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THE ROLE OF COMMERCIAL BANKS  
IN THAI AGRICULTURE

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## CHAPTER I. INTRODUCTION

Credit has long been recognized as a necessary input in the modernization of agriculture. Yet in most developing countries, institutional credit is available to only a small percentage of farmers and, in general, it has been the larger farmer who has benefited. Recent recognition of this fact has helped focus on changes or institutional innovations which might reach out to the small farmer.

To formulate a mix of policies capable of serving small farmers, it is useful to review the structure of those organizations which supply credit in Thailand, with emphasis on comparative data for the Bank for Agriculture and Agricultural Cooperatives (BAAC) and commercial banks.

### PROBLEM STATEMENT

While the overall agricultural credit market may or may not adequately service the rural populace, the institutional credit which goes to rural areas is concentrated among a small number of farmers. The Thai government has attempted to redirect the allocation of credit to rural borrowers through the establishment of a specialized agricultural credit bank, the BAAC, and by the utilization of a monetary policy which forces commercial banks to lend a minimum percentage of total deposits to agriculture. The government's policy in its first year (1975) required that commercial banks make at least five percent of their total loans outstanding available to the country's agricultural sector. This credit could be extended through the BAAC, or made available by the

commercial banks directly. In its second year, the percentage requirement was changed to 7% of total deposits. One can conclude a much larger amount of credit should be made available to the agricultural sector by the commercial banking system. However, it is not clear if or how this is to be accomplished or who in the agricultural sector will benefit. It is not evident from available information which of the two institutions are best suited to maintain larger amounts of loanable funds in agricultural credits. It is also not evident which of the two institutions are best suited to reach the smaller farmer. Further, the issue of the complementarity of the two institutions comes into question. A descriptive analysis and evaluation of the two institutions in terms of organizational objectives and constraints may help for the development of more appropriate policies.

#### OBJECTIVES

Specifically, the study will include the following objectives:

Objective One -- A comparative analysis of selected commercial banks and the BAAC in the context of:

- A. Historical Growth and Objectives
- B. General Operations
- C. Agricultural Loan Policies
- D. Organizational Structure
- E. Collection Policies
- F. The Record on Lending

Objective Two -- Identification of institutional and financial constraints.

Objective Three -- An evaluation of possible means for relaxing the constraints.

#### METHODOLOGY

This study is intended to be primarily descriptive. It will utilize secondary data from the Bank of Thailand (the central bank) and the Bangkok Bank, Ltd.

The study further relies heavily on personal interviews with staff in the economic research divisions of The Bank of Thailand and the Bangkok Bank; with the Vice President of The Bangkok Bank in charge of agricultural loan policies and his staff; and with foreign advisors to the BAAC and the staff of the Economic Planning Division of the BAAC.

The Bangkok Bank was chosen as the studied commercial bank because it has historically been in the forefront of supplying credit to agriculture. It was therefore felt that the quality and length of data base would be more enlightening. Further, due to its size, its assets represent approximately 1/3 of all commercial bank assets, the Bank impacts upon total commercial lending to agriculture more than any other commercial bank. The Bangkok Bank is not felt to be representative of Thai commercial banks.

This study does not pretend in any way to be a supply and demand analysis of agricultural credit in Thailand. The demand side will only be touched upon as a building block. Studies forecasting the growth in

demand will be cited and utilized only to uphold the relevance of understanding the structures of the institutions that are expected to supply the credit.

## CHAPTER II. BACKGROUND AND HISTORICAL PERSPECTIVE

### CONDITIONS OF AGRICULTURAL PRODUCTION

Intensification of agricultural production by raising yields and extending double cropping is necessary to maintain a growing agricultural product required for a population growing by 3% per year. Average yields are low in Thailand with fertilizer consumption among the lowest in Asia, improved seed fertilizer technology adopted only to a limited extent, and double cropping extended to only a small part of the irrigable area. Potential for intensifying production is great, but steps must be taken to realize this potential through the development of irrigation and improvement in cultivation practices. If such steps are not taken, the remainder of the decade may see increasing rural tenancy, indebtedness, and crowding as the free land is exhausted, and population growth will increasingly eat into the exportable agricultural surplus. Agricultural production grew at an average rate of 5 1/2% per year during the last decade and was considerably diversified as the output of maize, cassave, sugarcane, and kenaf expanded. This performance was largely the result of an increase of 45% in the area planted between 1960 and 1972, as about 500,000 additional hectares were brought under cultivation each year. Although the process of diversification can be expected to continue, evidence has increasingly accumulated that little new land suitable for cultivation remains. During the past decade, as agricultural production grew at a rate of 5.5% and as hectares under cultivation grew at a rate of 3.75%, we can conclude that yields increased only 1.69%.

As the supply of land is exhausted, additional production is only

## II. BACKGROUND

possible through increasing yields or double cropping. At the present time, with a population growth of 3%, the population is increasing 1.3% per year faster than increases in agricultural production due to yields. Hence, it is possible to conclude intensified methods of cultivation are essential to the growth of agricultural production. As agriculture becomes more intensive, especially in the irrigated areas, it will call for short-term credit for seeds, fertilizers, and pesticides, and medium and longer term credit for work animals, machinery, equipment, and on-farm improvements such as land leveling. However, the level of irrigation development that can take place in the near future is limited and therefore, the majority of Thai farmers will continue to raise their crops under rain-fed conditions. Increasing production in rain-fed areas will require appropriate price policies, improved seeds, far greater fertilizer use, increased credit, and research and extension support. While credit is recognized as only one input into the process of agricultural development, it can be considered central to the transition from extensive to intensive agriculture. And it is therefore possible to conclude that the demand for agricultural credit must increase as intensification of agriculture increases.

### CREDIT USE AND NEEDS

A study conducted in 1963 by Kasetsart University showed that farmers had a cumulative debt of approximately Baht 9,121 million. A second study produced ten years later by the Land Development Department showed that estimated debt level had increased to Baht 16,000 million.

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### Credit Requirements for Farm Production,

In 1973, a Bangkok Bank survey set the annual loan requirement in that year for production needs alone at Baht 13,373 million.

(BANGKOK BANK MONTHLY REVIEW, JULY 1973.)

The World Bank estimated minimum of B4600 million was extended in 1970 for production credit.

(IBRD, Thailand Agriculture Sector Survey, JAN., 1972)

US AID in 1972 in its Spring Review of small farmer credit estimated a range in demand of B 10000 - 12000 million. However, the basis for these estimates are two studies published in 1965 and 1966.

The Agricultural section of the Bank of Thailand has given the following ranges in estimates for the past three years:

|      |        |   |       |         |
|------|--------|---|-------|---------|
| 1973 | B10840 | - | 12480 | million |
| 1974 | B14820 | - | 15170 | million |
| 1975 | B12800 | - | 16430 | million |

(Bank of Thailand March, 1976)

Questions can be raised about all of these estimates. For one thing, what is being measured differs: total rural indebtedness, total production credit required or the credit demanded by small farmers; one can reasonably expect the methods to differ, and thus lack a degree of comparability. What does emerge from these studies is the immensity

## II. BACKGROUND

of the total sums, whether financing required or debt experienced.

### THE AGRICULTURAL CREDIT SYSTEM

Who supplies the credit makes a difference. Wolf Donner in a UNDP study (1971) states that about 50% of all yearly rural credit needs is supplied by relatives and neighbors. Marcus Ingle (US AID, 1972) states an additional forty per cent is provided through the marketing system (local store owners and crop buyers.)

Institutional credit to farmers over the years has been at best very meager, amounting to perhaps only 10% of the total annual credit requirements for the entire sector.

Of the two formal sources of credit, commercial banks have shown clear dominance among all financial institutions. They have proved consistently effective in both the mobilization of household savings and provision of credit. There appears, therefore, to be good reason to expect further expansion of commercial banks not only in their traditional operations but also in new areas.

Commercial banks as a group have not historically displayed an interest in loans to the agricultural sector of the economy. In fact, the amount lent to agriculture proportional to total loans declined through 1974. It is interesting to contrast the percentage of commercial bank loans to individuals for personal needs to the percentage of loans to the agricultural sector. Over the six year period, individual consumer loans have ranged from three times as great as agricultural loans in 1966 to five times as great in 1974. Further, agricultural loans while showing an increase in amount over the preceeding six years have in

## II. BACKGROUND

fact decreased in percentage of total credit extended in each successive year since 1956.

The net return from agricultural lending is not as attractive as other banking operations due to high administrative costs and high risks. In addition, there is a reluctance by the commercial banks to enter a sector of the economy about which they know little. However with the new directive given to the commercial banks by the Government, this traditional reluctance is expected to change. Beginning in 1963, the Bangkok Bank, Bank of Ayudhaya, Thai Farmer's Bank and Krung Thai Bank began to extend agricultural credit for the first time in the history of Thai commercial banking.

The BAAC is the alternative source of institutional credit available to the rural populace. It has shown consistent growth in agricultural lending since its inception in 1966. The structure (i.e. nature and characteristics) of the two institutions is important because before policies can be effective which will alter institutional lending behavior, one must understand the objectives and constraints of the institutions. How an institution will act is a function of its various interdependencies.

### CHAPTER III. COMPARATIVE ANALYSIS

#### HISTORICAL GROWTH AND OBJECTIVES

Commercial banking was first introduced in Thailand in 1888 with the establishment of a branch of the Hong Kong and Shanghai Banking Corporation. Two other foreign banks followed in the 1890's. In 1906, the first Thai bank, The Siam Commercial Bank, began operations. It was founded with a good deal of personal support from King Chulalongkorn and, today, remains the bank of the old aristocracy and the royal family. There are currently 16 Thai banks with over 800 branches (refer to Table #1) throughout the kingdom and 13 foreign banks in operation. Thai banks grew rapidly vis a vis foreign banks and today clearly dominate the commercial banking business accounting for approximately 95% of all deposits, approximately 90% of loans, and approximately 92% of total assets in the banking sector.

Silcox states that the early Chinese banks which were heavily involved in local business became the natural model for the Thai bank to follow when they were organized by the Bangkok traders, nearly all Chinese. Their general objective was to further the diverse political and business interests of the group. Bankers service large depositors and shareholders by advancing and/or restricting monies in areas of business by acquiring real estate of interest to the depositor/ shareholders, by securing supplies and markets, both domestic and foreign, for products of depositors/shareholders. The bank also services the politicians who provide political favor and safety by acting as a source for income (i.e. director fees) and by granting credit to the politician. The banks also act as a channel for the conferring of

### III. COMPARATIVE ANALYSIS

favors on key political supporters. Thus the politician avoids the embarrassment of direct money payments. We can see that the bankers in Thailand are not simply bankers but represent many other business interests. And through the control of such a large percentage of the nation's monetary assets comes a large degree of political as well as economic power. It appears as not only the most powerful but as the most sophisticated and successful sector of the Thai economy.

Commercial banks as a group do not have an organized spokesman. They do not publish industry objectives or goals. However as commercial institutions in a capitalist economy it is possible to conclude that profits and growth are obvious objectives.

Individual bankers have spoken out on behalf of the industry in the past but generally these occasions represent defenses against public criticism.

Paul Sithi Amnuai, Senior Vice President of The Bangkok Bank, in describing the essence of commercial bank management, states that as far as a banker is concerned "good management is good debt management at a profit." He further states that central bank efforts to force commercial bankers to alter their loan portfolios in the interests of development precludes the banker from optimum loan portfolio management to the best advantage of their depositors, which he feels is a prerequisite to good bank management.

(Bangkok Bank Monthly Review,  
December 1974)

### III. COMPARATIVE ANALYSIS

The profit and growth objectives of commercial banks are apparent over time.

#### ALL COMMERCIAL BANKS

| <u>Year</u> | <u>Capital Fund</u> | <u>Total Assets</u> |
|-------------|---------------------|---------------------|
| 1962        | 586.2               | 9184.5              |
| 1966        | 1385.9              | 20190.9             |
| 1975        | 7804.5              | 127,073.9           |

That a general objective of commercial banks is to further diverse business interests can be looked at in the context of commercial bankers' ownership and/or management positions in other companies. (See Table 2.)

The Bangkok Bank was established in 1944 and while changing forms of ownership several times, the bank not only has survived and shown consistent growth but has clearly dominated the commercial banking system since 1962. It's share of all commercial bank deposits, at that time, was approximately 21%. In 1966, the ratio had risen to 24% and is currently approaching 35%.

The Bangkok Bank can be seen as representative of Thai commercial banks in the context of the general objective of furthering diverse political and business interests. Silcox writing in 1966 gives the following description:

"The Bangkok Bank, a private bank which was started during World War II, was later expanded with funds from the Ministry of Economic Affairs. Under the control of

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Source 1962 & 1966, Rozental P. 128 & P. 131 respectively

Source 1975: Form C.B.1, Bank of Thailand

### III. COMPARATIVE ANALYSIS

leading Thai-Chinese banker it again became a private bank under the protection of Police General Phao. After Phao's fall, this Thai-Chinese continued effectively to control the Bangkok Bank from Hong Kong, and invited a rising military man, General Prapas Charusathirak, to become president. Now that Prapas is Deputy Prime Minister and Commander-in-Chief this has become one of the most important banks in Thai politics."

(Silcox, p. 185)

The leading Thai-Chinese banker, Chin Sophanpanich, maintained control of the Bank when the government of General Prapas fell during the student riots of 1973, and today he occupies the offices of President and Chairman of the Board.

The successful growth of the Bangkok Bank can thus be seen in the light of its political sponsorship. Chin Sophanpanich over time has maintained a Board of Directors which guaranteed political security, and allowed the bank the freedom to pursue its economic interests represented largely by domestic and foreign trade.

In 1975, Chin Sophanpanich in his Annual "Message from the Chairman" stated:

"This year (1974) was a time when we were in

### III. COMPARATIVE ANALYSIS

political changes from within. Deeply committed to playing a role in the economic and social development of Thailand, and, equally concerned over the economic uncertainties throughout the world, the Bank's management is determined to exercise every option available to it to help ensure the continued rapid economic progress of the country in the years ahead.

However, in order to achieve economic stability-and a truly democratic system which we have long hoped for-closer cooperation between the public and private sectors has become more essential than ever before. On behalf of the Bank, I guarantee that we will play whatever role necessary to achieve both these ends. At the same time, we rely on the Government to become increasingly responsive to the interests of the majority of the people and the overall "common good" of the nation. I take great pride in stating that this philosophy of cooperation has been a

III. COMPARATIVE ANALYSIS

long-standing goal of the Bank."  
(Bangkok Bank Annual Report, 1974)

And in 1976,

"With its long-standing commitment to participating in the social and economic development of Thailand, the Bangkok Bank cooperated fully with the Government in contributing significantly to the aggregate funds of commercial banks' credit earmarked to be extended to the agricultural sector. We take pride in saying that this is nothing new for the Bank, as we in fact were the pioneer in the field of agricultural credit. On behalf of the Bank I affirm that our solid cooperation is always readily forthcoming to accomplish this and other national ends.

Throughout the year 1975 the Bank continued to adhere to the principle of playing a responsible role in activities of social utility and promoting the welfare of society at large."  
(Bangkok Bank Annual Report, 1975)

These comments, laudatory in themselves, should be put into the context of the brief constitutional democracy which began in 1973 and ended in October, 1976 with the military takeover.

As a commercial enterprise, the Bangkok Bank is interested in growth

III. COMPARATIVE ANALYSIS  
and a satisfactory financial return.

In 1974, the Bank's net profit after tax was 466. million baht (an increase over the preceeding year of 61.5%) of which

"The Bank saw fit to retain 270 million  
as a reserve in order to insure its rate  
of expansion would remain at the high  
level of preceeding years."

(Annual Report 1974,  
Bangkok Bank, Ltd. p. 6)

In 1975, the net profit after tax had increased to 626.7 million,  
of which 411.2 were retained. (Annual Report 1975, Bangkok Bank, Ltd., p.4)

In summary, the following points are again noted.

- Thai commercial banks dominate the banking sector with the Bangkok Bank as the unquestionable "leader" by all indices.
- The growth in both capital funds and total assets over the last 15 years of all commercial banks exemplified the success and sophistication of the banking sector.
- Thai commercial banks represent diverse business interests and have traditionally functioned as a conduit between economic and political power holders.

The BAAC, established under Act BE 2509, replaced the former Bank for Cooperatives in 1966, and assumed the assets and liabilities of its predecessor. With the reorganization, agricultural credit was to cease being a subsidy from a benevolent government and instead become a stimulus to raise productivity and incomes. (Business Review, August, 1973.) Loans receivable increased from 217 million baht in 1966 to 4714 million baht in 1975.

### III. COMPARATIVE ANALYSIS

The objective of the founders of BAAC was to provide a supervised credit system which was to cover about 11% of farm households.

(Rozental, p. 86.)

The BAAC now sees its role as providing a constantly expanding agricultural credit program to service agricultural co-operatives, farmers groups, and to service individual farmers. In the past, there has been a bias towards the individual farmer rather than the farmers groups or cooperatives, and a bias towards short and medium term financing. An apparent unstated objective of the BAAC is longevity. Characteristic of most bureaucracies, it wants to stay in operation. To do this, it must either maintain a profit margin to cover administrative costs and bad debt expense or have a government willing to finance the deficit.

#### Summary

Comparing the two institutions in the light of their objectives and growth, we find very different animals. Commercial banks have strong political and business connections not found in the BAAC. The impact this may have on the commercial banks' agricultural loan policies can be hypothesized. If, for example, the ownership interest of a given commercial bank is the same or overlaps the ownership interest of a rice exporter, the decision making process becomes broader than simply maximizing the commercial bank interest. Commercial bankers, therefore, will not necessarily maximize their commercial bank operations, but will maximize their overall interests. As a consequence, agricultural loans which conflict with other interests may be restricted.

### III. COMPARATIVE ANALYSIS

Secondly, commercial banks have a profit orientation whereas the BAAC does not. As a result, agricultural lending by commercial banks must at the minimum cover the cost of funds, the operational cost of an agricultural loan program, and bad debt expense. Further, it can be hypothesized that the return from an agricultural loan must compete with the return from loans to other sectors if agricultural loans are to represent any more than a token portion of the total loan portfolio.

Finally, the BAAC has an objective of longevity, which has no direct corollary in a commercial bank. Longevity for the BAAC can only occur through an effective lending program and/or continuing financial support, (a luxury not afforded the commercial banks). Financial support from the government of Thailand is dependent upon the BAAC's image as an effective financial intermediary and the desire by the government to support an agricultural credit program. Thus, the BAAC if not effective, must at least appear to be so.

#### GENERAL OPERATIONS

The Bank of Thailand is charged with control of money and credit in the banking system. It is empowered to require all commercial banks to maintain legal reserves with the Bank of Thailand. The reserve ratio at present is 8%. The Bank may also prescribe various other rates and ratios in the regulation of commercial bank operations (i.e. the ratio of capital funds to risk assets, maximum deposit

### III. COMPARATIVE ANALYSIS

rates, maximum loan rates and discount rates). With a given capital fund, a bank can expand its risk assets only so far. To ensure stability, the Bank of Thailand has set this ratio at 9%. The maximum deposit and loan rates are generally adjusted only when there is strong market pressure (i.e. not very often). Bank of Thailand's loans to commercial banks secured by government bonds are made at a standard interest rate of 11%. This is a relatively high cost to commercial banks and tends to discourage credit expansion. The Bank of Thailand also gives rediscounting facilities to commercial banks against some specified types of notes. The rediscounting rate is fixed at 5% with the specification that the commercial bank may not charge more than 7% for export and industrial notes, and 10% for agricultural notes. Maximum rates of interest commercial banks may pay on one year time deposits is 8%. Maximum rates the commercial banks may charge on loans is 15%. (See Table #6)

The Public Development Program for Thailand (IBRD, 1959) noted that the political connection of some of the banks is undoubtedly conducive to lax standards in both the extension of bank credits and the enforcement of bank regulations.

They further noted that the reserve requirements were violated frequently and without penalty, and that required reporting was often long delayed.

The Bank of Thailand in attempting to impose a code of banking practice, largely imported from the West, on a commercial banking

### III. COMPARATIVE ANALYSIS

system, with Chinese banking traditions, encounters constant difficulties. The long run aim has appeared to be one of setting standards rather than of controlling the commercial banks. This has been accomplished more through monetary measures (strengthened by a system of bank inspections) rather than administrative action. (Silcox p. 193)

Rozental summarized the Bank of Thailand's statutory powers over commercial banks as

- a) The power to set maximum interest rates
- b) the power to vary reserve requirements
- c) to limit the ratio of risk assets to capital
- d) to prescribe the ratios of specified assets to capital
- e) to regulate the proportion of loans to one name
- f) power of prestige

and continues to say that the Bank of Thailand's success in influencing the behavior of commercial banks has been derived from utilizing its great prestige in the community to bring about changes. (Rozental p. 233) The Bank today regards "moral suasion" exerted through pronouncements and speeches of bank officials as its most effective tool.

It is interesting to note that only in the last few years has the Bank of Thailand become actively involved through rediscounting

### III. COMPARATIVE ANALYSIS.

facilities in the promotion of lending to agriculture. The 1958 IBRD mission stated that the creation of specialized institutions for agricultural credit involves high risks and difficult administrative problems, and that farm credit appeared less serious than in other Asian countries. Thus, they concluded it was not justified to make any substantial outlay on a rural credit program.

"It might be worthwhile to invest a token amount in the establishment of pilot rural credit institutions." (IBRD, 1959)

In 1968 the Bank of Thailand began a rediscounting facility of promisory notes for the production of rice and maize. (Rozenal, p. 200) This, however, was limited to the BAAC and not available to commercial banks until 1971. (See Table #7)

The primary functions of a commercial bank are to attract deposits and to extend loans, earning income of the difference between the interest costs paid on deposits and the interest charged to loans. Analysis of the main categories of assets and liabilities puts forth a more detailed understanding of bank operations.

Cash, treasury bills and government bonds, are liquid assets set aside for daily operations. Cash from a profit standpoint is useless. Government treasury bills and bonds pay interest and are easily disposable for cash. Commercial bankers look at liquidity in terms of cash conversion either to pay depositors or to use for loan and investment opportunities as they arise.

Government bonds not only pay a higher rate of interest but can be

### III. COMPARATIVE ANALYSIS

used in lieu of 50% of the cash reserve requirement at the Bank of Thailand.

Commercial banks make direct investments giving them equity positions in other companies. The Commercial Banking Act requires that these investments be carried at book value rather than at cost or market value. However, The Bank of Thailand admits that this is rarely the case and concludes that it is virtually impossible to enforce. The Bank of Thailand does not audit all branches of banks annually due to a shortage of personnel. It surely could not audit the subsidiaries of commercial banks or those companies in which a commercial bank maintains an ownership position.

To the extent that these investments are not carried at book value, the commercial banks are understating their profits.

When looking into the ownership of finance companies, a substantial number of the Bangkok Banks' investments emerged. Without question it is only a partial picture, but interesting for several reasons. First, the Bangkok Bank's investment in finance companies demonstrates overlapping ownership (e.g., while the direct investment in Bank Nomura International Security is 20%, the Bank indirectly controls another 15% through its subsidiary Bangkok First Investment & Trust and an additional 3% is held by Sophonpanich).

Secondly, holdings in finance companies are the mechanism for circumventing the legal lending rate (15%) applied to commercial bank lending. The recent proliferation of these companies suggests that the legal lending rate is not covering the cost of capital plus

### III. COMPARATIVE ANALYSIS

risk for some sectors of the economy. (See Tables #3 and #4)

Loan portfolios of commercial banks represent the relationship between the volatility of deposits and the conditions of national and international economies. But perhaps more important, the portfolios represent the bankers perception of the relationship between risk and return.

Commercial bank loans are primarily in the form of overdrafts (short term advances) which generally are renewable, sometimes again and again stretching over periods of years. The Bank of Thailand's statistics indicate that commercial bank lendings are concentrated primarily in the financing of domestic and foreign trade and manufacturing. (See Table # 5) These areas have consistently approximated 50% of total lendings. This appears to substantiate Silcox's thought that the Thai banks have in fact furthered the business interests of their owners, the Thai-Chinese traders. In contrast loans to agriculture (while increasing dramatically in 1975) represents only a minute portion of all commercial bank loans. (See Graph #1)

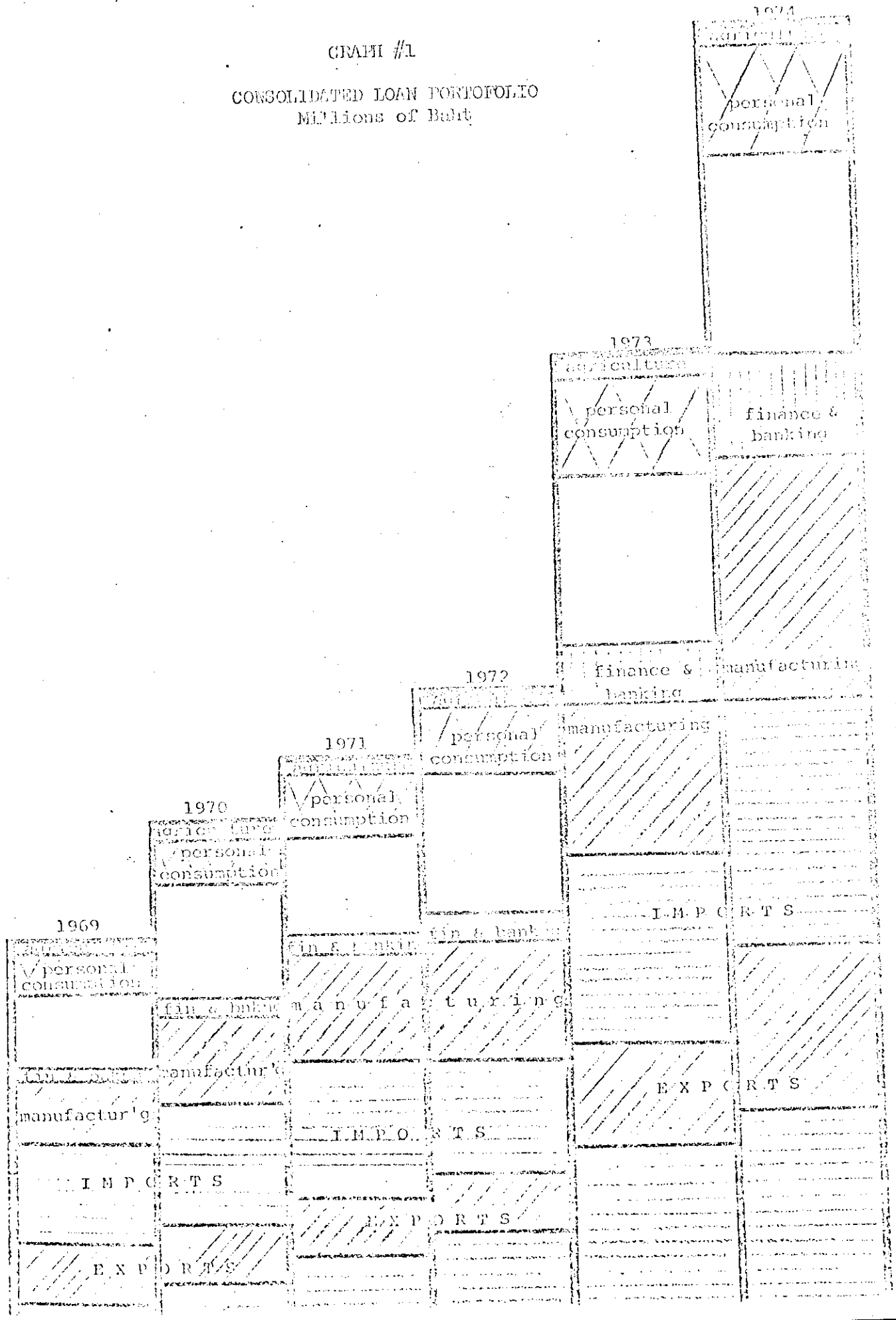
The commercial banks have traditionally made collateral loans rather than project loans. There are several reasons for this. First is the risk factor, collateral is generally safer. Secondly, the majority of the bank's funds (i.e. deposits and borrowings) are short-term commitments. The effect of this policy is a concentration of credit to those that have wealth.

The Bank of Thailand attempts to influence loan portfolios through

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GRAPH #1

CONSOLIDATED LOAN PORTFOLIO  
Millions of Baht



### III. COMPARATIVE ANALYSIS

discount facilities. (See Table #8) The mechanics of these facilities become important in commercial banks' willingness to make agricultural loans.

The loan portfolio of the Bangkok Bank is not a matter of public record. However in the annual reports of 1974 and 1975, the following is set forth.

|                               | <u>1974</u> | %     | <u>1975</u> | %     |
|-------------------------------|-------------|-------|-------------|-------|
| Manufacturing                 | 3411.2      | 12.5  | 4460.4      | 12.8  |
| Domestic Trade                | 2386.6      | 8.5   | 2813.8      | 8.2   |
| Agriculture                   | 223.4       | .8    | 1031.       | 2.9   |
| Total Loans, Advances & Bills | 27514.8     | 100.0 | 34734.8     | 100.0 |

Further, the 1974 annual report states that industry for the first time surpassed "the credit provided to import and export activities - traditionally the Bank's chief lending outlets."

If foreign trade is traditionally the Bank's chief lending outlet, it is feasible to assume that it represented approximately 10% or 2751 million baht of total loans, advances and bills, in 1974.

The 1975 report records increases of 24% in import/export lending which would bring the figure to approximately 3411 million baht for 1975.

The amounts lent for manufacturing and domestic and foreign trade would then account for approximately 31% of all loans in both year while those of all commercial banks for the same years approached 50%.

Deposits come in basically three categories: demand, savings and

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time deposits. Demand deposits differ from savings and time deposits in three ways.

1) Savings and Time deposits may be legally delayed when depositors ask for their money back. This delay allows these funds to be used in loans or investments which normally produce higher yields.

2) Savings and Time deposits carry an interest cost whereas demand deposits do not.

3) Savings and Time deposits have lower administrative costs due to the paperwork involved with checking accounts. (See Table #9)

Commercial banks obtain funds by accepting demand savings and time deposits from the public and through borrowing. In 1959, a major interest rate reform was enacted which raised the rate of interest allowed on time deposits. In 1962, interest from time deposits was excluded from personal taxable income. These factors in conjunction with the real growth of the economy dramatically increased the total funds deposited in the commercial banks. Total deposits (millions of baht) went from 9,990 in 1963 to 86,558 by the end of 1975. Of the commercial banks' total liabilities, deposits represent roughly 70%. The costs of deposits can be broken down as follows:

|                    | <u>% Total Deposits</u> | <u>Interest Rate</u> |
|--------------------|-------------------------|----------------------|
| Time Deposits -    | 75%                     | 7                    |
| Savings Deposits - | 9%                      | 4.5                  |
| Demand Deposit -   | 16%                     | 0                    |

Thus average costs of deposits is below 6%.

### III. COMPARATIVE ANALYSIS

Commercial bank deposits outside of the Bangkok metropolitan area accounted for over one third of the total deposits in commercial banks. This would indicate successful mobilization of savings by the branches in the provinces, and indicates rural to urban transfer of funds (e.g. the rural area is directly financing the urban population). See Graph #2

Commercial banks may borrow from the Bank of Thailand, from other commercial banks in Thailand or from banks abroad. Borrowings from the Bank of Thailand are at 10% interest and rediscounts are 5%. At the end of 1975 commercial bank borrowings of this type were at an all time high due to the high cost of funds abroad and the continued demand for loans. Borrowing from other commercial banks represents the domestic call market. This is a well established intra-bank market with interest rates fluctuating with the supply and demand for funds. At the end of 1974, the call loan rate was 11.3% but is currently around 11%. As the name implies, the funds borrowed are at call from the lending bank.

The capital fund of commercial banks is comprised of paid-up capital, statutory reserves, and undivided profits. As mentioned earlier, the Commercial Banking Act requires that the capital account be maintained at 9% (variable) of risk assets. While the definition of risk assets has been amended many times since the enactment of the 1962 code, it roughly corresponds to loans, overdrafts and discounts and investments. In 1966, the ratio of capital to risk assets for the banks as a whole stood at 10.36%; in 1975, this ratio

### III. COMPARATIVE ANALYSIS

increased to 11.26%. This would indicate a theoretical excess capacity. However, the aggregate data cannot be relied upon for estimating an actual excess capacity. For example, the Bangkok Bank found it necessary to increase its share capital in 1973 in order to maintain the required ratio and its desired asset portfolio.

The BAAC, as a specialized institution, has fewer components which simplifies an analysis of their operations. The primary functions of the BAAC are to attract funds (whether deposits from the public, borrowing from the government or commercial banks, or capital funds) and to extend loans to agriculture, earning income on the difference between the cost of funds and the interest charged on loans.

Cash, again, represents a non-productive resource. It is held primarily for loan conversion. As the need for agricultural credit is highly seasonal, the desire to hold cash is also seasonal. In addition the BAAC must occasionally meet depositor's requests for withdrawals.

Agricultural loans are the "raison d'etre" of the BAAC and its sole productive (income generating) asset. The loan portfolio, concentrated in the agricultural sector, requires a careful balancing of risk and return.

The BAAC has three categories of deposits - savings, time and compensatory. Interest rates on savings and time deposits are again regulated by the Bank of Thailand and are comparable to other savings institutions.

### III. COMPARATIVE ANALYSIS

#### Structure of BAAC Interest Rates Paid to Savers - 1975

|                          |       |
|--------------------------|-------|
| Savings                  | 4 1/2 |
| Time: less than 3 months | 1/100 |
| 3-6 months               | 6     |
| 6-12                     | 7     |
| 12 months and over       | 8     |

Each farmer is required to deposit 5% of every loan he obtains after the total repayment of his first loan. This deposit is effectively a three year time deposit which pays interest at 9%. These deposits may only be withdrawn prior to maturity under the following conditions:

- cessation of client status
- serious disaster
- family medical or educational expense

#### Cost of BAAC Deposits by Type

| <u>Type</u>  | <u>Amount</u> | <u>% Total Deposits</u> | <u>Interest Rate</u> |
|--------------|---------------|-------------------------|----------------------|
| Savings      | 283.9         | 24%                     | 4.5%                 |
| Time         | 582.6         | 50%                     | 6%                   |
| Compensatory | <u>308.1</u>  | <u>26%</u>              | 9%                   |
|              | 1174.6        | 100%                    |                      |

Thus, the average cost of deposits is 6.4%.

At the time of writing, farmers, protesting the "cash collateral" or what must be the deposit in proportion to loan requirement of the BAAC, have won the removal of the requirement for the majority of borrowers from the Minister of Finance.

### III. COMPARATIVE ANALYSIS

The Ministry in conjunction with the BAAC has established instead that 10% of the "better off" farmers of each group shall be responsible for 10% cash collateral or deposit in proportion to loan.

The BAAC has various long term loans outstanding. It inherited a debt from the Bank for Cooperatives which stood at 9.4 million baht at the end of 1974. In addition, the BAAC has received miscellaneous budget appropriations, and loans (from the U.S. and Japan) through Ministry of Finance. PL 480 funds are the bulk of this.

|        |             |
|--------|-------------|
| PL 480 | 116.4       |
| Others | <u>79.1</u> |
|        | 195.5       |

Interest costs on these loans vary but it is reasonable to assume that the subsidized rates are passed through to the BAAC.

Loans from commercial banks are made available to the BAAC at 8% interest - the stated cost of funds to the commercial banks. At the end of 1975, these amounted to 1670.8 million baht.

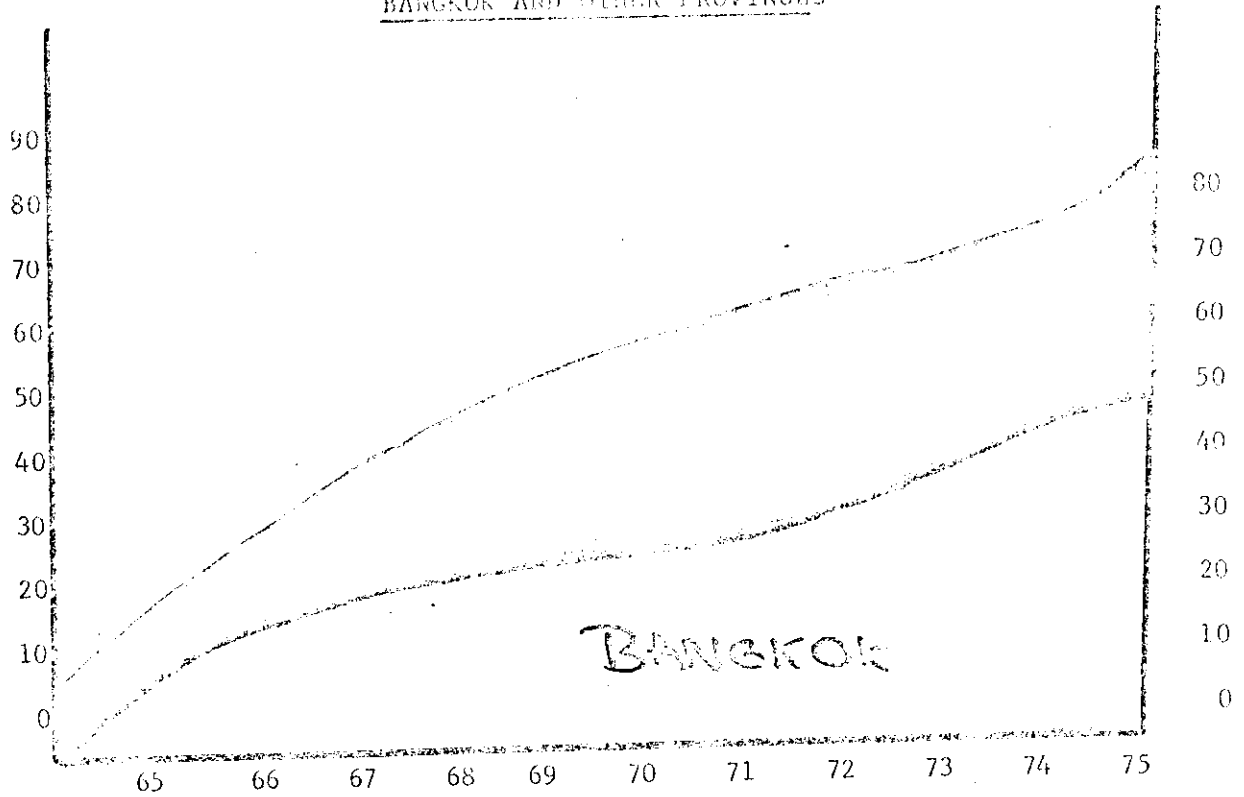
The BAAC has two bond issues outstanding both at 9% interest. The first issue, 50 million, becomes due 12/31/76. The second, 120 million, comes due 12/1/77.

The average cost of borrowings could be estimated conservatively as follows:

GRAPH # 2

COMMERCIAL BANK DEPOSITS

BANGKOK AND OTHER PROVINCES



### III. COMPARATIVE ANALYSIS

| <u>Type</u>           | <u>Amount</u> | <u>% of Total</u> | <u>Rate</u> |
|-----------------------|---------------|-------------------|-------------|
| Long term loans       | 195.5         | 10%               | -           |
| Commercial Bank Loans | 1670.8        | 82%               | 8%          |
| Bond issues           | <u>170.0</u>  | 8%                | 9%          |
|                       | 2036.3        |                   |             |

Thus, the average cost of borrowings is at least 7.3%.

#### Capital

The BAAC's capital fund at the end of 1975 was composed of:

|                   |                    |
|-------------------|--------------------|
|                   | (millions of baht) |
| Paid up capital:  | 999.9              |
| Reserve           | 57.                |
| Retained Earnings | <u>222.1</u>       |
|                   | 1279.1             |

Between 1966 and 1973, the 10,000 shares of authorized capital were issued, thus accounting for the substantial increase in the capital fund.

#### Summary

Comparing the general operations of the two institutions, the diversity on the one hand (commercial banks) and specialization on the other (BAAC) instantly comes to the fore. What emerges are two institutions operationally more different than similar.

- Liquidity or cash flow is extremely important to the Commercial Bank on a daily basis whereas the BAAC's need for liquidity is more seasonal and more predictable, (i.e., they do not depend upon the mobilization of funds and thus are not plagued with the vagaries of individual's choosing to withdraw funds).

### III. COMPARATIVE ANALYSIS

- Commercial banks have "earning" assets (investments) other than loans whereas the BAAC does not.

- Commercial banks capital fund increases generally result from earnings whereas the BAAC has increased its capital fund primarily by the issuance of shares.

- Where commercial banks have choices of loans by sectors, the BAAC has choice only in how it will lend its funds to the agricultural sector.

### III. COMPARATIVE ANALYSIS

#### AGRICULTURAL LOAN POLICIES

The Bangkok Bank was the first to initiate a bank-to-farmer agricultural credit program. It started the program with the full knowledge that the returns from it would not be comparable to those from other banking operations.

Essentially, the bank's program is directed at rendering financial and technical assistance to the farmers in the following ways:

- By supervising credit to farmers in need of capital for the purpose of increasing yield and for making farm improvements.
- By supervising credit to farmer groups, for the purchase of farm equipment.
- By rendering advice on farm management, farming technology and animal husbandry.
- By rendering advice on the transportation and marketing of farm produces.
- By distributing the latest agricultural bulletins and by acting in an advisory capacity on problems related to farming.

#### Categories of Farm Credit

In order to facilitate operations, the Bangkok Bank offers the following two distinct categories of farm credit, depending on the financial standing of the farmer:

1. Individual Farm Credit - for farmers who own the land they cultivate. These farmers are given

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individual agricultural loans against collateral in the form of a land mortgage.

2. Group Joint-Liability Credit - for the smaller tenant farmers who have no land to mortgage.

#### Qualifications for Loans

Consideration for the approval of loans for both types of applicants is made only when the applicant can satisfy the following qualifications:

1. Objective of Loan - how the loan is to be used.
2. Ability of applicant to make use of the loan to maintain a high level of production.
3. Type of farm operations - the crop and livestock programs within the loan, the acreage under cultivation, etc.
4. Capability of repayment - the net yield from the farm, the length of time required, etc.
5. Reliability of the applicant - his personal background, credit worthiness, indebtedness, character, family surroundings, etc.
6. Security available - the location and size of land, type of land ownership, legal procedures etc.

#### Loan Procedures

1. Individual farm credit is designed to assist the larger, better organized farmers, who can furnish collateral, and who need capital resources for farm productivity and

### III. COMPARATIVE ANALYSIS

improvement. These farmers can approach the Bangkok Bank either directly, at the Head Office in Bangkok or indirectly through the Bangkok Bank's branches in the provinces.

Application must be made in writing (on the form provided). It is first considered by the agricultural credit officer in terms of objectives, what the loan is needed for, the characteristics of loan, background of the applicant, his capability for repayment, location of the farm, and finally, the collateral offered.

A general farm survey is then carried out by the agricultural credit officer. A report, consisting of the following details, will be submitted:

1. applicant's background
2. general layout of the farm,
3. soil type and its suitability,
4. climatic and environmental conditions,
5. cropping program on selected acreage,
6. cost of production and annual family expenses,
7. average yielding and repayment possibility,
8. credit worthiness, and indebtedness,
9. collateral available.

The credit officer's reports and proposed budget program are taken as a guide in the final consideration either at the head office or at the local branch. The successful applicant is notified of the decision and informed of the procedure for mortgaging his property and collecting his loan.

### III. COMPARATIVE ANALYSIS

Joint-liability credit for group farmers is designed to assist the smaller farmers around the vicinity of the provincial branches.

A preliminary survey is made in the areas where the Bank anticipates establishment of this program. The survey will examine the general conditions of the area, such as the type of cropping and animal husbandry, the seasonal environment, suitability and productivity of land, soil type and irrigation, needs and requirements of the average farmers, communication and transport facilities, marketing and price structure, and the pattern of aggregate indebtedness.

The assigned agricultural credit representatives then approach the local farmers personally, by attending a monthly meeting among the Kamnans and Pucyaibans, (district and village officers) to introduce the program and arrange for further proceedings.

The interested farmers in the areas will form a mutual joint-liability group, consisting of not less than five and not more than twenty members. Each group is asked to appoint its own working committee, consisting of a chairman, a secretary, and a general officer with whom the Bank's field staff work.

After the submission of the application, a thorough farm survey is made at each member's farm (similar in detail to the individual farmer). The committee is entrusted with the task of intermediary between the group farmers and the Bangkok Bank.

A detailed report and proposed budget are submitted to the branch manager who, together with the agricultural credit officer will

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consider and make the approval.

#### Duration of Loans

The duration of each loan depends on the purpose for which the loan was granted. For practical purposes, loans are classified into two categories - short-term (productive loans) and medium-term. Short-term loans, repayments of which are required within a crop year or twelve calendar months, are granted for the purposes of covering family living expenses, for the purchase of fertilizers, seeds, pesticides and farm tools. Medium-term credit, which is spread over a period not exceeding five years, is granted for the purchase of land, light farm machinery, construction material and similar purposes.

#### Amount of Loans

For the individual farmers, the amount of loan which each can apply for is usually unlimited. However, any amount of loan applied for must be commercially viable. The availability of collateral does not assure a favorable decision, but is a limiting factor.

For the members of a joint-liability group the amount of loan which each can apply for without collateral is limited. Each member is allowed not more than the maximum of 10,000 baht, or the equivalent of 200-400 baht per rai, depending on the type of crop and cost of cultivation each is undertaking per season. However, if and when, any member should need more than the 10,000 baht maximum, and has mortgagable collateral of his own, he can, with the group committee's approval, apply for more. (see security)

However, under the Bangkok Bank's policies, farmers are required to

### III. COMPARATIVE ANALYSIS

save a minimum equivalent of 5 percent of the last amount loaned to them. In other words, a farmer is eligible to a second loan, only if he has saved an amount equal to at least 5 percent of the preceding loan by the time he has repaid the latter.

#### Security

The security required for loans is usually in the form of legally mortgagable collateral, such as land and buildings. In some special cases only can a guarantee procedure from a familiar customer be accepted. The individual farmer must mortgage his collateral, prior to collection of the loan.

The members of a joint-liability group must offer their future crop as guarantee.

The group committee and each member will be responsible for every other member's loan within the same group. Together, they will be liable for up to 10,000 baht per each member who does not repay when the contract matures. Any member wanting more than the maximum amount of 10,000 baht, with a longer period for repayment, can apply through the group committee if his own security is available. The application will be treated in the same manner as the individual farmer, and the group is not liable for the additional loan.

#### Rates of Interest

Annual production credit usually carries an interest rate of 12 percent per annum, or one baht per every 100 baht per month. Improvement credit may carry an interest rate varying from 12-14 percent per annum, depending on the immediate needs of the applicant. Whatever the rate,

### III. COMPARATIVE ANALYSIS

it is calculated on a daily basis on the amount outstanding.

1. Annual production credit - for purchase of seeds, fertilizer, pesticide, minor tools and implements, fuel, feeding stuffs and for labor costs, the rate is 12 percent per annum.
2. Long term improvement credit -
  - a) for purchase of land necessary to promote productivity, the rate is 12 percent per annum; for purchase of land for intensive cash farming, the rate is 12-14 percent per annum.
  - b) for purchase of heavy machinery and agricultural techniques the rate is 12 percent per annum. For the purchase of additional machinery and agricultural implements and purchase of machinery for home industry, including mills and trucks the rate is 12-14 percent per annum.
  - c) for construction of warehouses, tool sheds, office buildings, the rate of interest is 12 percent per annum. For construction of live-stock housing, the rate of interest is 12-14 percent per annum.
3. Debt settlement - where debt is incurred for purchase of necessary farm equipment, fertilizer, and for daily expenses, the rate is 12 percent per annum. For other debts incurred, the rate of interest is 12-14 percent per annum.

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The Bangkok Bank cannot settle debts incurred by every joint-liability applicant, but does so for the ones whose future viability is dependent upon refinancing.

#### Supervision of Loans

The Bank exercises careful supervisory control over the loans it provides. It does this by handing out each loan in installments with each installment being paid out only for the purpose approved and only when the need arises. For instance, this means that a farmer cannot draw credit for harvesting purposes before the actual harvest. It also means that the Bank does not actually make cash payments to the farmers, in order to enable them to purchase seeds, fertilizers and pesticides. Rather, the Bank directs the farmers to local suppliers who provide them with their requirements. Loans are supervised in this way in order to prevent farmers from misusing them.

Periodic inspections, also, are designed to prevent the misuse of loan proceeds. The most suitable occasions for periodic inspections would be around these periods:

1. At cultivation.
2. Weeding season.
3. At harvest.

A monthly meeting of each farmer group is also held, at the local hall, for general discussion among group members.

In addition, visits from a mobile extension unit are made, periodically, in all the areas, especially those that have suffered natural hazards.

### III. COMPARATIVE ANALYSIS

Experience has shown that both the farmer and the agricultural credit field officers enjoy the "pop-in" discussion sessions, especially on the topic of current market conditions. This enables the Bank to maintain a close relationship, as well as to stay the knowledgeable of "What's going on" at the farm.

#### Technical Services

In order to enable the farmers to receive maximum benefits from the loans, the Bank provides follow-up services in the form of supervision and information. The Bank's special mobile extension unit works in conjunction with the Department of Extensional Works of the Ministry of Agriculture, in all areas where supervised credit is given. The Bank also runs demonstration plots with the co-operation of several chemical companies in order to convince the farmers of the importance of fertilizers. Furthermore, the Bank works in conjunction with the local agricultural agencies in order to help farmers with pest control. Farmers are also encouraged to diversify their activities. They are put in touch with the Government's Livestock Department, which urges them to make use of their sparetime raising livestock and poultry. To enable farmers to receive maximum financial returns from their efforts, they are put in touch with local purchasing agencies. The Bank also renders other services such as the distribution of bulletins and booklets on farming and provides, the latest marketing information in some areas.

Farmers, under normal circumstances, get their loans according to their immediate needs. When possible, loans for purchase of inputs are paid in kind. This secures the correct use of the loan, but the Bangkok Bank

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states that in addition, farmers receive the inputs they need at a considerable discount.

The BAAC extends loans to individual farmers, agricultural co-operatives, and recently to farmer groups.

Farmer groups eligible for loans from the BAAC must be registered and have their officers trained by the Department of Agricultural Extension Services.

#### Qualifications of Borrowers

##### 1. Individuals

Qualifications for a person who may apply for registration as a branch client are as follows:

- (1) he is a Thai national
- (2) he has attained twenty years of age
- (3) he is a farmer
- (4) he has sufficient farm experience or training
- (5) he has been a permanent resident and operated his major farm enterprises within their operating area of the branch for a period of not less than one year;
- (6) he normally produces an annual marketable surplus of farm products in a reasonably sufficient value;
- (7) he is honest, known to have good reputation, industrious, and thrifty;
- (8) he is not a person of unsound mind or mental infirmity;

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- (9) he is not bankrupt or insolvent;
- (10) he has not been expelled by any branch.

In all cases, one must be registered as a branch's client in order to get loans from the bank.

#### 2. Agricultural Cooperatives & Farmers' Groups

Under the 1972 reorganization of the Government all cooperative work relating to agriculture, except cooperative auditing was consolidated into a single Department of Cooperative Promotion in the Ministry of Agriculture and Cooperatives. The stated objective was to give greater emphasis to helping farmers improve their welfare through the organization and operation of agricultural cooperatives. At the same time, the National Laws governing cooperatives were amended to enable small farmer groups to organize village and special purpose cooperatives and later join together as multipurpose district level cooperatives.

The Department of Cooperative Promotion is charged with the responsibility of registering farmer cooperatives, training the officer and members of cooperatives, and otherwise assisting them. The Department is organized through major divisions: (1) administration, (2) technical assistance to cooperatives, and (3) field operations.

A legislative procedural framework is available to farmers who wish to form an organization which is legally qualified to obtain credit. The powers of these farmers' associations are given in Section 13 of NEC Announcement No. 141 as follows:

- (1) To acquire, to purchase, to own or hold the rights to real property, to apply for loans or to borrow, to rent, to make installment

### III. COMPARATIVE ANALYSIS

purchases, to accept the transfer of rights to rents or installment purchases, to mortgage or pawn, to sell or distribute in any way its properties.

(2) To offer loans, to lend, to lease, to sell by installment, to provide credits, to transfer the rights in business, to accept mortgage on pawn of the properties of the members or for the members.

(3) To combine the capital for operations with other farmers' associations.

(4) To carry out business and commerce for the benefits of members.

(5) To provide services to members with or without service charge.

(6) To assist members in technical know-how.

(7) To carry out other activities which are related to or will fulfill the objectives of the farmer association with the approval from the Farmer Association Registrar.

#### Loan Procedures

##### 1. Individuals

In providing credit facilities to individual farmers, the BAAC operates through branches in the provinces to ensure credit services and supervision closer to farmer-borrowers.

Loan applicants are first required to become BAAC clients.

This entails:

- a primary investigation of farm assets and liabilities together with evaluation of his farm management capability

### III. COMPARATIVE ANALYSIS

- as well as his debt-carrying capacity.
- assignment to a client group based upon proximity of residence.
- approval by a majority of the total number of clients in the group.

Once approved as a client, application for loans can be made.

Applicants for short-term loans for crop production are processed sufficiently in advance of cultivation season. The credit supervisor stationed in the area convenes a meeting of each client group. In the meeting, he determines a proper line of credit for each applicant by inquiring into the extent of land proposed to be cultivated for the season, total anticipated crops, rental shares, amount of crops for home and farm use and the expected value of marketable crops. In addition, inquiry is also made as to the actual requirement for various items under the main crop production loan, the schedule of loan disbursements and repayments, and the applicant's repayment record. Such inquiries are conducted by the credit supervisor with the verification by the meeting of those clients who are jointly responsible for each individual loan.

Necessary legal documents are simultaneously signed in the group meeting.

If approved by the branch manager, the applicant may withdraw such limited sums as and when needed for carrying out his farm operations.

Applicants for other loans are visited by a Bank's credit supervisor

### III. COMPARATIVE ANALYSIS

stationed in the area who makes an on-farm investigation, helps the farmer to develop a proper loan application, and reports his findings and recommendations to the branch manager. This investigation includes the applicant's production plan, the property or produce offered as security, if any, his debt-paying record, other information pertaining to his business, and his financial condition and general standing. If these are justified in accordance with the BAAC's regulations, the necessary legal documents are prepared and signed simultaneously at the farm house of the applicant.

Once approved by the branch manager, the proceeds are made available to the applicant. Whenever practicable, the Bank disburses short-term loans for other purposes or medium-term loans to borrowers in installments according to their actual requirements.

A farmer requesting refinancing of old debts can apply directly to the branch or to the Old Debts Compromising Committee at either the national, provincial, or district level. After a compromise of the old debts has been made between the farmer and his creditor with the help of the branch manager or the Committee, the Bank's credit supervisor in the area makes an investigation of the applicant on his farm in order to see to it that the applicant's assets and liabilities, production plan, property offered as security, and other information pertaining to farm business and general positions meet the BAAC's criteria. The credit supervisor at the same time assists the applicant with the loan application and the necessary documents required.

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When a borrower is unable to pay a short-term loan at maturity, the loan approval official may sanction an extension for a period not exceeding twelve months. Extensions may be granted three times in succession.

Should a borrower be unable to pay a prescribed installment of a medium or long-term loan, the loan approval official may sanction a suspension of the payment.

As mentioned in the previous section, all clients are required to deposit 5% of each loan in a compensatory deposit account after the first loan has been fully repaid.

#### 2. Agricultural Co-operatives and Farmers' Groups

As legal entities, these groups borrow directly from the BAAC and relend to their individual members.

However, many existing farmer groups are not legal entities. When a non-registered group does borrow, it does so as a BAAC client group under joint liability. (Discussed further under Security.)

#### Duration of Loans

The duration of BAAC loans depends upon the purpose for which they are obtained. They can be classified as follows:

##### (1) Short-term loans for farm operating expenses

(less than 18 months) includes:

- (a) Purchase of seeds, fertilizers, pesticides, farm supplies, farm implements, repairs, market livestock

### III. COMPARATIVE ANALYSIS

- poultry feeding operations, and hired farm labor;
- (b) preparation for market, processing, and marketing of farm products produced by a borrower (marketing loans for rice paddy began in 9 provinces on an experimental basis in 1972);
- (c) rents in cash;
- (d) payment of land revenues;
- (e) farm service charges; and
- (f) essential household expenditures.

Short-term loans must be repaid in full at the time when farm products are normally marketed, subject to a maximum period of twelve months, or in exceptional cases eighteen months from the respective dates of loan approval.

(2) Medium term loans for capital investment and special farming activities (3-5 years) includes:

- (a) land clearing or reclamation and purchase of additional farm lands;
- (b) construction or development of water facilities, dikes, and other minor land improvements;
- (c) orcharding;
- (d) reorganization of farms on a more profitable basis;
- (e) purchase of work animals, water pumps, machines, transport and other equipment as necessary to farm productivity.
- (f) construction or remodeling of farm buildings;

### III. COMPARATIVE ANALYSIS

- (g) investment in livestock or poultry raising or fish culture; and
- (h) discharge of prior debts which were incurred for farm purposes.

Medium-term loans shall be repaid in installments. The loan approval official schedules repayment of each medium-term loan by taking into consideration the estimated useful life of the farm asset acquired with the loan-proceeds, the loan amount, as well as the borrower's income and reasonable ability to repay. The maximum period of medium-term loans is ordinarily three years. In exceptional cases, however, the repayment may be scheduled over a term not exceeding five years.

Long-term loans for refinancing of old debts must be repaid within a period of ten years. Long-term improvement or project loans have recently been undertaken which will allow up to 15 years for repayment.

#### Amount of Loans

The amount of each short-term loan is determined by the loan approval official on the basis of the applicant's farm production needs and his debt-paying record. In no case may a short-term loan be approved which exceeds sixty per cent of the expected value of the marketable products.

The amount of each medium-term loan shall be determined by the loan approval official taking into consideration the actual credit requirement of the applicant's farm production plan, his income and repayment capacity, as well as his debt-paying record.

### III. COMPARATIVE ANALYSIS

However, the total amount of short and/or medium-term loans outstanding to a borrower at any time may not be greater than Baht 80,000.

The amount of each long term loan for refinancing of old debts is determined by the loan approval official by considering the amount of old debt, burdens of repayment and removal of land mortgage obligation inclusive of the borrower's income and repayment capacity as well as general operating expenses and necessary investment on farm for the planting season. The total long-term loan may not exceed Baht 40,000 for each borrower.

The amount of long-term improvement or project loans is determined by project analysis using an investment pay back of three years.

#### Security

1. Individuals' (and non-registered farmers groups') short, medium, and long-term loans shall be secured by one or more of the following requirement:

(a) The mortgage of unencumbered immovable property of which the appraised market value is not less than twice the amount of the loan.

The mortgage contract shall specify a maximum amount for which the mortgage property is assigned as security for the repayment of both current and future debts. The amount must be the full appraised value of the mortgaged property.

The mortgage may be removed upon repayment of the entire debts due.

### III. COMPARATIVE ANALYSIS

from the borrower or with the permission of the Board of Directors.

(b) The pledge of Government securities or the security of "deposits in proportion to amount of loan" not exceeding eighty per cent of the amount of such securities or deposits.

(c) The pledge of the produce not exceeding eighty per cent of the appraised market value of the pledged produce.

(d) The pledge of two or more other clients acting as guarantor (maximum individual loans 7000 baht).

No client may, at any time, stand surety for more than two other clients.

A surety is not discharged by cessation of his client status unless and until a fresh bond with one or more fresh sureties, acceptable to the loan approval official is executed.

(e) The pledge of joint liability of all borrowing clients in the group (maximum individual loans 7000 baht).

Long term improvement or project loans require immovable assets of at least twice the loan value.

#### 2. Agricultural Cooperatives & Farmers Groups

As legal entities, these groups must collectively meet the BAAC security requirements.

#### Rates of Interest

##### 1. Individual

Interest on short-term and medium-term loans is twelve percent; interest on the loans for holding marketable produce in expectation of a better

### III. COMPARATIVE ANALYSIS

price is seven percent; interest on long-term loans for refinancing of old debts is ten percent; interest on long-term project loans is eight percent.

Interest is calculated on daily balances of principal and becomes payable when the loans or installments fall due.

#### 2. Agricultural Cooperatives & Farmer Groups

Interest on short and medium-term loans is 9% and on long-term project loans is 5%.

#### Supervision

The BAAC employs, insofar as practicable, a group contact method for the follow-up supervision of loans in areas where cropping patterns are more or less uniform and farmer-clients have shown sufficient awareness of their responsibilities. In the client group meetings, the credit supervisors inquire into the extent of cultivation accomplished by each individual borrower and current problems in farm production for the season, and evaluate the effect of changing conditions or emergencies on the farm operations. However, individual farm visits are made in cases where the borrowers' credit is weak or questionable, or for the purpose of supervision of uses of other loan funds (e.g. inspecting major purchases made by the borrowers with the funds.)

#### Technical Services

The BAAC attempts to disseminate knowledge regarding the latest improvements in agriculture and holds discussions on ways and means of solving

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farm problems as well as on improved farming practices in occasional meetings when farm jobs are light. This, however, is considered the responsibility of the agricultural extension agents of the Ministry of Agriculture.

#### Summary

Comparing the lending policies of the two institutions, a general similarity emerges. This is perhaps due to the fact that the Bangkok Bank has on many occasions been asked to advise the BAAC on lending policies. However subtle difference do exist in almost every policy area.

#### Categories of Farm Credit:

- The Bangkok Bank and the BAAC both lend to individuals and farmer groups.
- The Bangkok Bank however, does not lend to cooperatives.

#### Qualifications for Loans

- The emphasis of the Bangkok Bank's qualifications is commercial whereas the language of the BAAC's qualifications is political (e.g. Thai national).
- The Bangkok Bank list appears objective whereas the BAAC list is more subjective (e.g. honest, industrious, thrifty, not of unsound mind).

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#### Loan Procedures

- The Bangkok Bank does not require individuals with collateral to join a joint liability group whereas the BAAC requires that all clients be assigned to a client group.
- Joint liability groups of the Bangkok Bank are formed by the farmers rather than by the Bank. The BAAC client groups are formed by the BAAC with each member requiring approval of 50% of the group.

#### Duration of Loans

- The Bangkok Bank extends only short-term and medium-term loans while the BAAC in addition extends long-term loans.

#### Amount of Loans

- The Bangkok Bank's maximum loan for the individual in the joint liability group is 10,000 baht whereas the BAAC's maximum is 7000 baht.
- The BAAC production loans are further limited to 60% of the expected value of the marketable products.

#### Security

- The Bangkok Bank's security requirements are simpler than the BAAC's requirements.
- The Bangkok Bank requires the guarantee of the future crop plus the pledge of joint liability. The BAAC requires one or more of five different requirements.

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#### Rates of Interest

A notable difference is that the Bangkok Bank charges a higher rate for activities likely to be carried out by the "better-off" farmer, while the BAAC has only one rate for short-term and medium-term loans.

#### Supervision of Loans

- The Bangkok Bank utilizes greater supervision of loans by the provision of in-kind loans.
- The Bangkok Bank, in addition, uses mobile extension units and periodic inspections whereas the BAAC does not.

#### Technical Services

- The Bangkok Bank relies upon its own employees and commercial enterprises for the provision of technical services while the BAAC relies upon The Ministry of Agriculture's extension workers.

### D. ORGANIZATIONAL STRUCTURE

The Bangkok Bank's farm credit program is conducted by its Agricultural Credit Division, which currently consists of 220 trained staff members. All members of the division are university graduates in agriculture, agronomics, animal and crop husbandry, veterinary or social sciences. After joining the Bank, they receive special training in banking practice, credit supervision and other relevant subjects, before being assigned to field work.

Each officer in the field is acquainted with:

1. Agricultural conditions in the locality where he is to be

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posted. The officer chosen usually comes from that area.

2. Local farmers' background in general, especially, in character, experience, capability, and credit worthiness.
3. Suitability and type of cultivation, current cost of production and estimated yields in the area.
4. Ability to evaluate the applicant's properties and a knowledge of price and market fluctuations.

Supervised agricultural credit is controlled jointly by the agricultural credit division at the head office and by the manager of provincial branches. Credit for the individual farmers, at the local level, is usually controlled by the branch managers.

The staff has increased consistently since 1963, when the program was begun with a handful of people. In 1966, the division numbered 140; in 1973, about 180; and today, well over 200.

However, this growth should be seen in the context of the overall increase in Bangkok Bank employees. In 1966, the total staff numbered 2,744 and at the end of 1975, had risen to 11,165. (see Table # 10).

The simulated organizational chart gives a view of the Bangkok Bank and where the agricultural credit division fits into the overall structure. The branches of the Bangkok Bank are an integral part of the agricultural credit program. (See Chart #3 and #4)

In 1966, the BAAC consisted of a head office, 15 branches, 43 field

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offices and a staff of 376 (of which 115 were in the head office.)

At the end of 1975, the BAAC operated 58 branches, 301 field offices and a staff of 2,389 of which approximately 300 were in the head office. (See Table # 10)

The branch managers have authority to approve short-term and medium-term loans for general farm purposes to individual farmers. However, a branch manager may not authorize a loan to an applicant which will cause the total principal balance to exceed Baht 40,000 or any term exceeding three years.

Field offices have been set up to render extensive services to farmers in terms of: (1) investigating and selecting farmers for registration as branch clients by appraising their farm assets and enterprises at their residences and farms; (2) providing educational training to clients on agricultural credit and other related matters; (3) assisting clients in making proper loan applications; (4) advising client-borrowers on the proper and effective use of loans in accordance with approved purposes; (5) coordination with agricultural extension service in giving advice on improved farming practices to clients; (6) assisting clients to overcome obstacles in order to ensure the punctual repayment of their loans; (7) investigation of the group members in accordance with the provisions of the law on farmer groups by appraising their farm assets and enterprises at their residence and farms; (8) advising farmer group members periodically on the proper and effective use of

### III. COMPARATIVE ANALYSIS

loans in accordance with approved purposes. Field offices do not involve financial transactions but render farmerclients and farmer groups the above-mentioned services. In districts which are too far from branch offices, credit supervisors are dispatched on a temporary basis.

The General Manager of the BAAC is responsible to the Board of Directors for BAAC administration, operations, and his interpretations of Board policy.

#### Locations in the Provinces

The Bangkok Bank has 77 branches in the provinces while the BAAC has 58. These can be summarized regionally.

| <u>Region</u> | <u>Bangkok Bank</u> | <u>BAAC</u> |
|---------------|---------------------|-------------|
| North         | 16                  | 14          |
| Northeast     | 18                  | 16          |
| South         | 17                  | 8           |
| Central       | 26                  | 20          |
| Total         | <u>77</u>           | <u>58</u>   |

The number of Bangkok Bank branches is not comparable to the BAAC branches in that a branch of the Bangkok Bank may or may not engage in lending to agriculture. Therefore, the number of branches of the Bangkok Bank represent more the potential for lending to agriculture than the reality. The following number of branches of the Bangkok Bank have established group lending programs.

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|           |           |
|-----------|-----------|
| North     | 10        |
| Northeast | 5         |
| South     | 3         |
| Central   | <u>16</u> |
| Total     | 35        |

Initially, the Bangkok Bank restricted its joint liability program to the poorer farmers of the more prosperous agricultural regions. Lacking experience in giving farm credit, the bank considered it more practical to start with the "safer" areas and then branch out to other provinces. The Bank's program in 1970 covered 21 provinces and has since increased to 35. Equipped with this experience, The Bangkok Bank now states that its objective is to extend its services to other regions.

The BAAC while expanding coverage across the kingdom has confined each branch's lending to districts "where conditions are suitable for agricultural expansion. In such areas there needs to be an active agricultural extension service ready to help carry out an agricultural education program among the Bank's clientele." (BAAC Ninth Year of Operations, p. 2)

In addition, the BAAC states "from a business point of view, concentration of credit operations among the more advanced farmers, particularly in the Central Plain and the North, would be economically sound procedure. Nevertheless, in the Northeast and the South there are other considerations that are equally important. Consequently, the expansion of credit operations of the Bank is distributed over all regions of the Kingdom. As a matter of course, most of the expansion is clustered in the Central Plain where there is more commercial farming than in the rest of the country." (BAAC Eighth Year of Operations, p. 5).

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#### Summary

In comparing the two institutions the following points are noted.

- Both institutions are hierarchial in structure, however a greater decentralization is suggested in the Bangkok Bank. Rather than the top down control found in the BAAC, there is a joint control between the agricultural credit division and the branch managers.
- A more elaborate support system is apparent in the BAAC with the number of people in the provinces and the number of field offices. In addition, the increases in the number of staff at the BAAC appears dramatic in comparison to the Bangkok Bank.
- The Bangkok Bank's offices in the provinces outnumber the BAAC in each region with a particularly large difference in the South and Central regions. However, the number of branches engaged in agricultural lending suggests that the Bangkok Bank's program is least represented in the Northeast.
- The criteria for branch operations in agricultural lending differ for the two institutions. The BAAC must keep in mind political necessities, if not in actuality then at least in verbage. The Bangkok Bank, on the other hand, is not faced with this type of consideration.

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#### E. COLLECTION POLICIES

The Bangkok Bank requires that repayments be carried out in accordance with the contract. The farmers either repay in cash or through a consignment deduction by the processor.

The Bangkok Bank has found that by supervising farm credit and by offering the widest possible range of follow-up services, the percentage of farmers who default in the repayment of credits granted to them, can be brought down to a manageable minimum. When the farmers profit was enough to cover the loan they inevitably have found a way to repay the loans in time to borrow again. Failure to repay stems from natural hazards, especially drought and pest problems, and low prices for the farmer's produce. Another cause for non-payment is thought to be the belief that the overdue farmer may not get a new loan for the next cropping season if the overdue loan is repaid. This has been true to some extent with the "not so capable" farmers who already had difficulties with their loans in previous years. In the case of natural disaster, the farmers loans were normally deferred for another season and repayment was not pressed until the next harvest. With the other cases, however, the credit officers will notify farmers of their obligation and the penalty for non-repayment. (Credit officers are not encouraged to accept repayment from farmers outside of the office.) From the Bank's point of view, non-repayment of agricultural loans, other than in the case of natural disaster, is more the fault of the credit officer than the fault of the borrower. The

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Bank relies upon its credit officers' judgement in granting loans.

Further, the Bangkok Bank's credit officers encourage the farmers who lack repayment funds to borrow from the money lender in order to repay the loan and maintain a good credit record. The Bangkok Bank believes that this also makes sense from the farmers view. The farmer then has access to low cost credit for the majority of the year and high cost credit for only a couple of months.

The Bangkok Bank has very few legal cases pending. This is because it has become too costly and time consuming, and the publicity is considered harmful to the image of the bank.

Repayment to the BAAC is carried out by the farmer going to the branch banks, or through the Postal Money Order system. The BAAC is looking into the possibility of utilizing the Government Savings Bank in the future as a means of decreasing administrative costs and improving services to clients.

The BAAC relies on its client group system to secure repayment of loans. Each client group has its elected officers who work closely with credit supervisors and individual farmers to assist in repayment. For medium-term loans, the credit supervisor contacts the loan co-signers if the loan is overdue.

If a group leader is influential and the group members are relatively well off, BAAC supervisors can request that the leader make up defaults by assessing each member. The BAAC holds the threat of discontinuing loans to secure compliance. However, in

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the majority of cases, the BAAC finds it easier to dissolve the group and establish a new group excluding the farmers who have defaulted.

The branch managers have the authority to extend the repayment period of short loans up to 36 months after the loan falls due when clients have "satisfactory" reasons such as natural hazards. Refinancing is to some degree dependent upon the farmer's response to his obligation and his relationship with the BAAC credit supervisor. BAAC officials say that the perceived immediacy and need to repay a loan declines each year after the original loan is extended. When loans are due, farmers do not feel they will directly suffer if they are delinquent or default.

The BAAC estimated that approximately 70-80% of its bad debts or delinquent accounts result from natural hazards or crop failure.

The BAAC does occasionally initiate court action; however it does so in only a small percentage of cases. Politically, it is perceived unwise. BAAC suits against farmers who cannot repay are viewed as the "Government" abusing the poor farmer.

#### Summary

Collection policies of the two institutions are quite similar with two exceptions:

- The Bangkok Bank's credit officers are responsible for the loans they make. This degree of accountability exemplifies itself in

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the encouragement of borrowing from the moneylender to repay the Bank's loan.

- The BAAC dissolves existing client groups if some members are in default and forms new groups where as the Bangkok Bank does not.

### THE RECORD ON LENDING

#### F. Amounts and Purposes of Loans

A comparison of the financial position of the Bangkok Bank and the BAAC indicates in 1975 that the Bangkok Bank has assets approximately 9 times greater than the BAAC, and has loans approximately 7 times greater. (See Tables 13-15.) However, a comparison of the amount of agricultural lending indicates that the BAAC in 1974 had extended loans 7 times greater to this sector than the Bangkok Bank. In 1975, the ratio had decreased to less than 4.

As mentioned previously, what the bankers actually did in 1975 was to re-arrange their semi-agricultural loans into agricultural loans by discounting checks from sugar cane factories with middlemen who, in turn, provided loans to cane growers. Also many loans which were previously given to part-time farmers, in the form of overdrafts for business purposes, were changed into agricultural loans. (See Tables 16-17)

Of the Bangkok Bank's total loans to agriculture, 400 million baht was lent indirectly through the BAAC, the other 642 represents actual and re-classified loans. Of this amount, actual loans made directly to farmers are estimated to have increased approximately 25% which would put the amount of direct loans at 217 million baht and reclassified loans at 425 million baht. Therefore, the ratio of BAAC agricultural loans to Bangkok Bank agricultural loans increased from 7 to 15 times as great.

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The purposes for which agricultural credits were loaned are roughly similar for the two institutions. The exception is that the BAAC did hold a portion of their portfolio in long term (10 years) loans for debt settlement. The Bangkok Bank with reliance on short-term deposits is obviously not able to make this type of loan.

#### Regional Distribution of Loans

Bangkok Bank estimates that its loans are dispersed throughout the country as follows:

| <u>Agricultural Credit Extended by the Bangkok Bank</u> |              |
|---|--------------|
| North   | 42.9 %       |
| Northeast   | 8.0 %        |
| Central   | 48.3 %       |
| South   | <u>0.8 %</u> |
| Total   | 100 %        |

The BAAC loans to individual farmers between 1967 and 1974 are dispersed regionally as follows:

| <u>Agricultural Credit Extended by the BAAC</u> |              |
|---|--------------|
| North   | 27. %        |
| Northeast                                       | 23.8 %       |
| Central   | 40.9 %       |
| South   | <u>8.2 %</u> |
| Total   | 100 %        |

The Bangkok Bank and the BAAC both have a higher concentration in the Central Plains which, as noted earlier, is the more productive and commercialized region. It is, for the same reason, logical that the Bangkok Bank next greatest concentration of loans is in the North and

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the smallest amount in the South.

#### Beneficiaries

Neither the Bangkok Bank nor the BAAC has a profile of its "average" borrowers. However, the amounts lent to cooperatives vs. individuals is perhaps instructive.

| <u>Year</u> | <u>Farmers and Loans</u><br><u>Bangkok bank</u> |  |
|-------------|---|--|
|             | <u>No. of Farmers</u>                           | <u>Amount of Loan (Baht in millions)</u> |
| 1967        | 23,634  | 63.0                                     |
| 1968        | 32,305  | 94.1                                     |
| 1969        | 36,494  | 124.6                                    |
| 1970        | 26,425  | 93.2                                     |
| 1971        | 27,645  | 77.3                                     |
| 1972        | 33,244  | 89.7                                     |
| 1973        | 39,667  | 98.0                                     |
| 1974        | 42,405  | 173.5                                    |
| 1975        | 46,494  | 217. *                                   |

In 1969, of 36,494 farming families in receipt of agricultural credit, 36,221 were organized into joint-liability farm groups, with each group member receiving Baht 2,000 to Baht 5,000 in loans. The remaining 273 recipients were granted individual loans against collateral. Many of these farmers have several loans (e.g. 1972, 33244 farm families had 177924 accounts; 1973, 39667 farm families had 197861 accounts; 1974, 42405 farm families had 223,148 accounts; and in 1975, 46494 had 241,798.

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\*Estimated - The Vice President in charge of the Agricultural Credit Division suggested that actual loans to farmers increased approximately 25% from the preceeding year.

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Of the 46494 farm families granted credit in 1975, a little over 41000 belonged to joint liability groups.

| <u>Year</u> | <u>Farmers and Loans</u><br>BAAC        |  | <u>Amount of Loans to<br/>Cooperatives &amp;<br/>Farmer Groups</u> |
|-------------|---|--|--|
|             | <u>Number of<br/>Individual Farmers</u> | <u>Amount of Loan<br/>to Individuals</u> |  |
| 1967        | 45278                                   | 125.2                                    | 143.6  |
| 1968        | 121749                                  | 408.2                                    | 158.8  |
| 1969        | 196917                                  | 562.5                                    | 154.4  |
| 1970        | 228611                                  | 563.0                                    | 167.6  |
| 1971        | 262087                                  | 509.2                                    | 164.   |
| 1972        | 301622                                  | 670.9                                    | 224.6  |
| 1973        | 330628                                  | 773.7                                    | 249.2  |
| 1974        | 379575                                  | 1201.4                                   | 533.1  |

The BAAC estimates individual clients to have increased to approximately 500,000 in 1975. There are also estimated to be 528 cooperatives with a membership of 321,000 and 1100 farmers groups with members numbering 135,000 in 1975. Cooperative members are nearly equal to individual members yet receive less than half the value of loans.

A USAID survey in 1973 indicated that the typical BAAC client operates and manages a household farm. He is in almost all cases literate. He has access to an average of 5.9 hectares of land either through ownership or rental (by regulation one third of all BAAC loans must be extended to non-land owners). Average client assets are 35240 baht and do not differ substantially among regions. The national average net cash income per client averaged 15820 baht; but varied from 17880 baht in the Central Region to 14400 baht in the North, 13560 in the South and to

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9340 baht in the Northeast.

It is instructive to compare the BAAC client and the average Thai farmer: The educational level of the BAAC client is higher than the average farmer; less than 3% of BAAC clients had no formal education as compared with 1963 national average of 36%. The typical BAAC client has a much higher household total income and average cash income than does the average rural household. The average farm size in Thailand was found to be 3.4 hectares in 1970. This is only 60% as large as the 5.9 hectare farm that the average BAAC client operates. On the basis of this evidence it can be concluded that the BAAC client has a larger farm and is more prosperous than the average Thai farmer.

#### Repayment

Within the period 1963-1969 the repayment record of Bangkok Bank loans was good, with few delinquencies. The reason is thought to be two-fold.

First, natural hazards were less than the normal rate. Secondly, the fluctuation of prices for farm produce was relatively mild. The Bangkok Bank also increased their maximum amount on individual loans from Baht 2,000 at the start to Baht 5,000 in 1968, and Baht 10,000, at the present.

The period 1970-1973 manifested the aftereffects of repeated drought in 1968-1970 and the fall of commodity prices to a record low. The Bangkok Bank suffered a set-back in delinquencies and decided to create past due accounts. The policy established that at the end of the second cultivation season a delinquent account would be written off as a bad debt if the farmer failed to pay. It is interesting that

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accumulated the bad debt accounts have been reduced every year since 1973. (See Table #18)

BAAC also began with a fairly good repayment record. However, repayment decreased seriously with the repeated drought of 1968-70 reaching an all time low in 1971. (See Table #19)

The BAAC does not include in this analysis the delinquent loans to cooperatives and farmers groups. The amounts outstanding at year end to these groups have increased dramatically. (Millions of baht)

|      | <u>Amount of Loan</u> | <u>Amount Outstanding</u> |
|------|-----------------------|---------------------------|
| 1967 | 143.6                 | 259.1                     |
| 1968 | 158.8                 | 288.8                     |
| 1969 | 154.4                 | 317.4                     |
| 1970 | 198.0                 | 409.0                     |
| 1971 | 203.3                 | 639.2                     |
| 1972 | 221.0                 | 602.0                     |
| 1973 | 249.2                 | 788.67                    |
| 1974 | 388.7                 | 1105.21                   |

The accounting procedures for bad debts differ dramatically between the BAAC and the Bangkok Bank. This makes a comparison of the two repayment records difficult at best and somewhat speculative.

The BAAC neither ages its past due accounts nor calculates the amount of loans that have been rescheduled. The accounting procedure which the BAAC utilizes is a reserve account system against

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which bad debts are charged. However, the actual write off is a policy decision. And in the past, the BAAC has had no firm guidelines. As a consequences, it is felt that the losses for bad debts have been understated.

#### Summary

The lending record of the two institutions differs widely.

- The BAAC with one-ninth of the assets of the Bangkok Bank has 15 times more loans outstanding to agriculture
- The BAAC more fully reaches into the marginal regions of the country than does the Bangkok Bank.
- The average BAAC client is well above the average Thai farmer based upon income and landholding. There is no profile of the Bangkok Bank client.
- The Bangkok Bank lends primarily to farmers groups while the BAAC emphasis is on the individual.
- The Bangkok Bank's borrower repayment record is far superior to the BAAC's.
- The Bangkok Bank accounting and information system is at a much higher level of sophistication than is the BAAC's.

#### CONCLUSION

In concluding the comparative analysis it is perhaps worthwhile to reiterate briefly the points made in summary.

#### Historical Objectives and Growth

In the context of objectives and growth, we find very different institutions. Commercial banks have strong political and business connections

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not found in the BAAC. This potentially impacts upon the commercial banks' agricultural loan policies. For example, the Bangkok Bank furnishes production input credit in kind. It is possible to hypothesize that a relationship does exist between the supplier and the bank. If not ownership, perhaps the supplier pays a fee to the Bank. In addition, one may conclude that agricultural loans which conflict with other interests may be restricted.

Secondly, commercial banks have a profit orientation whereas the BAAC does not. As a result, agricultural lending by commercial banks must at the minimum cover the cost of funds, the operational cost of an agricultural loan program, and bad debt expense. Further, it can be hypothesized that the return from an agricultural loan must compete with the return from loans to other sectors if agricultural loans are to represent any more than a token proportion of the total loan portfolio.

Finally, the BAAC has an objective of longevity, which has no direct corollary in a commercial bank. Longevity for the BAAC can only occur through an effective lending program and/or continuing financial support, (a luxury not afforded the commercial banks). Financial support from the government of Thailand is dependent upon the BAAC's image as an effective financial intermediary and the desire by the government to support an agricultural credit program. Thus, the BAAC, if not effective, must at least appear to be so.

#### General Operations

Comparing the general operations of the two institutions, the diversity on the one hand (commercial banks) and specialization on the other (BAAC)

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accounts for a different set of operations within the two institutions.

Liquidity or cash flow is extremely important to the commercial bank on a daily basis whereas the BAAC's need for liquidity is more seasonal and more predictable, (i.e., they do not depend upon the mobilization of funds)

Secondly, commercial banks have "earning" assets other than loans whereas the BAAC does not.

Thirdly, commercial banks capital fund' increases generally result from earnings whereas the BAAC has increased its capital fund primarily by the sale of shares.

And finally, where commercial banks have choices of loans by sectors, the BAAC has choice only in how it will lend its funds to the agricultural sector.

#### Agricultural Loan Policies

Comparing the lending policies of the two institutions, an overall similarity emerges. However subtle difference do exist in almost every policy area, which result in a greater degree of control in the Bangkok Bank's program.

- While the Bangkok Bank and the BAAC both lend to individuals and farmer groups, only the BAAC lends to cooperatives.
- The emphasis of the Bangkok Bank's qualifications is commercial and apparently objective whereas the language of the BAAC's qualifications is political and relatively subjective.
- A notable difference is that the Bangkok Bank charges a higher rate for activities likely to be carried out by the "better-off" farmer, while the BAAC has only one rate for short and medium term loans.

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- The Bangkok Bank utilizes greater supervision of loans by the provision of in-kind loans and utilization of mobile extension units.
- The Bangkok Bank relies upon its own employees and commercial enterprises for the provision of technical services while the BAAC relies upon the Ministry of Agriculture's extension workers.
- Joint liability groups of the Bangkok Bank are formed by the farmers rather than by the Bank, and individuals with collateral are not required to join. The BAAC client groups are formed by the BAAC with each member requiring approval of 50% of the group, and all clients must join.
- The Bangkok Bank extends only short and medium term loans while the BAAC in addition extends long term loans.
- The Bangkok Bank's maximum loan per individual in the joint liability group is 10,000 baht compared to the BAAC's maximum of 7000 baht, with additional limitations.
- The Bangkok Bank's security requirements are simpler than the BAAC's requirements.

#### Organizational Structure

While both institutions are hierarchical in structure, a greater decentralization is suggested in the Bangkok Bank.

A more elaborate support system is necessary in the BAAC, as it does not have the in-place system of the Bangkok Bank.

The Bangkok Bank's offices in the provinces outnumber the BAAC in each region with a particularly large difference in the South and Central regions. However, the number of branches engaged in agricultural lending suggests that the Bangkok Bank's program is least represented in

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the Northeast.

- The criteria for BAAC branch operations is influenced by political necessity rather than commercial viability.

#### Collection Policies

- The Bangkok Bank's credit officers are responsible for the loans they make. This degree of accountability exemplifies itself in the encouragement of borrowing from the moneylender to repay the Bank's loan.
- The BAAC dissolves existing client groups if some members are in default and forms new groups whereas the Bangkok Bank does not.

#### The Record on Lending

- The BAAC with one-ninth of the assets of the Bangkok Bank has 15 times more loans outstanding to agriculture.
- The average BAAC client is well above the average Thai farmer based upon income and landholding. There is no profile of the Bangkok Bank client.
- The Bangkok Bank lends primarily to farmers groups while the BAAC emphasis is on the individual.
- The Bangkok Bank's repayment record is far superior to the BAAC's.
- The Bangkok Bank's accounting and information system is at a much higher level of sophistication than is the BAAC's.

It is evident that both the scale and the method of operation (supervised vs. non-supervised credit) differ between the two institutions. Further, one can conclude that the choice of scale and method of operation is to a large degree resultant from the divergent institutional objectives.

CHAPTER IV. IDENTIFICATION OF CONSTRAINTS TO INCREASED AGRICULTURAL LENDING

A comparative analysis of the two institutions suggests that the effective constraints of each institution are somewhat different.

The limiting factors of the BAAC to increased agricultural lending include an apparently insufficient interest spread, complicated lending operations, inadequate staffing, and the absence of a data gathering capacity.

The limiting factors to increased agricultural lending facing the Bangkok Bank include an absolute deficiency in the interest spread, an inability to mobilize long term deposits, the business interests of the Bank's owners, and the farmers' absorption capacity.

#### The Lending Margin

The lending margin is perhaps the most apparent of the constraints and is common to both institutions. This can best be analyzed by looking at the components. The lending margin can be increased either by increasing interest rates charged or by decreasing interest costs, and/or administrative expense and/or bad debt expense.

The interest rates charged by the BAAC range from 3 to 10 points below the maximum lending rate of 15%. The interest rate charged by the Bangkok Bank ranges from 1 to 5% below what the Bank could earn in alternative uses. Thus we see that the lending rates charged by the BAAC are less than those charged by the Bangkok Bank and both are below the opportunity cost of capital. The arguments in the literature for a free market determined rate of interest have been well documented in AID's Spring Review of Small Farmer Credit. The argument based on the principle of economic efficiency is as follows:

#### IV. IDENTIFICATION OF CONSTRAINTS

In a competitive credit market there exist many different rates of interest representative of the wide variance in risks. Imposition of a legal lending rate has the effect of reducing the amount of credit supplied, and thus directing the flow of credit to the lower risk/greater profit sectors of the economy. In an imperfect or fragmented market, the flow of cheap credit may have little effect on rural interest rates. The commercial banks' recent entry into the ownership of finance companies supports the theory that the productivity of capital within the country is greater than that allowed by the legal lending rate. (Finance companies' rates aren't regulated.

One might conclude that the logic in the above argument is sound and that the solution lies in simply raising interest rates. However, the LDC's have almost unanimous agreement that subsidized interest rates are necessary and beneficial. The arguments used to support this point of view vary and cover a range from the "infant industry" argument to the "political carrot" argument. (For discussion see ALD's Spring Review on Small Farmer Credit, Vol.XVI)

One can conclude that interest rates should be increased to reflect the opportunity cost of capital. However, one would surmise that this will occur gradually as LDC's recognize more efficient mechanisms for redistribution.

Interest costs, as noted in the previous section differ for the BAAC and the Bangkok Bank. The BAAC does not have access to the zero cost demand deposits of the Bangkok Bank as it is relatively weak in the mobilization of voluntary savings. The BAAC relies primarily upon its capital fund and borrowings. The Bangkok Bank, on the other hand, does not have access to long term, low cost borrowings. The effect of the different cost

#### IV. . IDENTIFICATION OF CONSTRAINTS

structure can be computed as follows:

|                   | BAAC              |             | Bangkok Bank      |             |
|-------------------|-------------------|-------------|-------------------|-------------|
|                   | <u>Percentage</u> | <u>Rate</u> | <u>Percentage</u> | <u>Rate</u> |
| <u>Deposits</u>   | 32%               | 6.4%        | 79%               | 5.9         |
| <u>Borrowings</u> | 68%               | 7.3%        | 21%               | 10.         |

The cost of an additional unit of capital based upon the current ratio of deposits to borrowings is 6.9% for the BAAC and 6.7% for the Bangkok Bank. Using the current distribution implies that the institutions have the ability to maintain the current balance between deposits and borrowings. This is not necessarily the case. When an additional unit of capital is required in the short term, it generally must be acquired through borrowing. Hence, the BAAC's marginal cost rate is about three points lower than the banks. Administrative expense of the agricultural credit program at the Bangkok Bank has been estimated at less than (1) 4%.

This figure obviously represents economics obtained through diversified operations. Whether or not the program is charged a portion of overhead on supporting fixed or variable costs is not known. Bad debt losses incurred for the agricultural loans of the Bangkok Bank are less than 2% of all loans extended. The BAAC administrative and bad debt expenses accounted for were in excess of 11% in 1974.

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(1) This figure was obtained from the Agricultural Credit Division of the Bangkok Bank and the author assumes that it is the average cost on all agricultural loans extended.

#### IV. IDENTIFICATION OF CONSTRAINTS

The lending margin can be calculated for the two institutions as follows.

|                     | BAAC      | Bangkok Bank |
|---------------------|-----------|--------------|
| Interest Earned     | 9-12      | 12-14        |
| Less: Interest Paid | 6.9       | 6.7          |
| Administrative      |           | 4            |
| Bad Debts           | <u>11</u> | <u>2</u>     |
|                     | -5 to -3  | +1 to - 1    |

The lending margin for the Bangkok Bank is right at the breakeven point which results in an absolute deficiency of the lending margin to act as an incentive for broadening the portion of agricultural loans in the commercial bank portfolio. The margin for the BAAC is negative which produces an apparently insufficient margin. Most LDC's believe that some subsidy of an agricultural credit program is necessary and/or at least desirable. To what extent a subsidy should exist is a political question. The alternatives for the decision makers range from no subsidy to total subsidy. For example, do they want only to subsidize the administrative expense or both administrative expense and losses incurred from non-repayment? Without a policy decision, it is not possible to argue an absolute deficiency in the lending margin. However, one can argue that economic efficiency would increase if the lending margin were to improve.

The argument further states that for those farmers who receive the cheap credit, a misallocation of resources occurs because investment decisions are made on the basis of the relative costs of inputs. Subsidized credit distorts the true value of capital relative to labor existing in the economy.

#### IV. IDENTIFICATION OF CONSTRAINTS

##### Lending Procedures

Additional constraints faced by the BAAC are of an organizational nature. The organizational chart of the BAAC represents hoped for operational changes. The complicated lending procedures are a result of a centralized rather than a regional or decentralized approach to lending. Simplification of procedures, preparation of uniform manuals and loan forms are fundamental to future success. Work on record-keeping and management aspects is vital to a balanced overall banking operation.

A data gathering capacity, inclusive of budget preparation and review is essential to administrative control. The growing need for full scale research and data gathering functions is clearly evident. The lack of a centralized, reliable and current body of information for use by the project planners and credit people will increasingly impair the Bank's ability to provide sound credit to the Thai farmer and his institutions.

##### Human Resources

Adequate staffing is probably the most pressing organizational problem. The budget and management plan has not allowed for the ongoing special training of the field staff. A fundamental characteristic of this program is its tendency to expand all too soon exceeding the training and experience of the field staff. The confidence of the staff is undermined under these conditions, with costly results. Special technical training requirements must be anticipated and the field work load should be borne by those not in training courses.

The salaries of professionals are low in comparison to the private sector. Nothing except sheer bankruptcy can harm a program faster than staff members

#### IV. IDENTIFICATION OF CONSTRAINTS

who are technically inadequate, restless and discontent.

##### Long Term Funds

An additional constraint to increasing agricultural lending by the Bangkok Bank is the lack of access to long-term funds. The inability to secure funds over a longer term precludes the Bank's possibility of committing funds over such a length of time. The structure of the interest rates paid on deposits offers no incentive to the public to commit funds for any period longer than a year.

##### Other Business Interests

Another constraint is the Bangkok Bank's and the bankers other business interests. The degree to which this factor is active is not quantifiable (e.g. when the Bank does not make loans which conflict with its other interests.) An example of this would be the rice exporter/banker whose interests dictate that he not encourage the provision of credit for on-farm rice storage facilities. That this constraint does exist can be implied from the inverse situation (e.g. when a bank makes loans to farmers that are to its advantage.) An example of this would be the encouragement of maize production loans in the Northeast.

##### Farmers' Use Capacity

The Bank further perceives itself as being constrained by the farmers' capacity to absorb credit. The chief of the agricultural credit division stated that the Bank's activity in agricultural credit was a gradual development over a long time because the farmers ability to profitably use credit and repay credit has been a learning experience. He also made the point that it was impossible for the Bank to lend the amount of funds prescribed by government directly to farmers because there simply are not at this time farmers capable of absorbing the credit.

## CHAPTER V. EVALUATION OF POTENTIAL FOR RELAXING THE CONSTRAINTS

The dominant strength of the BAAC's program is in the volume of agricultural loans extended and the number of farmers reached. The strength of the Bangkok Bank's program lies in the fact that the program breaks even. An evaluation of the potential for relaxing the constraints of the institutions to increased agricultural lending would be remiss without a long-run perspective. An agricultural credit program which incurs a net loss over the long-run inherently cannot increase agricultural lending. It does not have a wealth-creating capacity and cannot be considered successful. It is a transfer from one sector of the economy to another sector and one without equitable distributional criteria. Therefore, a break-even of income and expenses (defined either as direct or total) is considered a precondition for successful agricultural lending.

### Scale and Efficiency

The combination of scale and the absence of efficiency criteria underlie the BAAC's constraints. By simplifying its loan procedures and through building an information and evaluation capacity the BAAC can provide the framework for improving the quality of operation in both the lending and repayment areas. However, doing this requires both an effective and accountable staff. I doubt seriously that this will be accomplished without tremendous effort by the BAAC management in clarifying and making operational the objectives of the institution. What more likely will occur are gradual changes towards loan simplification and an improved data gathering and evaluation capacity with marginal expenditures on staff upgrading and training. If the BAAC could significantly improve its data gathering capacity, simplify its loan procedures and acquire

## V. EVALUATION

an adequately trained staff, this would, in turn, impact favorably on the lending margin. (however, likely insufficient to bring a positive margin)

The scale of operations and efficiency criteria underlie the apparent success of the Bangkok Bank's program. The supervision of credit allows the Bank a higher degree of control over its funds which in turn effectively lowers its risk factors and concurrently improves the lending margin. However, it can be hypothesized that in a supervised credit program there exist diseconomies of scale, (i.e., the cost of supervision increases disproportionately to the number of loans extended) which would preclude extension of supervised agricultural credits on a large scale.

The Bangkok Bank's inability to raise long term deposits results in a lending program which cannot offer "full-service" banking to the farmer. Possible solutions to this would include the provision of long-term funds by the Bank of Thailand to the commercial banks or a piggy-back arrangement where the commercial banks lend short-term credit to the farmer on top of the BAAC's provision of long term credit. The BAAC currently will not provide credit to farmers who have access to other institutional credit.

The other business interests of commercial bankers, as previously noted, changes the individual banker's economic calculations. Without full knowledge of these interests, it is difficult to evaluate the impact of alternative policies. However, it is not reasonable to ignore them simply because they are not quantifiable.

### Policy Options

The policy options which can favorably impact upon the deficient

## V. EVALUATION

lending margin are most numerous. An obligatory crop insurance program could protect the farmers who receive credit and reduce the costs of default due to natural disaster. An efficiently operated price support program with corresponding buffer stocks could reduce the incidence of default due to depressed prices. A restructuring of the interest rates paid on deposits could encourage medium and long term deposits. A system of preferential interest rates for small-scale rural depositors could counterbalance the implicit income tax advantages offered to the wealthy. Increasing the maximum rate of interest which institutions may pay could increase the income generated. A direct subsidy of some administrative expense such as extension could reduce costs.

All of these devices have the potential to impact upon the success of an agricultural lending program. However, the extent of improvement (or that an impact other than marginal will occur) is ultimately dependent upon the farmer's ability to profitably use and repay the credit extended. The farmers' economic calculus considers risk and return. The availability of profitable technology may or may not exist. Or the social infrastructure, such as the tenure system, may negate the expected gains. An imperfect marketing or processing structure may prohibit the farmers adoption of a more profitable technology. Credit does not exist in isolation. To look at only the delivery of credit is not sufficient.

### Future Research

Future research should begin with the farmer. Micro level research would provide detailed information on the potential use of credit. Longitudinal surveys of rural households can shed light on the farmers' decision making and in the process can identify the bottlenecks to the adoption of a

## V. EVALUATION

profitable technology. Macro policies of tenure, marketing, input supplies and credit can then be integrated with the findings of the micro level data to provide a better basis for decision making. The research could improve the design of credit programs by specifically considering the following:

- Can the small farmer profitably use credit priced at its opportunity cost?
- Is access to a minimum level of land a necessary condition to profitable use of credit?
- What are the causes of loan delinquencies and defaults?
- Does a demand for crop insurance exist? What would it cost?
- Are small farmers a source of untapped rural savings?
- What is the availability of human capital within the farm family and is there a willingness to invest this capital?

In addition, this research would reveal the farmers' attitudes toward borrowing costs implicit in institutional credit, toward extension services provided in conjunction with the delivery of institutional credit, toward credit tied to the purchase of production inputs, and toward credit repaid in kind with the farmers' produce. Selection could include both individual farmers and group farmers with an attempt to identify differences inherent in grouping.

## V. EVALUATION

This farm level research could then be linked to the policies of the lending institutions. We would know for example the impact the Bank of Thailand's raising the maximum lending rate might have upon efficiently increasing agricultural credit. We would know the possible tradeoffs between increased income and increased defaults due to an insufficient debt capacity of the small farmer. We could also measure the impact of supplying credit with increased technical assistance, which would tell us something about the tradeoffs between increased administrative expense and decreased bad debt expense. We would also know something of the impact of a savings mobilization component in the lending program and could therefore know something about the tradeoffs involved in the varying costs of funds.

It would be possible to determine factors or policies constraining the development of an effective program and to propose modified or new policies in order to eliminate constraints. The planning of cost effective education and training programs, the design of schemes to accelerate capital formation and the determination of small farmer financial needs would benefit both the small farmer and the lending institution.

TABLE # 1

## COMMERCIAL BANKS IN THAILAND

BANK

Opening Date

Banks Incorporated in Thailand

|                                      |      |     |      |
|--------------------------------------|------|-----|------|
| 1. The Siam Commercial Bank Ltd.     | Apr. | 1,  | 1906 |
| 2. Wang Lee Bank Ltd.                | Oct. | 11, | 1933 |
| 3. The Bank of Asia Ltd.             | Oct. | 2,  | 1939 |
| 4. The Siam City Bank Ltd.           | May  | 24, | 1941 |
| 5. The Bangkok Bank of Commerce Ltd. | Nov. | 17, | 1944 |
| 6. Bangkok Bank Ltd.                 | Dec. | 10, | 1944 |
| 7. Bank of Ayudhaya Ltd.             | Apr. | 2,  | 1945 |
| 8. The Thai Farmer's Bank Ltd.       | June | 8,  | 1945 |
| 9. The Laem Thong Bank Ltd.          | Dec. | 20, | 1948 |
| 10. The Union Bank of Bangkok Ltd.   | Mar. | 11, | 1949 |
| 11. The Thai Danu Bank Ltd.          | Apr. | 8,  | 1949 |
| 12. Bangkok Metropolitan Bank Ltd.   | Aug. | 21, | 1950 |
| 13. The Thai Military Bank Ltd.      | Nov. | 8,  | 1957 |
| 14. Thai Development Bank Ltd.       | Aug. | 17, | 1960 |
| 15. The Asia Trust Bank Ltd.         | Oct. | 20, | 1965 |
| 16. The Krung Thai Bank Ltd.         | Mar. | 14, | 1966 |

Banks Incorporated Abroad

|   |      |     |      |
|---|------|-----|------|
| 1. The Hongkong & Shanghai Banking Corp Ltd.  | Dec. | 2,  | 1888 |
| 2. The Chartered Bank                         |      |     | 1894 |
| 3. Banque de L'Indochine                      | Feb. |     | 1897 |
| 4. Four Seas Communications Bank Ltd.         | July | 2,  | 1909 |
| 5. The Bank of Canton Ltd.                    | Jan. | 3,  | 1919 |
| 6. Mercantile Bank Ltd.                       | Jan. |     | 1923 |
| 7. The International Commercial Bank of China | Oct. | 10, | 1947 |
| 8. Bharat Overseas Bank Ltd.                  | Dec. | 23, | 1947 |
| 9. Bank of America NT. & SA.                  | Dec. | 1,  | 1949 |
| 10. The Mitsui Bank Ltd.                      | Nov. | 22, | 1956 |
| 11. The Bank of Tokyo Ltd.                    | June | 29, | 1962 |
| 12. The Chase Manhattan Bank, NA.             | Jan. | 1,  | 1964 |
| 13. United Malayan Banking Corp. Ltd.         | Feb. | 28, | 1964 |

TABLE # 2  
OUTSIDE INTEREST OF MAJOR SHAREHOLDERS

| Bank | Bank Post of Major Shareholder | Outside Interest  |
|------|--------------------------------|---|
| 1.   | Managing Director              | Warehouse<br>Rubber<br>Trading  |
| 2.   | Vice Chairman                  | Import<br>Warehouse<br>Cinema<br>Trading  |
| 3.   | Managing Director              | Building Contractor<br>Sawmill<br>Liquor Agency<br>Provision, Food<br>Forestry<br>Sawmill<br>Trading<br>Transport<br>Insurance<br>Motor Spare Parts<br>Build. Contractor<br>Sugar Refinery<br>Warehouse<br>Mining |
| 4.   | Chairman                       | Liquor Agency<br>Trading<br>Agricultural<br>Trading<br>Insurance  |
| 5.   | Managing Director              | Trading<br>Finance<br>Shipping<br>Motor Trade<br>Warehouse  |

TABLE # 3

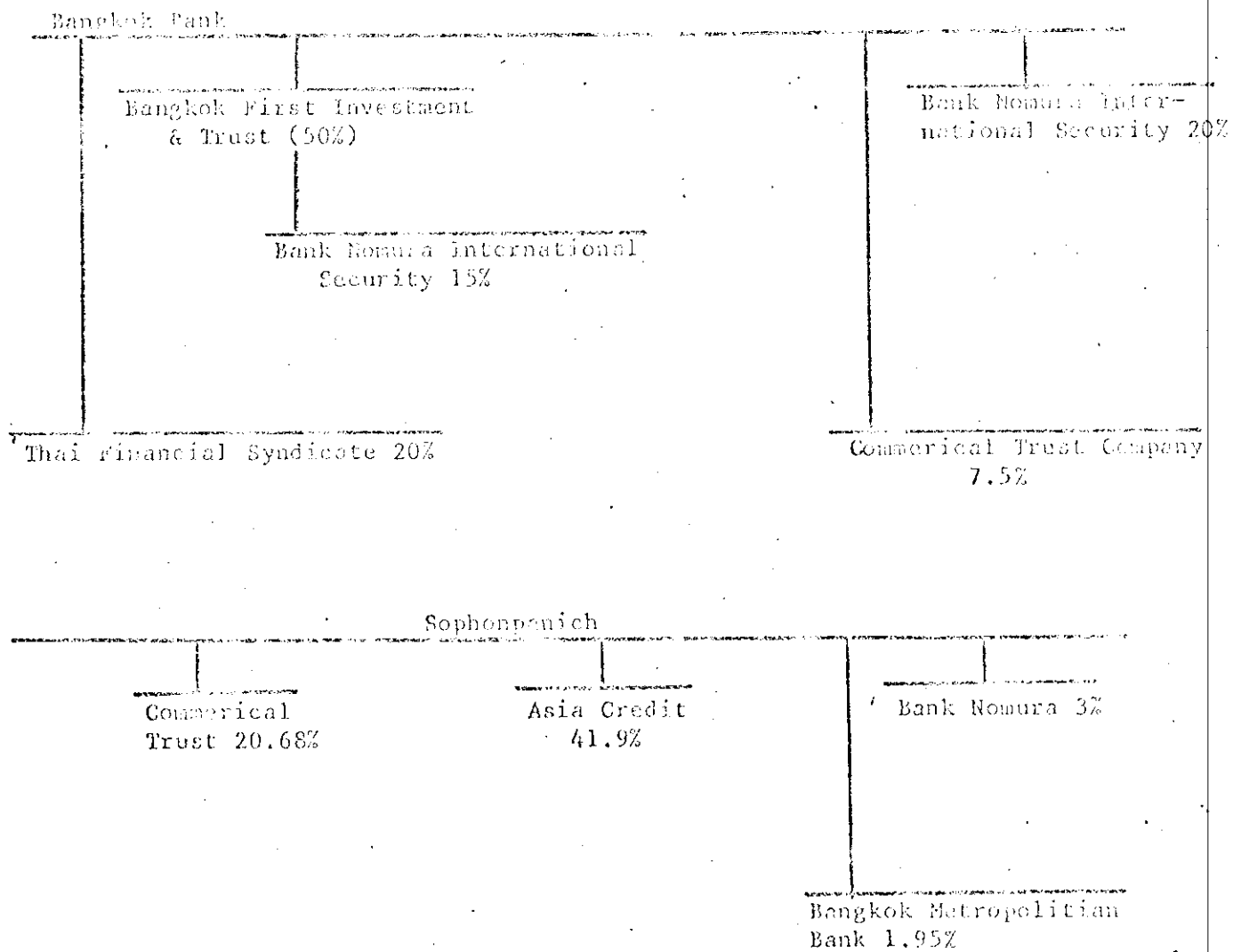
## MAJOR SHAREHOLDERS OF THE BANGKOK BANK

## Bangkok Bank:

|                               |             |
|-------------------------------|-------------|
| Ministry of Finance           | 11.14       |
| Asia Insurance Co.            | 9.71        |
| Bangkok Bank Workers          | 6.35        |
| Prapas Charusatiana           | 5.35        |
| Sophonpanich                  | 5.24        |
| Park Hotel                    | 1.88        |
| Commerical Reserve Investment | 1.30        |
| Shiang Kwan Investment        | .8          |
| Thanapornchai Co.             | .91         |
| Boochu Rojanastien            | .74         |
| Vilaiwan Saiyachit            | <u>2.97</u> |
|                               | 46.57%      |

TABLE # 4

BANGKOK BANK INVESTMENT IN FINANCE COMPANIES



Source: Business in Thailand, April, 1975.  
Annual Report, Bangkok Bank, Ltd, 1974.

TABLE # 5

## CONSOLIDATED LOAN PORTFOLIO-COMMERCIAL BANKS

Millions of Baht

BILLS, LOANS AND OVERDRAFTS OF COMMERCIAL BANKS CLASSIFIED BY PURPOSES <sup>1/</sup>

|  | 1969<br>Dec. | 1970<br>Dec. | 1971<br>Dec. | 1972<br>Dec. | 1973<br>Dec. | 1974<br>Dec. | 1975<br>Dec. |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 1. Agriculture                                     | 660.5        | 637.4        | 742.7        | 771.2        | 990.5        | 1,305.3      | 2,421.5      |
| 2. Mining  | 382.6        | 407.6        | 426.7        | 419.4        | 468.1        | 541.5        | 611.5        |
| 3. Manufacturing                                   | 3,175.0      | 4,351.8      | 5,161.1      | 5,686.5      | 8,357.8      | 12,762.7     | 16,481.5     |
| 4. Construction                                    | 1,620.2      | 1,595.7      | 1,770.6      | 2,608.3      | 3,391.4      | 3,391.4      | 3,811.5      |
| 5. Real estate<br>business                         | 1,248.9      | 1,717.3      | 1,619.5      | 1,848.0      | 2,412.3      | 3,068.5      | 3,381.5      |
| 6. Imports   | 5,225.3      | 6,058.4      | 6,007.2      | 6,257.6      | 9,137.9      | 12,253.1     | 12,421.5     |
| 7. Exports   | 2,442.6      | 2,793.7      | 3,152.0      | 3,322.5      | 4,387.0      | 8,058.3      | 10,111.5     |
| 8. Wholesale and<br>retail trade                   | 4,934.2      | 6,038.0      | 7,228.6      | 8,226.0      | 12,215.0     | 14,539.2     | 16,251.5     |
| 9. Public utilities                                | 252.3        | 324.2        | 474.2        | 388.2        | 605.2        | 793.8        | 911.5        |
| 10. Banking and other<br>financial<br>institutions | 306.8        | 619.4        | 812.6        | 1,605.6      | 2,802.1      | 3,831.2      | 5,281.5      |
| 11. Services                                       | 1,199.3      | 1,526.7      | 1,968.7      | 2,073.8      | 2,318.3      | 3,081.3      | 3,541.5      |
| 12. Personal consumption                           | 1,926.7      | 2,154.8      | 2,323.0      | 3,086.0      | 4,457.5      | 5,153.3      | 7,341.5      |
| 13. Others   | 15.8         | 9.0          | 22.9         | 10.1         | 31.3         | 31.3         | 11.5         |
| Total  | 23,390.2     | 28,234.2     | 31,709.8     | 35,845.7     | 51,291.2     | 68,800.7     | 82,891.5     |

<sup>1/</sup> Including inter-commercial bank transactions.

Source: Bank of Thailand form CBI.

TABLE # 6

## INTEREST RATES FOR GOVERNMENT SECURITIES

(per cent per annum)

|   | 1967  | 1968  | 1969   | 1970 | 1971    | 1972    | 1973    | 1974 | 1975 |
|---|-------|-------|--|------|---------|---------|---------|------|------|
| Government Securities                             |       |       |  |      |         |         |         |      |      |
| Government bonds                                  | 7     | 7     | 7  | 7-9  | 7.5-9.5 | 7.5-8.5 | 7.5-8.5 | 8.5  | 8.5  |
| Treasury bills                                    |       |       |  |      |         |         |         |      |      |
| 1. Sold at tender                                 | 4.06  | 4.58  | 6.93   | 6.98 | 6.98    | 5.36    | 6.33    | 5.14 | 6.8  |
| 2. Sold from Bank of Thailand's portfolio         |       |       |  |      |         |         |         |      |      |
| 1 - 15 days                                       | 2.92  | 2.92  |  |      |         |         |         |      |      |
| 16 - 30 days                                      | 3.42  | 3.42  |  |      |         |         |         |      |      |
| 31 - 45 days                                      | 3.99  | 3.99  | 6.50   | 6.50 | 6.50    | 4.61    | 6.13    | 4.89 | 6.6  |
| 46 - 60 days                                      | 4.47  | 4.47  |  |      |         |         |         |      |      |
| 3. Rediscount at Bank of Thailand                 |       |       |  |      |         |         |         |      |      |
| a. for bills previously sold at tender            | 4.75  | 4.75  | (rate at which bills were bought at tender, plus 1/4%) |      |         |         |         |      |      |
| b. for bills previously sold from BOT's portfolio |       |       |  |      |         |         |         |      |      |
| 1 - 15 days                                       | 3 1/8 | 3 1/8 |  |      |         |         |         |      |      |
| 16 - 30 days                                      | 3 5/8 | 3 5/8 |  |      |         |         |         |      |      |
| 31 - 45 days                                      | 4 1/8 | 4 1/8 | --   | --   | --      | 5.11    | 6.63    | 5.39 | 7.   |
| 46 - 60 days                                      | 4 5/8 | 4 5/8 |  |      |         |         |         |      |      |

Source: Bank of Thailand

TABLE # 7

## BANK OF THAILAND REDISCOUNT RATES

Bank of Thailand

|  | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 |
|--|------|------|------|------|------|------|------|------|------|
| Loan rate  | 7    | 7    | 11   | 9    | 9    | 8    | 10   | 11   | 11   |
| Rediscount Rates on:   |      |      |      |      |      |      |      |      |      |
| Import bills   | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    |
| Bills on raw materials<br>for industrial use                   | 5    | 5    | -    | -    | -    | -    | -    | -    | -    |
| Bills on sales on<br>credit of industrial<br>products          | 5    | 5    | -    | -    | -    | -    | -    | -    | -    |
| Bills arising from<br>industrial undertakings                  | -    | -    | 5    | 5    | 5    | 5    | 5    | 5    | 5    |
| Bills arising from the<br>purchase of agricultural<br>products | -    | -    | -    | -    | 5    | 5    | 5    | 5    | 5    |
| Agricultural Bills   | -    | 7    | 7    | 7    | 7    | 5    | 5    | 5    | 5    |

Source: Bank of Thailand

TABLE # 8

## Maximum Commercial Bank Lending Rates

|  | 1967 | 1968 | 1969 | 1970 | 1971 | 1972   | 1973   | 1974   | 1975   |
|--|------|------|------|------|------|--------|--------|--------|--------|
| Loans and Overdrafts   |      |      |      |      |      |        |        |        |        |
| Loan for exports   | 9    | 9    | 9    | 9    | 9    | 8 1/2  | 8 1/2  | 15     | 15     |
| Loans of industrial enterprises against collateral of immovables | 12   | 12   | 12   | 12   | 12   | 11 1/2 | 11 1/2 | 12 1/2 | 12 1/2 |
| Others   | 14   | 14   | 14   | 14   | 14   | 14     | 14     | 15     | 15     |
| Discount Rates on:   |      |      |      |      |      |        |        |        |        |
| Commercial bills   | 14   | 14   | 14   | 14   | 14   | 14     | 14     | 15     | 15     |
| Export bills   | 9    | 9    | 9    | 9    | 9    | 8      | 8 1/2  | 15     | 15     |
| Bills on raw materials for industrial use                        | 10   | 10   | 10   | 10   | 10   | 9 1/2  | 9 1/2  | 10 1/2 | 10 1/2 |
| Bills on sales on credit of industrial products                  | 10   | 10   | 10   | 10   | 10   | 9 1/2  | 9 1/2  | 10 1/2 | 10 1/2 |
| Export bills   | 7    | 7    | 7    | 7    | 7    | 7      | 7      | 7      | 7      |
| Bills on raw materials for industrial use                        | 7    | 7    | -    | -    | -    | -      | -      | -      | -      |
| Bills on sales on credit of industrial products                  | 7    | 7    | -    | -    | -    | -      | -      | -      | -      |
| Bills arising from industrial undertakings                       | -    | -    | 7    | 7    | 7    | 7      | 7      | 7      | 7      |
| Bills arising from the purchase of agricultural products         | -    | -    | -    | -    | 7    | 7      | 7      | 7      | 7      |
| Agricultural bills   | -    | 12   | 12   | 12   | 12   | 10     | 10     | 10     | 10     |

Discount rates are applicable to those bills rediscounted at the Bank of Thailand.

Source: Bank of Thailand

TABLE # 9

## MAXIMUM INTEREST RATES ON DEPOSITS

(per cent per annum)

|   | 1967  | 1968  | 1969  | 1970  | 1971  | 1972  | 1973  | 1974  | 1975  |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Deposits  |       |       |       |       |       |       |       |       |       |
| Demand deposits   | 1/100 | 1/100 | 1/100 | 1/100 | 1/100 | 1/100 | 1/100 | 1/100 | 1/100 |
| Demand deposits<br>(subject to a<br>maximum drawing of<br>4 cheques per<br>month) | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| Savings deposits  | 3 1/2 | 3 1/2 | 3 1/2 | 3 1/2 | 3 1/2 | 3 1/2 | 3 1/2 | 4 1/2 | 4 1/2 |
| Time deposits: less<br>than 3 months  | 1/100 | 1/100 | 1/100 | 1/100 | 1/100 | 1/100 | 1/100 | 1/100 | 1/100 |
| 3-6 months  | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 6     | 6     |
| 6-12 months   | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 7     | 7     |
| 12 months<br>and over   | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 8     | 8     |
| Foreign currency<br>deposit   | -     | -     | 12    | 12    | 12    | 12    | 12    | 12    | 12    |

Source: Bank of Thailand

TABLE # 10

COMPARISON OF NUMBER OF BANK EMPLOYEES

|      | Bangkok Bank | All Commercial Banks | BAAC |
|------|--------------|----------------------|------|
| 1966 | 2744         | not available        | 376  |
| 1967 | 3170         | not available        | 376  |
| 1968 | 3647         | not available        | 808  |
| 1969 | 4291         | not available        | 1123 |
| 1970 | 5050         | 17000                | 1566 |
| 1971 | 5927         | 19000                | 2018 |
| 1972 | 6927         | 20000                | 2306 |
| 1973 | 7979         | 24000                | 2325 |
| 1974 | 9777         | 29000                | 2366 |
| 1975 | 11165        | 42000                | 2389 |

Source, Bangkok Bank Annual Report, 1975; Statistical Data for all Commercial Banks in Thailand, 1975; BAAC, Ninth Year of Operations, 1975.

TABLE # 12

## COMPOSITION OF BAAC CAPITAL FUND

|    | <u>Total</u> | <u>Paid/in</u> | <u>Reserves</u> | <u>Retained Earnings</u> |
|----|--------------|----------------|-----------------|--------------------------|
| 66 | 147.4        | 147.4          | --              | --                       |
| 67 | 314.5        | 249.           | 54.3            | 11.2                     |
| 68 | 473.2        | 389.3          | 57.             | 26.9                     |
| 69 | 551.4        | 436.1          | 57.             | 58.3                     |
| 70 | 802.7        | 670.6          | 57.             | 75.1                     |
| 71 | 1158.2       | 995.2          | 57.             | 106.                     |
| 72 | 1204.7       | 998.3          | 57.             | 149.4                    |
| 73 | 1250.        | 999.9          | 57.             | 193.1                    |
| 74 | 1282.2       | 999.9          | 57.             | 225.3                    |
| 75 | 1283.8       | 999.9          | 57.             | 226.9                    |

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Source: BAAC Yearly Reports

TABLE # 13

CHANGES IN FINANCIAL POSITION 1966 - 1975  
 (Millions of Baht)  
 All Commercial Banks

| <u>Assets</u>                       | <u>1966</u>   | <u>1975</u>   | <u>% Increase</u> |
|-------------------------------------|---------------|---------------|-------------------|
| Cash                                | 2392.         | 11479.5       | 480%              |
| Gov't. Securities                   | 4134.4        | 17684.1       | 428%              |
| Securities - Private                | 208.1         | 1360.3        | 654%              |
| Loans                               | 15072.1       | 82410.2       | 548%              |
| Fixed                               | <u>1575.5</u> | <u>6052.2</u> | 384%              |
| Total                               | 23382.9       | 118986.3      | 509%              |
| <br><u>Liabilities &amp; Equity</u> |               |               |                   |
| Deposits: Demand                    | 5742.0        | 14019.6       | 244%              |
| Savings                             | 2011.         | 7677.3        | 382%              |
| Time                                | 9459.3        | 63893.3       | 675%              |
| Borrowings                          | 3059.8        | 15773.6       | 516%              |
| Other                               | 1484.         | 8646.9        | 583%              |
| Capital                             | <u>1626.8</u> | <u>8975.6</u> | 552%              |
| Total                               | 23382.9       | 118986.3      | 509%              |

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Data compiled from Bank of Thailand Monthly Bulletin, May, 1976.

TABLE # 14

CHANGES IN FINANCIAL POSITION 1966-1975  
(Millions of Baht)  
Bangkok Bank

| <u>Assets</u>                   | <u>1966</u> | <u>1975</u> | <u>% Increase</u> |
|---------------------------------|-------------|-------------|-------------------|
| Cash                            | 876.        | 6941.2      | 792%              |
| Gov't Securities                | 430.4       | 2681.8      | 623%              |
| Securities - Private            | 100.*       | 762.3       | 762%              |
| Loans                           | 3611.3      | 34734.8     | 962%              |
| Fixed                           | 204.5       | 604.2       | 295%              |
| Total                           | 5306.4      | 46393.8     | 874%              |
| <u>Liabilities &amp; Equity</u> |             |             |                   |
| Deposits                        | 4069.3      | 34314.      | 843%              |
| Borrowings & Other<br>Accounts  | 953.7       | 9219.3      | 967%              |
| Capital                         | 283.4       | 2860.5      | 1009%             |
| Total                           | 5306.4      | 46393.8     | 874%              |

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Source: Rozental, p. 131, all other data derived from figures supplied by the 1975 Bangkok Bank Annual Report

TABLE # 15

CHANGES IN FINANCIAL POSITION 1966-1975  
(Millions of Baht)  
BAAC

| <u>Assets</u>                       | 1966  | 1975   | % Increase |
|-------------------------------------|-------|--------|------------|
| Cash                                | 125.3 | 338.5  | 270%       |
| Loans                               | 217.4 | 4714.8 | 2169%      |
| Fixed                               | 12.2  | 132.7  | 109%       |
| Total                               | 355.2 | 5186.0 | 1460%      |
| <br><u>Liabilities &amp; Equity</u> |       |        |            |
| Deposits: Savings                   | 9.0   | 283.9  | 3154%      |
| Time                                | 25.6  | 582.6  | 2276%      |
| Compensatory                        | -0-   | 308.1  | --         |
| Borrowings                          | 142.7 | 710.9  | 498%       |
| Loans from Banks                    | -0-   | 1670.8 | --         |
| Bonds                               | 1.8   | 170.0  | 944%       |
| Other Liabilities                   | 28.7  | 175.3  | 611%       |
| Capital                             | 147.4 | 1284.4 | 871%       |
| Total                               | 355.2 | 5186.0 | 1460%      |

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Source: Data compiled from Bank of Thailand Monthly Bulletin, May, 1976.

TABLE # 16

AMOUNT AND PURPOSES OF AGRICULTURAL LOANS  
Bangkok Bank

|                                      | <u>1967</u> | <u>1968</u> | <u>1969</u> | <u>1970</u> | <u>1971</u> | <u>1972</u> | <u>1973</u> | <u>1974</u> | <u>1975</u> |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Amount of Loan<br>(Baht in millions) | 63.0        | 94.1        | 124.6       | 93.2        | 77.3        | 89.7        | 98.0        | 173.5       | 10          |
| Percentage of Loan                   |             |             |             |             |             |             |             |             |             |
| Cultivation                          | 73.0        | 63.5        | 54.4        | 49.3        | 39.9        | 33.1        | 39.0        | 37.2        | n           |
| Land Development                     | 2.18        | 7.55        | 7.06        | 11.44       | 16.41       | 10.08       | 7.77        | 11.78       |             |
| Purchase                             | 0.68        | 0.06        | 0.24        | 5.89        | 4.89        | 4.99        | 4.94        | 4.88        |             |
| Rent                                 | --          | --          | --          | --          | 2.47        | 1.76        | 1.08        | 1.86        |             |
| Equipment                            | 7.17        | 5.52        | 5.76        | 3.55        | 3.30        | 5.52        | 4.79        | 3.96        |             |
| Livestock                            | --          | --          | 0.14        | 20.90       | 22.34       | 22.60       | 35.75       | 28.76       |             |
| Family                               | 0.16        | 2.51        | 4.15        | 2.18        | 2.30        | 1.40        | 0.82        | 1.72        |             |
| Construction                         | 4.70        | 3.13        | 3.10        | 0.61        | 3.03        | 14.30       | 1.91        | 4.40        |             |
| Debt Settlement et                   | 11.57       | 17.73       | 25.13       | 6.11        | 5.40        | 6.20        | 3.99        | 5.42        |             |

Source: . Bangkok Bank Agricultural Credit Division

TABLE # 17

AMOUNT AND PURPOSES OF AGRICULTURAL LOANS  
BAAC  
(Millions of Baht)

| Amount of Loan     | 1967  | 1968  | 1969  | 1970  | 1971  | 1972  | 1973  | 1974   | 1975 |
|--------------------|-------|-------|-------|-------|-------|-------|-------|--------|------|
|                    | 125.2 | 408.2 | 562.5 | 563.0 | 509.2 | 670.9 | 773.7 | 1201.4 | n.a. |
| Percentage of Loan |       |       |       |       |       |       |       |        |      |
| Short Term         |       |       |       |       |       |       |       |        |      |
| Cultivation        | 47.9  | 47.6  | 67.7  | 74.3  | 71.5  | 70.8  | 70.7  | 68.9   |      |
| Medium Term        |       |       |       |       |       |       |       |        |      |
| Land Develop       | 12.0  | 10.8  | 8.1   | 5.9   | 5.6   | 6.7   | 5.0   | 4.9    |      |
| Purchase           | 3.1   | 5.2   | 3.6   | 3.1   | 3.3   | 3.1   | 3.4   | .3     |      |
| Equipment          | 2.1   | 2.5   | 2.5   | 3.0   | 2.6   | 3.5   | 4.3   | 3.8    |      |
| Livestock          | 22.2  | 19.5  | 9.4   | 7.9   | 8.6   | 6.9   | 9.9   | 12.8   |      |
| Construction       | 2.3   | 4.0   | 2.8   | 2.0   | 3.3   | 4.2   | 3.3   | 2.9    |      |
| Debt               | 8.3   | 7.8   | 3.2   | 1.4   | 1.6   | 1.5   | 1.0   | .5     |      |
| Other              | 1.7   | 2.2   | 2.3   | 2.0   | 2.9   | 2.5   | 1.9   | 2.0    |      |
| Long Term          |       |       |       |       |       |       |       |        |      |
| Debt               |       |       | .1    | .05   | .1    | .3    | .2    | 1.1    |      |

Source: Compiled from BAAC Annual Reports

Notes:

- 1) Cultivation includes all short-term production credit.
- 2) Land development includes purchase or improvement of water pumps, minor land improvements and land clearing.
- 3) Equipment includes purchase or improvement of machinery, farm equipment and transportation equipment.
- 4) Livestock includes purchase of draft animals.
- 5) Debt settlement includes only medium-term loans.
- 6) Other includes investments in orcharding, farm ponds, poultry and purchase or improvement of fishing boats.

TABLE # 18

REPAYMENT RECORD  
BANGKOK BANK

| Year | <u>Accumulated loan paid out</u> |               | <u>Accumulated past due</u> |           |               | <u>Accumulated Bad Debts</u> |           |     |
|------|----------------------------------|---------------|-----------------------------|-----------|---------------|------------------------------|-----------|-----|
|      | Accounts                         | Value (Baht)  | Accounts                    | Value     | % on Ac. loan | Account                      | Amount    | % o |
| 1972 | 177,924                          | 606,634,163   | 89                          | 2,093,403 | 0.35          | 1886                         | 5,937,018 | 0   |
| 1973 | 197,861                          | 704,600,057   | 187                         | 2,615,222 | 0.37          | 2359                         | 7,805,945 | 1   |
| 1974 | 223,148                          | 878,126,771   | 288                         | 2,395,125 | 0.27          | 2382                         | 7,804,988 | 0   |
| 1975 | 241,798                          | 1,036,318,392 | 422                         | 3,246,733 | 0.31          | 2285                         | 7,672,031 | 0   |

Source: Bangkok Bank Agricultural Credit Division.

TABLE # 19

REPAYMENT RECORD  
BAAC

| Items                               | 1967      | 1969                     | 1971                     | 1974        |
|-------------------------------------|-----------|--------------------------|--------------------------|-------------|
| (1) Matured principal               | 57,477    | 14,022,437               | 31,954,513               | 931,781,9   |
| (2) Matured principal collected     | 54,096    | 12,376,612               | 16,214,842               | 676,849,8   |
| (3) Advance repayments on principal | 402,522   | 1,723,717 <sup>1/</sup>  | 2,270,817 <sup>2/</sup>  | 116,506,6   |
| (4) Principal outstanding           | 5,361,972 | 30,689,753 <sup>1/</sup> | 40,462,211 <sup>2/</sup> | 1,430,346,9 |
| (5) Authorized arrears              | 3,380     | 1,406,035                | 15,169,947               | 198,960,0   |
| (6) Unauthorized arrears            | --        | 219,790                  | 1,604,544                | 58,196,8    |
| (7) % of (2) and (1)                | 94.12%    | 88.38%                   | 50.74%                   | 72.6        |
| (8) % of (5) to (1)                 | 5.88%     | 10.04%                   | 47.47%                   | 21.3        |
| (9) % of (5) to (4)                 | 0.06%     | 4.58%                    | 37.49%                   | 13.9        |
| (10) % of (6) to (4)                | --        | 0.71%                    | 3.97%                    | 4.0         |

Source: BAAC yearly Reports - Exclusive of all Cooperative Loans

1/ Exclusive of Long-term Loans Amounting to 38,306

2/ Exclusive of Long-term Loans Amounting to 97,990

3/ Exclusive of Long-term Loans Amounting to 12,377,163

CHART # 3

SIMULATED

ORGANIZATIONAL CHART

BANGKOK BANK  
HEAD OFFICE

Board of Directors

Chairman and President

Senior  
Executive Vice President

Executive Vice President  
Domestic Credit

Metropolitan  
Credit Dept.

Provincial  
Credit Dept.

Agricultural Credit  
Division

Executive Vice  
Pres. Domestic  
Branch Admin.

Executive Vice  
President Control

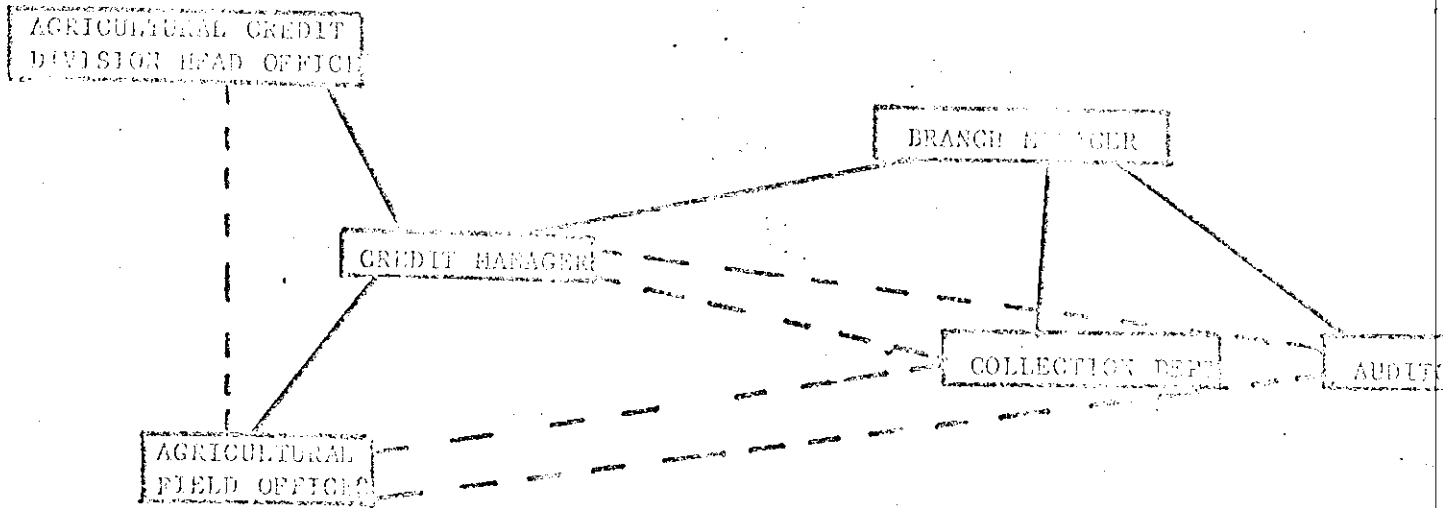
Executive Vi  
Pres. Foreign  
Operation

CHART # 4

SIMULATED ORGANIZATIONAL CHART

BANCKOR BANK

BRANCH OFFICE



Dotted lines indicate supportive services

CHART # 5

BANK OF AGRICULTURE AND AGRICULTURAL COOPERATIVES (HEAD OFFICE)

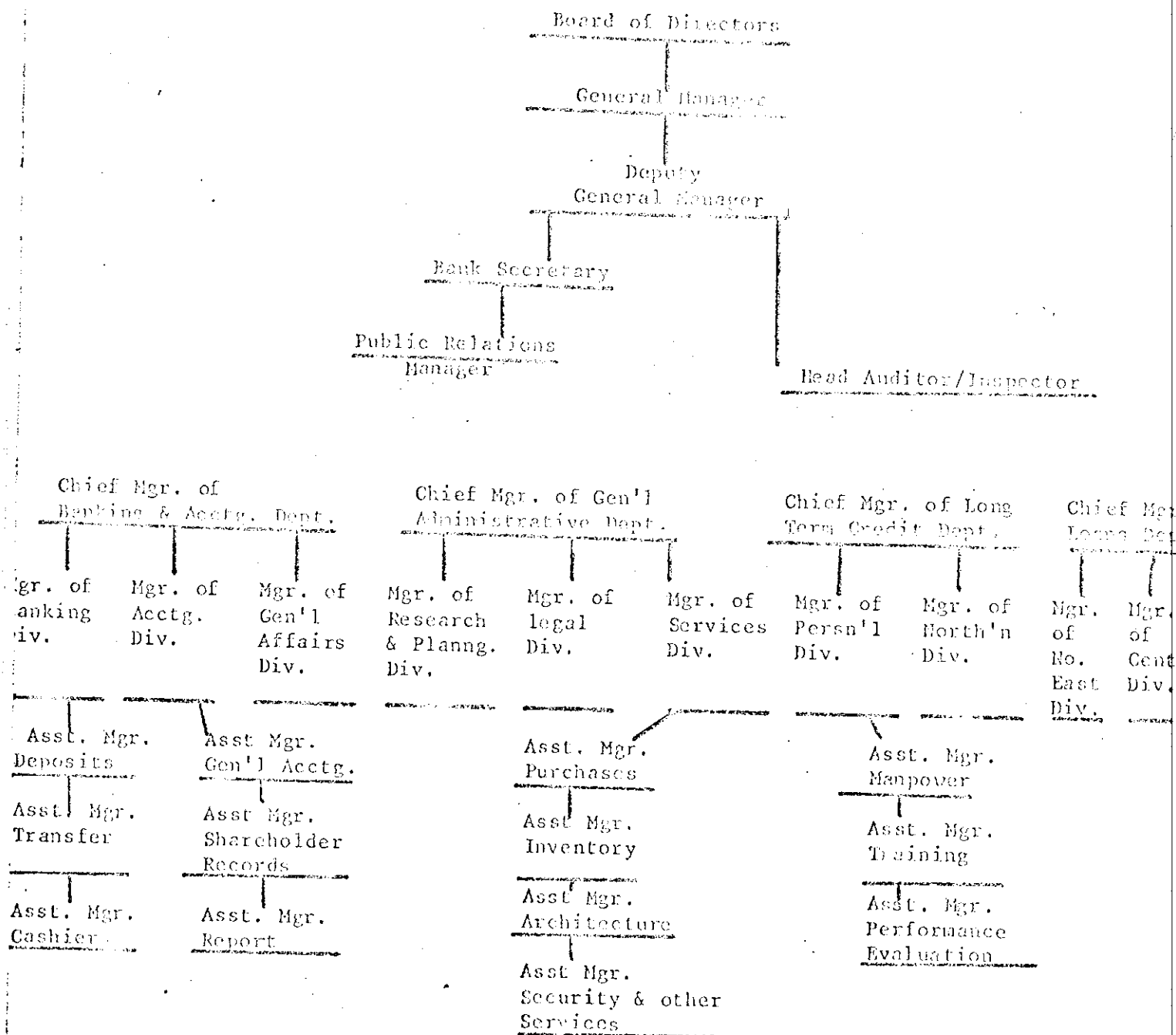
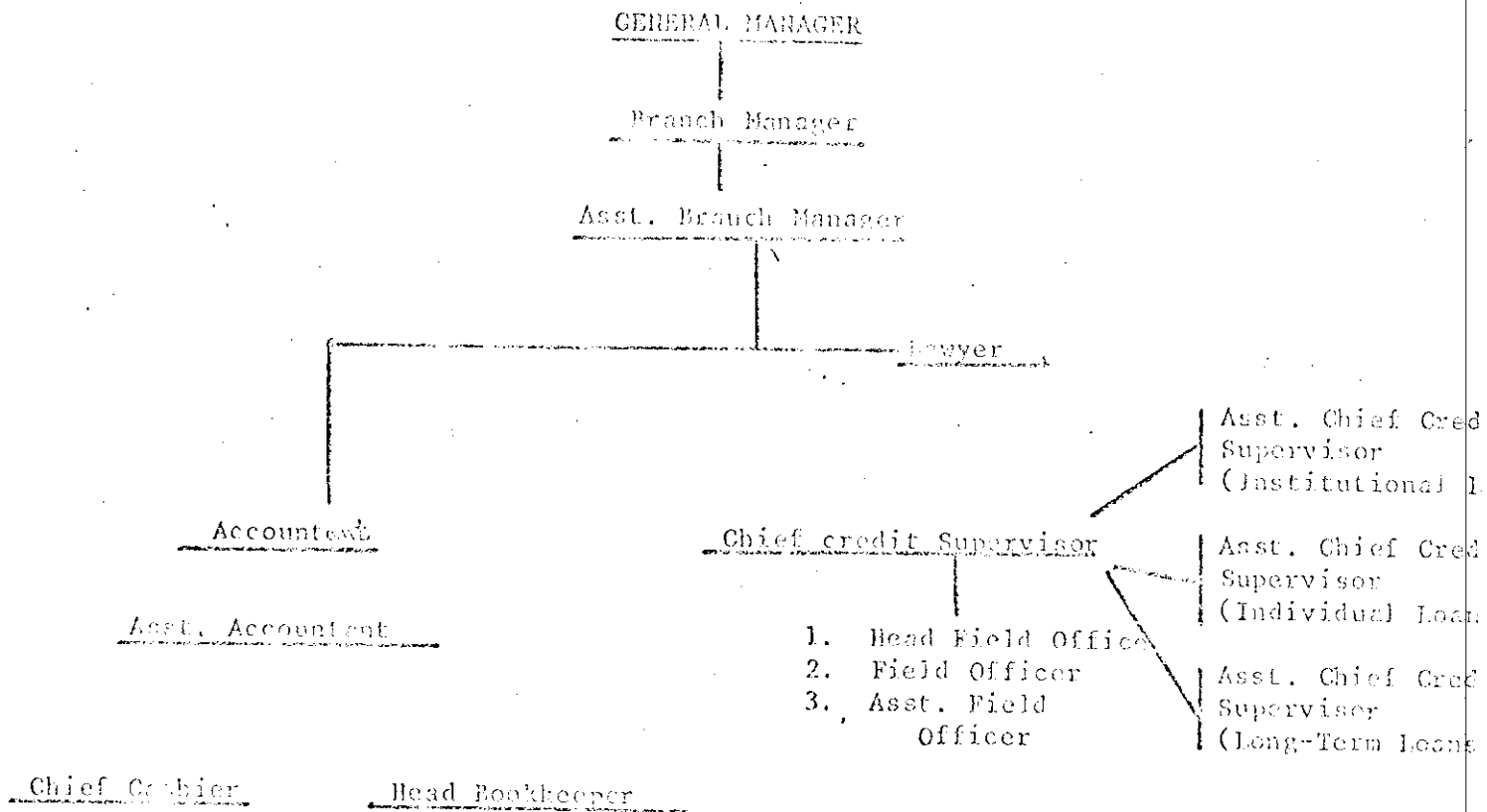


CHART # 6

ORGANIZATIONAL CHART

BANK FOR AGRICULTURE AND AGRICULTURAL COOPERATIVES (BRANCH OFFICE)



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