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1. 要請書 (T/R)

SUMMARY FORMAT VII: DEVELOPMENT STUDY

				Date	e. 7th August 200	0 1/4	
Sector	Rural De	Rural Development					
Development issue Promot		ı	ng participations of farmers and local governments in rural				
		and agricultural planning, and					
Natura		Natural r	resources management for sustainable development				
Title of childre Childre			n Application	of Partic	rinatory Plannin	o in Rural and	
			on Application of Participatory Planning in Rural and ural Development in the Lam Pa Chi River Basin				
		(Previous: Study on Participation —Oriented Rural and Agricultural					
(110000		(1 10 110 4.	Development Project in The Lam Pa Chi River Basin)				
Туре	☑Master	Plan	☑ Feasibility	Study	□Detailed	Design	
Í	□Detaile	ed D.(Yen Loan related) □Follow up			p		
	□Small-s	scale development study/research conducted by local institutions			cal institutions		
Request	□New	ew 🗹 Continual (A title has been changed.)					
Study area (km from Bangkok)			Ratchaburi & Kanchanaburi Provinces (60 to 100 km)				
			Please see a location map attached				
Implementing agency			Royal Irrigation Department				
and Cooperating agencies			Departments of Ministry Agriculture and Cooperatives				
			Other Governments and Local Agencies				
			Local Administration Offices				
Ministry concerned			Ministry of Agriculture and Cooperatives (MOAC)				
· ·		Ministry of Interior and others required will cooperate.					

Justification of the Study

Information on the sector: (present conditions, problems, sectoral development policy, etc.)

The Lam Pa Chi area is one of the sub-basins of the Mae Klong river basin where a master plan for water resources has developed in 1970's, but remains as a last tip of rural and agricultural development in the basin, because of difficult access to water resources. Since there is in the current situation no opportunity to further increase in amount of water resources in the area, development potential of the area has not yet been realized.

In the Lam Pa Chi area agriculture is a dominant activity and mainly produces upland crops such as sugar cane as law materials for agro-industry, vegetables to be supplied to urbanite. However, the area suffers from frequent flood and drought in the recent years, because of lack of water management with the basin-wide view. This occurrence brings a drop of crop production and beats regional economy, and also resorts to hardship to the rural people.

To eliminate the constraints above in the area the study will elicit a project proposal in applying participatory approach, which is less experienced but required to develop an acceptable plan for the rural people, and in employing the following step.

Taking into account both of restriction of water resources management in the basin and of necessity of irrigation development with new concepts (especially for upland crops), allocation of the water resources of the basin with participation of the agencies concerned in various water uses, and an irrigation and drainage project of the Lam Pa Chi area with participation of farmers and community-based organizations and other bodies to be benefited by the project will be drawn.

Background of the proposal (Project's priority in the National Development Plan<1997-2002>and other development programs):

The new paradigm for development is introduced in the Eighth National Development Plan (ENDP) to shift from growth-oriented to people-centred development. One of its main procedures is to apply a bottom-up approach through participation of people. This study will fit to the above-said approach and also contribute to human resources development in less experienced fields of project planning.

A project proposal to be formulated in the study will introduce the rural people to play as one of key members in project formulation and to receive benefits deriving from the project, as stipulated in the ENDP.

Name of Person/Institution who found/identified the study:

The Royal Irrigation Department associated with JICA experts will lead the study. A committee set with the Departments of the Ministry of Agriculture and Cooperatives, and governments and other agencies concerned in water uses will organize a consultative group to cooperate in the study.

Short-term and long-term objectives of the study:

A long-term objective is to establish project planning in rural and agricultural development applied participatory approach, and the study will directly respond to the short-tem objectives as follows:

- To show a project proposal on the rural and agricultural development applied participatory approach in its planning: and
- To increase knowledge of project planning in irrigation and drainage development. (in fields of water allocation, irrigation method, cropping, marketing and so on.)

Target to be achieved based on the study result:

- To create understanding in participatory rural and agricultural planning.
- To recognize new concepts on irrigation methods, cropping plan based on water availability, demand in market and so on.
- To prepare an acceptable development plan on irrigation and drainage considering water balance in the basin.

Details of beneficiaries:

(target groups, estimated number of beneficiaries, etc.)

Beneficiaries of a proposed project and major target groups will be a) small land-holder farmers such as sugar cane and vegetable growers who support agricultural activities in the basin, b) agro-industries i.e. sugar cane factories and agro-processing, and c) water users e.g. users of domestic water.

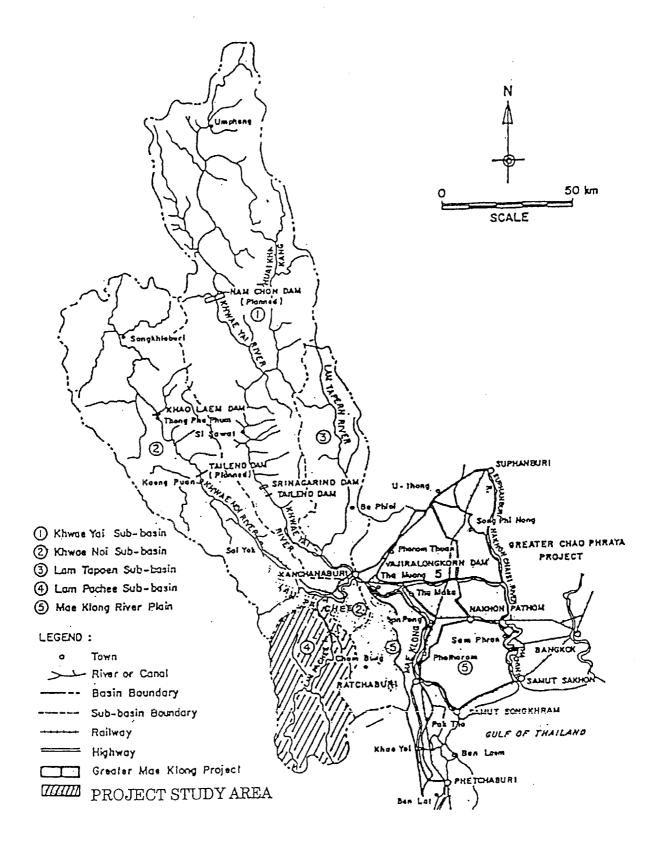
Another target group is government officials of water and agricultural sectors, mainly in the Royal Irrigation Department, involved in the study.

3/4 Scope of the study (main study items) 1 Basin-wide water balance study to assess availability of water in the basin. 2 Provision of information to support the committee activities. 3 Employment of appropriate techniques in irrigation methods, cropping and landuse based on allocated water resources for development. 4 Formulation of optional plans for consultation with stake holders. (possibly with cost sharing arrangement on beneficiaries of the project.) 5 Identification of approaches to reflect ideas developed in participation of the rural people. 6 Proposal on an integrated development plan on agricultural water management in the Lam Pa Chi area. 7 Case study on water sharing in river basin(s) of Japan. Desirable or scheduled times of the commencement of the study: Your earliest convenient date. Relevance to other JICA cooperation activities: The master plan study for the Greater Mae Klong River Basin Development Project was conducted late 1970's where developing process of the basin was phased in accordance with the water resources development. Based on the recommendation of the study, the feasibility study on the Kanphaeng Sean Irrigated Agriculture Development in the Mae Klong River Basin was carried out, and its pilot project has been implemented. Water allocation should take an holistic approach into account in order to maximize water utilization of the Lam Pa Chi river basin. Relevance to projects conducted by international organizations or other donors: No relevance is established. The World Bank had contributed in technical cooperation and financing on irrigation development project of the lower Mae Klong river basin. Security situations of the site:

No problem has seen.

SUMMARY FORMAT VII: DEVELOPMENT STUDY

			4/4
Estimated cost			
Project cost	million baht (approximately)		
Study cost	million baht (approximately)		
Prospect for fund	ling		
Expected funding	g source for the project based on the result of the study:		
│ ☑Thai governme	nt -∕ÍYen loan □World Bank □ADB		
□Others () □not planned yet		
Schedule of the p		-	
☐Budget secured	d already □Put on PIP (Public Investment Program)		
	equested to funding agency □Not put on PIP		
☑Not requested y	yet □No plan		
			
Implementation o			
	re necessary budget by the implementing agency for smooth in	ıplem	rentation
of the study			
	be possible Some difficulties Impossible Others (<u>.</u>	
Possibility to secure necessary officials/engineers by the implementing agency for the study			
	be possible □Some difficulties □Impossible □Others (<u> </u>	
	ovide necessary service by the implementing agency	tor	smooth
implementation of	rbe study rbe possible □Some difficulties □Impossible □Others (`	
Possibility to prov	ride basic information: (statistical data, etc.)	/	
	be possible Some difficulties Impossible Others (١	
Di cosible Dividy	be possible. Hearing dimediales. Himpossible. Heariers (
□The official prop	posal including the terms of reference is required to be attact	hed v	with this
summary format.			
mo	(A)	_	
□Contact for further information Mr/Ms. Chatchai Boonlue Tel: 669-5040			
	Chief of Policy and Project Coordinating Sec	TION	



PROJECT AREA MAP

APPLICATION FORM FOR JAPAN'S DEVELOPMENT STUDIES

. - - -

Date of entry; month <u>way</u> year, <u>1998</u>				
Applicant: the Government of <u>the Kingdom of Thailand</u>				
1. Project digest				
(1)Project Title: Study on Application of Participatory Planning in Rural and Agricultural Development in				
the Lam Pa Chi River Basin				
(previous: Study on Participation-oriented Rural and Agricultural Development Project in the Lam Pa Chi River Basin)				
(2) Location (province/country name): Ratchaburi and Kanchanaburi Provinces/ Thailand				
(city/town/village name): <u>Kanchanaburi</u>				
from the metropolis: abouttwo(2) hours' (ride/flight				
(3) Implementation Agency				
Name of the Agency: The Royal Imigation Department (RID), the Ministry of Agriculture and Cooperatives (MOAC) in cooperation with other concerned agencies				
Mainly Other Departments of the MOAC and Local Administration Offices				
Number of Staff of the Agency: <u>Eleven (11) in total of planner, engineers, hydrologist, economist etc.</u>				
(on a category basis)				
Budget allocated to the Agency: The Royal Irrigation Department				

(4) Justification of the Project

- Present conditions of the sector.

Potential of development in the Lam Pa Chi sub-basin of the Mae Klong river basin has not yet enhanced because of restricted access to water resources. Difficulty in water management in the Lam Pa Chi basin currently brings drought (water shortage) in the dry season and flood (excess water) in the rainy season. Agricultural production is often damaged by the drought and flood, and decrease of the agricultural products undermines regional economy of the Lam Pa Chi basin where agriculture and agro-industries are dominant.

- Sectoral development policy of the national/local government:

A study on basin-wide water balance directly contributes to efficient use of water as natural resources. And furthermore, this study addicts itself to the rural development which is one of key factors focussed in the National Development Plans.

This study willingly takes a participatory approach as a most obvious action to practice the new paradigm for development stated in the current National Development Plan and taking a direction of the next Plan into account. In addition, officials of the central and the local governments are expected to take a role that their presence should be in function on an irrigation and drainage project formulation. This work focuses on taking a part of human resources development.

All these are to be the key issues appeared in the program approach applying the current cooperation between Thailand and Japan.

13年度 開発調査要望調査

- Problems to be solved in the sector.

Constraints derived from difficulty of water allocation and management will be eliminated, and then agricultural development of the Lam Pa Chi sub-basin will be activated with water resources having limited availability and can be enhanced in applying people-centred development.

The study will introduce a project proposal to boost agriculture and benefit small-scale farmers, as well as regional economy, in the project area.

- Outline of the Project:

This study, through its execution, shows a new concept in project planning of an irrigation and drainage project, including irrigation methods, cropping plan based on water availability etc. It tries a participatory approach where understanding of beneficiaries is needed to share equitable benefits of the project. Throughout applications of the new concept and participatory approach, the study will propose a project to be acceptable and agreeable by its beneficiaries and planners concerned.

- Purpose (short term objective) of the Project:
 - To show a project proposal on the rural and agricultural development applied basin-wide water balance study and participatory approach in its planning; and
 - To increase knowledge of project planning in irrigation and drainage development in the fields of water allocation, irrigation method, cropping, marketing and so on.
- Goal (long term objective) of the Project:
 - To establish project planning in rural and agricultural development applied participatory approach in conformity with the current and next National Development Plans.

- Prospective beneficiaries:

The primary beneficiary of a project proposed with the study are small land-holder farmers such as sugar cane, vegetable growers who support agricultural activities and become irrigation water users in the Lam Pa Chi sub-basin. Other beneficiaries will be agro-industries of sugar cane and agro-processing, and water users e.g. uses of domestic water.

It also counts on that the procedure taken in this study directly benefits on officials of the central and local governments presented in water and agricultural sectors. RID officials shall particularly receive the significant benefit with improving their approach in project planning.

- the Project's priority in the National Development Plan/Public Investment Program:

This study shall create a basis on the policy implementation of the National Development Plans that is to empower people to play an initiate role in development process and to receive a fair share of the benefit of the development project. It will fit to the procedure which is applied in a bottom-up approach through people participation, as well as in human resources development in project planning.

Accordingly this study should have a high priority as it will introduce a new system of project planning and directs a procedure to be planned to implement the Plans.

(5) Desirable scheduled time of the commencement of the Project:					
month	June	year _	2001	(at your soonest convenient date)	

(6) Expected funding source and /or assistance (including external origin) for the Project:

It is basically envisaged that the project, outcome of this study, will be implemented with the local budget prepared by the Government of Thailand. An action such as budget request may be arranged after a project proposal is shaped. A JBIC loan will be considered, if it is possibly fit its funding condition.

It may be considered as a new arrangement that some part of funding will be borne by local governments and/or beneficiaries.

(7) Other relevant Projects, if any.

Application on the participatory approach will be primarily practiced in a project planning of irrigation and drainage. It is a first case in applying such the project planning process towards a change for betterment.

2. Terms of Reference of the proposed Study

(1) Necessity / Justification of the Study:

This study will be conducted with the participatory approach taking the new concept in conformity with the National Development Plans. A project proposal developed to be acceptable and agreeable by local people, especially small-scale farmers, of the Lam Pa Chi sub-basin shall be required to introduce a new approach in irrigation and drainage project planning.

There are serious constraints to develop the project area and no opportunity has been realized because of difficulty on water resources management. The area in recent years suffers from occasional drought and flood. The project area remains undeveloped as a last tip in the Mae Klong river basin of which most of available water resources has already been utilized.

The study will provide an opportunity to develop irrigation and drainage of the Lam Pa Chi sub-basin, as well as take the new approach.

(2) Necessity/Justification of the Japanese Technical Cooperation:

The participatory approach is a less experienced arrangement in the project planning, though it becomes significant requirement in a development project of the country.

It is understood that many irrigation and drainage projects have been planned and implemented in employing the participatory approach in Japan. This hopefully provides a basis on the approach.

The JICA was concerned on the master plan study for the Greater Mae Klong river Basin Development Project to set up developing process in water resources of the Basin late 1970's. And under the JICA program the feasibility study on the Kanphaeng Sean Imigated Agriculture Development was executed, and its pilot project has been implemented. To plan imigation and water resources management at this moment water allocation should take a holistic approach into account. Reestablishment of water resources management is a basic requirement to maximize its utilization in the Mae Klong basin, as well as the Lam Pa Chi area of its less developed sub-basin. The previous cooperation shall help the new planning for formulation of a project proposal.

(3) Objectives of the Study:

The study aims to establish a project planning where a participatory approach is applied with a new concept to determine its component sub-plans, and addresses one of the urgent subjects that is to respond to people-oriented development being required in the National Development Plans.

The study will prepare a project proposal on rural and agricultural development of the Lam Pa Chi sub-basin in practicing participatory approach on trial basis. To develop an acceptable planning by the people in the project area, new concepts on planning components such as water, and irrigation requirement, irrigation method, cropping planning based on water availability, should be prepared.

The study will give government officials their better understanding and improved knowledge on new approaches in the imigation planning through its execution. The study will explain an idea to be supported by the people of the project area, and receive concurrence to be ready for its implementation.

(4) Area to be covered by the Study:

The Lam Pa Chi area, it is about 2,500 km², of the sub-basin of the Mae Klong river basin, located in the Ratchaburi and Kanchanaburi Provinces.

A project proposal applying the participatory approach will concentrate on imigation and drainage areas of several blocks of imigation systems, and the target area will be decided to formulate a development plan.

(5) Scope of the Study:

- 1. Drafting and setting up of an implementation plan of the study.
- 2. Basin-wide water balance study to assess availability of water in the basin.
- 3. Provision of information to support activities of the committee on which the government agencies concerned participates.

Data collection on this section will have several purposes such as date detected to determine required factors for the project, data for selection of rationale water utilization, data to make comparative optional plans, and create basis on information to be supplied in the meetings. Collected data and information will be classified and arranged for the respective purpose.

- Selection and employment of appropriate techniques in imgation methods, O&M implementation, cropping and land use based on allocated water resources for development.
- 5. Formulation of optional plans for consultation with stake holders.
- 6. Identification of approaches to reflect ideas developed in participation of the rural people.

Through meetings and/or workshops to execute activities of the above 3, 4 and 5, the approaches to be taken in the study will be confirmed and the idea will be reflected and become a project proposal of rural and agricultural development in the Lam Pa Chi sub-basin.

In this process participation will be organized for government officials, beneficiaries and people to be relevant, and arranged at adequate timings.

- 7. A project proposal on an integrated development plan on water resources management for rural and agricultural development in the Lam Pa Chi area.
- 8. Case study on water sharing in a river basin(s) of Japan.

(6) Study Schedule:

The study will take thirty (30) months after its commencement. An implementation plan on the study will be formulated to guide participation on agencies/organizations concerned at its initial stage.

(7) Expected Major Outputs of the Study:

Government officials who have prepared the project and understand new concept and participatory approach in imigation and drainage project planning.

A project proposal of water resources management on rural and agricultural development of the Lam Pa Chi sub-basin. The proposal will include components (a) water balance study in the basin, (b) applied irrigation method, and (c) other technical documents to be employed in the project.

(8) Possibility to be implemented/Expected funding resources:

It takes into account that the project should be executed to show an outcome of this study applying participatory approach in conformity with the National Development Plans, and be implemented with the local budget prepared by the Government of Thailand. An action such as budget request, including possible external fund seeking, will be arranged after a project proposal is shaped. In addition it may be considered as a new arrangement that some part of funding will be borne by local governments and/or beneficiaries.

(9) Request of the Study to other donor agencies, if any:

No request has been submitted to other donor countries. This study is the first category in the field of planning on imigation and drainage.

(10) Other relevant information:

3. Facilities and information for the Study

(1) assignment of counterpart personnel of the implementing agency for the Study: (number, academic background, etc.)

Eleven (11) counterparts at division directors and/or experts levels will be directly assigned to the study in the fields of planner, engineer, hydrology, agricultural economy, agronomy, rural development, public relation and so on. Their staff will be mobilized whenever it is necessary.

(2) Available data, information, documents, maps, etc. related to the Study:

Data and information, including maps and document, collected and accumulated for the project planning related to the Lam Pa Chi area, and some parts of the Mae Klong basin will be provided by the RID and related agencies.

(3) Information on the security conditions in the Study Area: No problem has seen.

- 4. Global Issues (Environment, Woman in Development, Poverty, etc.)
- (1) Environmental components (such as pollution control, water supply, sewage, environmental management, forestry, biodiversity) of the Project, if any:

Impacts to environment will be considered to be one of the important issues in acquiring people's understanding on the development project and its acceptance by the public.

Environment aspects will be discussed during a course of the study where optional plans will be presented to the beneficiaries.

(2) Anticipated environmental impacts (both natural and social) by the Project, if any:

No serious impacts will be expected since the project shall take naturally and socially minimized negative impacts to its area into account. Compare to traditional development projects, water resources management will develop less undesirable impacts on natural resources. The project will not force its area to change a social system for its success.

(3) Women as main beneficiaries or not:

Women are not a direct and explicit target group in this study. Such an arrangement may not be required to develop the participatory approach where gender issues will get less attention.

(4) Project components which require special considerations for women (such as gender difference, women specific role, women's participation), if any:

Not specific action is taking into account since the study focused on natural resources development where such requirement may not exist.

However, if women groups have active roles in crop production, women's participation will become a important factor to success on the project. In such a case women will be expected to participate in formulation of project planning.

(5) Anticipated impacts on women caused by the Project, if any:

The project will give an opportunity on women to participate in the development project, whenever they join crop production there.

(6) Poverty alleviation components of the Project, if any:

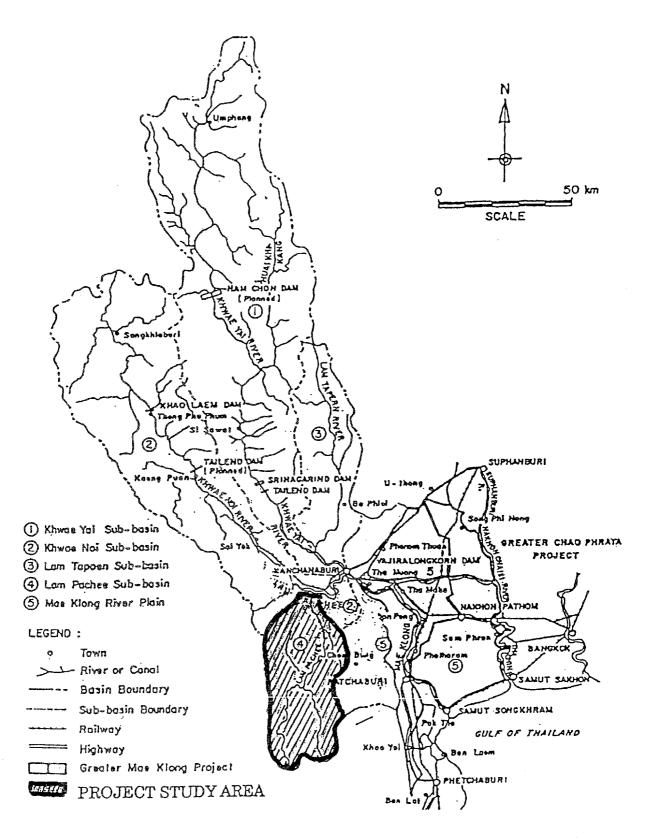
The project proposed by the study will contribute to income generation for small-scale farmers in the area of the Lam Pa Chi sub-basin, though it is not directly tackle the poverty. The project will improve the living standard of the people in the its area.

(7) Any constraints against the low-income people caused by the Project: None.

- 5. Undertakings of the Government of the Kingdom of Thailand
 In order to facilitate the smooth and efficient conduct of the Study, the Government of the Kingdom of
 Thailand shall take necessary measures:
 - (1) to secure the safety of the Study Team,
 - (2) to permit the members of the Study Team to enter, leave and sojourn in the Kingdom of Thailand in connection with their assignment therein, and exempt them from foreign registration requirements and consular fees,
 - (3) to exempt the Study team from taxes, duties and any other charges on equipment, machinery, and other materials brought into and out of the Kingdom of Thailand for the conduct of the Study,
 - (4) to exempt the Study Team from income tax and charges of any kind imposed on or in connection with the implementation of the Study,
 - (5) to provide necessary facilities to the Study Team for remittance as well as utilization of the funds introduction in the Kingdom of Thailand form Japan in connection with the implementation of the Study,
- (6) to secure permission for entry into private properties or restricted areas for the implementation of the Study,
- (7) to secure permission for the Study Team to take all data, documents (including photographs and maps), and materials related to the Study out of the Kingdom of Thailand to Japan, and,
- (8) to provide medical services as needed. Its expenses will be chargeable to members of the Study Team.
- 6. The Government of the Kingdom of Thailand shall bear claims, if any arises against member(s) of the Japanese Study Team resulting from, occurring in the course of or otherwise connected with the discharge of their duties in the implementation of the Study.
- 7. The Royal Imgation Department shall act as leading counterpart agency to the Japanese Study Team and also as coordinating body in relation with other governmental and non-governmental organizations concerned for the smooth implementation of the Study.
- 8. The Royal Irrigation Department will, as the executing agency of the Project, take responsibilities that may arise from the products of the Study.

The Government of the Kingdom of Thailand assures that the matters referred to in this form will be ensured for the smooth conduct of the Development Study by the Japanese Study Team.

		Signed Title: _ On behalf of the Government of	(Mr. Kitcha Polparsi)
Date:	20. SEP. 2000		



PROJECT AREA MAP

2. 実施細則 (S/W)

SCOPE OF WORK

FOR

THE STUDY

ON

APPLICATION OF PARTICIPATORY PLANNING
IN RURAL AND AGRICULTURE DEVELOPMENT PROJECT
IN THE LAM PA CHI RIVER BASIN

IN

THE KINGDOM OF THAILAND

AGREED UPON BETWEEN

THE ROYAL IRRIGATION DEPARTMENT OF

THE MINISTRY OF AGRICULTURE AND COOPERATIVES

AND

THE JAPAN INTERNATIONAL COOPERATION AGENCY

Bangkok, 25 June, 2002

Mr.Mondhian Kangsasitiam

Deputy Director General for Engineering

M. Kampacontion

Royal Irrigation Department

Ministry of Agriculture and Cooperatives

Kingdom of Thailand

Mr. Shinya Nakai

Resident Representative

Japan International Cooperation Agency

Thailand Office

Japan

I INTRODUCTION

In response to a request from the Government of Kingdom of Thailand (hereinafter referred to as the "GOT"), the Government of Japan (hereinafter referred to as the "GOJ") has decided to conduct <u>THE STUDY ON APPLICATION OF PARTICIPATORY PLANNING IN RURAL AND AGRICULTURE DEVELOPMENT PROJECT IN THE LAM PA CHI RIVER BASIN</u> (hereinafter referred to as "the Study") in accordance with the Agreement on Technical Cooperation between the GOJ and the GOT signed on November 5,1981.

Accordingly, the Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the technical cooperation programs of the GOJ, will undertake the Study in close cooperation with the authorities concerned of the GOT.

This document sets forth the Scope of Work for the Study.

II OBJECTIVES OF THE STUDY

The objectives of the Study are:

- 1 To formulate a rural and agricultural development master plan to develop the Lam Pa Chi River Basin with the participation of the community in the study area, and thus contribute toward better living for farm households.
- 2 To carry out technology transfer to Thai counterparts through on-the-job training in the course of the Study.

III STUDY AREA

The Lam Pa Chi River Basin (See Annex I)

IV SCOPE OF THE STUDY

In order to achieve the above objectives, the Study will consist of two (2) phases that will cover the following items:

1 Phase I

Formulation of participation methodology among stakeholders, the draft master plan, and selection of the area for implementing pilot project(s).

- 1.1 Review of previous master plans and existing development projects /plans for the Lam Pa Chi River Basin
- 1.2 Collection and analysis of relevant data and project formulation analysis with the participation of the stakeholders in the study area.

The following items will be studied:

- 1) Management and development potential of water resources
- 2) Participation method of stakeholders in formulating the master plan and implementing the

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pilot project(s).

- 3) Contribution of beneficiaries of projects.
- 4) Others
- 1.3 Conduct of the environmental profile of the basin, and execution of Initial Environmental Examination (IEE) of the pilot project(s) if it is necessary.
- 1.4 Formulation of the draft master plan
- Selection of areas for the pilot project(s) based on criteria set during the study

Phase II

Implementation of the pilot project(s) with the participation of the stakeholders and finalization of the master plan.

- 2.1 Implementation of the pilot project(s) with the following purposes:
 - 1) Thai counterpart personnel will obtain skills for implementing projects for developing river basins with the participating communities.
 - 2) Administrative systems of the organizations concerned will be strengthened.
 - 3) Farming productivity in the study area will increase.
 - 4) The potential of the method applied in the Study for further application in other areas will be verified.
- 2.2 Formulation of the master plan for the Study area taking into consideration the outcome of the pilot project(s).
- 2.3 Diffusion of knowledge and information gained by those concerned with the study through technical transfer seminars and other activities

STUDY SCHEDULE

The Study will be carried out in accordance with the attached tentative work schedule. (See ANNEX II)

VI REPORTS

JICA shall prepare and submit the following reports in English to the GOT:

1 Inception Report

Twenty (20) copies in English at the commencement of the fieldwork(first year) of Phase I.

2 Progress Report (I)

Twenty (20) copies in English at the end of the fieldwork(first year) of Phase I.

3 Interim Report (1)

Twenty (20) copies in English at the commencement of the fieldwork (second year) of Phase I.

4 Progress Report (2)

Twenty (20) copies in English at the end of the fieldwork of Phase I.

5 Progress Report (3)

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Twenty (20) copies in English at the end of the fieldwork(second year) of Phase II.

6 Interim Report (2)

Twenty (20) copies in English at the commencement of the fieldwork(third year) of Phase II.

7 Progress Report (4)

Twenty (20) copies in English at the middle of the fieldwork(third year) of Phase II.

8 Draft Final Report

Twenty (20) copies in English after office work in Japan is completed. The Royal Irrigation Department(hereinafter referred to as the "RID") will provide JICA with its comments on the Draft Final Report within one (1) month of its receipt of the Draft Final Report.

9 Final Report

Thirty (30) copies in English within one(1) month of JICA's receipt of the RID's comments on the Draft Final Report.

VII UNDERTAKINGS OF THE THAI AUTHORITIES CONCERNED

I Specific privileges and other benefits to the Japanese Study Team (hereinafter referred to as "the Team") necessary for the conduct of the Study will be provided in accordance with the Agreement on Technical Cooperation between the GOJ and the GOT signed on November 5, 1981.

2 The RID shall act as the counterpart agency to the Team. The RID shall also act as the coordinating body between the other governmental and non-governmental organizations concerned with smooth implementation of the Study.

- 3 To facilitate the smooth conduct of the study, the RID shall take the following necessary measures in cooperation with other relevant organizations within the laws and regulations in force in Thailand:
 - 3.1 to cooperate in securing the safety of the Team when and as required in the course of the Study,
 - 3.2 to cooperate in securing permission for entry into private properties or restricted areas for the implementation of the Study,
 - 3.3 to cooperate in securing permission for the Team to get access to all data, documents and information necessary for the execution of the Study, and
 - 3.4. to provide medical services as needed. Expenses will be chargeable to the members of the Team

4 The RID shall, at its own expense, provide the Team with the following in cooperation with other organizations:

- 4.1 available data related to the Study,
- 4.2 counterpart personnel,
- 4.3 suitable office space with necessary equipment in Bangkok and the Study sites, and
- 4.4 credentials and/or identification cards.

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VIII UNDERTAKINGS OF JICA

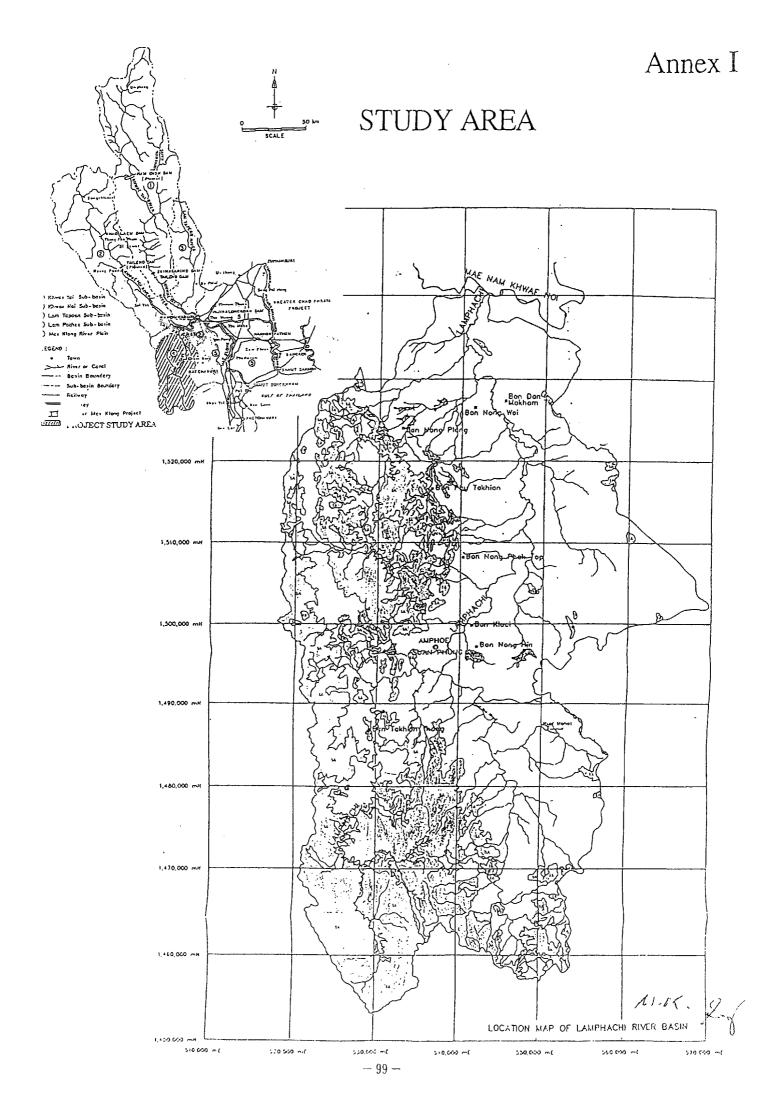
For the implementation of the Study, JICA shall:

- 1 dispatch, at its own expense, the Study team to Thailand, and
- 2 pursue technology transfer to Thai counterpart personnel in the course of the Study.

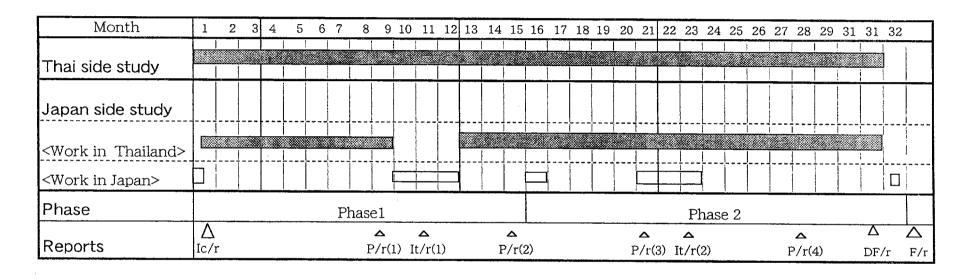
IX CONSULTATION

JICA and the RID shall consult with each other in respect of any matters that may arise from, or in connection with, the Study.

11.K. By



TENTATIVE WORK SCHEDULE



(Remarks) Ic/r : Inception Report

P/r(1): Progress Report(1)
It/r(1): Interim Report(1)
P/r(2): Progress Report(2)
P/r(3): Progress Report(3)
It/r(2): Interim Report(2)
P/r(4): Progress Report(4)
Df/r: Draft Final Report

F/r : Final Report