

Good governance of rice field fishery management



USAID
FROM THE AMERICAN PEOPLE



GOOD GOVERNANCE OF RICE FIELD FISHERY MANAGEMENT

Author

Kim Miratori and Alan Brooks

Citation

This publication should be cited as: Miratori K and Brooks A. 2015. Good governance of rice field fishery management. Penang, Malaysia: WorldFish. Program Brief: 2015-19.

Acknowledgments

The author is grateful to our nongovernmental organization (NGO) and government partners, such as Aphiwat Neary Khmer Organization (ANKO), Trailblazer Cambodia Organization (TCO), Cambodia Organization for Women Support (COWS), Village Support Group (VSG), the Fisheries Administration Cantonment and local authorities who actively participate in implementing this approach at the grassroots level to improve the governance of their rice field fisheries systems in order to increase their community's fish productivity.

The Rice Field Fisheries Enhancement Project is funded by the United States Agency for International Development (USAID).

CONTENTS

What are rice field fisheries?	4
What is a community fish refuge (CFR) committee?	5
How do we define good governance of a CFR committee?	6
Building good governance and management capability of the CFR committee	7
Benefits of good governance: Lessons learned	11

WHAT ARE RICE FIELD FISHERIES?

Rice field fisheries refer to the capture of wild fish and other aquatic animals from flooded rice field agroecosystems and their supporting infrastructure, such as canals, channels, streams and other bodies of water. Central to maintaining fish productivity in rice fields is a designated conservation area known as a community fish refuge (CFR) that connects to rice fields to form an area known as the zone of influence. In 2012, 640 households living

within the zone of influence of 40 CFR target areas were surveyed to better understand fish catch and livelihoods in rice field fisheries. This livelihood survey found that the total average amount of fish caught per household per year was 200 kilograms (kg) and that 76 kg of this amount came from rice fields. Rice fields are important fishing grounds for both farmers and fishers and provide easy access to productive fisheries.



Figure 1. Rice field fishery agroecosystem. Top left: Rice fields. Top right: Channel. Bottom: Community fish refuge.

WHAT IS A COMMUNITY FISH REFUGE (CFR) COMMITTEE?

A CFR committee is made up of local volunteers, elected by the community of people who live in the CFR's zone of influence. CFR committees are made up of 5 to 11 members, depending on the population and number of villages in their zone of influence. The main duties of these committees are to develop bylaws and

CFR management action plans; to define the CFR demarcation boundary; to hold regular meetings; and to manage fish pathways and other domains of rice field fisheries systems with support from local people, local authorities and the Fisheries Administration.



Photo Credit: Aphiwat Neary/Kimer Organization (ANKO)

H.E. Nao Thouk, former general director of the Fisheries Administration, presents a gift to the best CFR committee.

HOW DO WE DEFINE GOOD GOVERNANCE OF A CFR COMMITTEE?

Good governance of CFR committees enables effective decision-making and implementation of processes in order to meet CFR committee goals and objectives. Several practices can help to ensure good governance. These

include organizational management, planning and implementation, resource mobilization, linkages and networking, and representation and participation.

Characteristics of good governance	Description of characteristics
Organizational management	CFR committee has regular meetings, bylaws, and defined roles and communication among executive members.
Planning and implementation	CFR committee has developed priority action plans, implemented the action plans, monitored the changes, and can solve their problems and conflicts.
Resource mobilization	CFR committee has collected funds from various sources, uses the funds in a transparent way, keeps records and participates in decision-making processes.
Linkages and networking	CFR committee has a good relationship with local authorities, the Fisheries Administration Cantonment, other traditional groups, NGOs working in their communities, and the private sector. Some action plans have been integrated into commune plans and have received support from various stakeholders. The committee has attended commune council meetings.
Representation and participation	CFR committee has gender diversity among the committee members and has various representatives from different locations in the communities who participate in planning, decision-making and implementation of action plans.

Table 1. Characteristics of good governance.

BUILDING GOOD GOVERNANCE AND MANAGEMENT CAPABILITY OF THE CFR COMMITTEE

In order to achieve the key characteristics for good governance of rice field fisheries through the CFR committee, the Rice Field Fisheries Enhancement Project has identified four key developmental stages.

Stage 1: Partner capacity building

Partner NGOs responsible for developing solid practices with CFR committees have a solid understanding of management of rice field fisheries and the CFR. The capacity-building process is carried out in two stages: (i) formal training and (ii) field practice and coaching. The formal skills development process focuses on good facilitation skills and use of participatory analytical tools such as community visioning, problem tree analysis, stakeholder analysis and community-led action plan development (Table 2). Following training, partner staff practice their learning in selected villages, accompanied and coached by trainers.

Stage 2: Stakeholder awareness and empowerment

The success of CFRs maintaining productive rice field fisheries is dependent upon a wide range of users, interest groups and official institutions. Effective land and water use is an important factor. Therefore, this stage ensures awareness and aims for positive contributions from other village institutions (rice bank committees, village development committees, etc.), commune-level authorities and other NGOs working in the area. Two half-day consultation meetings should be arranged with (i) commune councilors and village chiefs within a region and (ii) village commune councilors, village chiefs, community representatives and other civil society organization key persons. During these meetings, ideas are shared, objectives are presented, success stories are told and visions for future actions are explored.

Visioning map	A visioning map is a visual description of where the community currently is and where it wants to be when it achieves its vision for the future.
Problem tree analysis	Problem tree analysis is a facilitated discussion with community members where they are asked to identify the root causes that limit their ability to attain their vision.
Stakeholder analysis	Stakeholder analysis is the process of identifying existing community-based stakeholders and assessing their interest in participating in action plans and the resources they have to contribute to them.
Action plan	An action plan is a roadmap that helps a community to achieve its vision. It helps communities and CFR committees define the resources, including stakeholders and funding, they need to secure in order to implement action plans.

Table 2. Definitions of participatory action tools.

Stage 3: CFR committee capacity development

Other committee members and key stakeholders, including local NGO staff, are included in two half-day capacity-development sessions. In this way, misunderstandings are minimized, collaboration of resource user groups is made easier, and overall community-level land and water management is better integrated.

The workshops involved five steps that aimed at assisting the CFR committee members to develop, implement and monitor a 6-month action plan to improve their rice field fisheries ecosystem.

Step 1: Introduce the CFR and rice field fisheries system concepts.

- Present photos and describe the three domains of rice field fisheries systems (CFR or conservation lake, channel, and rice field).

Step 2: Build a realistic vision.

- Ask participants to reflect on both positive and negative characteristics of rice field fisheries systems and on their vision for rice field fisheries domains over the next 3 years.
- Using a visioning map, develop a common vision for the whole community for each of the three domains of rice field fisheries systems.
- Finalize the vision map and present it back to the meeting for approval and agreement.

Step 3: Facilitate problem tree analysis.

- Identify the root causes preventing

- communities from achieving their vision.
- Define the possible solutions as action plans to remove those root causes.

Step 4: Conduct a stakeholder analysis.

- Identify existing stakeholders working in the village.
- Assess the interests and resources of those that can support the implementation of priority action plans (see Step 5). For example, some rice bank committees and pagoda committees have resources such as funds, paddy rice and labor.

Step 5: Create and prioritize an action plan for the next 6-month implementation period.

- Based on a visioning map and using the action plan template as a monitoring tool (see Figure 4), create a roadmap to help the community achieve their vision.
- Define resources (people, money, materials and networks) to support the implementation of the activities in the action plan.

Stage 4: Follow-up, review and strengthening

The Rice Field Fisheries Enhancement Project has developed four steps that offer the best chance for a sustainable, well-connected and motivated committee with opportunities for continued future resourcing.

Step 1: Organize a series of follow-up visits over a period of 6 months to support committees with their action plans, provide coaching,



Figure 2. Top left: Introducing the three domains of rice field fisheries. Top right: Community visioning map. Bottom left: Facilitating problem tree analysis. Bottom right: Defining solutions.

and build important networks with other institutions within the village and commune.

Step 2: Hold a stakeholder workshop. Activities at the workshop should include (i) review of and reflection on key successes and challenges; (ii) roleplays by skilled facilitators that enact the characteristics of good governance and management; (iii) participatory assessment that describes the current status of each of the five characteristics of good governance; (iv) a field visit; and (v) drafting of the next 6-month plan.

Step 3: Followup on the second 6-month action plan. During this step, more emphasis is placed

on improving governance and identifying opportunities for integrating elements of the plan into the the commune investment plan or other fundraising sources. Ideally, there are two or three visits with each CFR committee over a 6-month period.

Step 4: Conduct a second stakeholder workshop. This workshop is similar to the stakeholder workshop described in Step 2. However, since external support of the process will be ending, there is an additional focus on identifying opportunities for sustainability of the CFR committee and ongoing support from others stakeholders such as the commune council.

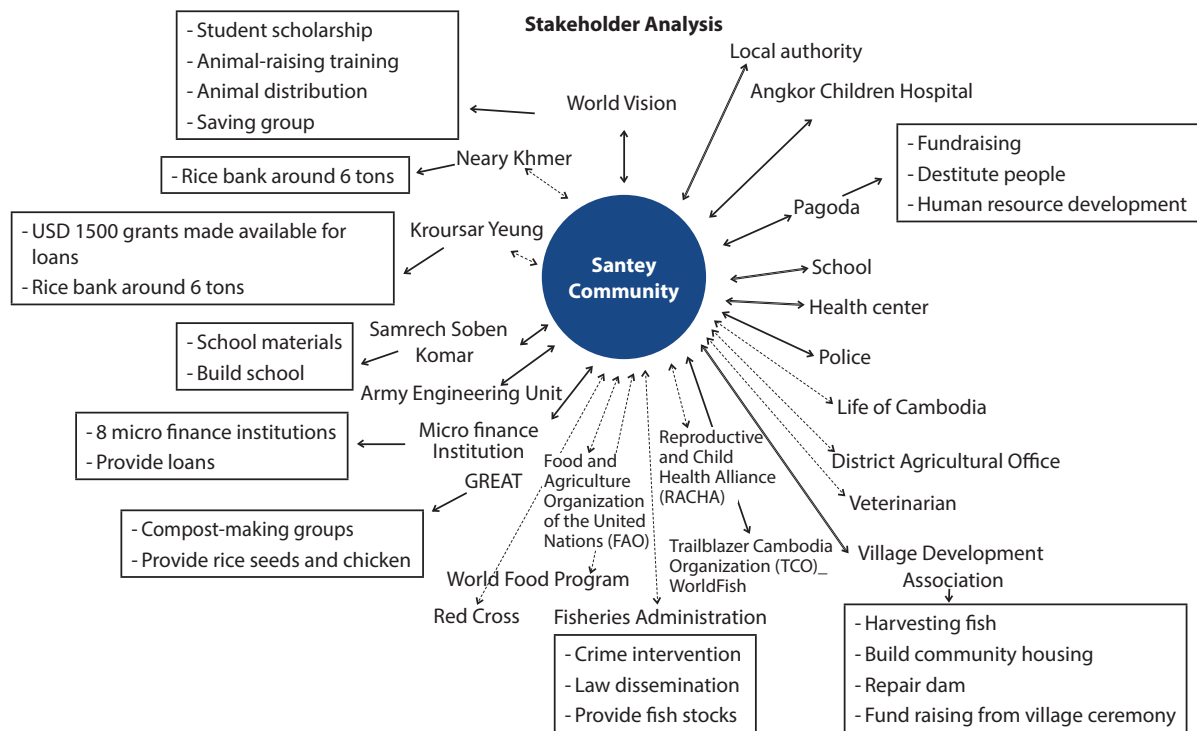


Figure 3. Example of a stakeholder analysis.

Action plan	How to do	Responsible person	Timeframe	How to monitor
Change water flow direction to avoid flood (level 2->3)	<ul style="list-style-type: none"> - Understand possibility of expanding water canal - Meet to discuss and plan for canal expansion - Raise funds to implement plan 	<ul style="list-style-type: none"> - Village Development Org. - Local authority 	May 2014 to November 2014	
Build dam to store water to improve aquatic resources (level 4->4)	<ul style="list-style-type: none"> - Meet to raise awareness on the dam reparation - Harvest fish from the community pond as a fundraiser to implement the activity - Contact contractor to build dam - Repair dam, follow up and monitor 	<ul style="list-style-type: none"> - Local authority - Doeun Norn - Khem Soeurn - Villagers - Water user committee 	May 2014 to November 2014	
Harvest 5-6 tons of rice twice a year (level 3->3)	<ul style="list-style-type: none"> - Hold technical training - Build dam to store water for dry season rice cultivation - Improve knowledge in choosing rice seeds and fertilizers - Integrate this action plan into commune investment plan - Monitor the implementation 	<ul style="list-style-type: none"> - Village Development Org. - Local authority - Water user committee 	Started October 2014	
Maintain CFR well and increase fish (level 3->4)	<ul style="list-style-type: none"> - Build extra 228 - meter fence to protect the CFR - Plant 100 trees around the pond - Plant vegetables around the pond (winter melon, chili, eggplant, etc.) - Do fundraising (village ceremony, household contribution) 	<ul style="list-style-type: none"> - Doeun Norn - Tak Khon - Dith Vy 	March 2014 to September 2014	
Prevent illegal fishing and pesticide activities and increase rice field fish refuge and concrete rings (level 3->4)	<ul style="list-style-type: none"> - Request permission to disseminate fisheries law on commune level - Meet to disseminate fisheries law - Issue recognition paper of the community pond to other nearby villages - Improve patrol and cooperation between villagers and authority - Request to have organic pesticide technician to train and provide information 	<ul style="list-style-type: none"> - Ong Chhan - Tak Khon - Doeun Norn - Fisheries Administration - Local authority - Community 	to July 2015	

Figure 4. Example of a 6-month action plan.

Characteristics of governance of CFR committee

	Cultivating (1 score)	Growing (2 scores)	Mature (3 scores)
Organizational management	<ul style="list-style-type: none"> No regular meetings Rules and regulations were decided by a few members of CFR committee No regular, verbal communication to members Most members have unclear idea of the role of the CFR committee 	<ul style="list-style-type: none"> Irregular meetings (less than 4 times per year) Rules and regulations were decided by some members of CFR committee Irregular verbal communication to members Some members have unclear idea of the role of the CFR committee 	<ul style="list-style-type: none"> Regular meetings (more than 4 times per year) Governance procedures followed with decisions made democratically with good communication to the community Members have a clear idea of the role of the CFR committee
Planning and implementing	<ul style="list-style-type: none"> Activities not planned and implemented Need total support from NGOs 	<ul style="list-style-type: none"> Activities planned and implemented by few committee members Some support from NGOs 	<ul style="list-style-type: none"> Activities planned and implemented by all committee members Little support from NGOs
Resource mobilization	<ul style="list-style-type: none"> No fundraising mechanism No bookkeeping system 	<ul style="list-style-type: none"> Regular fundraising both internally and externally Appropriate book keeping system but no circulation to other members 	<ul style="list-style-type: none"> Regular fundraising both internally and externally Appropriate book keeping system with members being kept updated and informed
Linkages and networking	<ul style="list-style-type: none"> CFR committee officially recognized No attendance at coordination meetings Plan not integrated in commune investment plan 	<ul style="list-style-type: none"> CFR committee officially recognized Coordination meetings regularly attended Plan integrated into commune investment plan 	<ul style="list-style-type: none"> CFR committee officially recognized Coordination meetings regularly attended Plan integrated into commune investment plan Receive extra support from NGOs, private sector and commune councils
Representation and participation	<ul style="list-style-type: none"> Less participation by women in decision-making Less representatives from different wealth groups in decision making 	<ul style="list-style-type: none"> Some women's participation in decision-making Women are regularly informed More representation from various wealth groups in the community 	<ul style="list-style-type: none"> Most women on the committee participate in decision-making Women members are kept well-informed Most wealth group representatives participate in decision making

Table 3. Example of a participatory assessment tool.

BENEFITS OF GOOD GOVERNANCE: LESSONS LEARNED

The following lessons are drawn from working closely with 40 CFR committees over a 2-year period. In summary, active and well-governed CFR committees coordinate better with other agencies; innovate and improve management of the CFR and rice field fisheries; and raise funds for self-support, resulting in higher yields in rice fields for local people while maintaining fish biodiversity.

- Well-governed CFR committees have better coordination with local authorities and the Fisheries Administration Cantonment. This results in integration of CFR committee action plans with commune investment plans and encourages local NGO participation. The engagement of a wider stakeholder group improves the quality of the action plans and their overall integration into land and water use and management.
- Well-governed CFR committees that develop realistic action plans and practice transparency encourage fundraising through temples, the Fisheries Administration Cantonment, private companies and other local entities. CFR committees that have regular meetings and a good recording system for income and expenses have more people participating in CFR management meetings, and people are more willing to contribute funding when the CFR committee and local authorities organize fundraising events in their villages. From August 2013 to September 2014, approximately USD 14,720 was raised by the CFR committees for maintenance projects.
- Active CFR committees embrace innovation to generate ideas. Some committees have secured permission from local authorities to harvest from part of the CFR for self-sustaining income to implement future CFR management action plans. Others use CFR embankments to grow vegetables, and in one case excavated soil to deepen the CFR was sold to generate more income for further CFR expansion.
- At all locations, resource-use conflict is reduced. Better coordination with other village committees and collaboration with commune councils ensures all CFR water users (e.g. rice and vegetable irrigation, potable water) agree on optimal water use for all users.

Overall, improved management of rice field fisheries systems led to reduced illegal fishing and increased catches by 400 households surveyed. All stakeholders corroborated this during lesson-sharing workshops conducted every 6 months.



This publication should be cited as:

Miratori K and Brooks A. 2015. Good governance of rice field fishery management. Penang, Malaysia: WorldFish. Program Brief: 2015-19.

© 2015. WorldFish. All rights reserved. This publication may be reproduced without the permission of, but with acknowledgment to, WorldFish.



Contact Details:
WorldFish, PO Box 500 GPO,
10670 Penang, MALAYSIA
www.worldfishcenter.org

Photo credit: Front cover, Kim Miratori/WorldFish
Photo credit: Back cover, Borei Sylyvann/WorldFish



**100%
RECYCLED**

Paper made from
recycled material

Harnessing research that makes a difference

