however, shows that at the end of fiscal year 1997, overdue loans for individual farmers amounted to B19.4 billion, an increase of 58 percent over the previous year. It was assumed that part of this increase was due to the crisis. Debt repayment problems led to demonstrations and petitions for a debt moratorium by an association of farmers in the Northeast. Loan recovery has been negatively affected in the community organizations funded by the Urban Community Development Office (McGuire and Conroy, 1998).

Table XII.12: BAAC Loan Disbursements and Repayments by Quarters for Fiscal Years 1996–1998, Classified by Type of Borrowers^a
(B Million)

Items	1996			1997			1998		
	Q1	Q2	Total	Q1	Q2	Total	Q1	Q2	Total
Disbursement									
- Individuals	30,562	21,283	51,845	36,406	14,352	50,578	25,168	15,351	40,519
- Institutions	4,359	2,333	6,692	4,863	2,886	7,749	4,489	3,136	7,625
Total	34,921	23,616	58,537	41,269	17,238	58,507	29,657	18,487	48,144
Repayment									
- Individuals	14,357	11,906	26,263	17,228	12,354	29,582	15,584	11,770	27,354
- Institutions	2,957	1,568	4,525	3,251	2,360	5,611	3,085	2,185	5,270
Total	17,314	13,474	30,788	20,479	14,714	35,193	18,669	13,955	32,624

^a BAAC Fiscal year is 1 April to 31 March.

Source: BAAC.

The Thai response to the crisis has focused on restoring health to the financial sector and implementing reforms to strengthen the financial system. There have also been several efforts to reduce social impact. Expenditures to support the social safety net were planned to include small infrastructure programs in the agricultural sector, and increases in funds for retraining programs and lending to the unemployed to facilitate self-employment. International agencies are also actively involved in programs to ease social problems (Ammar and Sobchokchai, 1998).

It appears that the short-term impact of the crisis has been felt more by the urban than by the rural financial system. BAAC could face a longer-term negative impact, however, if the Government decides to use it as a channel for relief and emergency funds to rural households as policy directed loans. This could create two problems: it would increase confusion about BAAC's mission and detract staff time from regular lending. Both problems could contribute to reducing BAAC's loan recovery rate and force the Government to subsidize it even more in the future. BAAC could also be affected if savings fall so that it lacks resources for new lending. Borrowers may be less inclined to pay existing loans if they are unable to get new ones.

CURRENT POTENTIAL AND CONSTRAINTS FOR RURAL FINANCE

Until the 1990s, Thailand was a good example for the developing world in financial sector development. State intervention in the financial system was moderate, and the authorities proceeded slowly with deregulation. A desire to support agriculture led to creation of BAAC in 1966, and to establishing the agricultural loan quota for the commercial banks in 1975. Today, BAAC loans represent about half of total agricultural lending and its outreach is reported to be about 90 percent of farm households. Depth of outreach is also impressive

with a third to half of recent BAAC loans made for \$1,200 or less. The average loan in the small loan category was \$660, or 24 percent of per capita GDP. During the 1990s, BAAC began to mobilize savings more aggressively and rely less on commercial bank deposits. It now has roughly a million more depositors than borrowers. Agricultural cooperatives and farmers' associations serve largely as a means to retail loans from funds acquired wholesale from BAAC. Village-level credit unions mobilize small-scale savings and make small loans.

An important issue to understand is how BAAC has largely avoided the problems that undermine many other specialized agricultural development banks. Three factors have been identified by Thai observers. First, regardless of the political party in power, the Minister of Finance has been chosen largely because of technical competence and this has contributed to maintaining a banking vision for BAAC. Second, BAAC has had strong leadership oriented towards professionalism, efficiency, and long-term sustainability. Third, the interest of the workers' union is tied to BAAC performance through annual bonuses. Therefore, the workers argue against BAAC engaging in activities that detract from strong financial performance. Because of these three sets of factors, BAAC maintains a firewall between its regular banking business and the projects it implements for the Government. It strives to identify the full costs of these projects and requires the Government to fully reimburse them.

There are a number of weaknesses in the Thai rural financial system. Rural savings mobilization is not a high priority. BAAC still depends on subsidies, and its low interest policy is a disincentive for searching more aggressively for ways to make smaller loans efficiently. Despite changes by parliament in 1999, BAAC is also constrained by charter and policies from fully serving the rural nonfarm economy. The supply of medium- and long-term loans may be limited compared with future demands, and BAAC staff may lack the skills needed to meet the demands for serving the rural nonfarm sector.

The information available does not permit a complete assessment of the rural financial markets. Information is weak or nonexistent on the following topics:

- (i) How far has formal finance penetrated into all rural regions and the most isolated areas? How far down into the poverty profile do BAAC and the other formal institutions reach in supplying loans and savings services?
- (ii) How well have commercial banks served the financial demands of large farmers and agribusinesses? What has been the impact of the financial crisis on their ability and willingness to continue to serve these clients?
- (iii) If BAAC would be permitted to charge higher interest rates for loans to smaller and poorer clients, how much would it improve access to formal finance? Would there still be a role for special microfinance institutions, or do the problems of the poor require nonfinancial services?
- (iv) What are the sources of finance for rural nonfarm enterprises today, and are they seriously affected by the regulations that constrain BAAC from serving a broader rural clientele? What would happen to the size and riskiness of BAAC's portfolio if it were permitted to serve a broader range of rural nonfarm activities?⁸
- (v) What additional rural financial services (e.g., transfer of remittances, insurance) do rural residents and enterprises demand, and what prevents them from being supplied by the current financial institutions?
- (vi) What constraints must be addressed if the financial system is to make more medium- and long-term loans that are necessary for the further structural transformation of the rural economy?
- (vii) What role does informal finance play in the rural economy and how will that role change as the formal financial system improves and expands?

⁸ In early 1999, the Thai parliament eased restrictions on BAAC by authorizing it to offer a broader range of financial services in rural areas. However, BAAC still cannot compete in offering the full range of services offered by commercial banks.

Thai agriculture faces some major challenges. How they are resolved will influence the nature of financial services demanded in the future. First, farmers face a cost-price squeeze caused by input-price increases and falling world commodity prices. Governmental research and extension systems have not been very successful in helping the farming sector cope with these problems in the past (Poapongsakorn et al., 1995). Second, the future growth path of farming and its impact on the rural-urban income gap are unclear. In spite of rapid agricultural growth, there has been relatively little change in average farm size. Rather, rural households have increasingly turned to paid employment and income earned from other enterprises to supplement farm income (Table XII.13). If this trend continues, the country will have to become more successful in rural industrialization to create higher-paying nonfarm work in rural areas. This would imply following a Japanese type of rural development based on small, part-time farms. Alternatively, the country could adopt more of a US-type of rural development by consolidating farms and increasing average farm size. Both the Japanese and US models of development require specialized financial services.

Table XII.13: Sources of Income for the Rural Population, 1975–1994^a
(percent)

Source of Income	Year						
	1975	1981	1986	1988	1990	1992	1994
Wage income	21.38	19.99	26.93	25.99	25.60	30.72	33.39
Farm income	49.99	44.35	36.48	36.11	36.55	30.89	25.24
Income from enterprise	19.44	18.20	23.16	22.34	23.55	23.70	24.86
Property income	1.05	1.63	1.22	1.45	1.72	1.41	1.18
Transferred income	6.94	12.51	10.58	12.10	10.01	10.84	13.35
Other income	1.20	3.31	1.63	2.00	2.53	2.44	1.98
Total (percent)	100	100	100	100	100	100	100

^a Excludes Bangkok and vicinity.

Source: Unpublished data of the Thailand Development Research Institute. Calculated from the Socio Economic Survey for 1975, 1981, 1986, 1988, 1990, 1992 and 1994, National Statistical Office.

Creating the Policy Environment

The immediate policy concern in Thailand is to restore the country's economic health and stability. Resolving these problems will have an especially important impact on how well commercial banks will serve large farms and agribusinesses in the future, because they are more dependent on banks than on other sources of financial services. There are several important policy concerns regarding BAAC that will affect its future performance and the access of small and medium farm and rural enterprises to financial services. The first, which has obvious political implications, concerns the subsidized interest rate policy on loans. Subsidized rates discourage other financial institutions from trying aggressively to serve agriculture; large segments of the sector are and will continue to be dependent on BAAC. Setting lower rates for smaller loans, although intended to help the poor, actually hurts them by discouraging BAAC from making small loans and searching for innovative ways to serve poorer clients with small loans.

Second, the policy of having BAAC administer policy-based lending is destructive. It creates confusion in the minds of borrowers about its true financial mission, and distracts it from exclusive dedication to the task of becoming the best possible financial institution serving the broadest range of rural clientele.

Third, BAAC's recently expanded lending authority still prevents it from fully serving the rural nonfarm sector. Rural industries and nonfarm enterprises will be better served if commercial banks and BAAC are allowed to compete in serving their financial demands. Moreover, BAAC may be less vulnerable to risks if it develops a less specialized portfolio composed of both farm and nonfarm loans. Fourth, BAAC's special institutional status needs to be reviewed. It may be more prudent for BAAC to be regulated and supervised by the stronger central bank that will emerge with the policy reforms now underway.

Creating and Strengthening the Financial Infrastructure

The financial crisis revealed important weaknesses in the country's financial infrastructure. One weakness is the decline of the technocracy responsible for managing the economy, including the Ministry of Finance and Bank of Thailand (Ammar, 1998). Weaknesses were also identified in the banking sector's ability to analyze and manage risks properly. Banks have traditionally relied on collateral to secure loans to Thai enterprises that were basically family businesses. But foreclosure procedures were not efficient, and it could take three to five years between initiation of proceedings and the time the lenders could realize their funds (Ammar and Sobchokchai, 1998). These and other infrastructure issues need to be addressed in the reforms.

No information is available on how limitations in financial infrastructure may specifically affect rural finance. Since BAAC plays such an overwhelming role in providing rural loans, there is less need for a credit bureau to maintain financial records for use by all institutions than would be the case in a market with many competing institutions. However, as BAAC broadens its mandate and competes more directly with other institutions, there will be a greater need to develop information systems for client credit histories, levels of indebtedness, and the status of collateral offered for loans.

Institutional Development

The major institutional development issue in Thailand concerns improving the capacity of BAAC to meet the future financial needs of the rural economy. The immediate problem is that it is vulnerable because it is undercapitalized. The total of all shareholders' equity in fiscal year 1996 represented about 7 percent of liabilities, but by the end of fiscal year 1997 equity had fallen to just under 3 percent of liabilities. This deterioration in capital resulted from an increase in total liabilities and a sharp

decline in equity due to exchange rate fluctuations. The subsequent improvement in the exchange rate eased this problem, but a lending institution with a portfolio heavily concentrated in a sector subject to systemic weather risks and volatile international commodity prices needs larger reserves. Moreover, it is not clear how realistic BAAC current loan loss provisions are, considering that the loans in arrears at the end of 1997 represented almost 11 percent of outstanding loan principal.

Another issue is the ability of BAAC's human capital and lending technology to respond to future challenges. Now that BAAC has achieved a large outreach, it cannot grow by simply lending to more farmers. Its loan portfolio can grow by either increasing loan sizes for existing clients and/or by lending for new types of nonfarm enterprises. Either approach implies more sophisticated loan appraisal and developing loan sizes and repayment terms suited to the demands and capacities of these clients. Peer monitoring will play a lesser role in assuring repayment, and more traditional types of collateral will be needed to reduce lending risks.

Another possible way for BAAC to increase profits would be to expand savings mobilization sharply. This would require the careful design of savings products with more complications in managing funds to earn a high but prudent return, while maintaining sufficient reserves to meet demands for withdrawals. Mobilizing more savings may require expanding the network of branches and field offices, and building linkages with village-level credit unions. Increased savings also implies the representation of new stakeholders in the institution's governance, and closer supervision to protect savers (Fitchett, 1997).⁹

The lower end of the rural financial market needs to be analyzed clearly to determine how village-level credit unions are performing, what risks they represent to local savers, and

⁹ In 1998, an ADB technical assistance team was working on-site to improve BAAC's loan appraisal and risk management capacity.

how they should be monitored as their savings and lending activities grow. The role of cooperatives and farmers' associations in the financial system should be evaluated. They are not heavily involved in savings mobilization, largely lend the funds provided by BAAC, and are responsible for some of BAAC's loan recovery problems. BAAC may not be adequately pricing loans made to cooperatives and associations to cover full costs and risks. Finally, the performance of subsidized microlenders and governmental programs for the poor need ongoing assessment to determine whether they are meeting financial demands that could be better served through unsubsidized sources. Programs for the poor should separate training and other activities that require subsidies from financial services that can be provided subsidy free.

