

KINGDOM OF CAMBODIA
Nation Religion King

MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES
FISHERIES ADMINISTRATION



FISHERIES CO-MANAGEMENT TRAINING MANUAL

n° 2: Strengthening the Community Fishery



August 2018

Inland Fisheries Research and Development Institute

KINGDOM OF CAMBODIA
Nation - Religion - King



FISHERIES CO-MANAGEMENT TRAINING MANUAL

n° 2: Strengthening the Community Fishery

Prepared by the
Inland Fisheries Research and Development Institute
for the
Fisheries Administration

Acknowledgements

The Fisheries Administration, Ministry of Agriculture, Forestry and Fisheries of Cambodia prepared the present manual with the support of the Ministry of Economy and Finance of Cambodia and the World Bank Group.

This document is one of the outputs of the project Mekong-Integrated Water Resources Management Project – Phase 3 (M-IWRMP-III) “Support for Fisheries and Aquatic Resources Management in Northern Cambodia” implemented by the Inland Fisheries Research and Development Institute.

Document prepared by:

Robert Pomeroy, Eric Baran, Touch Kim Chhan, Sokhan Savuth, Ly Vuthy, Tuy Samram, Chhuon La, So Rothavy, Pha Sroy, Tim Sandan, Bun Racy, Touch Bunthang, Chheng Phen and Eng Chea San with assistance from:

Sim Thavary, Ou Sary, Thieng Seyha, Phou Sok, Tith Puthearath, Pos Channara, Ken Laiheang and Pheach Ousa. Illustrations by Heng Santha.

The World Bank experts and consultants who provided comments and helped improve the overall quality of the content are sincerely thanked.

ISBN-13: 978-9924-9278-6-0

Citation:

Fisheries Administration (2018). Fisheries co-management training manual – n° 2: Strengthening the Community Fishery. Fisheries Administration and Inland Fisheries Research and Development Institute, Phnom Penh, Cambodia. 18 pages.

Contact:

Fisheries Administration
Inland Fisheries Research and Development Institute
#186, Preah Norodom Blvd., Phnom Penh, Cambodia
Web: ifredi-cambodia.org

© Fisheries Administration, 2018

All rights reserved. This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without the permission of the copyright holders provided that acknowledgement of the source is given. This publication may not be copied, or distributed electronically, for resale or other commercial purposes without prior permission, in writing, from the Fisheries Administration.

All comments and opinions expressed herein are those of the authors and may not reflect the position of the Fisheries Administration, its partners or the organizations that provided funding for the project and the publication.

CONTENTS

1.	What is Community Fishery co-management?.....	1
2.	Role and responsibilities of citizens in Community Fisheries	2
3.	What is the Ecosystem Approach to Fisheries Management?	3
4.	Conflict management.....	4
5.	The Community Fishing Area Agreement	5
6.	The Community Fishing Area Management Plan.....	6
6.1.	Content of the Community Fishing Area Management Plan	7
6.1.1.	Questions to be answered in the plan	7
6.1.2.	Gender aspects in the plan	8
6.2.	Process for the Community Fishing Area Management Plan	8
6.2.1.	Identifying and prioritizing issues, needs and goals	9
6.2.1.1.	Identifying issues.....	9
6.2.1.2.	Prioritizing issues.....	10
6.2.1.3.	Identifying and prioritizing needs	11
6.2.1.4.	Defining goals.....	12
6.2.2.	Developing the Community Fishing Area Management Plan	13
6.2.2.1.	Identifying objectives.....	13
6.2.2.2.	Identifying indicators	14
6.2.3.	Implementing the Community Fishing Area Management Plan.....	15
6.2.3.1.	Identifying management measures	15
6.2.3.2.	Considering enforcement and compliance	16
7.	Updating the Plan and the Agreement	17
8.	Sources of finances	18

1. WHAT IS COMMUNITY FISHERY CO-MANAGEMENT?

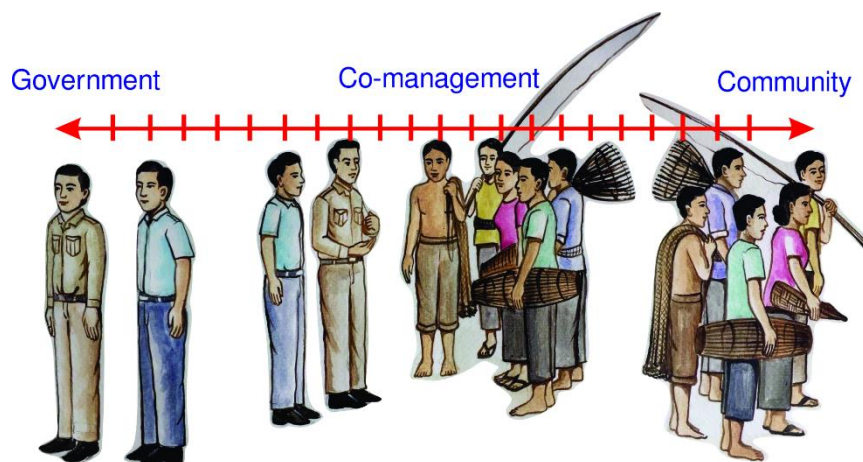
Co-management is a partnership arrangement in which the community, the government, and possibly other stakeholders (fish traders, business people, NGOs, etc.) share responsibility and authority for the management of the fishery.

In Cambodia, the development of Community Fisheries is co-management. The government is a partner with the fishing community in the management of the fishery.

For the government to collaborate with fishers in a place, this must be structured as a **Community Fishery (CFi)**. Through consultations and negotiations, the Fisheries Administration and the Community Fishery develop a formal agreement, such as the Community Fishing Area Agreement, on their respective roles, responsibilities and rights in management.

Fisheries co-management involves:

- equitable membership – fair and equal and open to all, including women and minorities;
- cooperation and collaboration - working with someone to produce something;
- sharing of responsibility and authority - shared power for decision-making;
- clear objectives - things aimed at or sought;
- arrangements and agreements between parties on a course of action.



Complements for trainers

New approaches to fisheries management recognize the need to involve fishers, to recognize local stewardship, and to share decision-making.

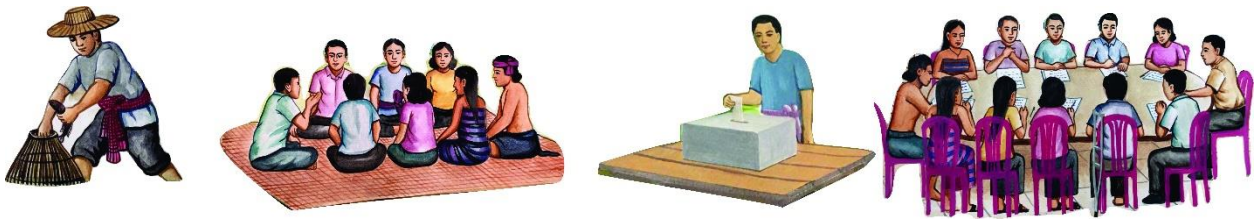
In former systems, decision making was top-down, and mainly in the hands of the Fisheries Administration deciding, implementing, monitoring or punishing. In co-management, decision-making, resource management and responsibilities are shared between the government and fishers.

2. ROLE AND RESPONSIBILITIES OF CITIZENS IN COMMUNITY FISHERIES

Members of a Community Fishery have the right to:

- fish at family-scale in accordance with the law, other regulations related to fisheries, and the by-laws of the Community Fishery;
- participate in all activities of the Community Fishery;
- request meetings and propose issues for discussion during meetings;
- attend meetings, vote and stand for election in the Community Fishery Committee;
- make complaints on any problems which affect the interests of the Community Fishery. Complaints are made to the Fisheries Administration, Commune/*Sangkat* Council, local authorities and relevant agencies.

The **Community Fishery Committee (CFC)** has the authority to lead and manage the CFi. The CFC is made up of elected members. Anyone from the CFi can be a candidate. The CFC members have a term of five years.



Complements for trainers

A new member who applies for membership in the Community Fishery must express his or her willingness to comply with the provisions of the Sub-Decree, the Community Fishery by-laws and internal rules, and all decisions made by the congress of the Community Fishery.

The Community Fishery Committee will in particular:

- prepare and sign a Community Fishery Area Agreement;
- develop a Community Fishing Area Management Plan;
- prepare a report every 3 months to the FIA Cantonment and report on violations;
- resolve disputes that occur within the Community Fishery;
- open a bank account and manage Community Fishery finances;
- organize meetings and consultations among members;
- make decisions with the agreement of a majority of Community Fishery members, in accordance with the CFi by-laws, the Fishing Area Agreement and the Fishing Area Management Plan.

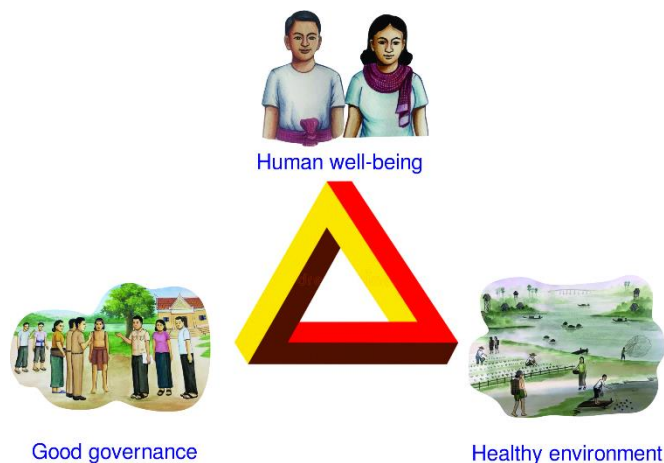
In case a member of a CFi prevents other members from exercising their rights, or causes serious harm to the interests of the community, he/she may be suspended or dismissed from the Community Fishery after confrontation with the Community Fishery Committee.

3. WHAT IS THE ECOSYSTEM APPROACH TO FISHERIES MANAGEMENT?

The **Ecosystem Approach to Fisheries Management (EAFM)** aims at securing a balance between a healthy environment, human well-being and good governance.

- *Healthy environment*: good fish diversity, sustainable abundance, non-degraded habitats and healthy water.
- *Human well-being*: good living standards (income), food security, improved social connections and relationships, safety.
- *Good governance*: participation; legal rights; equity; planning and implementation mechanisms; compliance and enforcement.

This approach considers the major components in an ecosystem, and the social and economic benefits that can be derived through sustainable use.



Complements for trainers

Fish depend upon the supporting ecosystem (water, habitats, people). Managing fisheries without managing the environment is relatively ineffective and unsustainable. Existing fisheries management does not cover all threats and issues facing the fishery (such as habitat loss) and can often fail. Conventional fisheries management also often fails to protect the poor communities who need access to the resource as well as economic and social benefits. A broader and more inclusive approach is needed.

In response to these needs an Ecosystem Approach to Fisheries Management (EAFM) was developed. This approach is an integrated and participatory management approach that considers: i) the fish resource; ii) the major components of the ecosystem, and iii) the social and economic benefits that can be obtained.

EAFM provides a vision that is more than just fisheries; it looks at the bigger picture and recognizes that fish and fisheries are part of a broader ecosystem that includes fish habitats as well as the people who benefit from catching, trading and eating fish.

An **ecosystem approach** is a holistic, integrated and participatory management approach that considers the major components in an ecosystem, and the social and economic benefits that can be derived through sustainable use. It seeks a *balance* between ecological well-being and human well-being through good governance for future generations.

An **adaptive management** approach to management monitors and evaluates the sum of all the management measures, compares it with previous strategies, or strategies employed by other communities, and thereby improves the strategy based upon learning.

A **precautionary approach** basically means, “*Let’s be careful!*” If, for example, the CFi believes that the fishery can support 100 bamboo cylinder traps, a lower limit of 70 traps might be set instead “just in case”. As information about the fishery improves, and if it is found that fish stocks are also improving, it may be possible to allow more traps to be set.

4. CONFLICT MANAGEMENT

Developing conflict resolution mechanisms during planning will help to avoid or reduce significant, time-consuming and costly conflicts. The plan must therefore include provisions about conflict management:

- conflicts within the CFi;
- conflicts between CFi members and villagers;
- conflicts between the CFi and outsiders.

Conflict resolution mechanisms should include:

- provisions for early conflict resolution (when parties are ready to find an arrangement);
- provisions for hard conflict (when parties are not ready to agree).
-

In each case, provisions must consider:

- who will help resolve the conflict;
- who will make a decision in case an agreement cannot be reached.



Complements for trainers

The *Prakas* states (chapter 11, Article 33) - "All disputes in the Community Fishery shall be resolved as follows:

- *The Community Fishery Committee must mediate and resolve disputes that occur within their own Community Fishery*
- *In the event that the Community Fishery Committee cannot successfully resolve the dispute, the case must be sent to the Fisheries Administration to resolve at successive levels of hierarchy, with the participation of local authorities and relevant officials as necessary.*
- *In the event that the dispute still cannot be resolved, the Community Fishery Committee and Fisheries Administration must submit the case to the relevant provincial or municipal court to resolve according to the law."*

Community Fisheries that include conflict management mechanisms tend to have far more success in achieving management objectives than those without conflict management mechanisms.

5. THE COMMUNITY FISHING AREA AGREEMENT

The **Community Fishing Area Agreement** between the CFi and the Fisheries Administration recognizes and ensures rights of the CFi in the specific area mapped.

The Community Fishing Area Agreement shall specify the following important points:

- parties signing the agreement as well as the roles, duties and responsibilities of each party;
- the location and size of the fishing area;
- the time period and conditions of use of the fishing area;
- the conditions of amendment and termination of the agreement.



Complements for trainers

The Community Fishing Area Agreement is an agreement with FiA to hand over management jurisdiction of fishing grounds to the CFi for sustainable management and for a three-year period. It also includes details about the fishing area, and describes the duties of provincial FiA Cantonment to support the CFi, and procedures for reporting non-compliance with rules and regulations.

Only two parties who must sign the agreement, namely the Provincial FiA Cantonment Chief and the Community Fishery Committee. The local commune/*Sangkat* chief serves as a witness.

The Community Fishing Area Agreement document must have attached:

- a 1 / 50,000 scale map showing the areas requested for establishment of a Community Fishing Area with clear coordinates;
- a list of Community Fishery members and Community Fishery Committee members;
- the by-laws and internal rules of the Community Fishery; and
- a statement on the objectives of establishing the Community Fishery and management of the fisheries resources.

The Community Fishing Area Agreement shall be announced by posting it at least 30 days in different public places where it can be easily seen, at the commune and provincial offices, before it is submitted to the FiA for review and approval.

6. THE COMMUNITY FISHING AREA MANAGEMENT PLAN

The *purpose of the plan* is to identify:

- fisheries management strategies and actions;
- the roles and responsibilities among Community Fishery members and government;

The plan should also cover:

- human issues (e.g. conflicts, health and safety, fish processing);
- ecological issues (e.g. impacts on habitats, on certain species or on juveniles);
- governance issues (e.g. consultation process, involvement of women, etc.).



Complements for trainers

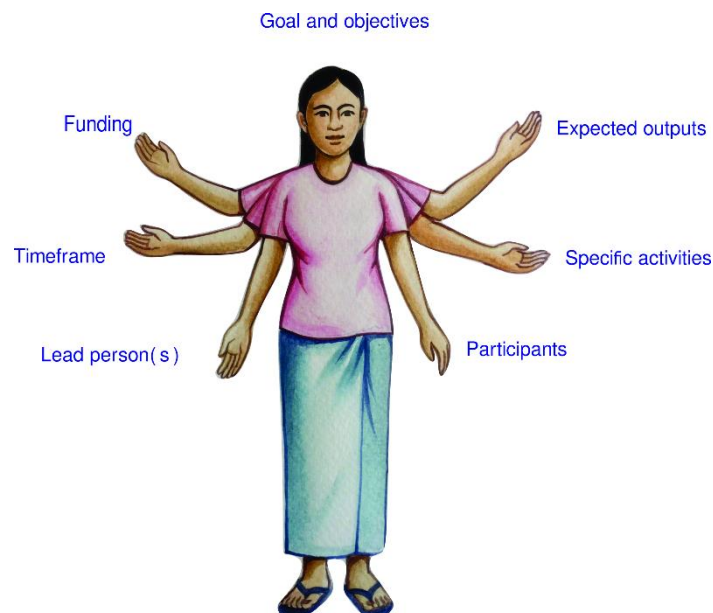
Even though the CFi members are already familiar with the management plan from establishing the CFi, we propose here an update to include the principles and practical details of a Community Fishing Area Management Plan.

6.1. Content of the Community Fishing Area Management Plan

6.1.1. Questions to be answered in the plan

The Community Fishing Area Management Plan should answer the following questions:

- What are the overall goal and the detailed goals to be achieved?
- What are the objectives to be achieved?
- What are the specific activities for achieving the objectives, and ultimately the overall goal?
- What are the expected outputs (what will be produced or changed)?
- What is the timeframe (over what period will this strategy be implemented)?
- Who are the participants (whose cooperation is needed to effectively carry out this action)?
- Who are the lead persons or organizations responsible for implementation?
- What are the funding needs and funding sources?



Complements for trainers

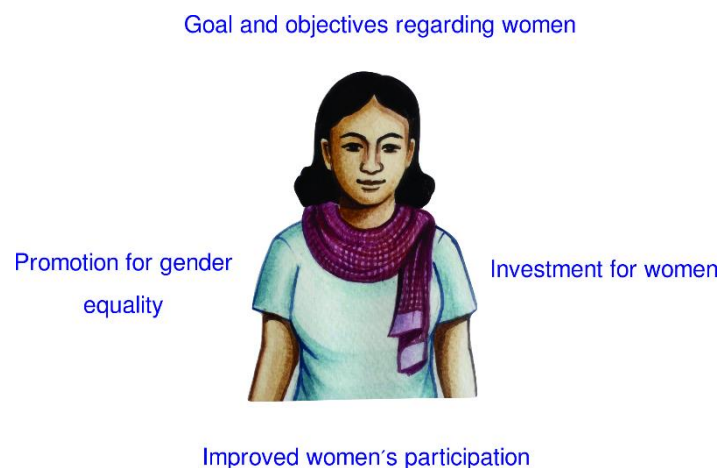
Annex 4 of the *Prakas* provides a model Community Fishing Area Management Plan for a three-year period. This is a generic model in which the Community Fishery Committee fills in blank spaces with local information. While useful, it does not provide specific guidance for full development of a comprehensive management plan. We try in this training to provide more details, and more applied guidance to produce a useful plan.

6.1.2. Gender aspects in the plan

The Community Fishing Area Management Plan should include aspects and activities related to gender. For instance:

- goals and objectives that address the needs of both men and women;
- investment for improving fish processing technologies as needed by women;
- activities to improve women's participation in the Community Fishery and CFC;
- training to promote gender equality in fisheries and aquaculture.

Separate meetings with women's groups should be conducted to find out women's issues, needs and opportunities, and include those in the plan.



6.2. Process for the Community Fishing Area Management Plan

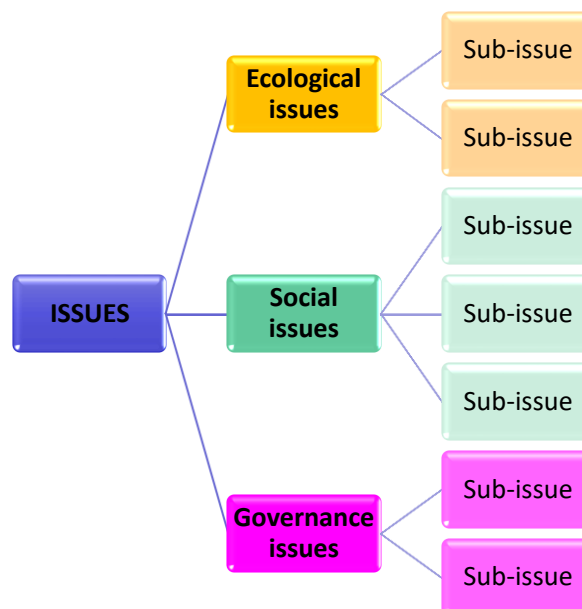
Indications for trainers

Since the CFI targeted here for training is registered, it most likely has a management plan already. In particular, several of the steps in developing the plan (such as the site needs assessment, engagement and awareness raising of CFI members, and mapping of the Community Fishing Area) will have been completed during the establishment of the Community Fishery. We shall here review and detail what a *good* management plan should be, which will also be useful to communities that do not have their full management plan yet.

6.2.1. Identifying and prioritizing issues, needs and goals

6.2.1.1. Identifying issues

The first step consists in *identifying issues or threats* associated with the fishery. Issues or threats should be broadened to include i) *ecological issues* and environmental well-being (e.g. habitat protection or restoration, pollution reduction and waste management, fishery resources); ii) *social issues* and human well-being (e.g. food security, sustainable livelihoods, rural infrastructure); and iii) *governance issues* (e.g. participation, empowerment, institutions). Thus, the identification should cover not just fisheries but also community development, livelihood, food security, governance, economic, social, and ecological considerations.



Complements for trainers

Below are some examples of possible issues:

Overall issue: there is not enough fish for the village.

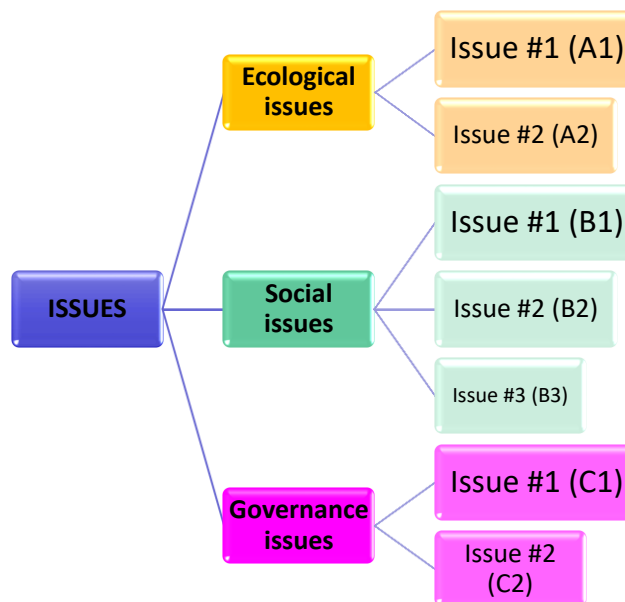
Ecological issue: there is not enough fish in the area because there are no more breeding sites.

Social issue: there is not enough fish for families to make an income from fishing.

Governance issue: the community receives no assistance from outside.

6.2.1.2. Prioritizing issues

The second step consists in *selecting most important issues or threats* among those identified (i.e. a number manageable and compatible with dedicated activities), then identifying the most important issue, followed by the second most important one, etc. This will allow ranking problems and corresponding activities by order of priority.



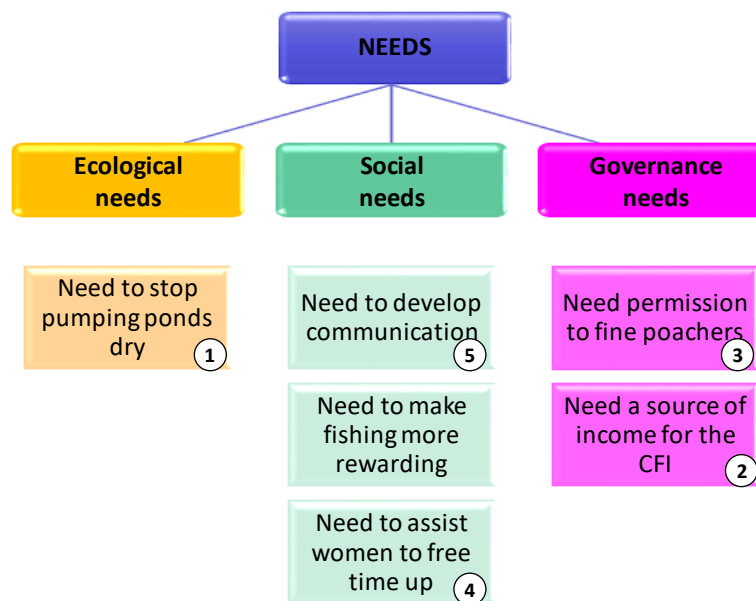
6.2.1.3. Identifying and prioritizing needs

The third and fourth steps consist in *identifying needs of the CFI*, then *prioritizing needs* in relation to threats and issues. This is one of the most important parts of developing the management plan, because it will determine which actions the CFI will focus on, in response to the needs identified and prioritized here.

Identifying needs in relation to threats and issues: list all needs, while remaining realistic (focus on needs the CFI or the village can do something about). The list should be limited, as these are needs the CFI and the CFC will have to tackle.

Prioritizing needs in relation to threats and issues: from the first, most important and most urgent need, to less important and urgent needs. Identify where the CFI can most easily have an impact.

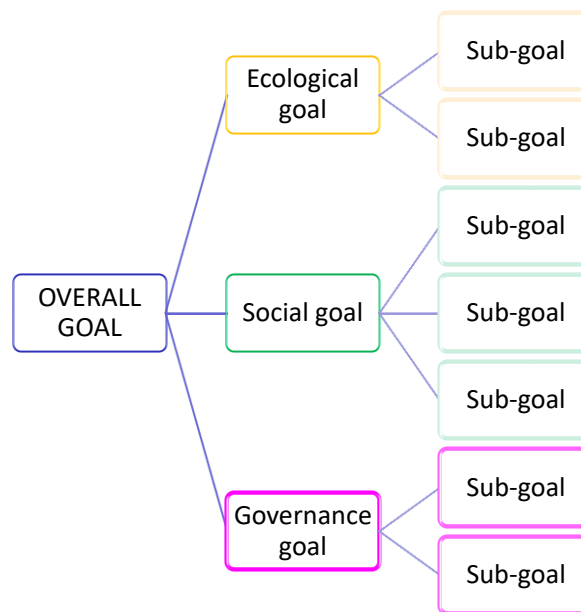
Some examples are given in the tree below.



6.2.1.4. Defining goals

A **goal** is a general statement of the desired state towards which the stakeholders are working (e.g. answering the question: “*What situation do we want to reach?*”).

A set of goals must be prepared in relation to the prioritized threats and issues identified. Like issues and threats, goals should be classified under i) ecological goals; ii) social goals; iii) governance goals.



Complements for trainers

A good goal meets the following criteria:

- *visionary*: inspirational in outlining the desired state towards which the stakeholders are working.
- *general*: broadly defined to encompass all activities.
- *brief*: simple and succinct so that all stakeholders can remember it.
- *measurable*: defined so that changes can be accurately assessed.

Examples of goals:

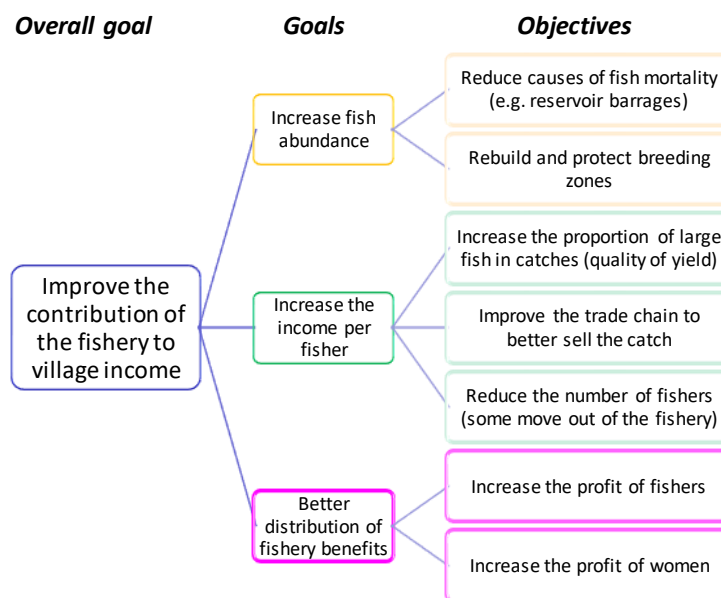
- “Overall goal: “the village will get more fish / will become less dependent on fish;
 - Ecological goal: make the environment suitable again for fish
 - Social goal: make an income from other sources than fish
 - Governance goal: seek assistance from outsiders (FiA, NGO, etc.)”
- “Fisheries and other living aquatic resources have been restored and are managed sustainably”.
- “Degraded, vulnerable and critical habitats are restored, conserved, and maintained”.

6.2.2. Developing the Community Fishing Area Management Plan

6.2.2.1. Identifying objectives

An **objective** is a formal statement detailing the desired outcome of management.

Objectives serve as the basis for determining the management actions required. The objectives are developed based on the issues and goals. Objectives need to state what will be achieved in a general sense. An objective should be achievable within available resources and within a defined timeframe. Some examples are given in the tree below.



Complements for trainers

The objectives are developed based on the threats, issues and needs affecting the goals. For example, if a high silt load in river waters was identified as a high-priority threat to habitats and fish stocks, an appropriate objective would be “to reduce silt in river waters”. If a specific threat, issue or need has been well identified, it should not be difficult to create an objective related to addressing it.

When writing objectives it is helpful to make them “SMART”:

Specific – a clear objective

Measurable – you can measure some indicators to check if you have achieved the objective

Agreed – by the appropriate stakeholders

Realistic – within your timescale and resources

Time dependent – it includes a stated timescale for achievement

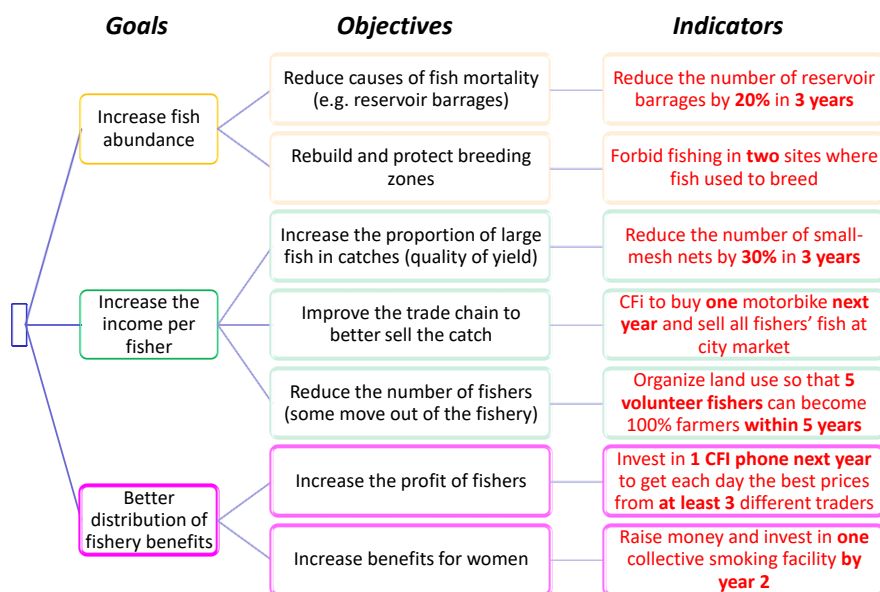
If, for example, the biological goal of the CFi was: “To rebuild local fish stocks to levels that maximize their sustainable yields”, then a SMART objective might be: “To increase the abundance and yield of blackfish species by at least 30 % from their current levels by 2020”.

6.2.2.2. Identifying indicators

Community Fishery members need to assess whether the objective is being achieved; this is done through indicators.

Indicators provide a measure of how well management is performing.

For each objective, at least one indicator should be identified, with a progress quantitatively identified compared to the present situation. Some examples are given below.



Complements for trainers

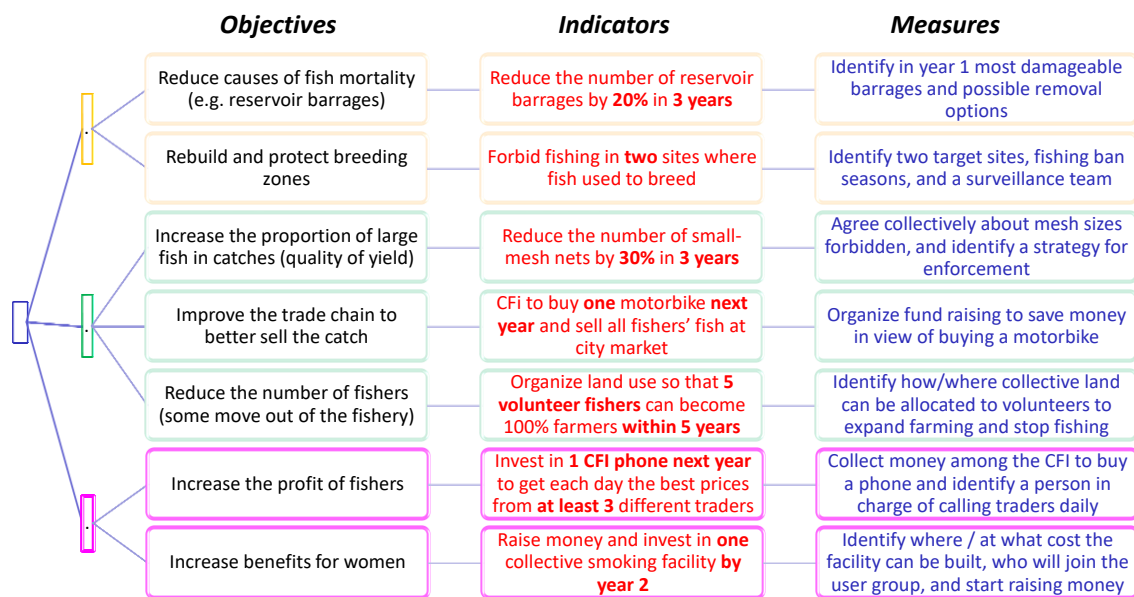
Indicators are developed only after an objective has been agreed upon. An indicator tracks the key outcome identified in the objective and, when compared with an agreed-upon benchmark or reference point, provides a measure of the management performance. If, for example, the objective is to develop alternative sources of income, an appropriate indicator might be the number of new community enterprises created.

6.2.3. Implementing the Community Fishing Area Management Plan

6.2.3.1. Identifying management measures

Management measures are the decisions and actions required to achieve an objective.

Management measures can include technical activities such as placing restrictions on the type of fishing gear used or imposing closed seasons to protect spawning stocks. They can also include social activities such as raising funds. Some examples are given below.



For each management measure, it is important to develop a workplan to answer the following questions:

- what is the expected output (what will be produced or changed)?
- what is the timeframe (over what period will this strategy be implemented)?
- who are the participants (whose cooperation is needed to effectively carry out this measure)?
- who is the lead person or organization (who is responsible for implementation)?
- what are the funding needs and sources?

Complements for trainers

For each objective, it is useful to prepare a list of all possible management measures with particular attention given to their ease of application, likelihood of success, feasibility, and cost. Often, one management measure can be used to address several objectives (e.g. fisheries conservation zone). The **management strategy** is the sum of the combined management measures.

The management strategy should seek to avoid or minimize negative impacts on members of the community including ethnic groups. If, for some reason, the management strategy results in any access restriction, provisions described in the Resettlement Policy Framework (RPF) should be applied.

6.2.3.2. *Considering enforcement and compliance*

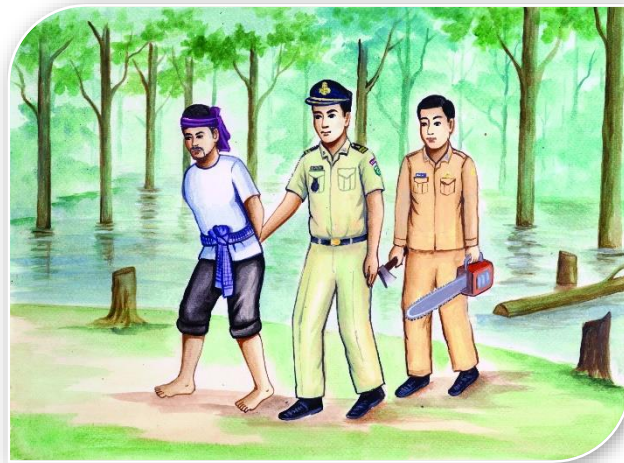
Enforcement is more than the presence of armed police arresting people; it involves the application of a broad range of approaches by different institutions and stakeholders to change or modify behavior. Enforcement interventions can be “soft” preventive measures or “hard” sanctions.

“Soft” enforcement approaches promote voluntary compliance with the requirements of the law and regulations. These positive approaches include:

- social mobilization;
- promotion of best practices;
- information dissemination, education and outreach;

“Hard” enforcement uses legal sanctions imposed by a regulatory authority. These negative approaches include:

- presence of law enforcers;
- activities to detect, apprehend and prosecute violators and impose appropriate sanctions;
- negation of economic benefits from illegal activities.



Complements for trainers

Soft or positive enforcement focuses on the social and cultural dynamics of compliance that can be used to: (i) encourage voluntary compliance, (ii) sustain widespread compliance, and (iii) achieve general deterrence. Soft or positive approaches include:

- social marketing, social mobilization, education, information dissemination;
- sharing of resource management best practices.

Hard or negative enforcement uses legal sanctions imposed by a court or regulatory authority. The objective is to identify, locate and suppress the violation using all possible instruments of law. Hard or negative approaches include:

- continuous presence of law enforcers;
- consistent activities to detect, apprehend and sanction violators;
- strategies developed to apprehend repeat violators;
- negation of economic benefits from illegal activities.

7. UPDATING THE PLAN AND THE AGREEMENT

Managing the Community Fishery is a continuous process to achieve a set of objectives. Plans must be updated to be kept on track, and evaluated if there is to be learning from successes and failures.

Each year a meeting of the whole CFi must be organized to review and possibly update or revise the Community Fishing Area Management Plan and the Community Fishing Area Agreement. These revisions will be based on the above procedure, by reconsidering in particular:

- priorities in issues;
- priorities in objectives;
- activities of the plan in relation to objectives.

Funding and funding opportunities must also be reviewed.



Evaluation consists of reviewing results of actions taken and assessing whether these actions have produced the desired outcomes – this helps to adapt and improve by learning (adaptive management).

8. SOURCES OF FINANCES

Sufficient, timely, and sustained financial resources are critical to support the management plan. Sustainable financing must be designed from the start as part of the plan, and several sources of financing may be required. The financing plan should be based on an evaluation of the costs of activities.

According to the *Sub-decree*, a CFI can raise revenue from any source and manage the funds themselves. Sources of finances for Community Fisheries derive from:

- contributions from community fisheries members;
- charitable donations;
- assistance from the Royal Government, international organizations and non-governmental organizations;
- other lawful income, for example tourism revenue (entry fees, boating fees, recreational fishing license fee, etc.), income derived from local enterprises (handicrafts, aquatic products, local products etc.), or income derived from savings clubs or other microcredit.

Complements for trainers

Funds need to be available to support planning, implementation, coordination, monitoring, and enforcement, among others. The Community Fishery must really be designed from the start with thoughts and plans for sustainable financing.

According to the Sub-Decree, a CFI can raise revenue from any source and manage the funds themselves, as long as it is lawful income (Article 30). The Community Fishery Committee can open a bank account and manage Community Fishery finances in a transparent and accountable manner (Article 20).

Too much dependency on one external source alone will likely impact long-term sustainability. A diversity of sources of financing is preferable. Sustainable financing mechanisms should be considered and evaluated as an essential part of a Community Fishing Area Management Plan, similar to a financing strategy within a business plan. The financing plan should be based on an evaluation of the costs of operations for activities in the fisheries management plan over both short- and long-term time horizons.

Background

The project “Mekong Integrated Water Resources Management - Phase III” is funded by the World Bank. The objective of this project is to establish the foundation for effective water resource and fisheries management in the northeast of Cambodia.

Within this project, Component 1 (Fisheries and aquatic resources management in Northern Cambodia) is executed by the Fisheries Administration and implemented by the Inland Fisheries Research and Development Institute. The objective of this component is to improve the management of fish and aquatic resources in selected areas in Kratie and Stung Treng provinces.

Five training manuals on inland fisheries co-management

The present manual is part of a series of five training manuals on inland fisheries co-management in Cambodia. These manuals target villages willing to form a Community Fishery, Community Fisheries members, members of Community Fishery Committees and staff of Fisheries Administration Cantonments.

N° 1: Establishing a new Community Fishery

audience: villagers

N° 2: Strengthening the Community Fishery

audience: all members of a Community Fishery

N° 3: Strengthening Community Fishery Committees

audience: elected members of Community Fishery Committees

N° 4: Strengthening Fisheries Administration Cantonments

audience: Fisheries Administration staff

N° 5: Developing a Community Fishing Area Management Plan

audience: all CFI members, in particular CFC members

