Community-Based Ecotourism as a Tool for Conservation: a Case from Cambodia

Ayako TOKO*

Abstract: Arguments on the best scheme of conservation and natural resource management (NRM) have been developed for more than half a century. Each period had its own challenges, which were recognized later, and decentralized approaches incorporating the concerns of local communities gained attention since the eighties as a consequence of past failures. However, community-based approaches also have challenges, especially lacking of financial and human resources in local communities. On the other hand, ecotourism emerged in the early eighties as an effective tool to provide financial resources for conservation and for local communities as well as to improve environmental awareness of local people. Summarizing the theories of these two approaches, community-based ecotourism (CBET) is supposed to be a good tool for NRM by contributing toward meeting the challenge of community-based approaches. Therefore, in order to examine the hypothesis, this study focuses on CBET in Cambodia where 73% of people still live in rural areas and are directly dependent on natural resources. The result from a model case indicates that CBET has a potential for support sustainable NRM; on the other hand, it is revealed that most of CBET sites in Cambodia are poorly assessed and still under development. Further research on CBET is urgently needed in Cambodia for the nation’s sustainable NRM.

Key Words: Community-based ecotourism, natural resource management, local community, Cambodia

INTRODUCTION

Community-based approaches gained attention during the early seventies, especially in the field of conservation, when the results of large-scale, capital-intensive, and centrally planned conservation and development projects discouraged further expectations on these previous approaches to natural resource management (NRM) (Kellert et al. 2000). What constitutes the best form of conservation has been debated for more than half a century, with various types of approaches being pursued, as shown in Table 1. Each period had its own challenges, which were recognized later and became the trigger for a new institutional approach.

From the late fifties to the seventies, many scholars and politician, particularly economists worked on what became known as the common property problem and concluded that the primary cause of the destruction and inefficient use of natural resources (NR) was the absence of property rights. Thus, private property regimes gained relevance as a solution (Gordon 1954; Scott 1955; Cheung 1970; Johnson 1972). However, substantial NR cannot be privatized and also can be overused privately; as a result, many NR continue to degrade during this period. In order to tackle such challenges, the importance of governmental control and management was asserted after the sixties, leading to the enactment of natural conservation laws in some countries. Yet, the government-lead conservation activities included other problems such as: the governmental institutional failures, bureaucratic failures, and the disregard of local needs and local knowledge. Because of past failures of highly centralized government bureaucracies, incorporating the concerns of local communities in NRM is being increasingly recognized since the eighties. At the same time, many studies have showed that local

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people could collectively manage these resources in a sustainable manner (Berkes 1989; Ostrom 1990; Pinkerton & Weinstein 1995; Ballard & Platteau 1996). Consequently, many governments in local communities is crucial (Rose 2002). Yet, substantial studies have revealed that highly decentralized schemes also caused problems: especially, the lack of human or financial resources in local communities is crucial (Rose 2002). Basically, a community-based scheme was expected to overcome the limitations of the state’s fiscal capacity and of the human resources for undertaking coercive conservation (Agrawal 2003); in reality, however, local communities also lacked these resources either. Therefore, for achieving better community-based conservation, such challenges must be addressed.

On the other hand, the concept of ecotourism emerged in the early eighties when it was first suggested as an effective tool to raise funds for nature conservation as well as to create financial incentive and awareness for local people. 1) According to the International Ecotourism Society, ecotourism is now defined as “responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education; education is meant to be inclusive of both staff and guests.” 2) Gartrell and Wearing (2000) states that ecotourism is a “community-based activity where community members are involved in all aspects of management of the resource that is the focus of tourism, as well as management of their own lives”. The ecotourism definition has been evolved in keeping with ecotourism development, although the basic key concept always includes 1) fundraising for conservation; 2) financial benefits for local community; and 3) environmental education.

Summarizing these discussions both on community-based approaches and on ecotourism, it is expected that ecotourism could contribute toward meeting the challenge of community-based

**Table 1  Institutional transition of NRM and related keywords**

<table>
<thead>
<tr>
<th>Age</th>
<th>Trends of NRM</th>
<th>Key words for NRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950s~70s</td>
<td>Private-property regimes</td>
<td>Property right</td>
</tr>
<tr>
<td>1960s~70s</td>
<td>Government-controlled management</td>
<td>Conservation law</td>
</tr>
<tr>
<td></td>
<td></td>
<td>National law</td>
</tr>
<tr>
<td>1980s~</td>
<td>Local level management</td>
<td>Community-based</td>
</tr>
<tr>
<td>1990’s~</td>
<td>Participatory management</td>
<td>Co-management</td>
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<tr>
<td></td>
<td>Collaborative management</td>
<td>Adaptive governance</td>
</tr>
</tbody>
</table>

Source: Summarized by the author, from Gordon (1954); Scott (1955); Hardin (1968); Cheung (1970); Johnson (1972); Berkes (1989); Ostrom (1990); Pinkerton & Weinstein (1995); Baland & Platteau (1996); Folke et al. (2005); Olsson et al. (2004)

![Fig. 1 Theoretical hypothesis](image-url)
approaches by providing financial benefits and educational aspects to local community as shown in Figure 1. It shows a hypothesis based on the historical arguments explained above, suggesting that community-based ecotourism (CBET) is an effective tool for NRM. Therefore, this study aims to examine the hypothesis by focusing on the actual condition of CBET in Cambodia. Although there is a slow but steady trend of urbanization in Cambodia, about 73% of people still live in rural areas and they are directly dependent on NR (Ministry of Planning, 2014). Furthermore, tourism has been identified as one of the priority sectors in the Rectangular Strategy of the country (Royal Government of Cambodia, 2012). Therefore, NRM and tourism development are directly related to and affect on the nation’s welfare. The results and discussion of this study are expected to contribute to further research of CBET and to sustainable NRM in the country.

1. METHODS

1.1 Study Site
Cambodia is situated in Southeast Asia in the southern part of Indochina and it covers 181,035km2. Cambodia’s forests are rich in biodiversity and provide potential for the ecotourism development (SCW, 2006). On the other hand, the forests are also an important NR that is central to rural livelihood strategies as almost 76% of people rely on fuel wood and 8% rely on charcoal for daily cooking (National Institute of Statistics, 2014). Therefore, in the Law on Tourism, the purposes of the law include conservation of the NR, culture and customs as well as poverty reduction (Article 2: Ministry of Tourism, 2009).

1.2 Verification of the hypothesis
Firstly, literature research, including the internet sources, was undertaken through a wide range of domestic and international publications by using several academic database such as CiNii Articles, SciVerse ScienceDirect and SpringerLink. A general internet search engine, Google scholar, was also used for both. Additionally, documents, books, maps, ministry brochures, and secondary data about Cambodia were collected through field works conducted in September 2014 and September 2015. Then, semi-structured interviews with key-persons related to CBET were conducted during the field works in 2015 in order to obtain further information (Table 2). Finally, a case was selected and examined to verify the hypothesis if CBET contributes to NRM by providing: a) funding for conservation; b) financial benefits for local community; and c) educational aspects as explained in Figure 1.

2. RESULTS

2.1 The actual condition of CBET in Cambodia
Brief summary of the actual condition of CBET in Cambodia is shown in Table 3. The country has 24 provinces and each province is divided into 185 district, which is further divided into communes totaling 1,621. The commune are then divided into villages with approximately 13,694 occurring in the country (SCW, 2006), but villages are not in the administrative order. A Commune with several villages are the major actor for CBET in Cambodia. Currently, there are 55 CBET (including CBT) sites in 16 provinces as shown in Figure 2, and most of them are supported by

Table 2  The list of Interviewees*

<table>
<thead>
<tr>
<th>No</th>
<th>Title</th>
<th>Organization</th>
<th>Num</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Deputy Director General of Tourism</td>
<td>Ministry of Tourism</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Deputy Director General of International Cooperation</td>
<td>Ministry of Tourism</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>JICA senior volunteer, Tourism Planning and Development Department</td>
<td>Ministry of Tourism</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Deputy Director</td>
<td>Mlup Baitong (Local Environmental NGO)</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>CBET’s Management Committee Leader</td>
<td>Chambok CBET</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>CBET regular staff, English spoken guide</td>
<td>Chambok CBET</td>
<td>1</td>
</tr>
<tr>
<td>7, 8</td>
<td>CBET Women, cooking staffs for tourists</td>
<td>Chambok CBET</td>
<td>2</td>
</tr>
</tbody>
</table>

*Interviewee No in the left column is used as a reference in NOTES (e.g. interviewee 1)
foreign donors.

According to the interviews with the Ministry of Tourism, the coastal zones such as Koh Kong and Kampot have become progressively popular and the easy access from Phnom Penh increase the tourism market potential for those areas. There remains submontane and lowland evergreen dense forests in those areas, especially in Koh Kong, and subsequently, endangered wildlife species are still living there including the elephants (SCW, 2014). Because of such abandoned biodiversity, Chi Pat CBET in this province, supported by Wildlife Alliance, is now regarded as the best CBET site in the country. Along the Mekon River, Kampi in Kratie province is also popular CBET site thanks to Irrawaddy Dolphin. The dolphin is endangered and rare species in the world, which attracts many people from different countries.

The northeastern part has great potential for CBET as well, but the area has more environmental problems such as forest degradation caused by large scale concessions on forest land on the border. More than one interviewee mentioned that land concessions are one of the biggest issues for CBET in Cambodia since local communities suddenly lose their forests, an important tourism resources for them, because of the concessions, and it often happens even while a CBET project is in process. Not a few CBET projects have failed to be sustainable for this reason. Therefore a major task of the government for the success of CBET is giving official licenses legally to the local community. Fortunately, the three ministries (of environment, tourism, and agriculture) have already started to jointly discuss the framing of a law for CBET and it should include the license issue.

In reality, the interviews revealed that most of CBET are still developing and unstable by reason such as: communities are lacking of their own visions how they want to activate the communities by CBET, the activities’ menu are the same everywhere, which does not give any attractive impression, and the access to the sites are scarce. Additionally, conservation efforts are often poorly managed, and no comprehensive evaluation has ever been conducted if they really work. There are not many success stories of CBET in Cambodia found in the existing literatures, nor heard from interviewees except Chi Pat in Koh Kong, Kampi in Kratie (as explained above) and Chambok in Kampong Speu. Among these, Chambok CBET is particularly unique because it is totally run by the local community since 2010, which is therefore a completely “community-based” approach. In addition, it is a case of CBET in a protected area where conservation activities are prerequisite. Thus, the Chambok CBET is further examined in the following chapter as a case study in order to verify the hypothesis.

2.2 A case from Chambok Commune

CBET in Chambok has started in 2002 when the commune made a contract with the Ministry of the Environment to use 392 ha of the National Park for a community forestry and 70ha of that area became CBET site (Prachvuthy, 2006). Chambok commune is in Phonom Sruich district, Kampong Speu Province with 9 villages and it is located at the inner border of the Kirirom national Park situated in the Northern Cardamon Mountain area. Turton (2004) mentioned that charcoal constitutes the main income earning livelihood strategy with producers claiming it is more profitable than

![Table 3 Brief introduction of the actual condition of CBET in Cambodia](image)

| CBET Sites | 55 sites, in 16 provinces | Recent Representative Sites | Chi Pat in Koh Kong Kampi in Kratie Chambok in Kampong Speu |
| Objectives | -Additional income for local community -Poverty reduction -NR conservation -Cultural enhancement -Capacity building -Community’s unity | Challenges | -Land concessions -Lack of community’s vision -Same menu (Less variety) -Scarce access -No comprehensive evaluation -Lack of research |

Source: Interviews in 2015 and Ministry of Tourism (2014)
Irrawaddy Dolphin. The dolphin is endangered in Kratie province is also popular in CBET site in Cambodia. Along the Mekong River, Kampi in Cambodia is now regarded as the best CBET site in the country.

Subsequently, endangered wildlife species are still found in Cambodia, and rare species in the world, which attract many tourists.

Source: Interviews in 2015 and Ministry of Tourism (2014)

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Challenges

Sites

Representative

Recent

Producers claiming it is more profitable than the main income earning livelihood. Turton (2004) mentioned that charcoal constitutes a significant portion of the total income of households. It is situated in the Northern Cardamom Mountain area.

The Kirirom National Park, Speu Province with 9 villages and it is located at the inner border of the Kirirom National Park. Chambok commune is in Phnom Sruich district, Kampong Speu. Among these, Chambok CBET is particularly unique because it is totally run by the local community. It has become CBET site (Prachvuthy, 2006). Chambok CBET in Kampong Speu.

In reality, the interviews revealed that most of the CBET sites in those areas, especially in Koh Kong, Kampong Speu, have not been successful. There are not many success stories of CBET in Cambodia.

Not a few CBET projects have failed to be managed, and no comprehensive evaluation has ever been conducted if they really work. There has been a lack of research into CBET. Additionally, conservation efforts are often poorly implemented, and the access to the sites are scarce. There is a lack of research on CBET sites in Cambodia.

Therefore, a major task happens even while a CBET project is in process. They often happen because of the concessions, and it often happens even while a CBET project is in process. There are many cases where the concession projects are implemented, and it often happens even while a CBET project is in process. There are many cases where the concessions are implemented, and it often happens even while a CBET project is in process.

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Fig. 2 Rough map of CBET (including CBT) sites in Cambodia

*1-8 are the number of CBET sites in each province. Source: Referred to Ministry of Tourism (2014); SCW (2006)

Fig. 3 Tourist numbers and income (USD) of the community in Chambok CBET

Source: referred to: Steck, B. (2013)

Fig. 4 CBET contributions to NRM in Chambok

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Community Forestry (Community Based NRM)

Pressures on the forest

Charcoal

Illegal logging and hunting

Firewood

Banned

Regular patrol

Payments

Alternative income

Community Forestry

Awareness Management skills

Motivation for forest protection

Water Supply

Hypothesis verification

Funding for conservation

Financial benefit for local community

Educational Aspects

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agriculture in provinces such as Kampong Speu. In fact, several households were engaged in charcoal trading, which was causing serious damage to forest resources of the National Park (Mlup Baitong 2003; Prachyuthy 2006), because hundreds of trees were consumed every day to make charcoals in that area (Moeurn, 2008). The CBET was established to manage ecotourism activities in the commune in order to provide alternative income sources for such a forest dependent community after the ban of making charcoals. These activities started by initial supports from Mlup Baitong (MB), a local environmental NGO, with several foreign donors. MB, who has been patiently and deeply communicated with the community, played an important role and they have particularly focused on awareness raising and capacity building. Outside support ceased in 2010, since when CBET and NRM in Chambok have been operating independently under their elected management committees in the community (Pichidara, 2013): firstly electing 9 leaders from 9 villages, and then selecting 1 community leader from those 9 village leaders, which leads to community democracy for discussing everything within community including ecotourism management, forest use, conservation issues and benefit distribution. The income from CBET has been increasing and recently stable as shown in Figure 3, which indicates that the growth of income mostly stem from foreign tourists. Women interviewees in Chambok mentioned that their income from CBET is not large but this additional income is contributing to their livelihoods. CBET regular staff also mentioned that income from CBET is supporting many community activities, especially the conservation efforts. He explained that villagers are often willing to be involved in forest patrol because of a few income from the patrol, and this payment comes from the revenue of CBET. According to Moeurn (2008), such conservation efforts have resulted in the prevention of forest fires and illegal logging and hunting inside the ecotourism site; in addition, several villagers previously involved in logging or hunting becoming farmers, with supplemental income as tour guides or tourism service providers. Anecdotally evidences also indicate that forest crime has declined since 2003 because of the regular patrolling by local people in that area. (Pichidara, 2013) This study also clarified that CBET contributed to conserve and regeneration of natural forests in the conservation area. Each household still consume 5-6 pieces fuelwood per day but they are taken from community forests which the community properly managed by themselves. Furthermore, CBET regular staffs mentioned that villagers sometimes participate in the forest patrol even without any payment as they want to protect the forest after understanding the importance of forest. The villagers understood the importance of forest not only because educational capacity building increased their awareness but also they realized that forests are important water sources since daily use water comes from a 30m fall in the middle of the forest. The water distribution system with simple pipes from the fall leaching to each household has been also built up by the CBET project, which save villagers’ time of a day because they used to spend hours for collecting water.

Figure 4 explains how CBET contributed to NRM in Chambok case based on the evaluation through hypothesis.

3. DISCUSSION

As shown in Figure 2, there are 55 ongoing CBET sites in Cambodia, but there is very few comprehensive information about the actual condition of them. Lacking of information often causes lacking of marketing, which ends up a failing tourism site: thus it is not optimistic. Furthermore, there are several challenges in CBET in the country as summarized in Table 3, which hinders the sustainability of CBET. As for three representative sites introduced in Figure 2, Chi Pat, Kampi, and Chambok, there are different but tangible reasons why they can be attractive as CBET sites: in case of Chambok, not only its forest and a fall but also easy access from Phnom Penh is a strong advantage, and the rich biodiversity is
valuable resources in Chi Pat, while Kampi has a world famous endangered species. These natural resources are able to attract tourist from inside and outside of Cambodia. In such cases, it is expected that the community could obtain additional income from CBET and that the income would be used for conservation. Although it is difficult to evaluate other cases yet because of lacking of comprehensive research, the problem of access can be a barrier for CBET sites to be popular. In addition, external factors such as land concessions should be strictly managed by the government since it breaks up further development of CBET. In this perspective, the law for CBET, of which joint discussion among relevant ministries has already started, is highly recommended to be established as soon as possible.

In the case of Chambok, a positive effects from CBET on NRM is indicated as explained in Figure 4. The Chambok case has ideally combined the community forestry and CBET: as a result, conservation activities are supported by financial resources and human resources built up through CBET. In this case, CBET contributes to NRM by providing: a) funding for conservation; b) financial benefits for local community; and c) educational aspects as supposed in the hypothesis in Figure 1. Such a model case is able to shed light on other sites that are struggling sustainable CBET.

Yet, as explained above, most of CBET sites in Cambodia are poorly grasped and evaluated, which must be a main challenge of CBET in the country.

**CONCLUSIONS**

The Chambok case can suggest substantial factors of success to other CBET sites in Cambodia; therefore further research, especially qualitative or empirical studies how NRM has been improved is needed. On the other hand, it seems that there are not enough financial nor human resources to assess each CBET site in Cambodia. It is crucial for the future of CBET in the country and there is a possibility that many of sites are closed without any success. Considering CBET is one of important schemes for sustainable NRM in the country, any research by foreign experts would be useful and indispensable.

**ACKNOWLEDGEMENTS**

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**NOTES**

1) Ecotourism concept was suggested as an effective tool for conservation for the first time in the IUCN 3rd World Park Congress. This concept stemmed from “sustainable development” strategy which was firstly presented in 1980 in the ”World Conservation Strategy” by IUCN, WWF and UNEP.
3) The Rectangular strategy of the Royal Government of Cambodia is the on-going national strategy and the rectangular includes “Growth, Employment, Equity and Efficiency”.
4) Some community based tourism sites are named as CBT (Community based tourism) and others are as CBET (Community based ecotourism) in Cambodia. However, when the author asked the difference between CBT and CBET during the interview, none of interviewees could clarify the difference and they mentioned that there was no clear definition and that it was just because how the site had been named in the beginning. Furthermore, as far as the author examined the different characteristics of CBT and CBET in the literatures, there was no consistent difference found and almost all CBT includes the ecotourism characteristics. Therefore in this study, the term CBET in Cambodia practically includes CBT as well. Actually, even in the global context, the difference between CBET and CBT is sometimes not clear.
5) Personal communication with the interviewee 3
6) Personal communication with the interviewee 1
7) Personal communication with the interviewee 2
8) Personal communication with the interviewee 4
9) Personal communication with the interviewee 5
11) The additional activities’ menu such as folk craft, traditional performance or weaving are provided everywhere in CBET sites.
15) Personal communication with the interviewee 5
16) Personal communication with the interviewee 7 and 8
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