

### **APPENDIX-N4 Society and Organization**

### **TABLE OF CONTENTS**

			1	ag	<u>;e</u>
N4.1	Summar	y of Field Work	N4	-	1
N4.2	Present C	Conditions of Model Cooperative	N4	-	1
	N4.2.1	Gao Giong Cooperative	N4	-	1
	N4.2.2	Phu Tho Cooperative	N4	-	4
	N4.2.3	Results of PCM Workshop	N4	_	7
		LIST OF ATTACHMENT			
Attachn	ment N4.1	PCM Workshop at Phu Tho Commune	N4	-	9
Attachn	nent N4.2	PCM Workshop at Gao Jang Commune	N4	_	23

### N4.1 Summary of Field Work

To produce high quality paddy and conduct collective marketing in the Study Area of Master Plan through strengthening the activities of model agricultural cooperatives, four candidates of model cooperatives (Gao Giong, Binh Minh, Phu Tho and An Phu) were selected based on the previous study results.

The major criteria for selection are (a) geographical conditions, (b) characteristics of leaders and members, and (c) current and planned future activities. Management conditions of Phu Tho and An Phu Cooperatives are good and developed compared with other cooperatives in Dong Thap province. These two cooperatives were transferred from old collectives with successful operation experience and have expanded their activities step by step. They are located in the same commune, and cover almost all farm households in the commune as members, which prove that their organizational power is solid. On the other hand, Gao Giong and Binh Minh cooperatives are located in the different but adjacent communes and have rather poor land transportation accessibility. Especially Binh Minh has just established and organizational structure is still weak and activities are very limited. In this context, to compare four cooperatives in the viewpoints of establishment and strengthening of farmer's organization, they were selected for the further survey.

Among the above 4 cooperatives, Binh Minh Cooperative is very new and its activities cannot be evaluated. Though An Phu Cooperative is located in the same commune with Phu Tho Cooperative, the former has poor location for post-harvest processing facilities and marketing. In considering of the role of model cooperative such that can provide positive impacts on the other farmers' organizations and facilitate expansion of organizations, Gao Giong and Phu Tho have the appropriate capacity. Based on the survey and discussion with local officials, Gao Giong and Phu Tho were selected as model cooperatives that can be different type models in comparison

### **N4.2** Present Conditions of Model Cooperatives

### N4.2.1 Gao Giong Cooperative

### (1) Activities

Gao Giong Cooperative covers Hamlet 2 of Gao Giong Commune in Cao Lanh District. Its cultivated area is 651ha. The number of members is 127 households, which shares 30% of the total households in the commune living in the hamlet. 7 members are living in other communes.

Only irrigation and drainage service are provided to the members covering about 660ha (whole paddy area of Hamlet 2). There are 9 electric pumps and rental charge is 300kg paddy/crop/ha. This service

THE STUDY ON INTEGRATED AGRICULTURAL DEVELOPMENT PLAN IN THE DONG THAP MUOI AREA VIET NAM FINAL REPORT

can be used not only by members but also by non-members who have land in the hamlet 2 with same

charge. The members can receive dividend of profit from this service every year. 13 irrigation workers

operate this service and their wages are paid in cash. All work arrangement and expenditure are handled

by a cooperative leader.

The following opinions of farmers are collected during the F/S.

More supported services and outputs should be added.

Dike height need to be raised.

Capital for buying agricultural facilities/equipment is necessary to expand activities including

supply of fertilizer, transportation, etc.

Low quality and un-uniform varieties cause low yields and cannot be exported. Therefore, good

quality seeds are necessary.

Low price of paddy cannot make profits.

Technology of how to use fertilizer/pesticide/herbicide is necessary. Training is necessary for high

technology in cultivation.

(2) Structure

General Assembly is the highest decision-making organization. Under this, there are Governing Council,

Management Board and Inspection Board. Executives are 5 members of Governing Council and 5

members of Management Board with a term of 5 years. 3 members in Governing Council are big

investors at the establishment of the cooperative, living outside of the area covered by the cooperative

and they do not have farmland in the hamlet.

General Assembly is held regularly once at the end of the year and extraordinary meeting can be held

with 1/2 requirements of the members or with request of Management Board. Management Board is

held once a month. The major rights and duties of Management Board are; a) implementing all matters

decided in General Assembly, b) assigning the duty for each member of Management Board, c) making

plan for production, trading and mobilization of capital, d) admitting new members, e) reporting the

activities to the General Assembly, e) hiring labors and technical staff according to the requirements of

development situation, etc. Inspection Board is responsibilety to inspect and control all activities based

on Cooperative Law. Members of Inspection Board are elected by General Assembly. Their term is 2

years.

Salary of cooperative staff is paid for 7 months per year at the following rate.

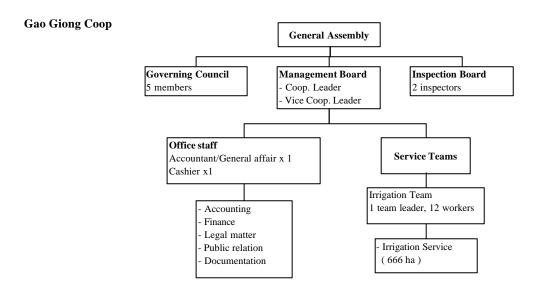
Leader: 600,000VND/month

Vice-chairman: 600,000 VND/month

Accountant: 600,000 VND/month

Cashier: 150,000 VND/month

N4 - 2



Organizational Structure

### (3) Financial Report

Financial and management conditions are shown in the table below. Since borrowing from bank is fairly difficult at the moment, all business is done without loan. In case of irrigation service, the covered area is large and makes enough annual profit of 230 million VND. As the investment at the establishment of the cooperative was rather burden to the members, 97% of profit has been distributed to members and the only rest 3% has been reserved.

(Unit: million VND)

Year		1998	1999	2000 *	
	Total Assets		1,427	1,523	
	Fixed Assets		1,098	1,139	
Financial	Current Assets		273	289	
Status	Accounts Receiva	ble	56	95	
	Loan/Investment				
	Service Amount	Irrigation	692	578	586
		Fertilizer			
		Credit			
Business Condition		Irrigation	408	271	288
	Cost Price	Fertilizer			
		Credit			
		Irrigation	284	307	298
	Gross Profit	Fertilizer			
		Credit			
	Personnel Expense	es	11	18	22
	Profit		273	289	276

<sup>\*</sup> The figure is approved by General Assembly in 1999

### (4) Future Plan

Irrigation service will be expanded by improving and expanding irrigation system to paddy field of 230ha in Hamlet 4. This plan includes 2 pump stations, power line and irrigation canals in the farmland

with 385 million VND of investment, of which 200 million VND is contribution of new members and 185 million VND is loan from bank.

Fertilizer purchase and supply service and seed multiplication service are considered as additional activities by Management Board. They are planned to be submitted to General Assembly in 2000.

### N4.2.2 Phu Tho Cooperative

### (1) Activities

Phu Tho Cooperative is located in An Long Commune of Tam Nong District. Total members of the cooperative are 579 households, which cover almost 100% of farm households in the commune.

In addition to irrigation and drainage service, the cooperative has expanded its activities steadily such as credit, fertilizer supply, seed production.

Present Conditions of Activities
Scale

Activities	Scale		
Irrigation/Drainage	Irrigated Area	370 ha	
Fertilizer Purchase	Amount	120 ton *	
Credit	Amount	79.4 million VND **	
Seed Production	Seed Farm Area	10 ha (5 varieties) ***	

<sup>\*</sup> in 1999 \*\* Investment amount in District JV Credit

### a. Irrigation and drainage service

There are 5 electric pumps owned by the cooperative. Service charge is 380kg paddy/crop/ha and paid in cash. Therefore, when the paddy price decreases, the charges decrease and income to cooperative also reduces. 3 pump operators and 3 water management workers are employed with contract. Member farmers can be employed as these workers with priority and wages are paid in paddy, 1.0-1.3 ton/crop/person. The actual working hours are 50 days per year.

### b. Fertilizer supply service

The necessary amount of each member household is collected and purchased from directly wholesaler and supplied to member farmers at lower price than retail price. All fertilizer (e.g. 120 tons in 1999) can be bought by fund of cooperative. Members can pay by whether deferred payment with interest rate (same with bank rate) after harvest time or cash on delivery. All members select the former way though the amount of payment is higher than the retail price. Since fertilizers are distributed to each member at spot delivery by wholesaler, storage is not necessary.

### c. Credit service

The amount of 79,151,000 VND was invested in An Long District JV Credit in 1998 to help members

<sup>\*\*\*</sup> W-S Crop in 1999-2000

for loan. Loan from JV Credit is received by member farmer himself/herself with guarantor of cooperative. The maximum amount of loan is 20 million VND with interest rate of 1.5%/month and its usage is not limited.

### d. Seed supply service

Cooperative started seed multiplication and sale in W-S Crop of year 1999-2000. 5 varieties of seed were produced in 12 farms (total 5ha) of superior cultivation technique. Material seeds are certified seeds bought from An Phong Seed Farm of Dong Thap province or ISAFOS of Long An province. There is no storage of seeds and seeds are usually stored in the cooperative office or seed farmers.

Seeds are sold to member farmers and non-member farmers directly by producer farmers at fixed price (500 VND/kg higher than that of usual seed). Some parts of seeds are delivered by cooperative in place of seed farmers but settlement is done between purchasers and seed farmers. This service aims at extension of superior seed and does not make any profit to cooperative.

The following opinions of member farmers are collected during the survey.

- Most of the farmers need capital for production.
- The paddy price should be increased for making profits.
- They produce high quality paddy but they have a problem in processing. They also cannot sell the products at high price.
- Farmers want to have stronger bargaining power because most of paddy prices are decided by collectors.
- Farmers want to plan several varieties of paddy for better yield.

### (2) Structure

The cooperative was established based on the old collective in 1998. No initial capital contribution was not collected at the foundation and fund of the collective was diverted to member contribution according to the farm size of each member. All farm households producing paddy in the hamlet are members.

General Assembly is the highest decision-making agency and under this there are Governing Council, Management Board and Inspection Board. Business is implemented by working team of each activity under the supervision of Management Board.

N4 - 5

### Present organization structure Phu Tho Coop General Assembly Inspection Bo Coop. Leader 2 inspectors Vice Coop. Leader Office staff Service Teams Thief accountant x 1 79 household Asst. accountant/General affair x 1 70 ha Group 1 211 households, Paddy Dryer Tean eed Multiplication Team Irrigation We Finance 2 staffs 12 advanced farmers workers 144 ha Legal matter Group 2 206 house Operation of dryers Public relation Purchasing & d Technical s Seed production Irrigation Se Documentation (2 units, 960ton) Collection of information ( 10 ha, WS 2000 ) (370 ha) of agri. cnmicals 120 ha Fertilizer Service Group 3 162 households, Note: Paddy Dryer Team shall be installed before harvest time of SA Crop season in year 2000 106 ha

### (3) Financial Report

Loan from bank is practically difficult and the cooperative has been operating without loan from the bank. Average annual profit is 110 million VND and 80% of them are from irrigation and drainage service. 30% of the profit are reserved for development, social welfare and bounty and the rest 70% is allotted to members as divident.

1998 Year 1999 2000 \* Total Assets 1,959 2,173 Fixed Assets 1,135 1,205 Financial Current Assets 390 501 Status Accounts Receivable 434 382 Loan/Investment 85 Service Amount 411 Irrigation 411 317 539 Fertilizer Credit 297 303 Irrigation **Business** Cost Price 301 521 Fertilizer Condition 108 114 Irrigation Gross Profit Fertilizer 16 18 \*\* 9 11 Personnel Expenses 26 17 Profit 113 120

(Unit: million VND)

### (4) Future Plan

### a. Introduction of paddy drying service

Two paddy dryers will be equipped and drying service will be provided to members at low price (nearly at prime cost). In order to start this service in S-A crop in 2000, procurement of the facilities and training of operators are scheduled by July 2000. The dryers are under direct operation of the

<sup>\*</sup> The figure is approved by General Assembly in 1999

<sup>\*\*</sup> Profit from credit is dividend of 80 million VND of investment to JV Credit

cooperative with 3 operators for each. They are located near the cooperative office or pump station. The necessary site can be leased.

- Planned drying scale: 45% (960 ton/30 days) of S-A crop production of paddy

- Investment: 75 million VND

- Financial source: Development fund of Cooperative

### b. Dike improvement project

Northern part dike of member's paddy filed (370ha) will be raised to prevent October flood level. The third crop will be possible and non-inundated road for motorbikes will be developed. The construction will start in the middle of April 2000 (\*) and finish before flood time.

- Planned scale: Distance of improved dike is 2km

- Investment: 480 million VND (50% from District PC, 50% from Cooperative)

- Financial source: 120 million VND is contribution of members, 120 million VND from bank credit or development fund of the cooperative

\* Because of the District PC's reasons (it seems financial problem), construction has not started yet as of the end of April 2000.

Future target of the cooperative activities is approved by General Assembly in 1999 as follows. However, the detailed implementation plan is not prepared yet.

a. Introduction of rice processing and marketing

- Investment: Rice mill facility of 400-500 million VND

 Future activity plan relating to rice processing includes study tour, technical study, project formulation, decision by Management Board and capital raising by selling stocks, etc. Regarding marketing, market study, production of good seeds, processing and joint marketing are considered as activity plan.

### b. Introduction of VAC system

Investment: 200-300 million VND

- Construction of irrigation canals of 1,500m (L) x 3m (W) x 1m (Depth) is considered for effective usage and improvement of garden area around houses in residential area. Fish breeding and small-scale livestock will be introduced. The future activities are study tour, technical training, nursery stock/baby animal supply, capital support, etc.

### N4.2.3 Results of PCM Workshop

PCM Workshops found the following major points for the two cooperatives. Problems and countermeasures are raised by participated members during the workshops. Detailed analysis can be

### seen in the Report of PCM Workshop attached.

	Problems	Countermeasures
Gao Giong	1. Staff has not enough experience or	1. Cooperative should invest threshers,
Cooperative	training. Cooperative needs qualified staff	pumps, tractors, harvesters, etc.
	and accountant for expanding its	2. Cooperative collects market/technical
	activities.	information, train staff and fund from
	2. Cooperative cannot borrow money from	SOEs, private industries, government,
	banks.	etc.
	3. It is difficult to find markets of the	3. Cooperative employs qualified staff,
	products.	4. Cooperative guide members to produce
	4. Cooperative's services are still limited	good quality paddy.
	and capital is not enough for	5. Cooperative coordinates with other
	diversification.	partners to set up processing facilities
	5. Machinery and production technique are not enough.	and purchase rice of the cooperative.
Phu Tho	1. Paddy variety is not uniform.	Cooperative selects varieties meet market
Cooperative	2. Seed supply depends on outside sources.	requirement and should know what good
	3. It is difficult to find markets and to sell	seed is.
	products collectively.	2. Cooperative establishes a seed
	4. Cooperative's fund is still small but	multiplication system manage
	money cannot be borrowed from banks.	distribution of seeds.
	5. Technical level is low due to lack of	3. Cooperative collects market information.
	investment in training of members.	4. Cooperative collaborates with collectors
	6. Cooperative has no post-harvest	to sell paddy and with other cooperatives
	processing facilities and processing	to create market channels.
	industries.	5. Cooperative should think about
	7. Livestock activities are not conducted.	purchasing a rice mill, good dryer, about
		a storage plan.
		6. Cooperative employs or train technical
		staff, accountants, sales staff, and ask for
		governmental support in financial and
		technical aspects. 7. Cooperative introduces VACR model.
		7. Cooperative introduces VACK model.

### Attachment N4.1 PCM workshop at Phu Tho Commune

1. Date & place: April 11 ~ 13, 20 at People's Committee Office

### 2. Program

Day	Program	Activities
Day 1	AM8:30 Opening Introduction Participation analysis (Social diagram + SWOT analysis)  AM111:30 Lunch break	Participants identify important players in agricultural production. They analyse organisational features of the Coop.
	PM13:00 Problems analysis PM16:00 Closing	Participants identify all the problems and create a problems tree which indicates the causes and effects of the problems.
Day 2	AM8:30 Objectives analysis AM11:30 Lunch break	Participants identify the means to solve the problems by creating an objectives tree.
	PM13:30 Alternatives analysis PM16:00 Closing	Participants identify all the approaches to solve their problems based on the objectives tree.
Day 3	AM8:30 Activities for approach AM11:30 Lunch break	Participants suggest necessary activities for the approaches.
	PM13:00 Presentation by the Team. Feedback and discussions PM15:30 Closing of Workshop	The team presented the additional activities to supplement participants' suggestions.
		Participants have open discussions among themselves.

### 3. Participants

15 Coop members

Non-member farmers: number unknown at this time

2 SOE staff

1 Paddy collector

1 staff from Province DARD

1 staff from District DARD

1 Commune PC representative

2 representatives from Women's union

3 Japanese study team members

### 4. Identification of the stakeholders in Phu Tho commune

See the attached social diagram. (Annex 2)

### 5. SWOT analysis

The result of the participatory SWOT analysis indicates that Coop members are quite positive about their organisation because of its financial status, members' trust in the board, good communication among members, etc. The weaknesses are lack of the Coop's activities in such areas as seed production, marketing, livestock development, member and staff training.

The members feel that the external environment is in favour of the Coop. Main reasons presented by farmers are: availability of agricultural machinery, inputs and loans (for individual farmers), and the legal framework that facilitates farmers' activities. The threats for the farmers are unstable market price, bad weather and floods, insufficient infrastructure for production activities.

The result of the SWOT analysis is shown in Annex 3.

### 6. Problems Analysis

The participants identified the low selling price of paddy as their core problem. The direct causes of the core problem were the mono-culture of paddy production and the low level of paddy quality. The reasons why farmers focus only on paddy production are; no direction for crop diversification and farmers' sowing at once. Low paddy quality is due to low seed quality, un-uniform varieties, wrong application of cultivation techniques, lack of post-harvest management and wrong use of chemicals. The problems tree is shown in Annex 4.

### 7. Objectives Analysis and Alternatives Analysis

The participants created an objectives tree based on the problems tree. (Annex 5) In the workshop, 6 approaches were identified to increase the selling price of rice. Farmers' preferences were; seed improvement and variety selection; post-harvest management improvement and cultivation techniques improvement; farming systems improvement and dike system improvement approaches. Soil improvement approach was rejected as an impracticable option. Only a few farmers voted for the farming systems improvement approach mostly because livestock and fishery development and fruit & beans production were for home consumption; therefore, they did not think that the approach was effective. (Annex 6)

The participants presented actions necessary for the above 4 approaches. Then, the Team presented their ideas to supplement the actions. (Annex 7) Representatives from SOEs presented their opinions. After that, the workshop moved into a free discussion session where farmers' areas of concern and various issues were discussed among the participants. Such issues included factors affecting paddy price, how to

measure paddy/rice quality, how to collect prices information, as well as where to market their products. Finally, all the participants evaluated the PCM workshop and its usefulness for future activities. (Annex 8)

### 8. Conclusions

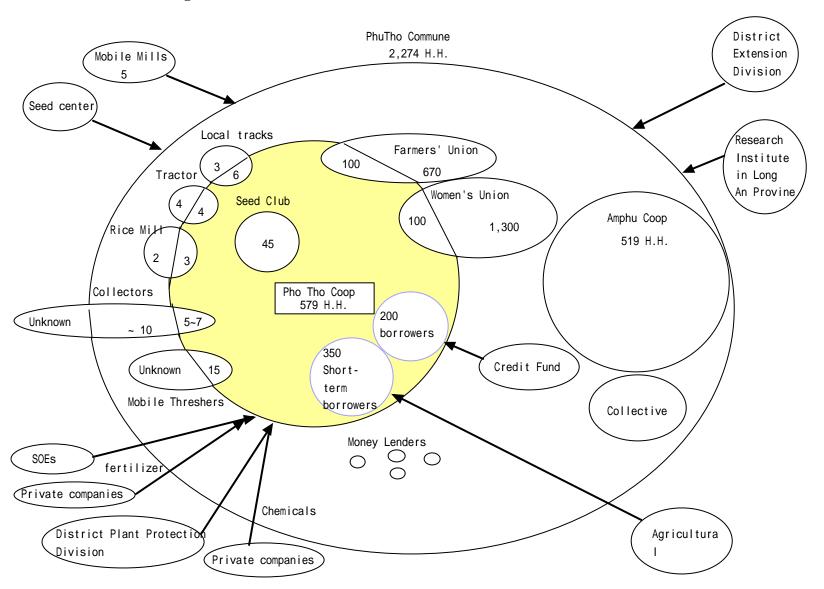
### Outcomes

- The participants have obtained a clear understanding of their problems and how they are interrelated. They have discussed and understood approaches to solve problems. Also, they have understood what activities and actions are necessary for each approach. (Annex 7)
- In this context, the PCM workshop sensitised farmers to the importance of quality management of paddy in order to increase the selling price. Also, the workshop let the farmers envisage rice milling to be a strategic option for the Coop. (See Annex 8.) In the workshop, the members seemed to understand the importance of having communication with SOEs to know quality requirements.
- The farmers understood the importance of obtaining latest price information at different markets, as well as the importance of marketing.

### Findings and implications

- Farmers hope that they will be able to sell their products in the form of rice instead of paddy in the future. Yet, the Coop has not set any clear vision or strategy to actually materialise such an idea. This was manifest in the course of problems analysis that Coop members claimed the low price of paddy was the largest problem for them. Procurement of a dryer(s) is their current plan in the field of post-harvest activities. (Annex 9)
- In the course of Objectives analysis, farmers were divided in their opinions whether they would be able to sell paddy at a higher price by improving paddy quality. Some farmers believed their profit would remain the same or increase only slightly while others were more optimistic.
- Farmers appeared to have little knowledge on objectively verifiable quality indicators. This is
  probably because farmers normally negotiate paddy price with the collectors who also do not use
  any quantitative indicators.
- One collector participating in the workshop welcomed farmers' involvement in quality management as it would be mutually beneficial.
- It was unclear at that moment whether the Coop would set marketing as part of their agenda for future activities. They seemed to be unfamiliar with the concept of marketing. This is because collectors normally visit farmers and also they tend to assume the Government to play a primary role in marketing or procuring paddy from farmers.

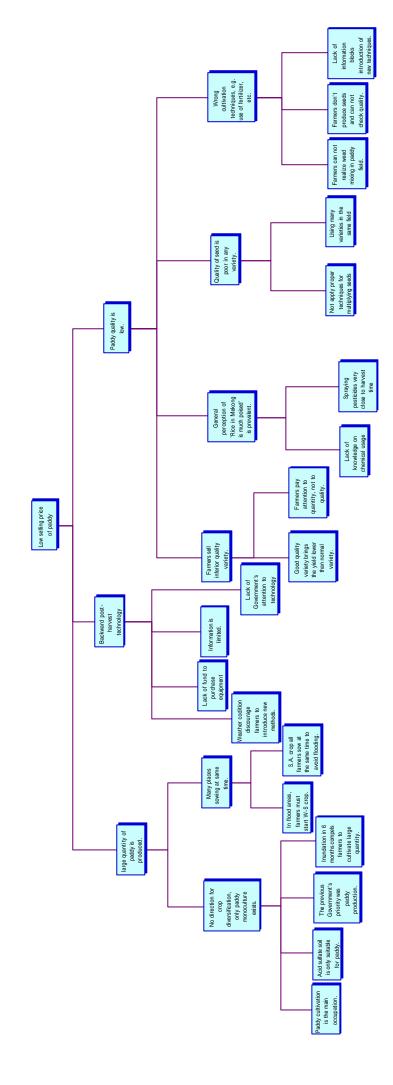
**Annex 1: Social Diagram of the Commune** 



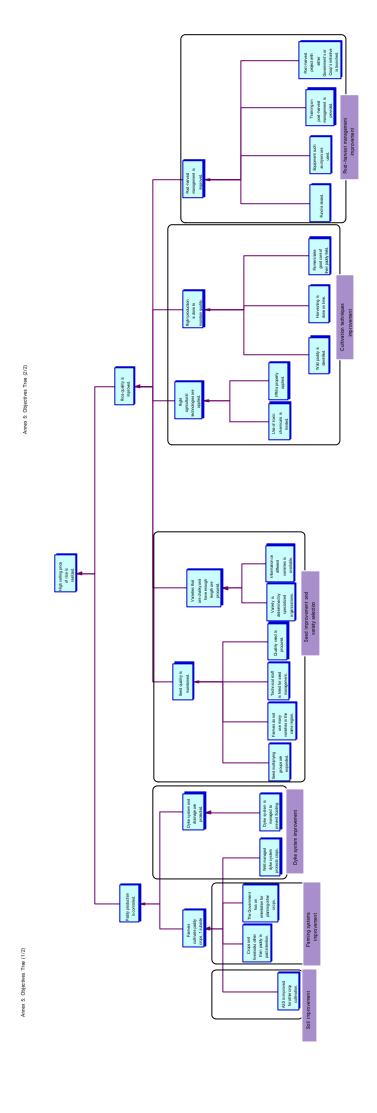
Annex 2: Results of participatory SWOT analysis (Coop members' perceptions on their organisation)

Strengths	Weaknesses
It is accepted that collectives are better than individuals.	Farmers produce un-uniform varieties.
Management board well manages the Coop.	Seed supply depends on outside sources (Farmers do not produce seeds
Management board is very active in production planning.	themselves.)
Profit is distributed to the members at the end of a year.	Farmers find it difficult to find markets.
Good irrigation system is provided.	Coop's fund is still small.
Fee for irrigation is low – high profit.	Low technical level due to lack of investment in training.
Agricultural inputs are supplied to members.	Coop should learn more from other coops.
Members are free to give their opinions.	Coop has no post-harvest processing facilities.
Fees for production is reduced for members.	There is no processing industry.
Coop tries its best to let members get loans.	Coop has not conducted any livestock activities.
Coop sends staff to protect members' crops.	Farmers do not sell their products collectively.
Coop can control damage caused by insects and rats.	Coop can not borrow money from banks.
Coop activities are approved of by members.	Training for technical staff on long-term basis is not paid attention.
Members seed and harvest at same times.	
Study tours and workshops are organised to increase knowledge.	
Forming a seed production team ton provide new varieties to farmers.	
Getting many comments from members for better activities.	
Members agree on Coop regulations.	
Coop has its own regulations.	
1 O & M staff and 5 technicians manage irrigation system.	
Annual meetings decide each year's activities.	
Opportunities	Threats
Scientific workshops on plant protection is available.	Market price is unstable.
Machinery for production, coming from the outside, is available.	Lack of high quality variety and agricultural materials.
Enough fertilizer can be procured.	Bad weather affects production.
Loans from Agricultural Bank are available.	Lack of infrastructure for agricultural/commercial/industrial activities.
Coop laws endorse Coop activities.	Rats, insects and diseases affect yield.
Extension workers provide scientific knowledge to farmers.	

Annex 3: Problems Tree



Annex 4: Objectives tree



### Annex 5: Alternatives Analysis

Participants' views on the approaches

t de tropparies views on the approaches				
Approaches	Responsible groups (Main players)	Members'	Other participants' Total score	Total score
		preferences	preferences (6 v 3 votes)	
Dike system improvement	Government + Coop	6	0	6
Soil improvement	Government	0	1	П
Farming systems improvement	1. Local Government + Coop	2	0	2
Seed improvement and variety selection	1. Coop 2. Seed Farmers 3. District Ext. Office	15	9	21
Cultivation techniques improvement	1. Coop 2. District Ext. Office	6	4	13
Post-harvest management improvement	1. Coop 2. Government (SOEs and Collectors)	10	L	17

Other participants included 2 SOE staff, 1 representative from Farmers' union, 1 from Women's union, and 2 from DARD.

All participants voted for the approach or approaches of their choice. Each of them had 3 votes. They either gave 1 approach 3 votes, 1 approach 2 votes and 1 vote to another approach, or 1 vote each to 3 different approaches.

### Annex 6: Participants' and experts' suggestions on the approaches

### SEED IMPROVEMENT AND VARIETY SELECTION\*APPROACH

Participants' suggestions

Expert's suggestions

The Government conducts research work for the selection of suitable variety.

Seed clubs produce good standard varieties.

Extension officers provide technical training to Coop members.

Coop ( farmers) select varieties meet market requirement to export.

Coop multiplies good seeds with proper method.

Coop has system of join purchasing of certified seed.

Coop should strengthen seed multiplication and distribution.

Farmers multiply seeds at the same time in a large scale.

Coop needs to know about several paddy varieties.

<u>Co</u>op and farmers need to know what good seed is (seed quality).

Coop needs to gather market information

Coop buys foundation seed.

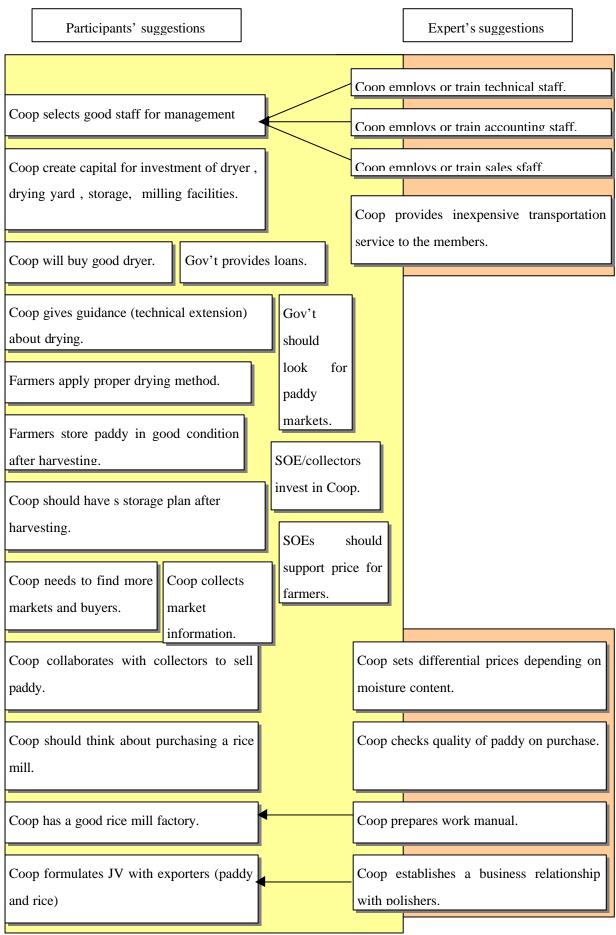
Coop establishes a seed multiplication system in the Coop.

Coop buys certified seed from outside (Alternative idea).

Coop manages distribution of seeds (Coop manages extension of varieties among members).

Coop conducts periodical field check, and gives guidance to apply proper care.

### POST-HARVEST MANAGEMENT IMPROVEMENT APPROACH



### CULTIVATION IMPROVEMENT APPROACH

Participants' suggestions

Coop gathers technical information for paddy production.

Extension officers provide technical auidance.

Coop gives guidance about plant protection techniques.

Farmers follow good cultivation practice.

Farmers learn good timing for using fertilisers, herbicides, and pesticides.

Farmers learn how to take care of their paddy fields.

Farmers should harvest in time to meet rice exporting standards.

Expert's suggestions

Coop gives members feedback of rice mill results and gives guidance for the improvement of paddy quality.

Coop should make difference in buying price, depending on the milled rice quality.

### FARMING SYSTEMS IMPROVEMENT APPROACH

Participants' suggestions

Coop creates an alternative cultivation plan.

Coop introduces garden, fish pond, livestock farm model (VACR model).

Gov't builds closed dike systems to implement VACR model.

Gov't supplies different kinds of crops.

Coop improves orchard by planting high economic value fruit trees.

Gov't provides loans to farmers to purchase seeds.

Coop replaces mix orchard by fruit trees.

Gov't supports capital.

Farmers apply cropping system: 2 paddy & 1 vegetable crop.

Farmers raise fish and plant fruit trees.

Farmers look for vegetable varieties to intercultivate with paddy crop.

Coop collaborates with collectors to look for markets.

Coop collaborates with other coops to create market channels.

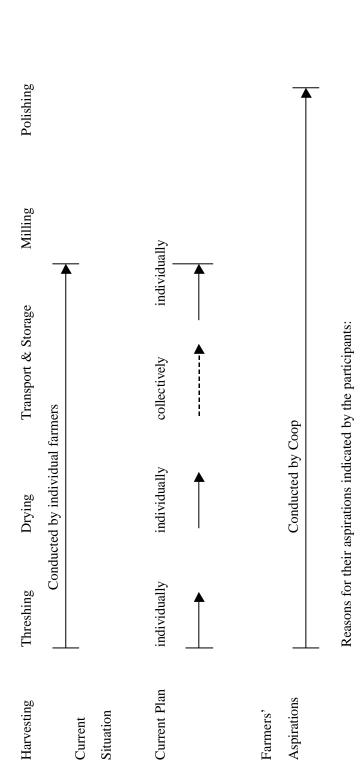
Coop collaborates with fruit processing factories.

SOIL IMPROVEMENT APPROACH and DIKE SYSTEM IMPROVEMENT APPROACH were not discussed at the workshop. The participants saw the soil improvement approach impracticable. Participants agreed not to work on the dike system improvement approach as it had been already discussed by the Coop and the team..

**Annex 7: Feedback from the participants** 

GRADE	OPINION
>5  1person graded W/S higher than 5.	Before the workshop: I haven't had a deep research in production, processing and purchasing the products. After the workshop: I could know more about planning, organisation in business management, production as well as future activities of the Coop.
5 10 persons	<ul> <li>Through the workshop, Coop members widened the knowledge about cultivation practice, especially each member can present their own ideas. Lastly, I don't know what to say, in the return for this we wish the team will be healthy, successful and hope to see you all again.</li> <li>Through the 3-day workshop in which agricultural problems presented. I myself realised that the team was very active in finding out the solutions for production problems. This might be the good experience for us to apply in our production in future.</li> <li>The team helped farmers understand logically about cultivation practice. The team paid attention to the Coop from producing good quality paddy to drying it up then purchasing at high price. This can improve farmers' living conditions.</li> <li>The workshop was very useful for Coop production planning and Coop member rights.</li> <li>The workshop achieved the good result in helping farmers understand production as well as post harvest processing. Farmers could learn the important factors of each solution and the implementation orders to achieve efficiencies.</li> <li>I could know well about the production for example if I take care of my paddy field good enough, my paddy will be sold at higher price from 10 – 15%.</li> <li>I could know more about the variety, dryer, rice mill. This is very useful.</li> <li>I could understand and follow easily.</li> <li>Through the workshop I could study many useful things not only for myself but also for other members. I would like to say thank you to the team which gave us a good opportunity to contact and study. We hope that we could have more opportunities to contact the team so that we can apply the knowledge into our practice.</li> <li>It is very useful for the Coop members to know about the ways of taking care of the paddy</li> </ul>
4 6 persons	<ul> <li>field and store paddy after harvesting, processing, and controling all stages.</li> <li>The team helped us find the solution that was very practical and logical. I could learn the experiences from the analyses.</li> <li>The team helped us understand agricultural extension knowledge (proper varieties) from that farmers could understand partly about extension and agriculture.</li> <li>The team introduced the new way of scientific workshop, easy to understand and remember.</li> <li>Through the workshop we were very pleased because of contacting the experts and interpreters. We could widen our knowledge and the purpose of the team was let farmers pay more attention to taking care of our cultivation in order to strengthen the Coop.</li> <li>I could get useful knowledge of production, technology and variety. I could study the way of choosing variety, storing after harvesting, analysing the prices at markets.</li> <li>I could know positive and negative things about the Coop.</li> </ul>
3.5 1 person	I could know how to strengthen the relationship between the Coop and members:  Post-harvest technology improvement.  Improvement and selecting varieties.  Cultivation practice improvement.  By these, we could improve our material and mental lives. Thank you very much.
3 2 persons	<ul> <li>Thank you for your attention to our Coop and let us know more about:</li> <li>Good cultivation practice</li> <li>Ways of choosing good seeds</li> <li>Improving PHT.</li> <li>I could understand about production especially producing the high quality products to improve our living conditions. Hope the Coop could purchase products from the members.</li> </ul>

Annex 8. Discussions on the Post-harvest Management Improvement Approach



5. Quality check by producers (farmers) will be possible.

Uniform variety is secured.

Jobs will be created.

Investment in other activities may be possible.

More profit is expected.

### Attachment N4.2 PCM workshop at Gao Jang Commune

1. Date & place: April 18 ~ 20, 2000 at the People's Committee Office

### 2. Program

Day	Program	Activities
Day 1	8:30 Opening Introduction Participation analysis  11:30 Lunch break	Participants identify important players in agricultural production and analyse organisational features of the Coop.
	13:00 Problems analysis 16:00 Closing	Participants identify all problems and create a "problems tree" which indicates the causes and effects of the problems.
Day 2	11:30 Lunch break	Participants identify solutions to problems by creating an "objectives tree".
	13:30 Alternatives analysis 16:00 Closing	Participants assess all the approaches to solving the problems based on the "objectives tree".
Day 3	8:30 Activities for approaches 11:30 Lunch break	Participants suggest necessary activities for each approach.  They present these activities to supplement participants' suggestions.  Participants create a project matrix.
	13:00 Presentation by the Team. Feedback and discussions PDM 15:30 Closing of Workshop	Open discussions among participants

### 3. Participants

12 Coop members

Non-member farmers – number unknown at this time

- 1 SOE staff member
- 1 Paddy collector
- 1 staff member from DARD Province
- 1 staff member from DARD District
- 1 Commune PC representative
- 3 Japanese study team members
- 4. Stakeholder Analyses and Organisational Analyses
- 4-1. Organisations and social groups in the commune: See the attached social diagram in ANNEX 2.
- 4-2. Features of the primary stakeholders in the commune: See the attached list in ANNEX 3.
- 4-3. Organisational structure and functions: See ANNEX 4.
- 4-4. Participatory SWOT analysis: See ANNEX 5.

### 5. Problems Analysis

The participants identified their core problem as: "Farmers' income is low." The direct cause of this problem is high production costs and a low selling price for their paddy. Primary production costs owed to high labour costs and costly inputs such as fertilisers and chemicals. The reasons for the low selling price are: farmers' inadequate understanding of quality standards; small export markets; imbalance between supply and demand of paddy; production of mixed varieties; poor paddy quality and existence of intermediaries in the market. The "problems tree" is shown in ANNEX 6.

### 6. Objectives Analysis and Alternatives Analysis

The participants created an "objectives tree" based on the "problems tree" (see ANNEX 7). In the workshop, 8 approaches were identified to increase their income. They were: mechanisation, establishment of a Co-op shop(s), establishment of quality standards, planned area cultivation, good seed supply, cultivation techniques improvement, harvesting – storage improvement, processing – marketing improvement.

Then, the participants rated all the approaches in view of their effectiveness, cost-effectiveness and feasibility.

PARTICIPANTS'	OPINIONS ON THE IDENTIFIED	APPROACHES

No	Approaches	Effectiveness for	Cost -effectiveness	Feasibility
		increasing		
		income		
1	Mechanisation	7	7	4
2	Coop shop	8	4	6
3	Quality standards	0	8	6
4	Planning area for export quality paddy production	3	0	5
5	Good seed supply	4	3	7
6	Cultivation improvement	1	4	5
7	Harvesting-storage	1	3	6
8	Processing- marketing	15	10	0

<sup>\*13</sup> Coop members and 1 DARD staff participated in the voting. Each time, all participants voted for the approach or approaches of their choice. Each of them had 3 votes. They either gave 1 approach 3 votes, 1 approach 2 votes and 1 vote to another approach, or 1 vote each to 3 different approaches.

The participants presented activities necessary for the above 8 approaches. The Team then presented their ideas to supplement the actions. (ANNEX 8)

After all the participants had confirmed all the necessary activities for the 8 approaches, they were asked to categorise the activities into three levels: 1<sup>st</sup> level –activities currently undertaken by the Coop, 2<sup>nd</sup> level –activities that the Coop plans to implement in the immediate future or at least discuss as part of their agenda, and 3<sup>d</sup> level –activities that they hope to conduct, yet they have not had plans or taken any actions.

### LEVELS OF PREPAREDNESS (SOCIAL PREPARATION)

No	Approaches	Level 1	Level 2	Level 3
1	Mechanisation	X	X	
2	Coop shop		X	
3	Quality standards			X
4	Planning area for export quality paddy production			X
5	Good seed supply	X	X	
6	Cultivation improvement	X	X	X
7	Harvesting-storage	X		
8	Processing-marketing			X

X = Coop has activities, plans or needs.

The above table shows the Gao Jang Coop's readiness for taking actions based on different approaches. For more details of the activities, please see ANNEX 8.

### 7. Project Design Matrix

Based on the analyses on the 8 approaches, the participants created a PDM. The contents of the PDM are shown in ANNEX 9.

Finally, all the participants evaluated the PCM workshop and its usefulness for future activities. Please see Annex 10.

### 8. Conclusions

### Outcomes

- The participants have obtained a clear understanding of the problems and how they are inter-related. They have discussed and understood approaches to solve the problems. Also, they have understood what actions are necessary for each approach. (ANNEX 7)
- Participants identified 8 approaches to help increase their income.
- Participants created a PDM which identified a project purpose, expected outputs, and necessary
  activities to produce those outputs, as well as necessary inputs and important assumptions for
  implementing the project. (ANNEX 9)

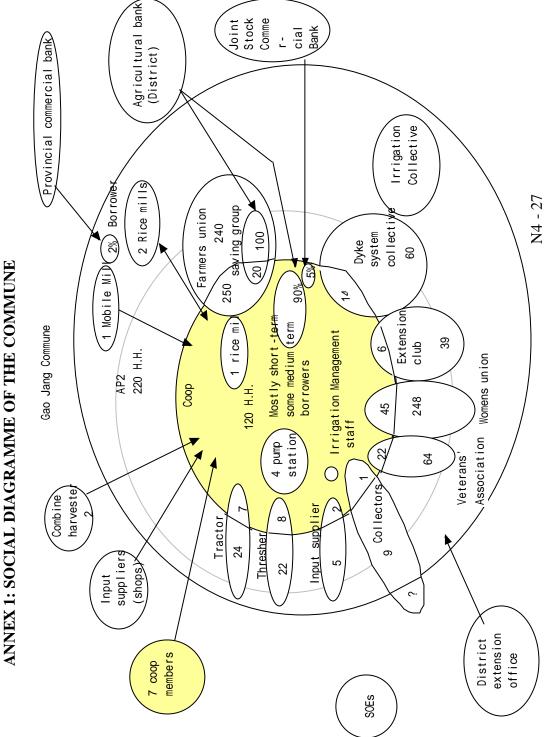
### Findings and implications

- Unlike the Phu Tho Coop, which has already conducted collective activities such as the joint
  procurement of agricultural inputs, Gao Jang Coop is still in a rudimentary phase of organisational
  development. Therefore, many activities are still in the planning stage. This is probably because the
  Gao Jang Coop was established a few years ago from scratch, whereas the Phu Tho Coop developed
  out of an existing collective.
- The leadership of Mr. Y is evident throughout the workshop. It is very promising when an organisation grows rapidly, yet more members should be encouraged to move from the rank and file into core management to help strengthen the organisation.

### THE STUDY ON INTEGRATED AGRICULTURAL DEVELOPMENT PLAN IN THE DONG THAP MUOI AREA VIET NAM FINAL REPORT

- Currently, the reduction of production expenses, particularly labour costs and inputs, are the
  immediate concern of the farmers in the Gao Jang Coop. Processing/marketing improvement is seen
  as the best means of addressing their concerns and solving their core problem. However, the
  participants feel that the processing/marketing improvement approach is not feasible without external
  assistance.
- It is worth noting that the participants saw the quality standard approach as very cost-effective and feasible, yet none voted for the approach on the effectiveness scale.

The table: Coop's levels of readiness for the 8 approaches clearly shows the general inclination of the Coop. Mechanisation, coop shop, seed supply, cultivation techniques improvement and harvest-storage improvement approaches have already become part of their agenda. Conversely, quality standards, planning area for export quality paddy production and processing-marketing improvement approaches have not been considered as immediate needs by members.



### ANNEX 2: CHARACTERISTICS OF PRIMARY STAKEHOLDERS

### Farmers' union

- Encourages members to participate in other social activities.
- union has a primary role in supporting cooperatives.
- Union does not cover everyone in the commune.

### Women's' Union

• Encourages members to actively participate in the business of the coop.

### Extension Club

- Provides sufficient supply of seeds.
- Extension Club should expand its activities to meet production demands.
- Extension Club should be broadened to introduce new varieties with high efficiency to the coop members.
- Selects suitable varieties for coop.
- Transfers technology.
- Extension Club should supply enough seeds of export quality.
- Provides high quality seed varieties for production.
- Farmers need good seeds. Seed markets are not stable, which is a disincentive to seed producers.

### Collectors

- Buy paddy from farmers. However, the price offered by them is lower than the export price
- Collectors' groups should be established to assist farmers in selling their products.
- It is difficult for Coop members to sell paddy because there are so few collectors. If farmers have contracts with SOEs to sell products, selling will be much easier for them.

### **Inputs suppliers**

- Input suppliers should be developed to better support agricultural production.
- Shops should supply agricultural inputs at a low price.
- Input suppliers are necessary for farmers; however, there are currently very large price fluctuations.
- Input suppliers do not provide enough materials; therefore, a shop network should be expanded in the coop.

### Thresher owners

• The Coop has few threshers, leading to difficulties during the harvest.

### Tractor owners

- There is shortage of tractors for land preparation. The Coop should purchase more.
- A tractor collective would help coop members seed in time.
- A land preparation collective is needed to reduce production costs.

### Rice mill owners

- Rice mills should ensure rice quality for export.
- Local rice mills produce low quality rice with a high loss-rate.
- Rice mills operate well, However, they should expand their scale to achieve the coop requirement in both quality and quantity.
- Local rice mills do not produce export-quality rice. Collectors need mills producing high quality rice.

### THE STUDY ON INTEGRATED AGRICULTURAL DEVELOPMENT PLAN IN THE DONG THAP MUOI AREA VIET NAM FINAL REPORT

Rice mill capacity meets only household consumption. They should have a better rice mill system to
produce rice for export.

### Pump station

- A pump station greatly assists irrigation and drainage services.
- A pumping group helps farmers' need in time, leading to a higher yield.

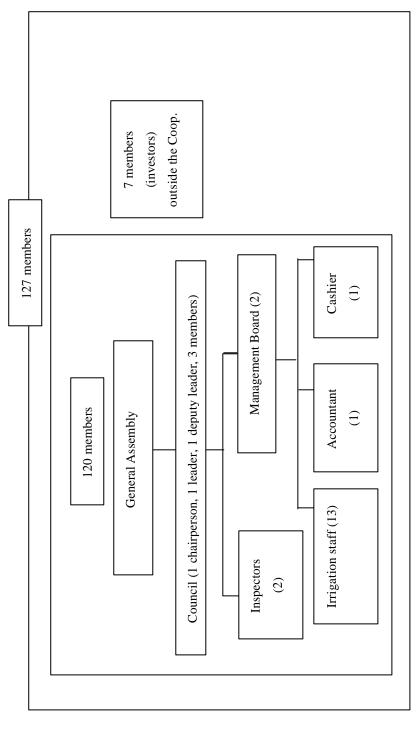
### Agricultural Bank

- The Bank can have a significant impact on production, therefore it should simplify loan procedures.
- Farmers need loans with longer-term payments.
- The Bank should provide more medium-term, low interest loans to farmers.
- Currently, the Bank lends only a small amount that is insufficient for production.

### **Others**

- At present, combine harvesters are necessary to reduce production costs.
- The Dike System Collective operates well. It collaborates with the coop to protect and enhance the dike system for harvesting paddy.

ANNEX 3: ORGANISATIONAL STRUCTURE AND FUNCTIONS



	FUNCTIONS	MEETINGS
нрот	Organise general assembly. Formulate annual plan.	Monthly
Management Board	Implement plan. Manage budget. Manage legal matters (Coop laws).	Weekly
Inspectors	Carry out internal auditing.	When necessary
General Assembly	Approval of annual plan. Select leaders.	Annually
Member meetings	2/3 of the members are active.	When necessary

N4 - 30

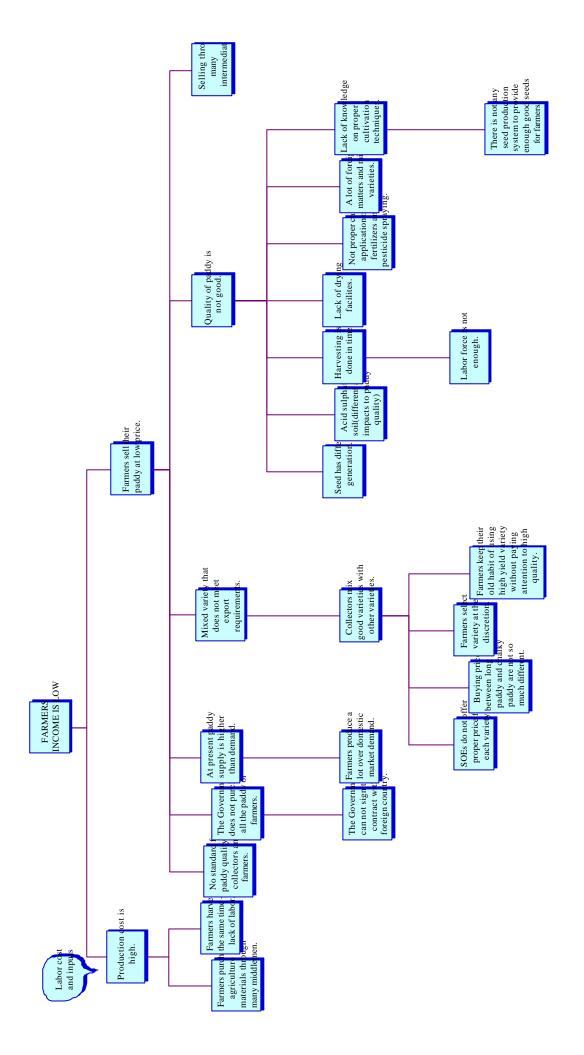
## ON THEIR ANNEX 4: RESULTS OF PARTICIPATORY SWOT ANALYSIS (COOP MEMBERS' PERCEPTIONS **ORGANISATION**)

$\mathbf{S}$	STRENGTHS	WEAKNESSES
•	So far, no complaints about the Coop.	Present staff is sufficient. However, in the future when the coop expands its
•	Reasonable fee for irrigation.	activities, it needs to employ more.
•	Good irrigation service and dike system.	Staff members do not have much experience or training.
•	Admirable Coop objective (to improve the living standard of all members).	Irrigation technician's skill level is still very low
•	Farmers are producing under direction of the Government and Party.	Dike system has not been completely constructed.
•	Management system is quite good.	Coop cannot borrow money from banks.
•	Since the establishment of the Coop, the farmers have a good relationship	Coop should employ more agricultural technical staff.
	among one-another.	Coop should organise monthly meetings to instruct farmers when to seed.
•	The Coop helps farmers improve their production.	Coop needs qualified staff and will need an accountant when it expands.
•	Mission of the Coop is to help farmers in making a dike system and provide	If the Coop expands, we need more trained stall.
	irrigation services.	toward from the find and develop new markets.
•	Some Coop members are very active in their operation.	Scientific production techniques are weak. No agriculture professional
•	Coop has selected well-respected leaders and they are good at instructing	)
	farmers in production and in helping bring profits to farmers.	The coop's operations are still limited. Services in the Coop should be
•	Members trust staff.	
•	Coop management board is very active in the Coop's operation.	Some Coop members have not paid their fees due to a lack of capital.
•	Pump station is serving production well.	Not enough machinery for harvesting.
•	Present staff are sufficient to handle current responsibilities.	Staff responsible for controlling water irrigation have not done their jobs well.
•	Farmers are more constructive since the establishment of the Coop.	Duke system is not good enough.
•	Coop informs members of dates for seeding and pumping water in and off	Coop has not collected enough capital (share).
	the field.	Some Coop members have not contributed to the Coop and have not fulfilled
•	Coop has been operated well since its establishment.	their responsibilities.
•	Good irrigation service encourages people to join in the Coop.	Activities are still not diversified and services have not been well-used or well
•	Organisational functions are clear from top to bottom.	developed.
•	Coop effectively manages the fund.	
•	Farmers have more free time to do other income-generating activities after	
	using the irrigation system.	
•	Annual plan is clearly explained at the general assembly.	
•	Irrigation staff are competent.	
•	Coop members are knowledgeable about the Coop, leading them to	
	efficiently do then own dutes.	

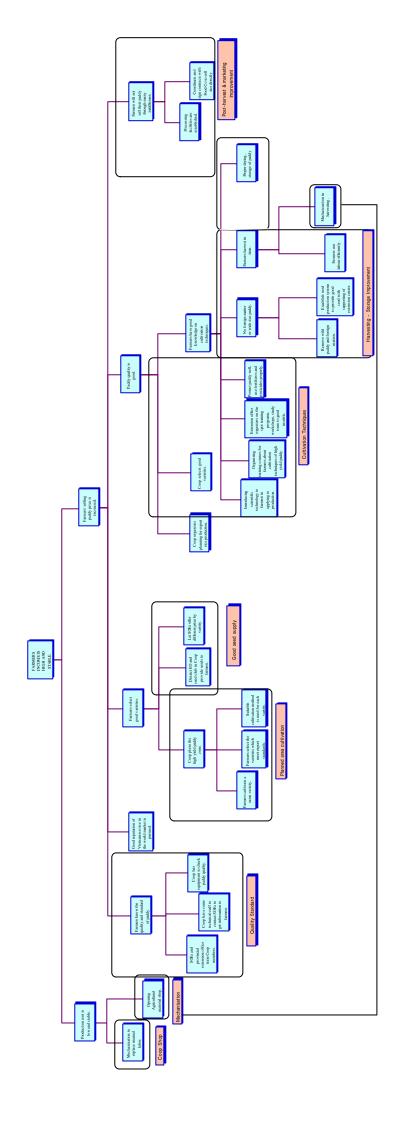
# THE STUDY ON INTEGRATED AGRICULTURAL DEVELOPMENT PLAN IN THE DONG THAP MUOI AREA VIET NAM FINAL REPORT

OPPORTUNITIES	THREATS
• The Government listens to the Coop.	<ul> <li>Dike system and transportation roads should be repaired.</li> </ul>
<ul> <li>Coop is supported by other organisations.</li> </ul>	<ul> <li>Collectors buy farmers' paddy at unreasonable (uneconomical) prices.</li> </ul>
<ul> <li>Government policy and laws support the Coop</li> </ul>	<ul> <li>Agricultural commodity prices are unstable.</li> </ul>
<ul> <li>The interest rate offered to farmers is low.</li> </ul>	<ul> <li>Input prices fluctuate.</li> </ul>
• The women's union and farmer's union support the Coop.	<ul> <li>Producers have little impact on the market.</li> </ul>
	<ul> <li>Lack of harvesters during peak harvest time.</li> </ul>
	<ul> <li>Some farmers will not join the Coop, reducing efficiency in production.</li> </ul>
	<ul> <li>Low paddy prices are a disadvantage. Economic development is slow.</li> </ul>
	<ul> <li>The government should have a price policy to allow collectors to buy products</li> </ul>
	at reasonable prices.

### ANNEX 5: "PROBLEMS TREE"



### ANNEX 6: "OBJECTIVES TREE"



### ANNEX 7: LIST OF THE ACTIVITIES NECESSARY FOR 8 APPROACHES (CATEGORISED BY THE LEVEL OF READINESS)

APPROACH	LEVEL 1:	LEVEL 2: PLANNING	LEVEL 3: HOPING TO
	CURRENTLY		PLAN
	IMPLEMENTING		
1- Mechanisation	- 3 electric pump stations (12.000m3/hr) - 1 diesel pump station (2000m3/hr)	<ul> <li>Land preparation collective should increase the number of tractors.</li> <li>Coop should invest in threshers.</li> <li>District Agricultural bank gives medium-term credits to Coop to buy: pumps, tractors and a harvester.</li> <li>Farmers need low interest, long-term credits to buy land cultivation machinery.</li> <li>Coop should invest in swathers.</li> <li>Coop buys harvester using members' contribution fund.</li> <li>Coop should invest in</li> </ul>	
2-Coop shop		ploughing machines.  The district Agricultural Bank grants medium-term loans to the coop to invest in fertilisers and pesticide services.  Agricultural Bank should support credits for the Coop to buy inputs that can then be sold to members.  Coop will know the exact level of inputs required.  Coop borrows from fund to provide seeds, fertiliser, and pesticide to farmers.  Coop forms joint venture with Dagrimex and other companies to buy inputs and distribute them to Coop members.  Coop shop is established using contributions of members.	
3-Quality standard			<ul> <li>Coop provides timely information to farmers.</li> <li>Coop collects information,, and price information</li> </ul>

			from SOEs and private polishers.  - Buy moisture meter and testing machinery like a milling tester and husker.  - Coop should train staff to control paddy quality and seed multiplication techniques.  - Farmers bring their paddy for quality check.  - Farmers pay a fee for a quality check (cost for staff, equipment).  - Coop asks Coop union to provide training.  - Coop asks SOEs to provide training.  - Coop asks PHTI to provide training through provincial DARD.
4-Planning area for exported paddy production			<ul> <li>Commune PC and Coop create a plan for and choose an area for export-quality paddy.</li> <li>At the general assembly, the Coop agrees to the export-quality paddy area.</li> <li>Commune and Coop and people agree on plan.</li> <li>Coop will visit other successful Coops, which already have export areas.</li> <li>Coop should study suitability of soil for proposed crop, or choose crop suitable for chosen area.</li> <li>Other groups must agree with the plan.</li> <li>Farmers in Helmet 2 agree to the plan.</li> </ul>
5-Good seed supply	<ul><li>Seed centre produces good quality seed.</li><li>Extension club</li></ul>	<ul><li>Coop manages seed distribution to Coop members.</li><li>Coop encourages members</li></ul>	

		T	Γ
	provides a high quality variety to farmers.  Extension centre helps commune extension club in technology and seeds.  Coop will have technical transfer for seed production and quality control from seed station.  District extension centre supplies good varieties to farmers.	to cultivate 1 variety.  Coop members are trained in quality control by seed station.  Coop establishes seed production system together with Coop members.  Coop buys foundation seeds from seed station.  Extension clubs (in Commune, District, Province) should support the COOP SEED MULTIPLCATION GROUP.  Coop organises monthly members meetings to oversee timely production.  Coop employs qualified staff.  Coop conducts periodic field surveys and gives guidance in proper crop	
6-Cultivation improvement	- Farmers improve cultivation techniques Related sectors hold training for farmers in cultivation techniques Coop contacts specialised sectors to request transfer of advanced science and technology in paddy production District extension station transfer advanced science and technology in paddy production District extension station transfer advanced science and technology in order to help farmers apply the most effective methods District extension station trains farmers	<ul> <li>Change drying practice from sun drying to dryers, which can control the moisture content.</li> <li>Coop constructs dryer to dry paddy in rainy season.</li> </ul>	<ul> <li>If Coop has a rice mill it will affect the buying price of paddy, depending on the quality of the milled rice.</li> <li>Coop offers guidance for proper care based on the check results /rice mill results.</li> </ul>

	how to apply		
	technology in		
	production.		
7-Harvest-	- Farmers carry		
storage	out efficient		
	harvest and		
	storage.		
	- Coop informs		
	members of the		
	harvesting,		
	storage methods		
	well in advance.		
8-Processing-	wen in advance.	- Vi	ietnamese and
marketing			panese and
marketing		· · · · · · · · · · · · · · · · · · ·	•
			overnments invest
			Coop (1 part is
			ant aid and the
			her is a loan) to
			tablish rice mills.
			oop has long-term
			edits at low interest
		fo	r building a rice
		mi	
		- Co	oop will have well-
		ex	perienced sales
		ma	anagers.
		- Fa	rmers produce
		go	ood quality paddy.
			oop will have a fund
			buy farmers paddy.
			oop saves profits for
			ture purchases of
			ddy from farmers.
			oop processes and
			arkets products.
			oop employs and
			nins accounting
			aff.
			oop employs
			chnical staff.
			oop employs
			perienced sales
			aff.
			oop employs new
			aff.
			oop co-ordinates
			ith other partners to
			t up a processing
			cility and purchase
		ric	ce of Coop
		me	embers.
		- Co	oop joint venture
			ith Dagrimex: Coop
			rchases milled rice
			om members then
			lls to the company.
<u> </u>	l .	Se.	ns to the company.

- Coop collaborates
with SOEs to
purchase and process
paddy for farmers.
- Coop establishes
business relations
with SOE and private
polishers.
- Coop prepares work
manuals before
starting operation.
- Coop conducts
quality inspection
when purchasing
paddy.
- Coop collects market
information.
- Need good
processing facilities
which can process
amount
- Coop provides cheap
transportation
services to collect
rice paddy from
members
- required by exporters
- Coop must have rice
mill to export.

### ANNEX 8: EVALUATION AND FEEDBACK FROM THE PARTICIPANTS

GRADE	OPINION	
13 participants gave the workshop 5 grades.	<ul> <li>Throughout this 3-day workshop, the team and we contributed to forming a project that would ultimately increase farmers' income. If the project can be implemented, all members will be very happy.</li> <li>The workshop helped us understand the objectives of the Coop and was very useful regarding science and technology.</li> <li>The workshop was very profound and scientific.</li> <li>The workshop was easy to understand.</li> <li>The 3-day workshop sets the development direction for our co-operation in future. We believe that we could achieve our highest target. We are extremely thankful to the JICA team.</li> <li>The 3-day workshop was also very useful in that the team worked actively throughout</li> <li>By studying the planning for the Coop, I now understand how the farmers' income can be increased. I hope that those approaches could be implemented.</li> <li>The 3-day workshop achieved successfully.</li> <li>In the future, I think participants could clearly understand Coop activities. This understanding is a result of the 3-day workshop.</li> <li>It was also very useful for farmers.</li> <li>Throughout the 3-days we worked very hard. Working hours were long. It was a bit stressful going so long without a break. More participants in the workshop would have resulted in a greater contribution of new ideas.</li> <li>Through 3-day workshop the team worked scientifically. For our perspective, we learned what we should do as well as the means to overcome the difficulties.</li> <li>Through 3-day workshop with the JICA team, they greatly helped and guided us to understand our issues clearly.</li> </ul>	
No participant gave 0 – 4.	None	

### **ANNEX 9: PDM**

NARRATIVE SUMMARY OF THE PROJECT	IMPORTANT ASSUMPTIONS
PROJECT PURPOSE: STEADY INCREASE IN FARMERS' INCOME	Paddy price is stable.
<ul> <li>OUTPUTS:</li> <li>Mechanisation is undertaken to reduce inputs and harvesting costs.</li> <li>Coop shop is established to reduce input costs.</li> <li>Farmers understand quality standards.</li> <li>Paddy for export is produced in planned areas.</li> <li>Good seed supply is secured.</li> <li>Cultivation techniques are improved.</li> <li>Harvest – Storage is improved.</li> <li>Processing – Marketing is improved.</li> </ul>	Support from the Government at all levels to promote rice production Farmers agree to establish a planned production area. Loans are available to farmers. Activities are supported by other co-operatives so that Gao Jang Coop can exchange information and conduct cross-visitations with them.
	NECESSARY INPUTS: Capital for rice mill, paddy dryer, harvester, thresher and tractor Capital to purchase equipment for quality testing/quality control
Methods necessary for all approaches:	1 technical staff person specialising in paddy production
• Persuade other members to new activities.	1 accountant
• Persuade outside investors (members) to agree on new activities.	1 agronomist
• Encourage non-members to join the coop.	1 marketing staff member
<ul> <li>Reach consensus on non-distribution of profits for some years to raise fund for new activities.</li> <li>Hire competent staff.</li> </ul>	30 ha of paddy field for seed production
Add one more vice-director to the board to deal with new activities.	Space to build rice mill