

## Community fisheries

# Fishing disarmed

**Community fisheries development is taking off in Cambodia, as demonstrated in the Tonle Sap Lake in the province of Siem Reap**

**I**n 2001 the Government of Cambodia adopted community fisheries as a new form of resource management. A project called “Participatory Natural Resource Management in the Tonle Sap Region” has been working to develop and promote community-based natural resource management on the north shore of the Tonle Sap lake in the province of Siem Reap. This project has been instrumental in developing the community fisheries approach and has sparked off a reform process within the inland fishery sector that has resulted in around 536,000 hectares (ha) of commercial fishing ground—equivalent to 56 per cent of all commercial fishing grounds—being released to local communities for community fisheries management.

The Tonle Sap Lake is the “Great Lake” of Cambodia. During the dry season, it covers some 250,000 ha, but as the Mekong River rises at the start of the monsoon, the drainage of the lake reverses direction until some 1.25 million ha are underwater several months later. Surrounding the Tonle Sap Lake are extensive forests and shrub lands, which provide food, shelter and spawning habitat to many of the over 100 fish species found in the lake. The unique annual hydrological cycle of the lake has created an exceptionally productive ecosystem for fish and wildlife. The high productivity of the lake was central to the development of the Angkor Empire a millennium ago and today still serves as the foundation for development in the region.

The project “Participatory Natural Resource Management in the Tonle Sap Region” was drafted in 1994 to address concerns over rapid clearing of the inundated forest ecosystem and

subsequent threats to productivity. The project is funded by the Government of Belgium and implemented through the Food and Agriculture Organization of the United Nations (FAO). The project has been of a pilot nature, with the first phase (1995-1997) focusing on research and data collection on fishing communities and the flora and fauna of the Tonle Sap Lake (Figure 1).

The second phase (1998-2001) expanded the target area throughout the province and focused on field implementation of community-based natural resource management in both the forestry and fishery sectors. The project has now entered a third phase that will focus on consolidation and standardization of approaches for both community fisheries and community forestry, and will emphasize training for government staff from around the Tonle Sap Lake to promote appropriate strategies and techniques.

Fisheries on the lake have been traditionally managed through a system of fishing concessions (fishing lots), which were auctioned at two-year intervals. This system dates back to 100 years of French colonial occupation. It was a system designed to extract revenue from the lake, while providing some degree of protection to the inundated forest habitat.

**Harvest mentality**

However, in practice, the system was managed to generate maximum revenue, which involved sub-leasing and sub-sub-leasing of a given fishing lot. The large amounts of money involved dictated a total harvest mentality. For years, fishing lots were jealously guarded by armed militias and a tense armed atmosphere prevailed around the lake. Consequently, the thousands of fishermen living on the

lake and/or on its borders were subjected to threats, intimidation and gunfire when straying too close to fishing lot boundaries. By the late 1990s, some 80 per cent of the entire dry season lakeshore was under the control of 18 fishing lots.

**I**n mid-1999, the government converted all the large fishing lots on the lake into so-called 'research lots' under four-year contract agreements, without auction. This further empowered fishing lot operators, and many illegally expanded their lot boundaries, further diminishing access to fishing grounds for the numerous subsistence fishermen.

At the same time, however, the disintegration of the Khmer Rouge regime and the cessation of armed conflict in the country gave fishing communities the confidence to speak out against the injustices of the fishing lot system. The number of conflicts reported increased exponentially.

In 2000, as more and more conflicts were being reported in the news, the issue of fisheries management on the lake gained the attention of the donor community through their working group on natural resources. A dialogue was initiated between the donors and the government to start addressing the reported problems associated with the fishing lots system and the increasing conflicts between local people and fishing lots.

The opportunity for reform opened in October 2000, when the Prime Minister visited Siem Reap to provide aid to flood victims. After discussions with local officials regarding conflicts between fishermen and fishing lots, the Prime Minister announced the release of 8,000 ha (from the 84,000 ha under fishing lots in Siem Reap province) to local communities for community management. A complaint against this decision from the Director General of Fisheries resulted in his removal, and a commission was sanctioned to conduct a more thorough review of conflicts within the inland fishery sector. The commission held meetings with fishing communities in Siem Reap and, later, around the entire lake, and asked the people what they wanted. Their demands soared and by February it was agreed to release 56 per cent of the entire area under fishing lots in Cambodia (536,289 ha) at the end of the fishing season in June 2001. Communities gained immediate access to fishing grounds taken from lots that were reduced in size. For lots that were to be abolished entirely, the lot owners were permitted to fish out the season. Fishery reform became the mantra of the day.

#### **New leadership**

Changes were occurring rapidly and as the new leadership in the Fishery Department scrambled to address the new challenges, in February 2001 the Prime Minister ordered all fishery staff back to

their offices for two months, effectively opening the lake to fishing by anyone and any means.

**I**t was 'open season' as never seen before. No one was permitted to enforce laws against illegal fishing and any size of gear was acceptable, without licence fees. Everyone went fishing. People who had never fished before were down on the lake. Push-nets mounted on the front of large boats became standard, and they soon emptied the fish sanctuaries. For the fishing lots that were to be released, this was their final fishing season and, therefore, "take everything" was the attitude. The lake has never been fished so thoroughly as between February and May 2001. The wealthy fishermen and businessmen benefited, while the poor fishing communities watched their resources being stripped before their eyes. The rapid depletion of fisheries resources around the lake left the fishing communities requesting for assistance to establish some form of control and management over the resources. The stage was set for community-based fishery development.

The FAO project in Siem Reap had established some 33 community forestry sites by early 2001, with seven sites, totaling around 10,000 ha, located in the Tonle Sap Lake. These were in the open-access fishing grounds located

between the seven existing fishing lots. By February 2001 it was decided that four of the seven Siem Reap fishing lots would be abolished and that the remaining three would be reduced by at least 50 per cent. This meant that around 62,000 ha of fishing grounds would be released to the local communities.

When the Fishery Department staff were ordered off the Lake and back to their offices, the project received permission from the new Director General of Fisheries to provide facilitator training to the fishery officers from Siem Reap. After a one-week training on facilitation techniques and concepts of community resource management, 15 of the 28 officers trained elected to work in community fisheries. These 15 were interviewed and seven were selected for further training and sent to the field as facilitators, alongside previously trained project staff. Seven two-person teams, one for each fishing lot, began work in April, and they have continued to the present time. The teams spend Monday through Friday in the field and return to the Provincial Fishery Department on Friday afternoons for a meeting with the Provincial Director of Fisheries and project staff to discuss what was accomplished during the week and to plan the next week's activities.

#### **Local meetings**

The facilitation teams began by meeting with local authorities to discuss the

concept of community fisheries and to gather information on who the primary users of a specific fishing ground are.

**T**he facilitators then visited each village and held discussions with the people about resource use to accurately identify primary and secondary (seasonal) users. Participatory Resource Assessment (PRA) was conducted in each location, and information collected from all segments (old, young, male, female) of each village. Through this exercise, problems, constraints and opportunities were identified for each location. Subsequent meetings and workshops were held at each village, and, eventually, each village elected a village fisheries management committee to represent the people of that specific village.

After village fisheries management committees were elected and the initial draft rules and regulations of resource use were drafted, a large workshop was held with all village representatives and local authorities and a central management committee was elected. Members of the central management committee then elected their own chairman, deputy, secretary and treasurer from among members. Also, some persons from the central committee were chosen to be in charge of protection, while others were made responsible for extension within the community. The project has encouraged the participation of women in the central management committees, as well as in the village committees. Local commune chiefs serve as advisors but cannot be members of the committees.

Rules and regulations of resource use are formulated at the village level, and are discussed and negotiated into a common set of rules and regulations by the central committee. These by-laws cover everything, from types and size of fishing gear permitted, timing of use and placement, protection of wildlife and the inundated forest, and associated fines for violations. Each site is mapped and demarcated to inform outsiders of the boundaries of the community fishery site. Some communities have divided the protection responsibilities for the resource into village-allocated areas, under a common set of rules and regulations,

while other sites have agreed to protect and manage the resource in common.

As this process was taking place, project staff travelled to meet other secondary or seasonal users in villages and communes at a distance from the resource, in some cases in other provinces. The development of community fisheries was discussed with all identified secondary users, who were invited to attend workshops with the primary users to participate in the discussion of boundaries and rules and regulations. In all cases, the secondary users are being permitted access, but under the approved rules and regulations of each site.

A key element has been to keep the District Governors involved in all the workshops and to also have the Provincial Director of Fisheries participate in all the workshops. This establishes legitimacy of the community fisheries development process and builds confidence among the participants.

There are now 10 central management committees overseeing protection and management of around 108,000 ha of inundated forest/fishing grounds within Siem Reap province (Figure 2). The people and committees are taking their new responsibilities very seriously and are actively patrolling their areas to stop destructive fishing practices, such as electric fishing, and other illegal activities, ranging from cutting trees in the forest to poaching wildlife. They have been confiscating illegal fishing gear and charging fines according to their rules and regulations. Provincial Fishery Department staff, who are responsible for law enforcement in each district, assist the communities to enforce their rules and regulations. Tens of thousands of illegally captured fish fry have been released back to the lake, as have monkeys, turtles and snakes that the communities confiscated from poachers.

#### **Political challenge**

The communities have gained confidence in their ability to protect and manage their resources. However, the recent election of commune chiefs in February 2002 disrupted the development process, as the three major political parties indirectly encouraged illegal activities and

disrespect for law enforcement. To strengthen control, the project's focus, for the next couple of months, will be on village-level extension and expansion of management committees for greater involvement in both management and enforcement.

**A**lso, during the next couple of months, the facilitators will be trained in preparing management plans. The first five-year operational management plans will be drafted by June. These plans will assess both forest and fish resources, and define actions to not only protect and manage the resources but to increase their overall productivity.

Community fisheries development is happening at a rapid pace in response to the release of over 500,000 ha of fishing grounds to local communities in 2001. The government wants all of these lands to come under the control of local communities and not be left in an open-resource situation.

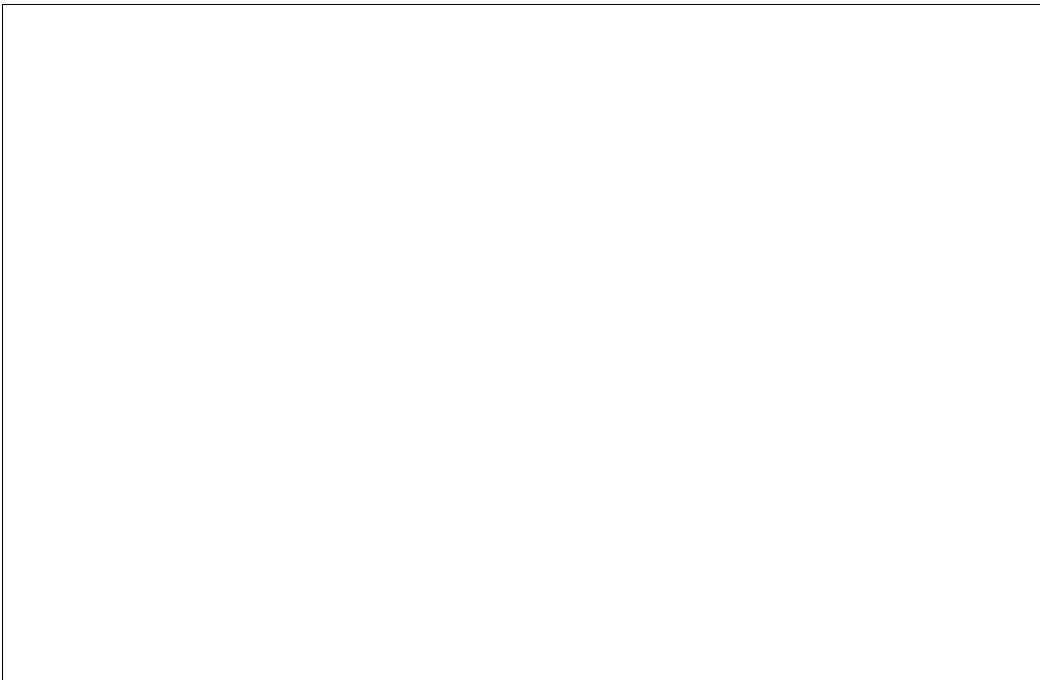
The Prime Minister started this process and wants to see it develop successfully. He has instructed the Department of Fisheries to draft a sub-decree for community fisheries, while simultaneously telling it to implement community fisheries now and not wait for the sub-decree to be finalized.

The sub-decree was drafted in mid-2001, through a consultative process with fishing communities and other officials from around the country. The draft is still being discussed and revised. Simultaneously, a new Fishery Law for the country is being drafted.

The Department of Fisheries has re-organized itself to address the new demands of community fisheries development. It has established a new community fisheries section in its central and provincial offices. The government is taking its new responsibilities seriously and is seeking additional assistance from donors for the extensive amount of community fisheries development required around the country.

The project 'Participatory Natural Resource Management in the Tonle Sap Region' will continue to support community fisheries development throughout its third phase through April 2004. During this time, the project objectives are to:

- support and ensure establishment of community fisheries throughout the province of Siem Reap;
- strengthen and standardize the process of community forestry in upland forests;



- provide training to fisheries, forestry and environment staff from around the Tonle Sap Lake in community-based natural resource management and extension; and
- implement a focused environmental education and extension programme throughout the fisheries domain in support of community fisheries development.

The project will continue implementation of a number of activities in support of community-based natural resource management, including aquaculture extension, seedling production and agroforestry extension, horticulture development, rural credit and income-generating activities. Within the community fisheries sector, greater emphasis will be placed on fish processing and marketing by local communities. In all activities, the project emphasizes the role of women.

As always, there are questions regarding the sustainability of project activities after the current phase of the project. Empowerment of the people will last; however, the ability of the government to support field activities is questionable. The reality in Cambodia is that the government is poor and is currently unable to pay its civil servants sufficient salaries; nor does it have funds for field activities. Extensive governmental reforms are under way and are expected to eventually establish a proper functioning civil service. However, this will take time. For the present, donor support is needed. Currently, the Asian Development Bank, in collaboration with UNDP and the Global Environmental Facility, is preparing a proposal to fund the fourth phase of the FAO Siem Reap project and to expand activities to the remaining four provinces bordering the Tonle Sap Lake. This is needed and timely, as the project in Siem Reap has always been considered a pilot activity that must one day move around the lake.

The process of community fisheries development in the Siem Reap province has been developed by the project over the past four years, primarily in the upland

forest areas. It is being adapted to issues specific to community fisheries and is being applied rapidly due to the urgent need to establish community control over the areas released from fishing lots. In summary, the process is as follows

#### 1) Contact with local authorities:

- Letters of authorization are provided from the provincial authorities and delivered to the district governors by the facilitation teams.
- Objectives and work involved are clearly explained.
- The district governor and other authorities (military/police) are kept informed and involved in the process.

#### 2) Identification of users

- Primary and secondary users are identified through local authorities, village chiefs and local fishermen.
- Discussions are held to ensure accuracy of information.

#### 3) Participatory Resource Assessment

For each site, a PRA is conducted with all the primary and secondary users regarding resource use, supply and demand, conflicts, etc.

#### 4) Village meetings

These are held in each village to:

- discuss PRA results and review sketch maps;
- define the resource area that individual villages use and want to manage;
- elect village representatives to a village-level community fishery committee;
- define objectives of resource management; and
- draft rules and regulations.

#### 5) Central workshops

These are held with village committee members, commune and provincial

authorities to elect a central committee with representatives from each village to:

- clearly define the resource boundaries; and
- name those responsible for protection activities and extension work.

#### 6) Demarcation and mapping

Community fisheries resources are defined and mapped with global positioning system (GPS).

Demarcation is done with painted poles, if needed.

#### 7) Rules and regulations

These are finalized for each community fisheries site by the central committees and made public through maps to inform all other potential users of the location and user obligations for a given resource.

The rules and regulations are endorsed and signed by the central committee, the district governor, the Provincial Director of Fisheries and by the Provincial Director of the Ministry of Agriculture, Forestry and Fisheries.

#### 8) Management plans

The central management committee, in consultation with village committees and fishermen in general, drafts a five-year operational plan that defines activities and actions related to resource protection, management and enhancement as well as benefit distribution.

The objective of this process is to empower the local communities to protect and manage the forest and fishery resources upon which they depend.

The basic strategy in community fisheries is to transfer responsibility for resource protection and management from the government to local resident communities. In Cambodia, the actual resource that communities protect and manage is physical land, thousands of hectares of seasonally flooded forest and shrub lands, dotted with ponds and streams in the dry season. The areas recently released from the fishing lot system for community management are

highly productive fishing grounds. If managed properly, they have great potential to ensure food security and stimulate local economic development. Legislation is being formulated to support the new policy, and the government is working to ensure its implementation. This unexpected and massive reform within the inland fishery sector of Cambodia will directly benefit many thousands of rural people.

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