

I. COOPERATION IMPLEMENTATION PROCESS

I. Cooperation Implementation Process

1. Background of Request and Background

The economy of Thailand is predominantly agriculture. This sector is not only the largest contributor of national income but also provides numerous employment to majority of working population. Despite acceleration on agricultural product expansion to meet demands of both nationally and internationally, Thailand is still coping many basic problems. The problem of rural poverty exists in all part of the country, thus the principal of national objectives for agricultural development is to pay concentrate attempt to solve the rural problems and, at the same time, motivate every rural development in order to enhance farmers living quality as well as level of rural income and standard of living. Under the Fifth Five-Years Economic and Social Development Plan, the Government by CPD has assigned an outstanding role to agricultural cooperatives to stimulate and support rural development in order to increase agricultural products and concurrently raise the income and living standard of the population in the rural areas. To achieve this, the policies and efforts of the Government were hence directed towards developing and strengthening an integrated system of agricultural cooperatives as an essential means of improving the economic and social well-being of rural people.

As part of its program for agricultural development, the Government wished to develop and strengthen agricultural cooperatives. Due to limited resources, international collaborations with the countries which have wide range of experience in agricultural cooperative development and proved successful development in their own countries like Japan were sought out.

1) In response to the request made by the Government of Thailand in February 1979, the preliminary study team, which consisted of the leader Mr. Kazuyoshi Inose and other 6 members was sent to Thailand in November and December 1979 for the purpose of confirming the contents of the request as well as understanding the situation of agricultural cooperative organizations in the country. In March and April 1980, the SAW mission, which was composed of leader Mr. Motonaga Chito and other 4 members, visited the country to discuss with the Thai authorities concerned on ways of implementing the main study and its implementation program including of selections of primary agricultural cooperatives to be studied.

ii) The main study was carried out jointly by the teams of both Japan and Thailand in Thailand during two months of July and August in 1980. This joint study team successfully attained its object of identifying the present situation and problems of the Thai agricultural cooperative movement as well as of recommending basic ideas for realizing a nationwide improvement of the movement, by conducting an overall observation including case studies at eight primary societies. The Thai team visited Japan for three weeks in December 1980 to have a joint discussion with the Japanese team on the basis of the study report drafted by the Japanese group. And the tentative final report was prepared through this joint discussion. In January 1981 the Japanese mission, headed by Mr.M. Ohto, was sent to Thailand to explain the proposed final report to its Government and the final report was presented in February of that year.

iii) Taking into consideration recommendations of this report, the Thai Government prepared the idea of "Agricultural Cooperative Promotion Project" as its five years plan on which the Thai Government requested the Japanese Government to be cooperative for the success of the plan in April 1981. This five-years plan was aiming to strengthen the agricultural cooperative organization with putting a priority on primary societies through realizing the "Total System" which is a method of improving business activities of primary cooperative such as : credit, economic operation, and guidance in an integrated and systematic manner in order to strengthen organization, businesses and management societies. The request of the Thai Government has been made in form of package project of (1) technical service, (2) fellowship, (3) aids for facilities, (4) cooperation for the Center, and (5) financial assistance, especially for successfully implementing the "Total System" at model agricultural cooperatives.

iv) The mission, headed by Mr.Motonaga Ohto, arrived Thailand on 12 July 1981 and had series of discussion with the Thai authorities. Eventually the "Minutes of Discussion on the SW for the Feasibility Study on the Agricultural Cooperative Promotion Project in Thailand" has been signed on 15 July 1981. It was agreed that the study would be carried out as a joint study of CPD and JICA based on the attached SW, which might be subject to the rules and regulations and the limitation of budget of the respective governments. It was also agreed that the study would be conducted in accordance with the attached plan of operation (draft) which would be finalized and included in the inception report after discussion in details prior to the commencement of the study in Thailand.

v) A feasibility study was conducted by the joint study team during 27 July 1981 to 25 September 1981. The Japanese team was headed by Mr. Hidetane Togawa. In this study, the development plan based on the "total system" was placed to one selected agricultural cooperative in each of four regions, representing as the model of each region which has different agricultural conditions.

vi) Findings and recommendations in the feasibility study were jointly reviewed and discussed by the Thai and Japanese authorities in January 1982. Both parties have agreed and adopted the total system approach towards possible cooperation between the two countries in promoting agricultural cooperatives in Thailand.

vii) In order to develop a comprehensive work program in the feasibility study to increase the probability of successful operation in cooperatives with a possible cooperation between the Government of Thailand and the Government of Japan in promoting agricultural cooperatives in Thailand, CPD proposed a request to the Government of Japan for individual experts assistance in March 1982 for a period of one year. As the CPD's request, four Japanese experts were dispatched for the Agricultural Cooperative Promotion Project in Thailand accordingly of which the first two Japanese experts were dispatched in December 1982 and the other two were dispatched in June 1983.

viii) As a result of the expert's findings, in cooperation with both CPD team assigned to the project and the cooperative personnels concerned, the establishment of the cooperative training centers of CPD and the development of the selected model agricultural cooperatives towards the proposed total system were keenly felt. Nevertheless, in keeping with an urgent need of the Government to reduce absolute poverty and accelerate rural development in the backward areas, the project would place concentration of efforts, in the initial period, only to the Northeast where has been listed by the Government as the high poverty areas. Therefore, the five selected agricultural cooperatives in Nakhonratchasima Province, the Northeastern region, would be developed as a pilot model for the total system approach in order that they could be dispatched for agricultural cooperative development at regionwide program.

ix) The project period was scheduled for five years, from July 1984 to July 1989, and was divided into two major projects as follows:

- a. The Technical Cooperation for Agricultural Cooperative Promotion Project in Thailand, and
- b. The Grant Aid Project on the Construction of two Cooperative Training Centers :
 - (1) Regional Agricultural Cooperative Training Center in Nakhonratchasima Province, and
 - (2) Central Agricultural Cooperative Training Center.

The Government of Japan agreed to provide Technical Cooperation for Agricultural Cooperative Promotion Project in Thailand and the Grant Aid Project on Establishment of Regional Agricultural Cooperative Training Center in Nakhonratchasima Province.

x) As there were some obstacles confronting to the implement of the project in the early period, but after removal of these blockages, the progress was made. However, within a reasonable short period of implementing activities the results would not be likely produced to achieve the desired objectives as cited in R/D. To reach that objectives was of vital importance for agricultural cooperatives in Thailand. The project had to be extended for the other two years in the form of follow-up cooperation. This was also recommended in the report by the Joint of the Japanese and Thai Evaluation Team for Agricultural Cooperative Promotion Project in Thailand.

2. Cooperative Implementation Process

2.1 Date of Request made February 1979

2.2 Project Formation Study NA

2.3 Preliminary Study

2.3.1 The First Team 19 November 1979 - 8 December 1979 (20 days)

(Assignment)	(Name)	(Division)
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Team Leader	Mr.Kazuyoshi Inose	NA
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and 6 members

2.3.2 The Scope of Work Mission March - April 1980

Team Leader	Mr.Motonaga Ohta	Overseas Agricultural Development Association, Tokyo
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and 4 members

2.3.3 The Joint Feasibility Study Team 1 July 1980 - 31 August 1980 (62 days)

Thai Team

Organization and Management	Ms.Peerarat Aungurarat	Planning Division, CPD
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Marketing Business	Mr.Virasak Choypat	Agricultural Cooperative Federation of Thailand
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Credit Business	Ms.Chongonee Sriprasert	Agricultural Division
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Cooperatives

Economic Activities / Coordinator	Mr.Ruangchai Boonyananta	Planning Division, CPD
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(Assignment)	(Name)	(Division)
<u>Japanese Team</u>		
Organization and Management	Mr.Hiroshi Yamamoto	Institute for the Development of Agricultural Cooperation in Asia (IDACA)
Economic Activities	Mr.Yuji Hashimoto	IDACA
Credit Business	Mr.Yasuo Hattori	IDACA

2.3.4 The Mission Team for the SW for the Feasibility Study

12 July 1981 - 15 July 1981 (4 days)

Team Leader	Mr.Motonaga Ohto	Overseas Agricultural Development Association
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2.3.5 The Joint Feasibility Study Team 27 July 1981 - 25 September 1981 (61 days)

Thai Team

Management	Ms.Peerarat Aungurarat	Planning Div. CPD
Marketing Business	Mr.Virasak Choypat	Agricultural Cooperative Federation of Thailand
Credit Business	Ms.Chongonee Sriprasert	Agri. Coop. Div.
Farm Guidance	Mr.Cherdchai Mathurod	Agri. Coop. Div.
Economic Activities / Coordinator	Mr.Ruangchai Boonyananta	Planning Div. CPD

Japanese Team

Team Leader	Mr.Hidetane Togawa	IDACA
Farm Guidance	Mr.Kazuo Kumazawa	IDACA
Organization	Mr.Hiroshi Yamamoto	IDACA - Zen Chu
Marketing and Purchasing	Mr.Mikio Suzuki	IDACA - Zen Noh

(Assignment)	(Name)	(Division)
Management, Accounting and Credit	Mr. Shuichi Matsuhisa	IDACA - Zen Chu

Governmental Assistance for Coop.	Mr. Isamu Akiyama	Agri. Coop. Div.
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2.3.6 The Advisory Team for Development Survey

15 September 1981 - 22 September 1981 (8 days)

NA	Mr. Terahide Fujita	International Cooperation Division
NA	Mr. Tsugibo Akatsuma	Agri. Coop. Div.
NA	Mr. Toshihazu Nagashima	JICA

The study teams during January 1982 to June 1983 were not applicable.

(Assignment)	(Name)	(Duration)
2.4 Long Term Experts	1 October 1984 - 5 July 1989 (1,738 days)	
Team Leader	Mr. Shizuo Sato	1 Oct. 1984 - 11 Oct. 1986
	Mr. Hiroshi Takeuchi	3 Feb. 1987 - 5 Jul. 1989
Coordinator	Mr. Yutaka Oishi	1 Oct. 1984 - 31 Mar. 1987
	Mr. Yasumasa Oizumi	17 Mar. 1987 - 5 Jul. 1989
Farm Guidance	Mr. Kazuo Kumazawa	1 Oct. 1984 - 30 Sep. 1986
	Mr. Koshi Tanaka	1 Oct. 1986 - 5 Jul. 1989
Cooperative - Management	Mr. Hiroshi Yamamoto	1 Oct. 1984 - 30 Sep. 1987
	Mr. Shuichi Masuhisa	14 Sep. 1987 - 5 Jul. 1989
Marketing and Purchasing Business	Mr. Akira Yoshida	1 Oct. 1984 - 30 Sep. 1987
	Mr. Masaru Yamamoto	14 Sep. 1987 - 5 Jul. 1989

Sep. 1987

(Assignment)	(Name)	(Duration)
Credit Business	Mr. Koshi Tanaka	1 Oct. 1984 - 30

Mr. Kenji Ishibashi 17 Feb. 1987 - 5 Jul. 1989

2.5 Implementation Discussion 23 June 1984 - July 1984 (15 days)

Exchange of a signed R/D or an agreement 6 July 1984

(Assignment)	(Name)	(Division)
Team Leader	Mr. Motonaga Ohno	Overseas Agricultural Development Association

Farm Guidance Planning	Mr. Sizuo Satoh	JICA Expert
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Cooperation Planning	Mr. Saburo Miyatake	International Cooperation Division
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Cooperative Organization	Mr. Kazuo Kawakami	Agri. Coop. Div.
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Coordinator	Mr. Toshiyuki Kasai	Technical Cooperation Div.
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2.6 Start of Dispatch of Experts December 1982

2.7 Mutual Consultation

Thai Team was not applicable.

The Japanese Consultation Survey Team 11 August 1985 - 21 August 1985

(11 days)

Team Leader	Mr. Mitsuo Hasegawa	Coop. Div.
Irrigation & Drainage	Mr. Mitsuhiro Goto	Construction Dept. Kinki Regional Agricultural Administration Office.

Cooperative Management	Mr. Teruaki Ushijima	Coop. Div.
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(Assignment)	(Name)	(Division)
Farm Guidance	Mr. Shuichi Matsuhisa	International Department The Central Union of Agricultural Cooperatives
Coordination	Mr. Masutaka Nakahara	Coop. Div.

2.8 Technical Guidance

(Assignment)	(Name)	(Duration)
Field Arrangement	Mr. Shigeru Tanaka	2 May 1985 - 30 May 1985
Water System Survey	Mr. Takahiro Katoh	2 May 1985 - 30 May 1985
Construction	Mr. Hirohiko Nozoe	10 Feb 1986 - 10 May 1986
Management	Mr. Takahiro Katoh	10 Feb 1986 - 10 Sep 1986
	Mr. Shigeki Ishiyama	7 Jan 1989 - 7 Mar 1989
	Mr. Masahiro Ohmiya	15 Feb 1989 - 5 Jul 1989
Agricultural Machinery	Mr. Kaoru Akane	24 Jun 1987 - 23 Jul 1987
Weir Bonng	Mr. Harunocu Yamamoto	24 Jun 1987 - 23 Aug 1987
Water Resource Survey	Mr. Kazuo Moroiishi	10 Jun 1987 - 9 Jul 1987
Poultry Breeding	Mr. Takaaki Inoshita	27 Sep 1988 - 29 Nov 1988
Poultry Facilities	Mr. Kuichi Ishida	8 Nov 1988 - 17 Nov 1988
Management		
Cooperative	Mr. Susumu Nakagawa	15 Feb 1989 - 14 Mar 1989
Management		
Vegetable Cultivation	Mr. Takayuki Yoshizawa	15 Feb 1989 - 14 Mar 1989
Detailed Design	Mr. Keiji Miya	15 Aug 1988 - 23

Sep 1988

Mr. Yuji Ohtsuka 15 Aug 1988 - 23 Sep 1988

2.9 Mid-Term Evaluation NA

2.10 Technical Guidance NA

(Repair of Equipment)

3. Special Remark on Cooperation Implementation Process

On cooperation implementation process of the Agricultural Cooperative Promotion Project in Thailand, some cases were specially remarked as follows :

3.1 At the early stage of requesting cooperation, the Government of Japan have drastically reviewed all feasibility of the project for primary planning. Working teams were assigned to study the scope and suitability of the project which have been proceeded jointly with the Thai teams as mentioned. The reason of making drastic review on the project was to precise the scale and character of cooperation properly to meet with actual needs of Thailand, and be in compliance with the National Economic and Social Development Plan, for the Project could concurrently implement suitable impact effectively.

3.2 Despite the joint survey and proceedings at arrangement of implementation for cooperation from the Government of Japan, the Project was brought for substantial change in the implementation institution of Thailand. The conclusion of the first survey indicated that the experimental development would be established on 4 selected cooperatives as pilot group and 16 selected cooperatives as subordinate group from every regions. But later to a drastic review, the substance of the said conclusion had to be changed to establish the development program on merely 5 selected cooperatives in Nakhonratchasima Province. The reason on this was about to respond the 5th National Economic and Social Development Plan which targeted the development on rural areas and precisely to the poorest areas as the first priority and most of them were in the Northeastern region. Another reason was that implementation of development role in one province would be easier and more convenient as it could take less time for transportation and could be fully controlled under condition of limited personnels. By the way, faster expansion of development to other agricultural cooperatives in the Northeastern region would directly enhance level of farmers income in the region.

3.3 Although the cooperation on the Agricultural Cooperative Promotion Project in Thailand had been already approved by the Government of Japan, but before actual commencement of the Project in Thailand, numbers of Japanese experts were dispatched for making preliminary survey, planning, and system experiment. This process took one and a half year, under drastic review, to reach its conclusion and actual commencement which caused the early implementation delayed behind the schedule and probably subjected to an exclusive 2 years expansion (1990 - 1991).

3.4 Because of environmental differences between Thailand and Japan, the technologies could not be immediately and directly applied with the five model cooperatives, therefore, each step of the proceeding had to be tested and confidently verified by the Japanese experts before being used or advanced to other steps. This could create confidence and feeling of acceptable on the counterparts, officers and members of the cooperatives but, however, it might also effect some in negative way, such as tardiness of work, etc.

3.5 The result of Project preparation analysis, according to the interviews and questionnaire responses on the Project founders, counterparts, officers and members of the cooperatives, of about 30 persons inclusive, who have been to Japan for observation visit indicated that :

3.5.1 Every steps in the Project planning was appropriately scheduled. Objectives of the Project were settled in compliance with the Record of Discussion (R/D) previously agreed and with recognition to the National Economic and Social Development Plan and the actual requirement of Thailand.

3.5.2 At the preliminary survey, every elements of Project supports and obstacles were identically brought into consideration of the Japanese experts for seeking out the most suitable and possible method of development. By this way, visualizing of more effective implementation, the Project substance was changed from establishing development on 20 selected cooperatives as pilot and subordinate groups to become 5 selected cooperatives in Nakhonratchasima.

3.5.3 Japanese experts and Thai officers were well coordinated in every joint working such as surveying, planning, target aiming, timing and process scheduling.

3.5.4 Through the well coordination as mentioned, clear understanding in the system of Thai-Japan cooperation was limited at high and medium rank officers. Thus, some activities which required cooperation from low-rank officers were not well responded. In the other hand, since there was no certain schedule made by the Japanese experts during the early period, it caused difficulties on provision of supporting budget and personnel in time.

3.5.5 In the process of Project cooperation, the Japanese experts and CPD officers interviewed the cooperatives personnels and members in order to study actual condition of problems and needs for plotting appropriate direction of agricultural cooperative development together with recognition of the National Economic and Social Development Plan. This could be the way to allow people and CPD to participate the Project planning from the very beginning.

3.5.6 Besides the careful studying before taking action on a case, all the schedules were always be reviewed and adjusted to match with the actual environmental condition of each cooperative which was different. For example : some area confronted difficulty of water shortage so unable to make co-transplanting of rice sprout, some area confronted salty soil condition which caused the plant fruitless or some members were not prepared for co-activity, etc.

4. Relationship with other Cooperation Projects

This Project has been implemented merely under cooperation between the Government of Thailand and the Government of Japan and the Government of Thailand did not make any request for similar cooperation from any country or other organization.

II. DEGREE OF GOAL ACHIEVEMENT

II. Degree of Goal Achievement

Project Name : The Agricultural Cooperative Promotion Project in Thailand

Narrative Summary	Indicators	Achievement	Important Assumption
<p><u>Development Goal</u></p> <ol style="list-style-type: none"> 1. To reduce absolute poverty and accelerate rural development in backward areas. 2. To improve production structure in agricultural sector, precisely on increment scale of product per area. 3. To promote the institution of agricultural cooperative for any integration of rural institutions. 4. To support agricultural cooperatives in product collection and sale, jointly 	<ol style="list-style-type: none"> 1. Development on targeted rural areas of 216 districts and 30 sub-districts in 37 provinces for 2.5 million of poor population. 2. Development on irrigation areas of 16 million Rai, and on salty soil of 7 million Rai, aiming to increase agricultural products at rate 4.5% per year. 3. Integrating farmers into agricultural cooperatives. 4. Promoting the quantity and volume expansion of plant and cattle farm. 	<p><u>At the Time of Implementation</u></p> <ol style="list-style-type: none"> 1. Five agricultural cooperatives in Nakhon Rachasima have been developed to become models of agricultural cooperative. 2. The cooperatives members of 9,990 households have been developed in both of economy and life quality. 3. Member of the cooperatives and volume of transaction between the cooperatives and their members have been increasing. 4. Other agricultural cooperatives have been developing following the model cooperatives. 	<p><u>At the Time of Implementation</u></p> <ol style="list-style-type: none"> 1. The governments of Japan and Thailand had to cooperated closely to develop the model agricultural cooperatives. 2. The budget of project sustainability had to be provided both by the governments of Japan and Thailand as well as experts, counterparts and equipments. 3. Expansion of development to other agricultural cooperatives had to be supported by the government in term of budget and personnel.
<p><u>Project Objectives</u></p> <p>To develop and strengthen agricultural cooperatives or a total system approach covering various needs of small farm members in order to increase agricultural products and improve economic and social well-being of its members more effectively.</p>	<ol style="list-style-type: none"> 1. Increment of member of the five model cooperatives and increment of member's participation in cooperative business. 2. Increment of savings and credit deals between members and the cooperatives. 3. The role of the cooperatives to enhance level of knowledge of members including to give technical advice and consultation to their members on technical matters and farm management. 4. Members could integrate their farms by doing plantation and animal farm together and could conduct the production thorough year. 5. More cooperation and involvement of members in cooperatives business. 6. Knowledge development on the Cooperative officers including government officers and cooperative members. 	<p><u>At the Time of Mid-Term Evaluation</u></p> <ol style="list-style-type: none"> 1. More farmers registered for membership with the five model cooperatives and dealt more with the cooperatives in both of credit and savings. 2. Members began to integrate their farms by increasing plants with interval-planting during dry season including chicken farm, pig and cow farm together with planting. 3. Developments were occurred on water sources, infrastructures, etc. 4. Members dealt more business with the cooperatives in both buying and sale. 5. The five model cooperative could enhance their conduction more efficiently. 	<p><u>At the Time of Mid-Term Evaluation</u></p> <ol style="list-style-type: none"> 1. Japanese experts, counterparts, Cooperative managers and personnels were essential part of role to achieve objectives of the Project. 2. Provision of budget, machineries and equipments should be on schedule. 3. Promotion on any plantation or animal farming would depend on geographical and environmental conditions. 4. Different geographic condition would form different promotion.

Narrative Summary	Indicators	Achievement	Important Assumption
<p><u>Output</u></p> <p>The model activities have been implemented exclusively for the five (5) selected agricultural cooperatives in Nakhonratchasima Province.</p> <p>(1) Muang Nakhonratchasima Agricultural Cooperative Ltd. (2) Pakhongchai Agricultural Cooperative Ltd. (3) Chakkara Agricultural Cooperative Ltd. (4) Khongsamakki Agricultural Cooperative Ltd. (5) Phimal Agricultural Cooperative Ltd.</p> <p>The model activities have been carried out through technical advice and guidance to counterparts of CPD in line with the following fields.</p> <p>a) Farm guidance b) Cooperative management c) Marketing and purchasing business d) Credit business e) Training</p>	<p><u>Input</u></p> <p>1. Contribution by the Government of Japan covered services of experts, equipments and fellowship. Total amount assisted from the commencement until termination in 1991 was Bht. 74,800,041 (excluding expenses for experts and fellowship). 2. Contribution by the Government of Thailand comprised land, buildings, counterpart personnel and running cost budget. Total amount assisted from the commencement until termination was Bht. 6,153,344.</p>	<p><u>At the Time of Evaluation at Completion</u></p> <p>1. The five model cooperatives had their own officers for farm guidance and were successful in establishment of breeding center for swine and promotion of animal production dry paddy cultivation, maize and soy bean cultivation including animal food business. 2. The model cooperatives had developed their management successfully and be able to provide welfare to members. 3. The members had more savings in both of cash and products including had more ability in repaying debt to the cooperatives which could reduce the problem of unrecoverable debt. 4. The model cooperatives could enlarge the volume of purchasing and marketing business and successfully promoted a form of group dealing for selling agricultural products including of consistent distribution of information to members. 5. The model cooperatives have cooperated with members for development of water sources and other basic requirements. 6. Members could reduce their production cost by co-utilizing equipments and were frequently trained by the cooperative officers.</p>	<p><u>At the Time of Evaluation at Completion</u></p> <p>1. Counterparts had to pay all attention and time for achievement. 2. Machinery and equipment would be in suitable capacity for each work. 3. Members and cooperative officers should fully cooperate with the cooperatives. 4. The Government should provide supports in continuity and long-term. 5. The cooperative development by total system approach was obviously suitable to the model cooperatives and get well on expansion.</p>

Narrative Summary	Indicators	Achievement	Important Assumption
	<p><u>Supporting Factors to Project Achievement</u></p> <ol style="list-style-type: none"> 1. Financial and personnel support by the Government. 2. Assistance by the Government of Japan. 3. Cooperation from cooperative officers and members. 4. The total system approach was suitable for development of the model cooperatives. 	<p><u>Supporting Factors to Project Achievement</u></p> <ol style="list-style-type: none"> 1. The cooperatives members and officers have advanced in knowledge of cooperative. 2. The Japanese experts and counterparts were the essential part of role in successful achievement as well as its good planning. 3. Adequate equipments and budget were available. 	<p><u>Supporting Factors to Project Achievement</u></p> <ol style="list-style-type: none"> 1. Both of the Japanese experts and counterparts have good systematic planning. 2. Machineries and equipments could generate more efficiency to the work. 3. Good flexibility in the Project operation made things easy for adjustment and adaptation.
	<p><u>Obstruction Factors in Proceeding</u></p> <ol style="list-style-type: none"> 1. Geographic condition of some areas not support the proceeding. 2. Lack of knowledge of cooperative members. 3. Counterparts had regular works which might be unable to give full time to the Project. 4. Equipments might not match with the site condition. 	<p><u>Obstruction Factors in Proceeding</u></p> <ol style="list-style-type: none"> 1. Resignment of the cooperative officers. 2. Counterparts were transferred to other provinces. 3. Delivery of budget was not on schedule. 4. Some equipments were not meet the requirement and inadequate. 	<p><u>Obstruction Factors in Proceeding</u></p> <ol style="list-style-type: none"> 1. Some equipments were not meet the requirement. 2. Budget for expansion process was insufficient.

II. Degree of Goal Achievement

1. Consistency with Plans at Higher Level

1.1 At the Time of Implementation

1.1.1 Project Preparation and Objectives Setting up

The project preparation for the Agricultural Cooperative Promotion Project in Thailand was made in the period of The Fifth National Economic and Social Development Plan, for the year 1982 - 1986, in which emphasized on development of rural areas as stipulated in its objectives that "to reduce absolute poverty and accelerate rural development in backward areas"

In the fifth five-year plan, agricultural cooperative was regarded to be the sole type of rural institution which would be promoted significantly as an essential tool to help in achieving the objectives of the Government. In line with this concept, six development strategies were designed as follows:

(1) Merging other existing rural institutions into agricultural cooperatives which was viewed to be a sole type of institution offering the small farmers at a large degree of participation in development effort;

(2) Reforming the administration's mechanism system of the agencies concerned with the rural institutions to coordinate the entire supporting system to promote agricultural cooperative alone;

(3) Promoting the collecting and marketing business of agricultural cooperatives with strong building up the integrate business activities with horizontal and vertical linkages to increase the cooperative trade and collective bargaining power, including grading and quality standard of agriculture products in order to obtain better prices of products selling;

(4) Price support program would be implemented on most commodity based like necessary crops and financial situation of the Government. The Government would play an active role by imposing all intervention measures for removing poverty particularly the poor and backward agricultural areas;

(5) Determining effective means and measures to promote fair business transaction between the cooperatives and manufacturers; and

(6) Promoting and supporting both government financial institutions and commercial banks to expand credit to farmers in order to increase agricultural productivity.

Preparation of the cooperation project between the Government of Thailand and the Government of Japan on The Technical Cooperation for Agricultural Cooperative Promotion Project in Thailand was made within the frame of the 5th National Economic and Social Development Plan, the Agricultural Development Plan, and the Agricultural Cooperative Development Plan. The Project therefore, set up the target for establishing development towards five agricultural cooperatives in Nakhonratchasima Province, namely :

- 1 Muang Nakhonratchasima Agricultural Cooperative, Ltd.
- 2 Pakthongchai Agricultural Cooperative, Ltd.
- 3 Chakkaraj Agricultural Cooperative, Ltd.
- 4 Khongsamakki Agricultural Cooperative, Ltd.
- 5 Phimai Agricultural Cooperative, Ltd.

Objectives of the Project has been set up in which consisted of General Objectives and Specific Objectives for enabling the Project to respond to the national economic and social development effectively, as follows :

(1) General Objectives

To develop and strengthen agricultural cooperatives through an integrated cooperative system or a total system approach covering various needs of the small farm members in order to increase agricultural production and improve economic and social well-being of its members more effectively.

(2) Specific Objectives

(2.1) Provision of guidance services by establishing a Cooperative Consulting Unit to undertake the guidance activities in regard to improvement of agricultural production, farm management and livelihood of the individual members as well as business planning and management of the cooperatives at all levels.

(2.2) Procurement of farming fund for implementing farm management program and improvement of the individual members.

(2.3) Formulation of the Agricultural Cooperative Promotion Fund to promote the activities as a revolving fund for collecting farm products of the members based on business planning in conjunction with farm plans of individual members.

(2.4) Expansion of marketing and processing facilities of cooperatives at all levels to service marketing, purchasing and processing activities in compliance with the improved programs of these economic activities.

(2.5) Provision of a mechanism for mobilizing a coordinated manner that the activity linkaged between credit, purchasing, marketing, and utilization of services of cooperatives would exist.

(2.6) Efficiency improvement for cooperative personnel through the provision of education and training in Japan.

(2.7) Expansion of the cooperative training centers of CPD to carry out training activities more efficiently and adequately.

1.1.2 The Model Activities

In compliance with the objectives, the Project therefore has designed the model activities for the five selected agricultural cooperatives. The model activities would be carried out through technical advice and guidance to counterparts of CPD in line with the following fields.

(1) Farm Guidance

Farm guidance activities centering on agricultural production at farm level and marketing plan. One or two model farming group(s) for each cooperative being organized among cooperative members as part of the farm guidance.

(2) Cooperative Management

Planning of operation and financial management of cooperatives in systematic ways.

(3) Marketing and Purchasing Business

Management techniques including quality control for collecting and marketing of agricultural commodities, and purchase of agricultural in-put.

(4) Credit Business

Management techniques in saving and credit.

(5) Training

On-the-job training through the model activities.

1.2 At the Time of Mid-Term Evaluation

Despite non-document available about mid-term evaluation of the Project, however, according to interviews made with concerned personnel, it is noted that during the period of mid-term evaluation of the Project there was no alteration of target from which has been set up at the beginning of implementation. Besides, the Project was just in early stage of proceeding which all things went right on schedule.

1.3 At the Time of Evaluation at Completion

Through the proceeding of the Project from its commencement to termination, there was no alteration from the primary set up target but some manner of activities have been adjusted to suit with particular environment of each cooperative.

1.4 Reasons for Success or Failure in Achieving Target

1.4.1 The main factors contributing to the achievement of the development target consisted of :

(1) Political factor : The Government policy have contributed cooperation and supports for the Project from the time of commencement until its completion.

(2) Personnel factor : The Government officers, counterparts, officers and members of the agricultural cooperatives were active and had better understanding of their own roles and duties.

(3) Technical factor : Technical staff, especially the Japanese experts have paid full attention into the work by which could impose better vision to members of the cooperatives and took them to join and cooperate in the Project activities.

(4) Equipment factor : Provident equipments by the Government of Japan have brought an idea of using modern technologies for production and marketing development.

(5) Managerial factor : The total system approach is a systematic management which allows members of the cooperatives participate in production and marketing planning.

1.4.2 The main factors inhibiting to the achievement of the development target are as follows:

(1) Environmental factor : Unsuitable geographic conditions such as unfertile or salty soil which caused any plantation become fruitless.

(2) Member factor : Some members of the cooperatives did not pay cooperation to the Project because they did not clearly understand the objectives of the Project and some were not prepared.

(3) Personnel factor : Numbers of counterpart had too much regular jobs to carry out the Project assignment successfully.

(4) Coordination factor : There was sometimes misunderstanding in communication between counterparts and the Japanese experts.

(5) Equipment factor : Some of the equipments were not suitable with site condition and character of work.

(6) Managerial factor : The Project proceeding at the early stage of implementation has been delayed because of the drastic review on preliminary data which caused a feeling of boredom to cooperative officers.

At the completion of the Project it appeared that the five agricultural cooperatives have been well-developed and good enough to become model cooperatives. In consequence, it conducted additional quality development as well as expansion of activities for being in harmonious with the National Economic and Social Development Plan which neither of its objectives nor the Government policy was in contrary with or affected the Project.

2. Status of Achievement of the Project

2.1 At the time of implementation

The proposed project would contribute towards strengthen five agricultural cooperatives in the poverty area that, in the short-run, would help directly of improving the economic condition and quality of life of their members of at least 9,990 farm families. In the long-run, the result stemming from the Project would be a key factor for socio-economic development of rural areas by mobilizing people participate in the process of rural development through a strengthened cooperative movement.

For achieving the expected result, the following activities have been carried out in order to strengthen agricultural cooperatives during the project period.

(1) Giving advice and guidance to the individual farmer members of the agricultural cooperatives in farm planning, farm management and group organization.

(2) Giving advice and guidance to the agricultural cooperatives to formulate their business plans especially in credit, marketing, purchasing and processing directly linked to individual farm plans and budget.

(3) Strengthening management system of the cooperatives with strong business linkages from farmer members and the cooperatives at all level.

(4) Mobilization of capital within cooperative system as well as outside the system. The production credit and marketing linkages for commodities produced by farmer members would be encouraged.

(5) Assessment of infrastructural needs for improving the marketing, purchasing and processing business of the cooperatives.

(6) Improvement of soil fertility, development of small irrigation system or on-farm development as well as transferring of new technology for agricultural development to cooperative members.

(7) Implementation of education and training for cooperative members to include farm guidance, farm recording, income-generating activities and improvement of living standard of the cooperative members' families.

(8) Preparation and conduction of training courses in cooperation and collaboration with the agencies concerned in all relevant fields.

In the process from preliminary study until implementation of the Project, all expected output have been clearly identified such as : schedule of sample members and files of members' data, farm planning, providing production technical instruction to members, publication of cooperative informations, instruction of group purchasing and product selling, promotion of saving included of training program for officers and members of the cooperatives as shown in the table. These outputs were measurable by either way of quantity or quality.

Interim target was also set up at distance through the period of Project implementation from which out-put could be brought into analytical process for measuring degree of success of the Project.

2.2 At the time of mid-term evaluation

2.2.1 Target adjustment

According to the interview with concerned officers, no out-put target adjustment has been done during the period of mid-term evaluation.

2.2.2 Measurement of project success

Instead of document of project mid-term evaluation which is unavailable, the evaluation team, therefore, consider the Report of the Progress of Project Activities for the year 1997 and find that during the mid-term period almost activities has been proceeding in accordance with the schedule and some were in acceptable delay. Those activities are summarized as follows :

(1) Credit activity

(1.1) Conducting training course on "Operational Techniques of Credit Business"

(1.2) Improvement of credit business and savings.

(1.3) Analysis of credit business from individual debt sheet.

(2) Purchasing and marketing activities

(2.1) Improvement of purchasing activities.

(2.2) Marketing activities :

- Survey and study marketing channel for farm products

- Collecting farm products from members and sell to contract

merchants

- Producing marketing news with 2 months distribution to members.

(3) Farm guidance activity

Providing instruction and promotion on chicken, swine and cattle production, producing animal feed, plantation after harvest season, breed of paddy, producing compost, construction of water cement container, soil nourishing plant, village road development and arranging newspaper room in the five cooperatives.

(4) Cooperative management activity

(4.1) Re-arrangement of cooperative executive meeting.

(4.2) Studying and analysing on financial and management situation of

the five cooperatives.

(4.3) Giving advice to cooperative chairmen and managers on general management and planning for cooperative business.

2.3 At the time of evaluation at completion

Performance of the five agricultural cooperatives, under technical cooperation of the Government of Japan, at the completion of the Project achieved target of each activity as follows:

2.3.1 Farm guidance activity

Farm guidance activities could enhance knowledge level of the five cooperatives members in production planning, production techniques and farm management by which produced decreasing of production cost, thus increased income of members.

2.3.2 Cooperative management activity

Cooperative management activities enabled the five agricultural cooperatives to set up appropriate managing plan, to manage accounting, stock, organization including to get use of computer for improving office work, as well as information distribution to members.

2.3.3 Credit activity

Credit activities produced increment of member's savings and member's responsibility on debt repayment to the cooperatives, meanwhile volume of unrecoverable debt was decreased.

2.3.4 Purchasing and marketing promotion activity

This activity contributed the cooperatives to expand purchasing business and procurement of agricultural equipments and materials for their members including to process raw agriculture products and sale.

2.3.5 Activities on development of water resources and basic requirements

Development of water resources enabled the members to have sufficient water for utilizing in their farm, in relevant, they could earn more income from selling vegetable and fruit at average Bht.100 /day/family.

2.3.6 Equipment co-activity

Such co-activity provided the cooperative members economy-of-scale and reduce production cost.

2.3.7 Training activity

Training activities provided practical knowledges to officers and members of the cooperatives, CPD's officers in production, marketing and cooperative business.

2.3.8 Expansion of cooperative businesses

Table 1 shows that the total volume of businesses in five model cooperatives previously (in 1984) was Bht.85,805,000 while total volume of business in 1993 was increased to Bht.387,998,000. In other word, the amount of business was increased 352%.

Regarding memberships, in 1984 the total number of member was 9,653 persons and increased to be 14,365 persons in 1993 or equivalent to 45.79% increasing.

Average service utilization per family was Bht.8,709 per family in 1984 and become Bht.27,000 per family in 1993 or 210% increasing.

2.4 Reasons for Success or Failure in Achieving Target

2.4.1 The main factors contributing to target achievement

- (1) Cooperative members and officers had better understanding in cooperative system and could envisage the essential role of cooperative towards agricultural vocation.
- (2) Cooperative development by total system approach was applicable and effective.
- (3) Cooperative officers were developed to better managerial capability.
- (4) Availability of farm and office equipments.
- (5) The Japanese experts who activated the counterparts and other personnels to cooperate in the work.
- (6) Progressive out-put of joint working between Japanese experts and Thai officers and the progressive development of the cooperatives which became acceptable in general.

2.4.2 The main factors inhabiting to target achievement

- (1) Resignment of cooperative officers for other career of higher earning.
- (2) Counterparts were promoted to some higher position and were transferred to other provinces which caused discontinuity to the work.

(3) Delay of budget arrangement by Thai side caused sometimes problems and difficulty to the work.

(4) Change of experts caused discontinuity or contrary to the work.

4. Status of Achievement of Input Target

4.1 At the time of Implementation

4.1.1 Contributions of the Government of Japan

The contributions of the Government of Japan covered services of experts in various fields concerned, equipment and materials, fellowship for training of Thai counterparts in Japan, and construction of various facilities.

4.1.2 Contributions of the Government of Thailand

The contributions of the Government of Thailand were as follows :

(1) Counterpart personnel for conducting Project activities consisted of CPD staff from both central and local offices, of which the Project Manager was appointed from the Chief of Project Management Office.

In addition, chairmen and managers of the selected cooperatives under the Project were also appointed as associated counterparts.

(2) Lands for model farming groups, buildings and facilities were also provided for the Project activities.

(3) Budget provided by the Government of Thailand for running cost of the Project, during 1984 - 1987, was estimated Bht 4,947,179.

4.2 At the time of Mid-term Evaluation

Whereas none of the main objectives of the Project has been changed during the time of evaluation, the activities for input target so were right on schedule except some equipments which had to be changed for suit with the actual working condition on site.

However, before termination of the Project, the Government of Thailand requested for extension of Project implementation for other 2 years so as those existing equipments for continuous use such as : office equipments, audio-visual aids, vehicles, farm machineries and materials and machineries for irrigation development.

4.3 At the time of evaluation at completion

Contributions of the Government of Japan and the Government of Thailand at the completion of the Project can be summarized as follows :

4.3.1 Contributions of the Government of Japan

Contributions of the Government of Japan covers services of experts, equipments and materials, and fellowship. Total amount contributed from the Project commencement until termination in 1991 is Bht.74,800,041 (excluding expenses for experts and fellowship).

4.3.2 Contributions of the Government of Thailand

Contributions of the Government of Thailand comprises of land, buildings, counterparts, personnels, and running cost budget. Total amount of Thailand contribution from the Project commencement until termination is Bht.6,153,344.

4.4 Reasons for Success or Failure in Achieving Target

4.4.1 The main factors contributing to target achievement

(1) Appropriate planning by both Japanese experts and Thai officers which they jointly made discussions over budget planning, equipment requisition schedule, etc. clearly in accordance with actual necessity and utility.

(2) Supply of equipments was scheduled to match with activity schedule so it could be flexible enough for any change where so required.

(3) Though the obtained equipments were aimed for the use of the cooperatives, but actual utilizing of those equipments in the Project work also directly benefit to the whole members.

4.4.2 The main factors inhabiting to target achievement

(1) Quantity of equipments and materials were not adequate.

(2) Provision of budget from Thailand and Japan was rather late so caused to delay of work.

(3) Some parts of the equipments were not available in Thailand, and needed to be imported from Japan, which caused much waste of time for repairing.

(4) Some equipments were not meet the requirement.

III. IMPACT

III. Impact

1. Impact of Project Implementation

Extent of Impact & Beneficiaries	BACKGROUND OF IMPACT					
	Technical Impact	Institutional Impact	Economic Impact	Socio-cultural Impact	Environmental Impact	Other Impact
<p><u>Positive Impact</u></p> <p>1) 24 counterparts and 20 associated counterparts from the 5 cooperatives have been trained about cooperative business in Japan and brought those experiences for applying in Thailand.</p> <p>2) Obtaining short term & long term of technical instructions from Japanese experts</p> <p>3) Member classification was very useful for both member and cooperative.</p> <p>4) Promoting members of saving in both money and product.</p> <p>5) Development of small irrigation system.</p> <p>6) Development of cooperatives in total system.</p> <p>7) Members could receive service over production technics, financial and equipments from Japanese government.</p>	<p><u>Positive Impact</u></p> <p>1) More farmers registered for cooperative membership.</p> <p>2) Conduction of model cooperatives was successful because of various support.</p> <p>3) Cooperative members become more reliable to middleman traders.</p>	<p><u>Positive Impact</u></p> <p>1) Cooperative members know of farm management and co-utilizing equipments by which reduce production cost. This produce increment of income at Bht. 6,000 -12,000/year/member.</p> <p>2) Creating bargain power against middleman traders by marketing deal with cooperatives.</p> <p>3) Members earn more income and have more savings.</p> <p>4) Members could work thorough year as well as the cooperative.</p> <p>5) Members could receive more dividend and average returns by dealing with cooperative.</p>	<p><u>Positive Impact</u></p> <p>1) Because of ability to work thorough year, rate of migration for city job is reduced, as well as the problem of broken home.</p> <p>2) Members are able to support their children for higher education.</p> <p>3) Living standard of members is raised.</p> <p>4) Result of fast information, members could have more adaptability.</p> <p>5) Members could obtain more welfares.</p> <p>6) Reducing conflict caused by poverty</p> <p>7) Members are promoted of various knowledges.</p> <p>8) Co-activity produces unity among member</p>	<p><u>Positive Impact</u></p> <p>1) Reduce destroying forest and spoiling soil surface</p> <p>2) Cooperative members can know-how of complete loop agricultures.</p> <p>3) Cooperative members can make water utilizing plan.</p> <p>4) Induce to development on resident area.</p> <p>5) Forest plantation is a kind of worth land use which conduce income as well as preserve environment.</p>	<p><u>Positive Impact</u></p> <p>1) Cooperatives in the project are enabled to conduct side-line business for serving their members.</p> <p>2) The training Center is capable to provide services to private businesses.</p>	

BACKGROUND OF IMPACT						
Extent of Impact & Beneficiaries	Technical Impact	Institutional Impact	Economic Impact	Socio-cultural Impact	Environmental Impact	Other Impact
At Project Level	<p><u>Negative Impact</u></p> <p>1) Some technical pattern need time for adjusting to suit with Thai cooperatives because of difference of conditions.</p> <p>2) Communication which requires translator results to tradiness and misunderstanding.</p>	<p><u>Negative Impact</u></p> <p>Cooperative members have more consumption as according to more income so that result to more debt and less savings.</p>	<p><u>Negative Impact</u></p> <p>For some period, the model cooperatives were unable to admit member and service to members. Some of new members did not understand the cooperative purpose.</p>	<p><u>Negative Impact</u></p> <p>- Nil -</p>	<p><u>Negative Impact</u></p> <p>Pig farm and using insecticide may exhale bad smell and create waste water which cause trouble to neighbour farmers.</p>	<p><u>Negative Impact</u></p> <p>- Nil -</p>
At Sector Level	<p><u>Positive Impact</u></p> <p>1) Induce to knowledge dissemination and development over Nakhonratchasima and adjacent provinces.</p> <p>2) Provide knowledges and training of total system cooperative development to become nationwide.</p> <p>3) Create small scale water source development.</p> <p>4) Publicizing modern production technology to farmers.</p>	<p><u>Positive Impact</u></p> <p>1) Conduction of the model cooperatives are considered successful as measured by growth of business volume in very high rate.</p> <p>2) Total system development is disseminated widely over NE region. Some cooperatives can attain at a level of success.</p> <p>3) Dissemination via Education Institute could accelerate to faster agricultural development.</p> <p>4) Farmer Institute are enabled to have more bargaining power in market.</p>	<p><u>Positive Impact</u></p> <p>1) Non-member farmers can develop their production process so conducting more product.</p> <p>2) Consequent to total system development, farmers are able to work thorough year and earn more income.</p> <p>3) Water source development and co-utilizing can reduce need of water during dry season and so reduce production cost as well.</p> <p>4) Promotion of modern technology conduce more production and income.</p> <p>5) Member of cooperative can receive several benefit including averaged returns.</p>	<p><u>Positive Impact</u></p> <p>1) Co-activity and group working of farmers will create development on social & cultures.</p> <p>2) Reduce conflicts between farmers and trading group.</p> <p>3) Reduce problems derive from farmers demand.</p> <p>4) Promotion of group working by cooperative policies improve such work better than other measure.</p>	<p><u>Positive Impact</u></p> <p>1) Development of mixed-farm can guide farmer to get more efficiency in land use.</p> <p>2) Farmers can learn how to get maximum utility from their resources.</p> <p>3) Farmers can get more knowledge about environment from their practice and other informations.</p>	<p><u>Positive Impact</u></p> <p>1) Development on persons in cooperative affairs.</p> <p>2) Create a habit of co-working.</p>

BACKGROUND OF IMPACT						
Extent of Impact & Beneficiaries	Technical Impact	Institutional Impact	Economic Impact	Socio-cultural Impact	Environmental Impact	Other Impact
At Sector Level	<p><u>Negative Impact</u></p> <p>As result of different condition of each cooperative, some cooperatives can not run successfully.</p>	<p><u>Negative Impact</u></p> <p>A restricted budget and personnel subsidized by government will cause lateness on cooperative development.</p>	<p><u>Positive Impact</u></p> <p>6) Agriculture cooperative could resolve the matter of revenue distribution.</p> <p><u>Negative Impact</u></p> <p>Unequal subsidy for development may bring to conflict.</p>	<p><u>Negative Impact</u></p> <p>Compiling groups of cooperative members may raise other illegal demand.</p>	<p><u>Negative Impact</u></p> <p>- Nil -</p>	<p><u>Negative Impact</u></p> <p>- Nil -</p>
On Region	<p><u>Positive Impact</u></p> <p>1) The model cooperatives are acceptable successful that become advance as model for cooperatives at regional level.</p> <p>2) Other cooperatives in NE region can easily develop themselves following the model cooperatives because of similar environmental conditions.</p> <p>3) The model cooperative can develop their efficiency to achieve that of private business.</p> <p>4) The CPD can set right budget on cooperative development in NE region.</p>	<p><u>Positive Impact</u></p> <p>1) The model cooperatives including their officers and chairmen are prominently involved in providing knowledges to other cooperatives.</p> <p>2) Cooperatives in NE region are stimulated to develop following the model cooperatives.</p> <p>3) Farmers can learn of group working so create more bargaining power.</p>	<p><u>Positive Impact</u></p> <p>1) About 2,500 persons from other cooperatives have observed conduction of the model cooperatives.</p> <p>2) Farmers in NE region can do more type of farm-work so reflects to more income, accordingly.</p> <p>3) Reduce regional income gap.</p>	<p><u>Positive Impact</u></p> <p>1) Farmers do not abandon their domicile for city work.</p> <p>2) More water sources are continuously developed.</p> <p>3) Performance of farmers comply with the national master plan for resource preservation and environmental development.</p>	<p><u>Positive Impact</u></p> <p>1) Reduce destroying forest in NE region.</p> <p>2) More water sources are continuously developed.</p> <p>3) Performance of farmers comply with the national master plan for resource preservation and environmental development.</p>	<p><u>Positive Impact</u></p> <p>1) Create good image to farmers in NE region and reduce politic conflict.</p> <p>2) Reduce problem of no-farmland as well as criminal commission.</p>

BACKGROUND OF IMPACT						
Extent of Impact & Beneficiaries	Technical Impact	Institutional Impact	Economic Impact	Socio-cultural Impact	Environmental Impact	Other Impact
On Region	<u>Negative Impact</u> Many cooperatives in NE region are still undeveloped which may cause to feeling of inequality.	<u>Negative Impact</u> Some cooperatives received less support from government thus, their members become lack of enthusiasm.	<u>Negative Impact</u> - Nil -	<u>Negative Impact</u> - Nil -	<u>Negative Impact</u> - Nil -	<u>Negative Impact</u> - Nil -
At Macro Level	<u>Positive Impact</u> The total system cooperative development is applicable with nationwide cooperatives under excessive support by government.	<u>Positive Impact</u> Co-activity and group working can induce unity so that will create other cooperations accordingly.	<u>Positive Impact</u> Total system development will result to efficient development to Thai cooperatives as well as more beneficiaries to farmers.	<u>Positive Impact</u> Upgrade Thai country social and cultures and create national unity.	<u>Positive Impact</u> Environment in Thailand are well developed in every point of view.	<u>Positive Impact</u> Thai citizen will get more understanding in cooperative system and will share support to other development.
2. Factors Effective to Impact						
2.1 Factors Contributing to Development and Extension of Impact consisted of :						
2.1.1 The contributions of Japan and Thailand provided CPD of expense budget and ensured the amount so required for management and operation of a project.						
2.1.2 Development on agricultural cooperative by the total system approach is applicable because of it effective system.						
2.1.3 The good cooperation of all personnel concerned is always a positive factor for development and extension of impact.						
2.2 Factors Inhabiting the Production of Expected Impact were as follows :						
2.2.1 Unsuitable geographic condition affects damage to the Project.						
2.2.2 Misunderstanding in the Project objectives and in the basic concept of the Project may cause a feeling of contrary or inequality.						

III. IMPACT

The cooperation between Thai and Japanese government in The Agricultural Cooperative Promotion Project in Thailand induces several impacts to Thailand, those are Technical Impact, Institutional Impact, Economic Impact, Sociocultural Impact, Environment Impact and Other Impact which appears in both positive and negative impact.

1. Technical Impact

1.1 Impact and Beneficiaries at Project Level

Positive Impact

(1) Consequent to training and observation visit to Japan of 24 counterparts and 20 associate counterparts of the five agricultural cooperatives for 16- 62 days to train and observe agricultural cooperative affairs in Japan, those people could attain knowledges and get well understanding in agricultural cooperative system and were enthusiastic to disseminate their experiences to cooperative members as well as to staff member of other cooperatives. Such dissemination has been continuously proceeded through the project period by which create many developments such as to set up re-organization of the five cooperatives, to improve credit system, farm guidance system, marketing and purchasing system. This benefits to cooperative members with knowledges and improvement over production and marketing system.

(2) Short-term and long-term experts from Japan have provided instructions to counterparts and cooperative members about farm planning, plantation and cattle farm technics, marketing and purchasing product including of co-activity. As a result, cooperative member could produce more production capacity and get well with co-activities.

(3) Promoting and advising cooperatives to arrange members into different classes for the improvement of member quality. The classification broke down into four categories which were class 1 special, class 1, class 2 and class 3, respectively. The consideration of farmer classes decided on loan repayment, share holding and deposit in cooperative. The benefit from member classification was that each member would acquire loan according to his class. If he wanted to be in upper class he must repay at due date and should increase his share and deposit. For member group, the practice was the same. By this way it would promote mutual help

among members in the group specially for loan payment. The member would assist each other to pay back loan which would reduce problems on arrear capital and interest.

(4) At early stage of conduction these five agricultural cooperatives, as regarded as the model cooperatives, were in difficulties about capital. Technical cooperation of the project so instructed and motivated the cooperative members of savings. For saving money, they introduced one-day-one Baht program to those members by saving one Baht everyday in bamboo stem saving. Another way is saving product, the cooperatives allowed members to deliver one bag of paddy- approximated 80 kg. and repaid to them by money after the paddy was sold either as paddy of milled rice according to the weight prior recorded at delivery.

(5) As Nakhonratchasima is a province in North - Eastern region that often gets into difficulty against aridity and water shortage, the project experts from Japan therefore conferred with Thai counterparts and local cooperative members and managed to construction of canals, ponds, watergates, pipe bridges and cofferdams which could relief the farmers difficulties. By the way, the Khongsamakki Agricultural Cooperative purchased an excavator to service pond construction sufficient to the member 's need. This equipment is capable to construct 100 ponds per year (each pond contains appx. 1,250 cu.m. volume).

During financial year 1990 to 1994 the model of pond used in this project was applied nationwide for relieving farmer 's trouble against aridity. Expenses for this regard was 85% subsidised by the government while the rest of 15% was from contribution of local farmers.

Numbers of pond construction were:-

Year	1990	400 ponds
Year	1991	2,070 ponds
Year	1993	6,810 ponds
Year	1994	6,245 ponds

(6) An outstanding character of the Technical Cooperation for Agricultural Cooperative Promotion Project in Thailand is to promote total system development to agricultural cooperatives. For this respect, the Japanese government provided experts to work with counterparts and members of the five cooperatives in Nakhonratchasima on farm guidance instruction, cooperative management, credit business, marketing and purchasing business, water source development and co - utilizing of basic requirements and machinenes. Together with

trainings, the cooperative members could obtain know-how of farm planning, group working, production technics development so that could gain more production efficiency including marketing development which could produce more bargain power to farmers.

(7) The cooperative members could obtain production technical services including machineries and equipments subsidised by the Japanese government so induced to rapid growth in productions. In the other hand, the five cooperatives could possess machineries and equipments for animal feed production as well as office computers for doing paper works, forms, accounting work, etc.

Negative Impact

(1) Patterns of agricultural cooperatives in Japan such as environments, personnels and government support are different from those of Thai agricultural cooperatives which have its own particular pattern. It is so required some period of time to adjust such technical pattern to become suitable to Thai cooperatives.

(2) Communication between Japanese experts and cooperative members which require translator is rather inconvenient that may cause to lateness and misunderstanding in communication.

1.2 Impact and Beneficiaries at Sector Level

Positive Impact

(1) Technical knowledge is disseminated to farmers in Nakhonratchasima and other provinces by promoting cooperatives to have observation visit at the site. At the same time the cooperative training center is another place of knowledge distribution to other farmers and agricultural cooperatives.

(2) Development of the five model cooperatives in Nakhonratchasima in total system is satisfactorily successful as could be respectable as a model for cooperatives at country level. Nowadays there are agricultural cooperatives make observation visit at the five model cooperatives 3 - 4 times a month. Chairmen and managers of the five model cooperatives are sometimes invited for delivery lecture to member and officer of other cooperatives. The total system development seems suitable to Thailand as its complete loop management could induce

approach good benefit and satisfaction to members. To apply the total system development with nationwide cooperatives would expectedly create better development on macro-farmers and macro-agricultures.

(3) Co-activity among members of the five cooperatives to construct canals, ponds, etc. which enable members have enough water for almost year is one of successful sample that interests non-member farmers to join the project. Besides, it reflects to development of small scale water resources over lower north-eastern region by using the pattern similar to that of the five model cooperatives. Such this development would enable farmers in north-eastern region to produce agricultural product thorough year as well as would reduce difficulty of water shortage during dry season.

(4) Dissemination of modern agricultural technology by the five model cooperatives results farmers in adjacent provinces bring those technology to apply with their businesses in both plantation and animal production. Those farmers can also use marketing services and buy animal feed from the cooperatives thus induce to rapid growth in production. In the other hand, the cooperatives can earn income from selling animal feed accordingly.

(5) Proceeding of the five model cooperatives can image reliability to other cooperatives and farmers as better and faster than any demonstration by government or government officers.

Negative Impact

The five model cooperatives in Nakhonratchasima in fact, have been set up and gradually developed in total system pattern for years before being applied to other cooperatives. Not all the cooperatives will be come successful by application of this pattern as depend on many conditions such as environment, members, government support, etc.

1.3 Impact and Beneficiaries on Regions

Positive Impact

(1) The five model cooperatives in Nakhonratchasima have been set up with right basic about farm guidance , production planning, marketing, management, etc. So be able to conduct the business by themselves as well as their members have well understanding in cooperative affairs. This would be the right pattern of cooperative to apply over the region for further development

(2) As there is not much difference of general environment in the north-eastern region so that the total system development could be applied easily but, however, it requires continuous support by the government.

(3) The five model cooperatives in Nakhonratchasima have developed their cooperative and business system to become alike private business as they can possess more modern machineries and equipments for business use.

(4) To develop cooperatives in the north-eastern region by using the same pattern as the five model cooperatives would even assist the to set up right budget for such development and other aid in this region.

Negative Impact

Development of the five model cooperatives is successful while other cooperatives are not, this may reflects to feeling of inequality on other cooperatives.

1.4 Impact and Beneficiaries at Macro Level

Positive Impact

Total system development of the five model cooperatives in Nakhonratchasima seems very suitable to generally apply with cooperatives in Thailand. According to the interview made with agricultural cooperatives in Nakhonratchasima and other provinces who have taken the pattern of the five model cooperatives to apply with their businesses, it responds that they could achieve at a level of success but could not grow fast because of insufficient supports such as capital, equipments and personnels. To develop cooperatives in pattern of total system successfully, the government would implement "Big Push" on it by mobilizing all sufficient capital, personnels and equipments to the target which may be partial done region by region.

2. Institutional Impact

2.1 Impact and Beneficiaries at Project Level

Positive Impact

(1) As farmers and member of the five model cooperatives in Nakhonratchasima have acknowledged and visualized various benefits derived from group production and trading their product through cooperatives. It is recorded that in 1984 there were only 9,853 households in 1993 or 501 households per year. Average value of service provided to each member was accordingly increased from Bht. 8,709.- in 1984 to Bht. 27,000.- in 1993 or 310% accumulative increase during 9 years period or at rate 33.33% per annum.

(2) As a result of applying total system development with the five model cooperatives under full support of capital, personnels and equipments by Japanese government, the cooperatives then were able to conduct their business in full capacity and eventually could stand independently at a level.

(3) Cooperative members become more reliable to middleman traders by reason of more income. Those farmers can receive more credit on either buying raw material or buying other consuming goods.

(4) Local middleman traders and even department stores pay more attention to deal business with cooperatives since they visualize that quantity of members and products of the five model cooperatives in Nakhonratchasima are acceptable to make business relation. An example is the Phimai Agricultural Cooperative who are capable to trade rice with a large scale department store : Siam Makro Public Limited Company, this creates much marketing advantage.

Negative Impact

Members of the five model cooperatives in Nakhonratchasima spend more expenses on extravagance goods according to the more credit they received so that effect to increasing of debt and declining of household savings.

2.2 Impact and Beneficiaries at Sector Level

Positive Impact

(1) The businesses under total system development conducted by the five model cooperatives in Nakhonratchasima are apparently successful. The business volume recorded in 1984 was Bht. 85.805 million and increased to Bht. 387.898 million in 1993 or 452% (See Table 1).

(2) The Ministry of Agriculture and Cooperatives have set up a plan of nationwide cooperative development in similar pattern to the five model cooperatives. Some patterns may be adjusted to suit with each cooperative depend on member, economic and geographic conditions. However, the profile of development is to apply those cooperatives base on total system pattern. According to the plan, if agricultural cooperatives are developed in the same way as the five model cooperatives, it will conduce the Farmer Institute become much more developed.

(3) Dissemination of knowledge to personnel in both government and private sectors, especially in educational institutes would accelerate distribution of modern cooperative technology which would result to faster development on general agriculture affairs.

(4) Co-activity in production and marketing will create more bargain power to agricultural institutes. Moreover, this may create potency to offer agricultural policy to the government as well.

Negative Impact

Development in the same pattern as the five model cooperatives requires excessive time and resources. So far as the government is restricted in personnels and subsidising budget, the whole development of cooperatives will certainly be delayed or some may even become failed.

2.3 Impact and Beneficiaries on Regions

Positive Impact

(1) The five model cooperatives in Nakhonratchasima are respected as samples of cooperative development in total system. Numbers of agricultural cooperative in the north-eastern region have observed and brought these samples to apply with their local businesses.

(2) Many of agricultural cooperatives within the north-eastern and other regions, after observed the model cooperatives, brought the system to apply in their local by giving instructions and consultations about agricultural technics, farm management included providing production and marketing information to their members. These activities will result more growth in agricultural sector, especially in the north-eastern region.

(3) Farmers in the north-eastern region could get know-how of group working and practiced it by categorizing work group according to professionality.

(4) Cooperatives in the north-eastern region have applied the welfare benefit pattern of the five model cooperatives with their businesses such as : welfare to member and member's children, etc. At early stage, this could serve within limited condition but it is expected to be better if the cooperatives in the north-eastern region are wealthier in future.

(5) As cooperatives in the north-eastern region have been developed by total system and observed the pattern of the model cooperatives, and by information from the cooperatives and from the CPD including training by the training center, some cooperatives can grow up firmly with more security in business and financial which advanced to expansion of business, capable to admit more members, dealing more business with other cooperatives and private businesses.

Negative Impact

Difference about financial status, member and environment between the five model cooperatives and other cooperatives in the north-eastern region and less support by the government may cause pessimistic vision to member of such small cooperatives that they may be unable to develop further and weaken enthusiasm and intention of those members to develop their own cooperatives.

2.4 Impact and Beneficiaries at Macro Level

Positive Impact

Agricultural cooperatives development in Thailand became very active after the Japanese government have provided technical cooperation to Thai government for a trial development on the five model cooperatives. At present, several agricultural cooperatives are

conducting their businesses in total system which is the pattern suitable to Thailand. Its complete loop of management by cooperation among members in setting up production and market planning will originate unity and well cooperation on other activities. More development of agricultural cooperatives will respect to more development and more expansion of the whole sector of Thai agriculture.

However, the essential elements effecting to the growth of agricultural cooperatives are capital, personnel, machineries, equipment and government subsidies. These elements so far are still the matter of restraint for every cooperative in Thailand : less capital, less loyalty of members to their cooperatives, insufficient machineries and equipments, less budget for government support and less personnel to work actually on cooperative promotion, these factors obstruct the growth of agricultural cooperatives in Thailand to be slower it could be.

3. Economic Impact

3.1 Impact and Beneficiaries at Project Level

Positive Impact

(1) The project creates increment in quantity and type of farm-plant and animal production. Before commencement of the cooperative development project on those five model cooperatives in Nakhonratchasima, general condition of the project sites were plantation relied on natural rain and arid climate. Farmers earned less income which derived once a year from one major plant such as rice or cassava so they had to migrate for work during dry season. Members organization dispersed in villages and tambol (sub-district) according to the provincial administrations. Business of each cooperative was conducted individually without coordination nor support to each other. Subsequent to project proceedings, those members began to combine together according to professions and had joint discussions and cooperations to solve their vocational problems as well as in the matter of production development. They began to make production planning in order to increase income. Integrated farm of appropriate mixing of plant and cattle was made under advice and consultation by the cooperative farm guidance officers. Many water sources were developed to serve production processes worked by the production group. These activities enabled the cooperative member-farmers to magnify quantity and type of plants

and cattle as well as enabled them to do farm work thorough year, thus it could reduce the problem of season-unemployment. Increment of product accordingly increased additional Baht. 6,000 - 12,000 averagely to each member's annual income

(2) The five model cooperatives could set up appropriate business plan to serve their member in compliance with the member's production schedule in term of farm guidance, credit, provision of production input including product collection for further processing or sale. Farmers were advised of co-utilizing machineries and equipments for reducing production cost. Such cooperation could produce not only reduction in production cost but also more bargain power for higher price of products which induced direct benefit to cooperative members.

(3) The result of earning more income raised up member's ability in household savings as there were more people debitted saving accounts with the five cooperatives. The figure of member's saving with the five cooperatives during the year 1984 to 1993 as shown in Tables 2 to 6 was obviously increased as summarized.

Summarized Amount of Members Savings with the Five Cooperatives

Name of Cooperative	1984 (Bht. Million)	1989 (Bht Million)	1993 (Bht. Million)
1. Muang Nakhonratchasima Agri. Coop.,Ltd.	1.413	4.569	9.549
2. Chakkaraj Agri. Coop.,Ltd.	0.205	3.219	5.332
3. Pakthongchai Agri. Coop.,Ltd.	0.608	9.739	3.218
4. Phimai Agri. Coop.,Ltd.	0.671	11.387	39.920
5. Khongsemakki Agri. Coop.,Ltd.	0.189	4.711	5.971

(4) Production development and increment of cultivation and animal production in members farm enabled the five cooperatives conduct their business thorough year. Volume of credit given to members, purchasing, marketing and equipment service to members during the year 1984 to 1993 were gradually increasing as shown in Table 2 to 6

(5) The members who traded with the cooperatives could receive a progressive rate of annual dividend and average returns. For example, members of Phimai Agricultural Cooperative were repaid the average return from buying animal food from the cooperative at rate 4% which was another factor to reduce production cost. By this reason, more of non-member farmers were interested to join the project.

3.2 Impact and Beneficiaries at Sector Level

Positive Impact

(1) Diffusion of total system cooperative conduction of the five model cooperatives was a factor producing vocational development and expansion to farmers, whether being member or non-member of the cooperatives, by which resulted to increment of agricultural products. This result complied with the principle purpose in agricultural sector to enlarge volume of agricultural products.

(2) The development of agricultural cooperative in total system was a remarkable pattern of success which convinced the government to promote and distribute this concept nationwide as it could enable cooperative members and farmers to have thorough year work, to have stronger bargain power against middleman traders, to sell their products at higher price and eventually to earn more income.

(3) Promotion of water resource development in form of pond construction and water co-utilizing could resolve water shortage problem at a level. At present the government is expending this promotion by subsidizing finance for construction about 10,000 ponds per year by which will provide water enough for co-utilizing. Another promotion of machineries and equipments co-utilizing will create economics of scale which results to decrement of production cost.

(4) Promotion of using modern production technology can produce not only increment of product and income to cooperative members but they could also be capable to reimburse their debt at a level. Meanwhile, despite farmers of non-cooperative membership, they imitate the style and could successfully increase their income as well.

(5) Combination of farmers to purchase material input and to sell their products through agricultural cooperatives not only gives fair price to those farmers but also resolves problems of weight cheating and delayed payment. This creates more reliance and faithfulness in the cooperatives. In a chain result, the cooperatives can run business with more profit which means more repayment of average return to members accordingly.

(6) Firm conduction of agricultural cooperatives in future will expectedly resolve problem about income distribution, so to say, the increment of agriculture cooperative member and their income will enarrow the income gap among vacationals and such the gap between city and country socials.

Negative Impact

While member of agricultural cooperatives are developing and having more capacity in production and marketing, major part of farmers are still undeveloped. This difference may cause a matter of uneven-development which could result further to conflict.

3.3 Impact and Beneficiaries on Regions

Positive Impact

(1) As the development of the five model cooperives has become obviously successful and its pattern of promotion and development therefore was set as a model pattern to develop cooperatives in the north-eastern and other regions, at present the diffusion projects has already launched off as there are manager of cooperatives and other personnels of about 2,500 persons being trained.

(2) The project conduces farmers in the north-eastern region to produce more various agricultural products and enables them to work thorough year by which results to increasing of farmers income in the region.

3.4 Impact and Beneficiaries at Macro Level

Positive Impact

Nationwide expansion of agricultural cooperative development in total system will progress development in whole agriculture sector of Thailand. Cooperative members will be benefited in terms of demand information of products, credit, procurement of production input and product collection for further processing or sale. This is the way to strenghten farmers to stand by themselves thus conduces decrement in various terms of support by the government.

Negative Impact

Although cooperatives can return various benefits to their members and so induce numbers of farmer become their member, but, if those member do not have clear understanding in cooperatives principle and look forward only to take excessive benefit, it will conduce such cooperatives to failure.

4. Sociocultural Impact

4.1 Impact and Beneficiaries at Project Level

Positive Impact

(1) As the five model cooperatives could provide whole year work to members by integrating plants and animal production in their farms which produce increment of income as well as decrement of debt and migration for city work during dry season, as a related result, it could resolve problem of broken home which is apart of city social problem.

(2) According to increment of earnings, cooperative members are capable to support their children in higher institutes than regular educational school so that they could have more opportunity to find good job. In agricultural point of view, higher education would bring forwards to more agricultural development.

(3) Cooperative members are capable to raise up their standard of living, obviously of more home facilitations such as refrigerator, radio, television, motorcycle, electric iron, car, etc.

(4) Cooperative members can receive more recent of various information so that enable them to get faster adaptation than other farmers.

(5) Cooperative members can receive some social welfare from the cooperatives such as scholarship for children, crematory welfare, etc.

(6) Reducing social conflicts such as forest trespassion, problem of poverty, tenants and landless farmers including other criminals.

(7) Sub-staple food production is also a kind of knowledge provided to the cooperative members such as mushroom and vegetable cultivation, etc. which produce not only increment of income but also sub-staple food for household consumption.

(8) Occurrence cooperation in many activities such as farm planning, co-utilizing of production requirements, etc. can create unity among members as well as among cooperatives.

4.2 Impact and Beneficiaries at Sector Level

Positive Impact

(1) Development of agricultural cooperatives in total system teaches farmers of team-work as performed when making production and market planning which can produce more benefit to farmers than individual work. To expand this development nationwide, the whole agricultural sector will be advancingly developed including in social and cultural terms.

(2) In agricultural sector, it will reduce conflicts between farmers and capitalist traders.

(3) Reducing farmers demand to the government and at the same time, farmers can have more opportunity and power to offer appropriate policies or measures to government for further efficiently proceeding.

(4) The Thai social already have a nature of combination but sometimes lack of leader. Promotion of combinationship by using cooperative measures will activate to faster combination.

Negative Impact

Combination of cooperative members may be induced to illegal demand or any violation against laws and regulations. Predictably once an illegal demand is successful there will come other endless of such demand.

4.3 Impact and Beneficiaries on Regions

Positive Impact

(1) A result of agricultural cooperative development makes farmers in the north-eastern region neither abandon their home vocation nor emigrate for city job so reflects to warm familyhood. Besides, it will prevent people in the region from deceitful employment for illegal or unsuitable work.

(2) Besides the cooperation of cooperative members in work, they also have other joint-activities such as sport competition, religious activity, etc. to strengthen the unity among them.

(3) Farmers are enabled to have further training as well as to support their children to higher education which can relatively reduce ignorance belief and out-moded vision of people in the region.

(4) By information of the cooperative, including training provided, farmers can always up-date more recent information.

4.4 Impact and Beneficiaries at Macro level

The development of agricultural cooperatives in total system which is diffusing nationwide, will not only generate economic growth in agricultural sector but also implement better conditions of Thai rural social and culture, create unity among people in the country and reduce social advantage problems.

5. Environmental Impact

5.1 Impact and Beneficiaries at Project Level

Positive Impact

(1) Cooperative members could have good understanding and prevent destroying environments such as soil surface, forest, etc. including carefully use of water.

(2) Cooperative members could learn of complete loop agriculture and of how to re-use waste materials such as to produce manure from animal excrements, feeding fish with wasted food, etc.

(3) Pond construction and water source development resulted farmers to set plan of utilizing water.

(4) Cooperative members could develop their residences and family hygiene. for example, they made earthen jar for stocking clean water and construct hygienic toilet for epidemic protection.

(5) The cooperatives promoted forestry plantation projects in order to make use on empty land, income earning and meanwhile, preserve environment. An occurent project is the Plantation Project proceeded by Khongsamakki Agricultural Cooperative Ltd.

Negative Impact

According to the promoting, farmers in many villeges conducted swine production which disturbed neighbours by its stinking. In addition, insecticides may damage water as rain erosion may bring remaining insecticide into ponds or water wells.

5.2 Impact and Beneficiaries at Sector Level

Positive Impact

(1) Development of mixed farm created condensed-utilizing of land which could be a way to prevent trespassing on reserved forest.

(2) According to the pattern of water source development and method of maximizing utility of using water by members of the five model cooperatives, this pattern becomes a sample of maximizing utility of production resources at sector level.

(3) Cooperative members were instructed about proper use of fertilizers and insecticides which caused to economical savings and, meanwhile, minimize unwanted material in river and canal water.

5.3 Impact and Beneficiaries on Region

Positive Impact

(1) Reduce problem of destroying forest in the north-eastern regions farmers know about land development and improvement.

(2) Continuity in water resource development, especially pond construction, and co-utilizing of water will implement save and maximum utility of using water.

(3) The promotion in forestry plantation project complies with the National Economic and Social Development Plan as well as the Agricultural Development Plan for resources and environment preservation.

5.4 Impact and Beneficiaries at Macro Level

The problem of environment is a national problem which requires cooperation from everyone to preserve it. Conduction of the five model cooperatives which is expanding nationwide will produce all positive development to environment.

6. Other Impacts

6.1 Impact and Beneficiaries at Project Level

(1) Agricultural cooperatives in the project can run various side-line businesses to service members such as small scale gasoline station, agricultural cooperative store, construction material industry, sale of animal food, buying other agricultural product, etc.

(2) The Regional Agricultural Cooperative Training Center in Nakhonratchasima serve not only for training government servant, member and officer of cooperatives but also available for private organizations or other government office to use to use during non-training period.

6.2 Impact and Beneficiaries at Sector Level

(1) The five model cooperatives and the training center in Nakhonratchasima are the place to develop personnels for further applications.

(2) Producing a habit of team work for increasing work efficiency, especially to agricultural works.

6.3 Impact and Beneficiaries on Region

(1) Created good vision to farmers in the north-eastern region and reduce politic problems.

(2) Reduce the problems of tenant and landless farmers as well as problem of criminals.

6.4 Impact and Beneficiaries at Macro Level

Farmers and other people could get well understanding in cooperative system for they could promote other cooperatives to conduct the business efficiently.

IV. PROSPECT FOR SUSTAINABILITY

IV. Prospect for Sustainability

The government of Japan and the government of Thailand signed for execution of the Technical Cooperation for Agricultural Cooperative Promotion Project in Thailand on 6th July, 1984 and further executed Supplementation Notes to the Record of Discussions on 4th February, 1986 and on 7th August, 1986 in order to expand the cooperation to cover Water Source Development and Training in Thailand by prolonging the project period for 2 years (from 1990 - 1991). This project has been continuously proceeding as details of which are described as follows:

1. Prospects for Organizational Sustainability

1.1 Implementing Agency

The implementing agency, CPD, is clearly defined in the organizational structure as shown in Figure 1. An organization chart to indicate the organizational structure under which the project was operated is shown in Figure 2.

The administration of the project consisted of :

1. The Director General of Cooperatives Promotion Department
has borne overall responsibility for the implementation of the Project.
2. The Chief of Project Management Office
has been responsible for the administrative and managerial matters of the Project as the Head of the Project.
3. The Japanese Team Leader
has provided necessary recommendation and advice on technical and administrative matters concerning the implementation of the Project to the Head of the Project.
4. The Japanese Experts
has given necessary technical guidance and advice concerning the implementation of the Project to the Thai counterparts.
5. The Joint Committee Meeting
was established for the effective and successful implementation of the Project.

Personnels in the Working Group were respectful in each professionality such as credit, engineering, etc. since they have been selected from CPD's divisions directly responsible in the same subject.

By integration of definite organizational structure, full capability personnels including technical and administrative advice given by Japanese term leader and experts, the operating agency of the project therefore has acquired sufficient administrative ability to manage and operate the project.

Because of the contributions by both governments of Japan and Thailand, the operating agency of this project acquired sufficient financial ability including ability to work out and expense budget and ensure the amount required for management and operation of the project.

1.2 Institution for Management and operation

During the project implementation, CPD secured people fully capable in managing and operating a project and has been well organized to implement the project.

The result of the Technical Cooperation for Agricultural Cooperative Promotion Project in Thailand leads the five selected agricultural cooperatives in Nakhonratchasima Province to develop and strengthen through a total system approach in order to increase agricultural productivity, promote agricultural marketing and improve economic and social well-being of their members effectively. These five cooperatives are capable to conduct their business independently, profitable and have effective administration so become respectable as model cooperatives, in consequence, they are many cooperatives in the north-eastern and other region frequently visit the place for business observation.

Since the Project Management Office was temporarily established for merely project implementation, subsequently to termination of the project, CPD therefore established a Special Project replacing the expired Project Management Office. However, it is because the Special Project had few officers so it lessened the role of technical promotion to the five cooperatives than which was done during project implementation.

Personnels in the Working Group were from various divisions of CPD. Each of them possessed regular function in his division but participated the project in manner of part time work so that they had to get back to their full-time offices after termination of the project.

At present, CPD does not assign a project Manager and Working Group for the project, nevertheless, CPD still carries on the project as routine by assigning personnel take responsibility according to their regular work in each division. However, some officers are occasionally assigned to visit the five agricultural cooperatives for inspecting objective achievement of the project.

Besides, CPD has yet a policy to support conduction of the five agricultural cooperatives by arranging partial of project fund in form of non-interest loan including allow the cooperatives to use machineries and equipments of the project to continue dealing business with cooperative members, thus retaining perfect conductivity of the model agricultural cooperatives.

1.3 Organization Changes

During the project implementation, the organizational structure of project offices has been defined as shown in Figure 2 but, subsequently after termination of the project particular structure of Central Administration was changed since sustention by the government of Japan was ceased. The Japanese-Thai Joint Committee and the Japanese Experts then become void. The Project Management Office was replaced by the Special Project without Project Manager and Project Working Group. The Special Project however yet coordinated with the Regional Agricultural Cooperative Training Center No.3, Nakhonratchasima Provincial CPD office and the Regional Engineering Center No.3 including the five agricultural cooperatives as before. Therefore, only partial organizational structure of Central Administration was changed while those of Provincial and District Level were still. The project was carried on under coordination of the Special Project together with officers from CPD's divisions who work on technical promotion and occasional site inspection. The revised organizational structure of offices is shown in figure 3.

2. Prospects for Financial Sustainability

2.1 Prospect for Raising Funds to Cover Necessary Expenses

For the Technical Cooperation for Agricultural Cooperatives Promotion Project in Thailand, contribution by the government of Japan covered services of experts, equipments and materials and fellowships. Total amount assisted from the project starting up to termination in 1991 was 74,900,041 Baht (excluding expenses for experts and fellowships). Contribution by Thai government comprised land, buildings, counterparts, personnels and running cost budget. Total amount of Thai contribution from the project starting up to termination was 6,153,344 Baht.

After the cooperation project between the government of Japan and the government of Thailand was terminated in 1991, the Thai government remained maintaining the project by arranging budget in term of salary for coordinate officials which was regularly payable, budgets for construction which mostly were barns and for partial equipments. The budgets for construction and equipment was not regularly paid every year and to every of the five cooperatives but was paid in accordance with occurrence necessity as approved by the Cooperatives Promotion Department each year. Since the five model cooperatives do not belong to the government so that the said project maintenance budget is actually insufficient to meet the demand of the five model cooperatives. In addition, such maintenance budget for future years may become discontinuous for a reason that sustention by the government to agricultural cooperatives will be performed in recognition to the whole cooperatives in the country. Nevertheless, the five agricultural cooperatives, in the status of model for nationwide cooperatives, will be yet in special concern of the government.

Finally, there is no reason to believe that there is a good chance of raising money enough to ensure sustainability of the project after it is transferred to Thailand.

2.2 Prospects for Official Aid and Stability of Such Aid

The aforementioned arrangement of project maintenance budget by the government could be summarized that, for the Technical Cooperation for Agricultural Cooperative Promotion Project in Thailand, the government has from time to time arranged sustention budget which was mostly in term of construction and equipments. Such the sustention budget is not paid every year nor to every of the cooperatives but is paid discontinuously for only the case that the Cooperatives Promotion Department considered necessary. Since the five model agricultural cooperatives are not belong to the government where by regular budget is unavailable so results that the existing sustention is insufficient to meet the demand of the five model agricultural cooperatives.

After the project has been handed by the government of Thailand, CPD could not take part into the project in full scale. Eventhough the project has yet been sustained by the government but the budget for sustention is apparently insufficient for maintaining the project in full scale. In addition, there is no any assurance whether the government will continue sustaining the project in the following years, or how much of such sustention and whether it will be enough for maintaining the project in case the sustention is available. Therefore, there is no reason to believe that there is a good chance of securing an acoequate budget continuously in and after the next year.

2.3 Status of Recovery of the Cost Through Self-Financing

Each of the five model agricultural cooperatives under the Technical Cooperation for Agricultural Cooperative Promotion Project in Thailand is respectable as a kind of business institue which has own incomes and expenditures.

Income of the five model agricultural cooperatives are in similar character as derive from creditting, purchasing, trading, agricultural promotion and other transactions.

Expenditures of the five model agricultural cooperatives comprise capital and running cost for creditting, purchasing, trading and other transactions including operating cost, wage and salary.

By way of conduction, the five model agricultural cooperatives pay their expenses by money from income account already received. Its balance appears profitable but not in large amount because principle of cooperative conduction does not target on maximum profit. According to performance of the five model agricultural cooperatives since 1991 up to present, it appears that the cooperatives members were honest and faithful to their cooperatives and have been dealing business with the cooperatives consistently so resulted the cooperatives income higher than expenditure in balance. It is expected that, in future, if those cooperative members are dealing business with the cooperatives as consistently as it used to be, the five model agricultural cooperatives will certainly be able to stand on their own leg.

2.4 Necessity and Relevance for Sharing Recurrent Cost

In case Thailand does not have much chance of ensuring full operation of a project on its share in expense alone, there is a chance of the project attaining sustainability if Japan shares part of the operating cost for a few years. If there is such a chance, the sort of scheme for sharing cost requiring to promote financial sustainability of the project were the technical cooperation for the cooperative member farm plans to decrease the production costs, the provision of modern equipment and materials and the market cooperation between Thai agricultural cooperatives and Japanese cooperatives are required to promote financial sustainability of the project.

3. Material and Technical Sustainability

3.1 Specifics of Technology Transferred and Appropriateness of the Technology Level

In the Technical Cooperation for Agricultural Cooperative Promotion Project in Thailand, the experts suitable for technology to be transferred were dispatched and the level of technology transferred is proper in the light of the technical level of Thailand. But the technology of the staff members was inappropriate and not enough to operate the project independently. Leaving the management and operation of facilities and equipments to Thailand will not cause any specific problem to development. But the problem is on repairing facilities and equipment because the spare parts of them are not available in Thailand and also out of stocks in Japan.

3.2 Status of Assignment of Staff Members

There were 32 counterparts assigned by CPD as staff members in which 12 persons were from Central Administration, 3 persons from Nakhonratchasima Provincial CPD office, and 17 persons from District CPD office. There was also a group of 31 associated counterparts personnels in which comprised of chairmen, managers and staff of the five selected agricultural cooperatives under this project. Five farm guidance officers employed and stationed by CPD in each agricultural cooperative concerned were in addition.

The job engaged were as follows :

1. Project Manager
2. Farm Guidance
3. Cooperative Management
4. Marketing Business
5. Credit Business
6. Training
7. Engineering
8. Water Resource Development
9. Coordinator

3.3 Status of Acceptance of Technology

Twenty four counterpart personnel and twenty associated counterpart personnel in which comprised chairmen, managers and staff of the selected agricultural cooperatives were accepted for training and observation in Japan. As learnt that some of those technologies acquired from Japan were not applicable in Thailand. Therefore, the counterpart fully capable of handling technology transfer have been unassigned.

Almost staff members to whom technology was transferred joined the organization for long period of time. However, some counterparts were promoted to higher positions with no more relation with the project, but the successor for the functions in the project have never been trained in Japan. The associated counterpart personnel who had been for 16 days training in Japan have been mostly working with the cooperatives except two managers of Chakkaraj Agricultural Cooperative, Ltd. and Pakthongchai Agricultural Cooperative, Ltd. were away after termination of the Project for new jobs with higher responsibility and salary and were accepted of capability.

Though the counterparts for handling technology transfer were unassigned, the assigned counterparts and associated counterpart personnels pay their all attempt to transfer the acquired technology to them in full scale , including with coordination of short-term and long-term Japanese experts. The five model cooperatives were highly capable in developing the technologies and visualized their members to understand the principal of cooperative business and create loyalty into the members, so they consistently dealt with the cooperatives, thus produced much development on both the cooperatives and the members. In consequence, non-cooperative members were interested more in the cooperative business and applied for membership registration in increasing numbers each year.

3.4 Plan to Rear Successors

The transfer of technology was not made only among staff members, those who acquired technology also conveyed such technology to their colleagues and younger staff by which enabled the proceeding of work went on efficiently , and so the same as the five selected cooperatives.

4. Other Factor Inhibiting Management and Operation

Marketing problem is the real factor inhibiting all the system. In the farm guidance activity that the cooperative promoted of swine production by providing proper guidance of production planning, techniques, credit and pig feed to members. But when those pig were about to sell, it occurred the price was so low as the members had to suffer lose. Such of this price fluctuation is out of control by the cooperatives but creates problems whenever a member suffer lose such as credit problem consequently.

V. NECESSITY FOR FOLLOW - UP COOPERATION

V. Necessity for Follow-up Cooperation

1. Necessity for Extension of Cooperation Period

The cooperation period seems necessary to be extended. Since the economic structure of Thailand has been changing which effects to decrement of agricultural area whereby the manner of agricultural farm becomes more intensive. Besides, unstable price of commodities and agricultural products is still a hard problem for agricultural business. To cope these situation, it requires utmost efficiency of production management. The five selected cooperatives are not different. Through the integrated cooperative system or the total system approach have been strengthened and be able to increase agricultural productivity, promote agricultural marketing and improve economic and social well being of their members at present are not enough for being the absolute model for agricultural cooperatives. The competent of the selected cooperatives for their self-enlightment is to be strengthen to preserve and promote satisfactory achievements obtained by the implementation of the Agricultural Cooperative Promotion Project in Thailand.

2. Specifics of Follow-up Cooperation and How to Extend Follow-up Cooperation

2.1 Sectors which Require Follow-up Cooperation

The sectors which require follow-up cooperation are as the same as model activities in line with the following fields : farm guidance, cooperative management, marketing and purchasing business, credit business and on-the-job training. However, it is considered that an additional of marketing cooperation should be also implement together with the follow-up cooperation.

2.2 Specifics of Follow-up Cooperation

(1) Since it is prior described that marketing problem especially of unstable and fluctuation of commodity price in Thailand is a hard problem for agricultural business including agricultural cooperatives. The root of the problem is effected by both local and international trade situation so that, to cope and solve this problem, only local marketing strategies are not enough. A possible method to attain solution for the problem is to broaden international market for agricultural product by which would raise up local market price of those products. Concerning to the Agricultural Cooperative Promotion Project in Thailand, a marketing cooperation becomes necessary to assist achievement of the Project

This marketing cooperation may be implemented within possible policy by broaden Japanese market for commodity and agricultural products from Thailand, or by direct transaction between Thai agricultural cooperatives and Japanese agricultural cooperatives.

(2) Dispatch of two long-term experts capable for total management of cooperative activities. The recommended follow-up cooperation could be done through experts with comprehensive knowledge and experience of cooperatives, rather than sector specialists who have been assigned for the Project.

(3) Dispatch of short-term experts if necessary. When and where it is considered imperative, the new assigned experts could be supported by specialist(s) who work(s) on ad-hoc basis.

(4) Provision of equipment.

(5) Counterparts' training in Japan.

2.3. Period of Time Required for Follow-up Cooperation

Period of the cooperation will be two (2) years.

2.4. Expected Impact

The five agricultural cooperatives will play a leading role activities in agricultural development and marketing through the total system approach.

APPENDICES

TABLE 1 Comparison of Average Value of Service Utilized per Cooperative Member in 1984 and 1993

No.	Name of Agricultural Cooperatives	Financial Year 1984			Financial Year 1993		
		Volume of Business in Total (Baht)	Memberships (Household)	Average Value of Service per Member (Baht)	Volume of Business in Total (Baht)	Memberships (Household)	Average Value of Service per Member (Baht)
1	Muang Nakhonraichasima Agri. Coop.	15,322,000	1,316	11,643	44,677,000	1,910	23,391
2	Chakkaraj Agri. Coop.	5,628,000	1,411	3,989	46,711,000	2,620	17,829
3	Pakhongchai Agri. Coop.	15,418,000	2,300	6,703	31,337,000	2,600	12,053
4	Phimai Agri. Coop.	44,038,000	2,755	15,985	193,090,000	4,041	47,783
5	Khongsamakki Agri. Coop.	5,399,000	2,071	2,607	72,083,000	3,194	22,568
	TOTAL	85,805,000	9,853	8,709	387,898,000	14,365	27,003

- Total Volume of Business Increases to be 452%

- Average Volume of Services utilized per Member increases to be 310%

Table 2 Financial and Business Information of Agricultural Cooperatives
Under the Agricultural Cooperative Promotion Project in Thailand

Muang Nakhonratchasima Agricultural Cooperative, Ltd.
Unit : Thousand Baht

No.	Description	Financial Year										
		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
1	Membership	1,316	1,257	1,211	1,238	1,340	1,387	1,570	1,893	1,901	1,910	
2	Cooperative Staff (person)	8	8	9	9	11	13	13	14	14	14	
3	Operation Fund	18,062	19,073	20,660	20,725	20,809	24,452	26,714	35,868	38,122	41,160	
4	Cooperative Own Fund	3,787	4,411	5,168	6,107	6,783	7,869	10,239	12,382	13,621	14,302	
5	Percentage of Cooperative Own Fund	19.97	23.13	24.77	29.61	32.60	32.18	38.33	34.52	35.73	32.39	
6	Total Volume of Business	15,322	13,495	14,081	14,736	17,766	26,490	34,705	46,526	42,179	44,677	
6.1	Deposit from Members	1,413	1,217	1,140	776	1,759	4,569	5,933	8,928	5,147	9,546	
6.2	Loans Providing to Members	5,772	8,356	9,695	11,987	13,471	17,345	22,115	28,821	27,582	28,803	
6.3	Purchasing of Farm Inputs and Customer Goods	2,043	3,070	1,560	1,497	2,088	2,600	4,368	7,945	8,875	4,160	
6.4	Collecting, Processing and Marketing of Members' Products	6,094	852	1,666	276	448	1,800	2,289	589	575	1,942	
6.5	Providing Farm Machinery Service								243		226	
7	Annual Profit		520	832	954	513	642	1,768	1,446	633	295	

Table 3 Financial and Business Information of Agricultural Cooperatives
Under the Agricultural Cooperative Promotion Project in Thailand

Chakkraj Agricultural Cooperative., Ltd.
Unit : Thousand Baht

No.	Description	Financial Year										
		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
1	Membership	1,411	1,366	1,341	1,413	1,464	1,562	1,788	2,146	2,362	2,620	
2	Cooperative Staff (person)	8	7	7	8	8	9	10	12	16	14	
3	Operation Fund	7,955	9,750	10,766	11,318	12,851	15,265	20,434	24,049	27,446	34,448	
4	Cooperative Own Fund	2,792	3,089	3,913	4,820	5,785	6,847	8,099	8,933	10,939	12,822	
5	Percentage of Cooperative Own Fund	35.10	34.83	36.35	42.59	45.02	44.85	39.63	37.14	39.86	37.22	
6	Total Volume of Business	5,628	7,952	11,706	14,220	16,261	21,018	31,042	35,383	33,736	46,771	
	6.1 Deposit from Members	205	349	1,013	1,114	1,657	3,219	5,135	5,256	3,635	5,332	
	6.2 Loans Providing to Members	4,085	6,528	6,989	10,626	11,845	13,850	18,366	20,812	22,215	30,911	
	6.3 Purchasing of Farm Inputs and Customer Goods	1,096	1,075	1,704	2,023	2,276	3,302	5,003	5,963	6,266	6,346	
	6.4 Collecting, Processing and Marketing of Members' Products	242	-	-	455	455	608	2,492	3,294	1,446	4,058	
	6.5 Providing Farm Machinery Service	-	-	-	2	27	39	46	58	170	124	
7	Annual Profit	272	282	257	492	518	568	564	47	711	637	

Table 4 Financial and Business Information of Agricultural Cooperatives
Under the Agricultural Cooperative Promotion Project in Thailand

Pakthongchai Agricultural Cooperative., Ltd.
Unit : Thousand Baht

No.	Description	Financial Year										
		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
1	Membership	2,300	2,836	2,636	2,608	2,636	2,597	2,544	2,606	2,618	2,600	
2	Cooperative Staff (person)	9	10	10	10	12	12	13	15	15	15	
3	Operation Fund	23,941	28,315	30,661	29,485	30,940	30,499	31,924	37,508	40,989	44,447	
4	Cooperative Own Fund	8,385	10,077	11,333	12,731	13,625	14,858	15,989	16,795	17,608	18,612	
5	Percentage of Cooperative Own Fund	35.02	35.59	36.96	43.18	44.04	48.72	50.08	44.78	42.96	41.87	
6	Total Volume of Business	15,418	14,837	11,066	12,159	20,436	21,778	38,267	33,826	31,095	31,337	
	6.1 Deposit from Members	608	704	558	4,521	8,828	9,739	10,247	3,305	3,752	3,218	
	6.2 Loans Providing to Members	13,321	12,195	8,724	6,703	9,388	9,915	17,352	20,517	16,820	16,614	
	6.3 Purchasing of Farm Inputs and Customer Goods	1,489	1,938	1,684	935	1,680	2,027	5,155	5,348	4,121	5,817	
	6.4 Collecting, Processing and Marketing of Members' Products	.	.	.	.	.	.	6,431	4,598	3,602	5,688
	6.5 Providing Farm Machinery Service	.	.	.	.	340	97	81	60	.	.
7	Annual Profit	996	1,254	1,237	1,544	1,115	1,260	982	572	503	633	

Table 5 Financial and Business Information of Agricultural Cooperatives
Under the Agricultural Cooperative Promotion Project in Thailand

No.	Description	Financial Year									
		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
1	Membership	2,755	2,842	2,986	3,032	3,141	3,177	3,230	3,382	3,624	4,041
2	Cooperative Staff (person)	10	11	15	16	18	20	25	25	25	31
3	Operation Fund	58,094	62,162	69,769	62,131	66,049	69,607	73,415	80,291	100,464	127,560
4	Cooperative Own Fund	18,722	21,837	25,487	30,061	34,494	39,844	45,460	50,636	57,467	64,714
5	Percentage of Cooperative Own Fund	32.23	35.13	36.53	48.38	52.22	57.24	61.92	63.07	57.20	50.74
6	Total Volume of Business	44,038	43,624	45,003	40,277	51,261	79,132	94,668	116,015	150,848	193,000
	6.1 Deposit from Members	671	2,181	1,756	1,723	6,717	11,387	18,093	26,327	32,473	39,920
	6.2 Loans Providing to Members	35,871	34,766	28,522	30,000	34,871	47,237	55,600	66,106	74,978	85,719
	6.3 Purchasing of Farm Inputs and Customer Goods	7,037	6,557	7,801	6,653	7,858	11,745	15,363	16,212	19,344	34,964
	6.4 Collecting, Processing and Marketing of Members' Products	459	-	6,924	1,861	1,962	8,685	5,534	7,216	23,940	31,980
	6.5 Providing Farm Machinery Service	-	-	-	40	53	76	98	154	113	507
7	Annual Profit	2,663	2,779	3,636	4,629	4,515	4,972	5,388	4,880	6,686	7,786

Phimai Agricultural Cooperative, Ltd.
Unit : Thousand Baht

Table 6 Financial and Business Information of Agricultural Cooperatives
Under the Agricultural Cooperative Promotion Project in Thailand

Khongsamakki Agricultural Cooperative., Ltd.
Unit : Thousand Baht

No.	Description	Financial Year										
		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
1	Membership	2,071	2,050	1,995	2,082	2,337	2,573	2,807	2,960	3,025	3,194	
2	Cooperative Staff (person)	8	8	8	9	9	12	20	24	16	26	
3	Operation Fund	12,879	14,893	14,952	17,941	23,395	29,600	36,416	51,843	67,597	72,637	
4	Cooperative Own Fund	6,836	7,883	9,387	11,347	13,598	15,865	18,471	20,234	23,286	24,764	
5	Percentage of Cooperative Own Fund	53.08	52.93	62.78	63.25	58.12	53.60	50.72	39.03	34.45	34.09	
6	Total Volume of Business	5,399	8,441	14,082	18,333	22,307	32,592	42,743	50,003	65,360	72,083	
	6.1 Deposit from Members	189	358	1,616	1,749	2,132	4,711	8,172	5,920	4,864	5,971	
	6.2 Loans Providing to Members	4,608	7,290	11,605	15,683	16,700	22,738	25,753	32,641	34,711	41,583	
	6.3 Purchasing of Farm Inputs and Customer Goods	252	774	800	891	3,343	3,447	7,205	8,393	12,496	14,926	
	6.4 Collecting, Processing and Marketing of Members' Products	350	19	61	-	-	1,440	549	733	7,293	7,476	
	6.5 Providing Farm Machinery Service	-	-	-	10	132	256	1,064	2,316	5,996	2,127	
7	Annual Profit	739	929	1,279	1,481	1,534	1,521	1,921	1,709	2,387	2,100	

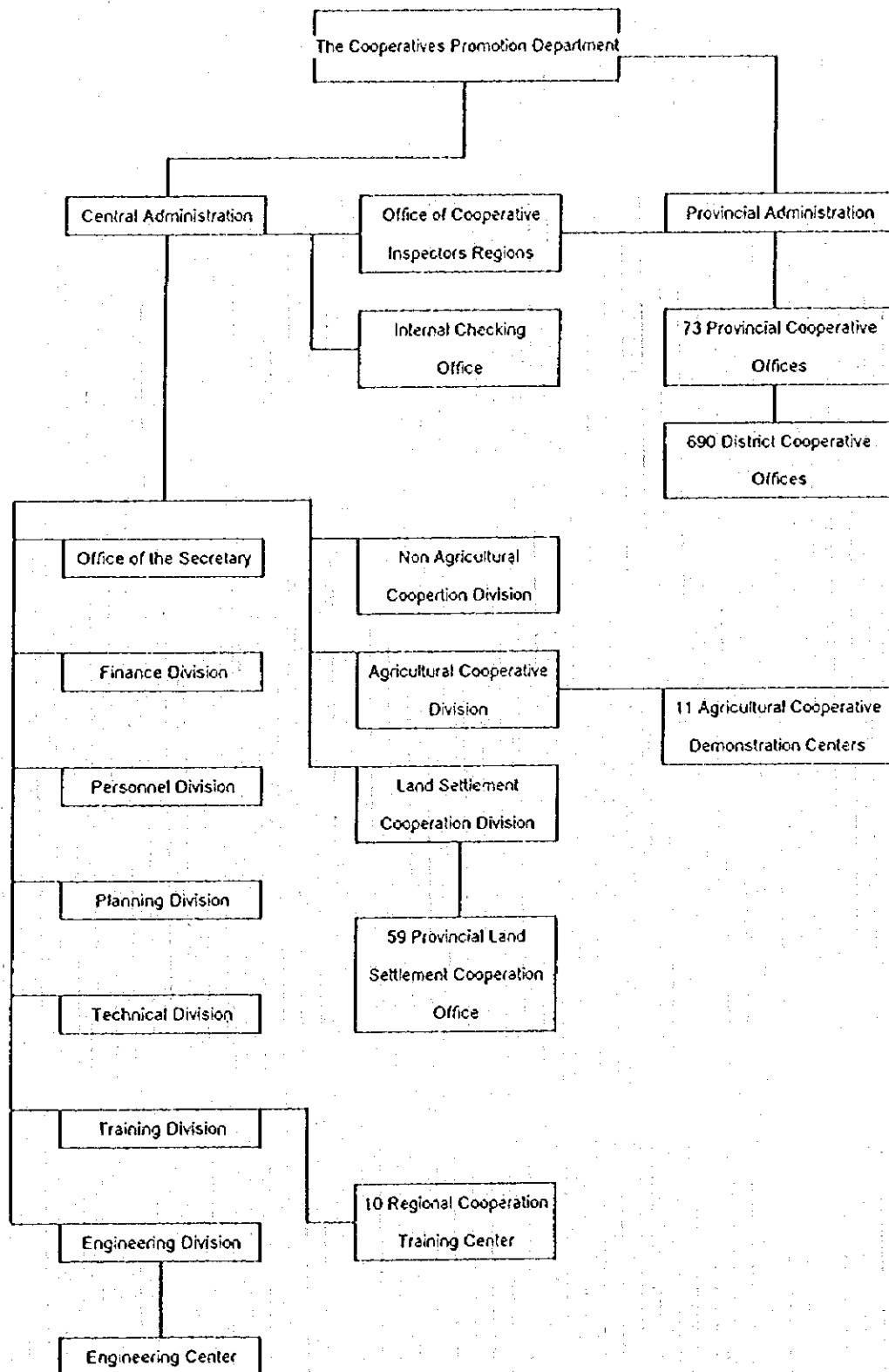


Figure 1 : Organizational Structure of the Cooperatives Promotion Department (CPD) During the Project Implementation

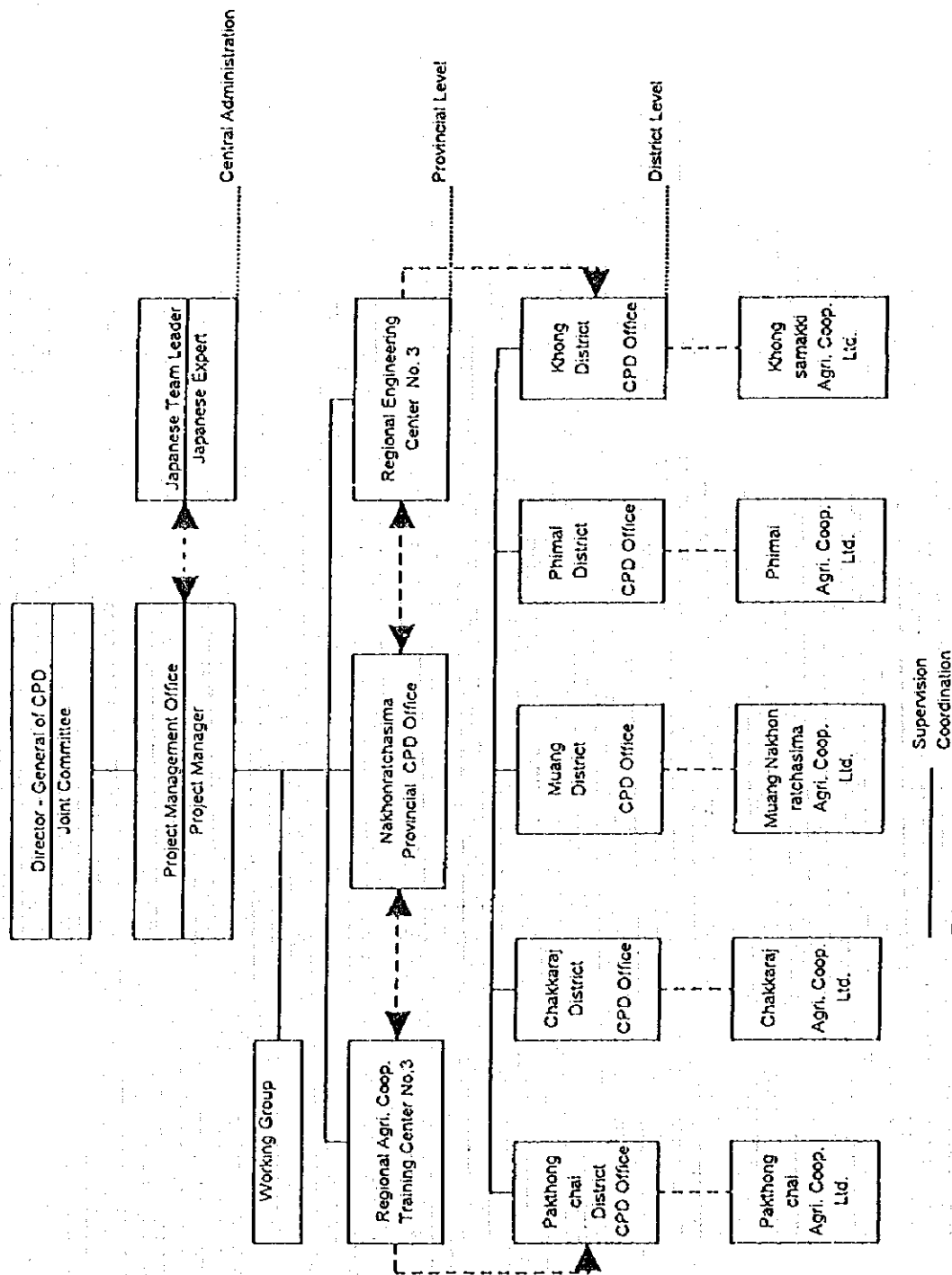


Figure 2 : Organization Chart of Agricultural Cooperative Promotion Project in Thailand

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