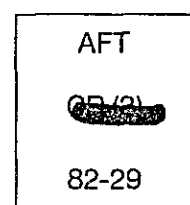


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FEASIBILITY STUDY REPORT
OF
THE AGRICULTURAL COOPERATIVES PROMOTION PROJECT
IN
THAILAND

February 1982

Japan International Cooperation Agency
(J I C A)



國際協力事業團

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PREFACE

It is with great pleasure that I present this report entitled the Feasibility Study Report of the Agricultural Cooperatives Promotion Project to the Government of the Kingdom of Thailand.

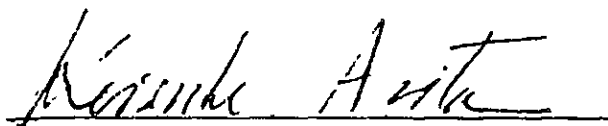
This report embodies the result of a feasibility survey which was carried out in four model cooperatives selected from four each region (North, North-east, Central and South region) from 27th of July to 25th of September 1981 by the Joint Study Team consisted of the Japanese team and Thai team.

The survey team, headed by Mr. H. TOGAWA, had a series of close discussions with the officials concerned of the Government of Thailand and conducted a wide scope field survey and data analyses.

I sincerely hope that this report will be useful as a basic reference for development of the Project.

I am particularly pleased to express my appreciation to the officials concerned of the Government of Thailand for their close cooperation to the Japanese team.

February, 1982



Keisuke Arita
President
Japan International Cooperation Agency

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SUMMARY

The rural cooperative movement in Thailand has a long history of sixty years since 1916, during which various measures have been taken by the government to support the movement.

The development made in the last decade in this field is in fact noticeable. Unfortunately, however, despite the efforts by the government the achievements in the field of cooperative movement cannot be appreciated enough.

Lack of trained farmers' leaders, shortage of fund necessary for the business activities, specific socio-economic structure in the rural society, these may be the main reasons of the insufficient cooperative development.

To improve the increasing economic disparities by region and relatively declining trend of socio-economic standard of farmers is now the task of primary importance to be tackled by the government, and it has been taken up as the biggest and the most important subject in the new Five-year Economic and Social Development Plan of the country.

Needless to say, to raise the socio-economic well-being of farmers effective measures taken by the government in rural development as the policy to support farmers are indispensable. More important are the accumulation of systematic efforts of self-help by farmers and among others strengthened farmers' organizations, agricultural cooperatives in particular. Without it the effects of government policy to support farmers and to improve their socio-economic well-being may not be sustaining.

In response to the request made by the Government of Thailand, the Government of Japan decided to cooperate in conducting a study on Agricultural Cooperatives Promotion Project in Thailand, and it was also agreed that the study should be conducted jointly by the teams of both Thailand and Japan.

In 1980 the study on the master plan of the Phase I was carried out. The study clarified the general problems in agricultural cooperatives in Thailand and the report proposed the four strategic targets as the basic direction to develop the agricultural cooperatives from the grass root level.

The first is to strengthen and expand the basis on which the agricultural cooperatives work. Main points are to increase the utilization ratio by the present member farmers and at the same time to make the organization strong enough to accept new members.

The second is that the agricultural cooperatives take leading part in the area agricultural development. Main points in this context are that the society should grasp the exact situation of farmers and specific conditions in the area by strengthening farm guidance activities, advisory works and offering information to member farmers, and make up their own business programmes standing on the effects brought by the activities above mentioned.

The third is to strengthen and expand the cooperative marketing and purchasing activities of the society as a fair trade body. This mainly aims at putting into practice the business activities in accordance with the fair rule which can be

easily understood and recognized by farmers, and at helping the farmers learn to calculate their farming works scientifically.

The fourth emphasizes to improve and strengthen the function of rural credit which is to meet the requirements of farmers, and to link the farming and financial programmes, which include the programmes of production and marketing, with cooperative business.

In order to realize the four strategic targets the method of integrated and multiple approach is required, which the Report calls the "Total System to bring up and strengthen the Agricultural Cooperatives".

The Report on the study of master plan in the Phase I recommends to start the making of development plan which aims at completing the total system in selected agricultural cooperatives.

The feasibility study of the Phase II conducted in 1981 was also carried out jointly by the teams of both countries. In this study the development plan based on the total system is made in each agricultural cooperative selected as a model in each of four regions, each of which has different agricultural conditions.

The Report clarifies the contents and expected effects of the individual development plan, which can be the basis of the Agricultural Cooperatives Promotion Project in Thailand to be started in the near future.

Four agricultural cooperatives studied are as follows:
Doi-Saket Agri. Coop. in Chiang Mai Province (North),
Koksamrong Agri. Coop. in Lop Buri Province (Central),
Muang Nakhon Ratchasima Agri. Coop. in Nakhon Ratchasima Province
(North East), and
Hat-Yai Agri. Coop. in Song Khla Province (South).

These cooperatives are typical in the region reflecting the basic agricultural conditions, farm products and cooperative activities in the region.

The development plan made in these societies, analyzing the situation of the societies and meeting the actual requirements in the areas, can be the model for the Promotion Project.

These are the reasons of selection of four societies.

Present situation, problems and the basic direction of improvement of individual societies have been arranged and confirmed in the discussions with cooperative leaders - presidents, managers and farmers' leaders - during the study trip.

These are, together with the development plan (3-year plan) based on the above, the contents of Chapter II.

The development plan is shown as divided into "organization, business activities and management", and furthermore "business activities" are again divided into "credit, marketing, purchasing and guidance".

In each part the target of improvement and ways to reach there are shown, and profit and loss plan of four cooperatives, which is expected attainable through improved activities, is added in Chapter IV.

As already mentioned for the development of agricultural cooperatives not only special measures in each field are required, but also important is the integrated and multiple approach which can coordinate the different aspects of various fields and multiply the effects of each field, that is the total system which was recommended in the last report.

In the course of study and analysis the team considered the strengthening of marketing function most important. It is from the recognition that the marketing function is not only the key to improve the repayment performance of loans in the credit activities but it is the most direct and important field of cooperative activities in order to raise the standard of farming and living.

However facilities, equipments, machinery and fund are necessary to increase the cooperative marketing ability (since the minimum target in the third year of the development plan is estimated 30% of the marketed value by the member farmers, the share of the cooperative will be only 6% of the value of marketed farm products in the area where the membership ratio is 20%, which represents one of the best ranking).

To meet these requirements the assistance and the support from the Government Agencies such as BAAC and CPD are indispensable. But the efforts by the cooperatives themselves to improve their financial position are also essential.

The improvement of the credit business requires strengthened marketing function, and again for strengthening of marketing activities the improvement of credit business is required. In such a way all the departments of the cooperative activities are inter-related, and the same with the relation between the business activities and organizational strengthening.

Although the development plan proposed in the report is described by department of activities, it must be emphasized that without inter-relation of all kinds of activities the effect can not be expected.

Another noteworthy point in the report is the importance of joint activities with neighbouring cooperatives, which make the efforts of individual societies to improve their works more efficient.

One society in each region was selected for the study. It is an existence of a "point". Effect of efforts in individual cooperative is limited. Of course many things can be done by individual society such as collecting system at the farmer's yard, temporary storage for the profitable marketing. However as for activities which can be strengthened by facilities such as rice mill, oil extraction plant, compound feedstuff plant or plant of making tapioca-pellet, many of them are beyond the ability of an individual society, and it is desirable to have large area joint-use facilities which can be utilized in cooperation with neighboring societies.

Implementation of the development plan of an individual cooperative can be ensured by joint activities hand in hand with neighbouring societies of similar conditions.

As described in Chapter III of the report, the Agricultural Cooperative Promotion Project is going to bring up and develop five cooperatives in each of selected four provinces, one area in each region, as models, where four studied societies are located.

For the successful promotion of the Project, the adequate supporting system is expected, including travelling guidance by the consulting-unit composed of experts, establishment of central training center and regional training centers meeting the specific requirements of the regions, and training programmes for cooperative leaders by CPD, strengthened facilities for cooperative marketing, construction of large area joint-use facilities, expanded provision of fund for farming as well as for cooperative activities.

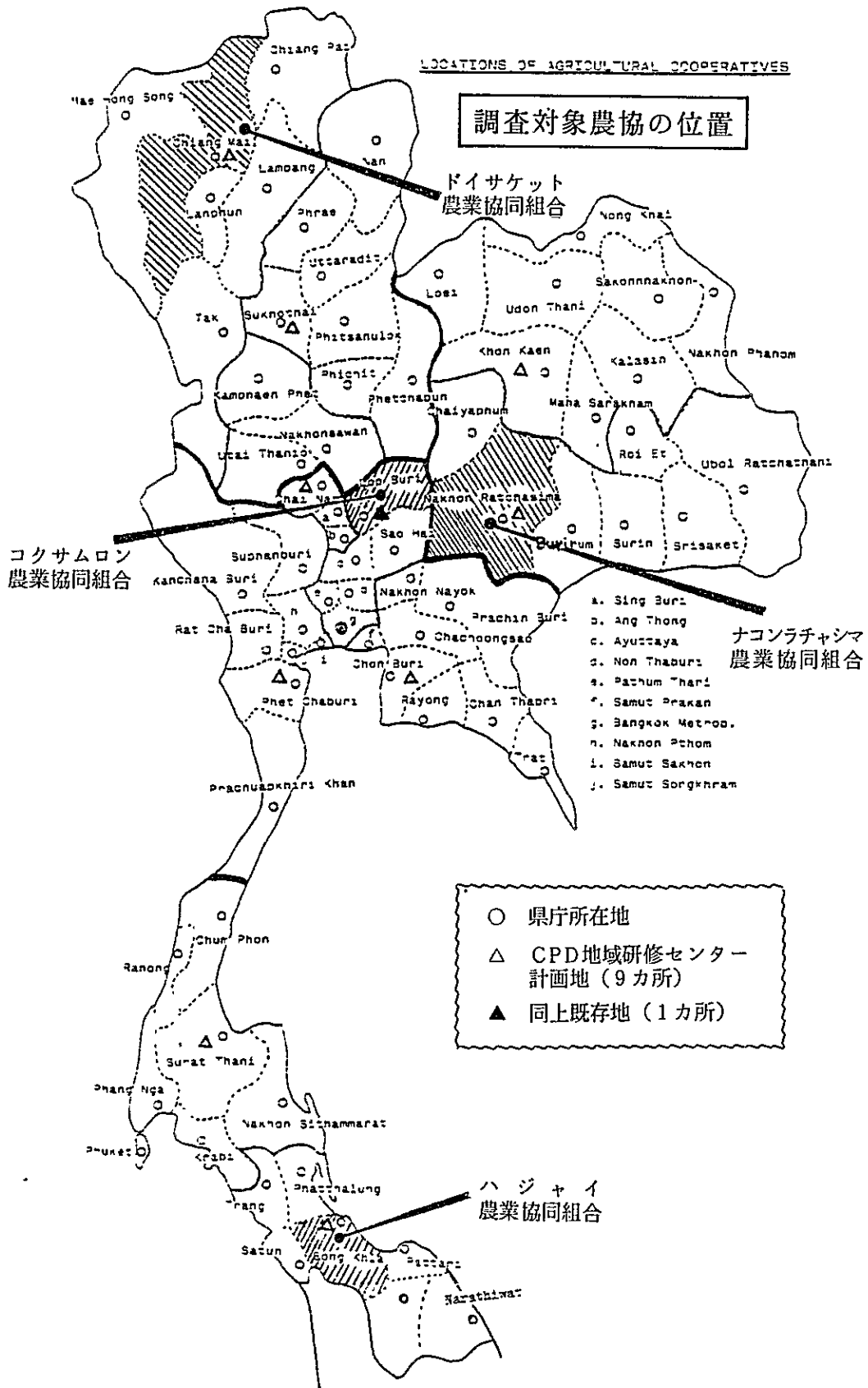
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LOCATIONS OF AGRICULTURAL COOPERATIVES

調査対象農協の位置





FOREWORD

Four National Development Plans have been promoted in Thailand since 1961, and the Fifth National Economic and Social Development Plan is now in progress since October 1981. Although the Thai nation experienced several changes of political powers in these twenty years, the National Development Plan has been continuously supported by the administrations, and "realization of the social justice, fair distribution of benefits brought about by the development" have been continuously the basic target of the policy. In spite of the rapid expansion of industrial and mining sectors Thailand has still a nature of agricultural country, and to correct the social and economic disparities between farming and non-farming people through expanding agricultural production and raising agricultural income is the biggest task of the government. In order to reach the target, needless to say, it is the key to bring up the agricultural cooperatives in each village.

In the fifth National Development Plan which was just started the programme "to reorganize the agricultural structure through raising productivity, saving energy, and rationalize the distribution" was taken up as the most important one, and it was emphasized to minimize various interventions in the market, to correct strains in distribution and to strengthen the bargaining power of farmers through agricultural cooperatives.

However, it is difficult to realize immediately the activities of agricultural cooperatives so as to meet the demand from the government policy. To accumulate the activities of each farmer and those in each village under the excellent leadership, this is a sure way to bring up and strengthen the agricultural cooperatives, though it takes time. It will be impossible to realize the strengthened bargaining power of the nation wide agricultural cooperative organizations without strengthening the bargaining power of primary cooperative society in each village.

The survey is the feasibility study on four agricultural cooperatives, each of which represents one of four regions of the country, with the objective of making the development plan of each society, standing on the basis of findings and conclusion of the survey on the master plan conducted last year, and intends to clarify the contents of the Agricultural Cooperatives Promotion Project in Thailand. Although it was only in four societies that the study, analysis of findings and the development plan were made, the practical contents,

the method and the justification were clarified in the course of works of studies and analysis and from the conclusion reached. Particular importance was given on the joint works of studies, analysis of findings and arrangements by both teams of Thailand and Japan.

On the occasion of presenting the final report, the team sincerely wishes to express its gratitude for the collaboration extended by the government authorities of Thailand and all the cooperators of the country during the works of study, and hopes the cooperation between the both governments, Thailand and Japan, and agricultural cooperative organizations of both countries advances and expands from the point to the facet in the form of total system.

CHAPTER I GENERAL SITUATION OF AGRICULTURE
 AND AGRICULTURAL COOPERATIVES
 IN THAILAND

1. Trend of Agriculture

1) Position of Agriculture in National Economy

The relative position of agriculture has been lowering in the past few years as a result of rapid progress of industrialization.

The farm population in 1979 was about 29.4 million, which is as much as 64 per cent of the total population. As long as this figure is observed, it is learned that Thailand still is an agricultural nation. The ratio of the farm household population to the total population, however, decreased by as much as 12 points in the past eight years as shown in Table 1-1. The ratio of number of workers engaged in agriculture to total number of workers decreased by as much as 13 points in the past eight years to 60.16 percent as of 1979, and it is considered unavoidable that it will keep on decreasing in the future.

Despite the fact that farm household population and number of workers engaged in agriculture indicate the trend of relative decrease as described above, the area of land managed by farmers indicates such a rapid increase as over two times in a period of 20 years, and as much as 116.4 million rai (18.6 million ha), which is equivalent to 36.2 per cent of the total area of the country, that is 321 million rai (51.4 million ha) as of 1978. Such an increase was accomplished as a result of promotion of large scale irrigation and farm land rearrangement operations. But, it is considered that further expansion of farm land is difficult in the future, as pointed out as "Expansion of farm land will probably cease in all areas at the beginning of the 1980's" in the economic survey report of 1978 of the World Bank. Increase of the farm area allowed expansion of the scale of management of farm households together with relative decrease of the farm household population. It is learned from Table 1-4 that the number of farm households of management scale of 30 rai or more increased in particular.

Table 1-1 Trend of farm household population and of number of workers engaged in agriculture

Unit: thousand, %

	Population			Workers		
	total population (A)	Farm household population (B)	B/A	Total No. of workers (C)	No. of workers engaged in agriculture (D)	D/C
1970	36,348	28,078	77.25	18,972	14,192	74.81
1971	37,348	28,285	75.73	19,712	14,390	73.00
1972	38,389	28,461	74.14	20,431	14,577	71.35
1973	39,350	28,664	72.84	21,222	14,800	69.74
1974	40,419	28,793	71.24	21,967	14,952	68.07
1975	41,497	28,948	69.76	22,771	15,132	66.45
1976	42,651	29,086	68.30	23,589	15,299	64.86
1977	43,847	29,213	66.62	24,417	15,451	63.28
1978	45,087	29,327	65.04	25,253	15,586	61.72
1979	46,114	29,405	63.77	26,094	15,699	60.16

Source: Ministry of Agriculture & Cooperatives, "Selected Economic Indicators Relating to Agriculture"

Table 1-2 Trend of area of land managed by farmers

Unit: thousand rai, %

	Farm holding land (A)	Ratio of total area of country	Area of paddy field (B)	B/A
1958	57,617	17.9	37,320	64.8
1963	70,530	22.0	39,422	55.9
1968	85,782	26.7	49,970	58.3
1973	113,095	35.2	70,559	62.4
1978	116,441	36.2	73,270	62.9

Source: Same as that of Table 1-1.

Note: 1 rai = 0.16 ha

Table 1-3 Utilization of land managed by farmers (1978)

Unit: thousand rai, %

	Area	%
Total area of country (A)	321,250	(B/A 36.2)
Farm holding land (B)	116,441	100.0
Housing area	2,610	2.3
Paddy field	73,270	62.9
Under field crops	23,759	20.4
Under fruit tree & tree crops	10,425	9.0
Under vegetables & flowers	348	0.3
Idle land	2,948	2.5
Grassland	349	0.3
Others	2,732	2.3

Source: Ministry of Agriculture & Cooperatives
 "Agricultural Statistics of Thailand,
 Crop Year 1979/80"

Table 1-4 Distribution of farm households classified by scale

Unit: %

	1966	1971	1976
Less than 2 rai	2.8	1.4	0.7
2 - 5.9 rai	11.0	6.6	3.8
6 - 14.9 rai	28.8	25.1	21.0
15 - 29.9 rai	28.9	30.7	30.4
30 - 44.9 rai	14.3	16.5	17.5
45 - 59.9 rai	7.1	9.0	11.4
60 -139.9 rai	6.6	10.0	14.2
140 rai or more	0.5	0.7	1.0
Total	100.0	100.0	100.0

Source: Same as that of Table 1-1

Table 1-5 Position of agriculture in the economy of Thailand

		1973	1974	1975	1976	1977	1978
GDP (market value)	million baht	216,543	269,695	296,298	332,177	383,057	444,196
Gross agricultural product (included in the above)	%	33.8	31.4	31.3	30.8	28.1	27.1
Gross export value	million baht	32,226	49,799	45,007	60,797	71,198	83,065
Agricultural products (included in the above)	%	68.7	72.3	66.3	70.4	71.9	62.4
Gross import value	million baht	42,184	66,044	66,835	72,877	94,177	108,859
Agricultural products (included in the above)	%	13.1	11.8	11.7	10.9	12.2	10.4
Annual budget scale	million baht	31,600	36,000	48,000	62,650	68,790	81,000
Budget related to agriculture (included in the above)	%	8.1	7.9	8.9	8.7	9.9	8.9

Source: Same as that of Table 1-1.

Table 1-6 Per capita GDP of agricultural and non-agricultural workers

Unit: baht

	Agriculture (A)	Non-agriculture (B)	B/A
1973	4,948	22,317	4.51
1974	5,667	26,603	4.69
1975	6,216	26,440	4.25
1976	6,720	28,269	4.21
1977	6,936	30,109	4.34
1978	7,725	33,491	4.34

Original source: Same as that of Table 1-1

The gross domestic product (GNP) of Thailand was 444.2 billion baht in 1978, which has increased by 16 per cent compared to the previous year. However, the ratio of the gross agricultural product has kept on decreasing. In 1977, also because of the fact agriculture suffered from serious drought which brought a damage of a value of as much as about 7 billion baht, its ratio drastically decreased by as much as 2.7 points from 30.8 per cent of 1976 to 28.1 per cent in 1977. In 1978, recovery was made from the damage caused by drought and the best harvest in the history was recorded for paddy and maize. In 1979, however, the situation was worsened again, and again in 1980, production of paddy in dry season, sugarcane, tapioca and so forth was reduced as suffered by drought. This poor crop was a major cause for worsening of the economy of Thailand together with raise of oil prices, and as a result, the growth rate of GNP decreased to 6.0 per cent in 1980 from 6.6 per cent in 1979.

2) Farm household economy

The GDP per capita engaged in agriculture in 1978 is 7,725 baht per year, which is as little as 23 per cent of that of a non-agricultural worker, as shown in Table 1-6. Because of the fact that productivity of agriculture is extremely low compared to non-agricultural industries as represented by this figure, the average income per farmer is less than a half of the average income per capita in the country.

However, development of economy as well as modernization and diversification of agriculture in 1960's brought a major change to the farm household economy. That is, urban mass media made broad penetration to farm villages and evolution of farm households toward consumption was rapidly increased. As a result, double crop of paddy and two crops a year increased for raising cash income, and seasonal work became popular in the off season. Under these circumstances, cash income of farm households makes a rapid growth as shown in Table 1-7. It is learned, however, that the majority of increase of cash income comes from non-agricultural sources.

Table 1-7 Structure of cash income of farm households

Unit: baht per household, %

	1970		1975		75/70
	Amount	%	Amount	%	
Agricultural income	1,486	42.1	4,233	44.6	2.85
Non-agricultural income	2,045	57.9	5,261	55.4	2.57
Total	3,531	100.0	9,494	100.0	2.69

Source: Same as that of Table 1-1

Table 1-8 Cash earnings of farm households classified by land area (1975 - 1976)

Unit: baht per household

	Cash income	Cash expenditure	Cash earnings
Less than 2 rai	12,898	3,885	9,014
2 - 9.9 rai	8,893	1,633	7,261
10 - 19.9 rai	11,055	3,611	7,444
20 - 29.9 rai	11,717	2,767	8,951
30 - 39.9 rai	15,228	3,658	11,569
40 - 49.9 rai	19,089	4,942	14,147
50 - 59.9 rai	18,478	7,340	11,139
60 - 69.9 rai	28,177	8,413	19,763
100 rai or more	64,448	26,969	37,479
All farm households	14,622	4,115	10,507

Source: Same as that of Table 1-1.

The cash income of farm households has been rapidly increasing together with these changes in the farm household economy. On the other hand, however, regional disparities as well as income disparities by class as shown in Table 1-8 have been expanding, and these disparities are new problems.

3) Trend of agricultural production

The agriculture in Thailand emerged in 1960's from such a situation that rice production forms the nucleus and rapid diversification was made, and production of cash crops such as maize, tapioca and sugarcane became flourishing. The progress of production of these main agricultural products can be observed in Table 1-9.

Production of rice has been very steadily growing in the past ten years. Although bad harvests of a minor extent occurred in 1972 and 1977, the largest production in the history was recorded in 1978. However, the production again dropped in 1979. The planted area is about 70 million rai and the yield per rai is between 230 and 280 Kg (1.4 to 1.7 tons per ha), and it is considered to be difficult to improve the productivity beyond this level under the current technology level.

Production of maize has been consistently increasing because transportation in long distances as a result of the expansion of road network was made possible. However, maize suffered from a serious damage by the major drought of 1977, as maize is weak against dry weather. But in 1978, bumper crop was obtained in maize and rice blessed by the weather. The planted area also increased together with the increase of production, and it is about 8.94 million rai as of 1978. It is considered that expansion of area above this level is difficult.

As for tapioca, production has been explosively increasing in the past few years because of strong demand in Europe for feed as well starch. Increase of planted area in the northeastern region is particularly noteworthy, and it is considered that the majority of reduction of planted area for kenaf was converted into tapioca.

The planted area in 1978 was 7.28 million rai, which is 2.4 times as much as that of 1974.

As for sugarcane, increase of production was continued as backed up by strong demand in the overseas market like maize and tapioca. However, the pace of increase of production became rather dull in the recent years, and particularly in 1979, the production was drastically reduced to 12.82 million tons due to draught

Table 1-9 Trend of production of main agricultural products

Unit: Upper column - thousand ton
Lower column - index based on the production of 1963 as 100

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Paddy	9,625 83	10,378 89	13,410 119	13,570 117	13,744 119	12,413 103	14,898 126	13,386 116	15,300 130	15,068 128	13,920 119	17,470 145	15,758 135
Rubber	216 109	259 131	283 143	287 145	316 160	337 170	368 185	382 193	349 176	393 198	425 214	460 237	534 270
Maize	1,217 142	1,331 155	1,700 198	1,938 226	2,300 268	1,315 153	2,339 273	2,500 291	2,863 334	2,675 312	1,676 216	2,790 325	2,863 334
Kenaf	429 196	320 147	378 173	385 176	422 193	437 200	469 215	384 176	308 141	183 84	240 110	311 142	222 102
Tapioca	2,062 98	2,611 124	3,079 146	3,431 163	3,114 148	3,974 235	5,668 269	6,240 296	8,100 384	10,138 480	12,372 505	16,357 758	11,101 528
Coconut	797 78	725 71	721 71	714 70	706 70	700 70	691 68	684 67	677 66	670 66	644 63	670 66	688 67
Sugarcane	4,526 96	5,879 124	5,102 108	6,586 139	5,926 125	9,513 201	13,339 282	14,592 308	19,910 421	26,094 551	18,941 400	20,200 427	12,826 272
Tobacco	14 180	17 190	16 188	20 206	22 216	26 229	24 258	31 286	37 307	43 300	43 328	43 330	47 360
Kapok	103 115	105 118	97 108	103 115	103 116	104 116	107 119	106 118	106 119	108 120	99 111	102 113	- -
Peanut	132 166	158 241	124 190	125 155	134 167	153 192	147 183	161 201	100 125	152 190	108 135	135 168	109 136
Raw cotton	81 166	117 241	44 90	27 55	41 83	49 102	28 58	56 116	29 59	27 55	91 187	90 189	143 291

Source: Same as that of Table 1-3.

Table 1-10 indicates the progress of yields per rai of these four main agricultural products. It is observed in this table that yield of rice (paddy) is very stable. The yield of maize is also stable like rice except for 1977 in which it suffered from drought. However, large differences are observed in its productivity by region as represented by the fact that productivity is high in general in the central plain and is low in the northeastern region.

4) Export trend of agricultural products

Table 1-11 indicates export figures of main agricultural products of Thailand. It is learned in this table that four main agricultural products, rice, maize, tapioca and sugarcane, form the main part of export.

5) Trend of agricultural financing

Financing to farmers is made by BAAC (Bank for Agriculture and Agricultural Cooperatives) and commercial banks. Under the guidance of the Government, sixteen member banks of Association of Banks of Thailand assign 11 per cent of the loan value of the previous year to agricultural financing. Under these circumstances, the total amount of agricultural financing provided by BAAC and commercial banks increased to 21,758 million baht as of the end of March, 1981, and the number of financed farm households increased to 2,375 thousand. However, this figure is as low as 52 per cent of 4.58 million farm households.

BAAC was started in 1966 after abolition of the Cooperative Bank, which was established in 1947, due to slump of business.

Table 1-10 Trend of yields per rai of main agricultural products

Unit: Kg

	1975	1976	1977	1978	1979
Paddy	265	269	231	261	258
Maize	349	333	223	322	300
Tapioca	2,389	2,364	2,237	2,246	2,100
Sugarcane	8,148	8,367	5,349	6,445	4,698

Source: Same as that of Table 1-3.

Table 1-11 Export of main agricultural products

Unit: thousand ton

	1971	1972	1973	1974	1975	1976	1977	1978	1979
Rice	1,576	2,112	849	1,029	951	1,974	2,946	1,607	2,797
Maize	1,873	1,844	1,386	2,302	2,105	2,419	1,543	1,972	2,014
Rubber	308	318	391	363	332	372	402	442	520
Tapioca	1,123	1,311	1,836	2,396	2,385	3,717	3,954	6,288	3,961
Sugar	175	408	275	444	595	1,124	1,654	1,040	1,287
Kenaf	272	255	264	247	158	138	81	91	77
Shrimp	6	7	15	10	14	16	14	15	18

Source: Same as that of Table 1-3.

It is a government bank in reality, as 1,523 million baht, which is equivalent to 98.9 per cent of its capital 1,540 million baht as of the end of March, 1981, is invested by the Ministry of Finance. Individual farmers, agricultural cooperatives and farmers' associations are the clients. It has 58 provincial branches and 498 district offices. The number of staff members is 4,300 persons (of which 796 persons are working at the main office). The progress of agricultural financing by BAAC and commercial banks is shown in Table 1-12. The loan value of BAAC is 11,346 million Baht as of the end of March, 1981, which represents a growth of as little as 6.3 per cent over the previous year, and there is a large difference from the growth rate of 19.6 per cent of agricultural financing provided by commercial banks. Of loans of BAAC, individual farmers has a share of as much as 64.5 per cent, agricultural cooperatives of 31.8 per cent, and farmers' associations as small as 3.7 per cent. The progress in the period of five years started in 1976 indicates a growth by 2.45 times of loans to individual farmers and on the other hand, it indicates a growth of as little as 1.66 times of loans to agricultural cooperatives.

When the breakdown of financing for agricultural cooperatives from BAAC shown in Table 1-13 is observed, it can be understood that financing for purchasing business, marketing business (funds for collection of products) and for long-term agricultural investment has been strengthened

in the past few years. However, there are strong requests for improvement regarding the financing conditions of the annual interest rate of 13 per cent on funds for marketing.

Table 1-12 Agricultural financing by BAAC and commercial banks

Unit: million baht, %

		1976	1977	1978	1979	1980
BAAC	Individual farmers	3,849 (58.7)	4,404 (59.0)	5,680 (61.9)	6,944 (65.1)	7,313 (64.5)
	Agricultural cooperatives	2,173 (33.2)	2,536 (34.0)	3,008 (32.8)	3,263 (30.6)	3,614 (31.8)
	Farmers' associations	533 (8.1)	521 (7.0)	482 (5.3)	464 (4.3)	415 (3.7)
	Total	6,555 (100.0)	7,461 (100.0) *13.8	9,170 (100.0) *22.9	10,670 (100.0) *16.4	11,346 (100.0) *6.3
Commercial banks		3,550	5,892 *66.0	7,881 *33.8	8,706 *10.5	10,412 *19.6

Source: BAAC, "Annual Report, 1980"

Note: * = Growth rate over previous year (%).

Table 1-13 Financing from BAAC to agricultural coops

Unit: million baht

	Resources for loans to members	Funds for purchasing business	Funds for marketing business	Long-term agricultural investment	Total
1976	1,997 (691)	94 (51)	1 (1)	81 (72)	2,173 (815)
1977	2,324 (1,221)	95 (108)	1 (1)	116 (41)	2,536 (1,371)
1978	2,755 (1,407)	98 (121)	13 (80)	142 (33)	3,008 (1,641)
1979	3,019 (1,573)	95 (165)	16 (113)	133 (3)	3,263 (1,854)
1980	3,148 (1,700)	95 (176)	251 (367)	120 (2)	3,614 (2,245)
Before revis- ion	To agri. coop 9% To members 12%	6% From Agri. Promotion Fund	To agri. coop 9% To federation 8%	6% (after March, 1979) 7% (after March, 1980)	
After revis- ion	To agri. coop 10% To members 13%	6% From Agri. Promotion Fund	To agri. coop & federation 13%	10%	

Source: BAAC, "Annual Report, 1980"

Note: Figures indicate balances at the end of the fiscal year.

Figures in () indicate amounts financed in the subject year.

Interest rate after revision was applied in April, 1981 and after

Situation of Agricultural Cooperatives

1) Historical progress

The history of agricultural cooperatives in Thailand started in 1916 by the birth of the first agricultural cooperative (credit cooperative) in Phitsanulok Province located in the middle part of the country. The Ministry of Finance invited specialists from Madras Bank for rehabilitation of Siam Commercial Bank, the business of which was dull in those days. Establishment of cooperatives as mutual credit organs of farmers was recommended together with establishment of a national bank in the proposal of specialists. In accordance with this proposal, the Ministry of Finance established Cooperative Section in Commerce and Statistics Department in 1915, and an agricultural cooperative was established in Phitsanulok Province as the first job of this section. Cooperative Department was established in the Ministry of Agriculture in 1920, and it was promoted to Ministry of Cooperatives in 1952. Although it was temporarily transferred to the Ministry of National Development when it was established in 1963, all of divisions and departments related to cooperatives were finally integrated in 1972 as Ministry of Agriculture and Cooperatives.

The first cooperative law in Thailand was the Cooperative Law (No. BE2471) enacted in 1928. All of the cooperatives established before the enforcement of this law were registered based on a special legislation called Private Corporation Law (No. BE2459) enacted in 1916. Many kinds of cooperatives appeared together with enactment of Cooperative Law, and the number of cooperatives increased to 440 in 1934, 2,998 in 1941 and 8,680 in 1951. Under these circumstances the Cooperative Bank was established as the central organ of cooperative financing in 1943. The operations of this bank were later taken over by the Bank for Agriculture and Agricultural Cooperatives (BAAC) in 1966, and operations of direct loaning to farmers was commenced together with loaning to agricultural cooperatives.

Although the number of cooperatives made a rapid growth as indicated above, consolidation of cooperative organization did not catch up with it, and together with the lack of funds and competition with merchants, many cooperatives fell into business slump. In 1958, the Government of Thailand started to organize production credit cooperatives, that is,

multi-purpose agricultural cooperatives with cooperation obtained from USOM (United States Operations Mission to Thailand) U.S.A. In the aspect of legislation, the Government promoted merger of credit cooperatives by enacting the new Cooperative Law (No. BE2511) in 1968 and attempted to establish production credit cooperatives at district level. Furthermore, CLT (Cooperative League of Thailand) was established under this law to carry out training and education for all cooperatives.

Efforts were made to upbringing multi-purpose agricultural cooperatives in the manner described above. It is the present situation, however, that strengthening of structure has not necessarily been accomplished because the lack of funds has remained almost unsolved even through merger.

2) Present situation of organization of agricultural cooperatives

Although the number of cooperatives in farm villages was as many as 10,173 in the whole country with rural credit cooperatives as the nuclei (in 1966, there were 9,869 rural credit cooperatives, 155 land settlement cooperatives and 149 agricultural cooperatives and fisheries cooperative; 10,173 cooperatives in total), their merger was promoted under the new Cooperative Law (No. BE2511) of 1968, and as a result, the number of rural credit cooperatives decreased to 49 by the end of 1974. The number of rural credit cooperatives kept on decreasing since then and establishment of multi-purpose agricultural cooperatives was promoted. As a result the number of agricultural cooperatives increased to 890 and all the rural credit cooperatives were gone by the end of June, 1981.

Today there are cooperatives of six kinds in Thailand, that is, agricultural cooperatives, fisheries cooperative, land settlement cooperatives, thrift and saving cooperatives, consumers' cooperatives and service cooperatives. The first three kinds are mainly established with rural areas as the territory, and the latter three kinds are mainly established with urban areas as the territory. Table 1-14 further classifies these cooperatives of six kinds and indicates the number of cooperatives and members in four regions. As observed in this table, the agricultural cooperatives have the largest share in both number of cooperatives and number of members. It is learned, however, the average number of members per cooperative is larger in urban cooperatives.

Table 1-14 Present situation of various cooperatives

(as of end of June, 1981)

Kind of Cooperative	Northern (20 prov.)		Central (22 prov.)		Northeastern (16 prov.)		Southern (14 prov.)		Total (72 prov.)	
	No of Coops	No. of Members	No of Coops	No. of Members	No. of Coops	No. of Members	No. of Coops	No. of Members	No. of Coops	No. of Members
Agricultural coops	231	22,4402	223	19,5795	286	26,2971	150	92,102	890	775,270
General agri coop	187	21,2317	172	17,5104	232	23,8025	123	85,142	714	710,588
Developing area agri coop	14	4,891	12	5,395	33	17,497	12	3,280	71	31,063
Special agri coop	7	1,094	13	5,374	3	771	-	-	23	7,239
Swine agri coop	23	6,100	26	3,922	18	6,678	15	3,680	82	26,380
Fisheries coops	2	412	10	1,776	1	40	6	1,660	19	3,888
Ocean fisheries coop	-	-	10	1,776	-	-	6	1,660	16	3,436
Fresh water fisheries coops	2	412	-	-	1	40	-	-	3	452
Land settlement coops	40	27,320	65	32,804	26	13,216	15	7,589	146	80,929
Land purchase coop	15	17,009	9	7,047	5	2,746	10	5,662	39	32,464
Land leasing coop	1	318	10	4,139	1	1,685	1	218	13	6,360
Land improvement coop	11	7,308	17	14,975	4	3,876	1	949	33	27,108
Fishing settlement coop	13	2,685	29	6,643	16	4,909	1	492	59	14,729
Thrift and saving coops	-	-	-	-	-	-	2	268	2	268
Students credit coop	73	106,219	184	211,266	81	144,021	40	63,027	378	524,533
Government officers' credit coop	22	80,107	80	74,362	21	11,615	15	45,295	88	311,399
Police officers' credit coop	18	8,733	73	107,667	14	6,313	4	1,929	109	124,642
Citizens' credit coop	24	16,506	38	21,791	22	24,448	18	15,552	102	78,297
Laborers' credit coop	9	873	23	2,891	24	1,625	2	113	58	5,532
Consumers coops	49	40,140	109	229,589	35	34,879	41	25,289	234	329,897
Government officers' coop	7	4,249	19	23,886	7	7,872	5	2,065	38	38,072
Students' coop	14	6,864	28	43,402	8	2,171	9	3,463	59	55,900
Citizens' coop	28	29,027	62	162,301	20	24,836	27	19,761	137	235,925
Service coops	64	20,275	68	20,288	27	25,222	24	24,700	183	45,325
Electrification coop	-	-	5	4,742	-	-	-	-	5	4,742
Taxi coop	37	8,207	56	14,724	27	25,222	22	24,430	142	281,660
Handicraft coop	27	12,068	2	302	-	-	1	14	30	12,384
Writers' cooperative	-	-	5	520	-	-	1	13	6	533
Total	459	418,768	659	691,518	456	453,649	276	192,407	1,850	1,760,342
No. of farm household	100,4303		789,409		1,660,172		564,543		4,018,427	
No. of members of Agri coop	22,4402		19,5795		26,2971		92,102		775,270	
%	22.3%		24.8%		15.8%		16.3%		19.3%	

Source : CPD material.

The ratio of the total number of members of agricultural cooperatives in the whole country to the number of farm households is 19.3 per cent as of the end of June, 1981. But this membership ratio largely varies by region and by farming pattern. For example, membership ratio is low in mountainous areas in the northeastern part, northern part and southern part of the country as well as in the outskirts of Bangkok, but is high in the Central area and particularly in "rice combined with field crop" areas such as Sing Buri Province, Chai Nat Province, Suphan Buri Province, Uthai Thani Province and Ang Thong Province. Land settlement cooperatives are of high membership ratio, because they are cooperatives for tenants and landless farmers with the purpose of settlement for becoming owner farmers.

As for cooperative organization system, three-stage system (primary agricultural cooperative -- provincial federation -- national federation) is adopted like in Japan. The number of provincial federations, however, is only 27 with 337 primary agricultural cooperatives as members as of June, 1981. It means that provincial federations are organized in only one third of all provinces.

On the average a provincial federation has 12 primary cooperatives as member. Although multi-purpose activities such as credit business, economic business and farm guidance are made by primary agricultural cooperatives, the majority of provincial federations are specialized in economic activities only with a few exceptions, and have a strong inclination as facilities federations.

The national federation is called ACFT (The Agricultural Cooperative Federation of Thailand Ltd.). Besides the ACFT, swine marketing agricultural cooperatives and sugarcane growers' agricultural cooperatives have their own specialized federations respectively. 863 member agricultural cooperatives including 27 provincial federations affiliate with these three national federations as of June, 1981.

ACFT was born in 1975 when CMPF (Cooperative Marketing and Purchasing Federation of Thailand Ltd.) separated consumers' cooperative department from it. Its predecessors are Thai Cooperative Wholesale Society established in 1952 and Bangkok Marketing Cooperative. The operations of ACFT are very much diversified with economic business as the nucleus.

Furthermore, CLT (The Cooperative League of Thailand) was established as the organ for education and training of personnel of all the cooperatives. It is managed by twelve or more directors elected out of members and by five or less directors nominated by the Minister of Agriculture and Cooperatives. With donation from member cooperatives, training is made to about 3,000 cooperative personnel per year. But it is the present situation that activities cannot be made as intended because of the limited budget frame of 2.5 million baht per year.

Besides the agricultural cooperative organizations described above, organizations called farmers' associations (also called farmers' groups) organized by the Agricultural Extension Department are in existence. The original purpose of these farmers' associations was guidance in agricultural technology, today they operate credit business, economic business, guidance activities and so forth which are similar to those of agricultural cooperatives. Particularly when MOF (Marketing Organization for Farmers) was established in 1974 by the Ministry of Agriculture and Cooperatives, many farmers' associations were organized in the whole country by making use of MOF, and their power was increased to a level that is competitive with agricultural cooperatives with economic business as the nucleus of operations. According to the statistics of 1980, the number of farmers' associations is 3,772 and the membership is 469,477 farm households, which is equivalent to 11.7 per cent of the number of farm households in the whole country.

3) Outline of business and management of agricultural cooperatives

Recent data related to business and management of agricultural cooperatives are shown in Table 1-15 through Table 1-18.

Table 1-15 Outline of organization and businesses
of agricultural cooperatives

Unit: thousand baht, %

		1978	1979	1980
No. of agri. coops		668	721 (7.9)	857 (18.9)
No. of members		595,980	660,946 (10.9)	724,958 (9.7)
(per coop)		892	916 (2.7)	845 (-7.8)
Loans to members		1,680,585	1,842,840 (9.7)	1,913,545 (3.8)
Value of supplied goods		372,432	494,661 (32.8)	598,456 (21.0)
Total dealings of marketing		294,927	355,163 (20.4)	979,967(175.9)
Main marketing facilities	Warehouse (buildings)	375	436 (16.3)	612 (40.4)
	(capacity, t)	174,860	201,860 (15.4)	282,575 (40.0)
	Rice mill (ton/day)	14 278	16 (14.3) 373 (34.2)	42(162.5) 1,898(408.8)

Source: Same as that of Table 1-14.

Note: Figures in () indicate growth rates over previous year.
Number of rice mills in 1980 include mills of provincial
federations. Those of primary coops are 22 and 568t/day.

Table 1-16 Outline of purchasing business

Unit: thousand baht

Article	1978	1979
Fertilizer	203,693	292,111
Agri. chemicals	17,562	22,964
Seeds	5,177	2,840
Machinery	28,872	44,520
Consumer goods	60,577	71,453
Rice for consumption	56,550	60,772
Total	372,432	494,661

Source: Same as that of Table 1-14.

Table 1-17 Outline of marketing business

Unit: thousand baht

Article	1978	1979
Paddy	185,919	158,557
Maize	9,912	32,882
Others	99,096	163,724
Total	294,927	355,163

Source: Same as that of Table 1-14

Table 1-18 Outline of fund position of agricultural cooperatives

Unit: million baht

	1975	1976	1977	1978	1979
Paid up capital	192.68	272.15	339.84	432.79	536.81
Legal reserves	270.08	290.55	312.65	337.75	389.38
Other reserves	84.56	83.04	85.08	88.38	99.32
Net profit	44.38	54.64	69.43	92.04	127.28
(Loss)	(16.09)	(15.39)	(29.94)	(21.30)	(30.29)
Owned capital total	575.61	684.99	777.06	929.66	1,122.50
Working capital total	1,859.26	2,863.12	3,298.17	4,151.27	4,887.20

Source: Same as that of Table 1-14.

Although the number of agricultural cooperatives was increased by 18.9 per cent in 1979 - 1980 period, the growth rate of the number of members was as small as 9.7 per cent, and the average number of members per agricultural cooperative was decreased by 7.8 per cent. One of the main reasons for it is major reduction of loan growth rate (9.7 per cent in 1979; 3.8 per cent in 1980), because the growth rate of loans from BAAC to agricultural cooperatives was as small as 4.3 per cent from 3,019 million baht in 1979 to 3,148 million baht in 1980. Compared to such dull credit business, purchasing business and marketing business are making a remarkable growth. The fact that the project of collection and

marketing of rice through agricultural cooperatives based on the agreement between ACFT and BAAC (Cooperative Rice Marketing Project) was commenced in 1980 exerts large influence in particular.

Rice marketing business was started by many agricultural cooperatives which had not experienced marketing business before. As a result, the turn-over of marketing business total dealings in fiscal 1980 was as much as 2.76 times of that of the previous fiscal year.

Major expansion and strengthening was also made to rice marketing facilities such as warehouses and rice mills.

The set up of the agricultural cooperative rice marketing project based on the agreement between ACFT and BAAC is as shown in the chart indicated in a separate sheet. This project was started in December, 1980 with the following two points as its purposes.

- a. To encourage willingness for production and raise living standard of farmers by guaranteeing fair price of rice.
- b. To develop and strengthen marketing business of agricultural cooperatives by making use of the channel of agricultural cooperatives.

The organs which constitute this project are CPD (Cooperatives Promotion Department), ACFT (the Agricultural Cooperative Federation of Thailand Ltd.), BAAC (the Bank for Agriculture and Agricultural Cooperatives) and PWO (Public Warehouse Organization), and their functions and roles are as follows.

CPD: District and provincial offices and main office guide and supervise agricultural cooperatives at each level.

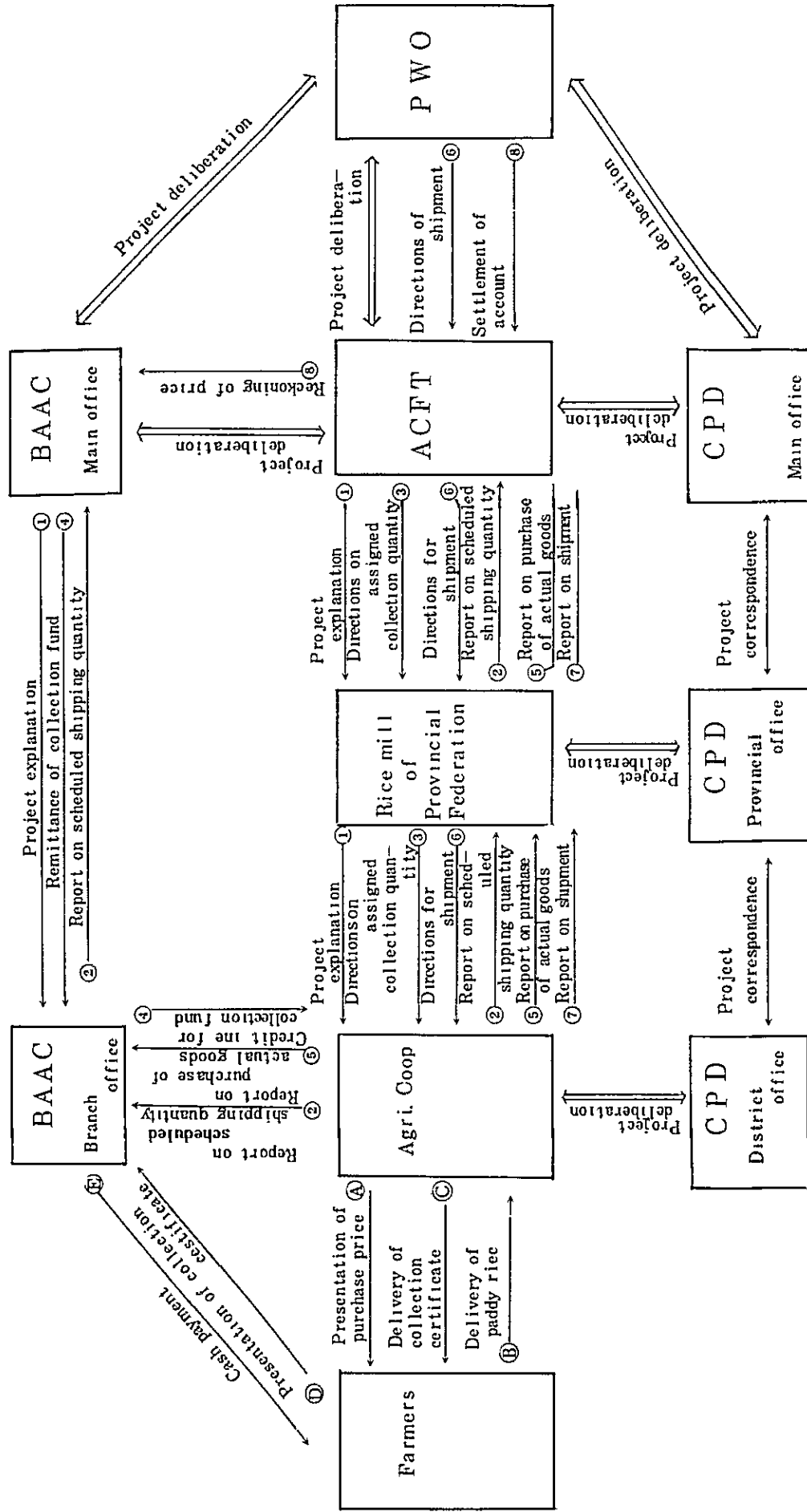
ACFT: Promotes the project in close collaboration with rice mills of provincial federations.

BAAC: Supplies collection funds required for implementation of the project.

PWO: Government's purchasing organ.

The commission at each stage of agricultural cooperatives and federations is as follows:

Table 1 19 Flow of agricultural cooperative rice marketing project



Agricultural cooperatives:

Storage fee:	10 baht/month per ton
Management fee:	19 baht/month per ton
In-and-out charge:	45 baht per ton

Provincial federations:

Bi-products (broken rice and rice bran) produced in the course of rice polishing are the share of the provincial federation. When both of these bi-products are sold, about 200 baht per ton can be obtained.

ACFT: Paddy - 3,800 baht per ton (price at which agricultural cooperative purchases from producers)

Polished rice - 7,210 baht per ton (price at which ACFT sells to PWO)

-- Both of these prices are applicable to products of highest quality --

The difference between prices indicated above (3,410 baht for rice of the highest quality) is the commission for ACFT.

ACFT bears interest payment (13 per cent per annum) to BAAC, storage fee, transportation charges and so forth out of this commission.

Although the target quantity for the first year was 200,000 tons as converted into polished rice (350,000 tons in paddy), the accomplishment was about 50 per cent of the target because of delayed rotation caused by problems in warehouse capacity of agricultural cooperatives and capacity of rice mill and also due to shortage of warehouse and funds on the side of PWO. It is intended to raise the target to 380,000 tons (paddy) for fiscal 1981, while overcoming the problems found through practice in the first year.

This project involves many points requiring improvement such as interest rate of 13 per cent on collection funds, but it is an epoch-making project for strengthening marketing business of agricultural cooperatives.

The outline of financial situation of agricultural cooperatives is as indicated in Table 1-18. Owned capital including paid-up capital has been strengthened year after year. The paid-up capital per agricultural cooperative increased by 96,600 baht (14.9 per cent) from 647,900 baht in 1978 to 744,500 baht in 1979, and owned capital also increased by 165,100 baht (about 12 per cent) from 1,391,700 baht to 1,556,800 baht. The net profit in 1979 was 176,500 baht per agricultural cooperative, which was the highest in the history. However, problems such as lack of funds and experienced personnel have not yet been solved.

3. Necessity of Upbringing Agricultural Cooperatives on the basis of Total System.

1) Major problems

Followings can be pointed out as problems regarding the Agricultural Cooperatives in Thailand.

- (1) Although membership ratio is increasing year after year, it is still very low.
- (2) The system and structure of business activities and management is not strong enough, mainly due to the lack of fund and experienced personnel, to accept farmers who wish to join the society.
- (3) Many fields of activities carried out by primary agricultural cooperatives can not be supplemented, because functions of provincial and national federations are immature and partial.
- (4) Insufficient financial support by BAAC restricts the business activities of agricultural cooperatives.
- (5) Government officers extend daily support to supplement the weak management system of agricultural cooperatives, it is often an excessive intervention in cooperative activities disturbing in result the development of autonomous operation of agricultural cooperatives.

These problems are not independent from each other but inter-related. For instance, low membership ratio does not come from the low consciousness of farmers unlike often insisted, but from the insufficient capability of agricultural cooperatives in the field of business activities to meet the requirements. Although many farmers desire to join the agricultural cooperatives, the cooperative system and structure are not sufficient to accept them. This is the fact.

Very often the low recovery ratio of loans is pointed out. It is an expression of the weak management system of the agricultural cooperatives. At the same time the following fact must not be neglected that member farmers borrow a small part of their money requirement from the society, and remaining part is borrowed from merchants in the village. After harvest farmers first repay their borrowings of high interest from merchants and they sell their products to the merchants. Repayment to the cooperative comes later and often after due time.

Agricultural cooperatives rely on BAAC and other commercial banks for their resources to lend out. Any banks examine their repayment ratio and determine the next credit line. In such a way the low repayment ratio from farmers to cooperatives restrict strictly the resources of loans to member farmers. Such a vicious circle can not be solved in the framework of credit business alone of the society.

Facts above mentioned are observed more or less in any agricultural cooperatives in Thailand, and show that problems in cooperative organizational set-up, management, business activities, problems in cooperative credit, problems in marketing and purchasing, they can not be solved separately but they have to be solved only in an integrated way.

2) Improvement through the Total System

Anyone can not deny an important role merchants have played in rural Thailand or in the market for agricultural products. However as emphasized in the New 5-year Economic and Social Development Plan, restructuring of agricultural production should be promoted in order to raise the socio-economic well-being of farmers.

For this purpose in promoting the rationalization of distribution, together with raising productivity and lowering cost of production through saving energy, it is essential to strengthen farmers' ability of marketing and purchasing through agricultural cooperatives and to improve the prices received by farmers. Minimize various interventions in the market and correct the strains in distribution, and strengthen farmers' bargaining power through agricultural cooperatives, these are particularly noteworthy in the New 5-year Plan.

However there are not in reality such agricultural cooperatives that can play the role like this. From the view-point of government policy, upbringing agricultural cooperatives is an important subject. In this case what requires careful consideration is, in the first place the accumulation of improvements from the grass-root level, and in the second place, the advancement through the total system. In reality there are many merchants who are playing an important socio-economic role in

rural villages. This is a fact and given data which should be carefully considered.

It is important to make the most of the know-how possessed by merchants. In view of the low share of agricultural cooperatives in the distribution of agricultural products, less than 1 per cent in paddy and as much as 5 per cent in maize, it takes a lot of time and needs the support from the government policy to realize the objective to "strengthen the bargaining power through agricultural cooperatives and raise prices received by farmers".

For the time being following functions can be implemented through efforts by agricultural cooperatives.

- (1) To urge farmers to have self-consciousness regarding agricultural management so as to understand how much value farmers themselves are creating by their production activities and what percentage of such a value is their portion and to deepen recognition on the significance of existence of agricultural cooperatives as the fair trade body.
- (2) To exhibit leadership in the area agricultural development which is supported through establishing medium and long term vision.

In order to put these functions into practice cooperative officials and staff members should not stay in the office alone, but should extend cooperative activities as far as farmers' yards. Accumulation of improvements at grass-root level means to accumulate the activities of each farmer and those in each village, both are conducted under the leadership of agricultural cooperative. Such an improvement by each farmer or each village should be reflected in the activities of provincial and national federations, and as for the way of improvement the necessity of integrated and multiple approach must be emphasized. With regard to this way of improvement the total system for upbringing agricultural cooperatives was recommended by the last report of the survey, the outline of which is as follows.

In the first place four strategic targets were presented.

- (1) Strengthen and expand the basis on which the agricultural cooperative exists. It means to build up the system and structure to accept new members while raising the cooperative utilization ratio by the present members.
- (2) Exhibit leadership in developing area agriculture. An important point in this regard is that the cooperative promotes planning both on the agricultural development of the area and the cooperative activities based on the exact information obtained through advisory works about the area and farmers by strengthening guidance activities which have been weak.
- (3) Strengthen and expand the marketing and purchasing activities of agricultural cooperatives as an organization of fair trade. It means that the cooperative carries out economic activities in accordance with the fair rule which can be understood by farmers, and in doing so let farmers learn the way of calculating their activities of production and marketing through the cooperative channel.
- (4) Strengthen the function of rural credit. It aims to build the system and structure which can provide necessary fund to member farmers by linking correctly the farming programmes of individual farmers, particularly the programmes of marketing their products and purchasing inputs, with cooperative business programmes, financial programme in particular.

Four strategic targets are all inter-related deeply with each other and have a nature of total system. In order to realize the targets individual agricultural cooperatives have to form the development plan of their own, making the most of the characteristics of the area. Full discussions by cooperative officials, staff members and member farmers are essential, and advices and supports from the government and federations are also indispensable. Among others provisions of funds to member farmers, funds for cooperative business and facilities have to be solved by establishing the integrated credit system. Without all of them there is the possibility that the development plan becomes a paper plan.

Above was proposed by the report of the last survey on the master plan. The feasibility study was conducted in accordance with the method proposed by the last report. That is upbringing agricultural cooperatives along the total system which has to start with making the development

plan in selected agricultural cooperatives as models, and then difuse it to neighboring cooperatives.

CHAPTER II OUTLINE OF STUDIED AGRICULTURAL
COOPERATIVES AND THEIR DEVELOPMENT PLAN

(Selection of Four Agricultural Cooperatives, Objectives of Study)

As described before the study was conducted with a view of clarify the method and possibility to make the development plan in individual cooperatives standing on the principles of total system and to difuse them to neighboring cooperatives. The principles are to take cooperative organizational set-up, business activities and management as inter-related, not separated, with each other and that inte-grated approach is indispensable to improve any field of activities, credit, marketing and purchasing or guidance, because all of them are inter-related with each other, and further that it is essential to accumulate improvements at grass-root level.

Therefore the agricultural cooperatives to be studied have to be models for up-bringing agricultural cooperatives in Thailand and they have to be those which represent various conditions such as agricultural production, rural society and cooperative organization in the country.

In considering situations above mentioned one province in each of four regions, which is generally adopted by the government and other institutions in Thailand, was selected, and then one agricultural cooperative in each province, which is believed to represent the conditions of the province, was selected. The characteristics of the agricultural cooperatives and the provinces, where the cooperatives are located, are as follows.

North Region

Scale of farming is rather small, and besides paddy (including glutinous rice), soy-bean, pea-nut, tobacco-leaf and vegetables are grown combined. Farming operation is intensive and the productivity is high. Agricultural cooperatives are rather developed centering on credit business, and the management is relatively stable, but many of them are not active in marketing farm products.

Central Region

The region covers the Maenam Plain and connected hilly areas. Paddy growing in the plain and maize and sorghum growing of large scale in the dry field

are observed. Agricultural cooperatives with historical background as credit societies are active in marketing of paddy and maize, and many of them are willing in cooperative operation laying emphasis on marketing of farm products.

North-East Region

Muang Nakhon Ratchasima is located on the Plateau of Korat, the entrance to the North-East Region. Paddy (including glutinous rice), tapioca, maize and kenaf are grown, but their productivity is low.

Agricultural cooperatives lay emphasis on credit and purchasing and are not active in marketing activities except paddy. Cooperative management, reflecting regional conditions of agricultural production, is not stable.

South Region

The region is tropical in weather and of abundant rainfall. Agriculture is characterized by planting of rubber and other trees.

Average farming scale is round 40 rai, not so large, but farm management is relatively stable.

Agricultural cooperatives are, as a whole, less developed and membership ratio is low. A limited number of cooperatives are carrying on marketing activities, and credit business is generally not stable, unlike the farm management of their members.

As mentioned above the number of agricultural cooperatives studied is limited, only four, but they are believed to represent the region of each. It means there are many cooperatives of similar conditions and problems around each of four.

Each cooperative was selected as model so that the future promotion of agricultural cooperatives in the country can be advanced and expanded making the most of the experiences of the models.

The cooperation with neighbouring societies is important not only for the successful development of these cooperatives but also for the successful practice of development plan and achievement of target of model societies.

(The Development Plans of Four Agricultural Cooperatives)

The development plans of four cooperatives were arranged in the form of 3-year plans standing on the ground of the "problems and the basic direction of improvements" which was discussed with the presidents and the general managers during the study trip, and considering the actual conditions of areas and capability of each society.

Agricultural cooperatives in Thailand have no experience of making medium or long term plan except bad societies. (Because bad societies have been forced to make long term plan for their reconstruction) Main reasons lie in that they are not blessed with their own conditions to tackle, as organized body, natural conditions so much different from year to year or ever fluctuating prices of farm products. However the recent development in organizational, personnel and financial aspects of agricultural cooperatives is really remarkable in the history of sixty-five years. It is true that they have problems to be solved, but at the same time it is also true that they are going ahead steadily step by step both in terms of quantity and quality.

Support by the government in various fields like finance marketing and purchasing or guidance, is important. More important is the exhibition of willing leadership by cooperative leaders to go ahead with member farmers.

3-year plan of cooperative development is the target and the method, to/by which the cooperative can go ahead in the near future of three years. It is desirable to establish a new target considering the achievement and new situations after a year of practice. 3-year plan is a target, which can be reached with efforts, to build the relation of solidarity between the cooperative and member farmers. Otherwise it may be a paper plan.

The model development plans of four agricultural cooperatives can be applied to other cooperatives. It is desirable the plan is made through discussions by president, directors, general manager and other cooperative leaders, different from that in the past, which used to be left to government officers.

The course of making plan and its implementation will make the development achieved in recent years by Thai agricultural cooperatives more definite. Thus on the new stage of agricultural cooperatives main actors will be member farmers and cooperative leaders, and on the other hand government officers will work on the back

stage, where they will find their true works. In this way the content of basic works to open the next stage, we can say, it is the development plan.

Although the development plan is drawn up separately in every field of cooperative activities such as organizational set-up, credit business, purchasing and marketing, farm guidance, construction of facilities, personnel matter, management and finance, all of them are intimately inter-related each other as a total system, and it must be emphasized that when they are approached in an integrated way the development plan can be more efficient.

(As for the detail of the plan to construct facilities and their designs please refer to appendix)

1. DOI-SAKET AGRICULTURAL COOPERATIVE
(CHIANG MAI PROVINCE)

1) General situation of the area

Doi-Saket Agricultural Cooperative is located in Doi-Saket District, Chiang Mai Province in the northern part of Thailand. Chiang Mai is the second largest city next to Bangkok and it is an old capital of Thailand. Therefore, it is famous as a tourist resort visited by many tourists from both inside and outside of the country. However, villages in its vicinity have made development as rich agricultural area. The northern part of Thailand is of inland climate as a whole. There are many mountainous areas and basins are located at a number of places along rivers, and the topography is complicated. But rainfall is relatively small except for mountainous areas because of influence of anticyclone from the Chinese continent. The average annual rainfall in Chiang Mai is 1,208 mm, and records indicate that the largest was 1,536 mm and the smallest was 865 mm. The average temperature is 26.8°C in 1979, but temperature difference is relatively large as represented by the figures of highest temperature 40.0°C and lowest temperature 12.3°C in the same year. Chiang Mai Province is entirely located in the basin formed by two mountain ranges, that is, Den Lao Mountain Range on the northwest side and Komtan Mountain Range on the east side, which are connected together in reversed V-shape on the north side. Of total planted area of 878,000 rai, paddy farming is made in 664,000 rai, which is equivalent to 75.6 per cent of all, and double crop farming of glutinous rice as well as dry field farming and secondary crops of soybeans, peanuts, tobacco, vegetables are also made.

The agriculture in Chiang Mai Province is of very small scale as represented by average planted area per household of 7.7 rai. With rice crop, however, average yield per rai is as much as 509 kg, which is about twice as much as the average yield per rai of 258 kg in the whole country.

Table 2-1 Production of main agricultural products in Chiang Mai Province

Year	Paddy			Soybean			Peanuts		
	Planted area (1,000 rai)	Production (1,000 t)	Yield per rai (kg)	Planted area (1,000 rai)	Production (1,000 t)	Yield per rai (kg)	Planted area (1,000 rai)	Production (1,000 t)	Yield per rai (kg)
1975/76	761	373	491	143	20	141	32	6	175
76/77	665	297	448	64	15	227	32	6	196
77/78	658	330	502	119	16	131	52	13	250
78/79	796	412	518	155	30	192	61	16	254
79/80	703	358	509	137	27	199	54	13	236

Source: Same as that of Table 1-3.

Table 2-2 General Situation of Agriculture in Chiang Mai Province and Doi-Saket District

Unit: thousand, rai

	Chiang Mai Province				Doi-Saket District			
	Farm household	Area	Per household	Farm household	Area	Per household	Per household	
Total	113,562	878,129	7.7	6,660	57,574	-	8.6	
of which no land owned	1,908	-	-	81	-	-	-	
land owned	111,654	878,129	7.9	6,579	57,574	100.0	8.8	
Owner farmer	80,639	613,921	7.6	3,650	29,998	55.5	8.2	
Owner/tenant farmer	3,424	38,731	11.3	296	3,451	4.5	11.7	
Tenant/owner farmer	7,687	80,859	10.5	956	11,044	14.5	11.6	
Tenant farmer	17,757	126,748	7.1	1,523	11,782	23.1	7.7	
Others	2,147	17,870	8.3	154	1,299	2.3	8.4	
Cultivated crops	Paddy	69,177	56.8	5,084	43,254	77.3	8.5	
	vegetables, field crops	8,652	37,326	4.3	237	3.6	2.9	
	Permanent crops	4,904	41,561	4.7	470	7.1	8.3	
Mixed	Paddy and others	26,797	32.0	722	9,289	11.0	12.9	
	Other than paddy	1,765	17,773	10.1	24	0.4	9.2	
No cultivation	359	1,821	5.1	42	206	0.6	4.9	

Source: Prime Minister's Office, Statistics Department "1978 Agricultural Census".

Table 2-3 Changes in number of members of Doi-Saket Agri. Coop.

Year		1978	1979	1980
Beginning of the term		1,227	1,370	1,391
During the term	Increase	182	85	62
	Decrease	39	64	68
End of the term		1,370	1,391	1,385

Source: Annual Report for each year.
(Same hereinafter, unless otherwise specified)

With soybeans, 199 kg, which is equivalent to 1.3 times of the average yield per rai of 150 kg in the whole country, was recorded and 26.4 per cent of production in the whole country is produced in this Province. Also with peanuts, 236 kg, which is equivalent to 1.3 times of the national average yield per rai of 179 kg, was recorded and the share in the production quantity is 12 per cent of the production in the whole country. Highly intensive farming of high productivity is managed in this area.

According to the agricultural census in 1978, the number of farm households in Doi-Saket was 6,660 and the farmland area was 57,574 rai. The average is 8.6 rai per farm household, and the scale is small. When the planted area is observed as classified by crop, paddy field was 48,788 rai, which occupies 84.7 per cent, orchard was 5,348 rai (9.3 per cent) and dry field was 1,570 rai (2.7 per cent). But actual planted area is larger because secondary crop farming is also made in paddy fields. Of all farm households, 55.5 per cent are owner farmers, and the ratio of owner farmers is the lowest among four studied areas. Tenant farmers (23.1 per cent) and tenant-owner farmers (14.5 per cent) are totalled to 37.6 per cent, which is the highest among areas of four agricultural cooperatives with which studies were conducted.

Although merchants of small scale only are in existence in the area, 20 leading merchants and nearly 100 medium and small merchants are active in Chiang Mai City. Their collection channels are also extended to Doi-

Saket area and have major influence. These merchants also work as money lenders. Examples in Doi-Saket indicate that the interest rate of merchants in the village is 3 per cent per month and that in Chiang Mai is 6 to 10 per cent per month.

2) Outline of organization of agricultural cooperative

Doi-Saket Agricultural Cooperative was started as a result of merger of 29 credit cooperatives in the district in 1971. The number of members as of the end of March, 1981 is 1,385 persons. The membership ratio to the number of farm households in the district is 21 per cent, which is the highest among four studied agricultural cooperatives.

The number of members showed a minor reduction in the past year. Main reasons for it are what are affected by unavoidable affairs such as death, retirement and removal. However, it is considered that the fact that the resources for loans to members have been kept unchanged in the past two years is also responsible for it. Members are divided into 30 community groups, and these groups, each one of them is constituted by about 50 members, are basic units of organization activities by the agricultural cooperative.

The number of staff members who perform operations at this cooperative are 15 directors and 5 employees. All of these directors also work as group leaders and the term of the office is one year. The president of the cooperative is elected through mutual vote by directors. The current president has been engaged in this work continuously for ten years since this agricultural cooperative was started in 1971. The breakdown of five employees is one each of assistant manager, accounting clerk, credit clerk, general affairs clerk and servant. The assistant manager has an experience of being a school teacher at elementary schools for 26 years. He worked as a group leader and director for five years since the cooperative was started in 1971, and took the post of assistant manager ten months prior to the time of study (September, 1981). The assistant manager also is in charge of purchasing works.

The general meeting of members is held with attendance of representatives who are selected at the rate of one out of ten members. Agenda are explained at group meetings held prior to the general meeting, and repre-

representatives are selected at these group meetings. Group meetings are held three times a year including that described above for the following subjects.

June --- Explanation of agenda for general meeting, selection of representatives.

November --- Arrangements for collection of paddy, guidance in secondary crops, income and expenditure plan and repayment plan of loans as harvest season is close.

January - February --- Measures for promotion of repayment of loans, as the end of the fiscal year is close.

(Besides the above, meetings for learning how to use fertilizers and farm chemicals are held for each group with engineers invited from ACFT and TJC in October - November period.)

Although group meetings are sponsored by the agricultural cooperative, explanation is mainly given by District CPD officer. Therefore, the District CPD officer attends all the group meetings. On the other hand attendance to group meetings of the president and assistant manager is of a rate of around 90 per cent.

The directors' meeting is held on the 11th every month. The attendance rate is about 100 per cent, and there are cases where group leaders, who are not directors, observe the meeting. The president presides over the meeting and the assistant manager reports on the progress of activities.

In the mean time, Doi-Saket (Krung Thep) Agricultural Cooperative sponsored by Bangkok Bank was established in the same area. The number of its members is 376, and it is performing loans (3 million baht) and purchases (0.3 million baht for fertilizers and farm machinery) businesses.

3) Outline of businesses of the agricultural cooperative

Doi-Saket Agricultural Cooperative is operating with credit and purchase business as the nuclei blessed with natural conditions, stabilized farm household management and high membership ratio. The outline of business is as follows.

(Credit)

This agricultural cooperative has abundant owned capital as shown in the balance sheet (Table 2-4). The loan balance is 11,433,000 baht as of the end of fiscal 1980, the borrowing balance is as low as 6,805,000 baht. Borrowing channels are Chiang Mai Provincial Federation and Bangkok Bank (commercial bank), and the contents are as shown in Table 2-4. Chiang Mai Provincial Federation is one of two provincial federations which operate credit business out of 26 provincial federations in the country.

Doi-Saket Agricultural Cooperative borrows resources for loans to its members, but its credit line has been kept unchanged at 6 million baht since April of 1976. Out of the borrowing balance of 5 million baht as of the end of fiscal 1980 (end of March, 1981), 4.2 million baht was taken over by BAAC at the end of June, 1981 due to bad financial position of the provincial federation, and it is expected that BAAC and Bangkok Bank will be the main channels of borrowing in the future. With Bangkok Bank, a credit line of 3 million baht has been set since July, 1978. But the borrowing balance at the end of fiscal 1980 was as small as 0.4 million baht as the interest rate is as high as 12 per cent per annum (provincial federation is of 9 per cent, BAAC is of 10 per cent).

Loans to members in recent years are as shown in the Table 2.5.

The loan balance at the end of fiscal year has been increasing year after year, and the balance per member is as high as 9,742 baht at the end of fiscal 1980. The largest feature of credit business of this cooperative is that the ratio of medium-term loans is overwhelmingly large. Although this ratio has been decreasing year after year, as much as 96.5 per cent is occupied by medium-term loans in the balance at the end of the term. When the fact that 100% of borrowings is short-term funds is taken into account, it is learned that own funds are used for medium-term loans. Table 2-6 indicates that these medium-term loans are used for long-term investments such as purchase of land and livestock and that they are evidences of long-time stability of management of member farm households and the agricultural cooperative. A recent feature in the loans classified by purpose is that investment of funds in stock raising is increasing, and it indicates that stock raising is being added to conventional mixed management with rice and dry field crops as the nuclei toward its expansion.

Table 2-4 Outline of Finance and Management

Unit : thousand baht

	Doi-Saket		Koksaerong		Nakhon Ratchasima		Hat-Yai	
	1980	1979	1980	1979	1980	1979	1980	1979
Balance Sheet								
Liabilities and Capital								
Capital	2,109	1,995	4,600	4,036	2,727	1,964	662	654
Borrowings	5,362	5,511	25,332	22,499	14,803	13,803	4,780	4,736
Saving	1,657	1,926	1,256	836	828	664	189	188
Reserve fund	1,619	3,998	7,412	6,605	1,819	1,633	5	5
Reserve	99	101	685	549	297	311	-	-
Total	15,515	14,553	39,285	34,525	20,474	18,375	5,636	5,583
Assets								
Loans	13,494	12,483	26,627	28,253	15,384	14,749	4,080	3,899
Accounts receivable	1,021	823	2,805	2,754	4,525	2,255	43	34
Net credit **	14,174	13,265	29,609	30,875	19,908	16,949	4,116	3,925
Interest receivable	162	194	1,875	1,504	74	93	261	213
Current assets (total)	1,684	1,382	3,994	3,526	2,143	1,782	4,522	4,485
Fixed assets	240	393	999	1,029	2,266	1,909	997	1,019
Total	15,081	14,219	40,942	36,323	44,036	36,918	5,578	5,504
Recovery of Loans in term	57.49%	47.83%	48.4%	50.0%	4.4%	5.9%	21.3%	42.9%
Business Profit and Loss								
Credit	2,127	1,613	3,874	3,364	2,117	1,851	245	501
Purchasing	1,305	1,177	4,285	3,898	9,350	6,422	5	128
Marketing	-	-	5,909	7,327	1,118	794	-	1,246
Total	3,432	2,790	14,068	14,589	12,585	9,067	250	1,875
Credit	693	619	2,111	1,891	1,525	1,355	199	406
Purchasing	1,154	1,023	3,623	3,446	8,636	6,040	4	120
Marketing	-	-	5,692	7,179	1,084	717	-	1,227
Total	1,817	1,642	11,426	12,516	11,245	8,112	203	1,753
Credit	1,431	995	1,762	1,472	592	495	46	95
Purchasing	150	153	662	451	713	381	1	8
Marketing	-	-	216	147	34	76	-	19
Total	1,584	1,148	2,640	2,070	1,339	952	47	122
Business Expenses	15	14	215	109	293	74	23	54
Direct business Profit	1,569	1,134	2,125	1,961	1,047	878	24	68
Other Profit	75	44	155	113	355	143	12	27
Business Profit	1644	1,178	2,580	2,074	1,402	1,022	35	95
Personnel Expenses	162	116	397	288	282	176	34	53
Saving Interest	235	83	95	67	47	31	12	11
Depreciation account	6	22	63	59	80	140	14	33
Total	542	286	799	632	750	656	82	145
Net Profit	1,101	893	1,781	1,442	652	365	46	50

Note : * 1980 of Hat-Yai is practically of six-month **Net credit = Loans + Accounts receivable - Reserve for un-collectible accounts.

Repayment performance within due time has been gradually improved in the past three years. It is 57.49 per cent as a whole and is 55.03 per cent for medium-term loans. Collection of overdue interest also helps this improvement.

Table 2-5 Loans to members of Doi-Saket Agri. Coop.

Unit: thousand baht, %

		Short-term	Medium-term	Total
Loaning during the term	1978	231	4,620 (95.2)	4,851
	1979	274	4,453 (94.2)	4,727
	1980	593	6,105 (91.1)	6,698
Balance at end of the term	1978	245	12,159 (98.0)	12,404
	1979	275	12,207 (97.8)	12,482
	1980	473	13,020 (96.5)	13,493

Note: Figures in () represent share of loaning during the term.

Table 2-6 Loans classified by purpose (Breakdown of loans provided during the term)

Unit: thousand baht, %

(Purpose)	Short-term				Medium-term			
	1978	1979	1980	(Purpose)	1978	1979	1980	
Dry field farming	133	103	163 (27.5)	Purchase of land	2,728	2,514	3,579 (58.6)	
Paddy field farming	66	72	133 (22.4)	Purchase of livestock	782	1,040	1,607 (26.3)	
Livestock	13	85	243 (41.0)	Purchase of machinery	290	349	150 (2.5)	
Living	-	-	25 (4.2)	House/warehouse	585	-	127 (2.1)	
Capital increase	19	15	30 (5.1)	Repayment of old debt	236	319	167 (2.7)	
				Capital increase	-	232	475 (7.8)	
Total	231	274	593 (100.0)	Total	4,620	4,453	6,105 (100.0)	

Note: Figures in () for 1980 are component ratios.

Table 2-7 Recovery of loans within term and accrued interest

Year	Recovery ratio within terms		Arrears		Accrued interest on loans				
	Ratio %	of which medium-term %	No. of persons person	Total arrears value 1000baht	Per person baht	No. of persons person	No. of cases case	Amount 1000baht	Per person baht
1978	48.22	46.63	791	5,092	6,437	87	113	100	1,149
1979	47.83	47.07	638	5,789	9,074	67	104	164	2,448
1980	57.49	55.03	653	5,410	8,285	56	103	162	2,893

On the other hand, however, such trends that although the number of delinquents is decreasing, the amount of arrears per person is increasing and that although the number of persons who have not paid interest is decreasing, the amount of unpaid interest per person is rapidly increasing require attention. As viewed from the position of management of members, it is not considered that repayment performance is very difficult, and therefore, members and the agricultural cooperative itself are expected to make further efforts in the future to improve the repayment.

As for saving, it is promoted based on the guidance policy of CPD to cause members to save the amount equivalent to 5 per cent of loaned amount, and in addition, members are recommended to increase investment in capital of 100 baht on Thailand Cooperative Day, that is February 26. In this way efforts are made to increase the own funds. Such a method that the order of priority is lowered for loaning to persons having small saving values is also adopted. The saving balance of 1,657,000 baht as of the end of fiscal 1980 means the average amount of saving per member is 1,196 baht, and it is an extraordinary high amount among four studied agricultural cooperatives. According to the hearing made with members, members want to have more cash at hand rather than increasing of the saving amount, and it is considered that there will be a considerable resistance to the employment of such a method that dividend and proceeds of sold products are transferred to saving accounts of members.

(Marketing)

The marketing business of this agricultural cooperative is only at the beginning. Collection of paddy was commenced in February, 1981, based on the Cooperative Rice Marketing Project under the agreement between ACFT and BAAC. The credit line for loaning collection funds was established by BAAC with the amount that is equivalent to 500 tons, which is equal to the warehouse capacity. However, actual collection was only 27 tons because of the facts that much rainfall in the harvesting season made drying paddy difficult, means for collection such as trucks are not available and farmers hesitated to sell to the agricultural cooperative as they did not want occurrence of such a situation that the proceeds are applied to repayment of loans.

However, this is a commemorative start of marketing business of this cooperative, and it can be expected that large reinforcement and expansion are made in the future. This paddy collection and marketing business is not

written in the settlement of accounts for fiscal 1980 (only a foot note is indicated) as the sale was not made before the closing date (end of March) of settlement of accounts.

(Purchasing)

The outline of purchasing business of Doi-Saket Agricultural Cooperative is as shown in Table 2-8. In fiscal 1980, 967,000 baht, which is equivalent to 74.1 per cent of the turn-over of 1,305,000 baht, is on fertilizers and 239,000 baht, which is equivalent to 18.3 per cent, is on seeds of peanuts and garlicks. Farm machinery and farm chemicals are also supplied besides them, but their values are minor. Attention must be paid that both amount and quantity are reduced compared to the previous year with fertilizers, which is the biggest item in the purchasing business. The main cause lies in the fact that consumption by farm households decreased due to price raise.

Accrued accounts related to purchasing is increasing at a rate that is beyond the growth of total turnover of purchasing business. The balance of accrued accounts 1,021,000 baht at the end of fiscal 1980 is as much as 78.2 per cent of the total purchasing turnover (supplied amount). It is necessary to take positive measures for its recovery together with repayment performance of loans.

4) Outline of management of agricultural cooperative

Refer to Table 2-4 for the situation of financing and management of Doi-Saket Agricultural Cooperative. This agricultural cooperative has established stabilized financial foundation with the credit business as the nucleus in the history of ten years and is making efforts toward sound management, and it can be ranked in the highest place among agricultural cooperatives in Thailand. The amount of own capital that totals the paid-up capital, reserves and surplus reserves at the end of fiscal 1980 is 7,172,000 baht, which is as much as 1.33 times of borrowed amount, that is, 5,362,000 baht.

Table 2-8 Outline of purchasing business of Doi-Saket
Agri. Coop.

Unit: thousand baht

	1978	1979	1980
Fertilizer	818 (461.9t)	1,014 (368.3t)	967 (293.4t)
Seeds (peanuts, garlics)	181	77 (161 bags)	239 (338 bags)
Farm machinery	10	38 (40 units)	52 (37 units)
Farm chemicals		48	47
Total turn-over	1,243	1,177	1,305
Accrued accounts at the end of the term	725	823	1,021
Accounts payable at the end of the term	144	-	-

When the saving of 1,657,000 baht is added to it, the total amount is as much as 1.64 times of the borrowed amount. It can be said that medium-term loaning is materialized as supported by such a solid financial situation, without relying on medium of long term borrowings.

This agricultural cooperative showed a profit of 893,000 baht in fiscal 1979 and 1,101,000 baht in fiscal 1980 with an increase of 208,000 baht. The largest source of this profit lies in the credit business, and the weight of the credit business in the gross profit of businesses is 90.5 per cent. For disposition of the surplus of 1,101,000 baht for fiscal 1980, 779,000 baht which is equivalent to 70 per cent was reserved, and dividend of 8 per cent to paid-up capital and patronage dividend that is equivalent to 4 per cent of interest on loan and purchase prices were made.

It is necessary to make improvements such as increase of the ratio of re-payment performance within due time and strengthening of measures for early collection of accrued accounts for supplied goods and to consolidate facilities for strengthening the marketing activities.

5) Problems and basic direction of improvement

This cooperative has been blessed with the comparatively favorable natural conditions, and can be regarded as the first-grade cooperative whose credit businesses in main have been developed.

However, it has four problems which need the measures for improvement as follows.

- (1) To extend the better service through improving the repayment performance ratio.

The amount of loan to members extended by the cooperative has been increased year after year. The most of out-standing amount of loans are occupied by the medium-term loan and further, a half of the medium-term loans have been spent to purchase the land, but on the contrary all the borrowings are the short-term.

This fact tells the abundance of its own fund and the stability of farmers' management.

On the other hand, attention has to be paid to the facts that the credit expansion has been restrained by the lower rate such as 47-57% of repayment performance within due date and the increase of accrued accounts for supplied goods and also that two-thirds of farmers in this area hope to join the cooperative and the present members also want to expand their farming operation when they can get more amount of loan, further, members have the capability to repay the borrowing by themselves.

In addition to these efforts of the cooperative, the bright picture for the future active cooperative movement can be drawn, when the credit from BAAC is increased. Regarding the saving function, it is necessary for the cooperative of which saving amount has already reached high level, as in this cooperative, that an accounting system of the saving function should be established as a part of the credit business or the independent business department.

- (2) To improve and reinforce the purchasing and marketing business, and re-organize the provincial federation.

As for the economic business of this cooperative the purchasing has been mainly carried out and marketing business has been just newly started.

The 80% of turnover of the purchasing business are occupied by the sale on credit, and at the end of 1980 fiscal year, 78.2% of turnover are remained un-collected. Such a kind of purchasing business could be regarded as another type of the lending business, and the efforts to collect the accrued accounts before due-date are also strongly required.

Farmers in this area have produced and sold paddy rice as well as soybean, peanut, garlic as the secondary crops which are sold by the individual farmers or by the small joint marketing groups.

The farmers' groups are now an important strategic point for farmers as they are formed to do joint marketing and purchasing activities as well as to get the technical guidance for limited commodities.

The members have a strong demand for the cooperative to prepare the collecting and marketing system of soybean, peanut, and garlic as well as paddy rice.

It is desirable that the cooperative makes the best efforts to promote the farmers' community groups (now organized in the community) as well as the commodity groups and study the way of marketing of agricultural products for developing their market and bargaining power by making the best use of the experiences accumulated by group leaders. Also the cooperative had better make the most of talent of leaders like the president who has the excellent trading experience.

The necessary facilities will be prepared to promote the marketing business.

The efforts in collaboration with the neighboring cooperatives are necessary to re-organize the provincial federation, of which credit business has been suspended, and rice mill has been managed by a merchant.

(3) To secure the water supply in the dry season.

As for the production conditions, to secure the water supply in the dry season is an earnest desire of farmers. There are no difficulties to secure the water supply in rainy season because of high percentage of irrigated area (8700 rai paddy field irrigated among 66000 rai). But the production of secondary crops in the dry season has been easily influenced by the shortage of water supply.

As the small-scaled water pumps owned by individual farmers can not pump out enough water, the cooperative has to study the possibility

of construction of large wells and joint use of water by getting the government aid, so as to stabilize the production of the secondary crops.

- (4) To strengthen the autonomous-management by the leaders of members. In this cooperative businesses are conducted in the same room with district CPD officers, therefore, the cooperative management has been easily influenced by them.

The assistant manager in office has been a member of the cooperative since its foundation and is a man of experience of director's post, and the president has been elected for ten consecutive years since its foundation. They seem to well know how to conduct the daily cooperative business. Therefore, there seems to be no difficulties of the daily operation of the cooperative business even if it shifts to the hands of farmers' leaders.

And CPD had better reconsider the duties of CPD officers to extend the advice and guidance to the cooperative when necessity arises.

6) Development Plan

(1) Organizational Strengthening

- * Realization of 30% of membership ratio and increasing the membership to 2,000 persons through strengthening efforts to improve the recovery ratio of loans and expanding the lending resources.

	Present	1st year	2nd year	3rd year
Membership Ratio	21%	24%	27%	30%
Cooperative Members (in number of persons)	1,385	1,600	1,800	2,000

- * In order to strengthen the independent operation, a separate room will be prepared for the District CPD officers.
- * Allow the group leaders to attend the directors' meeting, and strengthen the training program for the board members as well as the employees.

(2) Credit Business

- * Further expand the lending resources for cooperative members by raising the repayment ratio of loan to 70%.

Loan repayment	Present	1st year	2nd year	3rd year
ratio	57.5%	60%	65%	70%

- * Strengthen the field activities and effect closer relationship with members' groups, thereby establish a credit control system in every day activities. An independent account system will be put into effect by expanding the saving business (year's increase of 150 bahts in average saving amount per member).
- * Target of outstanding balance of loans and savings at the end of fiscal year as follows.

(in 1,000 baht)

	Present	1st year	2nd year	3rd year
Loans	13,494 (9,743)	16,000 (10,000)	18,000 (10,000)	20,000 (10,000)
Saving	1,657 (1,196)	2,160 (1,350)	2,700 (1,500)	3,300 (1,650)

() Average amount per member in baht)

(3) Purchasing Business

- * Expand the purchasing business planning mostly for the supply of fertilizer and rice for consumption. Principally based on the increase of membership and the elevation of cooperative utilization ratio by members.
- * The transaction target on fertilizer will be 480t through raising the cooperative utilization ratio by members from the current 70% to 80%.
- * To start dealing of rice for consumption so that the cooperative will be able to supply 50% of the demand of non-rice-growing member farmers. Purchasing by advance order and regular distribution to be effected.
- * Besides, supply and repair system for agricultural machinery will be established by employing the maintenance personnel trained at

the training center. Moreover, the cooperative service system will be strengthened by such means as cultivating members' lands by tractors owned by the cooperative. (operators will be temporarily employed from the cooperative member).

- * The target amount of purchasing transaction business will be 3 million baht as follows.

(In 1,000 baht)

	Present	1st year	2nd year	3rd year
Turn over	1,305	1,700	2,300	3,000
(of which, fertilizer)	293t	330t	430t	480t
(of which, rice)	-	35t	80t	140t

- * Strengthen the management system thereby collection of accrued accounts for supplied goods will be made within due time.

(4) Marketing Business

- * Expand the paddy marketing business, and in addition, the marketing of agricultural products other than rice, such as, soybeans and peanuts will be started.
- * As for the marketing of paddy, the fund allocated by the BAAC to collect 500 ton will be utilized to the fullest extent for the time being. Besides, in the 3rd fiscal year the transaction target of 1,000 t will be realized by effective utilization of the warehouse.
- * As for transactions on soybeans and peanuts, the initial year will be a trial period. But in the target year the transaction of 150t for soybeans and 150t for peanuts will be achieved.
- * The total amount of marketing transactions will be 5 million baht in the target fiscal year.
- * Facilities and equipments necessary for the promotion of the above will be arranged as shown in the attached paper.

(In 1,000 baht)

	Present	1st year	2nd year	3rd year
Turn over	(90)	1,600	3,000	5,000
(of which, paddy)	(27t)	500t	750t	1,000t
(of which, soybeans)	-	30t	100t	150t
(of which, peanuts)	-	30t	100t	150t

() actual transactions in fiscal year 1980

* Studies will be made for the establishment of large-area joint use facilities such as, rice mill and soybean oil extracting mill in collaboration with the neighboring agricultural cooperatives in the province. Cope with the reconstruction of the provincial federation.

(5) Farm Management Guidance

* Strengthen and expand the farm guidance system aimed at providing advice and guidance to members concerning farm technology and management.

* Grasp of area fundamentals; survey of actual farm conditions; guidance of simple farm management record with cooperative members (as model); and promotion of farm management plan in combination with the establishment of area agricultural development plan.

* The First Year

(a) Training and fostering of personnel (by attending the training meetings under CPD sponsorship).

(b) Grasp of area fundamentals (total number of houses, farm households, land utilization, cropping condition, output and sales conditions etc.) in the village.

(c) Compilation of cooperative members' farm management registry (farming area; planting, production and sales conditions by crop, family composition and labour conditions, etc.).

(d) Compilation of farm management record (model plan).

* The Second Year

(a) Starting of farm management record by model farmers; farming program making (in model area).

(b) Drafting of plan and discussions on area agricultural development program in each village (priority items).

* The Third Year

- (a) Diffusion of farm management registry and farming program making.
- (b) Area agricultural development program making in each village, and program making for the district.

(6) Development of Facilities

For the facilities in the cooperative the construction will be started by the Third Year at the latest; for the large area joint use facilities, the construction will be started by the Fifth Year. (Details are shown on the attached paper)

(Facilities and equipments)

- * Means of transportation --- 1 small-size truck (3t) for collection and distribution and 1 big-size truck (10t) for shipment.
- * Means of collection ----- paddy threshing machines, soybean threshing machine (both with pulling tractor attached); truck scale; paddy & soybean moisture meters and selecting machines.
- * Soybean dryers
- * Storage facilities ----- Warehouses (330 m²) for paddy (500t) and soybean, materials warehouse (garage combination, 700 m²).
- * Irrigation equipments ----- engine pumps, water hoses to be lent to cooperative members.
- * Machinery for cultivation - tractors with attachments for rent.

(Large Area Facilities)

- * Rice mill ----- rice polishing machine, warehouse (1,000 t) attached.
- * Soybean oil extraction plant.

(7) Training and Fostering of Personnel

- * Supplement and strengthen personnel in the following fields.
Personnel matters will be met mostly by internal reassignments; actual increase in personnel will be 4 persons. CPD's subsidizing system will be utilized.

Marketing,	Farm Guidance,	Field Activities	Purchasing
(a)	(b)	(c)	(d)

(Persons)

Present	1st year	2nd year	3rd year
5	7	8	9
(Actual increase)	(2)	(1)	(1)
(Assignment)	(a) & (b)	(c)	(d)

* Training will mainly rely on active and positive utilization of the facilities provided by the CPD for strengthening autonomous operation, strengthening marketing activities, field activities system, loan recovery and credit control system, repairs of agricultural machinery, etc. For this purpose, regional training center of CPD will be established. Warehouse personnel, farm machinery operators, etc. will be temporarily employed from among cooperative members.

(8) Improvement of Management and Financial Affairs

* While increasing cooperative membership, efforts will be made toward sound management and sound financial position. For this purpose, it is important to recover loans and accrued accounts for supplied goods within due time, and to guarantee this, positive action for cooperative marketing of agricultural products is required. In the strengthening of marketing business, it is necessary to establish a collection fund loan system by BAAC, CPD and ACFT for other agricultural products than paddy. It is desirable to accumulate, at CPD, agricultural cooperative promotion funds which can constitute the financial resources for the collection fund of agricultural products. Moreover, it is necessary to take measures in order to increase and strengthen owned capital through own efforts of the agricultural cooperative, such as, faster recovery of loans and accrued accounts, savings promotion, capital increasing activities, etc. As the basis for making these activities successful, efforts should be made to develop mutual trust and confidence in the relation between the cooperative and its members through daily business activities, and particularly to improve the services offered by the cooperative through furthering the advisory functions such as farm guidance activities.

* Standing on the basis of the fact that many farmers desire to be members of the cooperative, and that the members strongly desire the active cooperative marketing of agricultural products, the basic problem is to formulate a management outlook as follows that would realize these objectives. For this purpose the capital increase is necessary.

(In 1,000 bahts)

	Present	1st year	2nd year	3rd year
Capital	2,409	2,880	3,420	3,400
paid up	(1,739)	(1,800)	(1,900)	(2,000)

() Amount in baht per cooperative member.

2. KOKSAMRONG AGRICULTURAL COOPERATIVE
(LOP BURI PROVINCE)

1) General situation of the area

Koksamrong Agricultural Cooperative is located in Koksamrong District, Lop Buri Province situated in the central region of the country. Although Lop Buri Province is as a whole in Maenam Plain, its eastern part forms hills, and is in back to back relation with Plateau of Korat in the northeastern part of the country with Don Pya Yen Mountain Range sandwiched in between.

The annual rainfall in Lop Buri is 1,281 mm on the average, which is relatively small, and records indicate that the largest was 1,595 mm and smallest 772 mm (1979). Although Lop Buri River and Pasak River, which are artificial canals from Maenam River, flow through Koksamrong District, water shortage is always a serious problem here.

Lop Buri Province has been a traditional place of production of maize together with Sara Buri Province located on its south side. Particularly in the latter half of 1960's through the early half of 1970's, maize planted area was the largest in the country and it was larger than paddy planted area. Since then, maize planted area was increased in Nakhon Ratchasima Province located on its east side and also in Phetchabun Province located on its north side and paddy planted area was increased beyond the maize planted area in Lop Buri Province. However, Lop Buri Province still is a leading maize producing province having a share of more than 10 per cent of production of maize in the whole Thailand in both planted area and production.

Koksamrong District is an agricultural area with dry field crops as the nuclei because of its natural conditions.

According to the agricultural census in 1978, the number of farm households is 15,768, farmland area is 628,946 rai (1 rai is equal to 0.16 ha), and the average farmland area per farm household is 40 rai, which is considerably large compared to other area.

Table 2-9 Production of paddy and maize in Lop Buri Province

Year	Paddy			Maize		
	Planted area (1000 rai)	Production (1000 t)	Per rai (kg)	Planted area (1000 rai)	Production (1000 t)	Per rai (kg)
1975/76	798	229	287	1,250	444	355
76/77	883	338	383	1,324	497	375
77/78	1,203	408	339	791	119	150
78/79	1,278	312	244	890	303	341
79/80	1,255	376	300	974	333	342

Source: Same as that of Table 1-3

Unit: household, rai, %

		Lop Buri Province				Koksamrong District			
		Farm household	Area	Per household	Farm household	Area	Per household	Per household	
Total		59,418	2,193,282	-	15,768	628,964	-	39.9	
	of which no land owned	2,001	-	-	204	-	-	-	
Form of land ownership	land owned	57,417	2,193,282	100.0	15,564	628,964	100.0	40.4	
	Owner farmer	36,501	1,386,689	63.2	11,126	449,323	71.4	40.4	
	Owner/tenant farmer	3,826	221,525	10.1	1,073	69,069	11.0	64.4	
	Tenant/owner farmer	5,247	243,594	11.1	1,038	51,020	8.1	49.2	
	Tenant farmer	9,736	249,392	11.4	2,194	56,253	8.9	25.6	
	Others	2,107	92,082	4.2	133	3,299	0.5	24.8	
Cultivated crop	Single	Paddy	21,157	609,121	27.8	4,405	124,391	19.8	28.2
		vegetables, field crops	21,599	853,850	38.9	7,217	287,074	45.6	39.8
	Mixed	Permanent crops	768	4,258	0.2	47	717	0.1	15.3
		Paddy and others	10,633	560,968	25.6	3,430	188,733	30.0	55.0
	Other than paddy	2,997	164,242	7.5	441	27,795	4.4	63.0	
	No cultivation	263	843	0	22	254	0.0	11.5	

Source: Same as that of Table 2-2

Table 2-11 Changes in number of members
of Koksamrong Agri. Coop.

Year		1979	1980
Beginning of the term		2,611	2,902
During the term	Increase	348	27
	Decrease	57	81
End of the term		2,902	2,848

Source: Annual Report for each year.
(Same hereinafter, unless otherwise specified)

When planted area classified by crop is observed, paddy has a share of 32.5 per cent with 204,134 rai and dry field crops have 65.8 per cent with 414,057 rai. These figures indicate that this area as a whole is a dry field crop area with maize and sorghum as the nuclei. 71.5 per cent of farm households are owner farmers, but the total of 20.8 per cent of tenant farmers (14.1 per cent) and tenant-owner farmers (6.7 per cent) is not a small figure.

Branch offices of major banks are located in the area, and in addition, there are main grain merchants who deal with maize, sorghum and rice. Particularly in Non Wong village near the maize growing area, stores of 40 to 50 merchants are located together and this village appears to be a maize merchants' village.

They provide funds for production to farmers besides purchase of products from them. Their interest rate is 3 per cent per month at minimum, and is 7 per cent per month in an extreme case.

2) Outline of organization of agricultural cooperative

When the history of Koksamrong Agricultural Cooperative is observed, 77 credit cooperatives located in the area were merged into two agricultural cooperatives in 1970 and these two agricultural cooperatives were merged again in 1974 and Koksamrong Agricultural Cooperative was born. Later, a coop store (consumers' cooperative) located in the area was absorbed in 1979.

The number of members is 2,848 farm households as of the end of March, 1981, and the membership ratio is 18 per cent, which is of considerably high level. This number of member farm households, however, indicates a decrease of 54 compared to the previous year. The main reason for this decrease is that about 30 members, who could not borrow required funds due to shortage of funds of the cooperative left the society and moved to BAAC group, although there are some other minor reasons. Members belong to 50 community groups formed by 20 to 80 members. These community groups are basic units of activities. In the mean time the method to accept new members to this agricultural cooperative is as following. In the first place, the agricultural cooperative assigns the number of persons to be accepted to each group considering the fund available and each group submits a list of proposed members out of those who want to join the cooperative. A written evidence of the situation of management of each farm household including family composition, planted area, number of livestock, expectation to the agricultural cooperative and so forth is attached to this list. The agricultural cooperative then makes decision at the directors' meeting.

The number of staff members who perform works is 15 directors and 17 employees. The number of employees was increased by 3 from the end of the previous year. The breakdown of employees is one manager, two accounting clerks, six credit clerks, three marketing clerks, one general affairs clerks, one farm adviser, one servant and one guardman. Of which those three increased in the past year are one each of marketing clerk and farm adviser and one guardman. The general meeting is of representative meeting system with attendance of representatives selected by the rate of one out of ten members, and 290 representatives gather to deliberate agenda mainly focused on the report on the settlement of accounts once a year.

3) Outline of businesses of agricultural cooperative

Under excellent leadership of the president and general manager, this cooperative is performing positive business activities with emphasis laid on farm guidance and marketing of agricultural products. The outline of activities is described below as classified by the field.

(Credit)

This agricultural cooperative has a credit line of 19.5 million baht from BAAC and 5 million baht from Bangkok Bank as resources for loans to its members. In addition, a credit line of 1 million baht has been given from BAAC as funds for purchasing activities, a credit line of 2.8 million baht has also been given from BAAC as funds for collection of paddy, and a credit line of 0.3 million baht has been given by ACFT as funds for collection of maize.

Table 2-12 Loans to members of Koksamrong Agri. Coop.

Unit: thousand baht,

	Year	Short-term	Medium-term	Total
Loaning during the term	1978	10,010 (74.1)	3,500 (25.9)	13,510
	1979	15,206 (77.5)	4,426 (22.5)	19,632
	1980	8,323 (66.0)	4,293 (34.0)	12,616
Balance at end of the term	1978	9,025 (51.5)	8,484 (48.5)	17,509
	1979	17,303 (61.2)	10,950 (38.8)	28,253
	1980	15,605 (58.6)	11,022 (41.4)	26,627
Recovery ratio within term	1978	59.06		59.06
	1979	35.00	19.49	28.98
	1980	48.47	40.14	45.01

Note: Figures in () are component ratios.

Table 2-13 Loans classified by purpose
(Breakdown of loans provided during 1979)

Unit: thousand baht, %

(Purpose)	Short-term		Medium-term		
	Amount	%	(Purpose)	Amount	%
Farming	10,717	70.5	Purchase or reclamation of land	1,172	26.5
Rent	2,896	19.0	Irrigation or land improvement	166	3.8
Living	684	4.5	Livestock or farm machinery	2,683	60.6
Loan renewal	130	0.9	Building	99	2.2
Capital increase	779	5.1	Repayment of old debt	79	1.8
Others	-	-	Capital increase	227	5.1
Total	15,206	100.0	Total	4,426	100.0

The total of these credit lines is 28.6 million baht, which is the largest among four agricultural cooperatives at which studies were conducted. Of these credit lines, the resources for loans to members was increased by 4.5 million baht in 1979 from former 15 million baht and the funds for purchasing business was doubled in the same year from former 0.5 million baht by BAAC, but they were kept unchanged for 1980.

The progress of loans to members in the past three years is shown in Table 2-12.

Loans to members made an outstanding growth in 1979 by as much as 45.3 per cent compared to the previous year. In 1980, however, reduction was made and the mid-term loans in 1980 was less than that in 1978, that is two years before. These figures indicate that the credit business in 1980 was in a slump as the credit line for new loans was not expanded by BAAC due to the increase of accrued amounts caused by continued bad crops for two years. Under such circumstances the repayment performance ratio dropped to 29 per cent in 1979 and that of medium-term loans within due time was as low as 19.5 per cent. According to the information from the society, many members borrowed a lot of money from merchants under the conditions of slump credit business and are annoyed by high interest rates. Special remedies by BAAC are required particularly under such cases of emergency caused by natural calamity.

When the credit balance of this agricultural cooperative is observed, short-term loans are of a share of about 60 per cent and medium-term loans are of about 40 per cent, and it is learned in Table 2-13 that short-term operation funds required every year have the overwhelming share among purposes of loans rather than investment in land, farm machinery and livestock.

(Marketing)

Besides paddy (21,000 tons), maize (25,000 tons) and sorghum (10,000 tons), raw cotton (500 tons), beans (500 tons), water melon seeds (300 tons) are also produced in the area of this agricultural cooperative.

15,000 tons of paddy out of total production of 21,000 tons, and 100 per cent of other crops are sold. What were handled by the agricultural cooperative out of them are 688 tons of paddy and 1,685 tons of maize and the

marketing share of the agricultural cooperative is as small as 4.58 per cent for paddy and 6.74 per cent for maize.

The marketing values of paddy and maize in the past three years are shown in Table 2-14.

The marketing system of paddy by the agricultural cooperative was largely changed in the past few years as described in Chapter 1, and progress made was not necessarily under the same conditions. Particularly when figures of 1979 and 1980 are observed, sale of paddy to the agricultural cooperative was relatively favourable in 1979, because prices offered by the majority of merchants were lower than the support prices indicated by the Government. In 1980, on the other hand, severe guaranteed price system was adopted and merchants were obliged to purchase at the minimum price or higher. In addition, many merchants offered higher price than that of the agricultural cooperative. Accordingly, the total turnover of the agricultural cooperative dropped. Paddy was handled by this cooperative in 1980 under two different systems. One is the cooperative rice marketing project based on the agreement between ACFT and BAAC (collection funds are provided by BAAC in this case), and another is the purchase with its own fund.

Although a credit line of 2.8 million baht was given by BAAC for the former, the dealing value was only 1.7 million baht. The dealing values under two different systems are as indicated in Table 2-15, which also indicates the breakdown of rice marketing values into what used for recovery of loans and what paid to members in cash. According to these values,

Table 2-14 Outline of marketing business of Koksamrong Agri. Coop.

Unit: ton, thousand baht

Year	Paddy		Maize	
	Quantity	Amount	Quantity	Amount
1978	690 t	1,711	970 t	2,024
1979	1,038	3,148	1,608	4,068
1980	688	2,416	1,686	5,735

25.3 per cent of the dealing value is used for repayment of loans under ACFT/BAAC project system and 27.0 per cent under the collection with own fund systems. It is thus confirmed that there is an important link between the credit and marketing businesses.

The entire volume of paddy handled by the cooperative is shipped to the rice mill of Lop Buri Provincial Federation.

This provincial federation collected and polished 12,000 tons of paddy per year, but what was purchased from agricultural cooperatives was 3,000 tons only, and the remaining 9,000 tons were purchased from merchants (collection traders) and directly from farmers (40 per cent of them are members of agricultural cooperatives).

As for marketing channels, although the entire volume collected from agricultural cooperatives is sold to ACFT, 40 per cent of the remaining is supplied to agricultural cooperatives (as rice for consumption) and 60 per cent to the army. The reasons why member farmers make shipment to the provincial federation instead of agricultural cooperative are explained that the collection system of agricultural cooperatives is weak and shipping date is determined by the agricultural cooperative and that if shipment is made to agricultural cooperative, proceeds are taken by the society for repayment of loans.

For marketing of maize, the agricultural cooperative has no means of collection. Therefore, farmers hire large size trucks either jointly or individually and make shipment by themselves to ACFT silos located in Bangkok, and they receive prices from the agricultural cooperative with receipts issued by ACFT. Representatives go to Bangkok in the trucks for delivery. The collection system of the agricultural cooperative is far behind merchants with threshers who make collection and bagging at farmers' yards and transport immediately. Even under these circumstances, however, the maize dealing value of this agricultural cooperative has been growing year after year.

(Purchasing)

The outline of the purchasing business of Koksamrong Agricultural Cooperative is as shown in Table 2-16. Because of the history of absorption of a coop store, the dealing value of rice for consumption is the largest and its share in the total dealings is 71.3 per cent. This share, however, has been decreasing in the past three years. It is noteworthy that the share of fertilizers is increasing instead of rice.

The volume of supply of rice for consumption by this cooperative is as much as 4.6 per cent of the total volume in the area (estimated) and 25.6 per cent of that purchased by members (estimated), and these values indicates considerably advanced business activities. As for supply of fertilizers the agricultural cooperative has a share of 10 per cent of the total demand in the area (estimated) and 60 per cent of the demand of members (estimated), which are relatively large values.

Table 2-15 Total dealing of paddy classified by collection system (1980)

Unit: ton, thousand baht

	Quantity	Amount	Recovery of loans	Payment in cash
ACFT/BAAC collection system	491.5	1,706	342	1,274
Own fund collection system	196.2	710	192	518
Total	687.7	2,416	534	1,792

Table 2-16 Outline of purchasing business of Koksamrong Agri. Coop.

Unit: thousand baht

	1978	1979	1980
Rice for consumption	2,512 (314 t)	3,182 (366 t)	2,923 (436 t)
Fertilizer	176 (58 t)	436 (98 t)	640 (113 t)
Farm machinery	226 (25 units)	202 (19 units)	144 (16 units)
Seeds	24 (7 t)	- (-)	374 (56 t)
Bags	-	24	9
Others	-	15	10
Total	2,939	3,859	4,100
Accrued account at the end of the term	1,469	2,754	2,806
Accounts payable at the end of the term	-	569	24

The total dealings of the purchasing business were 4.1 million baht in 1980, and a growth by 1.4 times was accomplished in the period of three years. On the other hand, accounts receivable for supplied goods at the end of the term has also grown by 1.9 times in the mean time. This agricultural cooperative makes credit sales within 3,000 baht per member and imposes accrued interests of a rate of 12 per cent per annum. About 85 per cent of supplied value is of credit sales these days, and those who make credit purchase are as many as 1,500 persons equivalent to 53 per cent of all members.

4) Outline of management of agricultural cooperative

This cooperative is one of a few agricultural cooperatives which have the management policy laying emphasis on the marketing business, while credit is the key business for the majority of agricultural cooperatives in Thailand. The marketing business is of a profit ratio of 4 per cent, which is of relatively low and its ratio of direct contribution to the management of the cooperative is minor. However, the management policy of the agricultural cooperative which makes efforts in the expansion of the marketing activities strengthens unity of members and indirectly supports its management. The credit line of as much as 2.8 million baht allowed to this cooperative is a fruit of sound management and business activities made up to the present time, and loans of low interest rates of 2 to 3 per cent per annum for warehouse funds (long-term) and rice collection funds from CPD and maize collection funds from ACFT (all of them were repaid at the end of fiscal 1980) played an important role in improving management.

Koksamrong Agricultural Cooperative showed a profit of 1.44 million baht in fiscal 1979, and 1.78 million baht, which indicates an increase by 0.34 million baht, in fiscal 1980.

Fifty per cent of the profit was reserved, and besides 8 per cent dividend on paid-up capital, patronage dividend was also paid with credit business and purchasing business as the objects. The legal reserves accumulated year after year reached a value of 7.41 million baht and other reserves also amounts to 0.68 million baht. When totalled with paid-up capital of 4.6 million baht, the gross amount of owned capital is as much as 12.7 million baht, which is the largest amount out of agricultural cooperatives at which studies were conducted.

The figures which indicate main financial position and outline of the management of this cooperative are shown in Table 2-4.

5) Problems and basic direction of improvement

Koksamrong cooperative under the excellent leadership of the president and the general manager has willingly carried out the systematic activities under the unfavorable conditions of agricultural production due to poor irrigation facilities and salty underground water.

It is considered necessary to improve four points with a view to develop the cooperative activities in taking advantage of favorable conditions of the leadership as follows.

(1) To expand the further active marketing business

(Paddy rice)

It is the current trading system that the provincial federation purchases the paddy rice directly from farmers (including the cooperative members) and mills with its facilities, then sells it to the army and cooperatives.

A part of the marketing of paddy and the distribution of milled rice can be made through the cooperative channel, after consultation with the provincial federation.

It will be quite possible that the long-term, stable marketing system by the advance orders be established without any difficulties because the army and cooperatives have rather a permanent demand of rice.

Besides, BAAC is requested to study to provide the cooperative with the fund for collection of paddy recognizing this stable rice market as a kind of cooperative rice project.

It is also desirable to be studied that the provincial federation pays the proceeds to member farmers through the cooperative and possibly, remit it to the account opened in the cooperative by the members. This might be a new system.

(Maize and Grain-sorghum)

It is needless to say that ACFT should make every effort to expand and develop the foreign market as well as the domestic market and the cooperative has to make efforts to develop the domestic market

of its own, regardless ACFT's allocation, and to strengthen marketing function of the cooperative.

Therefore, necessary facilities for marketing functions should be installed, especially the collection system at farmers' yard with a truck and a thresher will give a great opportunity for the development of active marketing business. As the 80% of maize-producing farmers grow grain-sorghum as the secondary crops, the establishment of grain sorghum marketing system will help the cooperative to start the cooperative marketing of this crop, and it will be important for the further development.

- (2) To introduce the experimental irrigation system to the model area by the farmers' groups.

It is one of the fundamental problems for this cooperative to secure the supply of irrigation water, and the irrigation system for a large area should be the Government project.

A part of the area where the irrigation water is available right now, can be taken up as a model irrigation area and the cooperative should exhibit leadership to introduce the joint utilization system of irrigation water with pumps and hoses and try to stabilize and increase the agricultural production of the area.

- (3) To develop the credit business on the basis of strengthened group activities and marketing business

It will be an important key for the business improvement of the cooperative to strengthen the group activities. Especially, essential is fully consented discussion with member farmers at the group meetings being held three times a year in order to improve the ratio of repayment performance.

The important measure to develop the marketing business is to provide member farmers with the increased amount of loan for farming and to help the farmers not to rely on borrowing with high interest. In this respect, the amount of loan provided by BAAC towards the model cooperatives should be expanded.

As this area has been suffered from the poor harvest caused by the drought every several years, a special government loan to cope with the damages brought by the natural disaster should be considered, at the same time the cooperative efforts against the poor harvest,

say save some amount of crop in normal crop year, should be introduced.

Along with the development of group activities the coordination between the cooperative and group leaders will become more and more important.

Therefore, it is desirable to employ an assistant general manager or control manager in order to improve the daily works of management and control, and the cooperative should make effort to reflect synthetically the farming program of member farmers on its business program. It can be realized by establishing the farm guidance system.

- (4) To re-arrange the purchasing business laying emphasis on fertilizer and milled rice.

As for the purchasing activities the supply of milled rice and fertilizer will be most necessary as the first step to develop the purchasing business.

At present moment, the cooperative can not afford to have the stock due to the lack of operation fund, but can prospect the monthly and annual quantity of the milled rice needed by member farmers.

Therefore, it is quite possible that the cooperative, introducing the system of advance orders, makes the regular delivery of the milled rice to group leaders's houses from the rice-mill of the provincial federation by truck.

6) Development Plan

(1) Organizational Strengthening

* With greater efforts in farm guidance and marketing activities, the membership ratio will be raised to 22%.

	Present	1st year	2nd year	3rd year
Membership ratio	18%	19%	20%	22%
Cooperative members (Persons)	2,848	3,000	3,160	3,470

* Relation with members' groups would be further strengthened and operation will place priority on group activity by improving the personnel system of field works including the farm advisors and allowing attendance at directors' meeting by the group leaders.

(2) Credit Business

* Improve the repayment ratio of loans and gain the place in the first ranking cooperatives; and further, expand the lending resources for the cooperative members. The loan repayment ratio target to be 60%.

	Present	1st year	2nd year	3rd year
Loan repayment ratio	48.5%	50%	55%	60%

* Establish the field works personnel system and stronger relation with the members' groups, thereby building up the loan control system. Stronger efforts to savings promotion, and increase by 200 bahts a year per member to be realized.

* Target of outstanding balances of loans and savings at the end of fiscal year as follows.

(In 1,000 bahts)

	Present	1st year	2nd year	3rd year
Loan	26,627 (9,349)	28,500 (9,500)	30,000 (9,500)	33,000 (9,500)
Saving	1,256 (441)	1,920 (640)	2,650 (840)	3,610 (1,040)

() Average amount per cooperative member in baht.

(3) Purchasing Business

* Strengthen the purchasing business centering on the expansion of supply of fertilizer and rice for consumption. This will be based on the increase of cooperative members and raise of the cooperative utilization ratio by members.

* About 60% of the cooperative members' demand for fertilizer is being covered, this is expected to be raised to 70%, the target of quantity being 180t.

* As for the supply of rice for consumption, the agricultural cooperative will handle 50% of the demand of non-rice-growing member farmers (currently 26%). Advance order and regular distribution to be effected.

* Besides, seed center will be utilized for seed supply; as for agricultural machinery, the system will be organized including the employment and training of maintenance personnel. Also, services will be strengthened, such as, the cultivation of members' land by tractor owned by the cooperative. Additional services will include the rental of pumps for irrigation (personnel requirement will be met by means of temporary employment from cooperative members).

* Supply amount target will be 8.5 million baht a year.

(In 1,000 bahts)

	Present	1st year	2nd year	3rd year
Turn over	4,285	5,000	6,600	8,500
(of which, fertilizer)	113t	130t	154t	180t
(of which, rice for consumption)	436t	540t	760t	1,040t

* Control system to be strengthened for the successful recovery of accrued accounts for supplied goods within due time.

(4) Marketing Business

* In addition to expanding the current marketing business centering on paddy and maize, the marketing of sorghum to be started, which is grown by 80% of maize growing farmers as a secondary crop.

* Early realization of handling paddy up to the ceiling of the collection fund approved by the BAAC (1,000t), and to increase the quantity to 2,000 t in the 3rd fiscal year by effective utilization of the warehouse.

* As for maize, by setting the target of collecting 60% of members' selling, collection of 3,300 t is to be realized in the 3rd fiscal year.

* Regarding sorghum, the first year will be a preparatory period; transactions will begin in the 2nd year; and the 3rd year target will be 500 t.

* The total amount of marketing transaction is targeted at 13 million bahts.

* Necessary facilities to be equipped is as shown in the attached paper.

(In 1,000 bahts)

	Present	1st year	2nd year	3rd year
Turn over	5,909	7,000	9,000	13,000
(of which, paddy)	690t	1,000t	1,500t	2,000t
(of which, maize)	1,686t	2,000t	2,500t	3,300t
(of which, sorghum)	-	-	200t	500t

* Besides coping with for construction and improvement of the large area facilities in collaboration with neighboring cooperatives within the province including the improvement of the rice mill facilities of the provincial federation, the ACFT's sorghum marketing system will be built up.

(5) Farm Management Guidance

* Strengthen and expand the farm guidance system aimed at providing advice and guidance to members concerning farm technology and management.

* Grasp of area fundamentals; survey of actual farm conditions; guidance of simple farm management record with cooperative members (as model); and promotion of farm management plan in combination with the establishment of area agricultural developmental plan.

* The First Year

(a) Training and fostering of personnel (by attending the training courses by CPD sponsorship).

(b) Grasp of area fundamentals (total number of houses, farm households, land utilization, cropping condition, output and sales conditions etc. in the village).

(c) Compilation of cooperative members' farm management registry (farming area; planting, production and sales conditions by crop, family composition and labour conditions, etc.).

(d) Compilation of farm management record (model plan).

- * The Second Year
 - (a) Starting of farm management record by model farmers; farming program making (in model area).
 - (b) Drafting of plan and discussions on area agricultural development program in each village (priority items).
- * The Third Year
 - (a) Diffusion of farm management registry and farming program making.
 - (b) Area agricultural development program making in each village, and program making for the district.

(6) Development of Facilities

For the facilities required for the cooperative development the construction will be started by the Third Year at the latest; for the large area joint use facilities, the construction will be started by the Fifth Year. (Details are shown on the attached paper)

(Facilities and equipments)

- * Means of Transportation ---- 2 small-size trucks (3t) for collection and distribution and 1 big-size truck (10t) for marketing use.
- * Means of Collection ----- Paddy threshing machines, maize threshing machines, (both with pulling tractor attached); truck scale; paddy and maize moisture meters.
- * Maize Dryers
- * Facilities for Storage ----- Warehouse for paddy (500t), maize (1,000t), materials warehouse (garage combination 700 m²).
- * Irrigation equipments ----- Engine pumps and water hoses for rent to members.
- * Machinery for cultivation -- Tractors with attachments for cultivating members' lands.

(Large Area Facilities)

- * Rice mill ----- rice polishing machine, warehouse (1,000t) attached.
- * Assorted Feed Plant and Rice-bran oil extraction plant.

(7) Training and Fostering of Personnel

* Supplement and strengthen personnel in the following fields.

Internal reassignments will be studied; actual increase in personnel to be 2 persons. CPD's subsidizing system will be utilized.

Farm Guidance, Marketing, Field Activities, Purchasing
 (a) (b) (c) (d)
 Assistant manager (control)
 (e)

(Persons)

Present	1st year	2nd year	3rd year
17	18	18	19
(Actual increase)	(1)	(0)	(1)
(Assignments)	(a) & (b)	(c)	(d) & (e)

* Training programs of CPD and others will be utilized to train personnel for strengthening farm guidance and marketing business, introduction of field work system, recovery and control system on loans, agricultural machinery repairs etc. The CPD regional training center to be expanded and strengthened.

* Warehouse personnel, agricultural machinery operators, etc. will be temporarily employed seasonally from among the cooperative member farmers.

(8) Improvement of Management and Financial Affairs

* While increasing cooperative membership, efforts will be made toward sound management and sound financial position. For this purpose, it is important to recover loans and accrued accounts for supplied goods within due time, and to guarantee this, positive action for cooperative marketing of agricultural products is required. In the strengthening of marketing business, it is necessary to establish a collection fund loan system by BAAC, CPD and ACFT for other agricultural products than paddy. It is desirable to accumulate, at CPD, agricultural cooperative promotion funds which can constitute the financial resources for the collection fund of agricultural products.

Moreover, it is necessary to take measures in order to increase

and strengthen owned capital through own efforts of the agricultural cooperative, such as, faster recovery of loans and accrued accounts, savings promotion, capital increasing activities, etc. As the basis for making these activities successful, efforts should be made to develop solidarity and confidence in the relation between the cooperative and its members through daily business activities, and particularly to improve the services offered by the cooperative through furthering the advisory functions such as farm guidance activities.

* On the basis of the present stable management, farm guidance and marketing business are to be further strengthened, the close relation with member farmers to be made firmer and attain the place of the No. 1 ranking agricultural cooperative, to build up a management system capable of fully meeting the desires of the cooperative members.

* Capital paid up

(In 1,000 bahts)

Present	1st year	2nd year	3rd year
4,601	5,100	5,530	6,250
(1,616)	(1,700)	(1,750)	(1,800)

() Amount in baht per cooperative member