

ANNEX F. HABURAS MANATUTO

ANNEX F. HABURAS MANATUTO

F.1 Establishment of the New Organization

The new organization, Haburas Manatuto, was established on January 25, 2003. The main purposes are to coordinate the JICA Study Team and the farmers' groups on the implementation of training for rice cultivation and farm mechanization. Haburas Manatuto is also responsible for managing the renting system of farm machineries. In February, two farmers have been temporarily selected as the coordinator and assistant coordinator to work until April (see Haburas Manatuto, Meeting No.1 and No.2).

Haburas Manatuto shall be considered as the permanent organization. It will continue most of the project activities after the Study Team leaves in July. It shall also start or expand the business, such as renting agriculture machines to non-members, to generate some incomes to secure its future.

F.2 Incentives of the Members

The participation of the members to the project activities has been low, particularly in rice cultivation. The reason was not clear for the Study Team for a while because the project components and activities were decided with the farmers in the planning workshop, and the members were listed up by the farmers themselves. It has then become clear that most of the members were merely interested to get a tractor at the cheaper rate, or else they expected to be paid some money by participating in the activities. Another reason is the harvests to be obtained from the Pilot Project. It was decided in the workshop that the harvests should belong to the land owner while other farmers could learn how to cultivate rice. It is however guessed now that many farmers were not satisfied with this decision.

It could therefore be said that the incentives of the farmers are the immediate benefits, tractor, money or harvests. The long-term benefits such as training would be difficult to attract the farmers. This could be understood from their experiences that in Indonesian regime the farmers had been given agricultural inputs free or by cheap rates and even paid when participated in the training. Many international organizations have expressed this sort of farmers' attitudes as "dependency syndrome", and the Pilot Project has actually faced.

It has reminded the Study Team that some incentives should be taken into account when organizing the farmers, and the same can be said when strengthening Haburas Manatuto (see F.4).

F.3 Meaning of "Agreement"

The Study Team and the farmers have agreed many things through the workshops and meetings; for example, necessity of participation to the project activities, time to participate,

cost sharing, rules of tractor operations, etc. However, many issues have been neglected. It seems to the Study Team that an agreement does not mean for the farmers something that they should follow.

As a result, the farmers did not participate in the project activities, the rates of the cost sharing were not fixed, and the tractors were not maintained in good condition. It is one of the important lessons in organizing the farmers that one should teach the farmers patiently how important we keep the things we have agreed.

F.4 Strengthening Haburas Manatuto

Based on the experiences mentioned above, the Study Team has considered Haburas Manatuto be strengthened urgently to improve the situations. This requires the Study Team to consider various issues. One is the incentive. Since the tractors are the strong incentives for the farmers, the Study Team urged the members of Haburas Manatuto that we would lose tractors and would not be given the threshers and rice mill machine if this situation continues. The Study Team insists that we therefore discuss and do something now to show other people that Haburas Manatuto is the strong organization and capable to manage the machines.

The other three issues have been discussed as follows;

- (1) Regulations: The farmers should understand they have obligations and benefits in an organization. The regulations should be the one that all the members can surely follow.
- (2) Members: We need to have the members only who understand the project purposes and are committed to it. As a commitment, the farmers should pay a little money to be the members.
- (3) Leaders: We need to have the leaders who are supported by the members and capable to manage the organization. One is to mobilize people in the project activities.

The regulations were drafted by the Study Team and discussed with the members to finalize. Accordingly, the member list was reviewed and the leaders were selected by vote of the members before the Study Team left the site in March. Many new farmers actually started participating into the project activities, and inactive members were therefore replaced with those new farmers. The coordinator and the assistant coordinator were running the organization well, and were selected as the officers of Haburas Manatuto.

To strengthen and assess the capacities of the new officers, particularly regarding the management of the organization as well as the rental system of the farm machineries provided by the Study Team, the responsibilities were given to them in March before the Study Team left the country. A staff of NGO (CARE) was allocated to assist the officers at site. Their responsibilities and TOR given to them are shown in [Table F.4-1](#). It was intended to see how well they could fulfill their tasks during the absence of the Study Team, and eventually to decide whether or not the ownership of the farm machineries could be given to them. (see Haburas Manatuto, Meeting No.3).

F.5 Assessment of the Organizational Capacity of Haburas Manatuto

When the Study Team came back to the site in June, the capacities of the officers as well as Haburas Manatuto were assessed through the indicators set by the Study Team. As a result, the Study Team has judged the capacity of the manager is good although he needs some improvement in management and should hand over some responsibilities to other officers (see [Table F.5-1](#)). Overall, the capacities of Haburas Manatuto and its officers were considered as 60 to 70 percent. This indicates positively that the farm machineries could be given to them or allowed to use by them if proper guidance and supervision can be continuously given at the same time. In conclusion, Haburas Manatuto should still be supported from outside with being provided with some incentives, i.e., farm machineries, to strengthen the organizational capacity further more.

Haburas Manatuto Regulations

March 5, 2003

(1) Membership

1. Haburas Manatuto is open to any farmers in Laclo Irrigation System who agree to follow the regulations and wish to cooperate and work together with the members.
2. The officers of Haburas Manatuto are as follows:
(1) Manager, (2) Assistant Manager, (3) Accountant, (4) Auditor
3. The officers should be selected from the members by vote. More than 2/3 of the members should participate in the vote. The terms of the officers are one year.
4. To become the member of Haburas Manatuto, the farmer should register the name and pay the following non-refundable fees.
(1) Membership fee: US\$2.5, (2) Monthly fee: 25 cents
5. The above fees should be used for the operation of Haburas Manatuto. When the above fees are paid, the accountant should record it and issue the receipts to the payer. The money should be kept by the accountant in a safe place. The auditor should report the members after the money is used.
6. The members should participate in the group activities when requested by the manager. The members should pay penalties to Haburas Manatuto if not participate. The absent sheets should be prepared by the manager for the evaluation.

(2) Machine Rental

1. The rate of tractor rental is US\$30/ha for the members. The rate includes fuel and operator, and only the authorized operators can operate the tractors. The different rate will be applied to non-members (including the members who do not pay the fees).
 2. The area size should be measured before the signing of the “agreement on contract plowing.” The members who have signed the agreement can only rent a tractor. The member should follow the tractor schedule prepared by the manager.
 3. The tractors should be checked by the authorized mechanics every day before its use.
 4. The rates of thresher and rice milling machine rental should be decided in June. The same system as tractor rental should be applied.
 5. The failure of the management of the machinery rental system will cause termination of this system.
- End.

Haburas Manatuto

Responsibilities of the Officers

March 12, 2003

Manager, Assistant Manager

The manager and the assistant manager should cooperate with each other to fulfill the following responsibilities:

1. Membership Registration

- 1) Explain the regulation of Haburas Manatuto to the farmers who want to be the members
- 2) Register the names of the farmers who agree to follow the regulations

2. Contract Plowing with Tractor

- 1) Explain the regulations to the farmers who want to rent a tractor
- 2) Explain the rates are different between the members and non-members
- 3) Measure the size of the area with the member
- 4) Sign the contract with the member
- 5) Prepare the schedule of the tractors' use, and inform it the farmers
- 6) Check the conditions of the tractors every day before use, or call the mechanic to check it
- 7) Record the work time of the mechanic, if he works for the tractors of Haburas Manatuto
- 8) Assign the operators when they should work
- 9) Record it when plowing or paddling is finished
- 10) If spare parts are needed, request a person in charge to obtain it

3. Expenditure of the Money Collected

- 1) Make sure the money collected can be used only for emergency
- 2) If necessary, make a plan of expenditure (how much to what items)
- 3) Explain the plan to the members before use
- 4) After the money is spent, give the receipt to the accountant for refund

4. Management of Tools and Equipment

- 1) Make sure that the tools and equipment of Haburas Manatuto can be used only by the members
- 2) Record it when the members want to borrow the tools or equipment
- 3) Record it when they return it
- 4) Make sure the storage is always locked

5. Management of the Other Officers and Members

- 1) Supervise and give the necessary instructions and assistance to the accountant and the auditor
- 2) Mobilize the members when the group works become necessary

Accountant

- 1) Collect (i) the membership fee, (ii) the monthly fee, and (iii) the tractor fee
- 2) Record it in the account book when paid
- 3) Issue the receipts to the members when paid (make sure two receipts are made, one for the members and one for Haburas Manatuto)
- 4) Keep the money collected in a safe place

Auditor

- 1) Once a month, make sure the amount of money the accountant keeps and the record in the account book are the same
- 2) Report it to the members in the monthly meeting

End.

Haburas Manatuto
Meeting No.1, January 25, 2003

1. JICA Study Team and the members of three working groups for Crop Production and Farm Mechanization had a meeting. The objectives of the meeting were as follows:
 - (1) Establishment of an organization to coordinate the working groups
 - (2) Discussion on the schedule of farming and training (crop production and plowing with tractor)
 - (3) Explanation of the contract plowing with tractor
 - (4) Discussion on the cost sharing
2. The organization was established for coordinating the working groups into the project activities and starting the contract plowing with tractor. The name of the organization was decided by vote to be “Haburas Manatuto”, that means “Development of Manatuto”. The officers of the organization should be selected in the next meeting.
3. The Study Team explained the schedule of farming and training activities, which was planned based on the schedule of gate closing (end May) by UNOPS’s next rehabilitation works. According to the schedule, plowing should be started on January 28 and transplanting on February 17.
4. The participants have decided the rules of participation to this activity, in which each group should participate for two hours from 7 to 9 am, two days a week. The name should be deleted from the list if a member is absent four times without the permission.
5. The Study Team explained the rates of contract plowing with tractor. There are three rates, US\$ 30, 23 and 8 per ha depending on who pays for fuel and operator. The farmers can choose one of the three rates.
6. The Study Team confirmed the cost sharing which was agreed in the planning workshop. The rates of cost sharing, particularly for seeds, fertilizers and farming tools, should be decided soon. It was also confirmed that the collected money should be used by the members in future to continue the activities.

End.

Haburas Manatuto
Meeting No.2 (General Meeting), February 10, 2003

JICA Study Team and the members had the first general meeting of the newly established organization, Haburas Manatuto. 20 farmer members participated to the meeting.

1. The Study Team explained the followings:

(1) The objectives of Haburas Manatuto are (i) to coordinate the Study Team and the working groups for smooth implementation of training activities, (ii) to make sure the knowledge obtained from the training is extended to other farmers in the Laclo Irrigation System, and (iii) to maintain agricultural machines, tools and other equipment in good conditions.

(2) The roles of Haburas Manatuto are as follows:

- To inform training schedule to the working groups and mobilize the farmers accordingly
- To inform farmers' needs and requests to JICA Study Team
- To discuss and solve the problems related to the trainings
- To inform the results of trainings to other farmers in the Laclo Irrigation System
- To keep training materials including agricultural machines in good conditions
- To manage contract farming through which agricultural machines (hand tractors, etc.) are lent to the farmers

(3) The activities to be conducted by Haburas Manatuto are as follows:

- To keep books for equipment and tools
- To discuss with the farmers and start the cost-sharing system as well as the contract farming of hand tractors and other agricultural machines
- To collect fees from the farmers
- To manage the collected money
- To coordinate the study tours
- To sign agreement for what the Study Team and the farmers groups have agreed, and inform it to members
- Others

2. The followings were discussed regarding the officers and members of Haburas Manatuto.

(1) The farmers complaint not all the members participate to the farming and training conducted daily by the Study Team, and therefore it is necessary again to make sure who the members are. It was decided attendance be recorded daily. The member list will be reviewed in June based on the record.

(2) The coordinator and the assistant coordinator were selected by vote of the members. The name of the coordinator is Jose Pires and the assistant coordinator is Jacinto Soares. They will work as the temporary officers until April, and then the new officers will be elected by

the members. The result will be informed to the Study Team when it comes in June.

- (3) Haburas Manatuto is considered as the permanent organization. The current activities of the Pilot Project are expected to continue and expanded by Haburas Manatuto after the project is completed. It shall also start business to generate some incomes to secure the future activities of Haburas Manatuto. The details of future activities, regulations, etc. will be discussed in June. In the meantime, the Study Team will provide the members necessary assistance and training.
- (4) The leaders of three working groups are requested to inform the above to all the members in the groups.

3. The following were also discussed:

- (1) There are now 24 hand-tractors under the DAO. Most of them have been allocated to the farmers' groups in the Lacro Irrigation System, the groups at the secondary canal basis. However it does not reach to all the secondary canals. The farmers are given the right to use and responsible for the repair. They should pay US\$30/ha to the district, which includes the cost of fuel but not an operator.
- (2) It was confirmed that the farming training of the Pilot Project be concentrated to Inkero canal. The members need to participate in the training so that they can later use the knowledge obtained in their own farm. The harvests will belong to Mr. Sebastiao. Those issues were discussed in the workshop in last December and agreed.
- (3) The sites for the study tour are still under investigation. The candidate sites are Baucau and Maliana. The Study Team will inform the farmers the schedule to the coordinator, when fixed.

End.

Haburas Manatuto
Meeting No.3, March 5, 2003

1. The agenda of the meeting is "New Haburas Manatuto"; that means to discuss with the farmers how we can strengthen Haburas Manatuto. About 20 farmer members (including some new members) participated to the meeting.
2. The JICA Study Team explained that the JICA's officer in Japan in charge of this project visited the project site on last Saturday. He was happy to see that the new organization, Haburas Manatuto, has been established, but not happy to see only Japanese experts were in the field. Low participation of the farmers in the project activities would be considered as the low motivation of the farmers to the project. It is also pity for the Study Team that the things decided in the meeting, to make sure the participation of the members, have not been followed by the members.
3. The Study Team also explained that the ownership of two tractors is not yet known. Whether or not Haburas Manatuto can keep and use them in future really depends on how well the members manage Haburas Manatuto. The current situation of Haburas Manatuto may jeopardize the future ownership and use of the tractors.
4. The Study Team also explained the plan of providing threshers and rice mill machines in June would not be implemented to Haburas Manatuto if this situation continues.
5. The Study Team therefore urged the members that we strengthen Haburas Manatuto from now on. We should make and prove the strong Haburas Manatuto to other people. The situation is now very serious and this would be the last chance.
6. The Study Team strongly suggested that from the experience that we had been through, three things should be strengthened now.
 - (1) Regulations: We had some written regulations, but it was not followed by the members. We need to make the regulations which all the members can surely follow. It should be clear that the regulations have both obligations the members should follow and the benefits the members can enjoy.
 - (2) Members: We have many members only listed but never showed up to the activities. Their interest seems to seek the possibility to borrow the tractor at the cheaper rate. We need now to have the members only who are really committed to the project. The number of the members could be smaller than now.
 - (3) Leaders: The leaders should be able to manage the organization. The leaders should be respected by the members and can mobilize them to the project activities. It is necessary now to select the leaders officially by vote of the members.
7. The Study Team prepared the draft new regulations, which was then discussed with the participants. It was finalized after part of it was modified. As an example, the farmers who want to be members should pay US\$2.5 and register their names. The new regulations shall be applied to all members.

End.

Table F.4-1 Responsibilities of the Officers and TOR of CARE Staff

March 12, 2003

Responsibilities of the Officers of Haburas Manatuto	TOR of Mr. Thomas (CARE Staff)	Outputs (All the outputs listed here should be shown to the Study Team in June)
Manager, Assistant Manager		
1. Membership Registration		
1) Explain the regulation of Haburas Manatuto to the farmers who want to be the members	Make sure the members understand and agree the regulations	
2) Register the names of the farmers who agree to follow the regulations	Make sure the names and other information are registered properly	The registration sheet (name, village, secondary canal, membership fee)
2. Contract Plowing with Tractor		
1) Explain the regulations to the farmers who want to rent a tractor	Make sure the farmers understand and agree the regulations	
2) Explain the rates are different between the members and non-members	(same as the above) The rate for the member is US\$30/ha, and for the non-member is US\$40/ha	
3) Measure the size of the area with the member	Make sure the area is properly measured	
4) Sign the contract with the member	Make sure the agreement is signed before the use of tractor	The signed agreements
5) Prepare the schedule of the tractors' use, and inform it the farmers	Make sure the schedule is prepared before the use of tractor	The tractor schedule including the operator
6) Check the conditions of the tractors every day before use, or call the mechanic to check it	Make sure the conditions of the tractors are good before the use of tractor	The tractors (should be in good condition)
7) Record the work time of the mechanic, if he works for the tractors of Haburas Manatuto	Record the work time of Mr. Domingos if he works	The work time sheet of Mr. Domingos
8) Assign the operators when they should work	Make sure the operators understand they are paid US\$10/ha	
9) Record it when plowing or paddling is finished	Make sure the recording is done	The record of tractor use
10) If spare parts are needed, request a person in charge to obtain it	1) Write a letter to Mr. Domingos when the spare parts are needed 2) Make sure it is recorded by Mr. Domingos when the spare parts are given	1) The letters to Mr. Domingos 2) The records by Mr. Domingos

Responsibilities of the Officers of Haburas Manatuto	TOR of Mr. Thomas (CARE Staff)	Outputs (All the outputs listed here should be shown to the Study Team in June)
3. Expenditure of the Money Collected		
1) Make sure the money collected can be used only for emergency	Assist the manager to decide whether money can be used or not	
2) If necessary, make a plan of expenditure (how much to what items)	Make sure the plan of expenditure is made	The plan of expenditure
3) Explain the plan to the members before use	Make sure the members agree the plan	
4) After the money is spent, give the receipt to the accountant for refund	Make sure the receipt is given to the accountant	The receipts
4. Management of Tools and Equipment		
1) Make sure that the tools and equipment of Haburas Manatuto can be used only by the	Make sure the members understand the regulations	
2) Record it when the members want to borrow the tools or equipment	Make sure the recording is properly done	The record of tools and equipment
3) Record it when they return it	Make sure the recording is properly done	(same as above)
4) Make sure the storage is always locked	Make sure all the tools and equipment are stored	Tools and equipment
5. Management of the Other Officers and Members		
1) Supervise and give the necessary instructions and assistance to the accountant and the auditor	Make sure communication among the manager/asst. manager, accountant and auditor is good	
2) Mobilize the members when the group works become necessary	Assist the manager to mobilize the members	Paddy conditions in demonstration field (in particular, weeding is properly done)

Responsibilities of the Officers of Haburas Manatuto	TOR of Mr. Thomas (CARE Staff)	Outputs (All the outputs listed here should be shown to the Study Team in June)
Accountant		
1) Collect (i) the membership fee, (ii) the monthly fee, and (iii) the tractor fee	Assist the accountant that all the payments are made properly	
2) Record it in the account book when paid	Make sure the recording is done properly	The account book
3) Issue the receipts to the members when paid (make sure two receipts are made, one for the members and one for Haburas Manatuto)	Make sure the receipts are issued properly	The receipts (half part)
4) Keep the money collected in a safe place	Make sure the money is kept	The money collected
Auditor		
1) Once a month, make sure the amount of money the accountant keeps and the record in the account book are the same	Make sure the auditor works properly	
2) Report it to the members in the monthly meeting	Make sure the auditor reports it in the monthly meeting	The monthly report of the auditor

Note: If necessary, contact Hiroshi Okabe at any time through e-mail. The address is okabe@kmcinc.co.jp.

In addition to the above, the survey and study on the suitable system of water fee collection will be made in June. Mr. Thomas is requested to make an interview to the following persons to get the opinions on what systems should be suitable for the farmers. The opinions should be summarized by June.

- Four village leaders
- Some traditional leaders
- Four marinos
- Some leaders of the secondary canals
- Some farmers

Table F.5-1 Assessment of Organizational Capacity of Haburas Manatuto

Indicators	Results (as of June 26, 2003)	Assessment
<p>(1) Management of the Organization</p> <p>1 The officers of Haburas Mantuto fulfill their tasks according to the "Responsibilities of the Officers" given to them.</p>	<p>1. The manager and the assistant manager have understood and been following the "Responsibilities of the Officers".</p> <p>2. Almost all of the tasks are still handled by the manager. The tasks of the accountant and the auditor should be handed over to them.</p>	<p>The performances of the manager has been good, although he should distribute some tasks to other officers and supervise them.</p>
<p>2 The members are registered in paper.</p>	<p>The names and other information of 22 farmers have been registered as the members.</p>	<p>Good</p>
<p>3 The registration fees and monthly payments are being paid.</p>	<p>No member has paid the registration fee. The manager has decided to collect US\$1 per person instead of US\$2.5. No monthly payment has been collected yet.</p>	<p>Need improvement. Amount can be changed as this intends to see the commitment of the members.</p>
<p>4 An account book is properly recorded.</p>	<p>The book has been recorded properly.</p>	<p>Good</p>
<p>5 Collected money is properly managed.</p>	<p>The amount of the collected money should be US\$ 114.5. Part of collected money (US\$ 90) has been managed by the manager. The manager should return US\$4.5 as it was used for other purposes. A non-member paid the accountant US\$ 20 which should be once collected by the manager.</p>	<p>Fair. Need more strict management of money by the officers.</p>
<p>6 The members are aware of expenditures.</p>	<p>The items and amount of the expenditures have been recorded (US\$27.5 of welding, gasolin, oil with receipts, US\$ 30 for the operators) and reported to the members.</p>	<p>Good</p>
<p>7 The members can be mobilized when necessary.</p>	<p>The participation to group activities has been improved by 16 members. There are still 6 members not participating into the activities.</p>	<p>Fair. All the members should understand the importance of participation to the group activities although it may take time.</p>
<p>8 The materials and equipment provided by the Study Team are kept well.</p>	<p>1. The materials and equipment are kept well after they were handed over to the manager.</p> <p>2. The land owner (the member) starts insisting that the meeting house belong to him. The issue is being discussed among the parties concerned.</p>	<p>Good/Fair. The problem of the meeting house is attributed to the land owner's characters.</p>

Table F.5-1 Assessment of Organizational Capacity of Haburas Manatuto

Indicators	Results (as of June 26, 2003)	Assessment
(2) Operation of Renting System of Hand Tractors	Two hand tractors have been used for 21 farmers (16 members and 5 non-members, 15.8 ha in total) and maintained in good condition.	Good
1 The hand tractors are well maintained.	1. A contract has been made individually with the members and non-members. The contract forms were however made only for 13 farmers since the form was finished (need photocopy). 2. 11 members and five non-members have already paid full due of US\$ 172. Five members did not pay with the due amount of US\$28.2. The manager has decided the five members can pay one bag of paddy each after harvest.	Good. There are farmers who have no cash to pay. The situation will be improved gradually since irrigation is resumed from this year.
2 A contract is properly made when renting the tractors.	The schedule was prepared at the beginning. Later, this was not necessary since the peak of tractor needs was over.	N/A
3 A schedule of tractor use is prepared.	For Type A of the renting system, only the designated operators operated the tractors.	Good
4 The tractors are operated only by the designated operators	The operators were paid at US\$ 5 to 10 depending on the work volume (US\$ 30 in total).	Good
5 The operators are paid salary (US\$10 a day)		

ANNEX G. WATER MANAGEMENT

ANNEX G. WATER MANAGEMENT

G.1 Current Roles and Responsibilities

The Marinos (traditional water tenders) have been traditionally responsible for controlling water at the main canal level. This role is inherited from generation to generation. The Marinos were generally paid by the farmers every season at the rate of one bag of paddy per hectare, although the rates vary depending on the yield of the season. The representatives of the secondary canals have been acting as the leaders for water management at the secondary canal level for long time. They however are not organized in a group.

Two Marinos are at present on duty at the main canal of water management for a week, and other two Marinos take turns in the following week. They control the gates at the main canal, distribute water at each turnout, clean the canal and mobilize the farmers or the excavator when necessary. Although four Marinos belong to the different villages, all of them take care of the whole canal.

The representatives of the secondary canals are responsible for cleaning and maintenance of their own secondary canal. They mobilize the farmers who belong to their secondary canal. Although the representatives are not coordinated among themselves, each of them communicates with the Marinos on the needs of water, the date of canal cleaning, etc.

G.2 Locations and Names of the Secondary Canals

The locations and names of the secondary canals are shown in Figure G.2-1.

G.3 Water Management Group

The water management group has been established by the Pilot Project. The members are four Marinos and the representatives of the secondary canals (refer to **Table G.3-1**). After the rehabilitation of the irrigation system, the members of water management group will be working also as the leaders and the implementers of water management at the field level. They will be located under the WUA in future.

G.4 Given Instructions

The JICA Study Team has provided the water management group and other important persons (Table G.4-1) with the instructions on effective water management (see the Meeting Program on January 29, 2003). The instructions included;

1. What is necessary for effective water management?
2. Relationship between the WUA and the farmers (organizational structure of the WUA proposed by UNOPS)

3. The roles and responsibilities of the WUA officers and the farmers
4. What should we do next? (This intended to improve the current problem of poor communication between the WUA and the farmers)
5. How can JICA assist the WUA and the farmers?
6. Estimated costs by UNOPS for O&M of the system

This sort of the instructions will be continued after the WUA starts functioning.

G.5 Issues for Effective Water Management

The important issues have been identified for making water management of Laclo Irrigation System effective. There must be classified in the following three groups (**see Figure G.5-1 for the details**);

1. Water distribution
2. Maintenance works of the facilities
3. Collection of water fee necessary for the O&M

To cope with those issues, the necessary actions are summarized in **Table G.5-1**. It should be noted that the continuous supports from the outside, even beyond the period of the Pilot Project, will be needed to make sure the Irrigation System is sustainably operated, and the farmers enjoy the benefits for long time.

Table G.3-1 List of the Farmers in Water Management Group

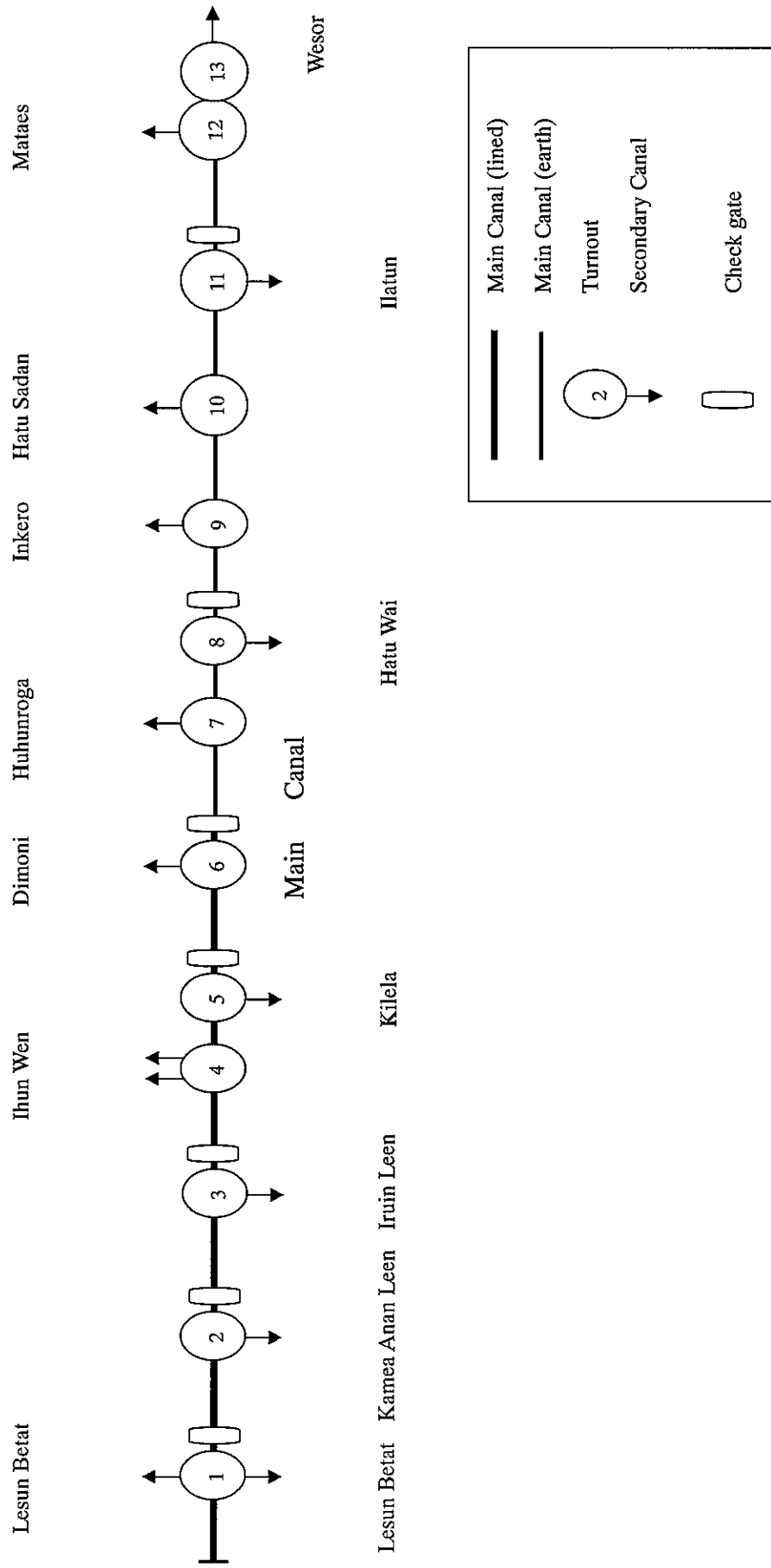
No	Name	Village	Remarks
Marino			
1	Grigori Soares	Aiteas	
2	Vinansior Soares	Ailili	
3	Joao Soares	Sau	Dimoni/Ihuen
4	Manuel da Silva Buik	Maabat	Kilela

No	Name	Secondary Canal	Remarks
Representatives of Secondary Canals			
1	Luis Leki Soares	Lesun Betat	
2	Paulino Gusmao	Kamea Anan Leen	
3	Jose Hadi	Iruin Leen	
4	Domingos Soares Antu	Ihun Wen	
5	Jose da Silva Roman	Kilela	
6	Domingos Soares Rohin	Dimoni	
7	Antonio Maubut	Huhunroga	
8	Joao Rodriguis	Hatu Wai	
9	Sebastiao de Carvalho	Inkeru	
10	Francisco Soares	Hatu Sadan	
11	Francisco da Silva Boe	Ilatun	
12	Lucas Boniparti	Mataes	
13	Domingos Pinto	Wesor	

Table G.4-1 List of the Members Participating to “Effective Water Management” Meetings

No	Name	Position	Signature
1	Caitano Jose Soares	DAO	
2	Clara	Sub-district Coordinator	
3	Joaquin Sarmento Alves	Chief of Village, Aiteas	
4	Francisco Soares	Chief of Village, Ailili	
5	Pedro Dameao	Chief of Village, Sau	
6	Joao da Silva	Chief of Village, Maabat	
7	Lorenco Soares	WUA, President	
8	Thomas	CARE staff	

Figure G.2-1 Locations and Names of the Secondary Canals

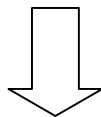
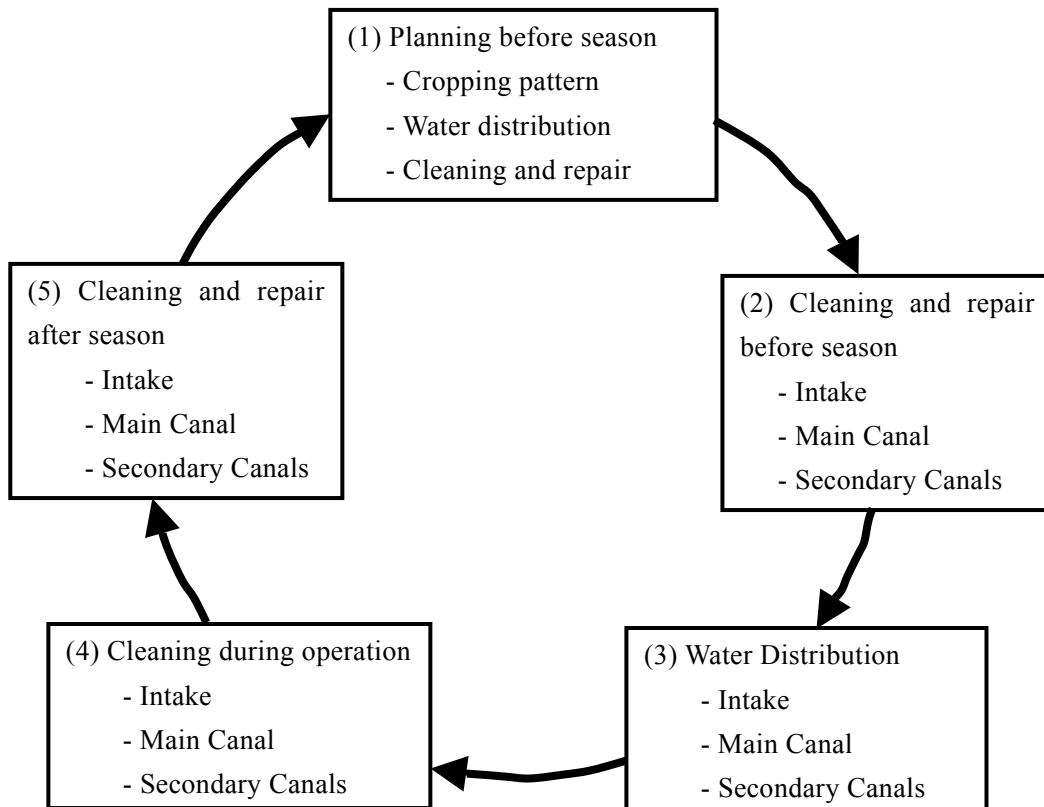


Meeting Program on January 29, 2003

Prepared by JICA Study Team

Objective: Discussion on the issues necessary for effective water management

1. What is necessary for effective water management?

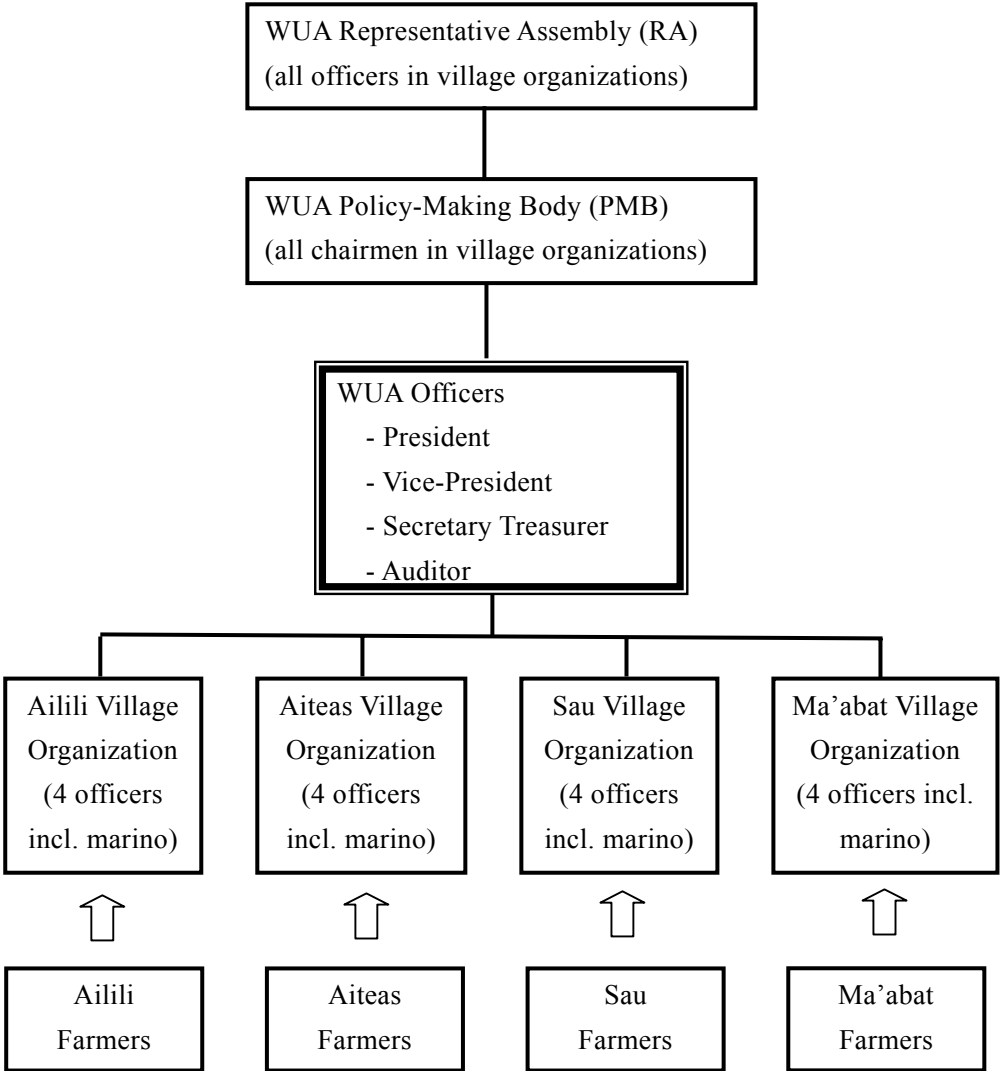


We need a farmer's group to make sure all the steps are smoothly proceeded.

||

Roles and Responsibilities of Water Users Association and farmers

2. Relationship of the WUA and the farmers



1. The WUA is the organization of farmers in four villages covered by the MIS.
2. The four village organizations have been organized to form the WUA.
3. Each of the village organization has 4 officers. These officers manage the irrigation affairs within their area for their members. They also represent the interests of the farmers in their area.

3. The roles and responsibilities of the WUA officers and the farmers

(1) Representative Assembly (RA) of the WUA: Members are all officers of village organizations.

- Highest policy and decision-making body in the WUA
- RA elects the officers of the WUA from the members of the association

(2) PMB: Members are all chairmen of village organizations.

- Set the operational and management policies of the WU
- Create four WUA working committees; Operations; Maintenance and Repair; Records, Membership, Education, Finance and Property; and Inventory and Audit

(3) WUA officers

- Prepare draft O&M plan with village organization officers
- Conduct the planning meeting with the farmers
- Supervise the O&M at the main canal and intake

(4) Village Organizations officers

- Supervise at all the turnouts with the farmers

(5) Farmers

- Attend the meeting for the O&M planning and implementation
- Prepare and conduct farming activities in accordance with the O&M plan
- Provide labor for cleaning and repair works

4. What should we do next?

(1) Reconfirmation of the given roles and responsibilities with the WUA and the farmers

- Make sure all the officers are still in place
- Make sure all the officers understand the roles and responsibilities
- Make sure all the farmers in MIS understand the roles and responsibilities

(2) Communication

- Conduct regular meetings between the WUA officers and the farmers to report the WUA's activities and discuss problems
- Set up the windows in the WUA where the farmers can contact in case of emergency

(3) Transparency

- Start record keeping

(4) Business planning

- Make a plan how the WUA can be financially self-sustainable
- Make a plan of lending an excavator
- Make a plan of water fee collection

5. How can JICA assist the WUA and the farmers?

- (1) Discuss with the WUA officers to make sure their roles and responsibilities, and the organizational structure
- (2) Facilitate the communication between the WUA and the farmers through regular meetings
- (3) Introduce a Financial Management System to the WUA and farmers groups to raise their transparency
- (4) Build awareness of the farmers on the importance of “common fund” necessary for O&M of the irrigation system (awareness campaign)
- (5) Assist the WUA to make a business plan
- (6) Assist the WUA and farmers to make an O&M plan for the MIS

6. Estimated Costs for Operation and Maintenance of the System
(Intake and main canal only, not include secondary and other canals)

	Cost / year
1. Salary for the gatekeeper	
Operate and maintain the intake facilities and structures, and head gate of the main canal	US\$ 2,127.60
2. Maintenance works for intake and conducting canals (total length = 2,650 m), main canals (5,250 m) and 21 structures = procurement of gravel, sand, cement for repair, oil and paint for control gates, sacks for sand bags, etc.	
a. Re-channeling river bed	US\$ 1,278.78
b. Removal of silt deposit and debris in the canals and structures	US\$ 12,353.12
c. Grass cutting in the canals	US\$ 251.10
3. Repair works for irrigation facilities and structures	
a. Reshaping canal embankment	US\$ 894.40
b. Repair protection of structures	US\$ 570.78
c. Emergency repair	US\$ 114.16
4. Office supplies and materials for WUA office	
Stationeries, records and forms, printings, etc.	US\$ 2,638.49
5. Contingencies	
10% of the total cost	US\$ 2,022.84
TOTAL COSTS	
	US\$ 22,251.27



Item	Total Cost (US\$)	Cost / ha (US\$)
Salary	2,304.36	3.49
Labor	16,362.12	24.79
Materials	3,594.79	5.43
Total	22,251.27	33.71

Figure G.5-1 Current Issues for Effective Water Management of Laolo Irrigation System

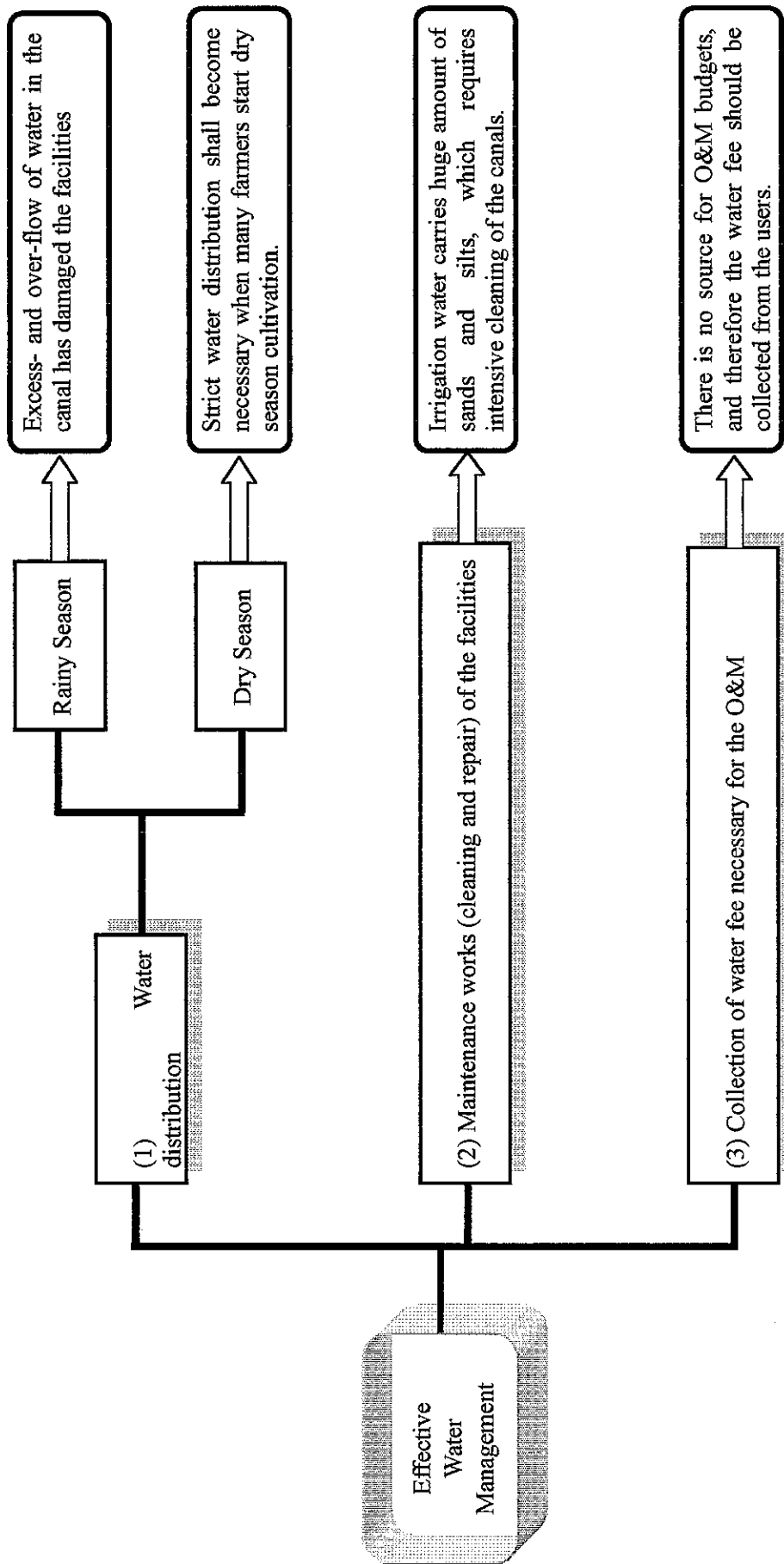


Table G.5-1 Actions to be taken for Effective Water Management of Lacro Irrigation System

Issues	Current Conditions	Actions to Be Taken
<p>I. Water distribution</p>	<p>1. Traditional Methods (1) Four Marinos (each lives in one of the four villages) are traditionally responsible for water distribution at the main canal. (2) Plot-to-plot irrigation has been the way to receive water at the field level for long time.</p> <p>2. Wet Season Sufficient water can be obtained from Lacro river.</p> <p>3. Dry Season (1) Few farmers cultivated rice in the dry season even before 1996. (2) Lacro river has 3.73 m³/sec at min. which exceeds the max. water requirement of 3.33 m³/sec.</p> <p>4. Water flow in the main canal At some places of the main canal, there are damages caused by the excess- and over-flow of water in the canal.</p>	<p>1. To define clear responsibilities of Marinos, the leaders of each secondary canal and the WUA. This can be done after the WUA start functioning.</p> <p>2. At this stage, it is less urgent and important to strengthen the traditional way of water distribution in the wet season.</p> <p>3. Strict water distribution shall become necessary in future when many farmers start dry season cultivation. This requires the farmers have an incentive to do so, which must be rice markets where they can sell the products. At this stage, it is also less important to take actions.</p> <p>4. To control water for the protection of the facilities. Need to give necessary training to the Marinos, who are responsible for the operation of the gates and cleaning of the main canal.</p>
<p>II. Maintenance works (cleaning and repair) of the facilities</p>	<p>1. Huge volume of sands and silts are flowing into the canals from Lacro river.</p> <p>2. The farmers are traditionally organized for cleaning the canals when the Marinos call them. The Marinos are responsible for the main canal while the representatives of secondary canals are responsible the secondary and other canals.</p>	<p>1. Regular cleaning of sands and silts, either by machine or manual, is important.</p> <p>2. If by manual, there is already the traditional system to mobilize the farmers. No action is needed at this stage.</p>

Issues	Current Conditions	Actions to Be Taken
<p>II. Maintenance works (cleaning and repair) of the facilities</p>	<p>3. The O&M equipment has been provided to the WUA by UNOPS.</p> <p>4. The Marinos and the representatives of secondary canals are not coordinated, and therefore the schedules as well as the qualities of their activities vary.</p>	<p>3. If by machine, some kinds of training are needed to the responsible persons. The training should include (i) machine operation, (ii) operation scheduling, and (iii) business planning. This can be done when the WUA start functioning.</p> <p>4. To give an instruction and training to the water management group (Marinos and representatives of secondary canals) to coordinate their schedules and raise the qualities. This will be one of the responsibilities of the WUA in future.</p>
<p>III. Collection of water fee necessary for the O&M</p>	<p>There is no source for O&M budgets, and therefore the water fee should be collected from the users. The system is yet to be established.</p>	<p>1. To establish the system of water fee collection.</p> <p>(1) To conduct the survey to identify who could be the community leaders in the system</p> <p>(2) To gather the opinions of the farmers on the payment of water fee.</p> <p>(3) To decide the amount of water fee and the timing of fee collection, based on the UNOPS report and the results of the above surveys.</p> <p>2. To make a continuous effort to build awareness among the farmers on the necessity of water fee payment</p> <p>3. To give an instruction on the following to the WUA and the persons responsible:</p> <p>(1) Accounting and financial management to make sure the transparency of the organization</p> <p>(2) Business planning and management to generate incomes for the WUA by renting the O&M equipment to other parties</p> <p>This can be done when the WUA start functioning. The experiences of Haburas Manatuto can be referred.</p>

Aid Memoir
Meeting for Effective Water Management (No.1)

Prepared by JICA Study Team

Date: January 29, 2003, 10:30-12:30
Place: Meeting House for JICA' s Pilot Project
Participants: DAO, Sub-district Coordinator, Chiefs of Village (Ailili, Ma'abat, Sau), representatives of secondary canals, CARE, JICA Study Team
Objective: Discussion on the issues necessary for effective water management

1. Although the invitation letter was sent by the JICA Study Team to all chiefs of village, the WUA officers, all representatives of secondary canals and 4 Marinos, not all of them participated to the meeting. The participants were as mentioned above.
2. The Study Team explained to the participants (1) what is necessary for effective water management – necessary activities and needs of organizing farmers, and (2) the new WUA structure, roles and responsibilities of the WUA and farmers.
3. The Study Team expressed its worry about the future O&M as well as the sustainability of the Irrigation System, since the farmers are not well organized and therefore the communication between the WUA and the farmers is not active. The Study Team asked the participants to discuss what should be done to secure the future O&M.
4. The chiefs of village explained how the current WUA was established. The WUA officers were selected only by the chiefs of village since it was an emergency time. Sau village chief was supposed to be the president, but he was busy in the national election for parliament members at that time. The current president was then selected by him, and three other chiefs of village became the vice-president, secretary treasurer and auditor of the WUA. The chiefs of village mentioned the current WUA is considered as temporary.
5. The Study Team asked the participants to review the current WUA as well as the new one proposed by UNOPS, and discuss what structure would be suitable for them.
6. The participants accepted the WUA structure proposed by UNOPS, but they requested the officers be newly elected by the farmers. They proposed the farmers select 4 officers in each village, and those officers (in total 16 officers) select the WUA officers, as proposed by UNOPS. The election will be conducted on March 10 with the presence of the Study Team.
7. The participants expressed their worry about the excavator provided by UNOPS. The machine is now under the management of the WUA, but it is not clear to the participants how the machine is allocated and how the future O&M is considered.

8. They also expressed another worry that the budget of US\$ 3,008, mainly for the O&M of the excavator, was given by the government to the WUA in December 2001. The money was then kept in the district's account for necessary expenditure, and after a while the rest was given to the WUA. It is not clear to the participants where the money is kept now.
9. The participants mentioned that the current WUA is therefore responsible to explain its activities to the farmers.
10. The participants requested that the rules and regulations of the WUA, including the use of the excavator, be discussed after the new WUA officers are elected.
11. On February 11, the meeting will be held to discuss about the training on the O&M planning and more details of the WUA election.

End.

Meeting for Effective Water Management, No.2

February 11, 2003

1. The agenda of the meeting are to discuss on (1) the WUA and (2) Training plans for water management by the JICA Study Team
 2. The list of the participants to the meeting is attached (note: attached only to the original).
 3. The Study Team explained what was discussed in the last meeting (refer to the aid memoir of the last meeting)
 4. In the last meeting, the participants wanted to elect the new officers of the WUA. It was discussed that the election will be conducted on March 10.
 5. The Study Team however informed that the UNOPS did not support to the idea of having election so early. The reasons are (1) the UNOPS has provided the current WUA officers with trainings, which should not be in vain and (2) the UNOPS has made agreements, still effective, with the current WUA concerning the O&M of the Laclo Irrigation System.
 6. It was therefore suggested by the Study Team that the current WUA officers together with the farmers solve all the problems before the election, otherwise the same problems may repeat in future. Even though it was established during the emergency time, we need to work with the one already established. The matter of election should then be discussed with the responsible government officers and the UNOPS.
 7. It was finally agreed by the WUA president and other participants that the meeting be held on April 3, 2003 together with the government officers in charge in Dili and Manatuto, the representative of UNOPS and the farmers. In the meeting, the president of the WUA will make a report on what responsibilities he had and fulfilled. All the problems will also be discussed in the meeting. The District Irrigation Officer will be responsible for the arrangement of this meeting.
 8. The chief of the village in Sau said that the Marinos are now making the plan of water distribution for this year. It is good if the Study Team provides training to improve the traditional ways of water management. The chief also mentioned that the water users need to pay fee for the maintenance of the Intake and main canal. The farmers used to pay in kind to the Marinos, and now need to pay in cash according to the instructions by UNOPS.
 9. The Study Team requested the participants to have another meeting to discuss on the training for effective water management. It must be separated from the WUA's issue which is already too big to discuss with other issues.
 10. It was agreed to have the meeting on water management on February 18. The invitation letter will be prepared and distributed by the Study Team.
- End.

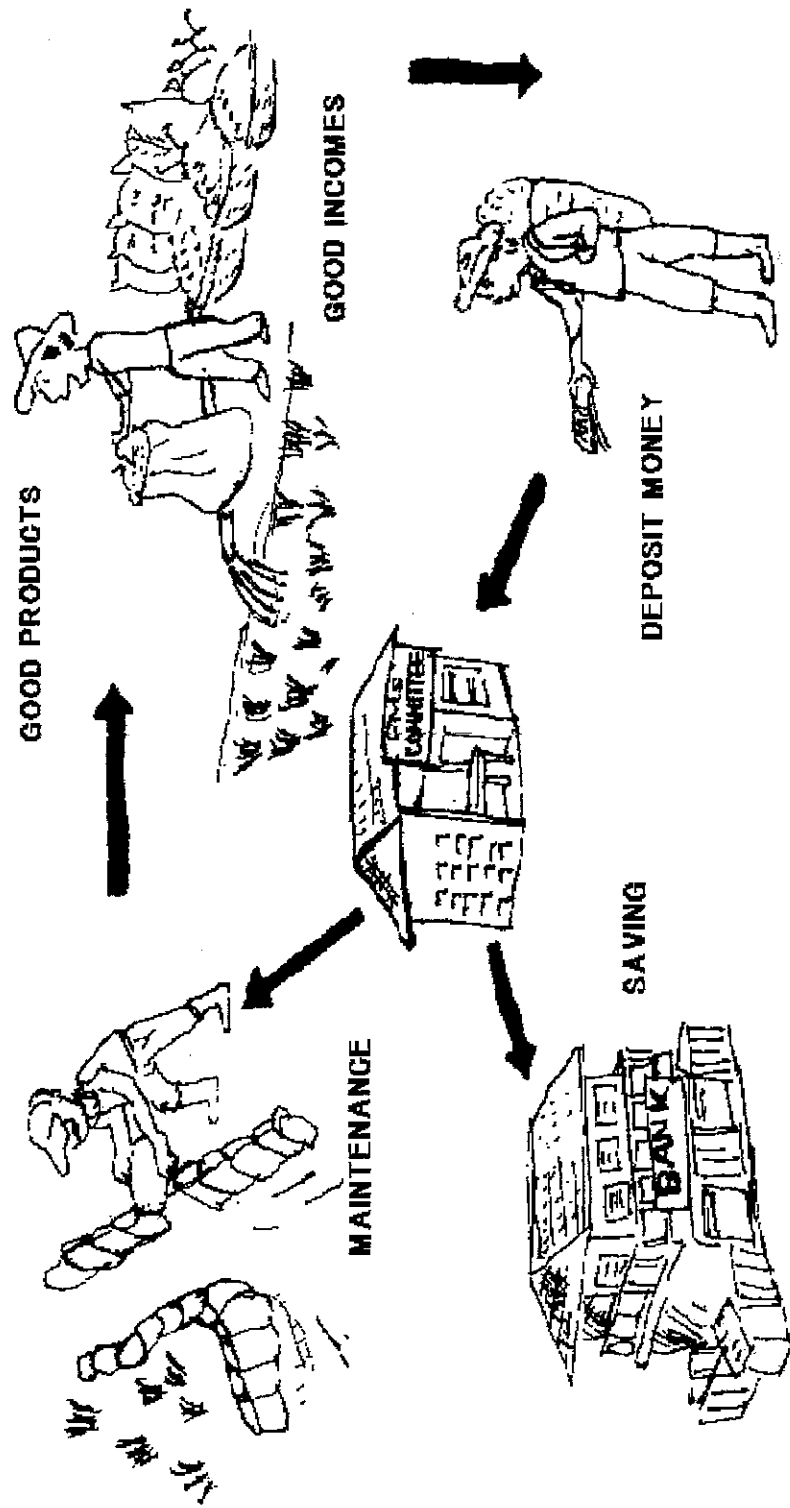
Meeting for Effective Water Management, No.3

February 18, 2003

1. The agenda of the meeting is to discuss on the traditional ways of water management. The JICA Study Team will make use of the traditions as much as possible in its project activities.
2. The participants were sub-district coordinator, one traditional leader, the chief of Maabat village, two Marinos, several representatives of various secondary canals, and other farmers.
3. Each village has a traditional leader (ketua adat). The traditional leaders have made important decisions in irrigation farming, such as the amount of water fee which the farmers should pay to the marino in rice. The chiefs of the village are not the final decision makers but like the witnesses.
4. The participants mentioned that the WUA structure proposed by UNOPS is acceptable, and the traditional leaders should be included in the organization as auditors. Some officer in WUA should function as a treasurer.
5. Regarding water fee, the Marinos should collect it from the farmers once a year. Traditional leaders together with the Marinos may decide how much it should be.
6. A farmer mentioned that the new water fee would be US\$6/ha according to his rough estimate. The Study Team explained the UNOPS' report suggests US\$34/ha if farmers do not contribute their labor, or US\$9/ha if they provide labor. The farmer mentioned this amount would be difficult to collect from the first time. The Study Team mentioned what is important is to introduce the system, at the earliest time, of collecting and managing water fee even small amount of money. It should be understood that it is only the farmers that maintain the irrigation facilities after UNOPS and JICA leave the project.
7. The farmers mentioned that the collection of water fee will be started with the new WUA when the officers are elected in this April.
8. The Marinos are responsible for O&M of the intake and main canal. All four Marinos together take care the whole part of main canal. Their responsibilities include the cleaning of intake and main canal, and the manual repair of the facilities.
9. It is traditionally agreed that the farmers in Lesun Betat, the first secondary canal, do not pay water fee.

End.

Let's work together and get benefits !!



Prepared by JICA STUDY TEAM

(1) Water problem in a village

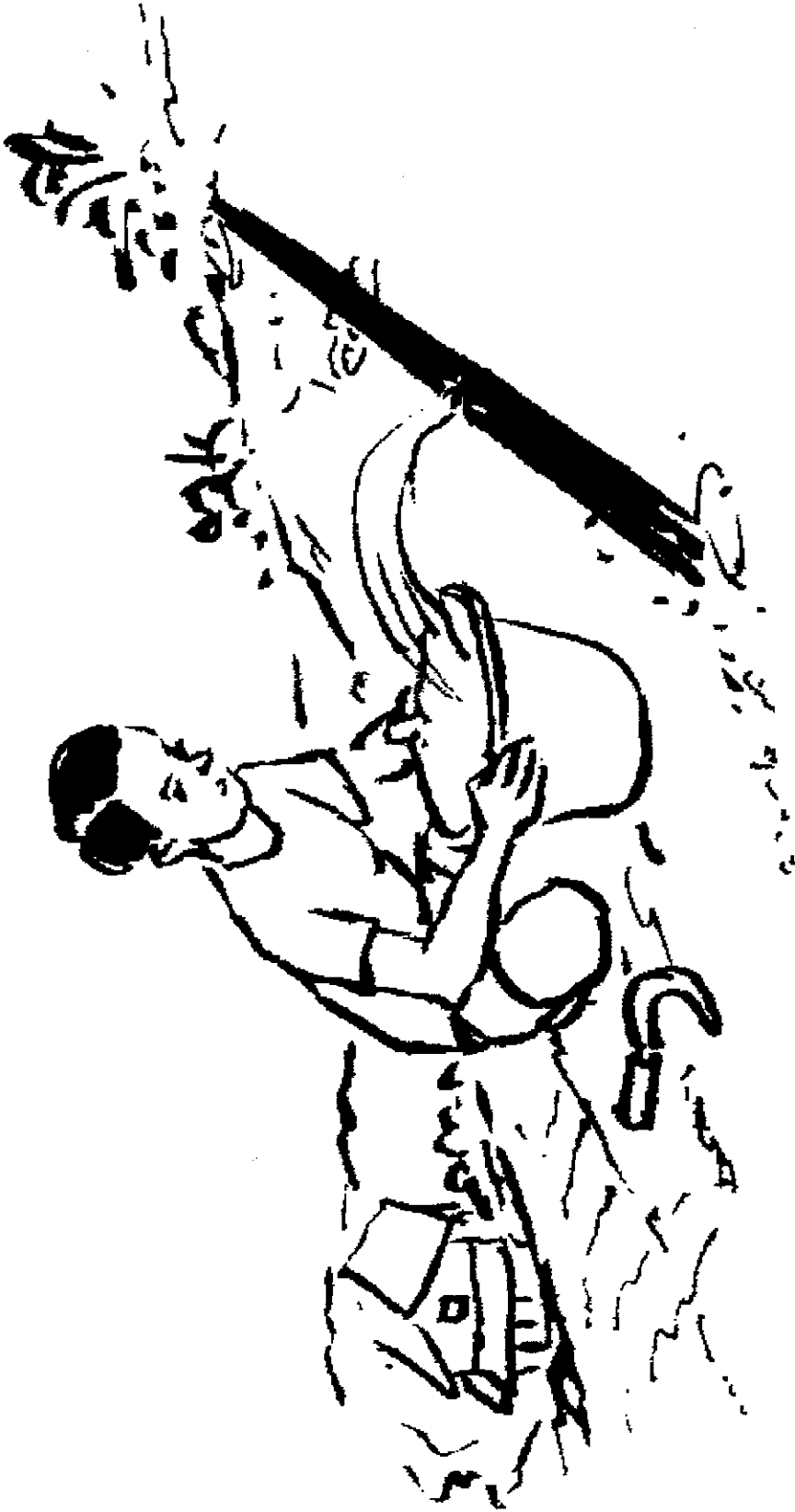
Oh! What should I do?
All my paddy died because
water does not come.

I always have a problem with my neighbours about
water. How can we cooperate each other to
make all of us happy?



Source: Asian Culture Center for Unesco, 1986, *Guide for Utilization*

(2) Water for me, or for all of us?



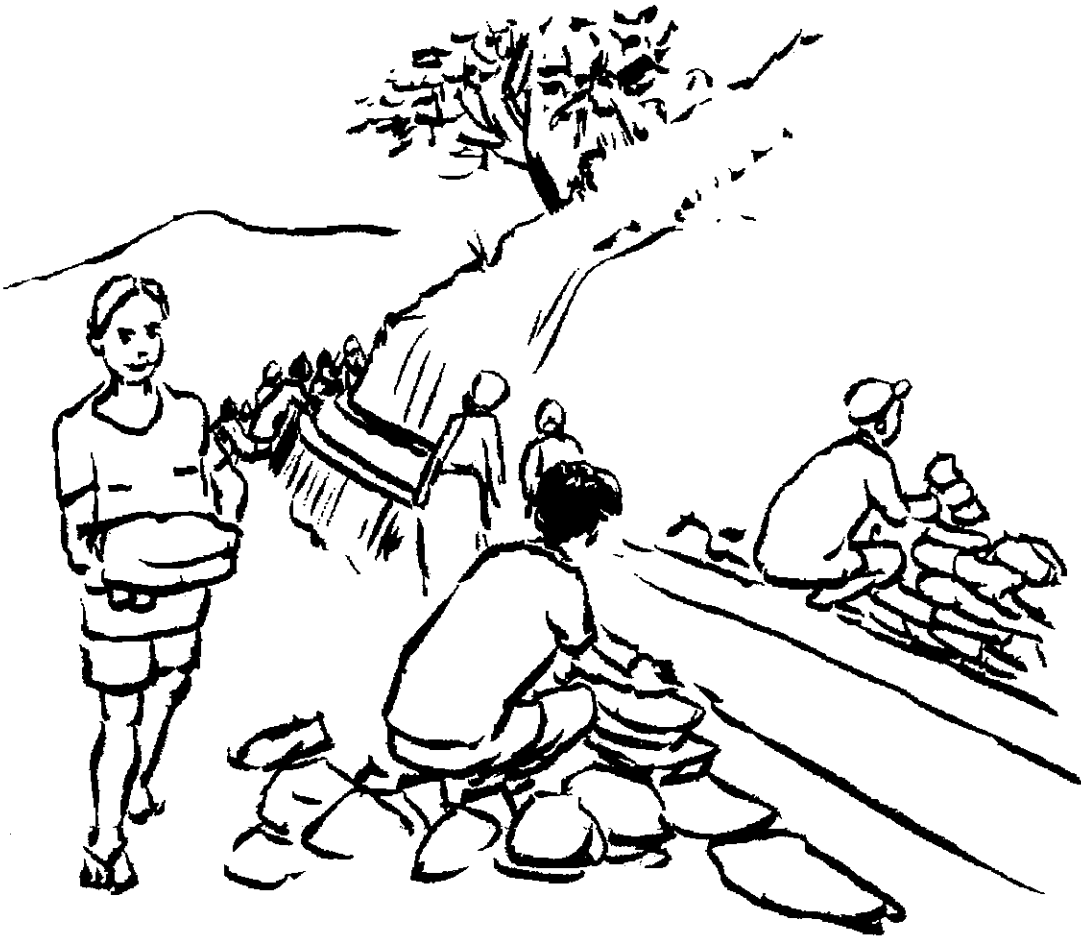
(3) Discussion with other farmers



Source: Asian Cultural Centre for UNESCO, 1986, *Guide for Utilization*.

(4) Work together by participation

All of us know what we should do now.



(5) Harvest time

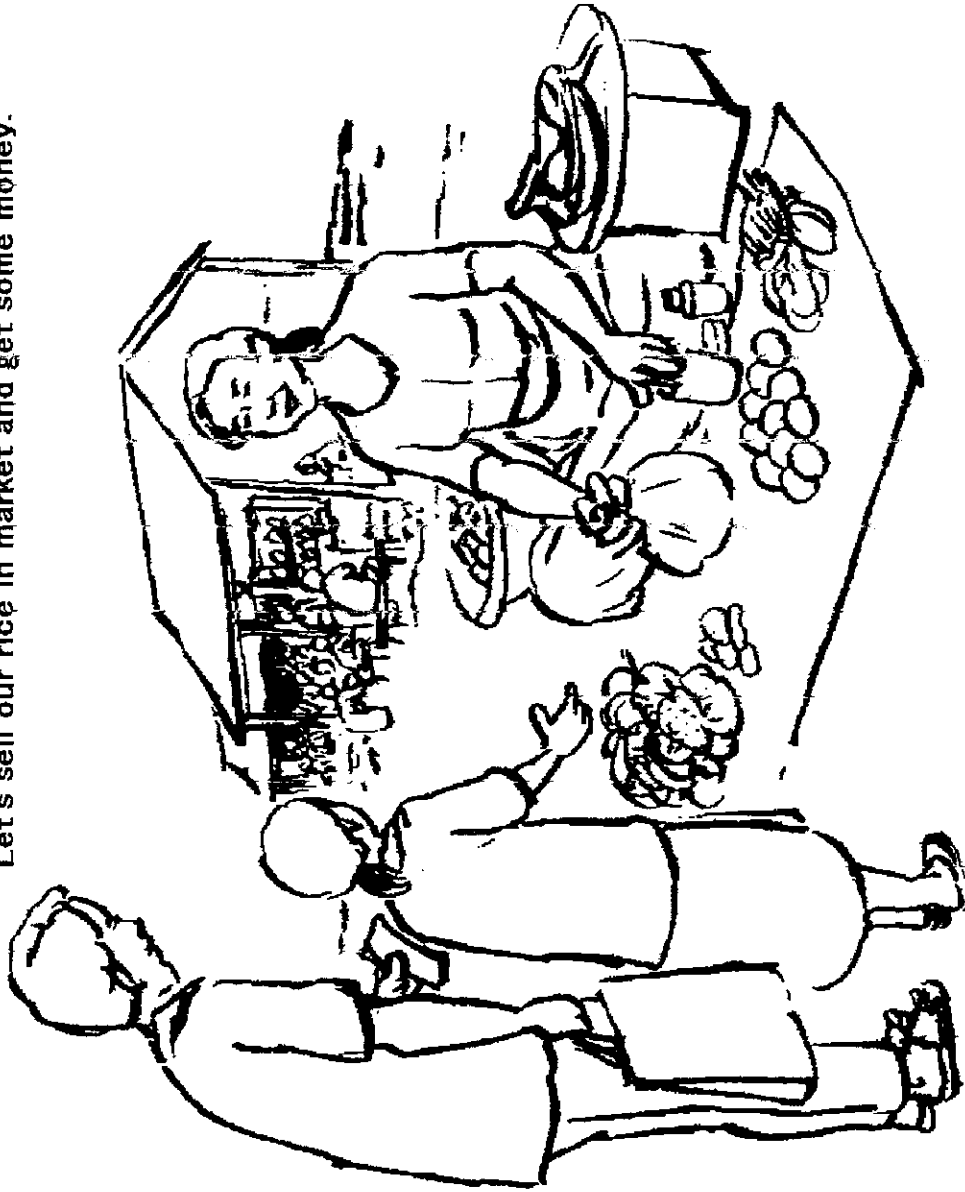
Look!
I am happy, and my neighbors are also happy
with the harvest.



Source: Asian Cultural Centre for Unesco, 1986, *Guide for Utilization*.

(6) Sell our rice in market and get some money.

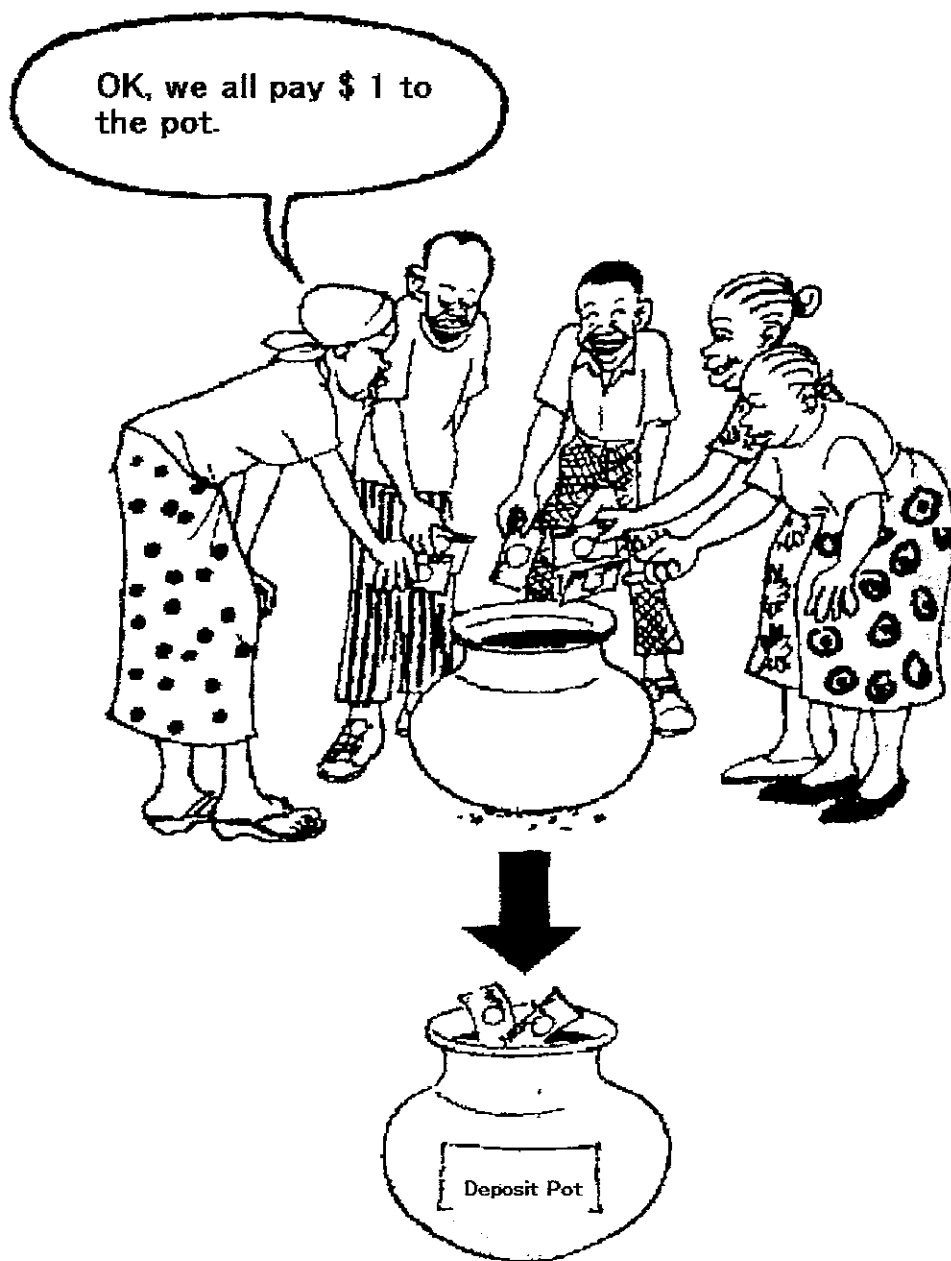
Let's sell our rice in market and get some money.



(7) Deposit some money for future

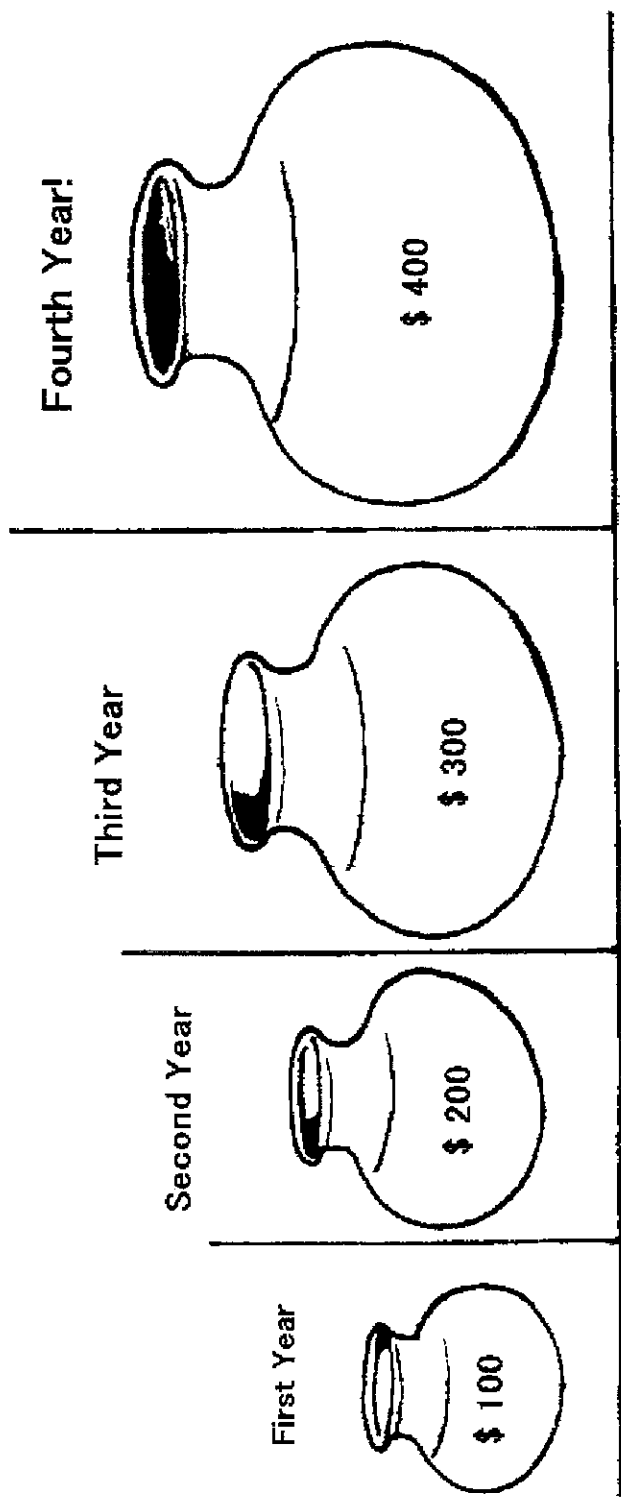
All of us now pay some money for our future.

This money will be used when we need.



Source: Karri Ka Batimbo/ILO-SSMECA PROJEC 1996.

(8) It's getting bigger.



(9) It's like you and your child.



You take care of you child.

Then, one day in future, you child will take care of you.



© 2001 *L. & B. Batambo* / ILO-SSMÉČA PROJECT 1995

(10) Collect water fee

We all deposit water fee for future.

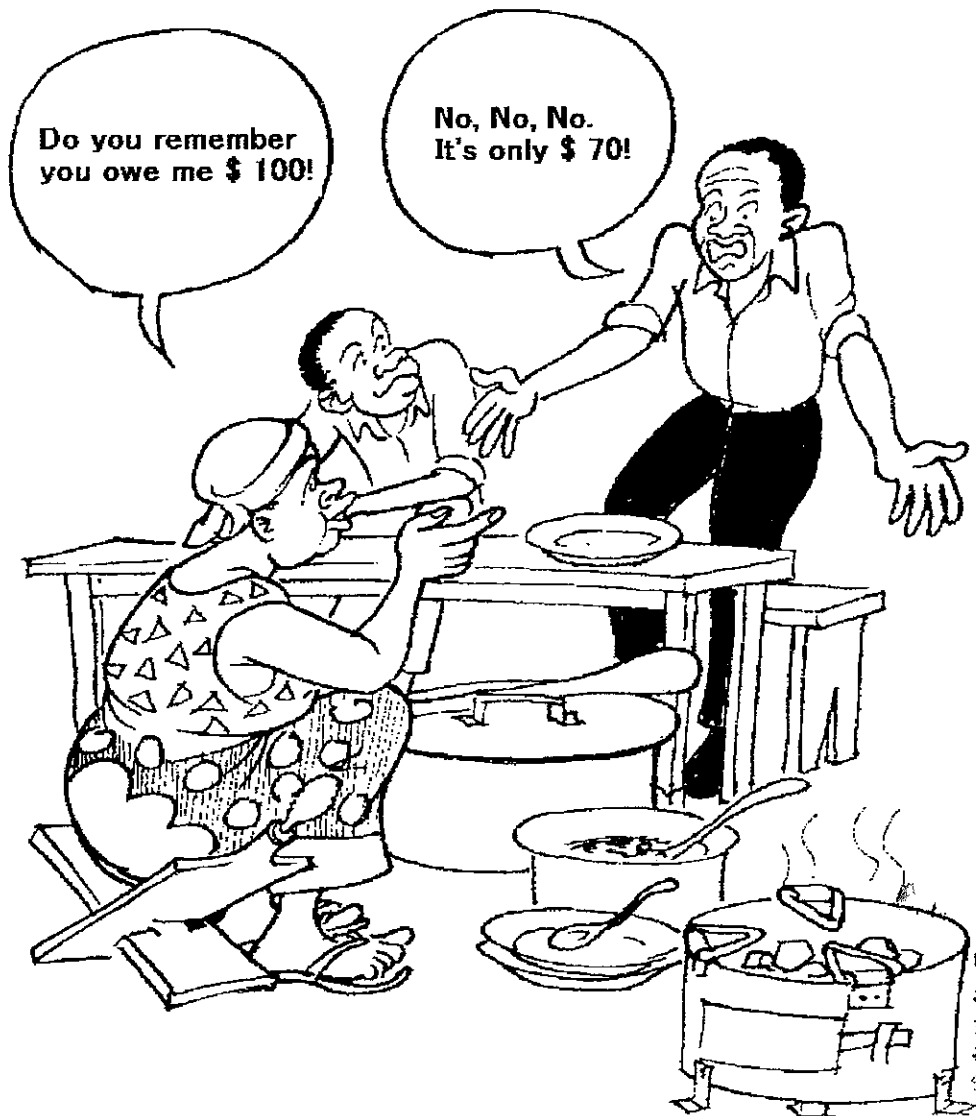
In the meeting, the accountant collects money from us,
and write receipts to us.



(11) Do you remember?

After collecting money, a problem has happend.

Because we do not remember how much we paid,
and how much you received.



© Kati & Bernabeu / Illustration / 1976

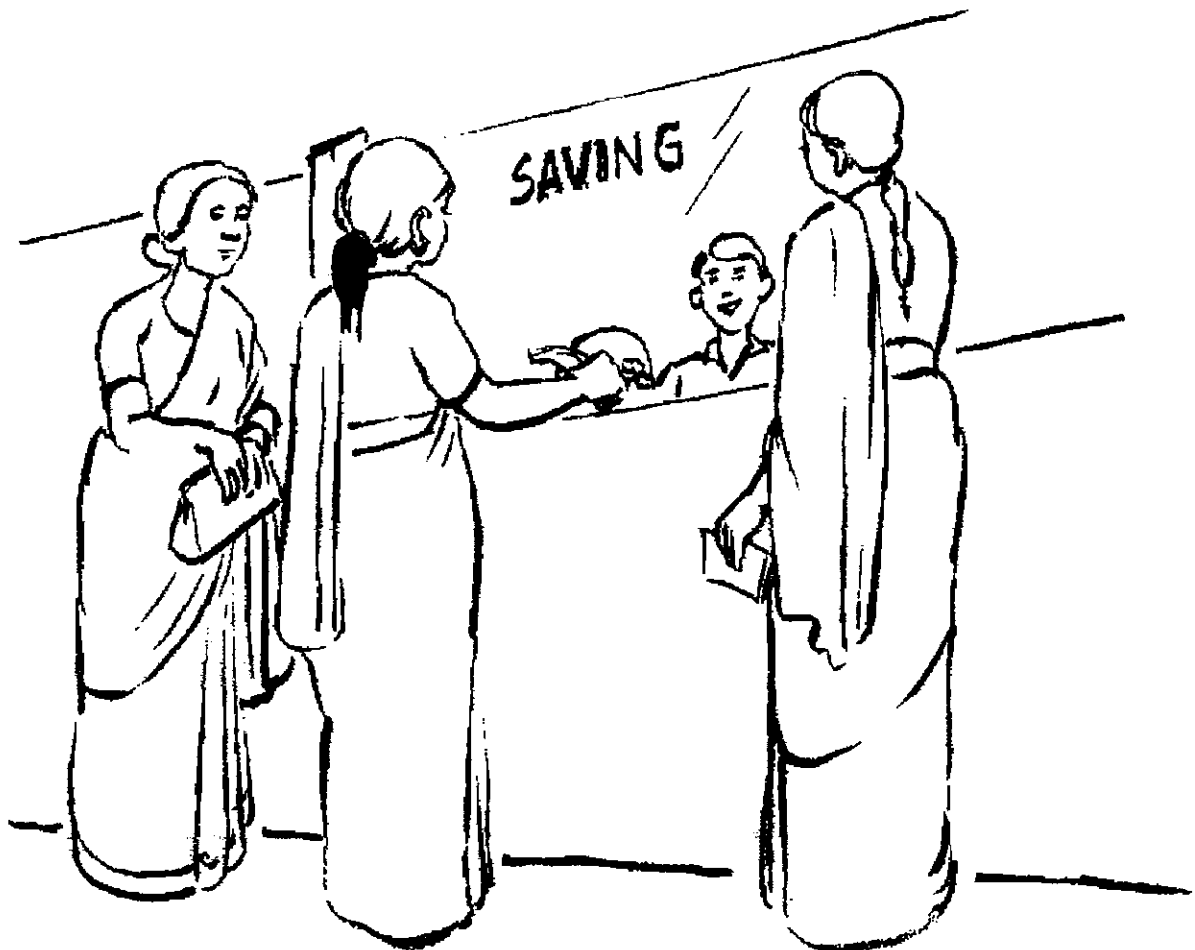
(12) Keep the record

The accountant keeps all the records of how much paid and how much received.



(13) Keep the money

The water fee is kept in a safe place like bank.

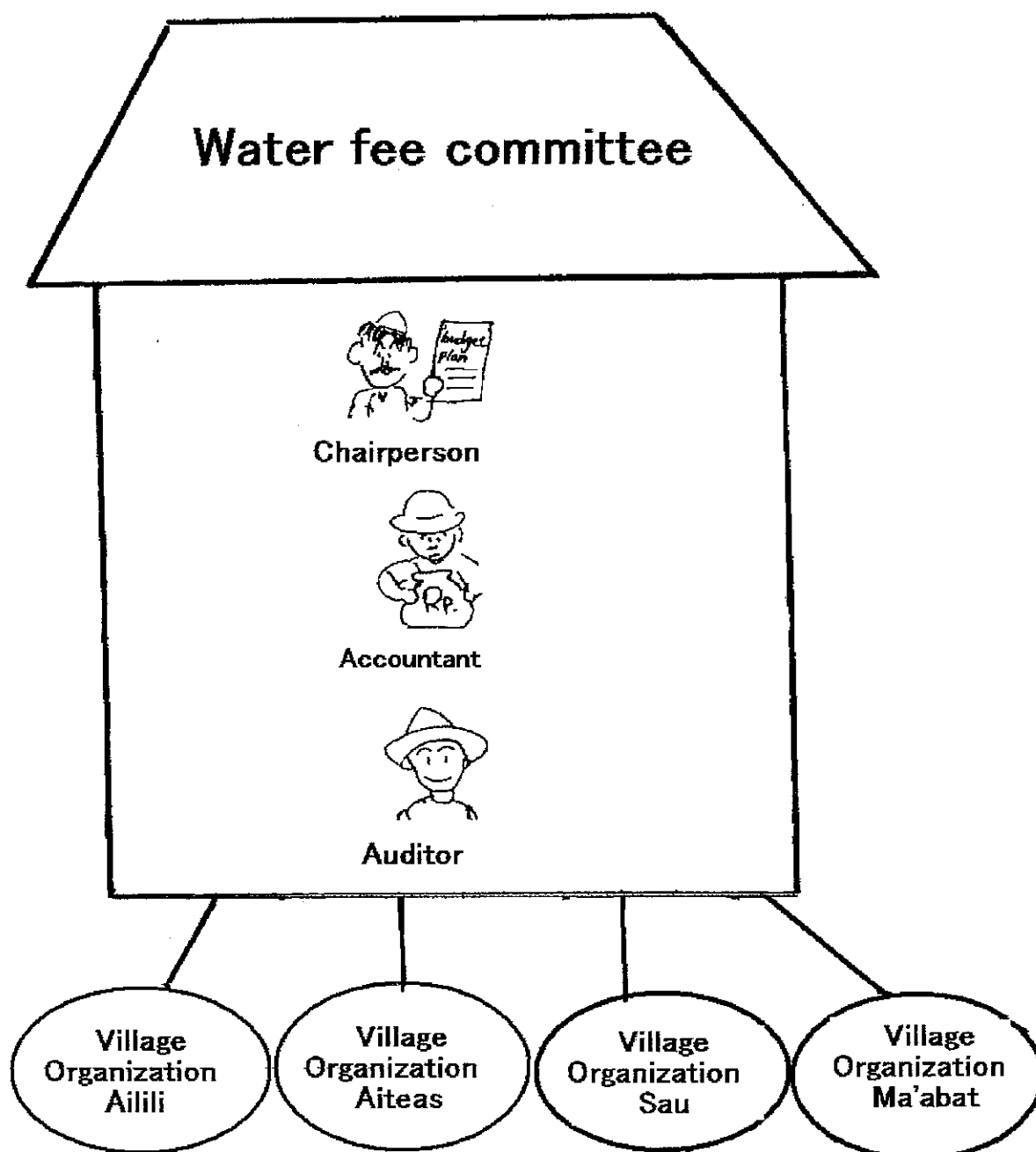


(14) Water fee committee

We organize a water fee committee.

This committee is responsible for managing water fee.

We all trust the committee members.



Source: Asian Cultural Centre for Unesco, 1986, *Guide for Utilization*.