Ecotourism in Prek Toal Core Area

1. Introduction

The preserved flooded forest and beautiful sightseeing wetland ecosystem with high concentration of many waterfowls species and wildlife make Prek Toal core area very attractive for tourism. Interview with some tour operators in Cambodia shows that a large percentage of tourists coming to Cambodia are interested in visiting Tonle Sap Lake. Indeed, with the political stability and lasting peace in the upcoming millennium, Prek Toal will be the target of frequent visit for most of the tourists who come to see Angkor Temple.

At present there is no legal status or any management plan for ecotourism promotion. A number of questions concerning institutional responsibility, community participation, fishing lot implication, revenue collection and distribution, impact assessment need careful consideration and study need to be resolved. Regarding the legality of ecotourism, TCU with the support of UNESCO has developed a draft royal decree, which is still under discussion at the ministerial level. The decree, if adopted, would be the first step for further elaboration of future management plan of Prek Toal core area as part of Biosphere Reserve concept, in which ecotourism is addressed. So far a pilot ecotourism has been promoted by a Belgian NGO Osmose in collaboration with TCU, aiming to regulate the prices and to identify the emerging issues and difficulties. TCU also distributed brochures to several hotels and travel agencies to raise awareness within the private sectors.

2. Osmose and TCU Joint Ecotourism Promotion

Osmose is set up by Mr. Frederic Goes and Natalia to provide ecotourism service for Prek Toal area. Mr. Frederic used to work as consultant to TCU during SPEC project. Osmose began operation in Nov 98 until Oct 99. In this joint cooperation Osmose brings tourists from Siem Reap to the station, while TCU staff accompany tourists to visit bird colony in Prek Toal area. It was agreed that Osmose charged 40 USD per pact, of which 10 USD is extracted for the station. For 10 USD as entrance fee, TCU should provide transportation service and guide. There are several options for price policy developed by Osmose and TCU based on estimated operational cost and number of tourists (see the attachment). The price for each package (including transport, meals, and entrance fee) range from 40 to 60 USD. As reported by Osmose, the first year operation is regarded as a trial, all the revenue collected is just to cover operation cost and initial investment. The station does not receive any entrance fees from Osmose. The upcoming year as promised by Osmose TCU will be more involved as agreed.

Based on Osmose report, 27 tourists visited the area between Nov 98 and Oct 99. The number now increases up to 40 visitors per month in 2001. The proportion of Siem Reap tourists going to visit Prek Toal is very small, compared to 800-1,200 tourists visiting Angkor per day. If 10% of Siem Reap tourists go to see Prek Toal it would generate income of about 180,000 USD per month with a monthly net profit of 90,000-120,000 USD, based on 60USD/person charge by Osmose. Some issues and constraints are observed as below:

- The price policy and carrying capacity is not fixed
- Access is hampered by fishing lot operation;
- Tiring trip during the April and May because of low water level; Walking path should be built to get easy access in the flooded forest
- Poor organization and service (communication, transportation, accommodation, food);
- Waterbirds are disturbed by fishing activities which may disappoint tourists when they do not see birds during the visit;
- TCU has a limited capacity (transportation means, tourist guides, language, communication, staff). At present TCU can serve maximum 20 tourists per day.
- The villagers have little knowledge about ecotourism.

3. Recommendations for Ecotourism Plan

To avoid confusion and guarantee sustainable ecotourism in the future it is recommended as the following:
Institutional Responsibility

Three key agencies relevant to ecotourism management are Ministry of Environment, Ministry of Tourism, and Fishery Department, who shall form a task force for developing ecotourism guidelines and management plan. The management plan would define institutional responsibility of each department, and set out price policy and distribution among concerned stakeholders.

Ministry of Environment: based on the draft royal decree for Tonle Sap Biosphere Reserve, MoE should take care of conservation activities, appropriate tourist zoning, monitor and control access, provide tourist guides and interpretation, impact assessment and carrying capacity, and entrance fee collection.

Fishery Department: shall oversee all fishing activities inside Prek Toal core areas to be consistent to the agreed management plan, which allow ecotourism practice go along in harmony with fishing lot operation.

Ministry of Tourism: should be responsible for awareness campaign to attract tourists to the area, organize transportation and communications through private company. Tonle Sap Lake tourist destination has been already included in the tourism guides.

Fishing lot constraint

Fishing lot presently causes some constraint to ecotourism promotion in terms of access and wildlife disturbance. The code of conduct and access to the fishing lot must be regulated properly. The best time for ecotourism in Prek Toal is from January to May, at the same time when fishing lot operates. The fishing lot owner is reluctant to allow access, because of fears of reducing fish catch. Consequently, permission has to be requested for any entry from fishing lot owner. Another problem is the risk of not seeing the bird colony as promised due to frequent disturbance by fishing lot labors. Such Experiences have occurred already when fishing lot owner purposely scare the birds in the area under his control to avoid frequent visit to the area. These problems can be resolved through different approaches suggested below:

- To guarantee high probability to see birds, fishing lot operations should not be too close to the nesting sites or feeding area of waterbirds, appropriate zoning may be required;
- Code of conduct of fishing lot owners should be attached to the fishery burden book;
- Financial incentives may be offered to the owner sublease river (or fishing lot guards) where birds are more concentrated and preserved;
- Agreement between ecotourism manager and fishing lot owner for 6 month period of access without frequent request for every entry;
- Observation posts shall be established to control population dynamics or human disturbance to birds, and promote conservation and ecotourism activities.

Community involvement

Community involvement is an important part of management strategy for sustainable ecotourism development, which would guarantee some benefit accrued to the local people. Community involvement can be organized as follows:

- Some villagers may be selected to serve as boat drivers or tourist guide.
- Some villagers may be selected to form a group of park rangers for monitoring and guard of the critical sites for tourist visits;
- Food and accommodation service can be provided by local villagers;
- Organize training for community on using map, ecology, birds, wildlife, and tourist entertainment.

Environmental Impact and Carrying Capacity
Tourists can have both positive and negative effects on socio-economics and environmental conditions. Ecotourism can be useful for education and environmental awareness, encouragement of public participation in conservation, alleviation of human pressure on local resources, income generation for local economy and conservation programme etc... But at the same time tourism may cause undesirable changes including wildlife ecology and behavior (breeding and migration) due to frequent visitation and infrastructure development near the sensitive site, water pollution, fish stock decline because of noisy motor boat transport, increase in human settlement (guest houses, restaurants), population increase due to migration from other areas, change in tradition and culture of local community, and an increase of illegal behavior by fishing lot (frighten waterbirds from the sites, destroy nesting site by felling tree or burning) because of unhappiness with new ecotourism opportunity. These issues need careful analysis. The concept of carrying capacity is often applied to mitigate ecotourism impact. Carrying capacities are recognized to have three components: physical, social and ecological. For Prek Toal area the three components can be interpreted below:

- **Physical carrying capacity**: relates to the number of people or visitor units (motor boats, rowing boats), infrastructure (restaurant, walking path) and observation posts (number and distance) that can be accommodated by the site.

- **Social carrying capacity**: refers to the number of visitors for each river (sublease) that can be accommodated without causing unpleasant feeling or experience of all visitors, and the number of entries (access) per day that can be allowed in each sublease without having disappointed the fishing lot owner.

- **Ecological carrying capacity**: this is the most important aspect of ecotourism, which have to define the number of visitors that can be accommodated by each site without having effects on ecosystem integrity, wildlife breeding and migratory pattern, hydrological regime due to transport and other possible infrastructure development, and fish stock.

In addition the price policy must be properly defined to regulate the number of visitors along with the above three parameters.

**Financial Distribution**

The revenue from ecotourism in Prek Toal can not be compared to fishing lot revenue and therefore should not be regarded profit oriented. It must keep in mind that the main objectives are to promote awareness and conservation activities as part of Tonle Sap Biosphere Reserve concepts. The revenue from ecotourism can be divided into two categories: entrance fee and tourism agency charge. The entrance fee contribution shall be collected by Prek Toal Core Area manager, and must be used for management of the core area, park rangers, station functioning and small community support programme. The second category of revenue will be managed by travel agencies who have some form of agreement with Tourism department in terms of tax, authorization, and profit sharing. Some part of this category may be accrued to local people through hiring driver for rowing boat or guide (motor boat is not allowed, except the speed boat of research station). Some amount of profit has to be allocated for fishing lot owner in the form of incentive or rewards for their active participation in conservation and ecotourism. More study has to be carried out to define the fee for foreign and local visitor.

**Legal status**

In addition to the draft royal decree on Tonle Sap Biosphere Reserve as the first foundation, there is a need also to have some legal commitment from Fishery Department and fishing lot owners. The fishery burden book has to be revised, which define the code of conduct of fishing lot operators, zoning of fishing lot operation, and conservation activities. Besides, a management plan should be prepared by the task force made up from MoE, Fishery department, and Tourism Department. Ecotourism management plan must include ecotourism zoning (wildlife/bird watching area, nature photography, picnic, different type of vegetation, self recreation and fishing), guidelines for visitors and travel agencies, natural resources potential, infrastructure (observation post, walking path, interpretation center), staffing, mapping and guide.