
Participation in fisheries co-management in Kandal Province, Cambodia

Kaing Khim*, Sung Sokunthea and Un Kanika

Management of River and Reservoir Fisheries Component, MRC Fisheries Programme

ABSTRACT

Policy reform of fisheries management provides a good opportunity for local users to participate in the running of fisheries and to achieve the goals of protection, conservation, development and sustainable use of this resource. Policy reform in Cambodia has led to the establishment of over 300 community fisheries (CF). This number includes 22 in Kandal province, 12 of which have received support from the Management of River and Reservoir Fisheries component (MRRF) since 2000. Establishing community management and development presents many challenges, especially where participation is concerned. Therefore, it is useful to study the factors that influence this aspect of fisheries co-management. This paper presents the results of such a study carried out in the MRRF target areas of Boeung Chunlen reservoir, Kandal province.

During interviews and discussions, more than 90% of CF members stated that they participated in CF activities, particularly those relating to elections. The legal entitlements that participation offered are a major motivating factor in promoting voluntary participation. Understanding attitudes, practices, beliefs and knowledge is also a key factor.

The interviewees also suggested a number of ways to improve the process of instituting and managing the CF. These form the basis of a number of recommendations concerning the way CF are setup in the future.

KEY WORDS: Community fisheries, community participation, Kandal, Cambodia

INTRODUCTION

Although rice is the staple food for most Cambodians, fish closely follows it in importance. Fish is traditionally the main source of animal protein, especially for the rural poor. The current population growth rate of 2.49% (Ministry of Planning 1998) means that there is a need to produce more fish and to increase access to fishing grounds. However, powerful leaseholders are progressively limiting access to fishing grounds and the number of unresolved conflicts between large-scale commercial fishers and small-scale subsistence fishers is on the increase.

The situation is becoming increasingly difficult for subsistence fishers who depend on natural resources for their livelihood. Furthermore, abuse of power, unequal distribution of benefits and denial of access to fishing grounds is leading to dissatisfaction and serious conflict amongst the thousands of inhabitants in the area around the Tonle Sap Great Lake and the Mekong river floodplain. Conflicts, such as those between owners of fishing lots and local fishers, drove the Government to reform the management of fisheries.

On 24th October 2000, during a visit to distribute emergency aid to flood victims in Siem Reap province, Prime Minister Samdach Hun Sen announced countrywide reforms to Cambodia's fisheries. The aims of

* Department of Fisheries, 186 Preah Norodom Blvd., Phnom Penh, Cambodia.
Email: kaingkhim@online.com.kh

the reforms were to provide more fishing grounds for subsistence fishing and to help alleviate poverty among rural farmers and fishing communities.

In line with this policy, the Government has closed about 56% of the area previously given over to fishing lots and allocated it to the establishment of community fisheries (CF). CF are formed by groups of people living in or near fishing grounds who, in order to relieve poverty and improve their standard of living, want to manage their fisheries in a way that optimises catches but is also sustainable (CF sub-decree 2003).

The policy gives local people an opportunity to participate actively in the co-management of natural fisheries resources in order to achieve the goals of protection, conservation, development and sustainable use of resources. Since introduction of the policy, local communities have established more than 300 CF. This number includes 22 CF in Kandal province, 12 of which have received support from the Management of River and Reservoir Fisheries component (MRRF) since 2000.

Establishing community management and development presents many challenges, especially where participation is concerned. Therefore, it is useful to study the factors that influence this aspect of fisheries co-management. This paper presents the results of such a study carried out in the MRRF target areas of Boeung Chunlen reservoir, Mok Campul, Kandal province (Figure 1).

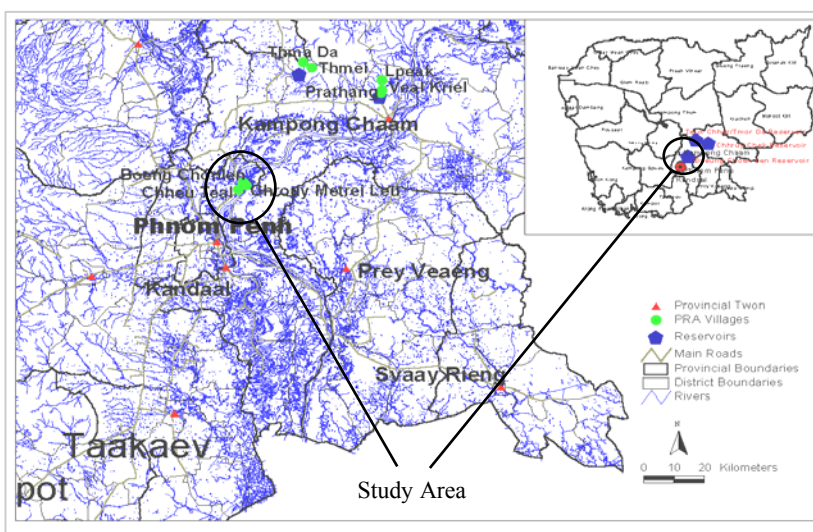


Figure 1. Location map.

METHODS

The CF Federation of Boeung Chunlen Reservoir is comprised of five CF from five villages and has a total membership of 477. Seventy-two of its members (34 female, 38 male), selected at random, participated in this study. Interviews of the participants used a standard questionnaire designed specifically for this study. Discussions in focus group helped to obtain general and supplementary information for later analysis and evaluation.

RESULTS AND DISCUSSION

Respondents' background

Ethnicity

The respondents included both people from both Cham (26%) and Khmer (74%) ethnic groups (see Figure 2). They live in the same communities and formed, and manage, the CF without any obvious ethnic, or religious (the Cham are Muslims), discrimination or conflict.

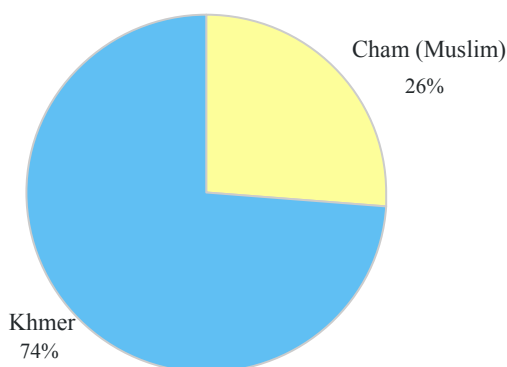


Figure 2. Ethnicity of respondents

Occupation

The primary occupations of the respondents were subsistence rice farming (48.6%), fishing (26.6%) and wage labour (6.9%).

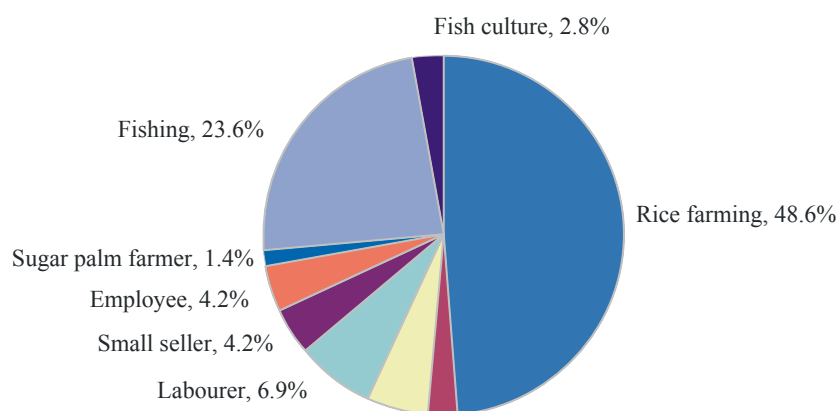


Figure 3. Primary occupation of respondents

However, fish are a very important element food in most villagers' diets and they provide additional source of income for some families. Many respondents gave fishing (40%) or fish culture (21%) as their main secondary occupation. Most villagers (over 87%), said they were engaged in fishing activity of some sort, usually when slack periods in rice cultivation permits.

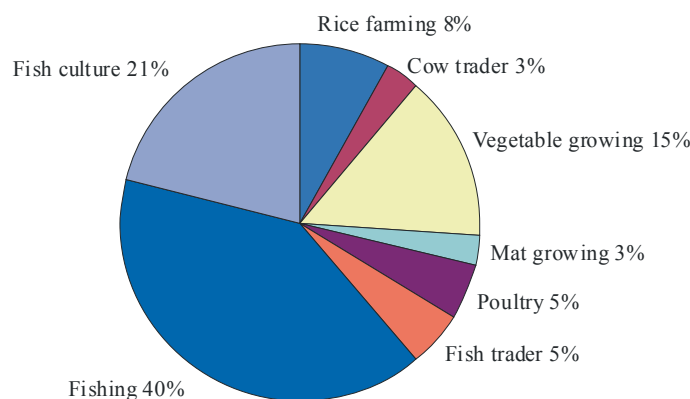


Figure 4. Secondary occupation of respondents

Participation in the CF process

Who participates?

There are two types of participant in the CF process: direct and indirect users. Direct users are members of the CF who fish for a living. These direct users are most closely involved in CF management and development. Indirect users include provincial fisheries officers, representatives of local authorities, local police officers and other related agencies.

Level of participation in the planning, management and implementation process

The survey shows that nearly all members of the CF (95.8%) are willing to participate in elections, probably because they do not wish to miss the opportunity of electing their own team leader onto the CF management team. The next most popular activity was drafting by-laws and regulations. CF members see the importance of these activities because they assign committee members roles, tasks, and responsibilities and establish rules and regulations for running the fishery.

The level of participation was very low in activities related to implementation (16.5%), planning (14.7%) and plan review (11.4%), as can be seen in Figure 6. This is probably because poorer CF members had to attend to their daily jobs in order to provide food for their families and had little time to spare. However, these people said that they were willing to support CF, abide by the rules and regulations, and report any illegal fishing activity.



Figure 5. People participating in drafting by-laws and regulations

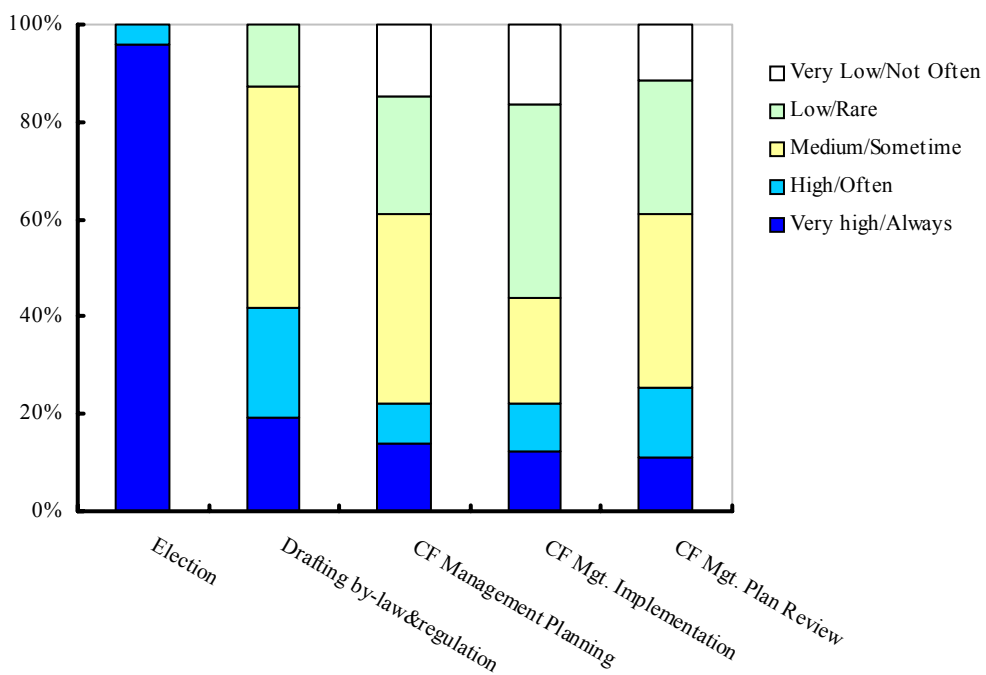


Figure 6. Participation in the CF planning, management and implementation process

Factors influencing participation

The factors that influenced local peoples participation in CF management and development included; national policy on fisheries management, people's knowledge and understanding of the importance and value of CF management, people's attitude/behaviour, and the perceived benefits of participating.

National policy on fisheries management

Almost all respondents (97.2%) said they were highly satisfied with the new national policy reform of fisheries management. They said that they are willing to support it because they believe it encourages user participation and is a better way of managing the natural fisheries resources, which they live close to and maintain.

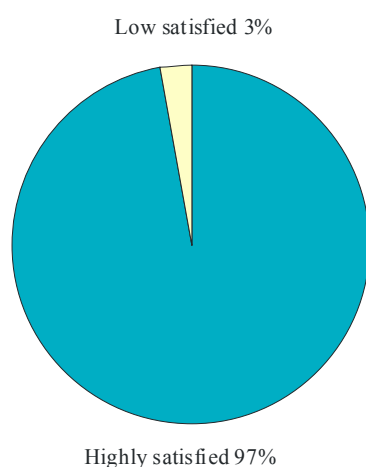


Figure 7. Level of satisfaction with national fisheries policy reform

Other reasons for satisfaction were:

- local users understood the value of their participation in natural resource conservation, protection, management and development
- it encourages co-operation and coordination amongst local users, stakeholders, and government
- no tax collection from middle-scale fishing
- illegal fishing is not permitted
- recently fish catch has increased in the study area and this has contributed to an increase in household income, food security, and poverty reduction
- the fisheries will be sustained for future generations

The very small proportion (2.8%) of participants dissatisfied with the national policy reform had largely misunderstood of the principles involved; some likened it to the idea of solidarity groups (*Krum Samaki*)

formed during the Pol Pot era. Therefore, there is still a need to raise awareness of the aims of CF among some stakeholders.

Knowledge and understanding of the importance and value of CF management

Willingness to participate often relates to an individuals' level of knowledge, awareness and understanding of the concepts, importance and value of CF management and development, especially the concept of fisheries co-management and development, and natural resource ownership.

Once people have a clear grasp of these aims, they expressed a willingness to participate and voluntarily support CF. Therefore, in the early stages of establishing a CF, the most important activities are, building trust and understanding, raising awareness, and disseminating information to all stakeholders in the new CF.

Attitudes

Attitudes are an important factor influencing levels of participation. The idea of working together in groups is much easier to promote in villages where people traditionally help each other and share responsibilities. Khmer people, especially in rural areas, tend to live and work together as a community. Therefore, villagers, including the 36% of the CF who are not active fishers, willingly participate in setting up and managing CF in order to develop their communities. They see a communal need to manage their resources in a sustainable way so that future supplies of food are secure, that their own standard of living will increase, and that future generations will benefit from the fishery.

Perceived benefits of participation

Almost half (40%) of all respondents said that they benefited from the CF within two years its establishment, (Table 1). The more than half (60%) of the respondents who claim to have seen no benefit were fishers who did not participate in CF activities and development or were not involved in fishing or active fishers.

Table 1. *Benefits received*

	Khmer		Cham		Total	
	Count	%	Count	%	Count	%
Yes	46	28.8	40	72.7	86	40.0
No	114	71.3	15	27.3	129	60.0
Total	160	100	55	100	215	100

Those who saw no benefit believed the fish catch had increased but that this mostly benefited those who fished on a regular basis. Many felt that the CF in their areas, some only launched only within the past two years, and had not developed in accordance with the needs of members because of lack of funds and capacity.

There are many activities involved in organising a CF that need to be carried out systematically (according to the CF management plan and with facilitation, help and guidance from technical agencies) in order to promote self sufficient and effective CF management in the future. All members of CF must receive a fair and proportional share of the benefits if the community as a whole is to increase its standard of living.

The respondents most intimately involved in the CF, active fishers, saw the principle benefits as:

- an increase in fish catch
- increased knowledge and awareness of the value and importance of local and other stakeholders participation in natural fisheries resource management and development
- increased understanding, co-operation and co-ordination both within and between villages; and an alternative livelihood strategy.

Most respondents (79.2%) felt that fish catch had increased since the formation of CF, especially since the establishment of fish conservation zones or fish sanctuaries and the clamp down on illegal fishing practices. This perception held across the community, regardless of the member's gender or ethnic group (see Table 2 and Figure 8).

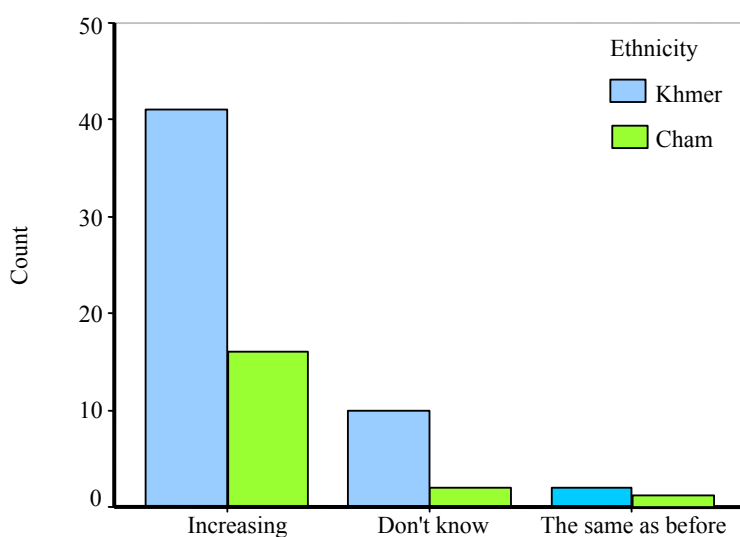


Figure 8. Ethnicity and perception of fish catch since the establishment of CF

Table 2. Perception of the size of the fish catch since the establishment of CF

	Male		Female		Total	
	Count	%	Count	%	Count	%
Increasing	32	84.2	25	73.5	57	79.2
Don't know	6	15.8	6	17.6	12	16.7
Same as before	0	0	3	8.8	3	4.2
Total	38	100	34	100	72	100

Effects of CF participation

Nearly all respondents (90.3%) said they experienced no negative effects from participating in CF activities (see Table 3) and, on the contrary, felt satisfied with the positive outcomes that they have seen. Only 9.7% respondents felt that their participation interfered with their daily work; most of these were committee members who spend most of their time on CF activities but do not receive any additional incentives or compensation.

Table 3. *Perception of negative effects of CF participation*

	Male		Female		Total	
	Count	%	Count	%	Count	%
Yes	4	10.5	3	8.8	7	9.7
No	34	89.5	31	91.2	65	90.3
Total	38	100	34	100	72	100

Members of the CF committee clearly need some form of additional incentives if they are to stay motivated. Providing training for alternative livelihoods or other activities that generate additional income may be one of the best incentives, especially if money generated from these activities helps to finance CF administrative work.

Problems and constrains

Although CF brings many benefits, they also face some problems and limitations. The following are some of the issues raised by respondents during focus group sessions:

- lack of resources to support the operation, participation, and implementation of CF management plans and administration
- a few illegal fishers still do not want to participate in the CF
- inadequate materials and incentives for CF committee members and patrol groups

CONCLUSIONS

This study has shown that at Beoung Chunlen reservoir CF were well organised with active participation and co-operation by members and other stakeholders.

The national legal framework and guidelines consider the needs of local people and present an opportunity for improving standards of living. Building trust, informing, and increasing awareness and knowledge of all stakeholders in the area, and especially in fishing villages, on the purpose of CF and fisheries co-management is one of the most important ways of promoting participation. It is important for facilitators to understand people's attitudes, practices and beliefs if facilitation activities are to be appropriate and capable of motivating people to participate actively in all CF activities.

Benefits are one of the most necessary factors in promoting high levels of active participation. Many members of the Beoung Chunlen reservoir CF are already enjoying the benefits that co-management brings. These benefits include an increase in fish catch in the area, raised awareness and understanding of the importance of fisheries resource management, and the creation of livelihood activities supported by MRRF. However, most of the membership preferred to receive immediate benefits because they were from rural communities and generally poor and short of food.

Only a few CF committee members, who were very poor and had to work daily to provide enough food for the household leaving them with little spare time, suffered negative effects of participation. Even so, these people were able to manage their time well by incorporating CF activities into their daily work routine.

Lack of resources for operating and running CF activities was the main problem identified by during the study.

RECOMMENDATIONS

During focus group discussions, the respondents identified the following list of recommendations:

1. Trust must be built and awareness and understanding of the purpose and concept of fisheries co-management raised if the level of participation is to be increased amongst users and other stakeholders.
2. External support is needed for facilitation activities and CF operation to run and develop CF and increase the level of participation.
3. High levels of co-operation and co-ordination between local authorities and technical agencies are needed to support CF management and development and generate higher levels of participation amongst CF members and local users.
4. The institutional set-up of CF should be reviewed regularly to ensure that benefits are equally distributed among all member of the community.
5. The creation of income-generating activities should be considered as a way of providing suitable incentives to increase the level of participation and benefit earning for suitable fisheries co-management.

REFERENCES

DoF (2001) *DoF Report 2001*. DoF. Phnom Pehn.

DoF (2003) *CF sub-decree: Draft of Sub-decree of CF management, DoF*. DoF. Phnom Penh.

Ministry of Planning (1998) *Population Census of Cambodia, by Ministry of Planning, The Kingdom of Cambodia*. DoF. Phnom Penh.