

9. Pilot Project

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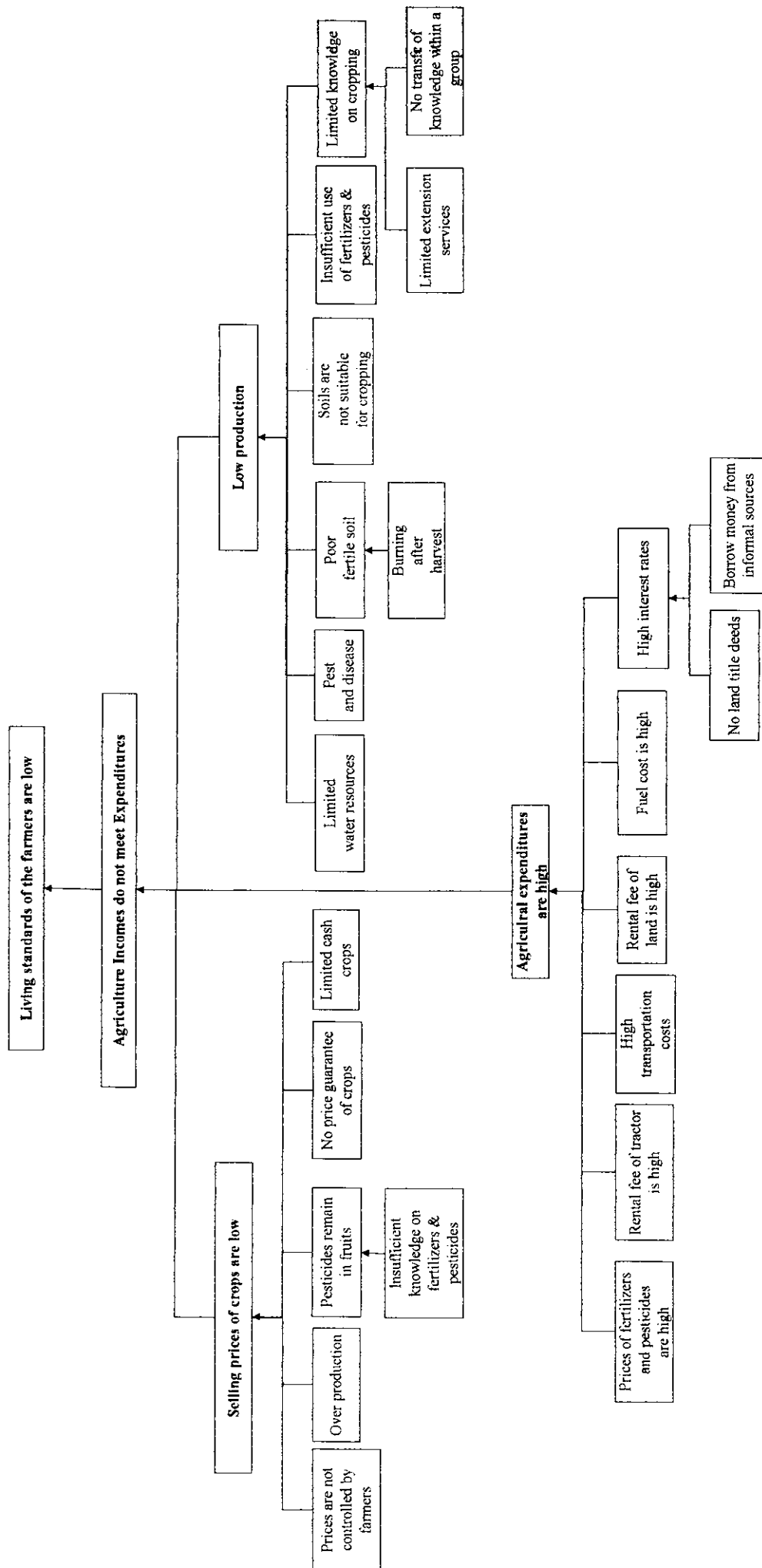
Contents

9.1	Problem Tree, Objective Tree, PDM, and PO in UHMR	9-1
9.2	Problem Tree, Objective Tree, PDM, and PO in BTPW	9-19
9.3	Detail Plans of the Responsible Agencies in UHMR	9-37
9.4	Detail Plans of the Responsible Agencies in BTPW	9-52
9.5	Activity Reports in UHMR	9-55
9.6	Activity Reports in BTPW	9-72
9.7	TOT to TSG	9-82
9.8	TOT to TTC	9-92
9.9	Monthly Monitoring Reports	9-97

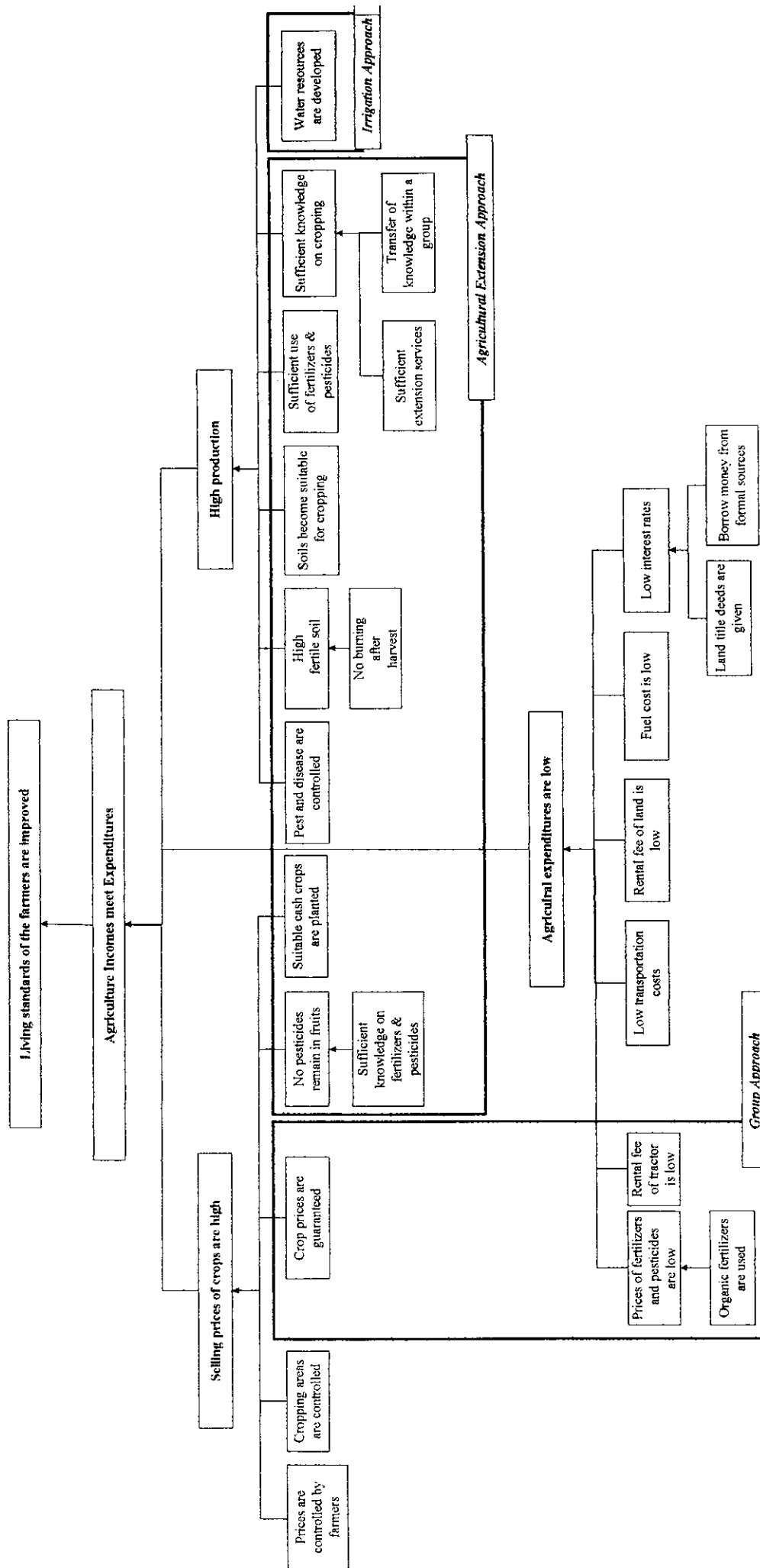
9.1 Problem Tree, Objective Tree, PDM, and PO in UHMR

9.1 Problem Tree, Objective Tree, PDM, and PO in UHMR

Problem Tree in Upper Huai Mahad Reservoir Project



Objective Tree in Upper Huai Mahad Reservoir Project



Project Design Matrix – PDM (0)

Prepared: November 10, 2003

Project Title: Upper Huai Mahad Reservoir Project

Target Area: Nong Chok Village, Tambon Nong Phan Chan, Ban Kha District, Ratchaburi

Target Group: Farmers in the target area, and responsible TTC members (target farmers are to be specified during the implementation stage)

Project Period: From November 2003 to December 2004 (from the planning to evaluation stages)

Note: This PDM is prepared based on the planning workshop held on November 3 to 5, 2003

Narrative Summary	Indicators	Means of Verification	Important Assumptions
Overall goal The living standards of the farmers in the village are improved.	<ol style="list-style-type: none"> 1. Total debts of the whole village households are decreased by 50 % (by 2006). 2. The number of households with high-value assets (car, house, land) is increased by 10 %. 3. The number of households in which no family member works away from home is increased by 10 %. 	Baseline survey	
Project Purpose Agricultural incomes of the target farmers are increased to meet expenditures.	<ol style="list-style-type: none"> 1. Total debts of the whole village households are decreased by 10%. 2. Agricultural incomes of 30 households are increased. 3. Agricultural expenditures of X households are decreased. 	Baseline survey PRA survey	

Narrative Summary	Indicators	Means of Verification	Important Assumptions
<p>Outputs</p> <p>1. The crops are sold at higher prices for the target farmers.</p> <p>2. Agricultural expenditures are reduced for the target farmers.</p> <p>3. Crop productions are increased for the target farmers.</p>	<p>1-1. Average selling price of pineapple is increased from Bt. 2,600/ton to Bt.3,000/ton or high (to be forecasted)</p> <p>1-2. Average selling price of sugarcane is increased from Bt. 580/ton to Bt.600/ton or high, by improving the CCS rate (to be forecasted)</p> <p>1-3. 2 crops are newly planted in Y % of farming area. (e.g. asparagus, baby corn, sweet corn, etc.)</p> <p>2-1. Average expenditures necessary for pineapple growing are reduced by 10 %.</p> <p>2-2. Average expenditures necessary for sugarcane growing are reduced by 10 %.</p> <p>3-1. Average yield of pineapple is increased from 4 to 6 tons/rai (to be forecasted)</p> <p>3-2. Average yield of sugarcane is increased from 10 to 12 tons/rai (to be forecasted)</p>	<p>Baseline survey PRA survey</p>	

Activities	Inputs	Important Assumption
<p>(Common Activities)</p> <p>0-1. The baseline survey is conducted.</p> <p>0-2. PDM(0) and PQ(0) are reviewed with major stakeholders.</p> <p>0-3. The meetings are held to establish the Water Users Group (WUG).</p> <p>0-4. The WUG fund is established and accumulated.</p> <p>0-5. The meetings are held between the WUG and village groups.</p> <p>0-6. The demonstration plots are established for sugarcane and pineapple.</p> <p>0-7. The study tours are conducted.</p> <p>0-8. Meetings are conducted with TTC members.</p> <p>0-9. The monitoring and evaluation surveys are conducted.</p> <p>(Specific Activities for Producing the Outputs)</p> <p>(Output 1: High selling prices)</p> <p>1-1. Trainings are conducted for the improvement of qualities of pineapple and sugarcane.</p> <p>1-2. Trainings are conducted for the improvement of selling prices of pineapple.</p> <p>1-3. Meetings and trainings are conducted on the introduction of new crops.</p>	<p>1. JICA</p> <ul style="list-style-type: none"> - Consultants and local consultants - Budgets (Bt.3.5 million) for project implementation <p>2. Thai Government</p> <ul style="list-style-type: none"> - RID provincial office for survey, design and cost estimate - DOAE, DOCP and LDD for providing trainings - TTC members for technical supports and coordination at the Tambon and village levels (and also as recipients of the trainings) - TSG members for technical supports and coordination at the provincial and district levels <p>3. Farmers</p> <ul style="list-style-type: none"> - Land for pipeline installation and demonstration plots - Labor for construction - Costs for tertiary pipelines - Fund for facilitating group activities <p>4. Sugarcane Factory</p> <ul style="list-style-type: none"> - Establish a demonstration plot for sugarcane and provide trainings 	

Activities	Inputs	Important Assumption Preconditions
<p>(Output 2: Low production costs)</p> <p>2-1. Trainings are conducted on the use of fertilizers and pesticides.</p> <p>2-2. Fertilizers, pesticides and herbicides are purchased by groups.</p> <p>2-3. Organic fertilizers are made or purchased by the farmers, and used in their fields.</p> <p>2-4. Tractors are rented by groups.</p> <p>(Output 3: High production volumes)</p> <p>3-1. Alignment of main and secondary pipelines is discussed and fixed.</p> <p>3-2. Survey, design and cost estimates for pipeline installation are conducted.</p> <p>3-3. Main and secondary pipelines are installed.</p> <p>3-4. Tertiary pipelines are installed.</p> <p>3-5. Trainings are conducted for water management and maintenance.</p> <p>3-6. Trainings are conducted for the improvement of productions of pineapple and sugarcane.</p>		

Note: (1) All indicators are tentative.

(2) PDM (0) shall be reviewed and finalized in early January through the meetings with the stakeholders.

Plan of Operations (0)

Prepared: November 10, 2003

Project Title: Upper Huai Mahad Reservoir Project**Target Area:** Nong Chok Village, Tambon Nong Phan Chan, Ban Kha District, Ratchaburi**Target Group:** Farmers in the target area, and responsible TTC members (target farmers are to be specified during the implementation stage)**Project Period:** From November 2003 to December 2004 (from the planning to evaluation stages)

Note: This PO is prepared based on the planning workshop held on November 3 to 5, 2003

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Costs or Materials	Necessary Conditions
		3	1	2	3	4	5	6	7	8	9	10	11				
(Common Activities) 0-1. The baseline survey is conducted.	- Baseline information of 50 households		■											JICA RID		(Cost of the baseline survey is born separately by JICA.)	
0-2. PDM(0) and PO(0) are reviewed with major stakeholders.	- PDM(1) and PO(1)		■											JICA RID Village Head	Farmers DOAE, DOCP, LDD TTC Sugarcane factory		
0-3. The meetings are held to establish the Water Users Group (WUG).	- Group structure, leader selection, regulations, work plan, etc.		■											RID Village Head	Farmers DOAE TTC		
0-4. The WUG fund is established and accumulated.	- Revolving fund with low interest rates for group activities		■											WUG DOCP	Farmers DOAE, RID TTC	Bt. 160,000 for purchasing group equipment (e.g., sugarcane choppers, squeezers, organic fertilizers)	Members pay member fees to WUG.

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Costs or Materials	Necessary Conditions
		3	1	2	3	4	5	6	7	8	9	10	11				
0-5. The meetings are held between the WUG and village groups.	- Regulations, work plan, monitoring of project activities, etc.													WUG DOCP	Village groups (pineapple and sugarcane groups, housewives, domestic water users, etc.) TTC		WUG acts as the leading group to guide other groups in the village.
0-6. The demonstration plots are established for sugarcane and pineapple.	- 2 plots (1 rai/plot) from 2 households													DOAE Village Head	Production Groups of pineapple and sugarcane Land owners TTC Sugarcane factory		Lands are provided by land owners at no cost.
0-7. The study tours are conducted.	- Exchange visits bet. 2 project sites, etc.													DOAE WUG	Farmers RID DOCP	Bt. 63,000	
0-8. Meetings are conducted with TTC members.	- Regulations, roles and responsibilities													JICA	TTC	Bt. 5,000 for training	
0-9. The monitoring and evaluation surveys are conducted.	- Monitoring and evaluation reports													JICA WUG	RID	(Costs of the M&E surveys are born separately by JICA.)	

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Costs or Materials	Necessary Conditions
		3	1	2	3	4	5	6	7	8	9	10	11				
(Specific Activities)																	
1-1. Trainings are conducted for the improvement of qualities of pineapple and sugarcane.	- Improvement of selling prices of pineapple and sugarcane													DOAE LDD WUG	Production Groups of pineapple and sugarcane TTC Sugarcane factory	Bt. 10,000 for seedlings and other inputs, trainings	Sugarcane factory bears some costs.
1-2. Trainings are conducted for the improvement of selling prices of pineapple.	- Improvement of selling prices of pineapple													DOCP WUG	Production Groups of pineapple TTC	Bt. 5,000 for training	
	- Planting new crops in wider areas													DOAE WUG	Farmers TTC	Bt. 10,000 for seeds and other inputs, trainings	
2-1. Trainings are conducted on the use of fertilizers and pesticides.	- Improvement of use and costs of fertilizers and pesticides													DOAE WUG	Farmers TTC	Bt. 10,000 for inputs and trainings	
2-2. Fertilizers, pesticides and herbicides are purchased by groups.	- Improvement of costs of fertilizers, pesticides and herbicides													DOCP WUG	Farmers TTC		
2-3. Organic fertilizers are made or purchased by the farmers, and used in their fields.	- Improvement of use and costs of fertilizers													LDD WUG	Farmers TTC	Bt. 4,000 for trainings	
2-4. Tractors are rented by groups.	- Improvement of costs of tractors													DOCP WUG	Farmers TTC		

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Costs or Materials	Necessary Conditions
		3	1	2	3	4	5	6	7	8	9	10	11				
3-1. Alignment of main and secondary pipelines is discussed and fixed.	- Alignment of main (L=1,675m) and secondary pipelines	-	-	-	-	-	-	-	-	-	-	-	-	RID Village Head	Land owners		
3-2. Survey, design and cost estimates for pipeline installation are conducted.	- Design and cost estimates	-	-	-	-	-	-	-	-	-	-	-	-	RID Village Head	Farmers		
3-3. Main and secondary pipelines are installed.	- Main and secondary pipelines installed	-	-	-	-	-	-	-	-	-	-	-	-	RID WUG	Farmers (land and labor) Pipe supplier TAO (supervision)	Bt. 3,200,000 for pipes (JTCA) Earthwork (RID)	Pipelines are guaranteed by the Supplier.
3-4. Tertiary pipelines are installed.	- Tertiary pipelines installed	-	-	-	-	-	-	-	-	-	-	-	-	WUG	Farmers (land, labor and funds) RID	Farmers purchase pipes.	
3-5. Trainings are conducted for water management and maintenance.	- Rules of water management and maintenance	-	-	-	-	-	-	-	-	-	-	-	-	RID WUG	Farmers DOAE TAO, TTC	Bt. 10,000 for training	
3-6. Trainings are conducted for the improvement of productions of pineapple and sugarcane.	- Improvement of production volumes of pineapple and sugarcane	-	-	-	-	-	-	-	-	-	-	-	-	DOAE LDD WUG	Production Groups of pineapple and sugarcane TTC Sugarcane factory	Bt. 30,000 for seedlings and other inputs, trainings	Sugarcane factory bears some costs.

Note: (1) All costs are tentative.

(2) PO (0) shall be reviewed and finalized in early January through the meetings with the stakeholders.

Project Design Matrix – PDM (2) DRAFT

Prepared: May 28, 2004

Project Title: Upper Huai Mahad Reservoir Project

Target Area: Nong Chok Village, Tambon Nong Phan Chan, Ban Kha District, Ratchaburi

Target Group: Farmers in the target area, and responsible TTC and TSG members

Project Period: From November 2003 to November 2004 (from the planning to evaluation stages)

Note: The PDM (1) was prepared in February 2004 based on the PDM (0) made in November 2003, and the following discussions with TSG and farmers.

The PDM (2) has been prepared based on the PDM (1) and the results of the monitoring in May 2004

Narrative Summary	Indicators	Means of Verification	Important Assumptions
<p>Overall goal</p> <p>The living standards of the farmers in the village are improved.</p>	<ol style="list-style-type: none"> 1. Total debts of the target farmers' households are decreased by 5 % by 2006. 2. Average agricultural incomes of the target farmers' households are increased by 5 % by 2006. 3. The number of households in which no family member works away from home is increased by 5 % by 2006. 	<p>Baseline survey</p>	
<p>Project Purpose</p> <p>Agricultural incomes of the target farmers are increased to meet expenditures.</p>	<p>Average agricultural incomes of 20 target farmers' households are increased by 5 %.</p>	<p>Baseline survey PRA survey</p>	

Narrative Summary	Indicators	Means of Verification	Important Assumptions
<p>Outputs</p> <p>1. The crops are sold at higher prices for the target farmers.</p> <p>2. Agricultural expenditures are reduced for the target farmers.</p> <p>3. Crop productions are increased for the target farmers.</p>	<p>1-1. Average selling price of pineapple is more than Bt. 2/kg. (to be forecasted)</p> <p>1-2. Average selling price of sugarcane is increased from Bt. 580/ton to Bt. 600/ton or high, by improving the CCS rate (to be forecasted)</p> <p>2-1. Average expenditures necessary for pineapple growing are reduced by 10 %.</p> <p>2-2. Average expenditures necessary for sugarcane growing are reduced by 10 %.</p> <p>3-1. Average yield of pineapple is increased from 4 to 6 tons/rai (to be forecasted)</p> <p>3-2. Average yield of sugarcane is increased from 10 to 12 tons/rai (to be forecasted)</p>	<p>Baseline survey</p> <p>PRA survey</p>	

Narrative Summary	Indicators	Means of Verification	Important Assumptions
<p>Activities</p> <p>(Common Activities)</p> <p>0-1. The baseline survey is conducted.</p> <p>0-2. PDM(0) and PO(0) are reviewed with major stakeholders.</p> <p>0-3. The meetings are held to establish the Water Users Group (WUG).</p> <p>0-4. The meetings are held between the WUG and village groups.</p> <p>0-5. The WUG fund is established and accumulated.</p> <p>0-6. The demonstration plots are established for sugarcane, pineapple and vegetables.</p> <p>0-7. The study tours by WUG are conducted.</p> <p>0-8. The study tours to the village from other Tambons are conducted.</p> <p>0-9. Meetings are conducted with TTC members.</p> <p>0-10. Trainings are conducted to TTC members on TOT.</p> <p>0-11. Trainings are conducted to TSG members on TOT.</p> <p>0-12. The monitoring and evaluation surveys are conducted.</p> <p>0-13. Irrigation system is transferred to TAO tentatively</p> <p>(Specific Activities for Producing the Outputs)</p> <p>(Output 1: High selling prices)</p> <p>1-1. Trainings are conducted for the improvement of qualities of pineapple and sugarcane.</p> <p>1-2. Trainings are conducted for the improvement of selling prices of pineapple.</p> <p>(Output 2: Low production costs)</p> <p>2-1. Trainings are conducted on the use of fertilizers and pesticides.</p> <p>2-2. Fertilizers, pesticides, herbicides and tractors are obtained by groups.</p> <p>2-3. Trainings are conducted on the make and use of organic fertilizers.</p>	<p>Inputs</p> <p>1. JICA</p> <ul style="list-style-type: none"> - Consultants and local consultants - Budgets (Bt. 3,888,000) for project implementation <p>2. Thai Government</p> <ul style="list-style-type: none"> - RID provincial office for survey, design and cost estimate - RID and DOAE for providing part of budgets for project implementation - DOAE, LDD and CDD for providing trainings - TTC members for technical supports and coordination at the Tambon and village levels (and also as recipients of the trainings) - TSG members for technical supports and coordination at the provincial and district levels <p>3. Farmers</p> <ul style="list-style-type: none"> - Land for pipeline installation and demonstration plots - Labor for construction - Costs for tertiary pipelines - Fund for facilitating group activities 		

Narrative Summary	Indicators	Means of Verification	Important Assumptions Preconditions
<p>(Output 3: High production volumes)</p> <p>3-1. Alignment of main and secondary pipelines is discussed and fixed.</p> <p>3-2. Survey, design and cost estimates for pipeline installation are conducted.</p> <p>3-3. Main and secondary pipelines are installed.</p> <p>3-4. Tertiary pipelines are installed.</p> <p>3-5. Trainings are conducted for water management and maintenance.</p>			

Plan of Operations – PO (2) **DRAFT**

Prepared: May 28, 2004

Project Title: Upper Huai Mahad Reservoir Project

Target Area: Nong Chok Village, Tambon Nong Phan Chan, Ban Kha District, Ratchaburi

Target Group: Farmers in the target area, and responsible TTC and TSG members

Project Period: From November 2003 to November 2004 (from the planning to evaluation stages)

Note: The PO (1) was prepared in February 2004 based on the PO (0) made in November 2003, and the following discussions with TSG and farmers.

The PO (2) has been prepared based on the PO (1) and the results of the monitoring in May 2004

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Estimated Costs or Materials	Necessary Conditions
		2004															
		1	2	3	4	5	6	7	8	9	10	11	12				
(Common Activities) 0-1. The baseline survey is conducted.	- Baseline information of 50 households (24 beneficiary households from pipeline irrigation and other 26)	■												JICA RID		(Cost of the baseline survey is born separately by JICA.)	
0-2. PDM(0) and PQ(0) are reviewed with major stakeholders.	- PDM(1) and PQ(1)	■												JICA TSG Farmer leaders	Farmers TTC TAO CDD	Bt. 3,000 for food	
0-3. The meetings are held to establish the Water Users Group (WUG).	- Group structure, leader selection, regulations, work plan, etc.	■												RID Farmer leaders	Farmers TTC JICA	Bt. 10,000 for materials and food	
0-4. The meetings are held between the WUG and village groups.	- Regulations, work plan, monitoring reports of project activities, etc.	■												WUG DOAE	Village groups (production groups, housewives, domestic water users, etc.) TTC, CDD	Bt. 10,000 for materials and food	WUG acts as the leading group to guide other groups in the village.

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Estimated Costs or Materials	Necessary Conditions
		2004															
		1	2	3	4	5	6	7	8	9	10	11	12				
0-5. The WUG fund is established and accumulated.	- Revolving fund with low interest rates for group activities													WUG	Village groups DOAE TTC CDD	Bt. 150,000 for purchasing group equipment (e.g., sugarcane choppers, squeezers, organic fertilizers)	Members pay member fees to WUG.
0-6. The demonstration plots are established for sugarcane, pineapple and vegetables.	- 2 plots (1 rai/plot) from 2 households - 0.5 rai for vegetables													WUG DOAE	Production groups of pineapple and sugarcane TTC	Bt. 20,000 for pineapple Bt. 10,000 for sugarcane Bt. 10,000 for vegetables (all for purchasing inputs)	Lands are provided by land owners at no cost.
0-7. The study tours by WUG are conducted.	- Pineapple growers in Chornbuli - Advanced WUG in other areas													DOAE WUG	TTC TSG	Bt. 63,000 for the tours	
0-8. The study tours to the village from other Tambons are conducted.	- Achievements of hard & soft components are presented - The comments of the participants are collected on implementing structure & activities - Potential expansion of the similar project to other areas as discussed													JICA	TSG TAO TTC WUG	Bt. 30,000 for the tours	
0-9. Meetings are conducted with TTC members.	- Regulations, roles and responsibilities - Progress reports													TTC	DOAE JICA	Bt. 5,000 for materials Bt. 8,250 for allowance	
0-10. Trainings are conducted to TTC members on TOT.	- TTC members can facilitate farmers' meetings.													JICA	TTC WUG	Bt. 20,000 for materials, food, trainers, transportation and accommodation (if needed)	

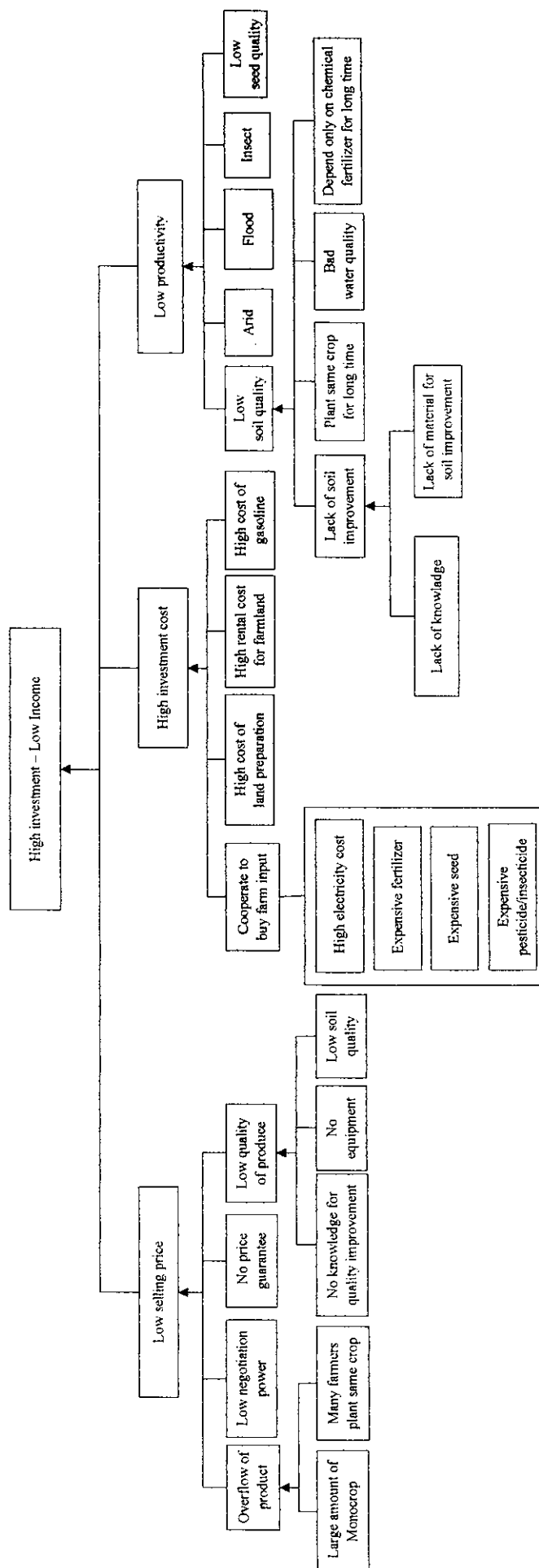
Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Estimated Costs or Materials	Necessary Conditions
		2004															
		1	2	3	4	5	6	7	8	9	10	11	12				
0-11. Trainings are conducted to TSG members on TOT.	- TSG members can facilitate farmers' meetings.													JICA	TSG	Bt. 20,000 for materials, food, trainers, transportation and accommodation (if needed)	
0-12. The monitoring and evaluation surveys are conducted.	- Monitoring and evaluation reports													JICA TSG	WUG TTC	(Costs of the M&E surveys are born separately by JICA.)	
0-13 Irrigation system is transferred to TAO tentatively	- Roles & responsibility of TAO & WUG - O&M manual - Spec of the facilities - Official letter - Water fee													RID	TAO WUG	Bt. 10,000 for materials and food	- Irrigation system is completed - WUG is able to operate the system - TAO is ready to adopt the system
(Specific Activities) 1-1. Trainings are conducted for the improvement of qualities of pineapple and sugarcane.	- Improvement of selling prices of pineapple and sugarcane													DOAE WUG	Production groups of pineapple and sugarcane TTC	Bt.20,000 for inputs, materials, food and trainers	
1-2. Trainings are conducted for the improvement of selling prices of pineapple.	- Improvement of selling prices of pineapple													DOAE WUG	Production groups of pineapple TTC	Bt. 10,000 for materials and food	
2-1. Trainings are conducted on the use of fertilizers and pesticides.	- Improvement of use and costs of fertilizers and pesticides													DOAE WUG	Production groups TTC	Bt. 15,000 for materials and food	
2-2. Fertilizers, pesticides, herbicides and tractors are obtained by groups.	- Improvement of costs of fertilizers, pesticides, herbicides and tractors													DOAE WUG	Production groups	(no budgets)	

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Estimated Costs or Materials	Necessary Conditions
		01	02	03	04	05	06	07	08	09	10	11	12				
2-3. Trainings are conducted on the make and use of organic fertilizers.	- Improvement of use and costs of fertilizers													LDD WUG	Production groups TTC	Bt. 21,000 for materials and food	
3-1. Alignment of main and secondary pipelines is discussed and fixed.	- Alignment of main (L=1,675m) and secondary pipelines													RID Village Head	Land owners		
3-2. Survey, design and cost estimates for pipeline installation are conducted.	- Design and cost estimates													RID Village Head	Farmers		
3-3. Main and secondary pipelines are installed.	- Main and secondary pipelines installed													RID WUG	TAO (supervision)	Bt. 3,110,909 for pipes (JICA) Earthwork (RID)	
3-4. Tertiary pipelines are installed.	- Tertiary pipelines installed													WUG	RID		Farmers purchase pipes.
3-5. Trainings are conducted for water management and maintenance.	- Rules of water management and maintenance													RID WUG	TAO	Bt. 10,000 for training	
														Estimated costs		Bt. 445, 250	
																Bt. 3,110,909	

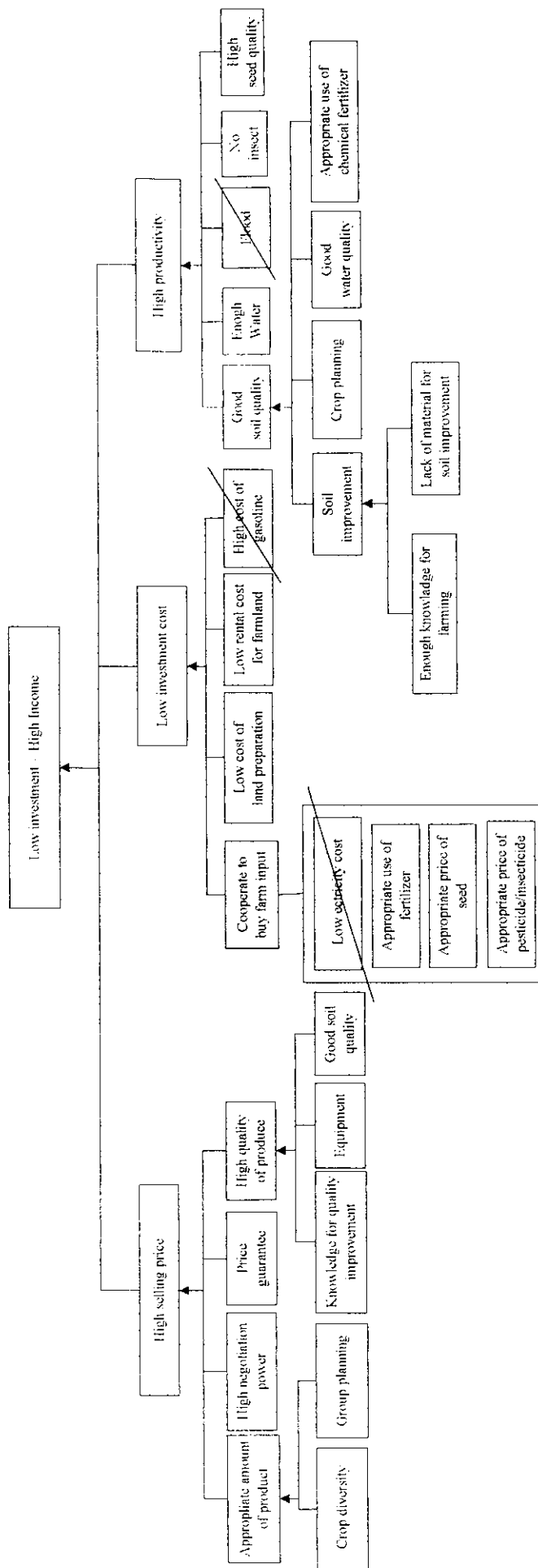
9.2 Problem Tree, Objective Tree, PDM, and PO in BTPW

9.2 Problem Tree, Objective Tree, PDM, and PO in BTPW

Problem Tree in Ban Tha Payorm



Objective Tree in Ban Tha Payorm



Project Design Matrix – PDM (0)

Prepared: November 20, 2003

Project Title: The Pilot Project for Agricultural Development in the Lam Pa Chi River Basin

Target Area: Thaphayorm Village,

Target Group: Farmers in the target village and responsible TTC members (target farmers are to be specified during the implementation stage)

Project Period: From November 2003 to December 2004 (from the planning to evaluation stages)

Note: This PDM is prepared based on the planning workshop held on November 18 to 19, 2003

Narrative Summary	Indicators	Means of Verification	Important Assumptions
<p>Overall goal</p> <p>The living standards of the farmers in the village are improved.</p>	<ol style="list-style-type: none"> 1. Total debts of the whole village households are decreased by 20 % (by 2006). 2. The number of households buying new car is increased by 10 %. 3. The number of households in which no family member works away from home is reduced by 10 %. 4. The number of household in which children have higher education is increased by 10 %. 	<p>Baseline survey</p>	
<p>Project Purpose</p> <p>Agricultural incomes of the target farmers are increased to meet expenditures.</p>	<ol style="list-style-type: none"> 1. Total debts of the whole village households are decreased by 10%. 2. Agricultural incomes of 30 households are increased. 3. Agricultural expenditures of X households are decreased. 4. Average net annual income per household is Bt. 40,000. 	<p>Baseline survey PRA survey</p>	

Narrative Summary	Indicators	Means of Verification	Important Assumptions
<p>Outputs</p> <p>1. The crops are sold at higher prices for the target farmers.</p> <p>2. Agricultural expenditures are reduced for the target farmers.</p> <p>3. Crop productions are increased for the target farmers.</p>	<p>1-1. Average selling price of sweet corn is increased from Bt.3.50 per kg to Bt.4/kg or high (expected value).</p> <p>1-2. Average selling price of baby corn is increased from Bt. 2.3/kg to Bt.3/kg or high (expected value)</p> <p>1-3. Average selling price of long bean is increased from Bt. 7/kg to Bt.10/kg or high (expected value)</p> <p>1-4. Average selling price of eggplant is increased from Bt. 5/kg to Bt.7/kg or high (expected value)</p> <p>2-1. Average expenditures necessary for baby corn are reduced to Bt 1600/rai.</p> <p>2-2. Average expenditures necessary for sweet corn are reduced to Bt. 2200/rai.</p> <p>2-3. Average expenditures necessary for eggplant are reduced to Bt. 700/rai.</p> <p>3-1. Average yield of baby corn is increased from 1.2 ton/rai to 1.5 ton/rai (expected yield)</p> <p>3-2. Average yield of sweet corn is increased from 1.5 to 2 tons/rai (expected yield)</p> <p>3-3. Average yield of eggplant is increased from 200 to 300 kg/rai (expected yield)</p>	<p>Baseline survey</p> <p>PRA survey</p>	

Activities	Input	Important Assumption
(Common Activities) 0-1. The baseline survey is conducted. 0-2. The meetings are held to establish the Water Users Group (WUG). 0-3. The WUG fund is established and accumulated. 0-4. The meetings are held between the WUG and village groups. 0-5. The demonstration plots are established for baby corn, sweet corn and selected vegetable. 0-6. The study tours are conducted. 0-7. Trainings are conducted to livestock raisers. 0-8. The monitoring and evaluation surveys are conducted.	1. JICA - Consultants and local consultants - Budgets (Bt.3.5 million) for project implementation 2. Thai Government - RID provincial office for survey, design and cost estimate - DOAE, CDD and LD for providing trainings - TTC members for technical supports and coordination at the Tambon and village levels (and also as recipients of the trainings) - TSG members for technical supports and coordination at the provincial and district levels 3. Farmers - Land for pipeline installation and demonstration plots - Labor for construction - Costs for tertiary pipelines - Fund for facilitating group activities	
(Specific Activities for Producing the Outputs) (Output 1: High selling prices) 1-1. Trainings are conducted for the improvement of qualities of baby corn, sweet corn and vegetable. 1-2. Trainings are conducted for the improvement livestock breeding and feed. 1-3. Meetings and trainings are conducted on production planning. (Output 2: Low Farm-input costs) 2-1. Fertilizers, pesticides and herbicides are purchased by groups. 2-2. Organic fertilizers are made or purchased by the farmers, and used in their fields.		

Activities	Input	Important Assumption
<p>(Output 3: High production volumes)</p> <p>3-1. Alignment of main and secondary pipelines is discussed and fixed.</p> <p>3-2. Survey, design and cost estimates for pipeline installation are conducted.</p> <p>3-3. Main and secondary pipelines are installed.</p> <p>3-4. Tertiary pipelines are installed.</p> <p>3-5. Trainings are conducted for water management and maintenance.</p> <p>3-6. Trainings are conducted for the improvement of productions of sweet corn , baby corn and selected vegetable.</p>		

Plan of Operation (0)

Prepared November 20, 2003

Project Title Ban Thaphayom Weir Project

Target Area Ban Thaphayom, Tambon Nong Phai, Amphoe Dan Makham Tia, Kanchanaburi

Target Group Farmers in the target village and responsible TTC members (target farmers are to be specified during the implementation stage)

Project Period From November 2003 to December 2004 (from the planning to evaluation stages)

Note: This PDM is prepared based on the planning workshop held on November 18 to 19, 2003

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Costs or Materials	Necessary Conditions
		Y	2004														
			1	2	3	4	5	6	7	8	9	10	11				
(Common Activities) 0-1. The baseline survey is conducted.	- Baseline information of 50 households		■										JICA RID		(Cost of the baseline survey is born separately by JICA.)		
0-2. PDM(0) and PO(0) are reviewed with major stakeholders.	- PDM(1) and PO(1)			■									JICA RID Village Head	Farmers DOAE, LDD TTC Sugarcane factory			
0-3. The meetings are held to establish the Water Users Group (WUG).	- Group structure, leader selection, regulations, work plan, etc.			■									RID Village Head	Farmers DOAE TTC			
0-4. The WUG fund is established and accumulated.	- Revolving fund with low interest rates for group activities		■										WUG DOCP	Farmers DOAE, RID TTC	Bt. 160,000 for purchasing group equipment (e.g., sugarcane choppers, squeezers, organic fertilizers)	Members pay member fees to WUG.	

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Costs or Materials	Necessary Conditions
		1	2	3	4	5	6	7	8	9	10	11	12				
0-5. The meetings are held between the WUG and village groups.	- Regulations, work plan, monitoring of project activities, etc.													WUG DOCP	Village groups (pineapple and sugarcane groups, housewives, domestic water users, etc.) TTC		WUG acts as the leading group to guide other groups in the village.
0-6. The demonstration plots are established for sugarcane and pineapple.	- 2 plots (1rai/plot) from 2 households													DOAE Village Head	Production of pineapple and sugarcane Land owners TTC Sugarcane factory		Lands are provided by land owners at no cost.
0-7. The study tours are conducted.	- Exchange visits bet. 2 project sites, etc.													DOAE WUG	Farmers RID DOCP	Bt. 63,000	
0-8. Meetings are conducted with TTC members.	- Regulations, roles and responsibilities													JICA	TTC	Bt. 5,000 for training	
0-9. The monitoring and evaluation surveys are conducted.	- Monitoring and evaluation reports													JICA WUG	RID	(Costs of the M&E surveys are born separately by JICA.)	

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Costs or Materials	Necessary Conditions
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1. Production is high 1.1 Farmers are trained on how to make compost	<ul style="list-style-type: none"> - 1 training course is organized. - 20 farmers are able to produce compost 													TTC	Farmers LDD TAO	1,800Bt (from the village million fund)	
1.2 Demonstration plots are set up.	<ul style="list-style-type: none"> - 3 demo plots are organized (1rai of sweet corn, 1rai of baby corn and 0.5 rai selected vegetable) - 1 field visit is organized to three demo plots. - 20 farmers are able to apply appropriate technology in their farm 													TTC	Farmers LDD-provincial TAO	Babycorn (1,500Bt/rai) Sweet corn (2,500Bt/rai) Vegetables (600Bt/rai) Total: 4,500Bt (JICA)	Farmers donate demonstration plots.
1.3 Compost Making Group is established	<ul style="list-style-type: none"> - A Group of 20 members is established - 50 tons of compost is produced. 													Organic Fertilizer Group	Farmers' representatives	50,000Bt farmer contribution 20,000 Bt JICA 30,000 Bt	Farmers have to pay member fee of XX Bt
1.4 Study tour are organized to the well developed agricultural production sites.	<ul style="list-style-type: none"> - 2 study tour are organized on production of the selected crops - 20 farmers participate each study tour - New crop or technology is introduced 													TTC	Farmers representatives	40,000Bt (JICA)	

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Costs or Materials	Necessary Conditions
		2004															
		1	2	3	4	5	6	7	8	9	10	11	12				
2. Water is secured for dry season cropping (both quality & quantity)																	
2.1 Pump Irrigation System is constructed	<ul style="list-style-type: none">- 1 pump irrigation system is constructed and operated.- xxx meters of pipeline is installed.- Xxx rai of farmland is irrigated- Xxx farmers benefit directly from the system													RID Village committee	Water users group	3.2 Million Bt (JICA)	Farmers are willing to donate their lands Farmers take a role of O&M
2.2 Water User Group (WUG) is established.	<ul style="list-style-type: none">- Group structure- Rules and regulation- Operation plan													RID WUG DOCP	Farmers in irrigated area	10,000Bt (JICA)	
2.3 Quality of groundwater is studied.	<ul style="list-style-type: none">- quality of ground water is identified- means of improvement of water quality is provided.													DGR RID Agricultural institute.	Farmers with the deep well who have problem with water quality.	10,000Bt (JICA)	
2.4 WUG is trained on operation and maintenance of the system	<ul style="list-style-type: none">- 1 on the job training course is organized.- All direct beneficiaries participate.													WUG RID	DOAE	10,000Bt (JICA)	Farmers have to pay members fee XX Bt

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Costs or Materials	Necessary Conditions
		1	2	3	4	5	6	7	8	9	10	11	12				
3 Input Cost is low																	
3.1 Production of each crop is planned	<ul style="list-style-type: none"> - Five agricultural products are planned (sugarcane, sweet corn, baby corn, asparagus and cattle). - Collective activities are identified. - Collective buying of input is organized. 													- WUG - DOAE	Production Groups DOAE	10,000Bt (JICA) for training material and input supply	
3.2 Training on artificial breeding in cow and feed preparation are organized.	<ul style="list-style-type: none"> - 2 training courses are organized. - 3 village representatives are able to breed artificially. - Cow feed is produced by the trained farmers. 													DOL	Cattle Raisers	10,000Bt (JICA) for training material and input supply	
3.3 Revolving fund is provided to Water User Group for production groups	<ul style="list-style-type: none"> - Revolving fund is secured for water user group. - Rules and regulation of group is prepared - A production plan is discussed between WUG and production groups. 													DOCP WUG	Production group	Xxx Bt (JICA) for input supply	Farmers pay for the membership.
3.4 Organic vegetable group established.	<ul style="list-style-type: none"> - A group is establish - Chemical free vegetables are produce. - The products are certified. - Price of the farm product is higher 													TTC	Farmers representatives	10,000Bt (JICA) For input supply	Market channels are identified

Note: (1) All costs are tentative.

(2) PO (0) shall be reviewed and finalized in early January through the meetings with the stakeholders.

Project Design Matrix – PDM (2) DRAFT

Prepared: May 28, 2004

Project Title: Ban Thaphayom Weir Project

Target Area: Thaphayom Village, Tambon Nong Phai, Dan Makham Tia District, Kanchanaburi

Target Group: Farmers in the target area, and responsible TTC and TSG members

Project Period: From November 2003 to November 2004 (from the planning to evaluation stages)

Note: The PDM (1) was prepared in February 2004 based on the PDM (0) made in November 2003, and the following discussions with TSG and farmers.

The PDM (2) has been prepared based on the PDM (1) and the results of the monitoring in May 2004

Narrative Summary	Indicators	Means of Verification	Important Assumptions
<p>Overall goal</p> <p>The living standards of the farmers in the village are improved.</p>	<ol style="list-style-type: none"> 1. Total debts of the whole village households are decreased by 20 % by 2006. 2. The number of households with high-value assets (car, house, land) is increased by 10 % by 2006. 3. The number of households in which no family member works away from home is increased by 10 % by 2006. 4. The number of household in which children have higher education is increased by 10 % by 2006. 	<p>Baseline survey</p>	
<p>Project Purpose</p> <p>Agricultural incomes of the target farmers are increased to meet expenditures.</p>	<ol style="list-style-type: none"> 1. Average agricultural incomes of 20 target farmers' households are increased by 5 %. 2. Average agricultural expenditures of 20 target farmers' households are decreased by 5 %. 	<p>Baseline survey PRA survey</p>	

Narrative Summary	Indicators	Means of Verification	Important Assumptions
<p>Outputs</p> <p>1. The crops are sold at higher prices for the target farmers.</p> <p>2. Agricultural expenditures are reduced for the target farmers.</p> <p>3. Crop productions are increased for the target farmers.</p>	<p>1-1. Average selling price of sweet corn is increased from Bt. 3.50/kg to Bt. 4/kg or high (expected value).</p> <p>1-2. Average selling price of baby corn is increased from Bt. 2.3/kg to Bt. 3/kg or high (expected value)</p> <p>1-3. Average selling price of eggplant is increased from Bt. 5/kg to Bt. 7/kg or high (expected value)</p> <p>2-1. Average expenditures necessary for baby corn are reduced to Bt. 1,600/rai.</p> <p>2-2. Average expenditures necessary for sweet corn are reduced to Bt. 2,200/rai.</p> <p>2-3. Average expenditures necessary for eggplant are reduced to Bt. 700/rai.</p> <p>3-1. Average yield of baby corn is increased from 1.2 ton/rai to 1.5 ton/rai (expected yield)</p> <p>3-2. Average yield of sweet corn is increased from 1.5 to 2 tons/rai (expected yield)</p> <p>3-3. Average yield of eggplant is increased from 200 to 300 kg/rai (expected yield)</p>	<p>Baseline survey</p> <p>PRA survey</p>	

Narrative Summary	Indicators	Means of Verification	Important Assumptions
<p>Activities</p> <p>(Common Activities)</p> <p>0-1. The baseline survey is conducted.</p> <p>0-2. PDM(O) and PO(O) are reviewed with major stakeholders.</p> <p>0-3. The meetings are held to establish the Water Users Group (WUG).</p> <p>0-4. The meetings are held between the WUG and village groups.</p> <p>0-5. The WUG fund is established and accumulated.</p> <p>0-6. The demonstration plots are established for baby corn, sweet corn and other vegetables.</p> <p>0-7. The study tours by WUG are conducted.</p> <p>0-8. The study tours to the village from other Tambons are conducted.</p> <p>0-9. Meetings are conducted with TTC members.</p> <p>0-10. Trainings are conducted to TTC members on TOT.</p> <p>0-11. Trainings are conducted to TSG members on TOT.</p> <p>0-12. The monitoring and evaluation surveys are conducted.</p> <p>0-13. Irrigation system is transferred to TAO tentatively</p> <p>(Specific Activities for Producing the Outputs)</p> <p>1-1. Farmers are trained on how to make compost.</p> <p>1-2. Compost is made and used by the group.</p> <p>2-1. Pump Irrigation System is constructed.</p> <p>2-2. Qualities of groundwater and soil are studied.</p> <p>2-3. WUG is trained on operation and maintenance of the system.</p> <p>3-1. Production of each crop is planned.</p> <p>3-2. Trainings are conducted for the improvement of qualities and quantities of crops.</p> <p>3-3. Trainings are conducted on chemical free vegetable production.</p> <p>3-4. Training on artificial breeding of cow and feed preparation are conducted.</p>	<p>Inputs</p> <p>1. JICA</p> <ul style="list-style-type: none"> - Consultants and local consultants - Budgets (Bt 4,009,000) for project implementation <p>2. Thai Government</p> <ul style="list-style-type: none"> - RID provincial office for survey, design and cost estimate - RID and DOAE for providing part of budgets for project implementation - DOAE, LDD, CDD and DOL for providing trainings - TTC members for technical supports and coordination at the Tambon and village levels (and also as recipients of the trainings) - TSG members for technical supports and coordination at the provincial and district levels <p>3. Farmers</p> <ul style="list-style-type: none"> - Land for pipeline installation and demonstration plots - Labor for construction - Costs for tertiary pipelines - Fund for facilitating group activities 		
			<p>Preconditions</p>

Plan of Operations – PO (2) **DRAFT**

Prepared: May 28, 2004

Project Title: Ban Thaphayom Weir Project

Target Area: Thaphayom Village, Tambon Nong Phai, Dan Makham Tia District, Kanchanaburi

Target Group: Farmers in the target area, and responsible TTC and TSG members

Project Period: From November 2003 to November 2004 (from the planning to evaluation stages)

Note: The PO (1) was prepared in February 2004 based on the PO (0) made in November 2003, and the following discussions with TSG and farmers.

The PO (2) has been prepared based on the PO (1) and the results of the monitoring in May 2004

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Estimated Costs or Materials	Necessary Conditions
		2004															
		Dec	1	2	3	4	5	6	7	8	9	10	11				
(Common Activities) 0-1. The baseline survey is conducted.	- Baseline information of 30 households	■												JICA RID		(Cost of the baseline survey is born separately by JICA.)	
0-2. PDM(0) and PO(0) are reviewed with major stakeholders.	- PDM(1) and PO(1)	■												JICA TSG Farmer leaders	Farmers TTC TAO	Bt. 3,000 for food	
0-3. The meetings are held to establish the Water Users Group (WUG).	- Group structure, leader selection, regulations, work plan, etc.	■			■									RID Farmer leaders	Farmers TTC JICA	Bt. 10,000 for materials and food	
0-4. The meetings are held between the WUG and village groups.	- Regulations, work plan, monitoring reports of project activities, etc.													WUG TTC	Village groups (production groups, housewives, etc.)	Bt. 10,000 for office equipment	WUG acts as the leading group to guide other groups in the village.
0-5. The WUG fund is established and accumulated.	- Revolving fund with low interest rates for group activities													TTC WUG	Village groups DOAE	Bt. 150,000 for purchasing group equipment (e.g., sugarcane choppers, squeezers, organic fertilizers)	Members pay member fees to WUG.

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Estimated Costs or Materials	Necessary Conditions		
		2004																	
		11	12	1	2	3	4	5	6	7	8	9	10					11	12
0-6. The demonstration plots are established for baby corn, sweet corn and other vegetables	- 100 rai for baby corn (by DOAE) - 1 rai for sweet corn - 0.5 rai for other vegetables															WUG DOAE	Production groups TTC	Bt. 3,000 for sweet corn Bt. 10,000 for other vegetables (all for purchasing inputs) (DOAE provides Bt. 80,000 for establishing 100 rai/20 plots of the demo. plots of baby corn) Bt. 63,000 for the tours	Lands are provided by landowners at no cost.
0-7. The study tours by WUG are conducted.	- Advanced agricultural areas - Advanced WUG in other areas															DOAE WUG	TTC RID		
0-8. The study tours to the village from other Tambons are conducted.	- Achievements of hard & soft components are presented - The comments of the participants are collected on implementing structure & activities - Potential expansion of the similar project to other areas as discussed															JICA	TSG TAO TTC WUG	Bt. 30,000 for the tours	
0-9. Meetings are conducted with TTC members.	- Regulations, roles and responsibilities - Progress reports															TTC	DOAE JICA	Bt. 5,000 for materials Bt. 8,250 for allowance	
0-10. Trainings are conducted to TTC members on TOT.	- TTC members can facilitate farmers' meetings.															JICA	TTC WUG	Bt. 20,000 for materials, food, trainers, transportation and accommodation (if needed)	

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Estimated Costs or Materials	Necessary Conditions	
		2004																
		11	12	1	2	3	4	5	6	7	8	9	10					11
0-11. Trainings are conducted to TSG members on TOT.	- TSG members can facilitate farmers' meetings.														JICA	TSG	Bt. 20,000 for materials, food, trainers, transportation and accommodation (if needed)	
0-12. The monitoring and evaluation surveys are conducted.	- Monitoring and evaluation reports														JICA TSG	WUG TTC	(Costs of the M&E surveys are born separately by JICA.)	
0-13 Irrigation system is transferred to TAO tentatively	- Roles & responsibility of TAO & WUG - O&M manual - Spec of the facilities - Official letter - Water fee														RID	TAO WUG	Bt. 10,000 for materials and food - Irrigation system is completed - WUG is able to operate the system - TAO is ready to adopt the system	
(Specific Activities) 1-1. Farmers are trained on how to make compost	- 20 farmers are able to produce compost.														LDD WUG	Production groups TTC	Bt.3,000 for materials and food	
1-2. Compost is made and used by the group.	- A group of 20 members is established. - 50 tons of compost is produced.														LDD WUG	Compost making group TTC DOAE	Bt.30,000 for materials	Farmers contribute Bt. 20,000 for materials.
2-1. Pump Irrigation System is constructed	- 1 pump irrigation system is constructed.														RID WUG	Land owners Farmers TAO (supervision) Farmers	Bt. 3,220,909 for pipes and pumps (JICA) Earthwork (RID) Bt. 10,000 for testing	Farmers donate the lands.
2-2. Qualities of groundwater and soil are studied.	- Qualities of groundwater and soil are identified - Means to improve water and soil quality are suggested.														LDD WUG			

Activities	Expected Results	Schedule												Responsible Persons or Groups	Other Major Stakeholders	Estimated Costs or Materials	Necessary Conditions
		1	2	3	4	5	6	7	8	9	10	11	12				
2-3. WUG is trained on operation and maintenance of the system	- WUG is able to operate and maintain the system													RID WUG	TAO TTC	Bt. 10,000 for materials and food	O&M manual, water fee calculation, spec of the facilities should be made ready by RID before training
3-1. Production of each crop is planned	- Training needs are identified. - Production plans are made.													WUG TTC	Production groups	Bt. 10,000 for materials and food	
3-2. Trainings are conducted for the improvement of qualities and quantities of crops.	- Selling prices of crops become higher. - Production volumes of crops become higher.													DOAE WUG	Production groups TTC	Bt. 20,000 for materials and food	
3-3. Trainings are conducted on chemical free vegetable production.	- An organic vegetable group is established. - Chemical free vegetables are produced. - Production costs become lower. - Selling prices of crops become higher.													DOAE	Production groups TTC	Bt. 10,000 for materials and food	Market channels are identified
3-4. Training on artificial breeding of cow and feed preparation are conducted.	- 3 farmers are able to breed cows artificially. - Cow feed is produced by the trained farmers.													DOL	Cattle Raisers TTC	Bt. 10,000 for inputs, materials and food	
														Estimated costs		Bt. 445,250	
																Bt. 3,220,909	

9.3 Detail Plans of the Responsible Agencies in UHMR

9.3 Detail Plans of the Responsible Agencies in UHMR

DETAIL OF ACTIVITY UPPER HUAI MAHAD RESERVOIR

1. PERSON WHO PROPOSED PROJECT	Mr. Auppatham Janesiriphaporn
2. AGENCY	Provincial Cooperative Office
3. DATE/MONTH/YEAR	February 18, 2004
4. NO. OF ACTIVITY	0-3
5. NAME OF ACTIVITY	The meeting are held to establish the Water User Group (WUG)
6. OBJECTIVE	6.1 WUG is established and manages group activities under the rules and regulation of group. 6.2 WUG is strengthened.

7. STEP OF IMPLEMENTATION			
D/M/Y	Activity	Detail	Expense (Bt)
4/03/04	Coordinate between the official and WUG	Prepare document and coordinate with WUG and responsible agencies	240 Bt
8-10/03/04	Prepare the documents: - Benefit of farmer's group - Regulation of WUG - Application form of WUG	Documentation and copy	760 Bt
12/03/04	Meeting and set up the WUG	Meeting aims to explain the benefit of WUG, to select the WUG's leader, to set up the regulation. The responsible officers describe the roles.	3,600 Bt
20/04/04	Meeting with WUG and responsible officers (15 persons)	Aims to know the situation, problem and threat then gather to improve and develop.	5,400 Bt

8. NO. OF PARTICIPANTS	30 persons
9. COOPERATIVE AGENCIES	RID provincial office Agricultural office at King-Amphoe Ban Kha TTC' TAO Nong Phan Chan
10. EXPECTED RESULT	WUG structure WUG committee is selected Rules and regulation are drafted and finalized Operation plan of WUG is prepared.

**DETAIL OF ACTIVITY
UPPER HUAI MAHAD RESERVOIR**

1. PERSON WHO PROPOSED PROJECT	Mr. Kasem Kamonphithan
2. AGENCY	Agricultural District Office of Ban Kha Sub district, Ratchaburi province
3. DATE/MONTH/YEAR	February 19, 2004
4. NO. OF ACTIVITY	0-4
5. NAME OF ACTIVITY	The meetings are held between the WUG and village groups
6. OBJECTIVE	6.1 Meeting of production planning 6.2 To report the progress of implementation 6.3 To advise the participatory approach

7. STEP OF IMPLEMENTATION			
D/M/Y	Activity	Detail	Expense (Bt)
25/02/04	The meetings between the WUG and village groups	Meeting in the village i.e. production group, housewife group and WUG by the method of participatory approach.	Total 10,000 Bt from materials (for 60 persons)

8. NO. OF PARTICIPANTS	60 persons
9. COOPERATIVE AGENCIES	9.1 TTC of Nong Phan Chan 9.2 TAO of Nong Phan Chan
10. EXPECTED RESULT	10.1 Clarify into plan of operation 10.2 To set up the regulation 10.3 To report the progress of the operation

**DETAIL OF ACTIVITY
UPPER HUAI MAHAD RESERVOIR**

1. PERSON WHO PROPOSED PROJECT	Mr. Sai Thongsri
2. AGENCY	Village Headman
3. DATE/MONTH/YEAR	February 18, 2004
4. NO. OF ACTIVITY	0-5
5. NAME OF ACTIVITY	Support the production group
6. OBJECTIVE	1. Production groups are supported according to their need. 2. WUG takes the leading role in the support.

7. STEP OF IMPLEMENTATION			
D/M/Y	Activity	Detail	Expense (Bt)
Apr 17,04	Production group meeting	Discuss about need of each group	
Apr.19,04	-	Recruiting members	Housewife group recruit members
	Purchase of fertilizer	-	See activity report

8. NO. OF PARTICIPANTS	100 persons
9. COOPERATIVE AGENCIES	TTC, DOAE
10. EXPECTED RESULT	Members receive input at low cost

DETAIL OF ACTIVITY
UPPER HUAI MAHAD RESERVOIR

1. PERSON WHO PROPOSED PROJECT	Mr. Kasem Kamonphithan
2. AGENCY	Agricultural District Office of Ban Kha Sub district, Ratchaburi province
3. DATE/MONTH/YEAR	February 19, 2004
4. NO. OF ACTIVITY	0-6
5. NAME OF ACTIVITY	The demonstration plots are established for sugarcane, pineapple and vegetables
6. OBJECTIVE	6.1 To implement the demonstration plot 6.2 To be a showing plot to other farmers 6.3 To be an exchange place for experience among farmers

7. STEP OF IMPLEMENTATION			
D/M/Y	Activity	Detail	Expense (Bt)
May to June	To establish demonstrate plots of sugarcane, pineapple and vegetables	- Sugarcane 1 rai/1 household - Pineapple 1 rai/ 1 household - Vegetable 0.5 rai/ 1 household	- Sugarcane 10,000 Bt from Seed 5,000 Bt, Plow 750 Bt, Fertilizer 1,000 Bt, Chemical substance 3,250 Bt - Pineapple 20,000 Bt from Seed 10,000 Bt, Plow 750 Bt, Fertilizer 1,000 Bt, Chemical substance 8,250 Bt - Vegetable 10,000 Bt from Seed 10,000 Bt, Plow 2,500 Bt, Fertilizer 750 Bt, Chemical substance 6,250 Bt

8. NO. OF PARTICIPANTS	3 persons
9. COOPERATIVE AGENCIES	9.1 TTC of Nong Phan Chan 9.2 TAO of Nong Phan Chan
10. EXPECTED RESULT	10.1 The establishment of three demonstration plots 10.2 To organize field demonstration day for farmers

**DETAIL OF ACTIVITY
UPPER HUAI MAHAD RESERVOIR**

1. PERSON WHO PROPOSED PROJECT	Mr. Kasem Kamonphithan
2. AGENCY	Agricultural District Office of Ban Kha Sub district, Ratchaburi province
3. DATE/MONTH/YEAR	February 19, 2004
4. NO. OF ACTIVITY	0-7
5. NAME OF ACTIVITY	The study tours by WUG are conducted
6. OBJECTIVE	6.1 Farmers learned good practice in crop production in other area. 6.2 Farmers learned about water user group development in other area

7. STEP OF IMPLEMENTATION			
D/M/Y	Activity	Detail	Expense (Bt)
June 04	Study Tour at Amphoe Cha-Am, Phetchaburi	Visit to processing groups and production groups in other area	63,000 Bt from Transportation
Nov. 04			2 times 15,000 Bt/time Total 30,000 Bt, Instructor fee 2,000 Bt, , Material 31,000 Bt

8. NO. OF PARTICIPANTS	80 persons
9. COOPERATIVE AGENCIES	9.1 TTC of Nong Phan Chan 9.2 TAO of Nong Phan Chan
10. EXPECTED RESULT	10.1 Farmers are able to apply some good practice in their crop production. 10.2 Some practice are implemented in the demonstration plot. 10.3 Team building for the related agencies.

**DETAIL OF ACTIVITY
UPPER HUAI MAHAD RESERVOIR**

1. PERSON WHO PROPOSED PROJECT	Nakorn Najaron
2. AGENCY	JICA Study Team
3. DATE/MONTH/YEAR	May 30, 2004
4. NO. OF ACTIVITY	0-8
5. NAME OF ACTIVITY	The study tour to the village from other Tambon are conducted
6. OBJECTIVE	6.1 Achievement of the project activities are presented 6.2 Comments and suggestions of participants are collected. 6.3 Potential expansion of activities in the Lam Pha Chi area is discussed.

7. STEP OF IMPLEMENTATION			
D/M/Y	Activity	Detail	Expense (Bt)
November	The study tour to the village from other Tambon are conducted	<ul style="list-style-type: none"> • Selection of team members • Preparation of the field • Invitation of participants • Organize the study tour • Conclusion of the study tour 	Transportation and Materials Total Bt 30, 000

8. NO. OF PARTICIPANTS	50 Person
9. COOPERATIVE AGENCIES	9.1 TTC of Nong Phan Chan 9.2 TAO of Nong Phan Chan 9.3 DOAE Ban Kha 9.4 RID Ratchaburi

**DETAIL OF ACTIVITY
UPPER HUAI MAHAD RESERVOIR**

1. PERSON WHO PROPOSED PROJECT	Mr. Kasem Kamonphithan
2. AGENCY	Agricultural District Office of Ban Kha Sub district, Ratchaburi province
3. DATE/MONTH/YEAR	February 19, 2004
4. NO. OF ACTIVITY	0-9
5. NAME OF ACTIVITY	Meetings are conducted with TTC
6. OBJECTIVE	6.1 TTC establishes the system of work. 6.2 TTC monitors the progress of work of the project activities. 6.3 TTC coordinates the technical support to WUG.

7. STEP OF IMPLEMENTATION			
D/M/Y	Activity	Detail	Expense (Bt)
Feb-Nov	Meetings are conducted with TTC	15 members of TTC meets month.	13,250 Bt from material 5,000 Bt (500 Bt/time), wages 8,250 Bt (825 Bt/10 times)

8. NO. OF PARTICIPANTS	15 persons
9. COOPERATIVE AGENCIES	9.1 TTC of Nong Phan Chan 9.2 TAO of Nong Phan Chan
10. EXPECTED RESULT	Technical support is timely coordinated.

**DETAIL OF ACTIVITY
UPPER HUAI MAHAD RESERVOIR**

1. PERSON WHO PROPOSED PROJECT	Mr. Nakhon Najaroon
2. AGENCY	JICA STUDY TEAM
3. DATE/MONTH/YEAR	February 19, 2004
4. NO. OF ACTIVITY	0-10
5. NAME OF ACTIVITY	Trainings are conducted to TTC members on ToT
6. OBJECTIVE	6.1 To understand the operation organization and activities 6.2 To understand the regulation and role of TTC 6.3 The participants can explain the coordinating mechanism and participatory method

7. STEP OF IMPLEMENTATION			
D/M/Y	Activity	Detail	Expense (Bt)
1-Mar	- To understand course of training and participatory method		Hotel fee 10,800 Bt Transportation 2,000 Bt Instructor's fee 6,200 Bt
2-Mar	- To understand the project plan, regulation, responsibility and coordinating mechanism		Materials 1,000 Bt <u>Total 20,000 Bt</u>

8. NO. OF PARTICIPANTS	20 persons
9. COOPERATIVE AGENCIES	9.1 Representative of TTC 3 persons 9.2 Representative of WUG
10. EXPECTED RESULT	10.1 TTC can facilitate and support to WUG 10.2 TTC consider to own regulation, duty and responsibility 10.3 TTC can cooperate to other agencies

**DETAIL OF ACTIVITY
UPPER HUAI MAHAD RESERVOIR**

1. PERSON WHO PROPOSED PROJECT	Mr. Nakhon Najaroon
2. AGENCY	JICA STUDY TEAM
3. DATE/MONTH/YEAR	February 19, 2004
4. NO. OF ACTIVITY	0-11
5. NAME OF ACTIVITY	Trainings are conducted to TSG members on ToT
6. OBJECTIVE	6.1 To understand the operation organization and activities 6.2 To understand the regulation and role of TSG 6.3 The participants can explain the coordinating mechanism and participatory method

7. STEP OF IMPLEMENTATION			
D/M/Y	Activity	Detail	Expense (Bt)
1-Mar	- To identify TSG's responsibility in implementing - Learning participatory approach and facilitation skill		Hotel fee 10,800 Bt Transportation 2,000 Bt Instructor's fee 6,200 Bt Materials 1,000 Bt
2-Mar	- To understand the project plan, regulation, responsibility and coordinating mechanism		<u>Total 20,000 Bt</u>

8. NO. OF PARTICIPANTS	25 persons
9. COOPERATIVE AGENCIES	9.1 Representative of RID central 3 persons 9.2
10. EXPECTED RESULT	10.1 TSG can facilitate and support to TTC 10.2 TSG consider to own regulation, duty and responsibility 10.3 TSG can cooperate to other agencies

DETAIL OF ACTIVITY
UPPER HUAI MAHAD RESERVOIR

1. PERSON WHO PROPOSED PROJECT	Mr. Kasem Kamonphithan
2. AGENCY	Agricultural District Office of Ban Kha Sub district, Ratchaburi province
3. DATE/MONTH/YEAR	February 19, 2004
4. NO. OF ACTIVITY	1-1
5. NAME OF ACTIVITY	Training is conducted to improvement of sugarcane and pineapple
6. OBJECTIVE	6.1 To train the improvement of sugarcane and pineapple. 6.2 To transfer new technology

7. STEP OF IMPLEMENTATION			
D/M/Y	Activity	Detail	Expense (Bt)
Jun-July	- To understand course of training and participatory method	1. Hotel 2. Transportation 3. Instructor's fee 4. Material TOTAL	TOTAL 20,000 Bt : - Instructor's fee 3,000 Bt (for 6 hr. and 500 Bt/hr) - Material 17,000 Bt

8. NO. OF PARTICIPANTS	50 persons
9. COOPERATIVE AGENCIES	9.1 TTC Nong Phan Chan 9.2 TAO Nong Phan Chan
10. EXPECTED RESULT	10.1 Farmers know the process of production, improvement of sugarcane and pineapple quality. 10.2 To increase the income by pineapple and sugarcane price

**DETAIL OF ACTIVITY
UPPER HUAI MAHAD RESERVOIR**

1. PERSON WHO PROPOSED PROJECT	Mr. Kasem Kamonphithan
2. AGENCY	Agricultural District Office of Ban Kha Sub district, Ratchaburi province
3. DATE/MONTH/YEAR	February 19, 2004
4. NO. OF ACTIVITY	1-2
5. NAME OF ACTIVITY	Training is conducted to marketing and sale promotion of pineapple
6. OBJECTIVE	6.1 To train for the marketing of pineapple 6.2 To inform to farmer the market trend by factory and fresh market

7. STEP OF IMPLEMENTATION			
D/M/Y	Activity	Detail	Expense (Bt)
July	- To train the marketing issue and sale promotion of pineapple	Training course for 1 time in 1 day and 50 farmers	TOTAL 20,000 Bt : - Instructor's fee 1,500 Bt (for 3 hr. and 500 Bt/hr) - Material 8,500 Bt

8. NO. OF PARTICIPANTS	50 persons
9. COOPERATIVE AGENCIES	9.1 TTC Nong Phan Chan 9.2 TAO Nong Phan Chan
10. EXPECTED RESULT	Farmers' income from pineapple is increased

**DETAIL OF ACTIVITY
UPPER HUAI MAHAD RESERVOIR**

1. PERSON WHO PROPOSED PROJECT	Mr. Kasem Kamonphithan
2. AGENCY	Agricultural District Office of Ban Kha Sub district, Ratchaburi province
3. DATE/MONTH/YEAR	February 19, 2004
4. NO. OF ACTIVITY	2-1
5. NAME OF ACTIVITY	Training is conducted to utilize the fertilizer and insecticide correctly
6. OBJECTIVE	6.1 To train the utilization of fertilizer and insecticide correctly 6.2 To alert the farmer about the effect of chemical hazard to consumers

7. STEP OF IMPLEMENTATION			
D/M/Y	Activity	Detail	Expense (Bt)
July	Training the utilization of fertilizer and insecticide correctly	Training course for 1 time in 2 day and 50 farmers	TOTAL 15,000 Bt : - Material, etc 12,000 Bt - Instructor's fee 3,000 Bt (for 6 hr. and 500 Bt/hr)

8. NO. OF PARTICIPANTS	50 persons
9. COOPERATIVE AGENCIES	9.1 TTC Nong Phan Chan 9.2 TAO Nong Phan Chan
10. EXPECTED RESULT	10.1 Farmers know the utilization of fertilizer and insecticide correctly 10.2 Farmers realize on the side effect of chemical substance

DETAIL OF ACTIVITY
UPPER HUAI MAHAD RESERVOIR

1. PERSON WHO PROPOSED PROJECT	Mr. Kasem Kamonphithan
2. AGENCY	Agricultural District Office of Ban Kha Sub district, Ratchaburi province
3. DATE/MONTH/YEAR	February 19, 2004
4. NO. OF ACTIVITY	2-2
5. NAME OF ACTIVITY	To group for purchasing the farm input
6. OBJECTIVE	6.1 To group the farmer to purchase the farm input 6.2 To train the farmer working into team and can negotiate the price to merchant

7. STEP OF IMPLEMENTATION			
D/M/Y	Activity	Detail	Expense (Bt)
Jun	Farmer's group to purchase the farm input	Target farmer 25 persons	Farmer pay the own money to buy the farm input

8. NO. OF PARTICIPANTS	25 persons
9. COOPERATIVE AGENCIES	9.1 TTC Nong Phan Chan 9.2 TAO Nong Phan Chan
10. EXPECTED RESULT	Input supplies are obtained for the lower price.

**DETAIL OF ACTIVITY
UPPER HUAI MAHAD RESERVOIR**

1. PERSON WHO PROPOSED PROJECT	Mr. Somsak Sonthiworachai
2. AGENCY	LDD of Ratchaburi, LDD region 10
3. DATE/MONTH/YEAR	February 19, 2004
4. NO. OF ACTIVITY	2-3
5. NAME OF ACTIVITY	To train the proceeding of organic fertilizers to use in farm plot
6. OBJECTIVE	6.1 To train the proceeding of organic fertilizers 6.2 To transfer new technology

7. STEP OF IMPLEMENTATION			
D/M/Y	Activity	Detail	Expense (Bt)
Mar-Apr	Demonstrate to proceed the organic fertilizer	Demonstrate to proceed the organic fertilizer	TOTAL 6,400 Bt Organic fertilizer 8 ton : 800 Bt/ton
	Farmer training	For farmer 100 persons	TOTAL 12,000 Bt : Instructor fee, Material
May-Jun	Demonstrate to proceed the organic fertilizer	Total 4 rai and 650 Bt/rai	Material totally 2,600 Bt

8. NO. OF PARTICIPANTS	100 persons
9. COOPERATIVE AGENCIES	Agricultural office of King-Amphoe Ban Kha TAO Nong Phan Chan
10. EXPECTED RESULT	10.1 Farmers can produce the organic fertilizer 10.2 Transfer new technology

**DETAIL OF ACTIVITY
UPPER HUAI MAHAD RESERVOIR**

1. PERSON WHO PROPOSED PROJECT	Mr. Pairat
2. AGENCY	RID Ratchaburi
3. DATE/MONTH/YEAR	February 18, 2004
4. NO. OF ACTIVITY	3-5
5. NAME OF ACTIVITY	To train the WUG for O&M
6. OBJECTIVE	WUG is able to operate and maintain the irrigation system.

7. STEP OF IMPLEMENTATION			
D/M/Y	Activity	Detail	Expense (Bt)
22 Mar	To coordinate between the official and WUG	Prepare for the document and coordinate with WUG and responsible agencies	-Material 240 Bt
23 Mar	To prepare the documents: - O&M - Farming account	Documentation and copy	-Material 760 Bt
24-31 Mar (2 days)	To training for the WUG	To train the issues : - O&M - Farming account	Total 9,000 Bt : Material 7,200 Bt (30 persons for 2 days and 3,600 Bt/day) Instructor fee 1,800 Bt (600 Bt/hr for 3 hr.)

8. NO. OF PARTICIPANTS	30 persons
9. COOPERATIVE AGENCIES	RID Ratchaburi Agricultural office of King-Amphoe Ban Kha Off. of agricultural auditor Ratchaburi TAO Nong Phan Chan
10. EXPECTED RESULT	WUG can manage to follow the O&M regulation

9.4 Detail Plans of the Responsible Agencies in BTPW

9.4 Detail Plans of the Responsible Agencies in BTPW

Detail Plan of BTPW Project in Kanchanaburi

Activity No.	Name of Activity	Objective	Responsible person	Organization	Steps	No. of participant	Budget Requested (Bt)	Other major stakeholder	Date of request
0-3	Establishment of WUG	Water Users are able to manage irrigation water effectively	Mr. Sayan Ketphan	DOCP	1. Explain objectives 2. Establishment of WUG 3. Selection of committee 4. Establishment of rules and regulation 5. Development of plan 6. Water User group meeting to explain all above	20	10,000	Study team TTC	23/02/04
0-4	Production planning	Water user group meet with production groups to plan for production	Mr. Supot Kitkat	DOAE	Organize two meeting with WUG and production group	20	10,000	RID DOCP	23/02/04
0-5	Support production groups	- Provide revolving fund to groups - Provide loan for group members	Mr. Sayan Ketphan	DOCP	1. Preparation of plan 2. Provide revolving fund and credit	20	150,000	Production group WUG TTC	23/02/04
0-6	Demonstration plot	- Set up Demonstrate plot of the project - Demonstrate high yield - Demonstrate low input cost	Mr. Supot Kitkat	DOAE	1. Secure inputs	3	13,000	TAO DOAE LDD	23/02/04
0-7	Study Tour	Farmers improve knowledge on water user group and agricultural development and	Mr. Supot Kitkat	DOAE	Organize study tour	30	60,000	TAO TSG TTC	23/02/04

Activity No.	Name of Activity	Objective	Responsible person	Organization	Steps	No. of participant	Budget Requested (Bt)	Other major stakeholder	Date of request
0-7/3-1	Release of shrimp in the river	- To increase shrimp population in the river - Improve farmer knowledge on shrimp raising	Mr. Chaluy Phitakcholsap	DOF	1. Release shrimp in the river 2. Participate in study tour 3. Train farmers on aquaculture	30	5,000	TTC RID	23/02/04
0-8	Organize study tour for others	- To present the achievement of the project implementation to representatives from other TAO within Lam Pa Chi basin	Mr. Supot Kitkat	DOAE	- Preparation of materials - Organize study tour	30	30,000	TAO	23/02/04
0-9	TTC meeting	TTC understand their role and responsibility in supporting WUG and production groups	Mr. Supot Kitkat	DOAE	Monthly meeting Purchase of equipment	15	13250	TAO	23/02/04
0-10	TTC training on TOT	-Participants understand the implementation structure of the project TTC understand their role and responsibility Participants understand participatory approach	Nakorn Najaron	Study Team	- Coordinate resources - Organize training	20	20,000	TSG WUG	19/02/04
0-11	TSG training on TOT	- Participants are understand participatory approach - Participants learn different skill of trainers	Nakorn Najaron	Study Team	- Coordinate resources - Organize training	15	20,000	TAO	19/02/04
1.1	Training on organic fertilizer	- Farmers realize the important of organic fertilizer - Reduce input cost - Increase soil fertility	Mr. Jiraphon Phimphu	LDD	One day training	20	3000	DOAE	23/02/04

Activity No.	Name of Activity	Objective	Responsible person	Organization	Steps	No. of participant	Budget Requested (Bt)	Other major stakeholder	Date of request
1-2	Establishment of Organic farmer group	- Organic farmer group is established - Farmers improve their soil using organic matters.	Mr. Supot Kitkat	DOAE	- Farmer training - Group establishment	20	30,000	LDD	23/02/04
2-1	Construction of pump irrigation scheme	To improve agricultural area in Ban Thaphayom	Engineer branch	RID Kanchanaburi	- Installation of pump - Installation of pipe		3,220,909	-	23/02/04
2-2	Test quality of water	- To know the quality of water - To improve soil and water	Mr. Jiraphon Phimphu	LDD	Test of water	20	10,000	DOAE Village volunteer	23/02/04
2-3	Training on operation and maintenance	WUD is able to operate and maintain the system	Engineer branch	RID Kanchanaburi	One day training	25	10,000	-	23/02/04
3-1	Production planning	Target farmers prepare the production plan	Mr. Supot Kitkat	DOAE	One day workshop	20	10,000	TAO Private company	23/02/04
3-2	Training on quality improvement	Farmers understand how to improve productivity and quality of the product	Mr. Supot Kitkat	DOAE	One day workshop	20	20,000	TAO Private company	23/02/04
3-3	Training on production and marketing of chemical free vegetable	Farmers understand how to produce chemical free vegetable	Mr. Supot Kitkat	DOAE	One day workshop	20	10,000	TAO Private company	23/02/04
3-4	Training on artificial breeding	Farmers understand the benefit of artificial breeding	Mr. Anurak Thabut	Livestock	One day workshop and field trip	30	10,000	TAO Farmers from the nearby villages	23/02/04

9.5 Activity Reports in UHMR

9.5 Activity Reports in UHMR

ACTIVITY REPORT UHMR Project in Ratchaburi	
Date:	May 26,2004
Name of Activity:	0-1 Baseline Survey
No. of Participants:	50 (Male: 18, Female: 32)
Total Budget:	Budget is born separately from JICA.
Planned activities	<ol style="list-style-type: none"> 1. Conducting survey of 24 direct beneficiary households. 2. Conducting survey of other 26 households living in the same village.
Activity Result	<ol style="list-style-type: none"> 1. Major crops are pineapples with average yield of 4.12 t/ year/ rai and sugarcane with average yield of 11 t/ year/ rai. 2. Main problems of the villagers are insufficient water resource, low products prices and high input cost. 3. Farmer needs are determining of farming zone, pineapple and sugarcane seedling, knowledge on animal feeds, artificial breeding and fish farming. 4. Average household income is 323,560 Bt / Year. Average household-expenses is 202,253 Bt/ Year. Average household debt is 76,850 Bt / Year. Average saving is 20,681 Bt/ Year.
Name of Facilitator/Modulator	Team Consultants Co.ltd
Impact to the project	Baseline data is used as indicators for the socio-economic and agricultural development of the project. It will be used also during the project evaluation.

ACTIVITY REPORT UHRM Project in Ratchaburi	
Date:	May 26,2004
Name of Activity	<0-3> Meeting and Establishment of WUG
No. of Participants:	25 (Male: 15, Female: 10)
Total Budget:	Bt 10,000
Planned activities	<ol style="list-style-type: none"> 1. Meeting for selection of WUG's administrative committee by members 2. Meeting for formulating the WUG's regulations
Activity Result	<ol style="list-style-type: none"> 1. Water user group is established and strengthened. 2. WUG committee is responsible for allocating water and coordinating with agencies concerned. 3. Applying of rules and regulations for managing group. 4. Exchanging knowledge within group and neighboring groups.
Name of Facilitator/Modulator	<ol style="list-style-type: none"> 1. Mr. Chatchawarn Wongmuang, Ratchaburi Irrigation Project 2. Mr. Kritikorn Noipin, Ratchaburi Irrigation Project 3. Mrs. Peyanut Noipin, Ratchaburi Irrigation Project
Impact to the project	<ol style="list-style-type: none"> 1. Generating of joining group together 2. Exchanging knowledge negotiation power. 3. Farmers could reduce conflict in managing water.
Recommended continuing activity	Supervising WUG in implementing the action plan.

ACTIVITY REPORT UHMR Project in Ratchaburi	
Date:	May 26,2004
Name of Activity	<0-4> WUG meet with production groups
No. of Participants:	50 (Male: 25, Female: 25)
Total Budget:	Bt 10,000
Planned activities	1. Inviting members to attend the meeting 2. Meeting for setting the guidelines among WUG, farmers and Housewife's group
Activity Result	Members from different groups understand how to work together. Problems of each group are discussed.
Name of Facilitator/Modulator	Mr. Kasem , Ban Kha Aricultural Extension Office
Impact to the project	Group has the strengthening action guidelines
Things to be improved for the next activity	Plan and need of each group should be clearly written.

ACTIVITY REPORT UHRM Project in Ratchaburi	
Date: April 8,2004 Name of Activity: 0-5 No. of Participants: 100 (Male: 55, Female: 45) Total Budget: 150,000 baht	
Planned activities	1. Farmers meeting 2. Discussion and conclusion 3. Group gathering
Activity Result	1. Farmers are united to buy their produced material 2. Farmers learned to work as a group 3. Farmers have to decrease the production cost
Name of Facilitator/Modelator	Mr. Samruay Bunkird, Chairman of the water user group and member
Impact to the project	Increasing of the present budget to satisfy the need of 100 members

ACTIVITY REPORT UHMR Project in Ratchaburi	
Date:	May 26,2004
Name of Activity	<0-5> Supporting the revolving funds for production group
No. of Participants:	100
Total Budget:	Bt 150,000 and member contribution Bt 10,000
Planned activities	<ol style="list-style-type: none"> 1. WUG met production groups to discuss about how to support production groups effectively. 2. Members were recruited. 3. Total Bt 10,000 was collected as member fee (Bt100 per member) 4. WUG opened saving account 5. 30 tons of chemical fertilizer is purchased with a total cost of Bt 152,400. The remaining budget is Bt 7,600 (160,000 – 152,400).
Activity Result	<ol style="list-style-type: none"> 1. Each member received 6 bags of fertilizer. 2. Farmers learned that purchasing input collectively could save their money. 3. Rules and regulation of the groups is clearly written.
Name of Facilitator/Modulator	DOAE and TTC coordinated the purchase.
Impact to the project	The revolving fund facilitate group process during and after the project.
Things to be improved for the next activity	<ol style="list-style-type: none"> 1. Period of repayment should be six month instead of one year. 2. Other types of input may be purchased in the future if they are needed by members. 3. TTC should establish the database of input sources.

ACTIVITY REPORT UHRM Project in Ratchaburi	
Date: - Name of Activity: 0-6 (Sugarcane) No. of Participants: N/A (Male: -, Female: -) Total Budget: 10,000 Baht	
Planned activities	1. The water user group meeting 2. Farmers selection is made within the group 3. Sample plot was selected 4. Follow the group regulation
Activity Result	1. Made a sample plot for the farmers to study 2. Site survey area 3. Site for exchanging experiences
Name of Facilitator/Modelator	Mr. Bunchoo Saikaew
Impact to the project	

ACTIVITY REPORT UHRM Project in Ratchaburi	
Date: Name of Activity: 0-6 (Pine apple) No. of Participants: N/A (Male: -, Female: -) Total Budget: 20,000	
Planned activities	1. The water user group meeting 2. The selection of the farmer is made within the group 3. Sample plot was selected 4. Follow the group regulation
Activity Result	1. Made a sample plot for the farmer to study 2. Site survey area 3. Site for exchanging experiences
Name of Facilitator/Modelator	Mr. Samruay Bunkird
Impact to the project	

ACTIVITY REPORT UHMR Project in Ratchaburi	
Date: - Name of Activity: 0-6 (Vegetables) No. of Participants: N/A (Male: -, Female: -) Total Budget: 10,000Bt	
Planned activities	1. The water user group meeting 2. The selection of the farmer is made within the group 3. Sample plot was selected 4. Follow the group regulation
Activity Result	1. Made a sample plot for the farmer to study 2. Site survey of the area 3. Site survey for exchanging experiences
Name of Facilitator/Moderator	Mr. Thongyod Srikarm
Impact to the project	

ACTIVITY REPORT UHMR Project in Ratchaburi	
Date:	21-22 April 2004
Name of Activity	<0-7> Organizing study tour for WUG
No. of Participants:	42
Total Budget:	Bt 50,000 (Total budget is Bt 63,000)
Planned activities	<ol style="list-style-type: none"> 1. Need assessment for the study tour. 2. Study tour is planned. 3. Sites for visiting are contacted 4. Organize study tour to four different sites
Activity Result	<ol style="list-style-type: none"> 1. Farmers learned from other advance group how to manage group. 2. They learned how to process pineapple. 3. They learned how to produce high yield pineapple.
Name of Facilitator/Modulator	<ol style="list-style-type: none"> 1. Mr. Woravut Kanchanapanyo , Kaset Tambon (DOAE) 2. Wanchai Nilawong, Kaset Tambon (DOAE)
Impact to the project	<ol style="list-style-type: none"> 1. Some farmers started to apply field knowledge of pineapple planting in their field. 2. Some practices will be applied in the demonstration plot. 3. TTC, water user group and production groups in the area got to know each other during the study tour.
Things to be improved for the next activity	<ol style="list-style-type: none"> 1. Number of sites to visit should not be too many. Selection of particular sites to visit and spent more time at each sites. 2. Lesson learnt should be discussed and summarized after the study tour. 3. The existing pineapple production should be analyzed. 4. Good practice should be prepared and recommended.
Recommended continuing activity	One more study tour to other water user group will be organized

ACTIVITY REPORT UHRM Project in Ratchaburi	
Date:	November 1, 2004
Name of Activity:	0-7 (Continue)
No. of Participants:	45 (Male: 22, Female: 23)
Total Budget:	13,000
Planned activities	1. Farmers meeting 2. Asking for the site survey needs 3. Fixed the place 4. Contact and cooperate the site survey spot 5. Fixed date, place and inform the farmers
Activity Result	1. Farmers got new ideas 2. Exchanging experience 3. Discussion among farmers to keep their network
Name of Facilitator/Modulator	1. Mr. Preecha, Agriculturist of Tambon Thaphayom 2. Mr. Somyos, Chairman of the water user group 3. Mr. Chingchai Phetphirun, Agriculturist of Ranong Province
Impact to the project	There should be enough budgets to visit other site areas which have the same activities for comparison.

ACTIVITY REPORT UHMR Project in Ratchaburi	
Date:	26 May 2004
Name of Activity	<0-9> Monthly meeting of the Technology Transfer Center (TTC)
No. of Participants:	15 (Male: 15, Female: -)
Total Budget:	Bt 12,250
Planned activities	<ol style="list-style-type: none"> 1. Setting the date of monthly meeting 2. Agenda detailed: <ul style="list-style-type: none"> • Explanation of the TTC's roles, Summarizing of agricultural problems of Tambon, Planning and finding the solutions, Determining the supporting guidelines, Technical knowledge and budget 3. Conducting survey concerning water resources for farming, Cropping areas of each crops and livestock quantity 4. Planning and coordinating about marketing of pineapples, sugarcane, vegetables, fruit trees and livestock 5. Preparation of minute of meeting
Activity Result	<ol style="list-style-type: none"> 1. Committee identify their roles 2. They learned the agricultural problems of Tambon 3. They learned how to support plan, how to solve agricultural problems, how to promote potential crop and prepare guidelines for agricultural production. 4. Prepare information of water resources for farming, farming areas and livestock production
Name of Facilitator/Modulator	Mr. Woravut Kanchanapanyo , Kaset Tambon (DOAE)
Impact to the project	TTC serves as coordinating body for technical assistance.
Things to be improved for the next activity	<ol style="list-style-type: none"> 1. Some committees did not attend the meeting (only 8-12 participants) 2. Farmers did not follow the recommendations for instance reducing the use of chemical fertilizer by using compost or manure instead and the use of insecticide 3. Conducting the public relations to farmers rapidly and more increasingly
Recommended continuing activity	<ol style="list-style-type: none"> 1. Monthly meeting will be organizes to monitor the progress of work. 2. Coordination with Technical Support Group for technical assistance if needed.

ACTIVITY REPORT UHRM Project in Ratchaburi	
Date:	September 3, 2004
Name of Activity:	0-9
No. of Participants:	15 (Male: 15, Female: -)
Total Budget:	13,250
Planned activities	1. Select the leader of each villages 2. Announce the appointed committee 3. Set up the meeting 4. Divide responsibilities: crop, animal and fishery 5. Fixed the development guideline 6. Provide agricultural information service to the citizen
Activity Result	1. Monthly meeting 2. Job Regulation 3. Allow the committee to fix the development plan 4. Allow the committee to known the role of the work
Name of Facilitator/Modulator	15 Committee members from the Tambon Nong Phanchan agricultural technology transfer and services center
Impact to the project	1. Speaker training needs. 2. Budget needs for development center.

ACTIVITY REPORT UHRM Project in Ratchaburi	
Date: Name of Activity: No. of Participants: Total Budget:	September 10, 2004 1-1 N/A (Male: , Female:) 20,000
Planned activities	1. Look for a suitable speaker 2. Fixed date, time and place 3. Appoint farmers for training
Activity Result	1. Farmers acknowledge the quality improvement of sugarcane and pineapple 2. Farmers have their income increased
Name of Facilitator/Modulator	Mr. Chao Visetchoke, Agricultural Promotion Expert, Ratchaburi Agriculture Office
Impact to the project	Farmers should be taken for training on the area which have the sample of sugarcane

ACTIVITY REPORT UHRM Project in Ratchaburi	
Date: September 15, 2004 Name of Activity: 1-2 No. of Participants: 100 (Male: 54, Female: 46) Total Budget: 10,000	
Planned activities	1. Planning 2. Speaker 3. Fixed date, time and place 4. Invite the farmers to join the meeting
Activity Result	1. Farmers gain knowledge 2. Farmers learn to how to cultivate
Name of Facilitator/Modulator	Mr. Chingchai Phetpirun
Impact to the project	1. Provide marketing information 2. Farmers learn to plan the production according to the need of the market

ACTIVITY REPORT UHRM Project in Ratchaburi	
Date: October 22, 2004 Name of Activity: 2-1 No. of Participants: 45 (Male: 30, Female: 15) Total Budget: 15,000	
Planned activities	1. Look for Speaker 2. Fixed date, time and place 3. Appoint farmers for training
Activity Result	1. Farmers acknowledge the usage of the chemical correctly 2. Farmers acknowledge the danger cause to the consumer from the using of the chemical
Name of Facilitator/Modulator	Mr. Chao Visetchoke, Agricultural Promotion Expert, Ratchaburi Agriculture Office
Impact to the project	

ACTIVITY REPORT UHMR Project in Ratchaburi	
Date:	26 May 2004
Area:	UHMR Project in Ratchaburi
Name of Activity:	<2-3> Conduction and utilization of compost and organic fertilizer
No. of Participants:	70 (Male: 47, Female: 23)
Total Budget:	Bt 14,240
Planned activities	<ol style="list-style-type: none"> 1. Contacted and coordinated with Village Head concerning the date of training 2. Village Head informed farmers about date and time of training 3. Contracted lecturers 4. Prepared equipment for training 5. Organized the training by gave lecture and used media 6. Demonstrated the conduction of compost and liquid organic fertilizer
Activity Result	<ol style="list-style-type: none"> 1. Farmers are able to conduct compost and liquid organic 2. Fertilizer by themselves. 3. Reducing the use of chemical substance. 4. Reducing the expenses for purchasing chemical fertilizer.
Name of Facilitator/Modulator	<ol style="list-style-type: none"> 1. Mr. Vhai Inphorm , Ratchaburi Land Development Office 2. Mr. Kulthorn Kaitsiri , Ratchaburi Land Development Station 3. Mr. Woravut Kanchanapanyo Agricultural Extension officer.
Impact to the project	<ol style="list-style-type: none"> 1. Soil fertility is improved. 2. Chemical fertilizer will be reduced. Therefore, cost for input is decreased
Recommended continuing activity	Promotion of compost making and green manure production.

ACTIVITY REPORT UHMR Project in Ratchaburi	
Date:	-
Area:	UHMR Project in Ratchaburi
Name of Activity:	<3-1, 3-2, 3-3> Construction of irrigation system.
No. of Participants:	30 (Male: -, Female: -)
Total Budget:	Bt 3,422,000
Planned activities	<ol style="list-style-type: none"> 1. Meet with farmers and TAO to explain about the project. 2. Finalize the alignment with farmers and TAO 3. Survey and design the system 4. Explain the designs to farmers 5. Implementing the construction work: 6. Opening top soil 7. Soil excavating 8. Installation of pipe 9. Completion of the construction areas 10. Testing of the systems 11. Facilitate the installation of tertiary pipeline in the farmers' field.
Activity Result	<ol style="list-style-type: none"> 1. 95 percent of the construction work is completed. 2. Supplied water to farmers approx. 30 persons covering areas of 600-700 rai
Name of Facilitator/Modulator	Ratchaburi Irrigation Project and WUG
Impact to the project	<ol style="list-style-type: none"> 1. The project farmers could irrigate their field so productivity of their crops will be increased. 2. Cost for pumping will be reduced.
Things to be improved for the next activity	Conflict among WUG for daily used, WUG for farming and WUG in existing stream might be happened if water allocation and management is not good enough.
Recommended continuing activity	<ol style="list-style-type: none"> 1. Transfer the ownership of the system to TAO after completion of the construction. 2. Transfer the operation and maintenance of the system to WUG 3. RID supervises the operation and maintenance.

9.6 Activity Reports in BTPW

9.6 Activity Reports in BTPW

ACTIVITY REPORT BTPW Project in Kanchanaburi	
Date:	24 May 2004
Area:	BTPW Project in Kanchanaburi
Name of Activity:	<0-1> The baseline survey
No. of Participants:	30 (Male: 30, Female: 0)
Total Budget:	(The budget is born separately by JICA)
Planned activities	<ol style="list-style-type: none"> 1. Examine the list of direct beneficiaries in the pilot project and the list of other farmers in Ban Ta Phayom, Tambon Nong Phai. 2. Choose 20 direct beneficiaries and other 10 households randomly as target farmers for the interview. 3. Conduct baseline survey in the village by interviewing 30 households. 4. Result of the survey is analyzed and reported
Activity Result	<ol style="list-style-type: none"> 1. Farmer family owns average 19.39 rai 2. Main crops planted in the village are asparagus, eggplant, string bean and chili. 3. Main problems: <ol style="list-style-type: none"> 3.1 Selling price is low. 3.2 Agricultural area is flooded. 3.3 Soil is not fertilized. 4. Farmers' needs: <ol style="list-style-type: none"> 4.1 Training on disease and insects control. 4.2 Training on animal food production. 4.3 Training on artificial breeding. 5. Family income and expenditure: 6. Incomes: 321,905Bt/ year/ household 7. Expenditure: 251,650Bt/ year/ household 8. Debt: 102,133Bt/ year/ household 9. Savings: 13,822Bt/ year/ household
Name of Facilitator/Modulator	Team Consultant Co. Ltd.
Impact to the project	The result of the survey will be used for evaluation of the project at the end of the project.

ACTIVITY REPORT

Date: 26 October 2004

Area: _____

1. Name of Activity: 0-3, Meeting for set up and develop the water user group

2. No. of Participants: 18 persons

3. Total Budget: _____

4. Operation Procedures:

4.1 26 Oct.04, Mr. Prateep, Provincial Cooperative as the Expert of the meeting had been invited to train the member of the water user group for approximately 3 hours and to purchase the stationary for accounting preparation

4.2 The accountant of Amphoe Cooperative Office was invited to give a lecture to the committee of the water user group and a fan was given as an appreciation

4.3 _____

5. Activity Result

5.1 _____

5.2 _____

5.3 _____

6. Name of Facilitator/Modulator

- _____
- _____

7. Effect to the Project in the long term

- _____
- _____
- _____

8. Things to be improved for the next activity

- _____
- _____
- _____

9. Recommended continuing activity

- _____
- _____
- _____

Name of Reporter:

Agency:

ACTIVITY REPORT BTPW Project in Kanchanaburi	
Date:	24 May 2004
Area:	BTPW Project in Kanchanaburi
Name of Activity:	<0-6> Demonstration Plots
No. of Participants:	3 (Male: 3, Female: 0)
Total Budget:	Bt 13,000
Planned activities	<ol style="list-style-type: none"> 1. The WUG selected three embers to produce each crops. 2. The three selected farmers are 1) Mr. Somwang Indra-oo sod (Bean production), 2) Mr. Suthad Nuchnum (Vetgetable) and 3) Mr. Somyod AeimSaeng (Sweat Corn production). 3. Materials are purchased for demonstration plots. 4. The selected farmers grew 0.5 rai of white cabbages, 1 rai of sweet corn and 0.5 rai of string bean 5. Each crop produce in different stage ,for example, 40 days for white cabbages , 50 days for string bean and 75 days sweet corn.
Activity Result	<ol style="list-style-type: none"> 1. Three demonstration plots are established. 2. Expenditures are recorded.. 3. Three Signboards of all plots are prepared. 4. The plots are maintained by responsible farmers.
Name of Facilitator/Modulator	Mr. Preecha DanMatam, Kaset Tambol, Nong Phai (DOAE)
Impact to the project	The demonstration plots will be used as good practice in how to reduce input cost and organic fertilizer use.
Things to be improved for the next activity	<ol style="list-style-type: none"> 1. Compost should be produced and applied more in the plots 2. Herbal spray should be applied in the plots to protect crops from insect.
Recommended continuing activity	<ol style="list-style-type: none"> 1. To promote the use of compost 2. To promote the use of herbal spray

ACTIVITY REPORT

Date: March 2004

Area: _____

1. Name of Activity: A: 0-6, Demonstration plot on the baby corn, sweet corn

B: 0-7, Site survey of the water user group

2. No. of Participants: A: 3 persons and B: 50 persons

3. Total Budget: _____

4. Operation Procedures:

A:

4.1 From the baby corn plot: Mr. Somyos profited

4.2 From the cowpea plot: Mr. Somwang flooded

4.3 From the Chinese cabbage plot : Mr. Suthat flooded in May04

B:

4.4 Site survey in Nakorn Si Thammarat (2 days)

4.5 Visited the manure producers' group at Ban Homehaeng and stayed overnight 1 day

4.6 Visited the crop producers' group (1 day)

5. Activity Result

5.1 Exchanged experience for suitable development and improvement

5.2 _____

5.3 _____

6. Name of Facilitator/Modulator

- _____
- _____

7. Effect to the Project in the long term

- _____
- _____
- _____

8. Things to be improved for the next activity

- _____
- _____

9. Recommended continuing activity

- _____
- _____

10. Other agency participated

- Nongphai TAO
- Dan Makamtia Agricultural Office

Name of Reporter:

Agency:

ACTIVITY REPORT

Date: _____

Area: _____

1. Name of Activity: 0-8, Site survey of the agency from the other area _____

2. No. of Participants: 300 persons _____

3. Total Budget: _____

4. Operation Procedures:

4.1 2-8 Sep. 04, Agricultural Office of Amphoe Dan Makhamtia and TAO Nongphai join to set up the fair of Opening the water system and demonstrative day _____

Station 1: Animal breeding by manual _____

Station 2: Plant plot and fertilizer produce _____

Station 3: Fertilizer produce _____

4.2 The end of Oct. 04, Welcome for the participant of water use group of Ban Huai Mahard, Nong Phanchan A.Kingbankha C.Ratchaburi _____

4.3 _____

5. Activity Result

5.1 _____

5.2 _____

5.3 _____

6. Name of Facilitator/Modulator

- _____
- _____

7. Effect to the Project in the long term

- _____
- _____
- _____

8. Things to be improved for the next activity

- _____
- _____
- _____

9. Recommended continuing activity

- _____
- _____

10. Other agency participated

- Members from other TAO _____
- Head of Government Office of Amphoe Dan Makamtia _____

Name of Reporter:

Agency:

ACTIVITY REPORT

Date: 2 November 2004

Area: _____

1. Name of Activity: 0-9, The meeting of the committee of Technology Transfer Center
+ Meeting compensation 2,100 Baht from the budget

2. No. of Participants: 15 persons

3. Total Budget: _____

4. Operation Procedures:

4.1 2 Nov. 04, Meeting of the committee of Technology Transfer Center about the finance

4.2 _____

4.3 _____

5. Activity Result

5.1 _____

5.2 _____

5.3 _____

6. Name of Facilitator/Modulator

- _____

- _____

7. Effect to the Project in the long term

- _____

- _____

- _____

8. Things to be improved for the next activity

- _____

- _____

- _____

9. Recommended continuing activity

- _____

- _____

- _____

10. Other agency participated

- Dan Makhamtia Agricultural Office

Name of Reporter:

Agency:

ACTIVITY REPORT BTPW Project in Kanchanaburi	
Date:	24 May 2004
Area:	BTPW Project in Kanchanaburi
Name of Activity:	<1-2> Compost Making Group Establishment
No. of Participants:	62
Total Budget:	Bt 30,000
Planned activities	<ol style="list-style-type: none"> 1. Compost making group was established on 4 May 2004. A meeting was organized to established the group. Participants are Mr. Preecha Danmatam, TTC members, TAO members, village committee and chief of the village. 2. The group committee comprised of a chairman, deputy chairman, secretary, deputy secretary, accountant and advisor. There are 62 members. 3. The group prepared draft workplan for the production of compost. This plan will be finalized after the group members are trained on compost making and study tour to other successful compost group
Activity Result	Budget is allocated to WUG to purchase materials.
Name of Facilitator/Modulator	TTC
Impact to the project	Compost will be produced. Organic farming and chemical free vegetable will be promoted.
Things to be improved for the next activity	-
Recommended continuing activity	<ol style="list-style-type: none"> 1. The group should be trained on compost making to be organized by Land Development Department. 2. The group should visit to the successful compost making group outside the project area where farmers group explain why they turn to compost making and how they work together.

ACTIVITY REPORT BTPW Project in Kanchanaburi	
Date:	24 May 2004
Area:	BTPW Project in Kanchanaburi
Name of Activity:	<2-1> Pump Irrigation System Construction
No. of Participants:	20 (Male: 20, Female: 0)
Total Budget:	Bt 3,543,000 (30 percent of the total budget is spent)
Planned activities	<ol style="list-style-type: none"> 1. Survey and design the irrigation system based on the allocated budget and farmers' preferences. 2. Farmers allow RID constructing the system in their land without requesting for compensation. 3. Request approval from Highway Department to install pipes under the road. 4. Request approval and installation of electricity from the Regional Electricity Office, Dan Ma Kham Tia District, Kanchanaburi province. 5. Request approval for pipe lining over the gas pipeline from the Gas Pipeline Center 5, Ratchaburi Province 6. Construction of pump station 7. Installation of Pumps 8. Installation pipes and other structures
Activity Result	<ol style="list-style-type: none"> 1. All agencies approved the request. Farmers agreed in writing to allow RID to construct the system. 2. The construction of pump station is completed 3. Fifty percent of electricity installation cost is paid to the electricity regional office. 4. Pipes and other accessory are purchased and supplied to the construction site.
Name of Facilitator/Modulator	RID Kanchanaburi Provincial Office
Impact to the project	<ol style="list-style-type: none"> 1. Cost for irrigating the field will be reduced. 2. Farmers obtained better quality of water for their crop production. Therefore, higher
Things to be improved for the next activity	Cooperation among related people and agencies should be improved
Recommended continuing activity	<ol style="list-style-type: none"> 1. Installation of pump 2. Installation of pipes and other structures

Remarks: The project area was flooded during May 22-23, 2004. It may have caused the delay of the construction work.

ACTIVITY REPORT

Date: 13 September 2004

Area: _____

1. Name of Activity: A: 3-1, Crop planning, Budget 10,000 Baht
 B: 3-3, Training to produce and sale the vegetable without pesticide

2. No. of Participants: 20 persons

3. Total Budget: _____

4. Operation Procedures:

A:

4.1 13 Sep.04, Invited Khun Lek Paltkawong as the speaker for the training on crop marketing and production for approximately 3 hours

B:

4.2 20 Oct.04, Guided the water user group on site survey at Farm 'Sor. Bunyakrit' A.Nongprue on the production and marketing of the vegetable without pesticide and the price assurance of 10 Baht at the minimum

4.3 _____

5. Activity Result

5.1 _____

5.2 _____

5.3 _____

6. Name of Facilitator/Modulator

- _____
- _____

7. Effect to the Project in the long term

- _____
- _____
- _____

8. Things to be improved for the next activity

- _____
- _____
- _____

9. Recommended continuing activity

- _____
- _____

10. Other agency participated

- Dan Makamtia Agricultural Office
- Nongphai TAO

Name of Reporter:

Agency:

ACTIVITY REPORT BTPW Project in Kanchanaburi	
Date:	24 March 2004
Area:	BTPW Project in Kanchanaburi
Name of Activity:	<3-4> Artificial breeding of cow and cow feed production
No. of Participants:	38 (Male:35, Female: 3)
Total Budget:	Bt 10,000
Planned activities	<ol style="list-style-type: none"> 1. Selection of farmers to participate in the training. 2. Coordination with the Nong Phai TAO to provide the training room and facilities. 3. Contact resource person from Ratchaburi Artificial Breeding and Organic Technology Research Center and Kanchanaburi Provincial livestock Office. 4. Preparation of four cattle farms in the area in Tambon Rang Sali, Tanuang district, Don Khamin District, Ta Maka district and diary farms (concentrate mixing) in Tambon Wang Kanai, Ta Muang District, Kanchanaburi province.
Activity Result	<ol style="list-style-type: none"> 1. Farmers understood the principle and usefulness of artificial breeding. 2. Farmers learnt to observe animal heat and "the golden minute" (right time) of artificial breeding. 3. Farmers learned from the field visits on cattle farm management and animal food preparation. 4. Farmers learnt how to preserve cow food and use them in the time of lacking.
Name of Facilitator/Modulator	<ol style="list-style-type: none"> 1. Mr. Sarot Ngamkam, Director of Ratchaburi Artificial Breeding and Bio-Technology Research Center (Trainer) 2. Mr. Somkhid Vimuktanon, Animal Husbandry Officer, Kanchanaburi Provincial Livestock Office (Trainer) 3. Mr. Surapong Pianprasob, Chairman of Ta Muang Diary Cooperatives Agency: Ta Muang Diary Cooperatives, co., ltd. (Farm owner) 4. Mr. Apichai Poomperiruek , Cattle Demonstration Farm, Tambon Rang Sali, Ta Muang District, Kanchanaburi (Farm owner) 5. Mr. Sing-has Mankaew , Cattle Demonstration Farm, Tanbon Yang Muang, Ta Maka District, Kanchanaburi (Farm owner) 6. Mr. Anurak Thabutr , Chief of Kanchanaburi Artificial Breeding Station (Organizer)
Impact to the project	Long-term extension service will be established. Project beneficiaries could increase their income from cattle production by participating in this activity.
Things to be improved for the next activity	<ol style="list-style-type: none"> 1. The time for this training course should be two days instead of one. The first day training cover theoretical knowledge on artificial breeding. The second day of training is field visits. 2. Budget should be increased from Bt10,000 to Bt20,000.
Recommended continuing activity	<ol style="list-style-type: none"> 3. Establishment of an artificial breeding service unit in the Nong Phai TAO office 4. Establishment of an animal health fund 5. Establishment of the cow feed production group 6. Linkage with the cattle cooperatives to secure the market.

9.7 TOT to TSG

9.7 TOT to TSG

Summary of TSG Training March 9-10,2004

1. Expectation of participants

1. Obtain knowledge and learn new experience
2. To meet new friends and relax
3. To learn how to improve farmers' income
4. To learn new way of thinking and how to integrate work from different government agencies.
5. To learn how to be good trainers

2. Training objectives

1. Participants understand participatory approach and how to apply it in their CEO plan.
2. Participants understand project approach.
3. Participants are able to prepare the support plan to TTC and farmers.
4. Participants learn how to be good trainer.

3. Training schedule

March 9,2004

1. Understanding the training course
2. Problem analysis
3. Provincial development plan
4. Goal setting and approach
5. Analysis of the implementation structure

March 10,2004

1. TTC development process
2. How to support TTC and farmer groups
3. How to work with farmers
4. How to work together
5. Evaluation of the training course

4. Scope of analysis

TSG (Scope of work, process of work, administration and activities.)

TTC (Marketing, agricultural product, natural resource management, administration, information system.)

Target farmers (Quality of life, knowledge, occupation, household income, participation)

TTC

TTC was established in the year 2000 to coordinate agricultural activities in each Tambon. It is under supervision of DOAE. It collects agricultural information, identify problems in its' Tambon and coordinate for support from government agencies. DOAE staff at Tambon level acts as TTC secretary. It faces two main problems which are the uncertainty of the office space and financial support.

5. Working process of TTC

1. Data collection and identification of need in Agriculture
2. Preparation of Tambon Development Plan
3. Mobilizing resources
4. Implementation of activities.
5. Monitoring of activities
6. Evaluation of activities

TTC approaches

1. Coordinate with farmers and government agencies
2. Transfer of knowledge
3. Provide agricultural extension service
4. Learn new technology
5. Receive complain or problems of farmers
6. Search for new market for agricultural product

6. Analysis of constraints in irrigated agriculture

Group	Internal problems	External problems
1	<ul style="list-style-type: none"> - Duplication of work among government agencies - Lack of budget - Lack of equipment - Farmers do not accept performance of government agencies - Farmers do not like to form themselves in group - Limitation of resources 	<ul style="list-style-type: none"> - Lack of natural resources - No clear policy - Unstable market - Changes in policy makers
2	<ul style="list-style-type: none"> - Work load of government agencies - Lack of infrastructure - Farmers lack of knowledge in agriculture 	<ul style="list-style-type: none"> - Lack of marketing information - Lack of water - Price of agricultural product is determined by outsiders. - Uncertain government policy - Natural disaster
3.	<ul style="list-style-type: none"> - TSG members have a lot of things to do. - No office for TTC - Farmers resist to changes - Farmers do not have direct benefit from TTC - Labor shortage - Poor farmers 	<ul style="list-style-type: none"> - hard geographical condition - lack of decision making power
4	<ul style="list-style-type: none"> - no clear policy - lack of budget - lack of attention from government staff - farmers do not understand group process 	

7. Summary of the constraints

Farmer level

Poor farmers
↑
Limited resources
no stable market
natural disaster
lack of infrastructure
lack of good management

TTC

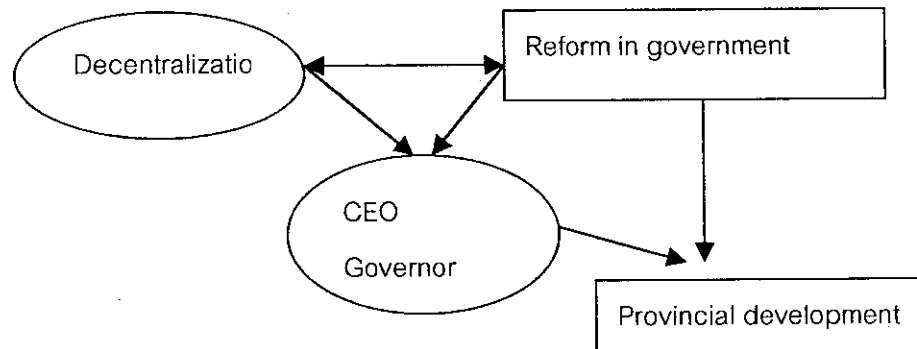
Lack of cooperation
↑
Farmers do not understand TTC role
Low budget
No clear policy
Internal conflict
No clear role of the committee

TSG

Duplication of work and no clear policy

8. The relation between CEO and pilot project

1. Thai government decentralizes rural development work to local organization.
2. Strategic management becomes center of government.
3. Provincial development plan reflects both national policy and local needs.
4. Budget is allocated to local to support the development plan.
5. Each agency must have indicators to monitor success of its activities



75 provinces are divided into 19 clusters. Each cluster prepares its strategic development plan. Each province prepares its provincial development plan based on the cluster plan.

MOAC promotes sustainable agriculture through appropriate technology, environment conservation, improvement of farmers' way of life and border trade.

TSG has to accommodate both national policy and provincial development plan into pilot project implementation.

9. Participants discuss strategy issue indicator and initiatives

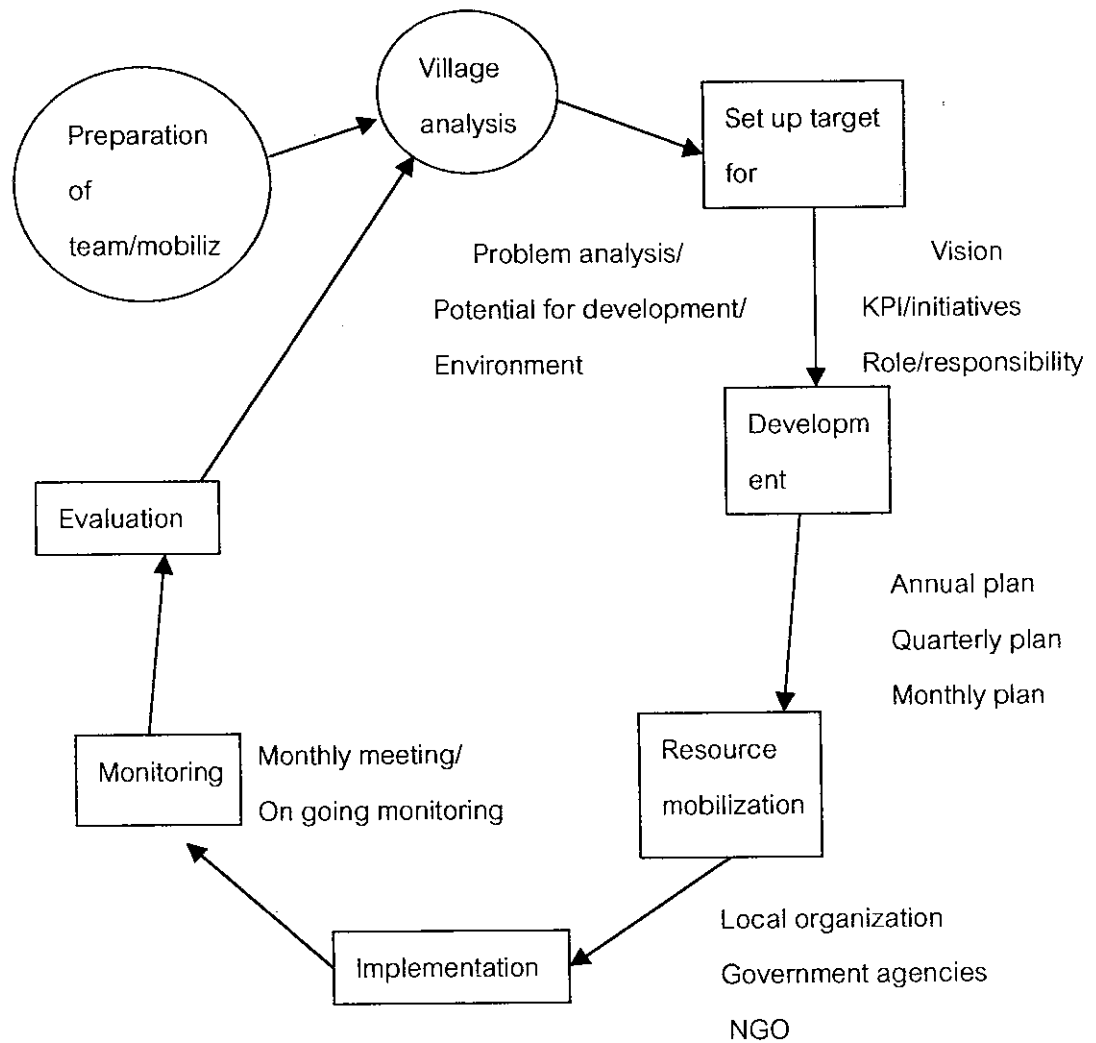
Strategy	Issue	Indicator	Initiatives
Promotion of sugarcane, pineapple, vegetables and asparagus	Price	Percent of farmers who are satisfied with price.	1. Sell product in group 2. Process agricultural product 3. Production planning
	Transportation	Percent of product damaged during transportation	Group manages transportation of agricultural product
	Market channels	<ul style="list-style-type: none"> - Bumber of contract farmers - Number of channels increased. 	<ul style="list-style-type: none"> 1. Advertisement 2. Organize the production group 3. Training on marketing
Development of appropriate production system	<ul style="list-style-type: none"> - Input supply - Farm product - Farm record - Quality of product 	<ul style="list-style-type: none"> - Low input cost - Percentage of germinated seed - Percentage of mineral in soil - Number of organic fertilizer farms - Number of farm receiving irrigation water - Yield per rai - Number of farm with farm record 	<ul style="list-style-type: none"> 1. Improvement of seed production 2. Soil improvement 3. Establishment of demonstration farm 4. Organization of study tour 5. Training on quality improvement
Development of infrastructure	<ul style="list-style-type: none"> - Development of water resources and farm roads - Soil 	<ul style="list-style-type: none"> - Number of farmers getting access to irrigation water - Number of farmers 	<ul style="list-style-type: none"> 1. Development of water resource 2. Development of farm roads

	improvement - Electricity improvement	getting access to electricity for agriculture - Number of organic farmers - Number of farmers who do not get access to farm road	3. Improve soil fertility 4. Improve crop and livestock
TSG	Working group, Budget and policy	- Percentage of staff who understand role and responsibility - Percentage of budget spent according to plan	1. clarify policy 2. secure budget 3. ensure continued support

10. Road Map of TSG

Vision	Quality of life of farmers are improved
Tasks	Access to inputs, infrastructure improvement, access to market channels
Work process	Farmer participation/production planning, technology transfer, coordination and budget
TTC	staff , administration and information system
TSG	Implementation structure, team work, budget security, information system and support from local organization

11. Process of work of TSG



12. Role and responsibility of TSG

Steps	Roles	Responsibility
Village analysis	Student/researcher	Study secondary data Team preparation Data collection Data analysis Report writing
Set up goal and approach of work	Planner	Study policy and report Set up goal Consider external and internal factor Coordinate different government agencies/target group
Mobilize resources	Coordinator	Work plan preparation Stakeholder analysis Provide information
Implementation	Advisor	Course design Training Show good practice Distribution of information
Monitoring	monitor	Monitor process Provide advice Report writing
Evaluation	Evaluator	Set up scope of evaluation Preparation of evaluation tools Collect data Analysis of data Prepare evaluation report

13. TSG as trainers

It is important for TSG members to learn different skill as trainers. Those important skills are;

1. good listeners
2. use appropriate tools
3. evaluate participants
4. manage the workshop or meeting
5. design training course
6. supervise group
7. create good atmosphere
8. stimulate participants
9. team building
10. good communication skill

Some important elements for participatory learning

1. There must be a central board to synchronize idea.
2. Selection of good training room without interruption.
3. Contact trainers/preparation of contents
4. Stimulate participants to share ideas.
5. Exchange of idea
6. Understanding participants background
7. Appropriate timing for each session
8. Preparation of training materials
9. Typing of training result

9.8 TOT to TTC

9.8 TOT to TTC

Training on Trainers for TTC March 6-7,2004

1. Training objectives

- 1) Participants understand the project approach and activities.
- 2) Participants realize the constraints and potentials in improving capacity of TTC in the pilot project.
- 3) Participants understand role of trainers in development.
- 4) Participants understand implementation structure.

2. Target participants

2.1 TTC members from the two project areas

2.2 WUG representative

3. Opening ceremony

Chairman of TSG Kanchanaburi opened the training by saying that TTC play the central role as the source of information of the Tambon. It is a good opportunity that the trainers will organize the discussion so that the participants could develop working approach. He hope the training course will achieve its objectives.

(1) Participants

There are 17 water users, 11 TTC members, two RID staff, three DOAE staff and two members of study team.

(2) Training schedule

March 6,2004

- Opening ceremony
- Understand the training course
- Concept of CEO plan
- Situation analysis
- Goal setting for development
- Activity analysis

March 7,2004

- TTC development process
- Trainers' role
- Trainers' skill
- Adult learning approach
- Implementation structure
- Evaluation of the training course

(3) Introduction of the pilot project

Lam Pa Chi Water shed pilot project is financially supported by JICA. The pilot project covers two provinces namely Ratchaburi province and Kanchanaburi province. Two villages are selected to implement the projects. The duration of work is one year. There are four different steps as follows.

- 3.1 Planning stage (area study/planning/revision of plan)
- 3.2 Implementation stage (transfer of budget to support activities/implement activities as plan)
- 3.3 Monitoring (review what has been done/ identify problems and ways to improve it.)
- 3.4 Evaluation (measure the outcome of activities compare the result with expected result)

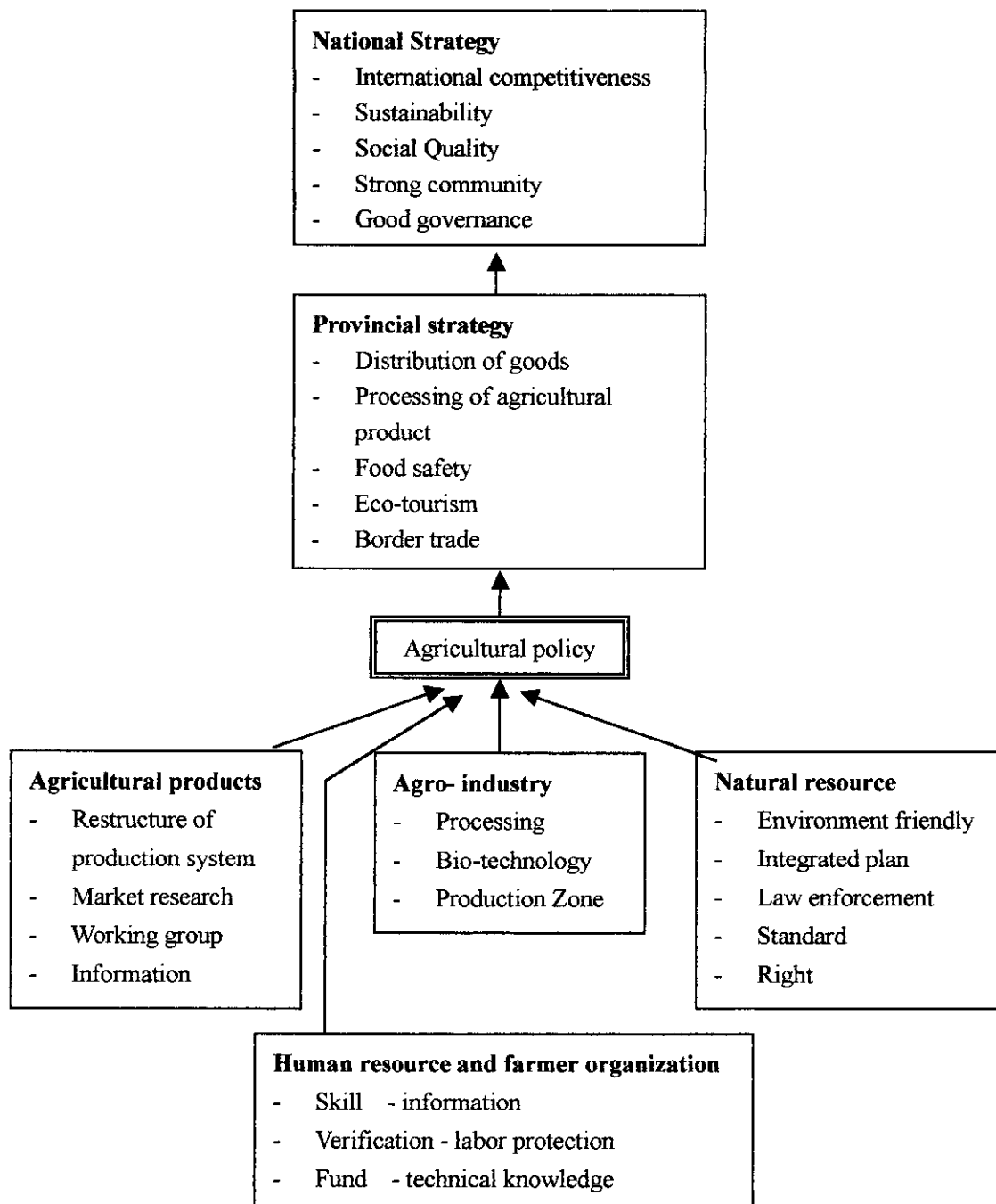
There are two main components of the project, which are hard component and soft component. In Ratchaburi province, pipe is installed to convey water from the existing small- scale irrigation scheme to farmers' field. Agricultural extension and other means of improving farmers' capacities are also promoted. In Kanchanaburi province, pump irrigation is developed. Agricultural activities are also promoted.

In both provinces, working group in each at provincial level is established. Different government under ministry of agriculture involve such as RID, DOAE, DOCP, livestock and land development. At the field level, TTC in each Tambon act as coordinating body to coordinate project activities.

The project promotes participation of farmers at all stages of project, which was different from the implementation of irrigation projects in the past. The hard component is designed according to farmers' preference and the agricultural activities are initiated to reflect the farmers' real needs.

The project utilizes existing government structure. At the provincial level Technical Support group (TSG) is established. At the field level, the existing TTC is strengthened.

(4) How to connect project implementation to national level?



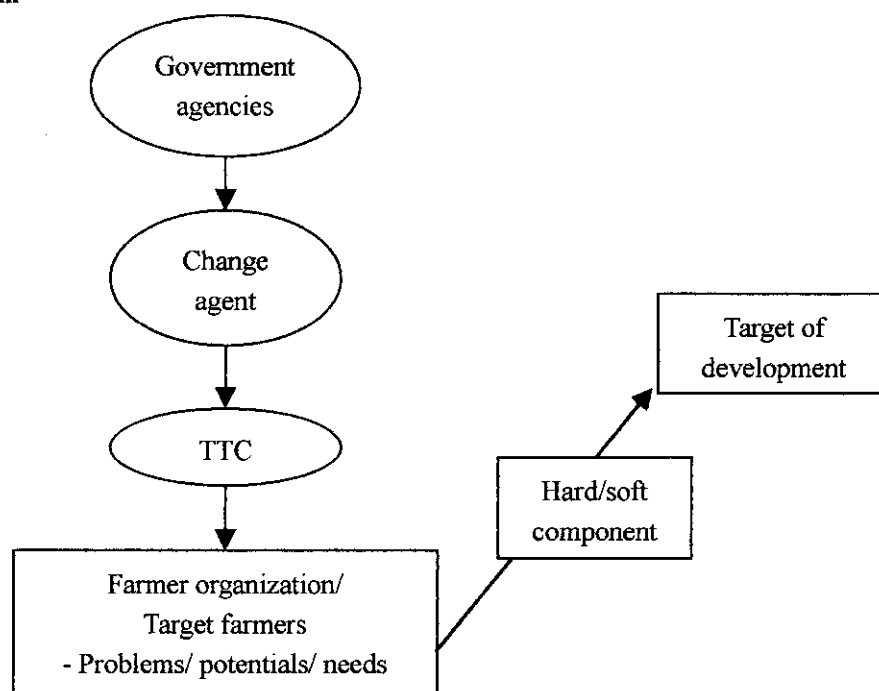
Analysis of TTC

Introduction to system approach

Community system

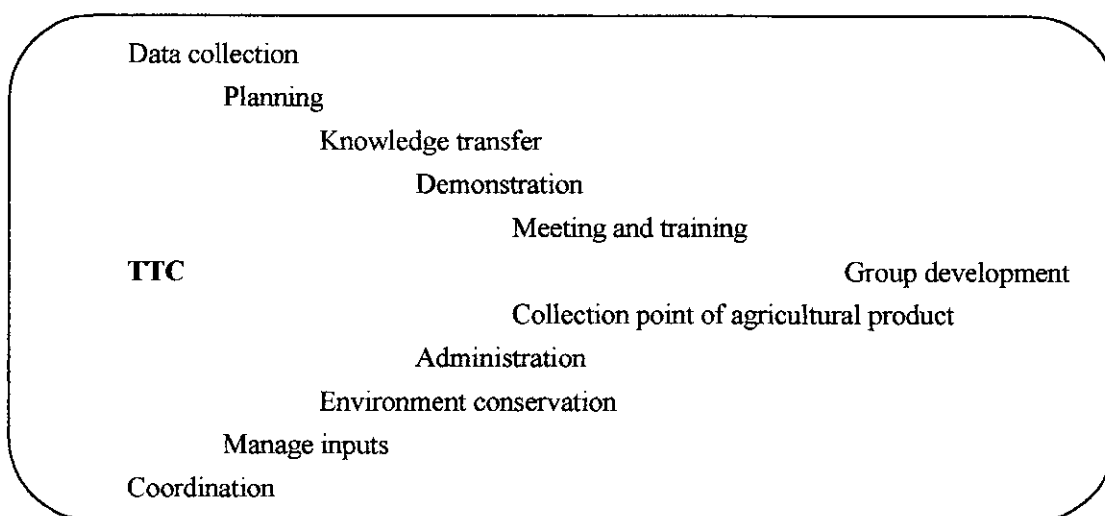
Culture / rites/ belief/ groups/ kinship/ production system/ occupation/ natural resources/ education/ health/ others

Coordination system



Topic	Result of discussion
Problems of TTC	TTC (Low on budget/ staff lack of knowledge) Farmers (natural problems/lack of cooperation of farmers/ water shortage/ low price of agricultural product/ high input cost) Government agency (loosely)
Development goal	Gain more cooperation from farmers Promotion of group formation Promotion of contract farming Transfer of knowledge Availability of fund
Approaches	Result base management Farmers learn agricultural knowledge Low input cost
Implementation structure	Clear role and responsibility of TTC Coordinate with agencies involved at all levels Work through groups Financially support
Role of change agent	Understand problems and current situation Plan for implementation Knowledge transfer Understand of agricultural technology Be good example

Summary of roles and responsibility of TTC



From the above roles, participants discuss how TTC could improve its capacity through implementing the pilot project. Participants agree that to implement the project activities could improve its capacity.

9.9 Monthly Morning Reports

9.9 Monthly Monitoring Reports

Monthly Monitoring Report in March

Study on Application of Participatory Planning in Rural and Agriculture Development Project
In the Lam pa Chi River Basin

Date: March 22, 2004

Subject: Progress of the two pilot project sites

By Nakorn Najaron

1. Ban Thaphayom Weir Project (BTPW)

1.1 Training on artificial breeding

The training was organized by the artificial breeding center under the Department of Livestock on March 18, 2004. There were some forty farmers participating. In the morning session, it was in house training at TAO meeting room on the usefulness of the artificial breeding, how to identify the heat in cow and how to seek for service from the center and how to manage pasture.

In the afternoon, participants visited three different farms where they could learn from other successful farmers on how to manage pasture, how to produce cow feed and other topics of their interest.

(I participated only in the morning session because in the after noon I have to participate in the meeting with DOAE and WUG of Upper Huai Mahad.)

Observation

1. *Participants are not only from village number four but also from other villages close by. They are very interested in improving livestock production. This is the first official training they received on the topic. Half of the participants used the artificial breeding service from local breeders whose service was not up to the satisfied level. It was requested by them to establish the artificial breeding center in the area where they could call for service when needed. The director of the center who was also the trainer said that there was possibility to set up such a center using the government annual budget but more detail plan needs to be analyzed.*
2. *During the training, it was proposed by the participants to establish the livestock raising group. Therefore, they selected the new TAO head as the group leader. He is one of the major livestock raisers in the area. It will be more effective for the government official to provide the extension services via group. The newly selected group leader said he will choose some more farmers as a team to work on livestock raising.*
3. *The activity report form and evaluation form were prepared. They were used by the organizer.*
4. *The follow up meetings with these farmers should be organized for further development.*
5. *Detail activity report and evaluation report are under preparation by Mr. Anurak, the organizer.*

1.2 Advance Payment for two more activities

The water users group and Kaset Tambol requested the budget for activity number 03 (Establishment of WUG) and activity number 06 (Demonstration plots). Khun Banluesak already arranged for the payment.

2. Upper Huai Mahad Project

2.1 Progress of activity number 05 (Support Production Groups)

The water users group and the housewife group have already started to recruit the members. Now there are 90 members recruited (one member per family). Each member has the right to obtain inputs from the group at lower cost than market price. With the budget to be allocated by the project, the group decided to buy chemical fertilizer (21-0-0) which could be used in both sugarcane and pineapple production. Prices of the different suppliers are searched. The supplier with the lowest price will be selected. Detail plan for budget request is under preparation by the groups. It will be finalized and be submitted to DOAE district on March 24, 2004. TTC members will also be informed.

3. Tentative Schedule of soft component in both project sites

3.1 Ban Thaphayom Weir Project (BTWP)

A meeting was organized at TAO office on March 16, 2004. There were four water user committee members, Kaset Tambol and me participating. The main topic of the discussion was the schedule for implementing the activities as shown in Table 1.

Table 1 Tentative Schedule for BTWP

Act. No	Act. Name	BTWP
0-3	Establishment of WUG The budget in this activity will be used to support WUG in purchasing material, photocopy, communication and stationary	Mar 23, 2004
0-5	Support production group	May 2004
0-6	Demonstration Plot	Apr 1-15, 2004
0-7	Study Tour on Agriculture	July 2004
0-8	Study tour for other Tambol	Oct 15, 2004
0-9	Support TTC	Oct 31, 2004
1-1	Training on organic fertilizer Act 1-1 to 1-2 will be conducted at the same day. Preparation of raw materials is needed prior to the training day.	Apr 15-30, 2004
1-2	Est. organic fertilizer group and produce organic fertilizer	Apr 15-30, 2004
3-1	Production Planning	May 10, 2004
3-2	Training on improvement of quality and quantity	May 20, 2004
3-3	Training on chemical free vegetable	June 2004

3.2 Upper Huai Mahad Reservoir Project (UHMRP)

A meeting was organized by DOAE district officer at the district office in the afternoon of March 18 2004. Participants were eight WUG committee members, three DOAE officers, one LDD officer and me. Tentative schedule for implementing the activities is prepared. See more detail in table 2.

Table 2 Tentative Schedule for UHMRP

Act. No	Act. Name	UHMRP
0-4	Meeting WUG and production groups	Mar 24, 2004
0-5	Support production group	Apr 5, 2004
0-6	Demonstration Plot	Apr 25, 2004
0-7	Study Tour on Agriculture (pineapple) 40 people (WUG, TTC and government staff) Bt 50,000 is allocated for two days trip.	Apr 21-22, 2004
0-7	Study Tour on Irrigation (Bt 13.000)	Sept 14, 2004
0-8	Study tour for other Tambol	Oct 18, 2004

Act. No	Act. Name	UHMRP
0-9	Support TTC	Mar 24, 2004
1-1	Training on quality improvement	Jun 3, 2004
1-2	Training on marketing of pineapple	Jul 14, 2004
2-1	Training on application of fertilizer	May 13, 2004
2-2	Purchase of input	Apr 5, 2004

4. Administration

- 4.1 Advance payment for 50 percent of 15 M/M is already arranged by Mr. Bunluesak.
- 4.2 Financial report on TTC and TSG training will be submitted to Sanyu BKK on March 25, 2004.

5. Translation Work

Translation work is on going for the detail PO(s) and TTC training report. The final report for TSG training will be submitted on March 25, 2004.

Monthly Monitoring Report in April

Study on Application of Participatory Planning in Rural and Agriculture Development Project In the Lam pa Chi River Basin

Date: April 12, 2004

Subject: Progress of the two pilot project sites

By Nakorn Najaron

1. General situation

Mr. Pairat of RID Ratchaburi is transferred to Ranong province in Southern Thailand. However, he is still in charged in the Lam Pa Chi pilot project.

2. Upper Huai Mahad Project

2.1 Monitoring meeting

A monitoring meeting was organized on April 9, 2004 at TAO office chaired by TTC head. Participants are 15 TTC members, two RID central (Mr. Thaweesin (Pia) and Mr. Santi), Krit and Ja, Mr. Banluesak and me.

The TTC have met already three times since January 2004. In the previous TTC meeting which was organized on March 24, 2004 I informed them that the budget for supporting PO1 of this pilot project was already allocated to the TSG Ratchaburi. Water User Group and TTC could start requesting budget for implementing the activities. Water User Group and TTC proposed three activities:

Activity Number 0-5 Support production groups, 150,000 Baht.

Activity Number 0-6 Demonstration plots, 40,000 Baht

Activity Number 0-7 Study Tour for water user group, 50,000 Baht (total budget is bath 63,000)

Up to the date of monitoring, ten activities are already implemented (0-1, 0-2, 0-3, 0-4, 0-5, 0-9, 0-10, 0-11, 3-1, 3-2). Three activities are under preparation and will be implemented soon (0-6, 0-7, 2-2). The remaining eight activities are to be implemented at the following dates;

Act number	✓	*	Date
0-1	✓		Jan 04
0-2	✓		Jan 04
0-3	✓		Feb 04
0-4	✓		March 24, 04
0-5	✓		April 7, 04
0-6		**	May 10, 04
0-7		**	April 21-22, 04
0-8		*	Oct 04
0-9	✓		Feb 04
0-10	✓		March 6-7, 04
0-11	✓		March 9-10, 04
0-12		*	May/Nov 04
1-1		*	Jun 04
1-2		*	Jul 04
2-1		*	May 04
2-2		**	Apr 15, 04
2-3		*	May 04
3-1	✓		Jan 04

Act number	✓	✖	Date
3-2	✓		Jan 04
3-3	✓✓		Mar-May 04
3-4		✖	May 04
3-5		✖	May 04

Remarks

- ✓ completed
- ✖ to be implemented
- ✖✖ under preparation
- ✓✓ on-going activity

2.2 Progress of the activities

2.2.1 Activity Number 0-5 Support production groups

Total budget of 150,000 baht was transferred to the water user group's account on April 7, 2004. This amount of budget will be used to purchase chemical fertilizer at 5,100 baht per ton from a company located in Kanchanaburi province. Six bags of fertilizer will be distributed to each of 97 members at 260 baht per bag. They will pay in April 2005. Some 9,700 baht of member fee was collected. DOAE district officer and TTC coordinate the purchase. Housewife group organizes the distribution of fertilizer to all the members according to agreed amount. The delivery of fertilizer is going to take place not later than April 16, 2004.

Observation

- This activity demonstrates the coordination at all level of stakeholders involved in the project. DOAE officer represents TSG in financial and technical support. TTC demonstrates the coordination and ensure the smooth supply of input. WUG secures budget and coordinate with production groups. Housewife group manages the distribution of fertilizer, bookkeeping and collecting the member fee and repayment from members at the agreed date.*
- This activity demonstrates the purchase of input collectively. Farmers can obtain inputs at lower cost from collective action. It should be analyzed economically how much farmers can save their money by participating in the activities.*
- This activity links directly to activity number 2-2 purchase of input by group.*

2.2.2 Activity Number 0-6 Demonstration plots

Demonstration plot will be organized after study tour. Farmers are selected to handle the plots namely;

- 3.1 Mr. Samruai Bunkerd (WUGL) grows one rai of pineapple (Bt. 20,000).
- 3.2 Mr. Bunchoo Saikew grows one rai of sugarcane (Bt. 10,000).
- 3.3 Mr. Thongyot Srirakham grows one rai of vegetable (Bt. 10,000).

These farmers were selected by water user group because of their specialty in the specific type of crop.

Observation

- It must be cleared to all that the demonstration plots are to show how to produce high yield crop and how to reduce input cost.*
- Field day must be organized for farmers to transfer technology and knowledge on crop production. This may be combined with activity number 0-8 (organize study tour to the village from other tambols).*

2.2.3 Study Tour for water user group

A two-day study tour will be organized by DOAE to visit three different locations in Phetchabuti province and Prachuabkirikhan province. Participants are all members of water user group, TTC members, some housewife group members and DOAE and RID government staff. Total participants are not more than 47. Tentative schedules are as follows.

- April 21, 2004 - Visit to the **agricultural processing group** in Prajuabkirichan province where different processed products can be observed and demonstrated.
- Visit to the **village group** where different income generating activities and farmer group formation are implemented.
- April 22, 2004 - Visit to the pineapple production field where high yield pineapple production is demonstrated.

Observation

1. *I suggested DOAE officer that at the end of second day, there must be the wrap up session to assess what farmers learn from each visit. Farmers will also evaluate the activity and suggest for improvement*
2. *DOAE district officer is the organizer and responsible person. He will prepare the activity report and also the financial report.*

2.2.4 Irrigation Construction

2.2.4.1 Construction of meeting place

A construction of meeting place was completed. One storage room and one toilet are also constructed inside the building. It will be used as the meeting place for water user group in the future.

2.2.4.2 Installation of pipe

Pipes were delivered to the construction site already. 300 meters of pipe is installed. One blow off structure and one air vent are under construction.

According to Khun Krit, it is expected that the construction of irrigation will be completed within the first week of May. Then training on operation and maintenance can be conducted.

Observation

The construction of irrigation in this pilot project is in good progress, thanks to RID staff at all levels and good cooperation of farmers in the project area.

3. Ban Thaphayom Weir Project

The TTC and water user groups met on April 10, 2004. The purposes of the meeting were to monitor the progress of work and to discuss on the problems and tentative solutions. Four activities are in progress as follows:

3.1 Activity number 0-3 – The establishment of water user group

Water user group requested budget in this activity to be used by water user group in purchasing white board, stationeries, communication, and transportation. This activity is initially proposed by the DOCP but because the officer from this office rarely comes to meet with water users. Therefore, the budget for this activity can be effectively used by water users.

Observation

1. *Budget for this activity was allocated initially to set up water user group, selection of the group committee and formulation of the group regulation. This activity is supposed to be implemented by DOCP or RID. However, the water user group was established early to handle different activities. Therefore, budget was not spent.*
2. *Water User Group is the main body for participatory development of the project. The group should be supported both technical advice and finance so that they could mobilize the activities. To reallocate the budget to water user group is the better way.*

3.2 Activity number 0-6 Demonstration plot

Demonstration plot was already started. Farmers were selected to grow sweet corn and vegetable. They are all member of water user group. Total budget of 13,000 baht is transferred to responsible farmers already.

Observation

- 1. The activity is under close supervision of DOAE and TTC. Therefore, it is in good hands. The selected farmers are proved to be best farmers of each crop so they can follow recommendation of DOAE properly. Moreover, they can explain to other farmers how to produce high yield crop with less input.*
- 2. Field day should be organized in combination with activity number 0-8 study tour to the village from other Tambol.*

3.3 Activity number 3-4 Training on artificial breeding

The impact of this activity is higher than expected. The officer from Khanchaburi breeding center is willing to continue the extension services in this area. Therefore, he provides breeding facilities and assigns a skillful breeder to TAO Nongphai. The new TAO head agree to provide office space and a table set for the breeder.

Observation

- 1. This is a good move. We could certainly claim this impact is from the initiation of the project input. It reinforces the concept of the implementation structure of the project. It demonstrates how the artificial breeding center at the TSG level supports technically to farmers through TTC or TAO. TTC and TAO also demonstrate how to link up with TSG and farmers for livestock development. Farmers also learn that if they need services they better form themselves into group.*
- 2. It is interesting to assess economically on this activity. According to Khun Anurak, if each breeding is successful then farmer will benefit right away at least 5,000 baht. Therefore, during evaluation number of breeding must be counted.*
- 3. Not only breeding activity will be promoted but also animal vaccination and pasture management will also be promoted by the breeding center. Provincial livestock office will also be involved.*

3.4 Irrigation activity

Construction of the headwork freezes for a while when farmers wants to building to be higher. The initial design was the only 1.5 meter high from the ground. Farmers said it must be higher than two meters. They said in some years the water level is higher than two meters. They requested RID to redesign the headwork.

4. Translation Work

The proceedings of both TOT courses were already submitted by the trainers. Translation of the main contents as well as the detail plan of Kanchanaburi and Ratchaburi will be completed within April. They will be sent to you after completion. I will spend the remaining man days for translation work. Therefore, field visit may not likely to be possible except telephone call to DOAE and water user group.

5. Administration

5.1 Receipts of the following items are submitted to Khun Banluesak on April 10, 2004.

- TOT courses
- Car rent and gasoline

5.2 Activity report form and evaluation form were sent to DOAE so that they can prepare for each activity. These forms will be translated into English for you acknowledgement.

Monthly Monitoring Report
in May
Study on Application of Participatory Planning in Rural and Agriculture Development Project
In the Lam pa Chi River Basin

Date: May 5, 2004

Subject: Progress of the two pilot project sites

By Nakorn Najaron

During May 26-27, 2004, the team (Mr. Thaweesin, Mr. Banluesak, Mr. Nakorn) visited Ban Nong Chok and Ban Thaphayom. The purpose of visit was to monitor the progress of soft and hard components. The team discussed with Kaset Tambol and other three farmers. Findings are below.

1. Upper Huai Mahad Project

1.1 Soft Component

1.1.1 Purchase of chemical fertilizer to support production group

On April 19, 2004, 97 farmers received 30 tons or 600 bags of chemical fertilizer at 5,080 baht per ton. Total budget spent is 152,400 baht. The supplier is from Satpawai subdistrict. Each farmer received six bags. All fertilizer was distributed to the members immediately. The member will pay to group at 264 baht per bag on April 19, 2005. Water User Group still has 7,000 baht in its bank account.

Observation

- 1. The price of fertilizer at the date of this monitoring was 5,700 baht per ton. That means farmers could purchase fertilizer at lower price by group at the beginning to mid of April. They could save 620 baht per ton or 18,600 baht per 30 tons. During water user group meeting in the future, this analysis should be discussed.*
- 2. This activity benefits 97 farmers or 300 rai of sugarcane or pineapple (two bags per rai). These farmers belong to different production groups. This distribution of the beneficiaries reflex the farmer way of providing benefit to farmers equally. This practice is found in different development projects.*

1.1.2 Study Tour

45 people participated in study tour to different locations. The main objective was to learn how to produce high yield pineapple. Participants were water user group members, TTC members, member of housewives group and RID and DOAE staff. What farmers could learn from other farmers was pineapple yield could be increase up to 18 tons per rai by irrigating the field and by proper management. Detail report is now under preparation.

Observation

- 1. It is recommended that lesson learnt about pineapple production practices should be clearly discussed among participants. They should be compared with those practices of farmers in the project site. A one day workshop is recommended to conclude lesson learnt, to identify farmer existing pineapple production practices and to identify guideline for appropriate practices.*
- 2. Some of the practices may be applied in the demonstration plot. Some may be applied directly in the farmers' field.*
- 3. At the end of the project, there should be "know how" in pineapple production specific for Ban Nong Chok.*

1.1.3 Demonstration plots

Three WUG members were selected to grow pineapple, sugarcane and vegetable. All plots are in the irrigated area. They will start growing once their fields are irrigated.

1.2 Hard Component

It was the first time that we see water springing out of the pipe. Irrigation construction here is in good progress. During monitoring 95 percent of pipe was installed. All structures were nearly completed. According to Khun Krit (RID technician), he said that hard component will be completed within May 10, 2004. Training course on operation and maintenance is scheduled on May 10, 2004.

Observation

This scale of irrigation is ideal for the pilot project. The working procedure should be recorded so other area can learn from this success. It is remarkable arrangement of RID Ratchaburi in construction work.

1.3 Four activities to be implemented soon are 1) training on operation and maintenance, 2) farmer training on how to produce organic fertilizer, 3) demonstration plot, and 4) farmer training on how to improve quality of pine apple.

2. Ban Thaphayom Weir Project

Small group meeting was organized at farmer field to discuss the progress of different activities. Participants were Mr. Thaweesin, Mr. Banluesak, Mr. Nakorn, Kaset Tambon and two farmers.

2.1 Soft Component

2.1.1 Demonstration plot

a. Sweet corn

Sweet corn was about 30 centimeter high. Farmer (accountant of WUG) started planting in April 6, 2004. He received 2,500 baht to conduct demonstration plot. One kilogram of seed was cultivated. The cost of seed was 600 baht. 30 kilograms of chemical fertilizer was applied on April 20, 2004. 50 bags of organic fertilizer will be applied when the corn reaches 35 days. Corn can be harvested after 55 days. The farmer expected to get about 1.5 ton. The price was four bath a kilogram.

b. Yard bean

Yard bean was cultivated on March 30, 2004. Farmer (assistant of WUG leader) received 4,500 baht to establish the plot. The size of plot is half rai. Expected yield and price are 1.5 ton and eight bath accordingly. The bean was about one meter high already. The farmer applied organic fertilizer. He will show how to apply herbal spray to control insects. During the visit, DOAE provincial staff also visited this farmer to interview advance farmer who produce different appropriate tools for his own farm. This plot can be demonstrated on how to produce high yield bean with organic mater.

c. Cabbage

Demonstration plot on cabbage production will be established soon. Farmer already received 4,500 baht for the plot. All necessary materials were purchased already.

Observation

1. *This activity goes smooth as planed. Good practices should be recorded and used as annexes of the master plan.*

2. *Field demonstration day should be conducted when demonstration plots produce.*

2.1.2 Support the establishment of water user group

Budget of 1,000 baht for activity 0-3 was used to support water user group in purchasing materials like table and chairs, stationeries and white board. These materials are necessary for water user group meeting and others.

2.2 Hard component

Necessary steps of farmer approval, coordination with other government agencies were completed. Only one pump storage building was nearly completed. Other activity of construction work was not seen in the field.

Observation

Steps in construction work should be reviewed when the study team arrives. Farmers are not sure about the capacity of the pump. They would like to know more about what is going on and are willing to cooperate if needed.

Monthly Report in July 2004
Application of Participatory Planning
in Rural and Agriculture Development Project in Lam Pa Chi River Basin

Schedule of study tour of Ban Thaphayorm farmers to organic farmer group in Nakhonratchasima province in the Northeast

1. Introduction

Since the farmers from Ban Thaphayorm are interested in producing compost. The compost making group was established. The WUG would like to support the compost making group in producing compost. WUG and compost making group were trained by the land development already. However, they need to learn from other farmer groups on the concept of organic farming and group management. Therefore this two days study tour is organized. It is planned in such a way that the WUG, compost making group, TTC and TAO members could share opinion and work together as team. I facilitated the development of the organic farmer group in Korat in the beginning of 2003. Right now the whole village turn themselves from chemical rice farming to organic farming. It is interesting to learn what make them change.

One more organic farmer group in Korat will also be visited. This group is recommended by DOAE province. They produce chemical free vegetable and sell to the provincial market.

DOAE is cooperative in preparation of the study tour. The visited the sites and send official letter to DOAE Nakhonratchasima to facilitate the study. Three DOAE staff from BKK will also join the tour. Khun Surat may join if no other assignment.

2. Objectives of the study tour

1. Farmers learn the concept of organic farming and method of producing organic fertilizer.
2. Farmers plan for the production of compost in Ban Thaphayorm.

3. Participants (Total 41 –male 26, female 15)

1. Members of WUG and compost making group.
2. Member of TTC
3. TAO member
4. DOAE officer, LDD officer and RID staff

4. Schedule

July 1,2004

0530-1300 - Travel from Ban Thaphayom to the target village (Breakfast and lunch are provided on bus.)

1300-1600 - Visit the compost making site, organic rice farming plots, presentation on the concept of organic farming, exchange experience in compost making.

1600-1800 – Check in at the villagers houses (Home Stay).

1800-2100 - Greeting ceremony and Esarn dinner.

July 2,2004

0700-0800 Breakfast in the village

0800-0900 Compost production planning of Ban Thaphayom (The host villagers will also participate in the discussion)

0900-1000 Departure for the vegetable production group

1000-1300 - Study the chemical free vegetable production (Lunch is provided at the site)

- Conclude the study tour and evaluation

1300-1800 Departure for Ban Thaphayom

5. Budget

Total budget is Bt 50,000.

Monthly Report in August 2004
Application of Participatory Planning
in Rural and Agriculture Development Project in Lam Pa Chi River Basin

Progress Report

August 19, 2004

By Nakorn Najaron

1. Introduction

This report covers the progress of activities in the two project sites up to August 19, 2004. A meeting was organized in each site to monitor the progress of work and plan the remaining activities during August 16-17, 2004. Some 25 participants from different agencies participated in each meeting.

2. Upper Huai Mahad Project

A meeting was organized at meeting room of Bankha district on August 16, 2004. Participants were RID central (2), RID Ratchaburi (3), DOAE central (1), DOAE provincial officer from Sakaew province (1), DOAE Bankha district (1), Study team (2), TTC(1), WUG members(13). There were four topics for discussions namely

- Registration of water user group to become certified group.
- Verification cropping area in the project.
- Monitoring the progress of activities and plan for the remaining activities.
- Discuss in detail on activity number 0-8 (Organize study tour for representatives from other Tambon.)

2.1 Registration of water user group to become certified group.

RID Ratchaburi prepared necessary documents for the registration such as the back ground of the project, the participation of water user group in irrigation development, group structure and list of the committee members and members of water user group. These documents were submitted to the district governor on the same date of the meeting. The registration improved the status of WUG to become a certified group. However, the group was not yet the legal group. The benefit of certified WUG was that the group could reinforce the application of rules and regulation. WUG could participate actively in operation and maintenance of irrigation system after it was transferred to TAO. Moreover, WUG could request assistance from any government agencies because of the certified status.

Observation

1. *It was suggested in the previous monitoring report that the same process could be applied in BTPW project since the conditions were similar. The registration process as certified group was much easier than the registration as the cooperatives.*
2. *This initiative could be clearly discussed during evaluation period and include in the master plan.*

2.2 Verification of cropping area in the project

There were three main crops cultivated by 24 direct beneficiaries; pineapple, sugarcane and vegetable. Total cultivated area covered 674 rai. The meeting suggested that DOAE and farmers prepared the production plan according to the available of water and market need. Detail cropping area was available at RID and DOAE field office.

2.3 Monitoring the progress of activities and plan for the remaining activities

It was indicated in the monitoring report 2-2 that during the absence of the study team, the social development specialist and RID counterparts will monitor the progress of work at least

once a month (page 10). The objectives of the monitoring were 1) to discuss the progress of hard and soft components and 2) to plan for implementing the remaining activities.

Base on the monitoring report 2-2, there were 10 activities to be implemented and on going see table 1

Table 1. Remaining and on going activities in Upper Huai Mahad Project

Activity No.	Budget	Date	Remarks
0-6 Demonstration plots	40,000	April 14,04	On going
0-7 Study tour for WUG	13,000	Sept 20,04	To be done
0-8 Study tour for other Tambon	30,000	Sept 15,04	To be done
0-9 TTC meeting	13,250	Mar 2004	On going
1-1 Tr. on quality improvement	20,000	Sept 15,04	To be done
1-2 Tr. on marketing	10,000		Hold
2-1 Tr. on fertilizer and insecticide	15,000	Aug 31,04	To be done
2-2 Obtain inputs by group	-	April 20,04	On going
3-4 Installation of farm pipe	-	July,04	On going
3-5 Tr. on operation and maintenance	10,000	May,04	Done

The meeting discussed the remaining activities and setting up date for implementation. The progress could be summarized into four groups;

- a. The activity already implemented or done (3-5)
- b. On going activities (0-6, 0-9, 2-2, 3-4)
- c. To be done (0-7,0-8,1-1, 2-1)
- d. Hold (1-2)

a. The activity already implemented or done (3-5)

The training on operation and maintenance was already implemented by RID. Additional on the job training on operation and maintenance will be implemented during water supply period on RID contribution.

b. On going activities (0-6, 0-9, 2-2, 3-4)

In general there was no serious problem with the on going activities except the demonstration plots. Farmers complained that they had to wait for long time for budget to buy inputs. Total budget of Bt 40,000 was transferred from TSG to DOAE district office already since beginning of July but less than half of the budget was transferred to the farmers. The meeting suggested that DOAE transferred the remaining balance for demonstration plot to WUG account. WUG will manage to pay to individual farmers to buy inputs. Mr. Worawut (Kaset Tambon) will coordinate with his boss on this matter. (**Activity number 0-6**)

TTC monthly meeting is going on. The members of TTC discuss about the project activities and also the possibility to extend the result of the project to other nearby village of the same Tambon (**Activity number 0-9**).

Farmers will continue obtaining input through group activities. They planed to buy pipes for their farms together for lower price. All farmers will install pipes before organizing the visit of representative from other Tambon (**Activity number 2-2 and 3-4**).

c. To be done (0-7,0-8,1-1, 2-1)

Dates for implementing activities were given. Farmers requested to integrate training course on quality improvement with marketing since they quality of product related to price (activity 1-1

and 1-2). Therefore the one day training course will be organized on September 6,2004 on the improvement of quality in pineapple and sugarcane to meet the market demand. Representatives of private companies will be invited to talk about quality of products and prices.

d. Hold (1-2)

Since the training activity on marketing will be integrated into activity number 1-1 training on quality improvement. Therefore, the meeting decided to wait for the result of other activity.

2.4 Organize the visit for representatives from other Tambon

Detail session of this activity was discussed with the major stakeholder. A one day visit will be organized for five representatives of 16 Tambons. These five representatives are chairman of TAO, permanent secretary, TTC chairman, one village head and one advance farmers. Water user group from Ban Thaphayom weir project will be invited. The activity will be organized on September 15,2004.

Three main output are expected; 1) achievement on hard and soft components are presented, 2) opinion and suggestions of the participants are collected and 3) potential in expanding similar activities to other Tambons in the same watershed.

Three stations will be established. The first station will be established at the dam site for opening ceremony, orientation, discussion and conclusion. The second station is located at the headwork where RID and WUG will explain the process of participatory irrigation development. The third station is established at the demonstration area where DOAE and TTC together with farmers will explain the agricultural activities and participation of TTC in the project implementation.

TSG Ratchaburi and study team are responsible for overall implementation of the field visit. WUG and TAO Nongphanchan are responsible for logistics, food and drink. Ban Kha district governor is invited as the chairman of the field day.

Observation

This activity is considered as one of the most important moment of the project where major stakeholders participate, present and share ideas about this type of irrigation development. Opinions of participants should be collected as much as possible. The complete people participation is expected. The core team of organizers should spend a few days in preparation of the activity.

3. Progress of Banthaphayom Weir Project, Kanchanaburi province

The meeting was organized at TAO meeting room on August 17,2004. The Participants were RID central (2), RID Kanchanaburi (1), DOAE central (1), DOAE provincial officer from Sakaew province (1), DOAE Danmakhamtia district (2), Study team (2), TTC(5), WUG members(10) and TAO(3).

The meeting was the combination of TTC meeting and monitoring meeting. Kaset Tambon facilitated the meeting. WUG leader and study team share the panel of discussion. Results of the meeting could be summarized as follow.

3.1 TTC activities

- 12 baby corn growers were invited to participated in training on baby corn production at River Kwai Hotel on August 24, 2004.
- The district governor needed the data on flooded area urgently. Therefore, this data should be submitted soon.
- TAO transferred Bt 20,000 to TTC as per diem and TTC activities. Since this TTC members are newly elected, they may not be able to reimburse all the per diem. Therefore, the remaining budget will be allocated for other purposes.

- Farmers who suffered from flood would receive financial assistance as the relief fund from government.

3.2 Progress of activity

Base on the monitoring report 2-2, ten activities were to be implemented and on going. Since the previous monitoring some activities were already implemented. See the following table.

Activity No.	Budget	Date	Remarks
0-5 Revolving fund	150,000	April 14,04	On going
0-7 Study tour for WUG	63,000	Aug 2-3,04	Done
0-8 Study tour for other Tambon	30,000	Sept 20,04	To be done
1-1 Tr. on organic fertilizer	3,000	July 5,04	Done
2-2 Soil and water testing	10,000	July 5,04	On going
2-3 Tr. on water management	10,000	Sept 1,04	To be done
3-1 Production planning	10,000	Sept 3,04	To be done
3-2 Tr. on quality and quantity improvement	20,000	Sept 3,04	To be done
3-3 Tr. on chemical free vegetable	10,000	Sept 3,04	To be done

- Activity 0-5 was requested by water user group and organic fertilizer group to support the production of organic fertilizer. The product will be sold to members of water user group and other producers. The request was approved by the team leader. Detail request describes detail of production process, budget allocation and contributions of each stakeholder. The storage house was under construction. It is expected to complete by now. All necessary equipments were already purchased within the proposed budget. These equipments were chopping machine, mixer and bag sewer. Raw materials would be purchased by the end of this month then the production could start. Member fee was collected by organic fertilizer group. Contribution from the village development fund (Bt 18,000) would be collected by the end of October.
- Study tour for WUG, TTC and TAO was organized for two days during July 1-2,2004 to visit organic fertilizer group and chemical free vegetable production group in Ban Nongwaeng, Buayai district, Nakorn Ratchasima province. There were some 50 participants. DOAE central coordinated and participated in the study tour. This village was selected as the model village for organic and environment development of the district. The intension was 1) to learn from those groups how they produce organic fertilizer, chemical free vegetable and group management and 2) to build up rapport among WUG, TTC and TAO members. Home stay and dinner with the Northeast welcome ceremony were organized by the target villagers. The district governor of Buayai district participated during the ceremony. Some 50,000 bath of total budget 63,000 baht was spent. The remaining 13,000 baht would be used in the future study tour to visit other water user group.

Participants were impressed with the way that Buayai farmers organized themselves as group in order to solve both economic and environmental problem. The production of organic fertilizer was one of many activities that the group did in order to reduce the cost in rice production. It also helped to reduce the impact of chemical fertilizer to the soil structure. Those target farmers wanted to produce enough organic fertilizer for local use by sharing labors on rotation basis.

The project farmers expressed that they could not mobilized labor rotation as observed from the Buayai farmers because the interaction of farmers in Ban Thaphayom was loosely when compared with the Northeast farmers. The production group would

manage the production process then selling the product to members. Cooperatives oriented approach would be applied.

- c. Organize Study tour for other Tambon
Detail session for this activity would be discussed among major stakeholders and study team soon. In this area, DOAE and TAO were active so that they could be main organizers. The study tour would be organized tentatively on September 20, 2004.
- d. Training course on organic fertilizer and testing of soil and water quality
These two activities were already organized by the Land Development Department. Farmers were able to produce organic fertilizer by themselves and the fertilizer production group was confident to produce. Soil samples were collected from all water users and sent to soil testing center in Ratchaburi province. Results were to be obtained.
- e. Training on water management would be organized by RID on September 1, 2004.
- f. f. Activities 3-1, 3-2 and 3-3 would be integrated and organized on September 3, 2004. Part of the budget would be used. The remaining budget will be spent on additional activity to be proposed by DOAE Danmakhamtia district.

Overall observation

Irrigation development in both projects are completed. They could be used as demonstrated area for participatory irrigation development. Soft components are the concern at this moment. DOAE will have to pay main role in organizing activities in order to meet the project goal. It is observed that all activities indicated in PO2 would be completed within September, 2004. Additional activities may be proposed by farmers or TSG if contingency is available.

Monthly Report in October 2004
Study on application of Participatory Planning in Rural and Agriculture Development Project in
the Lam Pa Chi River Basin

Date: 10th October 2004
By Nakorn Najaron

1. Introduction

This activity report covers the activity “ Organize the field visit for representatives from other Tambons to the pilot projects” which were organized in both areas. Study team is responsible for the activities. It was organized in Upper Huai Mahad Project on September 15, 2004 and in Ban Thaphayom Weir project on September 28, 2004. It was organized in each pilot project in the following events.

1.1 Upper Huai Mahad Project

1.1.1 Preparation meeting

Preparation meeting was organized in at RID field office to clarify objectives of activities and to discuss on sessions and responsible person. Participants are two DOAE Central representatives, TTC secretary, RID field staff and WUG leaders. Different tasks are assigned each specific stakeholder. RID is the main organizer while DOAE district is co-organizer. RID will explain the participatory irrigation development. DOAE is responsible for the demonstration of agricultural activities. WUG will prepare the tents, refreshment and transportation within the area.

1.1.2 Field Day

The actual activity was organized at the dam site of Upper Hui Mahad. There are some 90 participants from four Tambons. Actually, all Tambons within Lam Pa Chi were invited but many of them were busy closing the annual budget so only representatives from four Tambons could join. TSG chairmen from both areas participated. TAO and WUG from Ban Thaphayom also participated.

The DOAE Ban Kha district officer opened the activity. Mr. Pairat, representative of Ratchaburi RID explained about the project. Then participants are divided into two groups. The first group learnt about participatory irrigation development. The second group visited demonstration plots.

Mr. Chatchawan (RID field officer) explained on participatory irrigation development. The village headman explained how farmers involved in planning, in designing of alignment, and in organizing themselves as water user group. After that the participants visited headwork and other infrastructures. RID staff explained function of each structure. Most of the participants were interested in to know how to submit their request if they need to develop similar infrastructure.

The agricultural activities were organized at the demonstration plots of sugarcane and pineapple field. The main topics were how to irrigate pineapple using drip irrigation and how to increase pineapple production with increasing number of seedlings and proper input management.

After the participants learnt from both stations, the discussion forum was organized to hear opinion of participants on activity in the pilot project. The major comments were as follows.

1. Using by the irrigation system, farmer could increase crop yield.
2. Farmers' income will increase by the increased yield.
3. Irrigation system provided more opportunity to farmers to grow potential crops.
4. The related agencies should understand how to increase the irrigated area of this project to cover more farmers and cropping areas.

1.2 Thaphayom Wier Project

1.2.1 Preparation Meeting

A meeting was organized on September 17, 2004 at TAO office. The purpose of the meeting was to prepare for organizing the activity. There are some 20 participants from one DOAE Kanchanaburi, 2 RIDs, 6 TTCs, 5 TAOs and 5 WUGs and one study team. The meeting understood the objectives of the activity and assigned tasks of each stakeholder. Basically, TAO would be major organizer. DOAE Danmakhamtia coordinated and facilitated the activity. Livestock department established the demonstration on artificial breeding, water user group organized food, vegetable production and organic fertilizer demonstration. The activity was called "The Field Day"

1.2.2 The Field Day

There were 60 participants from four districts participated in the field day. Most of the participants were women.

Danmakhamtia District Governor opened the field day. He addressed that the pumping system and organic fertilizer production enhance farmers to produce organic vegetable. This organic vegetable production should be announced as the strategy of this Tambon Thaphayom. He would allocate resources to support this activity. After that he switched on the pump station.

Mr. Surat Sanguansap (DOAE) briefed on the project background. Mr. Samphan (RID) briefed on participatory irrigation development. Then participants visited different agricultural demonstration plots starting from artificial breeding, vegetable production and organic fertilizer production.

Participants were also advised on crop management by the guest speaker, Mr. Chinchai (Sakeaw Provincial DOAE Officer). Finally, Mr. Suwetch (RID) discussed with farmers on the quality of water from Lam Pa Chi river in comparison with water from under ground. He pointed out that the better quality of water from the river would bring better yield to farmers' crop even though the cost of pumping may be a little bit higher. He would like farmers to learn and find out the suitable approach in using the system

Observations

1. This activity demonstrates how the stakeholders in each pilot project work together. It is clear in both areas the farmers and government agencies, farmers and local government work together effectively. However, degree of participation of each agency may be different. The most intensive participation are RID Ratchburi, TAO Kanchanaburi, DOAE Danmakhamtia and WUGs in both areas.
2. In such field day, 10 percent of time should be given to the briefing. Most of the time should be spent at the demonstration sites.
3. Hearing from other Tambon about the pilot project could not properly managed. Most of other TAOs left after visiting all stations without enough discussion. Therefore, seminar or workshop should be organized separately to transfer technology and to get feedback.
4. DAOE Bangkok reflexed that farmers need more specific technical knowledge on crop production and maintenance. Therefore, additional technical training should be organized for farmers from both areas if time and budget is available.
5. Power point presentation may not be suitable because of the open area.
6. Farmer to farmer explanation at each demonstration sites is proved to be the most effective knowledge transfer method of the field day. Government officers provide technical support if needed.

10. Others

10. Others

Contents

10.1	Contents of Work Sharing (December 3 rd , 2002).....	10-1
10.2	CEO Provincial Development Strategy in Ratchaburi	10-3
10.3	CEO Provincial Development Strategy in Kanchanaburi	10-9

Study on Application of Participatory Planning in Rural and Agriculture Development Project in the Lam Pachi River Basin

10.1 CONTENTS OF WORK SHARING (December 3, 2002)

A. General

Items	RID	JICA Study Team	Local Consultants	Outer Participation
Data collection, Meeting, Workshop, TSG	1) Existing data collection 2) Arrangement for meetings 3) Conducting meetings and translation for JICA team 4) Coordination with provinces districts and local administration offices 5) Making appointments with relevant offices for JICA team 6) Establishing TSG	1) Secondary data collection 2) Document preparation 3) Reporting 4) Technical transfer	1) Secondary data collection 2) Support to JICA Team 3) Translation of document prepared by JICA team	MOAC, Provinces, Districts , TAOs, TTCs

B. Grasp of Present Condition

Study Items	Area	RID	JICA Study Team	Local Consultants	Outer Participation
1. Survey on present condition					
1) Agriculture	16 Tambons	1)Existing data collection 2)Land use maps, etc.	1)Formating for secondary data collection 2)Field surveys 3)Interviewing relevant offices	1)Secondary data collection by field survey and through field offices	Provinces, Districts , TAOs, TTCs, Villagers Sugarcane factory
2) River Erosion	16 Tambons	1)Existing data collection 2)Aero photo, etc. 3)Processing of Satellite image	1)Formating for secondary data collection 2)Field surveys, 3)Interview of relevant offices, 4)Material cost for processing satellite image	1)Secondary data collection by field survey and through field offices	Provinces, Districts , TAOs, Villagers
3) Flood Condition	16 Tambons	1)Existing data collection	1)Formating for secondary data collection 2)Field surveys 3)Interview of relevant offices	1)Secondary data collection by field survey and through field offices	Provinces, Districts , TAOs, Villagers
4) Water resources /Irrigation	16 Tambons	1)Existing data collection 2)Inventory of existing facilities such as Reservoirs, weirs, dikes 3)List of development potential	1)Documentation		Provinces, Districts , TAOs
5) Ground water	16 Tambons	1)Existing data collection 2)Aero photo, 3)Hydro geological map	1)Formating for secondary data collection 2)Field surveys	1)Secondary data collection by field survey and through field offices	Provinces, Districts , TAOs
2. Socio-economic survey					
1) RRA	2 Mu-bans	1)Conducting RRA	1)Instruction of RRA 2)Participation	1)Conducting RRA 2) Documentation	TAOs, Villagers
2) Baseline survey	16 Tambons, & 120 HHs	1)Providing 3 staff from RID 2)Conducting Baseline survey	1)Preparation of questionnaire	1)Translation of questionnaire	Provinces, Districts , TAOs, Villagers

10.2

CEO Provincial Development Strategy Plan in Ratchaburi for the year of 2004

Important crops of Ratchaburi: Rice, Sugarcane, Fruits, and Vegetable

Important live stocks of Ratchaburi: Swine, Daily cattle, Poultry, fresh water prawn

Internal environmental analysis for agriculture in Ratchaburi

Strength

1. Market share of agricultural products among the west provincial group (Nakhon Pathom, Kanohanburi, Suphanburi and Ratchaburi) is 28%, and 1.9% in the country.
2. Largest producer of swine (approx. 1.5 million heads)
3. Having largest central market for vegetables and fruits in the west.
4. Leading producer of vegetables and fruits.

Weakness

1. High use of agricultural chemicals.
2. Low efficiency of environmental management leading to waste water sewage and pollution problems.
3. Lacking technology for safe agriculture.
4. Farmers lack knowledge and skill for safe agricultural production.
5. Lacking of integrated knowledge and skill for management for safe agriculture.
6. Lacking of swine slaughter house-both quantity and quality.
7. Lacking of efficient integration and factors to examine, recommend and promotion of safe agriculture.

Opportunities

1. Government agricultural policy for “world kitchen”.
2. Government policy to promote local wisdoms to international market.
3. Many opportunities for safe agro processing products.
4. Government relationship policy to Myanmar.
5. With Thailand-China bilateral agreement, this is big room for agriculture produce and processed agricultural products in Chinese market.

Treat

1. Fluctuation of price of agricultural products.
2. Bilateral free trade agreement (FTA) with Australia and New Zealand for dairy products.
3. Official administration system
4. Myanmar not really open the country and small Burmese population near Thai border.
5. Inadequate devotion from public and private sectors in inhabitations and concerning rivers and

water sources.

Development Goal of Ratchaburi

1. Increasing provincial GDP at least 8% per year.
2. Increasing production and market of safe agricultural products 8% per year
3. Increasing income from tourism 10% per year.
4. Increasing Thailand-Myanmar border economic value 6% per year.

Strategy Items

1. Ratchaburi is a producer for safe agricultural products and agro-processed products.
2. Promotion of products from local wisdom for exporting.
3. Promotion of eco-rural tourism.
4. Development of west border economy.

Strategy Guidelines

1. Developing for quality and chemical safe agricultural goods and agro-processed products.
2. Increasing production and value of agricultural goods and agro-processed products.
3. Developing strategic administration management system.
4. Developing production system of local wisdom goods.
5. Increasing production and quality of local wisdom goods.
6. Developing marketing system for local wisdom goods.
7. Rehabilitating Mae Klong river and other water sources suitable for eco-tourism.
8. Developing tourism product in term of touring route or interesting groups.
9. Promoting trade and tourism along the border.

Ratchaburi province has proposed 29 development projects in 2004, which are classified as most important, very important, and important projects. Titles of these projects are as follows.

Development Project and Their budget for the year of 2004 in Ratchaburi

Most Important Project	Budget (Bt)	Very Important Project	Budget (Bt)	Important Project	Budget (Bt)
1.Increasing Efficiency of Safe Food Production under Good Agricultural Practices (GAP), Office of Agriculture and Cooperative.	1,000,000	1.Promotion of Local Care Center, Fresh water Fishery Center	400,000	1.Establishment of Examination Center for Agricultural and Agro-industrial goods, Provincial Agricultural Extension Office	11,663,110
2.Extension of Fresh Water Prawn Farm Standard under GAP Provincial Fishery Office	209,240	2.Farm Account Preparation Provincial Cooperative Account Inspection Office	1,388,316	2.Preparation for Opening Thailand-Myanmar Border Trade in Suan Phueng Area Office of Ratchaburi Rural Highway	2,800,000
3.construction of Small Frozen House Provincial Industry Office	2,600,000	3.Establishment of Agricultural Goods Link between Provinces (Ratchaburi-Phuket) Office of Agriculture and Cooperative	175,000	3.Development of Human Resources Potential to increase Production Volume in Agro-Processing Industry Provincial Labor Office	462,000
4.Dedelopment of Production System and Increasing Volume of Local Wisdom Goods for Domestic Consumption and Exporting Provincial Rural Development Office	1,650,000	4.Establishment of Education Network and coordinating Technology for Safe Agriculture Office of Agriculture and Cooperatives.	1,000,000	4.Project Under External Budget Development of Lam Pa Chi River Basin JICA Budget-Provincial Irrigation Office	4,550,000
5.Promotion of Orchid Cultivation for Exporting and Conservation Office of Agricultural Cooperatives	484,250	5.Strengthening Standards for Swine and Safety Provincial Tourism Center	500,000		
6.Improvement of Sugarcane and Sugar Production Efficiency to increase yield and quality Agricultural Extension Office	50,000	6.Development of Ratchaburi Tourism System Provincial Tourism Center	500,000		
7.Development of Agro-processing Plants to meet Standards Provincial Industry Office	700,000	7.Management of Three-Day Tour of Tourist Spots Provincial Tourism Center	112,500		

Most Important Project	Budget (Bt)	Very Important Project	Budget (Bt)	Important Project	Budget (Bt)
8.Development of Swine Farm Provincial Livestock Office	2,045,000	8.Promotion of Fresh Water Fishery and Waterway Eco-Tourism Provincial Tourism Center	200,000		
9.Improvement of Quality of Marketing and Lam Pa Chu River Basin and Other Water Sources for Good Living and Eco-tourism Provincial Natural Resources & Environmental Office	2,200,000	9.Investigation of Ratchaburi Agricultural Goods Market Direction. Office of Agriculture Cooperatives	75,000		
10.Development of Thai Local Medical Treatments and Health Tour Damern Saduak Hospital	2,862,500				
11.Construction of Swine Slaughter Houses for meet Exporting Provincial Livestock Office	250,000,000				
12.Suan Phueng Border Economic Queen Pilot Project Provincial Administration Office	18,000,000				
13.Promotion for Constructing and Developing Slaughter House with International Standards. (Searching investment motivation and investment sources such as SME Bank) Provincial Livestock Office	30,000,000				
Total 13 Projects	281,800,990	Total 9 Projects	9,624,716	Total 4 Projects	40,125,110

JICA budget of 4,550,000 Bt is not included in 40,125,110 Bt

Detail of Selected Projects under Ratchaburi Development Strategies

Project Title	Key Promotion Index	Target					Budget (bath)
		2004-2007	2004	2005	2006	2007	
Strategy: Development of Agricultural Goods & Agro-industry Goods for Quality and Chemically Safe							
1. Improvement of Goods Production System for People Life Quality	Percentage of safe goods to total goods	95	80	85	90	95	8,000,000
	-Agricultural goods	100	85	90	95	100	
2. Increasing Production Efficiency & Pollution Control in Agro-Processing Plant.	-Agro-Industry goods	50	10	12	13	15	
	-Percentage of increased products						
	-Percentage of plants approved with pollution control standards	100	85	90	95	100	4,800,000
	-Percentage of plants approved with labor standard	100	85	90	95	100	
3. Promotion of Participatory R & D for chemical and pollution safe production	-Percentage of increased safe products	7	1	2	2	2	
	-Percentage of increased number of pollution free plants	9	1	2	2	2	6,000,000
	-Report of investigation	4	1	1	1	1	
	-Yield of organic matter & organic mass	4,000	500	1,000	1,000	1,500	
4. Promotion of Organic Matter Production for Agriculture	-Yield of organic fertilizer	3,000	300	500	1,000	1,200	6,000,000
	-Number of zones by major products	8	2	2	2	2	400,000
5. Demarcation of Agricultural Goods & Agro-Industry Goods Production Zone	-Appropriation of production zone	High	Moderate	High	High	High	
Strategy: Increasing Production and Value of Agricultural Goods and Agro-industry Goods							
1. Promotion of Community Enterprise for Agro-processing.	-Percentage of the increased enterprise.	100	20	30	30	20	
	-Percentage of the increased sale volume of the enterprise.	70	10	20	20	20	3,000,000
2. Establishment of Information Center for Investment, Marketing, Technology and Product Development	-Number of Users	80,000	10,000	15,000	25,000	30,000	12,000,000
	-User's Satisfaction	≥ Sat.	≥ Sat.	≥ Sat.	≥ Sat.	≥ Sat.	
	-Number of services	100,000	15,000	20,000	30,000	35,000	
	-Documents (set)	100,000	20,000	30,000	30,000	20,000	
	-Computer (time)	16	4	4	4	4	
	-Seminar (time)						

Project Title	Key Promotion Index	Target				Budget (bath)	
		2004-2007	2004	2005	2006		2007
Strategy: Development of Agricultural Goods and Agro-industry Goods Marketing System							
1. Promotion and Development of Collection and Distribution Center for Domestic and International Markets.	-Percentage of sale volume through the centers	150	20	50	50	30	40,000,000
2. Promotion of Agricultural Product Selling in Contract Market	-Sale volume in the contract markets	16,000	1,200	2,000	6,000	6,800	480,000
Strategy: Development of Local Wisdom Goods Production System for Exporting							
1. Development of Local Wisdom Goods Production Occupation to replace Low Income Occupation	-Number of people turning to local wisdom goods occupation	10,000	1,000	2,000	3,000	4,000	10,000,000
2. Fund for Developing and Promoting Marketing of Local Wisdom Goods to Oversees	-Percentage of local wisdom goods selling to overseas carpets	150	20	20	50	50	20,000,000
Strategy: Rehabilitation of Mae Klong River and Other Water Sources Suitable Ech-Tourism							
1. Management of Water Treatment System and Overall Water Quality Reviewed in Ratchaburi	-Water Pollution safed value higher than minimum standards. -Satisfaction of farmers at low stream	33 ≥ Sat.	= ≥ Sat.	3 ≥ Sat.	33 ≥ Sat.	33 ≥ Sat.	

10.3

CEO Provincial Development Strategy Plan in Kanchanaburi for the year of 2004

According to the government new policy that provincial governor acts as Chief Executive Officer (CEO), all development activities on programs must be planned and implemented by integrated approach. Provincial offices reporting to different ministries will be no longer work separately as before. Rather than initiate, plan and implement regal development projects together under the same umbrella i.e. CEO governor. Workloads or activities of one officer must be known to the others. Moreover, by nature of the development, differences in activities planned for development still exist among offices.

Followings are conclusions of agricultural development projects by provincial group strategies of Kanchanaburi and Ratchaburi relevant to “the Study on Application of Participatory Planning in Rural and Agriculture Development Project in the Lam Pa Chi River Basin”.

Strategies for Development of Kanchanaburi

There are 7 relevant projects, and all have been approved by the Cabinet as follows.

- | |
|--|
| <ul style="list-style-type: none">I. Promotion of chemical free vegetable production under Good Agricultural Practices. (GAP)II. Promotion of rice production under GAP.III. Promotion of pineapple under GAP.IV. Promotion of sweat corn production under GAP.V. Promotion of cassava production under GAP.VI. Promotion of sugarcane production under GAP.VII. Multilateral Networks of Organic Agriculture. |
|--|

Followings are the projects with their components.

I. Promotion of chemical free vegetable production under GAP

- 1) Responsible Agency: Kanchanaburi Provincial Agricultural Extension Office
- 2) Project Objectives:
 - To promote farmers to produce chemical free vegetable under GAP
 - To improve effectiveness of vegetable production to obtain save methods for producer and save produce for consumer.
- 3) Project Goal:
 - About 4,273 vegetable farmers adopt production methods recommended by GAP.
 - All or 100% of vegetable producer groups are investigated, evaluated and approved with GAP standard by the year 2007.
- 4) Project Duration: 4 years (2004-2007)
- 5) Project Cost: 1,745,664baht, 2004budget:545,664bhat, 2005-2007 budget: 1,200,000baht.
- 6) Project Output: About 3,200 farmers receive training for vegetable production under GAP.
- 7) Index: 100% of farmers or farmers' group receive investigation, evaluation and approval under GAP standard system.

II. Project Title: Promotion of rice production under GAP.

- 1) Responsible Agency: Kanchanaburi Provincial Agricultural Extension Office
- 2) Project Objectives:
 - To promote the farmers to produce high quality rice under GAP.
 - To increase average yield of rice.
- 3) Project Goal:
 - Two hundred rai of paddy fields receive investigation, evaluation and approval under GAP.
 - Average yield of wet season rice is increased to 512 kg/rai and dry season rice to 1,020 kg/rai by 2007.
- 4) Project Duration: 4 years
- 5) Project Cost: 1,351,440 Bt, 2004 budget: 337,440 Bt,
2005-2007budget: 1,014,000 Bt.
- 6) Project Output: Farmers receive training for rice production under GAP, and average yield of wet season and dry season rice is increased to 512 kg/rai and 1,020 kg/rai respectively.
- 7) Index:
 - Farmers producing rice under GAP receive investigation, evaluation and approval for production.
 - Average yield of rice is increased by 10%.

III. Project Title: Promotion of pineapple under GAP.

- 1) Responsible Agency: Kanchanaburi Provincial Agricultural Extension Office
- 2) Project Objectives:
 - To promote the farmers to produce high quality pineapple with GAP.
 - To increase average yield of pineapple
- 3) Project Goal:
 - Farmers producing pineapple with GAP receive investigation, evaluation and approval for 400 rai.
 - Average yield of pineapple is increased from 2.8 ton/rai to 4.5t/ rai by 2007.
- 4) Project Duration: 4 years
- 5) Project Cost: 1,171,2400 Bt (2004 budget: 271,2400 Bt, 2005-2007budget: 900,000 Bt)
- 6) Project Output: Pineapple farmers receive promotion and training for high quality pineapple production under GAP, and average yield of pineapple is increased to 4.5 t/rai
- 7) Index: Farmers producing pineapple under GAP receive investigation, evaluation and approval for production

IV. Project Title: Promotion of sweat corn production under GAP

- 1) Responsible Agency: Kanchanaburi Provincial Agricultural Extension Office
- 2) Project Objectives:
 - To promote the farmers to produce good quality sweet corn under GAP.
 - To increase average yield of sweat corn.
- 3) Project Goal:
 - Farmers producing sweet corn under GAP and receive investigation, evaluation and approval for production for 400 rai.
 - Average yield of sweet corn is increased from 1.62 ton/rai to 2.0 ton/rai by 2007.
- 4) Project Duration: 4 years
- 5) Project Cost: 1,661,840 Bt (2004 budget: 361,840 Bt, 2005-2007budget: 1,300,000 Bt)
- 6) Project Output: Farmers receive promotion and training for sweet corn production under GAP and average yield of sweet corn is increased to 2.0 ton/rai.
- 7) Index:
 - Farmers producing sweet corn under GAP receive investigation, evaluation and approval for production.
 - Average yield of sweet corn is increased by 25%.

V. Project Title: Promotion of cassava production under GAP.

- 1) Responsible Agency: Kanchanaburi Provincial Agricultural Extension Office
- 2) Project Objectives:
 - To promote the farmers to produce cassava under GAP.
 - To increase average yield of cassava.
- 3) Project Goal:
 - Farmers producing cassava under GAP receive investigation, evaluation and approval for production.
 - Average yield of cassava is increased from 2.35 ton/rai to 5 ton/rai by 2007.
- 4) Project Duration: 4 years
- 5) Project Cost: 780,748 Bt, (2004 budget: 180,748 Bt, 2005-2007budget: 600,000 Bt)
- 6) Project Output: Farmers receive promotion and training for cassava production under GAP through demonstration farm.
- 7) Index: Average of cassava is increased to 5 t/rai by 2007.

VI. Project Title: Promotion of sugarcane production under GAP.

- 1) Responsible Agency: Kanchanaburi Provincial Agricultural Extension Office
- 2) Project Objectives:
 - To promote the farmers to produce sugarcane under GAP.
 - Average yield of sugarcane is increased from 9.12 ton/rai to 13 ton/rai by 2007.
- 3) Project Goal:
 - Farmers producing sugarcane under GAP review investigation, evaluation and approval for 1,920 persons and 1,920 rai.
 - Average yield of sugarcane is increased from 9.12 ton/rai to 13 ton/rai by 2007.
- 4) Project Duration: 4 years
- 5) Project Cost: 4,347,840 Bt
 - Government Budget: 3,963,840 Bt, (2004 budget: 963,840 Bt, 2005-2007budget: 5,000,000 Bt)
 - Non-Government Budget: 384,000 Bt (from Sugarcane & Sugar committee)
- 6) Project Output: Farmers receive promotion and training for sugarcane production under GAP for 1,152 persons and 1,152 rai.
- 7) Index:
 - Farmers producing sugarcane under GAP receive investigation, evaluation and approval for production.
 - Average yield of sugarcane is increased by 1 ton/rai/year.

VII. Project Title: Multilateral Networks of Organic Agriculture.

- 1) Responsible Agency: Kanchanaburi Land Development Station
- 2) Project Objectives:
 - To link public sector to strengthen capability of the farmers implementing organic agriculture (non chemical agriculture)
 - To develop multilateral partners of organic agriculture to improve technical management, processing of produce, marketing and organization development.
 - To search for knowledge and know-how to develop multilateral partners of organic agriculture for research and development (R&D)
- 3) Project Goal:
 - Workshops participated by 320 persons of soil volunteer, farmers, organic agriculture farmers, organic agriculture businessmen, technical personnel from different organizations and education institutions.
 - Four workshops of one day each participated by 100 persons, totaling 400 persons.
 - Six times monitoring with one-month interval in 2004 after the workshops to evaluate and modify the implementation.
- 4) Project Duration: 2 years
- 5) Project Cost: 590,300 Bt (2004 budget: 290,300Bt, 2005-2007budget: 300,000 Bt)
- 6) Project Output: About 320 attendants of the workshop for multilateral network of organic agriculture in Kanchanaburi in order to co-manage with public sector and the small enterprise involving organic agriculture.
- 7) Index:
 - Number of network members increases annually 20% from 320 persons.
 - Average of organic agriculture increase by 30% per year.