



# Guidelines on a Group-Based Approach to Supporting Rice Farmers

Lessons from the Agricultural Productivity Promotion Project in West Tonle Sap (APPP)

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“Guidelines on a Group-Based Approach to Supporting Rice Farmers: Lessons from the Agricultural Promotion Project in West Tonle Sap (APPP)”, Hideki Sonoyama, APPP

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3. Bylaws of Rice Farmer Group (Sample)
4. Group Members List
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# Introduction

## 1) Purpose of the Guideline

This guideline presents an agricultural development approach to supporting farmer groups' activities for increasing productivity and profitability in rice farming.

In Battambang, Pursat and Kampong Chhnang provinces, the “agricultural productivity promotion project in west Tonle Sap (APPP)” has been conducting a pilot project to organize and support fifteen rice farmer groups.

With the assistance from the project, many farmers in the groups have so far learned and practiced improved rice cultivation techniques, gained access to funding for buying necessary agricultural inputs and jointly promoted their products for sales in market, thereby having increased their rice yields and income.

The approach described in the guideline is based on experiences gained and lessons learned from the project. It aims at helping readers understand the feature, effectiveness and limitations of the approach and decide if it should be adopted in their own project for supporting rice farmers to bring about greater effect.

## 2) Target Audience

Target audience of this guideline are planners, implementers and field workers engaged in agricultural development projects helping rice farmers in Cambodia, which can include officers and extension staff in the Ministry of Agriculture, Forest and Fisheries (MAFF), Provincial Department of Agriculture (PDA), District Agricultural Office (DAO), local and international NGOs and development consultant firms.



# Overview of the Group-based Approach

## 1.1. APPP's Support for Rice Farmer Groups

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Generally, many farmers in Cambodia are faced by the following problems in rice production and sale.

**Low yields:** Many farmers suffer from low yields of rice production. In addition to harvest loss caused by frequent natural disasters such as floods and droughts, lack of technical knowledge, use of low quality seeds, improper application of fertilizers, damage by crop diseases and insects are among the major causes for this problem.

**Poor quality of rice grains:** Farmers tend to sell so poor quality of rice that very cheap prices are offered from buyers such as rice millers and middlemen. Especially, rice grains contaminated by foreign varieties or impurities, damaged and colored grains, and inadequate rate of moisture contents are often observed. Poor farm management and use of low quality seeds are among the major causes for these problems.

**Low profitability:** Many rice farmers suffer from low profitability for various reasons. It might be because they cannot have enough rice harvest to sell, or because they gain cheap sales prices due not only to the poor quality of the products but also to their weak bargaining power (i.e. farmers are not strong enough to negotiate with buyers for obtaining better prices). Lack of cost-effective cultivation techniques also leads to higher cost of their rice production.

***Agricultural Productivity Promotion Project in West Tonle Sap (APPP)*** is a technical cooperation project implemented by the Ministry of Agriculture, Forestry and Fisheries (MAFF) and Japan International Cooperation Agency (JICA) from 2010 to 2015 to help rice farmers in Battambang, Pursat and Kampong Chhnang provinces address these problems.

As one of its three main activities, APPP has been carrying out a pilot project to help about 260 rice farmers organize themselves into fifteen groups and practice activities to improve the productivity and profitability of their rice farming.

## Outline of APPP

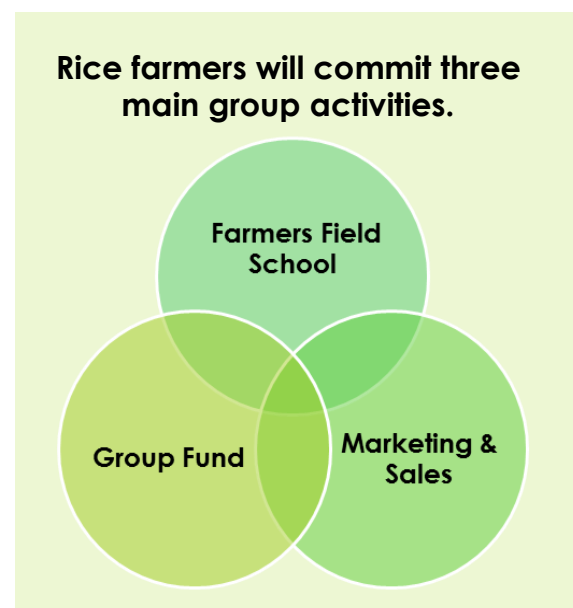
<b>Project Period</b>	October 2010 – March 2015 (4.5 years)
<b>Target Area</b>	Battambang Province (30 communes) Pursat Province (5 communes) Kampong Chhnang Province (2 communes)
<b>Implementation Agency</b>	Ministry of Agriculture, Forestry and Fisheries (MAFF) Provincial Department of Agriculture (PDA)
<b>Cooperation Agency</b>	Japan International Cooperation Agency (JICA)
<b>Project Purpose</b>	To improve productivity and income of rice farmers in the target area.
<b>Major Activities</b>	<ol style="list-style-type: none"> <li>1) Agricultural Extension: Train extension staff and farmers for the extension of improved rice cultivation techniques.</li> <li>2) Seed Production &amp; Sales: Organize and support seed growers groups (SGGs) to produce and sell quality rice seeds.</li> <li>3) Rice Production &amp; Sales: Organize and support rice farmer groups to produce and sell quality rice paddy (: <b>pilot project</b>).</li> </ol>



## 1.2. Feature of the Group-based Approach

In the approach undertaken by APPP to supporting rice farmer groups (hereinafter called “**group-based approach**”), farmers who organize themselves into groups aim at increasing rice productivity by practicing improved cultivation techniques and using adequate quantity and quality of agricultural inputs.

The application of the techniques and inputs will lead to improvement in their rice paddy quality, too. By carrying out collective actions to promote such high value products to more buyers, they intend to increase sales and income of rice farming.



Following this strategy, farmers are encouraged to commit themselves to three main group-based activities, which are: “rice cultivation through Farmers Field School”, “management of group funds to purchase agricultural inputs”, and “collective actions for marketing and sales”.

## 1.3. Basic Steps for the Approach

There are multiple steps to be taken in the group-based approach. The outlines are shown below.



### ■ Step 1: Preparatory Activities

Before your project gets started, some preparatory activities are needed (see **Chapter 2**). It should begin with setting up a project management unit, planning of project schedule and



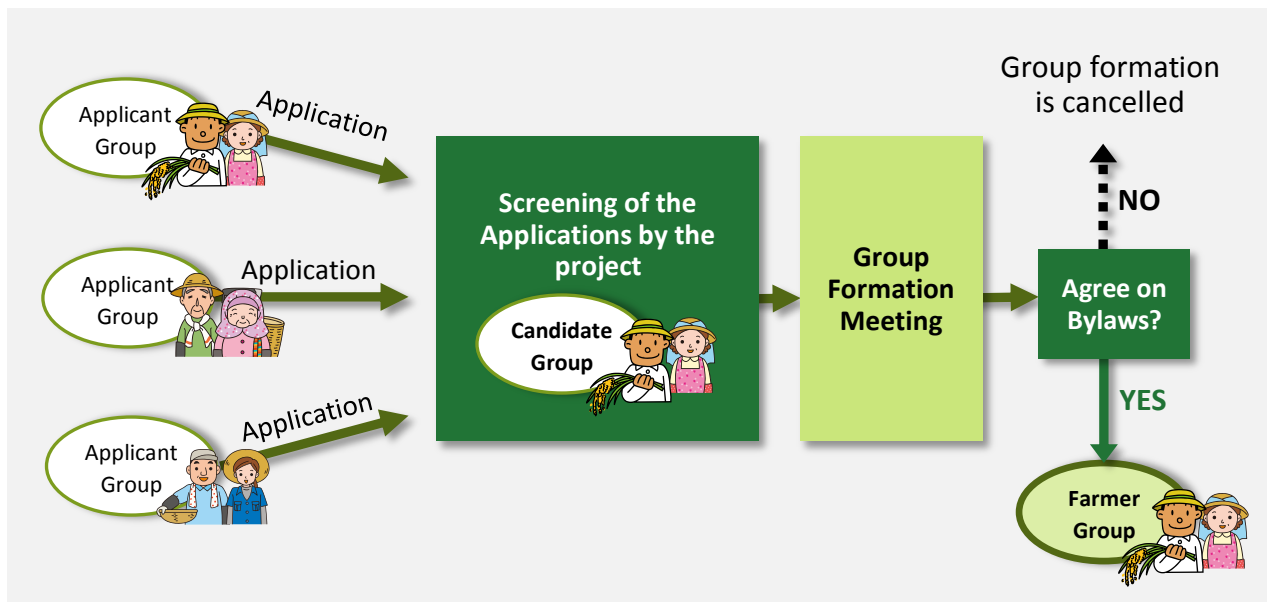
training of the extension staff who serve farmers at the fields. In the project's target area, you will need to select target villages according to specific criteria.

## ■ Step 2: Applications from Farmers

Your project activity starts with the process of group formation in the target villages. In the process you will need to introduce an application-based system to make sure that any farmers in the villages have equal opportunities to apply for the project (see **Chapter 3**).

Rice farmers interested in working with your assistance will organize applicant groups and submit applications to the project. Among all of the applications from them, you will select candidate groups who can move on to the next stage of the group formation process.

## ■ Step 3: Group Formation



With each of the selected candidate groups, you will have a meeting for group formation (see **Chapter 4**). In the meeting, participants from the candidate groups are required to fully understand the objectives, conditions and rules of the group activities set by the project, and consider and discuss additional rules on their own.

After the meeting, farmers who have agreed on the group's bylaws are entitled to join the group and start its activities with support from the project.

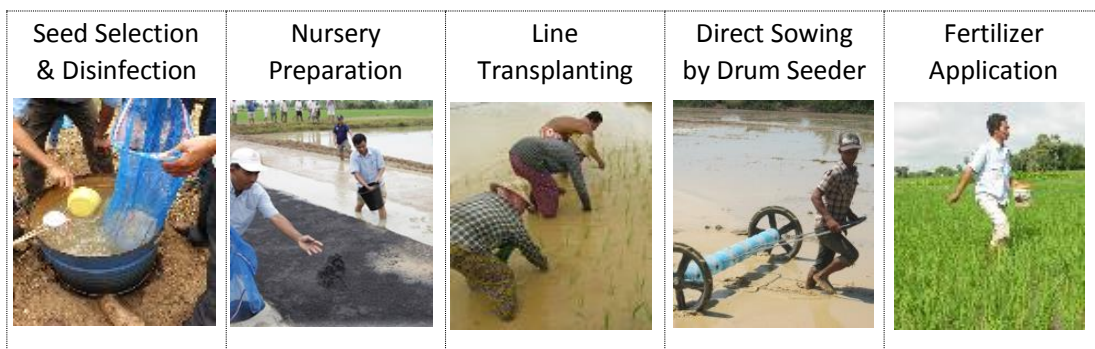
## ■ Step 4: Support for Group-based Activities

During the project period, you will help farmer groups carry out the following three main activities.

# 1) Rice Cultivation through Farmers Field School

First, you will implement a hands-on training program called **Farmers Field School (FFS)** for each farmer group (see **Chapter 5**). FFS provides group members opportunities to learn, both in theory and practice, rice cultivation techniques essential to improve yields, quality, and efficiency of rice farming.

## Various rice cultivation techniques are demonstrated in FFS



In principle, learning in FFS is not voluntary but mandatory for group members. Once having joined a group, every member is required to attend every session of the training program. They must practice all the techniques recommended by the project in their own rice fields, too.

## 2) Management of Group Funds

Secondly, you will help each farmer group purchase necessary agricultural inputs by establishing and managing a group fund on their own (see **Chapter 6**).

The initial capital for group funds will be sourced from your project, though group members are also required to pay a little amount of membership fees to funds.

You first provide group members with seeds and chemical fertilizers in kind, which are used by them for rice cultivation in the first cropping season. After harvesting and selling rice at the end of the season, members will save money equivalent to the cost of the provided inputs in their fund, adding some amount of interest to it.

From the next cultivation season, members continue to buy necessary inputs by making use of the money in their fund.

### 3) Marketing and Sales

Thirdly, you will support groups' activities for marketing and sales.

Although many farmers in Cambodia complain about cheap rice paddy prices offered from buyers such as rice millers and middlemen, there are few farmers proactively taking actions to make a breakthrough in the situation.

As a marketing strategy to attract more buyers, therefore, you will encourage farmers to grow rice variety highly demanded in market, keep the quality of their products at high level and thereby differentiate their products from others. Only those farmers who can be committed to this challenge are allowed to join the group.



With encouragement and advice from the project, farmers will plan and practice more activities for marketing and sales (see **Chapter 7**). The activities do not necessarily but can include: visiting potential buyers to understand their demands, collecting and sharing market information, collective advertising, sales and shipping of products.

## 1.4. Why Group-based Approach?

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Farmers may need external assistance to improve productivity and profitability of rice farming. But why does the pilot project of APPP facilitate group formation and support group-based activities, rather than individuals? That is because the group-based approach can have the following advantages.

### 1) Efficient Learning of Cultivation Techniques

If a farmer works alone in rice cultivation training programs, what he/she can observe and learn will be limited to what occurs in his/her own rice fields by adopting new cultivation techniques.

By learning together as a group in Farmers Field School, on the other hand, one can see what the other members are experiencing by applying the same techniques in their fields, share ideas and findings each other and discuss better ways to improve their practice. In this way, the effectiveness of their learning process can be increased.

## 2) Improved Access to Funding

Many farmers often cite a lack of financial capital as major reason for not purchasing agricultural inputs needed for boosting rice yields. Even where informal or formal financial services are available, farmers often face high interest rates or unfavorable borrowing conditions. Some farmers may receive agricultural inputs from rice millers on conditions that their produce is sold to the millers, yet often not at a satisfactory price.

By introducing the group fund system, farmers can more easily access to funding for buying quality seeds and fertilizers. Peer pressure in a group makes each member feel responsible for keep depositing the money back to funds.

During the project period, all members in a group are allowed to get an equal amount of funding for investing in a certain size of rice fields (e.g. 0.5ha per member). At the end of the project, however, each group can introduce more flexible management rules on their own to make it much more convenient.

## 3) Achieving Stronger Bargaining Powers

From the viewpoint of sales promotion, even if a farmer succeeded in producing high-quality rice paddy in small quantities at individual level, it would be still difficult for such a smallholder to attract and negotiate buyers and gain favorable prices.

By producing high quality rice paddy in larger quantities and carrying out sales promotion activities as a group, they are more likely to attract interest from buyers and enhance bargaining power.



# Preparatory Activities

Before your project activities get started, some preparatory activities are needed. This chapter explains what should be done at the preparatory stage.

**2.1. Setting-up a Project Management Unit**

**2.2. Planning Project Schedule**

**2.3. Training of Extension Staff**

**2.4. Target Village Selection**

**2.5. Consultation with Local Leaders**

## 2.1. Setting-up a Project Management Unit

Preparation for your field activities begins with designing and setting up a project management unit (PMU).

While the form of PMU can vary from project to project, the indispensable actors are the extension staff. They are expected to play multiple roles in the unit, serving as trainers, facilitators and monitors of farmer groups' activities by frequently visiting and communicating with group members.

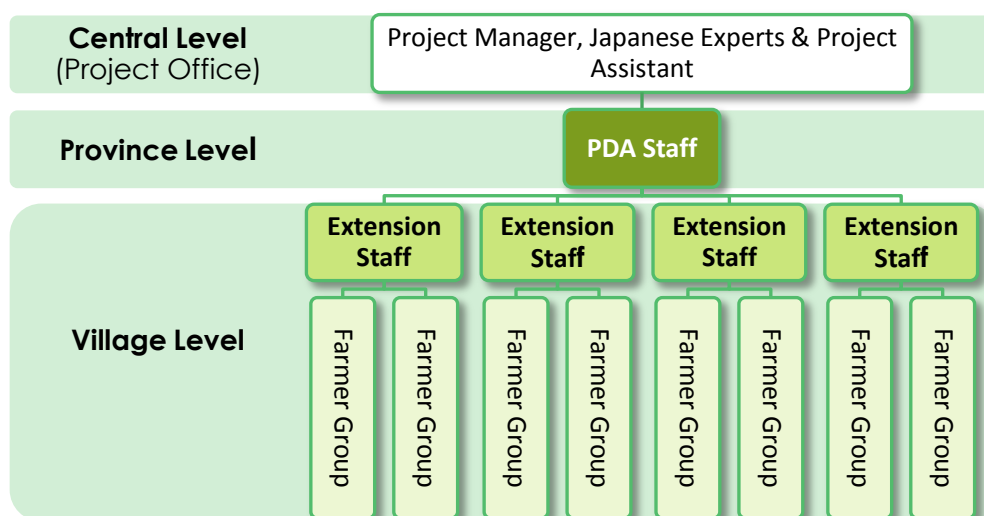
In the case of APPP, the government's extension



staff working for district agriculture office (DAO) were assigned the critical tasks.

Given its capacity and workload, an extension staff should be assigned to work for one or two farmer groups only. Each staff is likely to need a means of transportation for their daily field work. In APPP, the project supplied a motorbike to each of them.

**In APPP, extension staff played a role of trainers, facilitators and monitors of farmer groups under the supervision of PDA staff & the Project Office.**



## 2.2. Planning Project Schedule

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Your project schedule needs to be planned taking into account farmers' cropping pattern in two main rice cultivation seasons: wet and dry.

For example, while support for groups' rice cultivation through FFS is possible during cropping season only, activities for group formation should be practiced off-season when farmers have enough time to join them.

In the pilot project of APPP, its support for production and sales focused only on wet-season rice, which depends mainly on rainfall from May to November. For the majority of the farmer groups, project assistance is provided for the period of two years. For your reference, a model schedule is shown below.

## Example of Project Implementation Schedule

Main Activities	1st year					2nd year												3rd year											
	(wet)					(dry)				(wet)				(dry)				(wet)											
	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Preparatory Activities																													
Setting-up a PMU	■																												
Planning Project Schedule	■																												
Training of Extension Staff	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Target Village Selection					■																								
Consultation with Local Leaders					■																								
Applications from Farmers						■																							
Group Formation						■	■																						
Support for Group-based Activities																													
For Rice Cultivation (FFS)										■	■	■	■	■	■	■					■	■	■	■	■	■	■	■	
For Group Fund Management										■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
For Marketing & Sales										■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	

## 2.3. Training of Extension Staff

Before starting full-fledged field activities, you will need to train your extension staff to ensure that they are ready to work efficiently as trainers, facilitators and monitors of farmer groups' activities.

### Roles of the Extension Staff and Required Training

Roles expected to the extension staff	Trainers	Facilitators	Monitors
<b>Major Activities</b>	<ul style="list-style-type: none"> <li>Farmers Field School (FFS)</li> <li>Group fund management</li> </ul>	<ul style="list-style-type: none"> <li>Group formation</li> <li>Collective actions for marketing &amp; sales</li> </ul>	<ul style="list-style-type: none"> <li>Monitor of rice cultivation and farmers' group management</li> </ul>
<b>Major Subjects for Training</b>	<ul style="list-style-type: none"> <li>Management of Farmers Field School</li> <li>Rice cultivation techniques</li> <li>Bookkeeping Skills for group fund management</li> </ul>	<ul style="list-style-type: none"> <li>Facilitation skills &amp; group dynamics</li> </ul>	<ul style="list-style-type: none"> <li>Methods of field monitoring, data recording and reporting</li> </ul>

In APPP, the project has been providing a training program and on the job training (OJT) covering a variety of subjects for the extension staff at the outset of and during the project period.

In case that your project does not have its own extension staff to operate field activities, contracting a partner organization with competent field workers will be an important factor for successful project implementation.

## 2.4. Target Village Selection

After setting up PMU, you will need to select target villages in your project area. The table below shows the key criteria for selection.

**Key Criteria for Target Village Selection**

	Criteria	Remarks
1)	<b>Moderate amount of rainfall</b>	To avoid the risk of harvest failure by natural disaster, target villages should have moderate rain. Villages in drought- and flood-prone areas should be avoided.
2)	<b>Access to water resources</b>	To avoid the risk of harvest failure by drought, target villages should have access to water resources such as river, pond or irrigation scheme for supplementary irrigation.
3)	<b>Access to market</b>	Target villages should have market in neighborhoods for two reasons: 1) In order to minimize farmers' dependency on the limited number of local buyers, other potential customers need to be sought in market; 2) Without access to market, members cannot buy inputs such as fertilizers and agricultural chemicals recommended by the project for boosting rice yields.
4)	<b>Access to main road</b>	Target villages should be at a short distance from the main road to ensure efficient project operation. If they are in remote areas where access roads are muddy in wet season, the project cannot visit the villages as often as planned.
5)	<b>Access to the project office</b>	Target villages should be where the project staff can frequently visit to ensure efficient project operation. If they are very far from the project office, the project cannot visit them as often as planned.
6)	<b>No overlap with the other agricultural development project</b>	Target villages should not be overlapped with the target by the other agricultural development projects in progress. Especially, in villages where the provision of free gifts and services by the other projects is observed, farmers tend to depend heavily on



		aid.
7)	<b>Availability of labors (Situation of migration)</b>	Target villages should not be seriously suffering from shortage of labor for rice cultivation. A trend in terms of migration should carefully be checked beforehand to avoid shortage of labor and unexpected withdrawal of members after group formation.
8)	<b>Adequate conditions for growing specific rice variety</b>	If your project intends to promote a specific rice variety among farmer groups, target village must be in adequate environmental conditions for it. For example, <i>Phka Rumduol</i> , a fragrant, medium-maturing rice variety in high market demand, cannot be grown in the lowest level of lands where water is likely to be deeper and submergence may frequently occur in wet season.

Before selecting villages by the criteria, you will need to collect social, economic and environmental information by using secondary data such as agro-ecosystem analysis (AEA) and annual rainfall data of each commune. You also need to get qualitative information by interviewing Provincial Department of Water Resources and Meteorology (PDWRAM), Provincial Department of Agriculture (PDA), commune councils, NGOs and local leaders.

Because rice farmers in Cambodia normally face many constraints of rice production, you may find it difficult to identify villages that can meet all of the criteria mentioned above. In that case, a special priority should be placed on **“moderate amount of rainfall”** and **“access to water resources”** because improvement in rice production and sale can never be realized without proper water control (See also **“8.2: Considerations in adopting the group-based approach”**).

## 2.5. Consultation with Local Leaders

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In parallel with the target village selection process, you must have a consultation with local leaders such as the village chief to enable them understand the purpose and plan of your project and hear their needs. Through this process your project can build relationships with those leaders and get support from them for project implementation.

In case there are villages where local leaders are not cooperative or do not fully agree with your project plan, you should exclude the village from your target.

# Applications from Farmers

Your project activity starts off with the process of organizing rice farmer groups in target villages. This chapter explains how you can start the process by collecting and screening applications from farmers.

First you will need to announce the purpose and plan of your project widely in your target village, and make sure that any farmers have equal opportunities to form an applicant group and apply for the project. Among all applicant groups, candidate groups will be selected to move on to the next stage of group formation.

**3.1. Introduction & Announcement of the Project**

**3.2. Collection of Applications**

**3.3. Selection of Candidate Groups**

## 3.1. Introduction and Announcement of the Project

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First, you will need to announce your project purpose and plan to all farmers in your target village, encouraging them to apply for the project by tentatively organizing applicant groups with the other farmers who wish to join them.

The announcement can be made by distributing a notice paper to every farmer in the village (for your reference, see “**Annex 1: project announcement (sample)**”). In addition, you should have a public meeting by inviting villagers and ask them to spread the information via local network.

However, this should be practiced with a great care because some local leaders, who often act as the contact point for your project, may invite only their family, relatives and close friends in such a meeting, thus ending up exclusively benefiting from your project.

To prevent this from happening, you are recommended to repeat the meeting at different times and locations in the village, so that more and more farmers can have a chance to know and apply for your project.

Groups already exist in the village can apply for the project, too. However, it should be informed that applicants need to meet the following application conditions.

### **Application Conditions**

	<b>Requirement</b>	<b>Remarks</b>
1)	<b>Commercial purpose</b>	All members of a group should aim at producing quality rice paddy for commercial purpose. Everyone should produce rice to sell in market and earn cash income, not for home consumption.
2)	<b>Number of members</b>	For strengthening the unity among members, the number of the members in a group should not exceed 20 members.
3)	<b>Access to water resources</b>	To avoid the risk of harvest failure by drought, all members should have access to water resources such as river, pond or irrigation scheme for supplementary irrigation.
4)	<b>Size and ownership of paddy field</b>	Each member must own a fixed size of field that can be exclusively used for group's rice production activity. (*The land size should be predetermined by the project. The size should be fixed within the range of 0.3-1.0 hectare, depending on the condition of land ownership in target villages) Leased land is not acceptable.
5)	<b>Closeness</b>	All members should be neighbors in good relationships. Both the residence and farmland of the members must be at close distance each other to make frequent group meetings and collective actions possible.
6)	<b>Economic condition</b>	All members should not have an outstanding debt. They should not be borrowing money from more than two money lenders or organizations (e.g. rice millers, middleman, bank, microfinance institutions).
7)	<b>Agricultural support from the other donors or NGOs</b>	All members should not be joining or benefiting from the other agricultural development projects.
8)	<b>Payment of the membership fee</b>	Each member must pay a certain amount of money (*the amount should be predetermined by the project) to become a member of the group. The fee will be saved in a group fund to be opened, and managed by the members themselves. The money is going to be used for the group's common benefit and cannot be refunded to each member.

## 3.2. Collection of Applications

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After the announcement is made from the project, farmers who are willing to apply for the project as a group will receive an application form from the project, and fill in it with required information. A sample of the form is available in “**Annex 2: application form (sample)**”.

After getting an approval from their village chief, they will submit the application to the extension staff by the deadline.

## 3.3. Selection of Candidate Groups

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After collecting applications from farmers, your project will need to interview with the representatives of the applicant groups and visit their rice fields to observe and understand the condition of their farming. Based on the results, you will examine if they meet the application conditions.

When the number of applicant groups is more than the number to be admitted in your project, applications will have to be screened according to your own selection criteria. In case it is difficult to decide which applicant group is superior, it is recommended that you select groups with better access to water sources. Again, it is because water availability is prerequisite for successful group-based activities for rice farming (see “**8.2 Considerations in adopting the group-based approach**”, too).

When you notice the selection results to each applicant group, it is important to clearly explain the reasons to all the applicants and ensure the transparency of the selection process.

# Group Formation

This chapter explains how you can proceed with farmer group formation after selecting candidate groups in each target village.

First, you need to prepare a draft of group bylaws. Then each candidate group will have a meeting to deepen understanding about the objectives, conditions and rules of their group activities set by the project. They also discuss additional rules of the group on their own.

After the meeting, once every member has made agreements on their bylaws by signing them, the formation of a new farmer group can officially be approved by the project.

## 4.1. Preparing Draft Bylaws

## 4.2. Meeting for Group Formation

- 1) Introduction
- 2) Preconditions for group formation
- 3) Rice cultivation through Farmers Field School
- 4) Management of Group Fund
- 5) Marketing and Sales
- 6) Organisation Management
- 7) Distribution of Draft Bylaws

## 4.3. Signing Group Bylaws

## 4.1. Preparing Draft Bylaws

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Your project needs to prepare a draft of group bylaws of your prospective farmer groups. The bylaws should include the objectives of the group, membership conditions, rights and obligations of the membership, and rules in terms of organization structure and management.

In the draft, some of these conditions and rules remain tentative because they have to be determined depending on what each group will discuss in the meeting for group formation. For your reference, see “**Annex 3: bylaws of rice farmer group (sample)**”.

## 4.2. Meeting for Group Formation

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### 4.2.1. Preparation for the Meeting

The meeting for group formation should be held by the extension staff from your project with the attendance of all members of a candidate group.

It will be an opportunity for the participants from the candidate group to fully understand the conditions and rules of the activities to which they are supposed to commit as a group. Based on what are explained and clarified through the meeting, each of them can make a final decision as to whether or not they join the group.



The meeting also should be an opportunity for your project to understand the participants' actual conditions and views. Through discussions in the meeting, you can finally judge if each of them indeed qualifies for a members of your target group.

In the meeting, copies of the draft bylaws will be distributed to all the participants. However, because they are not necessarily literate or good at reading, you should explain everything without relying on written papers for their easy understanding.

The meeting does not necessarily have to end in one day. It should be continued or repeated if the participants need more time to understand the conditions and rules of the group activities or to discuss them further before making a final decision.

### 4.2.2. Procedure for the Meeting

#### 1) Introduction

##### ■ Objectives of Organizing Rice Farmer Groups

After confirming every member's attendance in the meeting, you will explain the purpose and plan of your project, and the objectives of rice farmer groups to be organized.

It should be clarified that the group is organized to increase productivity and profitability of its members' commercial rice farming. Members need to make joint efforts to enhance the quality and quantity of rice for sale, attract more buyers and obtain better prices from them. Only highly motivated farmers are expected to join the group.

You explain that group members need to commit themselves to three main activities to achieve the goal, which are: “rice cultivation through Farmers Field School”, “management of group funds to purchase agricultural inputs”, and “collective actions for marketing and sales”.

### ■ **Project Period**

You need to clarify about the duration of your project period, indicating for how long your project support for the group will continue.

Although farmer groups are highly expected to continue their activities even after the end of the project, it will totally depend on the members’ own decision to be made at the end of the project period.

## **2) Preconditions for group formation**

You should reconfirm the preconditions for group formation with the participants. The application conditions described in the project announcement (refer to **Chapter 3**) should be explained again. Any farmers who are not meeting the requirements are not entitled to be group members.

## **3) Rice cultivation through Farmers Field School**

In terms of the group activities for rice cultivation, the followings should be explained and discussed.

### ■ **What makes differences?**

First, you should start discussions with participants by asking the results of their rice paddy production and sales in the last cropping season. Let them discuss who among them have obtained the best and worst results in terms of rice yields and paddy sale prices, and ask what makes such differences among them.

In case there are no significant gaps in the results of the participants, ask them what they should do to enhance rice yields, attract interest from buyers and get better prices for their products.

### ■ **Selecting a Rice Variety Highly Demanded in Market**

Secondly, as one of the means of attracting buyers, you will suggest that all group members grow a specific rice variety in an equally fixed size of paddy field (e.g. 0.5ha per farmer).

They are recommended to choose a variety highly demanded in market because if they supply a popular variety of rice in a large quantity together, they are more likely to attract interest from buyers who can make larger orders at better prices.

In the case of APPP, all of the groups have chosen fragrant rice varieties such as *Phka Rumduol* and *Somaly*, because they are demanded by many rice buyers and traded at the highest prices in market (See also “**8.2. Considerations in adopting the group-based approach**”).

After exchanging views and ideas on this issue each other, participants need to choose and agree on their target rice variety.

### ■ Production of High-Quality Rice to Obtain Better Prices

Thirdly, you suggest that group members put a top priority on producing “high quality rice paddy”. This is because getting quality paddy from farmers is one of the biggest challenges for most rice buyers. And for farmers, meeting buyers’ demand is a prerequisite for obtaining better prices.

Again, after exchanging views and ideas on this issue each other, participants finally need to understand and agree that they will make an effort as a group to meet quality standard shown below.

#### Quality Standard of Rice Paddy

- a) No different varieties are contained.
- b) No weed seeds are contained.
- c) No pebbles are contained.
- d) Blank (sterile) head of paddy grains are hardly observed.
- e) Paddy grains damaged by insects are hardly observed.
- f) Color of paddy is natural and uniformed.
- g) (In the case of dry paddy,) moisture content is 14% or equivalent.

### ■ Participation in Farmers Field School

Next, you will explain to the participants that it is important to improve rice cultivation techniques in order to meet the quality standard and achieve higher rice yields.

Then inform the participants that the project will implement a hands-on training program called Farmers Field School (FFS) for them. For making detailed explanations on FFS, refer to **Chapter 5** of this guideline.

Explain the feature of FFS and let the participants know that it will help them learn various rice cultivation techniques both in theory and practice.

You should clarify that group members must attend every session of FFS, exchange technical knowledge and support each other to practice better rice cultivation. Every group member is obligated to practice all of the techniques recommended in the FFS in the fixed size of rice field.

Practicing all of these techniques may require substantial time and labor. The participants should be made aware of the potential cost and benefit, and those who cannot afford to meet the required conditions are not recommended to join the group.





## Do farmers agree on “quality-oriented” strategy?

During the meeting, some participants may doubt whether good-quality rice paddy can be sold at higher prices, claiming that despite their efforts rice buyers would keep buying them at cheap prices.

Other participants might be concerned about labor, time and cost additionally required to the activities for improving paddy quality, appealing that they may not afford them.

As you can see later in **Chapter 8** of this guideline, their efforts do not always ensure positive results. Farmer groups to be organized, however, should consist of people who are willing to challenge themselves to these new activities to achieve their common goal. Those who have different point of view or cannot afford to meet the quality requirement had better not join the group.

## 4) Management of Group Fund

In terms of the group activities for group fund management, the followings should be explained.

### ■ Understanding the Group Fund Mechanism

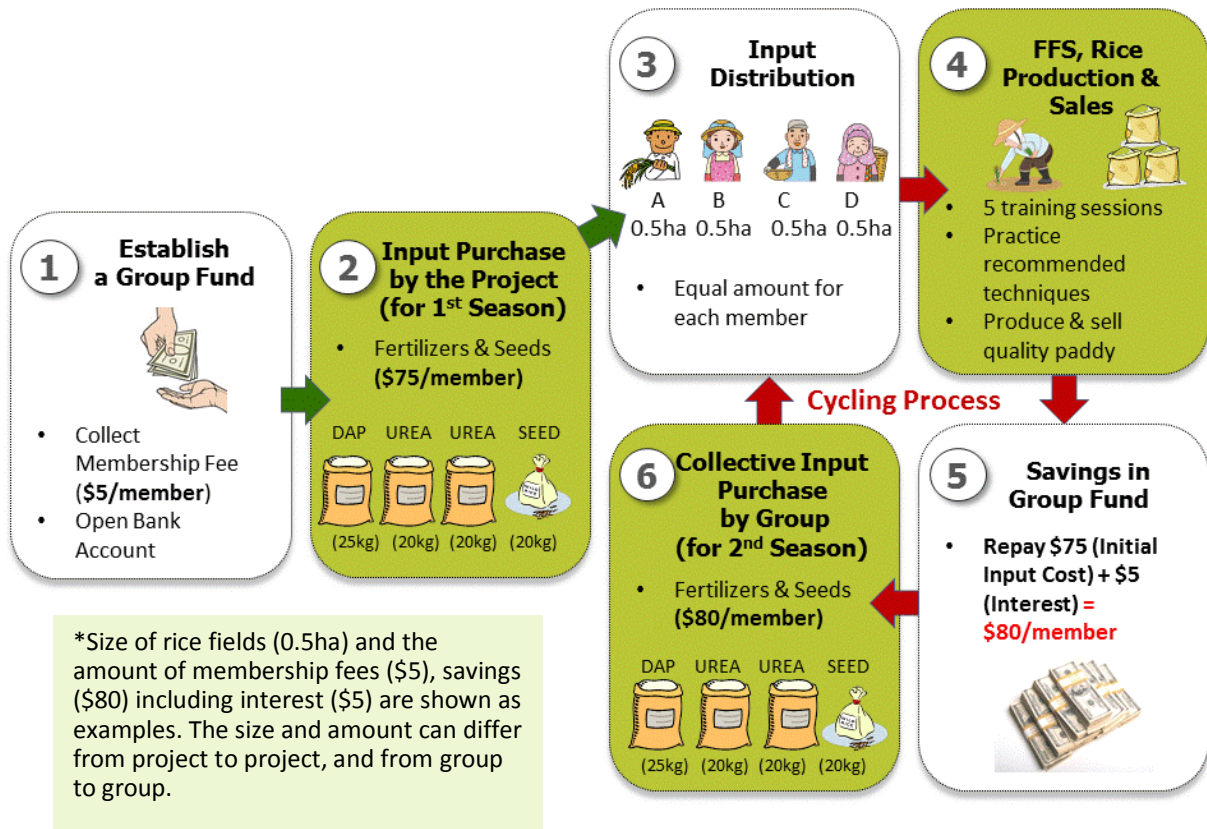
You will explain to the participants that the use of high quality seeds and appropriate amount of fertilizers is also critical to meet the quality standard mentioned above and achieve higher rice yields.

Inform them that your project will help each farmer group to establish its own group fund to buy those essential inputs for rice farming. For making detailed explanations on the flow of group fund management shown in the picture below, refer to **Chapter 6** of this guideline.

The participants need to fully understand their rights and responsibility in the fund management, and agree on the amount of money (including interest) each member has to save every season.



## Flow of Establishment & Management of Group Fund



### Present Financial Condition of the Members

You need to ask the participants if they have already been involved in similar savings activities such as village savings group, microfinance group, or agricultural cooperative. In case they belong to such groups and have credit to repay, they should carefully think if they can afford to participate in the project activity, too.

### Selection of Accountant

You inform to the group that it needs to select an accountant in charge of group fund management and input procurement. The role and responsibility of the accountant is explained and discussed later in the meeting (see “**6) organization management**” below). The accountant must be good at calculation and writing. Guidance from the project on account book recording will be provided.

## 5) Marketing and Sales

In terms of the group activities for marketing and sales, the followings should be explained.

## ■ Planning Collective Actions for Marketing and Sales Promotion

You suggest that group members make commitments to take various actions for improving marketing and sales of their products.

As discussed earlier, the participants need to agree on the following strategies for marketing:

- 1) Select and grow a rice variety highly demanded in market;
- 2) Produce high quality rice paddy to attract more buyers.

In addition, after a group is organized, the members are encouraged to plan and practice more activities, such as: visiting potential buyers to know their demands, collecting and sharing market information, collective advertising, sales and shipping of products. For making detailed explanations on these activities, refer to **Chapter 7** of this guideline.

Details should be discussed and planned after group is formally organized, but the extension staff and the participants should exchange views and ideas on possible actions in this meeting, too.

## ■ Selection of Marketing Staff

Explain that group members need to select a marketing staff that will in charge of coordinating actions for marketing and sales. The role and responsibility of the staff is explained and discussed later (see “**6) organization management**” below).

# 6) Organization Management

## ■ Role and Responsibilities of Group Representatives

For the efficient management of group activities, group members should have a leader, sub-leader, accountant and marketing staff. You will explain to the participants the expected roles and responsibilities of the representatives.

After exchanging views and ideas on selection methods, participants should select the representative members among them.



### Can farmers work together for marketing and sales?

During the meeting, again, some participants may argue that any group efforts for marketing will be useless because the price of their produce is up to buyers' decision and every buyer would end up offering cheap prices to them.

The other participants may expect your project to find a good buyer for the group.

In that case, let them discuss again what to do by themselves to make a breakthrough in the situation. Those who are unwilling to make a joint effort for marketing and sales are simply not recommended to become group members.

## Roles and Responsibilities of the Group Representatives

Assignment	No. of person	Roles and Responsibilities
<b>Leader</b>	1	<ul style="list-style-type: none"> <li>• Chair group meeting and manage overall activities of the group.</li> <li>• Keep an attendance record of the group meeting and project's training, and report it to the extension staff whenever required.</li> <li>• Monitor and record the progress of the member's cultivation practice and harvest and sales result with the extension staff.</li> <li>• Open a bank account together with the accountant, and supervise the management of the group fund (cash and savings)</li> </ul>
<b>Sub-Leader</b>	1	<ul style="list-style-type: none"> <li>• Support all the activities of the group leader, accountant, and marketing staff whenever required.</li> <li>• Open a bank account together with the accountant, and supervise the management of the group fund (cash and savings).</li> </ul>
<b>Accountant</b>	1	<ul style="list-style-type: none"> <li>• Open a bank account of the group and deposit the collected membership fee.</li> <li>• Collect money from each member after rice sales at the end of every cropping season, and save it in the bank.</li> <li>• Keep and manage group fund (cash and savings) properly by recording accounting books, and disclose it to the members whenever required.</li> <li>• Before the beginning of each cultivation season, purchase necessary amount of group fertilizers and quality seeds by getting an approval from the leader or sub-leader, and distribute them fairly to the members according to the amount of money repaid by each one.</li> </ul>
<b>Marketing Staff</b>	1	<ul style="list-style-type: none"> <li>• Coordinate group actions in terms of marketing and sales promotion, for example:               <ul style="list-style-type: none"> <li>- Contact as many customers as possible and collect information about rice paddy price.</li> <li>- Share the collected information with the other group members.</li> <li>- Negotiate with buyers on rice paddy price as a representative of the group.</li> </ul> </li> </ul>

## 7) Distribution of Draft Bylaws

At the end of the meeting, you will hand over the copies of draft bylaws and a form of group member list to the participants (for your reference, see "**Annex 4: group members list**"). All the participants need to read and understand it after the meeting, and make a final decision whether or not they will join the group.

## 4.3. Signing Group Bylaws

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The candidate group members need to prepare the final draft of group bylaws that reflects the results of discussion during and after the meeting. The extension staff should help them prepare it, and also check if the final draft is acceptable for the project side, too.

Lastly, all farmers who have agreed on the group bylaws will sign the list of group members and submit the documents to your project. When your project receive and approve the bylaws and members list, the process of farmer group formation will be completed. The original copies of the documents should be returned and kept by groups.

# Support for Rice Cultivation through Farmers Field School

Farmers Field School (FFS) is a training program in which group members learn, both in theory and practice, rice cultivation techniques essential to improve rice yields and quality.

Every member is required to attend every session of the training, and put into practice all the techniques recommended by the project in a fixed size of rice fields.

This chapter explains the feature of the training program and techniques. In preparing for FFS, your project will need to select a site for technical demonstration and plan the training schedule according to group members' annual cropping calendar.

## 5.1. Features of FFS

### ■ Five Training Sessions with Theory & Practice

In FFS, five training sessions are conducted per season. Each session will cover specific technical subjects.

As shown below, the curriculum of FFS in the pilot project of APPP differs depending on whether farmer groups choose to practice line-transplanting or direct sowing by drum seeder in rice cultivation.

Basically line-transplanting is recommended as the best means of farm management to enhance rice yields and quality.



However, some farmers cannot practice it because of labor shortages or rising cost of manpower. Direct sowing by drum seeder is recommended for such farmers as an alternative method that allows them to plant rice with a little manpower.

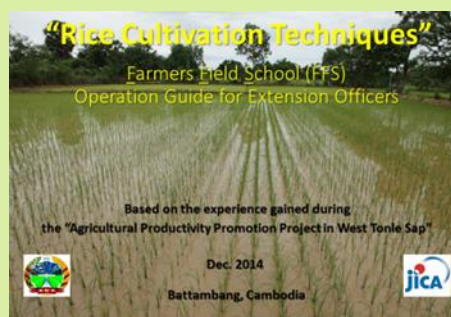
### Curriculum of Farmers Field School

	Transplanting	Direct Sowing by Drum Seeder
Session 1	Seed Selection, Seed Disinfection by Hot Water, Nursery Preparation, Land Levelling, Basal Fertilizer Application	Seed Selection, Seed Disinfection by Hot Water, Land Levelling, Basal Fertilizer Application
Session 2	Transplanting (line-transplanting, 21-day old seedlings, appropriate planting density)	Direct Sowing by the Drum Seeder
Session 3	First Top Dressing Fertilizer Application	
Session 4	Checking Panicle Initiation Second Top Dressing Fertilizer Application	
Farmers Field Day (FFD)	Review and Evaluation of Seasonal Results	

FFS covers not only theories but also practical exercise. As agreed in the group bylaws, all of group members are required to attend every FFS session.

### Recommended Reference Material for FFS Operation

To deepen your understanding on the feature of FFS and each session, you are recommended to check **“Rice Cultivation Techniques: FFS operation guide for extension officers”** (English & Khmer) developed by APPP.



## ■ Improved Rice Cultivation Techniques

The table below shows the main rice cultivation techniques to be learned by group members by participating in FFS. Every member is required to adopt all of these techniques in their own rice fields.

<p><b>Seed Selection:</b></p> 	<p>To increase germination rate, minimize disease damages and achieve uniformed plant growth, seeds are selected by salt water or urea solution water.</p>	<p><b>Seed Disinfection by Hot Water:</b></p> 	<p>To minimize seed infectious disease and increase rice yields, seeds are disinfected by hot water (60 degrees)</p>
<p><b>Nursery Preparation:</b></p> 	<p>For easier nursery management, soil improvement and better growth of seedlings, nursery bed is made with the size of 1.5m width, 10 cm height by mixing its soils with carbonized husk.</p>	<p><b>Land levelling:</b></p> 	<p>To facilitate effective water control and uniformed plant growth, rice fields are levelled as flat as possible.</p>
<p><b>Line Transplanting:</b></p> 	<p>For better farm management and yields, seedlings are transplanted in line. Two or three rice seedlings of 21 day-old are planted per hill at 25 x 20 cm of planting density.</p>	<p><b>Drum Seeder:</b></p> 	<p>Drum seeder is a cost-effective alternative to line-transplanting method. Seeds are sown in line directly in main fields by operating manually a drum seeder machine.</p>
<p><b>Fertilizer Application:</b></p> 	<p>For higher yields, fertilizer application is done three times: Basal (DAP), 1st Top Dressing (UREA) after transplanting, and 2nd Top Dressing (UREA) at a timing of panicle initiation.</p>	<p><b>Field Management:</b></p> 	<p>Appropriate field management including frequent weeding, removing alien varieties, close monitoring against disease occurrence and insect damage.</p>



## Recommended Reference Material on Rice Cultivation Techniques

To know more about each technique shown above, refer to the following three manuals developed by APPP. Each manual contains easy-to-understand instructions with an abundance of photos and pictures.



### “Rice Seed Production Manual” (English & Khmer)

This manual is developed as a reference for rice seed growers and their trainers. But it is also useful for trainers of FFS for ordinary rice farmers to learn effective techniques for quality paddy production, too.



### “Step Up Your Knowledge on Rice Cultivation” (English & Khmer)

This manual aims at equipping rice farmers with basic knowledges on agronomy (rice farming), specifically focusing on fertilizer application, use of agricultural chemicals, and the control of crop disease and insects.



### “Drum Seeder Manual” (English & Khmer)

This manual is developed for drum seeder users. It explains how to practice direct sowing by using the seeder, including its advantages over the line-transplanting method.

## 5.2. Preparation for FFS

Before starting FFS, your project and group members need to get together to discuss and confirm the following issues about preparation for FFS. In the case of APPP, the group

members had a “meeting for action planning” at the beginning of each season to discuss and confirm these plans as a group.

### ■ **Trainer**

In principle, the extension staff trained by your project serves as a trainer in five FFS sessions. The staff also should play a role of monitor who regularly visits every member’s fields, observe their farm management including weeding, removal of foreign varieties and the control of crop disease and insect, identify potential problems and provide technical advice for them.

### ■ **Selecting a Demonstration Site**

FFS sessions for a group will always take place at so called “demo site”, which is a specific site chosen for demonstrating a series of the cultivation techniques.

Before starting FFS, you need to ask group members to select one member’s rice field as their demo site. The site should be located at the place where every member can easily access, and the owner of the demo site should be a reliable person. The extension staff should visit the site selected by members, confirm its location, size and water availability, and see if it is really appropriate as a demo site.

### ■ **Planning FFS Schedule**

Group members need to discuss and plan the schedule of FFS before every cropping season starts. The timing of five FFS sessions varies depending on which rice variety they choose to grow, since each session follows the specific growth cycle of the variety.

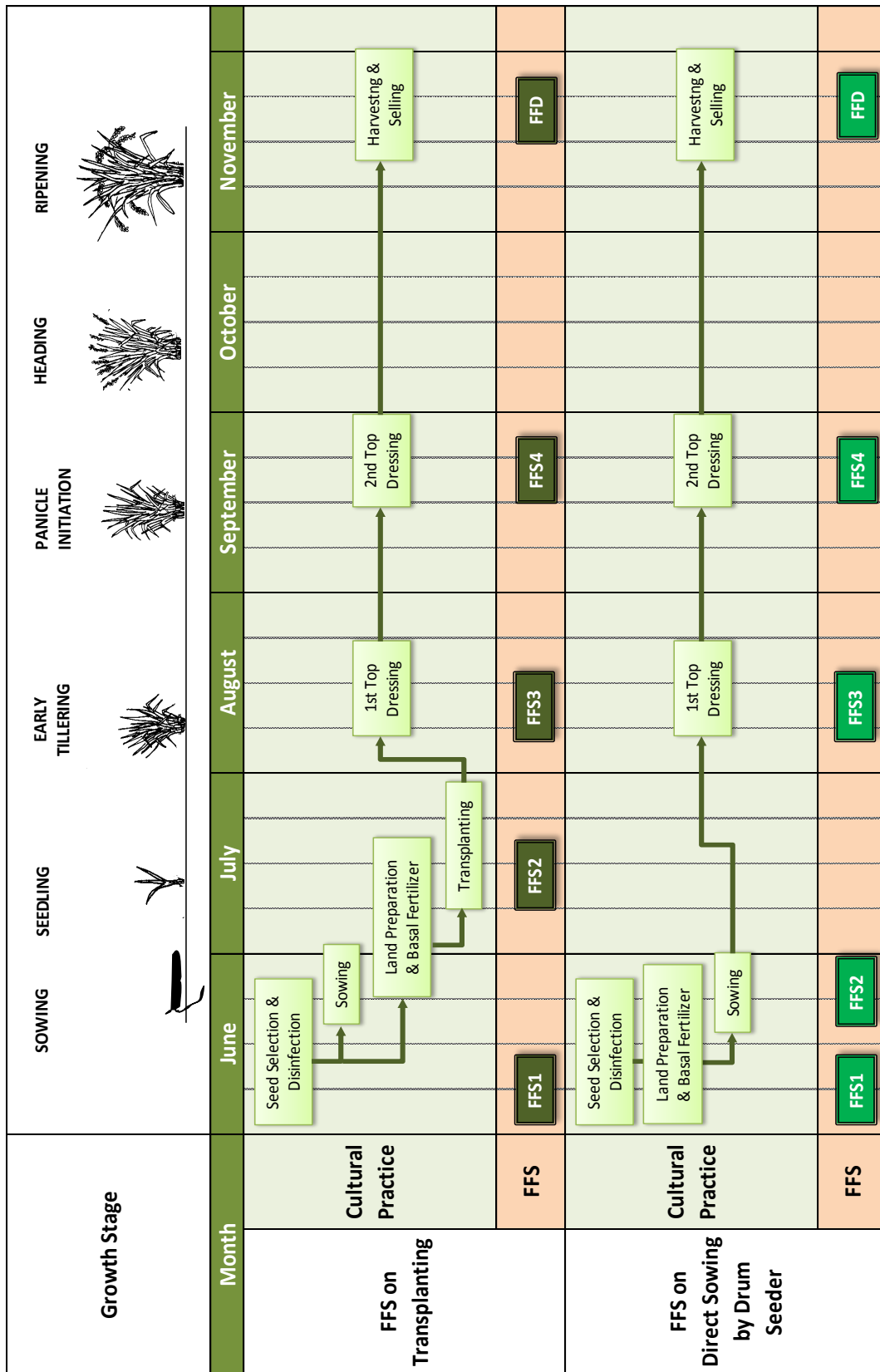
Before planning FFS schedule, therefore, group members’ annual cropping calendar has to be confirmed. Although members might say it totally depends on unpredictable rainfall conditions and cannot be planned in advance, they can discuss a tentative cropping schedule to have a consensus among members.



A special attention should be paid to the timing of “sowing”. While some members might want to finish it before rainfall stops in short dry season (May or June) in Cambodia, the others might plan to begin it after short dry season (July or August) to avoid possible dry spell damage.

However, group members are recommended to make as much effort as possible to start cultivation at the same timing, so that they can harvest and promote the sales of

products at the same timing together. For example, in the case a group chooses to grow a medium maturing variety, the cropping calendar and training schedule of FFS can be as shown below.



## ■ Materials

You need to prepare some materials for implementing FFS for a group. Most of them are used in the first session of FFS for practicing seed selection and seed disinfection by hot water.

For your reference, the table below shows the cost estimate of materials essential for training a group of 20 members. In the case of practicing line-transplanting, the material costs can be approximately **180 USD**. When members use drum seeders instead of line-transplanting, the cost can be approximately **300 USD**.

### Cost estimate of FFS materials

		Unit price	number	Total price
1	Fabricated drum can	15.00	2	30.00
2	Thermometer	15.00	2	30.00
3	Plastic Basin	4.50	2	9.00
4	Net Bag	1.50	40	60.00
5	Fresh Eggs	0.12	2	0.25
6	Scale	30.00	1	30.00
7	Urea (for seed selection: 50kg)	22.00	1	22.00
<b>Total (by transplanting)</b>				<b>181.25</b>
8	Drum Seeder	60.00	2	120.00
<b>Total (by Drum Seeder)</b>				<b>301.25</b>

In APPP, in addition to these materials, a variety of posters with technical information, technical manuals, and a white board were provided to each group. This kind of teaching material would be helpful, if prepared by your project, too.

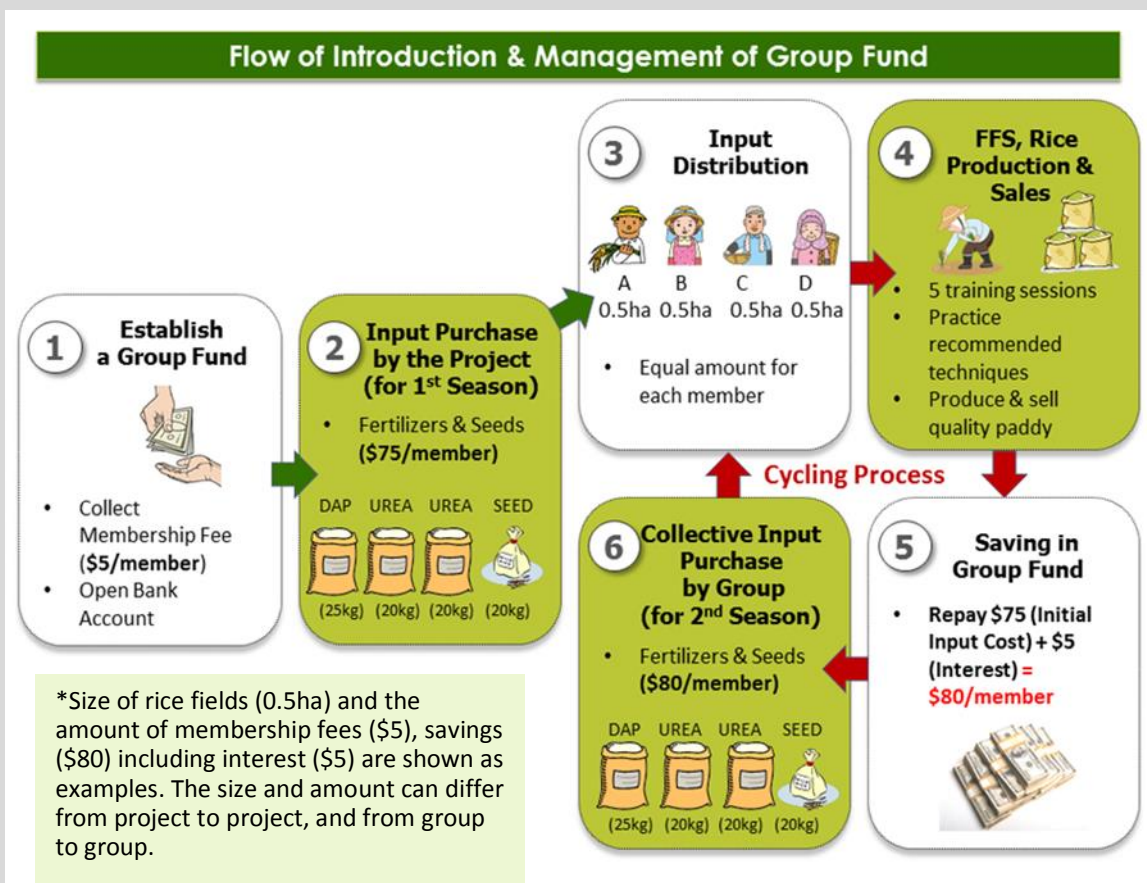
## 5.3. Management of FFS

When cropping season begins, the extension staff carries out FFS sessions as planned. To know details on how to operate FFS, see again the recommended reference material: **“Rice Cultivation Techniques: Farmers Field School (FFS) Operation Guide for Extension Officers”** developed by APPP.

# Support for Group Fund Management

With support from your project, group members will establish and manage a group fund for purchasing adequate quantity and quality of agricultural inputs on time, which are also essential to enhance rice yields and quality.

This chapter shows how the group fund should be established and managed. For proper and transparent fund management, farmer groups need to keep recording their financial transactions in cash and deposit books. Your project also should provide training on bookkeeping to the accountants.



# 6.1. Mechanism of Group Fund

## 1) Establish a Group Fund

Just after a farmer group is organized, group members will pay membership fees and establish a group fund. The fees will be a part of the initial capital of the fund and cannot be refunded to each member. As mentioned earlier, the amount of fee should be determined by your project, taking farmers' financial capacity into account.

After fee collection, the group representatives (leader, sub-leader and accountant) will open a bank account of the group in commercial bank or microfinance institution nearby, into which the collected fees should be saved as an initial deposit. A bankbook issued for the account should be kept by the accountant.






Your project also needs to prepare and provide account books to each farmer group. Accountant is responsible for bookkeeping to ensure proper management of group fund (see "6.2. Accounting Record" below).

## 2) Input Purchase by the Project

For the first cropping season only, seeds and chemical fertilizers needed for cultivating the fixed size of rice fields are purchased by the project and provided for groups. For example, in the case that each farmer grows rice in 0.5ha of land by transplanting method, 20kg of certified seeds and 65kg of chemical fertilizers (DAP 25kg and UREA 40kg) are needed per member.

### Amount of Inputs (per member, 0.5ha, transplanting method)

Certified Seeds (20kg)	Chemical Fertilizers (65kg) (DAP: 25kg)                      (UREA: 40kg)	
		

However, in case farmers practice direct sowing by drum seeder, the amount of seeds would be doubled to 40kg. The amount of fertilizers also differs depending on the size of fields and its conditions. The cost will vary depending on its actual market price, too.

### 3) Input Distribution

The inputs purchased by the project are distributed among group members. Each member receives equal amount of inputs for rice cultivation in the fixed size of fields.

### 4) FFS, Rice Production & Sales

Once the first cropping season begins, group members participate in the training (FFS: Farmers Field School) conducted by the project, and need to practice recommended cultivation techniques in the fixed size of field. After harvest, members sell their products in market.

### 5) Savings in Group Fund

At the end of the first crop season, each member has to repay money equivalent to the cost of the provided inputs in their group fund as savings.

In addition, they are required to pay interest on it, too. The rate of interest should be set by the project and agreed by group members during the process of group formation.

In the pilot project of APPP, the amount of interest per season was fixed at 5 USD for farmers who cultivate 0.5ha of land. Because the input cost was 75 USD, each farmer saved 80 USD in the group fund.



#### Be sure to provide quality seeds to farmers

Many rice farmers in Cambodia still use poor quality seeds, but using purebred “certified seeds” is essential to realize the production of quality rice paddy.

Therefore, in the first cropping season, you need to make sure that you procure certified seeds from reliable sources and provide them to group members.

Ideally, you should find the sources locally, so that farmer groups can keep buying seeds from the same sources even after the project support ends.

In APPP, seeds procured for the farmer groups were the ones produced by seed growers groups or the provincial department of agriculture, both of which were also technically supported by the project.



## Savings in Group Fund (APPP)

(per member/0.5ha, transplanting method, seed variety: *Phka Rumduol*)

	1 <sup>st</sup> Season	2 <sup>nd</sup> Season
For principal (input cost)	\$75	\$80
For interest	\$5	\$5
Total Savings (Repayment) Amount	\$80	\$85

## 6) Collective Input Purchase

In the second cropping season, there is no more provision of inputs from your project. Farmer group needs to buy certified seeds and fertilizers by using their own group savings.

It is recommended that the members purchase the inputs collectively and distribute equally to each member. By purchasing and transporting larger quantities together, they are more likely to get them at reduced price and less transport cost.

At the end of the harvest in the second season, in the same way as in the first season, each member needs to save money equivalent to the input costs to their fund, adding interest. In case the project continues for more than two seasons, the cycle of input purchase and savings would be continued.

When members are unable to make the savings in due time for inevitable reasons such as crop failure by severe droughts, floods and crop diseases, the outstanding balance can be settled by the end of the next crop season.

## 6.2. Accounting Record

For proper and transplant management of group fund, farmer groups are required to keep recording financial transactions in accounting books.

As group savings are kept either in cash or in bank account, they need to keep two types of accounting books: “cash book” and “deposit book”.

For reference, see “**Annex 5: Bookkeeping Guide**” to know more about the bookkeeping methods introduced by APPP for its target farmer groups. The group accountant is required to make a report on revenues, expenditures and balance of the group fund to all of group members at the end of each season (see “**Annex 6: Accounting Report**”).



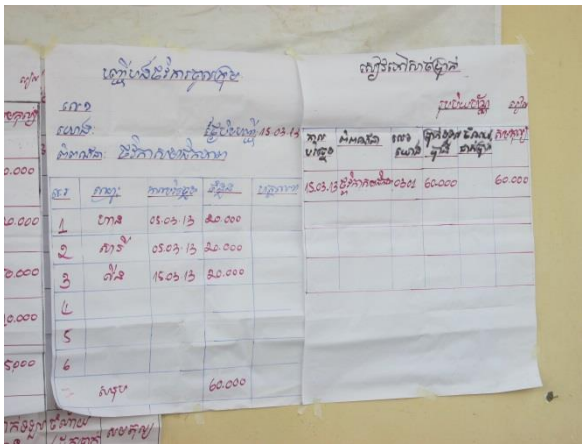


## 6.3. Training on Accounting

For proper and transplant management of group fund, your project also should provide training on bookkeeping to the accountants of farmer groups.

In APPP, the project conducted one-day training program on accounting by inviting accountants from all the target groups. The training covers both lecture and exercise, through which the participants learned how to record the revenues and expenditures.

Apart from the training program, extension staff should regularly check the group's accounting records and provide necessary instructions and advices to the accountants.



The image shows a handwritten accounting ledger on a wall. The ledger is written in Burmese and is organized into columns. The columns include 'စက်ဝိုင်း' (Group), 'ရက်စွဲ' (Date), 'အမျိုးအမည်' (Type), 'ပမာဏ' (Quantity), 'တန်ဖိုး' (Value), and 'စုစုပေါင်း' (Total). The data is as follows:

စက်ဝိုင်း	ရက်စွဲ	အမျိုးအမည်	ပမာဏ	တန်ဖိုး	စုစုပေါင်း
၁	၀၅.၀၅.၁၅	အကျွေး	၂၀.၀၀၀		
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# Support for Marketing and Sales

This chapter explains in what way collective actions for marketing and sales should be taken by farmer groups.

First, farmers are encouraged to engage in market-oriented production. They should grow rice variety highly demanded in market, keep the quality of their products at high level and thereby differentiate their products from other farmers' one.

In addition, group members will have a meeting several times before and during cropping season to discuss and plan what else they should do, and put them into practice with support from project.

## 7.1. Planning Actions for Marketing and Sales

First, as mentioned earlier (see **Chapter 4**), for making their products attractive to more buyers, all the group members need to commit the following strategies:

- 1) Select and grow a rice variety that is highly demanded in market;
- 2) Produce high quality rice paddy that meet the quality standard agreed among the members.

Secondly, group members should have a meeting several times before and during cropping season to discuss and plan what else they can collectively do for marketing and sales of their rice paddy. The extension staff should attend each meeting as a facilitator. For example, in the meeting members can discuss the agenda shown below.

	Item	Remarks
1)	<b>Potential buyers to be Targeted</b>	Members discuss and determine at whom they aim for selling their rice paddy. It might be rice millers and middlemen interested in purchasing quality paddy, or local farmers demanding quality "seeds" for their own

		rice cultivation. If possible, the project also should collect and give information on peoples or companies who might be interested in buying groups' products.
2)	<b>Rice Paddy Quality and Type</b>	Confirm if each member is able to meet the quality standard agreed on their bylaws, and also decide whether they sell dry paddy or wet paddy. They also need to discuss what else their target buyers would demand in terms of rice quality, and whether they should do something more or different for adding value to their products.
3)	<b>Actions for Accessing Market information</b>	Discuss how they can access information on market price to know whether their products are priced appropriately or not and what a fair price would be.
4)	<b>Actions for Advertising</b>	Discuss what kind of advertising activities they can carry out together to attract more buyers' interest to their products.
5)	<b>Actions for Sales and Transportation</b>	Discuss whether they engage in collective sales and shipping, too. In case they do, they need to plan how they bargain with buyers about a transaction and what they should prepare together for collecting and delivering members' products to them.

## 7.2. Taking Actions for Marketing and Sales

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Thirdly, group members should put what they have planned into practice. While there can be a variety of actions for marketing and sales, here are some examples:

### 1) Study Visit to Potential Buyers

First of all, group members are recommended to visit some potential buyers directly to know more about market demands and needs. It can also be a good opportunity for the buyers to know the groups' products. Both the buyers and group members can even discuss the possibility of transactions between both parties in the future.

In the pilot project of APPP, the marketing staff of each group visited rice millers with the extension staff, checking out mainly the following points.

	Item	Remarks
1)	<b>Rice Variety Demanded</b>	Which variety of rice is highly demanded in market? Is the variety selected by the farmer group for production in high demand?

2)	<b>Rice paddy Quality</b>	What do buyers require in terms of rice paddy quality? What should farmers do to get favorable sales price? While most buyers tend to emphasize the importance of “purity” of paddy grains, what exactly they define it?
3)	<b>Moisture Contents of Rice Grain</b>	Do buyers demand dried paddy or wet paddy? In both cases, exactly how much should the rate of moisture content be?  *Normally, buyers request farmers to reduce the moisture rate up to 13-14% for dried paddy. When buyers demand wet paddy, they very often request farmers to sell them within one or two days after harvest because otherwise the quality and color of moisture grains would quickly deteriorate.
4)	<b>Methods to Check Rice Paddy Quality</b>	How do buyers actually check the quality and moisture content of rice paddy in purchasing them?  *This question is important to know if groups’ products can be valued in a transparent manner. Some buyers may use special equipment to value the quality, while others just see (and often bite in the mouth) and say “it is ok” or “bad”.
5)	<b>Conditions for Transportation</b>	Do farmers need to transport rice paddy to buyers? Or do buyers come over to farmers’ fields to collect paddy? Do buyers charge transportation cost?
6)	<b>Desired Rice Purchase Price</b>	How much price will buyers pay for products that fully meet their quality requirements?  *Most buyers would say it depends on paddy market price at the time of harvest and therefore it is not possible to tell predetermined prices. However, others might promise to pay premium price for good products or even propose to make “contract farming” with group members. In that case, detailed conditions should be clarified and agreed in a written form.



Back in their home villages after the study visit, the marketing staff must meet the rest of group members and share the information gained from the interview with them.

The extension staff also should attend the meeting as a facilitator, and make sure that findings from the visit are reported to all members. Members are encouraged to make efforts to respond more to the demands from the potential buyers.

## 2) Collection and Sharing Market Information

Farmers living in the same village often do not proactively collect and share information on rice market price and buyers each other. Some tell that such information sharing is meaningless because every buyer just offer farmers the same price anyway.

In fact, however, in many villages farmers are selling products at different prices. While some succeed in obtaining a favorable price, the others gain lower prices. It is therefore recommended that group members collect market information as widely as possible via various channels and share them each other to find better buying offer from buyers.

Such information sharing is also necessary for group members to know whether their products are priced appropriately or not and what a fair price would be.

## 3) Collective Advertising

As one of their sales promotion activities to attract interest from more buyers, group members are recommended to advertise collectively their products.

In the pilot project of APPP, farmer groups have started the advertising since wet season 2014 by distributing leaflets and displaying signboards and posters. The contents of these advertisements were designed by the project reflecting ideas from group members. It particularly emphasized the high quality of their products realized by improved cultivation techniques and quality seeds.

In APPP, it was found that local farmers can also be good customers for groups, because they often demand quality rice paddy at higher prices in order to use them as seeds for rice cultivation. Most of the groups eventually practiced their advertising activities in the vicinity of their villages for appealing mainly to those farmers, rather than millers and traders far from their villages.

Group members would be able to continue this kind of advertising activities even after support from the project ends, as far as they believe it is worthwhile. Although it would be hardly possible for them to prepare high-quality posters and leaflets at high printing costs, they can prepare hand-made advertisements with simple information.



Your project can support groups' advertising activities by using local media or internet, too. For example, APPP has broadcasted radio programs and set up a website to support the farmer groups advertise their products.

## 4) Collective Sales and Shipping

Group members can carry out collective sales and shipping, too. By working together and supply buyers with high quality paddy in larger quantity on time, they would be able to have more chances to find good buyers and obtain favorable sales prices.

However, it also should be noted that collective sales and shipping may not always have the intended effects. Farmers might be unable or unwilling to practice it because they have the following constraints.

**Wet paddy needs to be sold at once:** As mentioned earlier, when buyers demand wet paddy, farmers have to sell them within one or two days after harvest, because the quality and color of moisture grains quickly deteriorate. Where wet paddy is highly demanded, therefore, the more time and days pass by after harvesting, the more drastically the purchase price gets down. If farmers practice collective sales and shipping, they are likely to need more time to complete harvest and collect all members' rice, thus ending up gaining lower prices and less profit.

**The timing of harvest differs from farmer to farmer:** Farmers often find it difficult to sell and transport wet paddy collectively because they cannot make sure that they harvest at the same timing. Even if they choose the same rice variety to grow, the timing of sowing and harvesting could vary from farmer to farmer since it is very often affected by water shortage or floods during cultivation season.

**There is no storage for common use:** Even in the case of selling dry paddy, group members may still find it difficult to practice collective sales and shipping partly because they do not have suitable storage where all members' paddy can be collected, inspected and accommodated together. Such a physical infrastructure for common use cannot be easily constructed by group members without external financial assistance.

**Farmers' lands are not close each other:** farmers living in a neighborhood do not necessarily have their farmlands in proximity each other. In case group members' land is far apart, the cost of paddy collection within a group can be high. Depending on the conditions, individual sales to middlemen can be a more cost-efficient option for members.

Group members should not be encouraged to start collective sales and shipping without taking into account these potential constraints and risks associated with its practice. Your

support should be provided only when members voluntarily decide to practice it after acknowledging its advantage.

### Advertisement on Website

For your reference, the website set up by APPP to support the groups' advertising is available here:

<http://quality-paddy-for-sale.webnode.com/>

It contains the information of location and telephone number of each group, so that buyers interested in their products can directly contact the producers.



# Outcomes and Considerations

The pilot project of APPP to support fifteen rice farmer groups has started its full-fledged activities since wet season in 2013 with a total of 227 group members (which have increased to 258 members in 2014).\* As of now, in terms of the project outcomes, only the data of the wet season 2013 has been available.

Although it is too early to assess the validity of its group-based approach, this chapter shows what kind of impact has been brought about to the group members, and also points out several issues to be considered before adopting the approach in your project. This should help audiences consider the effectiveness and limitations of the approach to increasing rice farmers' productivity and profitability.

(\*By way of trials, the pilot project started working with two farmer groups consisting of 33 members in 2012. The outcomes reported in this chapter do not include the results of the trial year.)

## 8.1. Outcomes

The followings are the main outcomes of the pilot project for the fifteen rice farmer groups in wet season 2013.

### 1) Yields of Rice Production

In the season, all of 227 members planted *Phka Rumduol*, a fragrant rice variety. Seven members (3%) failed to harvest because of damages caused by floods or rice blast. The average rice yield of the rest members was 3.3 tons per hectare, up 33% from its baseline (2.5 tons per hectare, 2012).

#### Average Paddy Yield

(Wet Season 2013, Variety: *Phka Rumduol*)

Province	No. of Groups	No. of Members	No. of Harvesters	Average Yield (t/ha)		
				(2012) <sup>*1</sup>	2013	YoY
Battambang	5	76	70	2.6	2.7	+5%
Pursat	9	135	134	2.5	3.7	+48%
Kampong Chhnang	1	16	16	2.1	2.8	+33%
Total	15	227	220	2.5	3.3	+33%



\*1) Average yield of new 13 groups (165 farmers who harvested *Phka Rumduol*) in 2012.

As a result, many members were satisfied with good harvest, except those damaged by floods occurred in Battambang. Looking at individuals' result, the highest yield of all was 5.4 tons per hectare.

## 2) Group fund Management and Collective Input Purchase

The table below shows the results of savings collection for the group funds at the end of 2013 wet season.

The total amount of savings pooled by the fifteen groups has reached to approximately 17,500 USD, which accounts for 92% of the planned amount. 13 out of 15 groups completed the savings collection from all of the members. These groups practiced collective purchase of seeds and fertilizers at the beginning of 2014 wet season by using the savings.

### Collection of Savings for Group Funds (Wet Season 2013)

No.	Size of land (ha)/member	No. of Members	Planned Amount of Payment (\$/member)			Total Amount Paid (\$/group)		
			Principal	Interest	Total	Plan	Actual	(%)
Battambang Province (5 groups)			(Sub Total)			7,520	5,915	79%
1	1.0	18	150.0	10.0	160.0	2,880	2,880	100%
2	0.5	17	75.0	5.0	80.0	1,360	1,360	100%
3	0.5	10	75.0	5.0	80.0	800	800	100%
4	0.5	11	75.0	5.0	80.0	880	155	18%
5	0.5	20	75.0	5.0	80.0	1,600	720	45%
Pursat Province (9 groups)			(Sub Total)			10,858	10,858	100%
6	0.5	23	82.5	0.0	82.5	1,898	1,898	100%
7	0.5	15	75.0	5.0	80.0	1,200	1,200	100%
8	0.5	20	75.0	5.0	80.0	1,600	1,600	100%
9	0.5	13	75.0	5.0	80.0	1,040	1,040	100%
10	0.5	9	75.0	5.0	80.0	720	720	100%
11	0.5	14	75.0	5.0	80.0	1,120	1,120	100%
12	0.5	12	75.0	5.0	80.0	960	960	100%
13	0.5	16	75.0	5.0	80.0	1,280	1,280	100%
14	0.5	13	75.0	5.0	80.0	1,040	1,040	100%
Kampong Chhnang Province (1 group)			(Sub Total)			768	768	100%
15	0.3	16	45.0	3.0	48.0	768	768	100%
Total (three provinces)		227				19,146	17,541	92%

Meanwhile, two groups in Battambang faced difficulty in the collection of savings as they were seriously hit by the floods. As relief measures, the project again had to provide them with agricultural inputs for wet season 2014.

### 3) Sales

In terms of rice paddy sales, 195 members (86%) sold their produce. The rest 32 members (14%) living mainly in Battambang did not sell it for various reasons: for example, some gained no surplus to sell due to flood or disease damage; others kept them for their own home consumption or seeds in the next crop season; and the others aimed to stock them until market price further rises up.

#### ■ Sales Price

The unit sales price was 1,168 KHR (0.3 USD) on average, which remained almost flat from the baseline (1,162 KHR/kg: 2012). Many members were not happy with this result.

#### Average Paddy Sales Price of the Pilot Groups

(Wet Season 2013, Variety: *Phka Rumduol*)

Province	No. of Groups	No. of Members	No. of Sellers	Average Price (KHR/kg)		
				(2012) <sup>*1)</sup>	2013	YoY
Battambang	5	76	48	1,314	1,234	-6%
Pursat	9	135	131	1,094	1,114	+2%
Kampong Chhnang	1	16	16	1,293	1,413	+9%
Total	15	227	195	1,162	1,168	+1%

\*1) Average sales price of the new 13 groups (165 farmers who sold *Phka Rumduol*) in 2012.

The prices were significantly influenced by a fall in domestic paddy market price compared to the same period in the previous year. In addition, in Battambang, Thai Baht (THB) is widely used as the basic unit of money in paddy transactions. As Baht considerably weakened than a year earlier, it led to a drop in the price of paddy in Cambodian Riel (KHR). Some members could not get a satisfactory price due to the reduced quality or bad color of paddy, which was caused by floods or plant lodging.

#### ■ Gross Sales

On average, the gross sales of paddy per hectare are estimated to be approximately 1,000 USD, up 38% from the baseline (728 USD/ha, 2012). As the majority of the members cultivated 0.5ha of land in the season, the gross sales per member would be approximately 500 USD.

**Average Gross Sales (Estimate)**  
(Wet Season 2013, Variety: *Phka Rumduol*)

Province	No. of Groups	No. of Members	No. of Sellers	Average Gross Sales (\$/ha)		
				(2012) <sup>*1)</sup>	2013 <sup>2)</sup>	YoY
Battambang	5	76	48	857	925	+8%
Pursat	9	135	131	690	1,035	+50%
Kampong Chhnang	1	16	16	675	986	+46%
Total	15	227	195	728	1,004	+38%

\*1) Average gross sales of the new 13 groups (165 farmers who sold *Phka Rumduol*) in 2012.

\*2) Average gross sales of the 15 groups (195 farmers who sold *Phka Rumduol*) in 2013.

**Net income**

The average cost and net income per hectare are estimated to be approximately USD 400 and USD 600, respectively.

**Average Net Profit of the Pilot Groups (Estimate)**  
(Wet Season 2013)

Province	Battambang	Pursat	Kampong Chhnang	Average
Gross Sales (\$/ha)	925	1,035	986	<b>1,004</b>
Cost (\$/ha)	403	380	601	<b>403</b>
Net Income (\$/ha)	522	656	384	<b>601</b>

## 8.2. Considerations in Adopting the Group-based Approach

In summary, in the first season of the pilot project (2013 wet season), rice yields and sales of the group members increased a lot on average as the result of adopting the group-based approach. While most of the groups successfully pooled savings in the group funds, a few groups could not make it. Despite the members' efforts, the average sales price did not significantly go up.

The outcomes of the activities in the second season (2014 wet season) are yet to be confirmed. However, the average rice yields are likely to go down compared to the first season, because many members have negatively been affected by a prolonged dry spell. While some groups are likely to obtain satisfactory sales prices by attracting new buyers, the average sales price seems to be slightly getting down in many groups.

Given these outcomes and lessons learned so far, the following points should be taken into considerations when you adopt the group-based approach in your project implementation.

## 1) Not for “the Poorest of the Poor”

The group-based approach aims at neither the poorest villages nor the poorest farmers. Rather, as mentioned earlier, projects are encouraged to select villages in certain conditions suitable for promoting rice production and marketing. Farmers who wish to produce rice only for subsistence or those who borrow money from many lenders cannot be entitled to join the group.

Why is this? One primary reason is, unless these preconditions are met, farmer group’s commercial activities to improve rice yields and sales cannot be feasible irrespective of the members’ motivations and efforts. If the primary purpose of your project is to reach the poorest, therefore, different solutions should be sought.

## 2) Cannot Work without Adequate Water Supply

Among the criteria for selecting target villages and farmer groups (see **Chapter 2 and 3**), the importance of “access to water resources” cannot be overemphasized.

Because this criterion could not be so rigidly adopted in APPP, not a few members have been negatively affected by droughts. Due to water shortage some could not even practice the recommended techniques such as line-transplanting and drum seeding. Floods also negatively impacted rice harvest of some groups. They had to get additional inputs from the project to maintain their group funds.

This suggests that the group-based approach cannot work in the areas with no adequate water supply. When your project has to work with farmers who depend solely on erratic rainfall, therefore, you should carefully assess if promoting their group-based activities to improve their rice yields and sales is feasible.



### 3) More Needs for Cost- and Labor-Saving?

Although the pilot project requires every group member to adopt all of the recommended cultivation techniques, the actual adoption rate of some techniques remains low. There is no single cause for this, but costs and risks associated with the adoption cannot be overlooked.

For example, as mentioned earlier, practicing the “line-transplanting” method requires more labor and time. For farmers who are used to practice direct seeding, the introduction of the technique leads to increases in the costs of production. The cost of “land leveling” can also be an extra expense for many farmers, because more time and fuels are needed to reshape carefully their fields by a hand tractor. The recommended “nursery preparation” technique may also consume more labor compared to the conventional method. Although these techniques are essential to increase rice yields and quality, once harvest is lost by flood or drought after investment, it can lead to a greater financial loss for farmers.

If your project put a higher priority on responding to such farmers’ needs for “minimizing costs, labor and risks” rather than “increasing yields and income”, a different approach should be undertaken. In this case, the subjects of FFS had better focus on labor- and cost-saving techniques.

### 4) Sustainability of Group Funds

After support from projects ends, each farmer group should make their own decision whether or not to continue using their group fund. But in case they continue, there are challenges to be tackled.

First, the interest rate needs to be set at an adequate level. If compounded on a monthly basis, the interest rate charged on APPP’s group funds is below 1.0 %, which is much lower than market interest rate (2.0-3.0%). However, if market prices of chemical fertilizers and seeds rise by inflation in future, the real value of their capital would be reduced and the members would become unable to keep purchasing enough amounts of inputs. Groups should therefore be encouraged to raise their interest rate to make it as high as market rate.

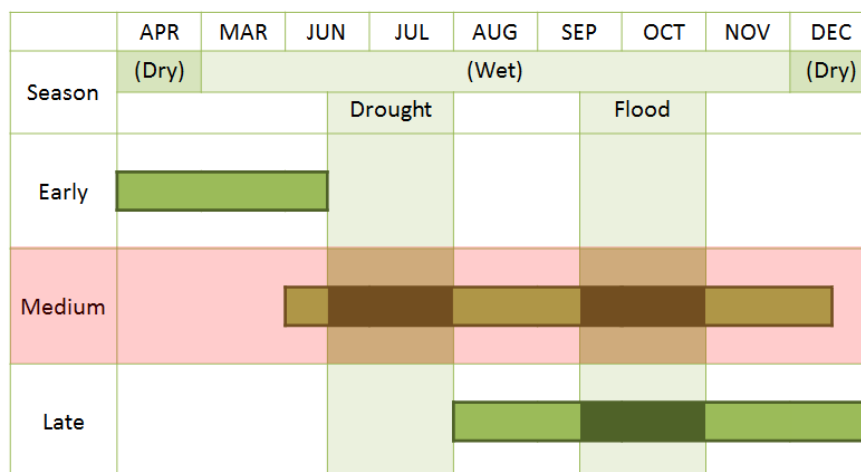
The biggest challenge would be managing default risk. In case many members in a group became unable to make repayments (savings) due to crop disease damage or natural disasters, it would be hard for such a small-scale fund to survive by recovering the loss on its own. Realistic ways to ensure sustainability might be converting farmer groups to agricultural cooperatives that have stronger financial bases or encouraging them to go under the umbrella of existing microfinance institutions.

### 5) Risks Involved In High Demand Fragrant Rice

In the pilot project of APPP, group members have chosen to grow fragrant rice such as *Phka Rumduol* and *Somaly* because of the high demand and prices of the varieties in market.

But these photo-sensitive and medium maturing varieties can grow only in wet season. Therefore, as shown in the figure below, they are exposed to much higher risks of flood (usually in September or October) and drought (in June or July) than short- or late-maturing varieties. These medium varieties grow so tall that they have poorer lodging resistance, too.

### Higher Risks Faced by Medium Variety Growers



Furthermore, APPP has found that these fragrant varieties are much more vulnerable to rice blast disease. Before making a decision on a rice variety to grow, therefore, group members should be made aware of both potential benefits and risks of producing these highly demanded fragrant varieties.

## 6) Clustering Farmer Groups for Stronger Bargaining Power

In the pilot project of APPP, the group members have reported that rice millers and middlemen have started to notice that the rice produced by them is of high quality and give priority to buying from them. However, the average sales prices have not yet increased.

From the viewpoint of strengthening the unity and cohesion of members, the size of a farmer group should be kept small and therefore the number of the members per group should not exceed twenty members. From the viewpoint of enhancing members’ bargaining power, however, their production scale may be still too small to negotiate and obtain advantageous terms from buyers who demand bulk purchase.

The fifteen rice farmer groups supported by APPP are scattered across the three target provinces, but if possible it is worth a try for your project to organize a certain number of farmer groups that produce a common rice variety within a defined area. The scale of each group is small, but clustering these groups could be a more effective way to boost the appeal of their area as a “quality-rice-production sport” to buyers and enhance their bargaining power.

# ANNEX

## Annex 1

### PROJECT ANNOUNCEMENT

(SAMPLE)

The Project for Agricultural Productivity Promotion in West Tonle Sap (APPP)  
\_\_\_\_\_ Provincial Department of Agriculture

In \_\_\_\_\_ village of \_\_\_\_\_ commune, the Project for Agricultural Productivity Promotion in West Tonle Sap (APPP) is going to help rice farmer groups enhance the quality and quantity of rice paddy for sale.

With support from the project, all members of a farmer group will have opportunities to engage in three main activities:

- 1) Rice cultivation through a training program called Farmers Field School
- 2) Management of group fund to purchase quality agricultural inputs
- 3) Collective actions for marketing and sales of products

Rice farmers who can commit themselves to carry out these activities to improve rice yields and sales can organize a group and apply for the project. The deadline of submitting applications is \_\_\_\_\_.

#### 1. Objectives

The project will support farmer groups' effort to produce and sell an increased amount of quality rice paddy so that their agricultural income can be stabilized or increased.

#### 2. Project Period

From \_\_\_\_\_ to \_\_\_\_\_ ( \_\_\_ years, for wet season cultivation)

#### 3. Standard size of a farmer group

Total production area of a group (Max)	Maximum number of group members	Plot size per member	Target rice variety
_____ ha	20 households	_____ ha	All members will need to select and grow a specific rice specific variety together



#### 4. Conditions for applications

The applicant group members must understand and meet the following conditions.

	Requirement	Remarks
1)	<b>Purpose of rice production</b>	All members should produce quality rice paddy for selling in market and earning cash income. The group's rice production activities are not for home consumption.
2)	<b>Number of members</b>	The number of members in a group should not exceed 20 members.
3)	<b>Access to water resources</b>	All members should have access to water resources such as river, pond or irrigation scheme for supplementary irrigation.
4)	<b>Size and ownership of paddy field</b>	Each member must own ___ha of rice fields that can be exclusively used for group's activity. Leased land is not acceptable.
5)	<b>Closeness</b>	All members should be neighbors in good relationships. Both the residence and farmland of the members must be at close distance each other to make frequent group meetings and collective actions possible. However, only one person per family can join the same group (e.g. a married couple cannot join the same group).
6)	<b>Economic condition</b>	All members should not have an outstanding debt. They should not be borrowing money from more than two money lenders or organizations (e.g. rice millers, middleman, bank, microfinance institutions).
7)	<b>Agricultural support from the other donors or NGOs</b>	All members should not be joining or benefiting from the other agricultural development projects.
8)	<b>Payment of the membership fee</b>	Each member must pay ___USD to join a group. The fee will be saved in a group fund to be opened, and managed by the members themselves. The money is going to be used for the group's common benefit and cannot be refunded to each member.

## Annex 1

### 5. Features of Group Activities and Support from the Project

#### 1) Rice Cultivation through Farmers Field School

The project will implement a training program called Farmers Field School (FFS) for farmer group every wet season. Members can learn rice cultivation techniques essential to improve yields and quality of rice. Every member is required to attend every session of the training program and practice all the techniques recommended by the project in \_\_\_\_ ha of rice fields.

#### 2) Management of Group Funds

The project will help farmer group purchase necessary agricultural inputs by establishing and managing a group fund on their own. For establishing a group fund, each member needs to pay \_\_\_\_ USD as a membership fee.

In wet season of the first year, the project provides every member with quality seeds (\_\_\_\_kg) and chemical fertilizers (\_\_\_\_kg) necessary for rice cultivation in \_\_\_\_ha of land. Instead, after harvesting and selling rice at the end of the season, each member has to save \_\_\_\_ USD in their group fund. From the next wet season, members continue to buy necessary inputs by making use of the money in their fund.

For proper management of fund, the project will provide training on accounting, too. Group members need to keep recording all the transactions in group fund.

#### 3) Marketing and Sales

To obtain higher sales prices from rice buyers, group members need to grow rice variety highly demanded in market, keep the quality of their products at high level.

With support from the project, group members should plan and practice collective activities for marketing and sales, such as visiting rice millers to understand their demands, collecting and sharing market information, and advertising.

### 6. Selection

Applications from several groups will be carefully examined and screened by the project according to its specific selection criteria. To collect necessary information for the screening, the project may interview with the representatives of the applicant groups

and directly observe members' fields.

Among all applicant groups, the project will select ONE candidate group. The members of the candidate group will have a meeting with the project to fully understand the purpose and rules of the group activities. After making agreement on the rules, the formation of the group can officially be approved by the project.

## **7. Submission Requirements**

- Application form (available from \_\_\_\_\_, extension staff of \_\_\_\_\_ district agricultural office)

**END**



## Bylaws of Rice Farmer Group (Sample)

Date: .....

### CHAPTER 1

#### Name, Address and Objectives

##### ARTICLE 1: Name and Address

The name of this farmers' group shall be: .....

The group shall consist of the members living in the following address:

Village: ..... Commune: .....  
District: ..... Province: .....

##### ARTICLE 2: Objectives

The objective of the farmers' group is to produce and sell an increased amount of quality rice paddy at a better price by cooperating each other among its members, so that their agricultural income is stabled or increased.

##### ARTICLE 3: Period of the Activities

The activities of the farmers' group shall be carried out under the rules and regulations stipulated hereunder. The period of the group's activities shall be two years from.....to..... The extension of the period shall be decided by the group members at the end of the original period.

### CHAPTER 2

#### Conditions of Membership

##### ARTICLE 4: Conditions of Membership

Farmers who wish to be a member of the farmers' group shall satisfy the following conditions:

## Annex 3

- 1) Own a paddy field of .....ha to be exclusively used for group's rice production activity.
- 2) Be neighbours each other to make frequent group meetings and collective actions possible.
- 3) Do not have an outstanding debt or borrow money from more than two money lenders or organizations.
- 4) Not participating in agricultural (rice cultivation) projects implemented by the other donors or NGOs.
- 5) Pay ..... US Dollars ( ..... Riel) as a membership fee.

### **CHAPTER 3 Rights and Obligations**

The members of the farmers' group shall have the rights and obligations stipulated in the following articles.

#### **ARTICLE 5: Provision of Agricultural Inputs**

For the cultivation in the first rainy season only, rice seeds (.....kg: name of rice variety: .....) and chemical fertilizers (.....kg) for the cultivation of .....ha shall be provided by the project to each group member. The total cost of the provided inputs will be approximately ..... US dollars (..... riel) per member.

#### **ARTICLE 6: Participation in Rice Cultivation Training**

Each member shall participate in every session of rice cultivation training (FFS: Farmers' Field School) carried out by the project for two wet seasons.

#### **ARTICLE 7: Paddy Cultivation Methods to be Practiced**

Each member shall practice all of the following cultivation methods demonstrated in the FFS in their own paddy field of ..... ha.

- 1) Seed selection by water, and hot water disinfection.
- 2) Making seed bed with mixing rice husk charcoal in the soil.

- 3) Sowing .....kg of selected seeds in the seed bed.
- 4) Ploughing and tilling the paddy field as level as possible.
- 5) Using three weeks (21 days) seedlings for transplanting.
- 6) Practice line transplanting with the following space:  
20cm (space between hills) x 25cm (space between ridges or lines)
- 7) Fertilizer application (.....kg/.....ha)  
Basal: DAP .....kg/ .....ha, just before transplanting  
1<sup>st</sup> Top Dressing: UREA .....kg/.....ha, one month after transplanting  
2<sup>nd</sup> Top Dressing: UREA .....kg/.....ha, at a timing of panicle initiation
- 8) Appropriate field management including frequent weeding, removing alien varieties, close monitoring against disease occurrence and insect damage.

**ARTICLE 8: Paddy Quality to be Required:**

Each member shall make efforts to produce paddy that meet the following quality standard for its sales promotion. In harvesting period, paddy quality inspection will be conducted by the group members with the extension staff working for the project.

- 1) No different varieties are contained.
- 2) No weed seeds are contained.
- 3) No pebbles are contained.
- 4) Blank (sterile) head of paddy grains are hardly observed.
- 5) Paddy grains damaged by insects are hardly observed.
- 6) Color of paddy is natural and uniform.
- 7) (In the case of dry paddy,) moisture content is 14% or equivalent.

**ARTICLE 9: Collection of Price Information and Negotiation with Buyers:**

For the sale of paddy produced through the group activity, the group members shall collect price information from as many potential buyers as possible and negotiate with them together.

## Annex 3

### **ARTICLE 10: Collective Shipping and Sales:**

Each member shall make an individual effort to ship and sell paddy that passes the above mentioned quality inspection. Collective shipping and sales activity would also be practiced as a group when it is possible.

### **ARTICLE 11: Savings in Group Fund**

By the end of the next February, each member shall repay ..... US dollars (..... Riel) by cash, which shall be deposited to the group's savings account. In addition to .....US dollars ( .....Riel) as the repayment of the input cost, the payment of .....US dollars (.....Riel) is required as an interest to maintain and increase the capital of the group.

A member who fails the repayment in the 1<sup>st</sup> wet season shall return the outstanding amount with additional interest by the end of the next wet season. In an occurrence of severe drought or flood affecting a majority of members, however, the repayment condition can be changed by the group in consultation with the project.

### **ARTICLE 12: Collective Purchase of Agricultural Input**

For the 2<sup>nd</sup> year's cultivation, the group shall buy seeds and chemical fertilizers for .....ha together by using the money saved in the group fund, and distribute them fairly to each member.

### **ARTICLE 13: Storage of Materials Donated by the Project**

A set of drum cans, nets, thermometers, water basins shall be donated by the project to the farmers' group for common use by the group members. These materials shall be kept in good conditions all the time and stored by the group leader.

In case that these materials are damaged or lost, the group members are responsible for replacing them with new ones by using deposited membership fee.



**CHAPTER 4**  
**Organization Structure and Management**

**ARTICLE 14: Selection of Group Representatives**

The following representative members of the farmers' group shall be elected from and by the group members. The assignment period of the members shall be for two years.

- 1) Group leader
- 2) Group sub-leader
- 3) Accountant
- 4) Marketing staff

**ARTICLE 15: Duties of the Group Leader**

The group leader shall have the following duties:

- 1) Chair group meeting and manage overall activities of the group.
- 2) Keep an attendance record of the group meeting and training, and report it to the extension staff whenever required.
- 3) Monitor and record the progress of the member's cultivation practice and harvest and sales result with the extension staff.
- 4) Open a bank account together with the accountant, and supervise the management of the group fund (cash and savings)

**ARTICLE 16: Duties of the Group Sub-leader**

The group sub-leader shall have the following duties:

- 1) Support all the activities of the group leader, accountant, and marketing staff whenever required.
- 2) Open a bank account together with the accountant, and supervise the management of the group fund (cash and savings).

**ARTICLE 17: Duties of the Accountant**

The accountant of the group shall have the following duties:

## Annex 3

- 1) Open a bank account of the group and deposit the collected membership fee.
- 2) Collect money from each member after paddy sales at the end of every rainy season, and save it in the bank.
- 3) Keep and manage the group fund (cash and savings) properly by recording accounting books, and disclose it to the members whenever required.
- 4) Before the beginning of rainy season cultivation, purchase necessary agricultural inputs and distribute them fairly to the members.

### **ARTICLE 18: Duties of the Marketing Staff**

The marketing staff of the group shall have the following duties.

- 1) Coordinate group actions in terms of marketing and sales, for example,
  - Contact as many buyers as possible and collect information about rice paddy price.
  - Share the collected information with the other group members.
  - Negotiate with buyers on rice paddy price as a representative of the group.

### **ARTICLE 19: Group Meeting**

Group meeting shall be held whenever necessary to discuss any issues concerning the group activities, including the election of group representatives. The date and time of the meeting shall be set up and informed to the members by the group leader. Each member is obliged to participate in the meeting, and in case (s)he is not available, a family member could substitute for him/her.

### **ARTICLE 20: Penalties**

When a member failed to participate in group meeting more than three times a year due to his/her negligence, (s)he shall charge a penalty at ..... US dollars (..... riel).

**ARTICLE 21: Withdrawal from Membership**

A member has the right to withdraw from the group membership by getting approval from both the other group members and the project. However, the cost of the inputs provided for the withdrawing member shall be reimbursed to the group with interest.

**END**

**GROUP MEMBERS LIST**

Village chief's name: \_\_\_\_\_

Date of registration: \_\_\_\_\_

Signature: \_\_\_\_\_

Province		District		Commune		Village	
No.	Name	Sex	Age	Position (leader, sub-leader, accountant & marketing)	Size of land for paddy production (all varieties) (ha)	Telephone No. (if available)	Signature
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
				Total	(ha)		

# BOOK KEEPING GUIDE

Agricultural Productivity Promotion Project  
in West Tonle Sap  
(APPP)

## Annex 5

### 1. INTRODUCTION

Book keeping is important to manage your group fund properly. Because your group's money is always kept either as cash or in bank savings account, you always need to use the following three types of book keeping forms.

- 1) **Cash Book:** A cash book is a record of your group's cash transaction. When your group purchases something by cash, you need to record the amount of cash outflow in the cash book. When your group gets cash income, too, the amount of cash inflow needs to be recorded.
  
- 2) **Deposit Book:** A deposit book is a record of transaction in your group's bank savings account. When your group withdraws cash from the bank, you need to record the amount of each withdrawal in the deposit book. When your group deposits money into the bank, it also needs to be recorded.
  
- 3) **Cash Payment/Collection Record:** A cash payment/collection record is also used as a record of your group's cash transaction, but only when you receive or collect money from more than one person for the same purpose or item. (e.g. membership fee, group fund)

## 2. BOOK KEEPING METHOD

When you collect money from several group members, you need to record it both in "1) cash payment/collection record" and "2) cash book". Let's take a look at the following case and understand how to record the transaction.

### Case 1:

Your group has 3 members: Mony, Sothea and Lina. You requested each of them to pay 20,000 riel as group membership fee.

- 1) March 5, 2013                      Mony and Sothea paid 20,000 riel each.
- 2) March 15, 2013                    Lina paid 20,000 riel.

As a result, you have completed collection on March 15, and a total amount of membership fee you collected was 60,000 riel.

### 1) Cash Payment/Collection Record

You use "cash payment/collection record" to record each member's name and payment amount. "Ref. No (reference number)." and "Item" have to be written on the top.

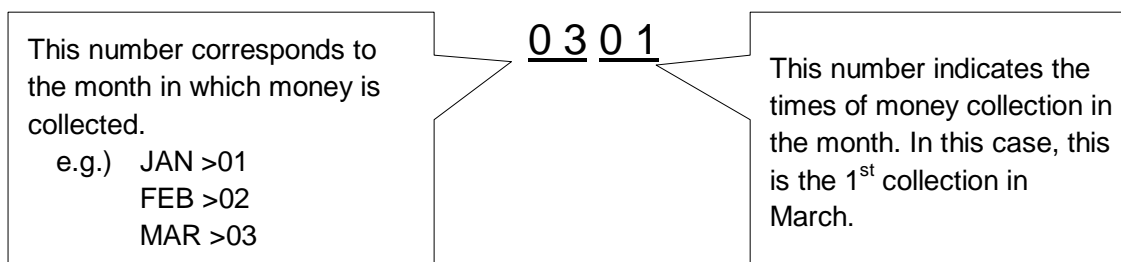
#### Cash Payment/Collection Record

Ref. No.    0301                                  Collection closing date: 15/03/13  
Item        Membership Fee

No.	Member's Name	Date	Amount	Signature
1	Mony	05/03/13	20,000	<i>Mony</i>
2	Sothea	05/03/13	20,000	<i>Sothea</i>
3	Lina	15/03/13	20,000	<i>Lina</i>
Total			60,000	

## Annex 5

Note that “Ref. No. (Reference Number)” should be written for the identification of the record. In the case above, the No. is 0301.



### 2) Cash Book

A cash book is a record of your group’s cash transaction. Therefore, after finishing collection, you need to record the transaction in your cash book, too. In cash book, however, you don’t need to write down the details of the transaction, but just its sum.

In the case above, you completed membership fee collection on 15 March, receiving a total of 60,000 riel. This transaction should be recorded as shown below.

No.            1

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**Cash Book**

(Currency:    Riel    )

Date	Item	Ref. No.	Received (In)	Paid/ /Deposited (Out)	Balance
15/03/13	Membership Fee	0301	60,000		60,000

You also need to write down “Ref. No.” of the cash payment/collection record, so that you can refer to the details (“when”, “how much” was paid by “whom”).

Continuously, let’s have a look at the next case and keep recording each of the transaction.



## Case 2:

- 3) March 16, 2013 You went to bank and deposited 40,000 riel into the savings account.
- 4) April 1, 2013 You went to bank and withdrew 30,000 riel from the savings account.
- 5) April 5, 2013 You purchased seeds at a shop and paid 40,000 riel.
- 6) April 5, 2013 You paid 5,000 riel for transporting purchased seeds to your village.

## Cash Book

No. 1

(Currency: Riel )

Date	Item	Ref. No.	Received (In)	Paid/ /Deposited (Out)	Balance
15/03/13	Membership Fee	0301	60,000		60,000
16/03/13	Deposit to Bank			40,000	20,000
01/04/13	Cash withdrawal		30,000		50,000
05/04/13	Seeds Purchase			40,000	10,000
05/04/13	Transport for Purchased Seeds			5,000	5,000

Every time you get or pay cash, you need to calculate and write down the cash balance, too, so that anytime you can check how much cash remain with you.

In the case above, for example, your cash balance should be 5,000 riel at the end of 5 April 2013.

## Annex 5

### 3) Deposit Book

A deposit book is a record of transaction in your group's bank savings account. When your group withdraws cash from the bank, or deposits money into the bank, it needs to be recorded not only your cash book, but also in your deposit book, too.

Let's have a look at the same case already recorded in the cash book above.

Case 2:

- 3) March 16, 2013 You went to bank and deposited 40,000 riel into the savings account.
- 4) April 1, 2013 You went to bank and withdrew 30,000 riel from the savings account.

### Deposit Book

No. 1

---

(Currency: Riel )

Date	Item	Ref. No.	Received /Deposited (In)	Paid/ Wirhdrawn (Out)	Balance
16/03/13	Deposit to Bank		40,000		40,000
01/04/13	Cash withdrawal			30,000	10,000

You can record the transaction in almost the same way as you do in cash book.

###

When you want to know how much amount of money is in your group fund, you always need check the latest balance of cash book and deposit book. The sum of both cash and deposit is the balance of your group fund.

END





Cash Payment/Collection Record (**SAMPLE**)Ref. No. **0301**Collection Closing date: **15-Mar-13**Item **Membership Fee**

No.	Member's Name	Date	Amount	Signature
<b>1</b>	<b>Mony</b>	<b>5-Mar-13</b>	<b>20,000</b>	<i>Mony</i>
<b>2</b>	<b>Sothea</b>	<b>5-Mar-13</b>	<b>20,000</b>	<i>Sothea</i>
<b>3</b>	<b>Lina</b>	<b>15-Mar-13</b>	<b>20,000</b>	<i>Lina</i>
Total			<b>60,000</b>	

## Accounting Report

Period: From \_\_\_\_\_ to \_\_\_\_\_

Province:	District:	Commune:
Village:	No.of group member:	
Accountant:	Date:	Sign:
Group Leader:	Date:	Sign:

### 1 AMOUNT RECEIVED

	Item	Amount
1		
2		
3		
4		
5		
6		
7		
8		
	<b>Total Amount Received</b>	

### 2 AMOUNT PAID

	Item	Amount
1		
2		
3		
4		
5		
6		
7		
8		
	<b>Total Amount Paid</b>	

### 3 BALANCE

1. Total Amount Received	2. Total Amount Paid	<b>Balance (=1-2)</b>

4. Cash Balance	5. Bank deposit balance	<b>Balance (=4+5)</b>



