Evaluation of Ex-fishing Lot No. 5 after its Abolishment in 1988 Siem Reap Province, Cambodia

by
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1. Abstract

Presently, there are 52 fishing lost around the Tonle Sap Great Lake, 7 of which are located in Siem Reap province. Since 1979, not only the location and the are of extension of the fishing lots have changed, but also the style of management has changed. From 1979 to 1989, fishing lots were leased to a number of family groups operating ther under the system of Krom Samaki. They had to pay their use rights in the from of fresh or salt dried fish to the government. Since 1989, this system was replaced by an auction system, in which every two years fishing lots are auctioned and given to the highest bidder. Over the years, the number of fisher families increased, but the size of the fishing grounds to which they have access remained the same. This lead to conflicts over resource use between fisher and the owner of fishing lot #5 in particular. seeing this problem occurring every year, the government reconsidered and decided to abolish the fishing lot and open it up for family fishers in 1989. The paper primarily identifies the changes in the living conditions of the fisher families and the effect on the resource management.

2. Introduction

Siem Reap province has a rich cultural heritage as well as rich fisheries resources that enable the province to export its fish product to upland provinces and Thailand as well. The Siem Reap provincial border with the Tonle Sap Great Lake is about 82km long. There are 33 communes located along the lakeshore withing or close to the inundate forest. About 34% of the total population of the province are engaged in fishing and fishing related activities (Thuok 1996)

The fishing operations are divided into small scale, middle scale and large scale fishing according to the gear size catch capacity. The lager scale fishing operations are known as fishing lost, which are allowed to operate only during the open season.

In the 1980's the province had 7 fishing lots. One fishing lot was abolished in 1888. But the province got one in return from Kompong Thom province.

The fisheries authorities and research have different opinions about the usefulness of fishing lots for fisheries management. Those who prefer to maintain and expand the fishing lots say that lots potentially contribute to the protection and conservation of the fish stocks by protecting critical fish habitats inside the lots. Others want to open up the fishing lots for villagers and family fishing.

3. Purpose of the paper

The purpose of this paper is:
1. To describe the past management of ex-fishing lot #5 and the current management of the abolished lot area.
2. To explain the season, why the fishing lot was opened as a common property area.
3. To evaluate the impact of the lot abolition on the fisheries resources.
4. To provide criteria for considering the fishing lot system for fisheries management.
5. To make recommendation for further studies of the lot system.

4. Methods

In order to meet the above objectives, information was obtained through informal meeting and discussion with fishers, local authorities, and the ex-owner of lot No. 5 and fisheries officers. Direct field observation were also made of the exofishing lot location, forest situation and activities of the fishers. Unfortunately, no secondary or statistical data demographic features nor the habitat situation
was available to be used for comparing between the pre and post abolition period. Thus, the present evaluation relies on the report of some key informants.

5. Results

Fishing village
Kampong Phluok is one of the communes in the former Siem Reap District, but it presently belongs to Prasat Bakong District. This fishing commune has been in existence for a long time. It located next to ex-fishing lot No. 5 (figure 8.1). The inhabitants of Kampong Phluok have their permanent residence in the commune center, but the biggest part of the population lives in a "floating village" that moves in a yearly cycle following the water level fluctuations of the Great Lake. Under these circumstances, every fisher family has to rebuild their house twice a year. Reportedly, during the decade of the 80's, most of the fisher families cut the trees each year from the flooded forest area located nearby or within the area of ex-fishing lot No. 5 for rebuilding their temporary shelters. In addition, fisher families also collected the firewood for cooking and smoking fish.

None of fisher families has agricultural land within the flooded forest area. They protect the inundated forest around their village as the forest provides protection against waves and storms. The fisher families earn their living mainly from fishing using different types of fishing gears, mostly gill nets.

The inhabitants of Kampong Phluok had limited access to fishing ground up to 1988 (figure 8.30). They continuously complained to the fishery authorities about the conflicts with fishing lot owners over navigation and fishing accessibility. Therefore, they asked the fisheries authorities to solve this problem.

Ex-fishing lot No. 5
Ex-fishing lot No. 5 was located in between ex-fishing lot No. 5 and Kamponh Phluok commune. Since 1980, the fishing rights were given to a group of fisher families the Krom samaky. This so-called solidarity group of fisher families had to pay tax in the form of fresh or salted dried fish to the state. Krom Samaky groups have a division of labor, as is shows in figure 8.1.

The lot protection unit was formed by several members and divided into 4 small groups with 2-3 people per group. These 4 small group take responsibility and patrol at 4 sites of the lot including the flooded forest area in order to prevent people from entering the lot. People are not allowed to enter the lot for about 6 month of the open fishing season starting from October and ending in March.

**Figure 8.1:** Organizational Chart of EX-fishing Lot No.5

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Group Leader
  ↓
Vice Group Leader
  ↓
Technical Unit (fishers)
  ↓
Members
  ↓
2-3 Members

Lot Protection Unit
  ↓
Members
  ↓
2-3 Members

Financial Unit
  ↓
Members
  ↓
2-3 Members

2-3 Members

2-3 Members
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The fishing operation started in April when the water depth was appropriate to enclose the lot and
experienced technical group went around the lot and checked the abundance of fish. At the right time to start lot operation they enclosed the lot with bamboo fences in order to harvest the fish. In the closed season for the lot operations family and middle scale fishers were allowed to fish inside the lot area.

The changes after the abolition of the lot

The former fishing lot No 5 was abolished in 1988 by the fisheries institution based on the following criteria:

1. The fish production of ex-fishing lot No. 5 was reported to have declined from about 400 tons to about 100 tons and the lot operator could not afford to pay the lot fee.
2. The fisher in Kampong Phuok Commune complained that the boundary of the ex-fishing lot No 5 was illegally enlarged and thereby public access was reduced. It also caused an obstacle to people's navigation from one village to the other and from one fishing ground to the other.
3. As the fishing lot No 5 had its peak catch earlier that the neighboring ex-fishing lot No. 4 the two lots frequently were in conflict with each other.

After the abolition, ex-lot No. 5 became a public fishing area (see figure 8.3). The fishers from Kampong Phluok commune and sometime from Chong Khneas commune come to fish in the abolished lot. They use not only arrow shaped traps, but also other types of fishing gears. There were reportedly about 15 Lop Rav (arrow shaped trap) fisher, 4 seine net fisher and around 30 gillnet fishers. Almost 30 gillnets fishers permanently fish in the abolished lot are because of the lack of a motorized boat. The fisher who go fishing in the abolished lot have to pay a fishing fee to the government (fisheries authorities), but not all gillnet fisher pay the fee. After receiving the fishery license, the fishers can go fishing any time according to the appropriate time for their fishing gears.

Informal talk with arrow shaped trap fisher and gillnet fishers indicate that they sometimes have quarrels with the seine net fishers about the use of the fishing grounds as fishing activities frighten the fish away from the area.

A survey conducted by FAO shows that in the closed season people come from upland communes to fish in the flooded forest area probably within the abolished lot area after they finish planting their rice. Mostly, they use gillnet, castanet and small traps. These part time fisher do not pay a fishing fee.

The recent survey on dam construction and day season rice field within the flooded forest area conducted by FAO shows that there are new dams constructed for the purpose of growth dry season rice. These dams have been constructed by people coming from upland communes. However, the fisher in Kampong Phluok village do not care about the inundated forest in general, they only protect the area surrounding their village.

6. Discussion

A fishing lot can be protected by lot owners for about 6 month as long as the lot is operated. In this time fish has the chance to grow bigger and some species might reproduce within the lot. The flooded forest in the lot is protected by the guards of the lot.

On the contrary, when the fishing ground is open to public access, fish there all the time. These fishing activities limit the chance for fish to grow and reproduce themselves. Moreover, these fishers do not protect the forest much, because they think that their fishing ground does not belong to any one.

7. Conclusion

Based on the collected information it is concluded that fishing lots should not be abolished even though there are conflicts about the lot boundaries. The government should consider reshaping the lots to a reasonable size or locating them away from fishing villages. By building awareness among
local fishers and defining clear boundaries, conflicts may be reduced and cutting of the forest stopped.

Fishing communes only look after the flooded forest adjacent to their communes, because this forest provides a natural windbreak for the village and protects it against an occasional storm. Also, it is suggested that during harvesting the lot operators should abide by the regulation stipulated in the burden book. They should not use destructive fishing gears such as brush park (samrah), pumping or electro fishing.

It is recommended that the current fishing lot management in various lots in the country should be thoroughly studies to provide a better insight in the problems. In addition, the relationship between the flooded forest and fish should studied in order to understand better how important the flooded forest is in the lifecycles of the fish species of the Tonle Sap.

8. References


