

Nature Trail SWOT Assessment Report

Ecotourism is tourism that promotes environmental conservation or environmental sustainability by seeking to preserve a site that is being visited (Arensen, lecture notes, Siem Reap, 14 February 2015). Community-based tourism involves local communities in the implementation and management of tourism programs. Reimer and Walter (2011) explore the fusion of ecotourism and community-based tourism, which is an entirely separate entity dubbed community-based ecotourism (CBET); Reimer and Walter describe this field as promoting “a mutually reinforcing relationship between environmental conservation, local economic livelihood, and cultural preservation – a kind of mutualistic symbiotic relationship which benefits all three... In essence, CBET helps to preserve wilderness and wildlife, but also acknowledges that conservation solutions should involve people living within natural areas.” CBET is generally accepted as tourism that seeks to benefit local people and to promote environmental conservation or sustainability; in Cambodia, CBET is a fairly new field and often focuses on communities living within protected areas (Arensen, lecture notes, Siem Reap, 14 February 2015). CBET initiatives in Cambodia are often facilitated by non-governmental organizations in partnership with communities to help get local people involved in conservation efforts; some of their joint aims include protection of biodiversity, provision of alternate incomes in protected areas as incentives to abide by conservation rules, and education of the community about environmental sustainability (Oru, lecture notes, Siem Reap, 16 February 2015). The efficacy of CBET models in achieving these goals depends on several components. These components involve factors that are both internal and external to the structures of CBET programs. According to Oru, some challenges that impede the success of CBET ventures in Cambodia include lack of participation from communities, deforestation, wildlife population decreases, lack of funds to expand or market the business, and the relative unfamiliarity of the ecotourism market to most visitors (Oru, lecture notes, Siem Reap, 16 February 2015). Two CBET ventures in Siem Reap province are the Baray Reach Dak tour within Angkor Park and the Kulen Nature Trail in Phnom Kulen National Park (PKNP). This report details analyses of the strengths, weaknesses, threats, and opportunities of each CBET project, beginning with the Baray Reach Dak Community Tour.

Kulen Nature Trail

The first guided tour on the Kulen Nature Trail was in June 2014, though ecotourism ventures have been in place in the area since 2012. The ranger station where the tour originates is located in the village of Preah Ang Thom in Phnom Kulen National Park; the tour moves through the Popel Community Protected Forest. Its emphasis is on nature trail hikes, where wildlife (particularly the silvered langur) and local vegetation observations are major selling points (Kulen Nature Trails, n.d.). Hikes of different lengths are offered. It is a CBET project that features an alternative source of income for local Ministry of Environment (MoE) rangers; it also helps the rangers/guides do their government job of patrolling the forests (tour guide, interview notes, Preah Ang Thom, 23 February 2015). According to the tour’s brochure, the trails were constructed and the program instituted “to protect these [threatened] species, to prevent further deforestation, and to provide sustainable, alternative livelihoods for

community members in the park” (Kulen Nature Trails, n.d.). With these goals, the trails also seek to preserve the ecosystems in Kulen more broadly, which includes the natural and cultural heritage of the site and the functionality of the park’s forests in water catchment. Three guides are from the community, two are MoE rangers, and nine total members patrol and receive direct benefits from the program; their training constitutes of MoE ecotourism training and nonprofit informal training. The goals of the project include: making displays for the information center, increasing tourism (to perhaps ten tours per month), and having more patrols to protect forests and wildlife (tour guide, interview notes, Preah Ang Thom, 23 February 2015).

Strengths

The trails used in the nature walks benefit many members of the community, who use it to navigate the community forest and to collect fruit and medicinal plants. They were widened slightly to accommodate this project (tour guide, interview notes, Preah Ang Thom, 23 February 2015). So, in addition to providing alternative livelihood strategies to the rangers and community members involved, the trails also have a dual functionality. The trails help the rangers to patrol, and the tours give them another chance to do their jobs for the MoE. There is heavy community involvement in the forest and a definite emphasis on biodiversity and environmental sustainability. The villagers are happy with the project as it benefits their daily activities, albeit not monetarily because the program has not generated enough income from enough tours to sustain a community fund. The trail charts through thick forests; wildlife sightings are possible, so this outdoor program could certainly satiate the growing demand for ecotourism in PKNP.

Weaknesses

Low attendance and little outreach and marketing mean that very few tourists know about the Kulen Nature Trail. Advertising with businesses in Siem Reap requires compensation, and travel companies take a lot of convincing to promote a new business. Additionally, the cost to enter PKNP (\$20) might deter people from paying a second cost to hike the trail (Steinbrecher, field notes, Preah Ang Thom, 23 February 2015). Reportedly, many domestic tourists do not have much of an interest in the nature trail hikes—the demand will come primarily from international visitors. Because few tours have been offered, the guides are not generating much of a substantial secondary income from this project; they are paid per diem, and to date they have only offered about 20 tours (tour guide, interview notes, Preah Ang Thom, 23 February 2015). Another impediment to the long-term success of this CBET program is the fact that the guides do not speak English; communication between guides and guests is essential, and without a translator visitors will have little ability to interact with the knowledgeable guides (Steinbrecher, field notes, Preah Ang Thom, 23 February 2015).

Threats

Deforestation, ensuing habitat loss and degradation, wildlife hunting, and other illegal activities in the forests of PKNP threaten the livelihoods of villagers in this region. Through this CBET project, the MoE rangers and local communities hope to mitigate these threats to their survival by integrating tourism into a sustainable model for continued use of the community forests. The success of the Kulen Nature Trail is threatened by a lack of accessibility by tourists, factoring in the cost of entering PKNP and the general deficiency of adequate advertisement and marketing around this project (Steinbrecher, field notes, Preah Ang Thom, 23 February 2015). The MoE rangers also have alternate demands for their own livelihood activities—while patrolling is a crucial element of their job, they spend part of their time farming as well. This inhibits their ability to be involved in the community forest or with the Kulen Nature Trail (tour guide, interview notes, Preah Ang Thom, 23 February 2015). Tour operators are generally apathetic when it comes to translating and joining tours on the trail, so the threat of missing support to connect visitors with the guides (without Tony, an English-Khmer speaker who works to promote the trail) is a threat to the program's success. Lack of resources account for many of the organizational, marketing, and additional services currently unavailable to the Kulen Nature Trail (Arensen, lecture notes, Siem Reap, 16 February 2015).

Opportunities

One of the goals of the Kulen Nature Trail is to generate enough income from the tours to set up a community fund; this community fund would be used towards village needs. Right now, not enough tourism comes to the Trail to support the community—income from tours pays the guides (tour guide, interview notes, Preah Ang Thom, 23 February 2015). If the Kulen Nature Trail could advertise its tour in Siem Reap, preferably in CBET- or environmentally-friendly market areas to target the right international audience, perhaps word would get out such that the project could continue to develop to provide a sustainable livelihood alternative. Building a social media presence, getting listed in tour books and with travel agencies, and spreading the word could help the project to this end. Once more tourists start bringing more dollars to the Kulen Nature Trail, community-based and conservation priorities will be more easily attained.

Recommendations

Both the Baray Reach Dak Community Tour and the Kulen Nature Trail have emphases that will appeal to certain kinds of tourists—they are unique ventures that provide nuanced, interesting, and different tourist opportunities to visitors to Cambodia. A priority that people involved with each program acknowledged is simply garnering interest and bringing more tourists to each, and on a more regular basis. Developing a demand that values the particular strengths only offered on community-based tourist programs in Cambodia will be difficult work, as CBET is a field that is only now being cultivated in the country by fledgling initiatives such as the ones analyzed in this report. To truly maximize the chance that CBET ventures like the Baray Reach Dak Community Tour and Kulen Nature Trail will reach their goals of providing environmental or cultural sustainability in conjunction with direct benefits to the local communities living in

protected areas, a market for CBET will certainly need to be more widely created. Travelers would be attracted to and endorse both projects, but word needs to get out to tourists that projects such as these exist. Social media outreach, inclusion of the tours in travel blogs and guides, and tapping into target audience communities will be important in this sense. It is recommended that in the nascent stages of each of these programs, both businesses focus on increasing attendance and participation—this means collaborating with NGOs, businesses in town, travel agencies, hotels, and advertisers to increase marketing initiatives. A cascade of benefits will ensue from increased attendance and a more steady cash flow to these projects.

The programs will also need to make some changes to their current modes of operation to accommodate international tourists to generate and retain visitors. Of utmost importance is English-speaking guides, or the availability of translators; guides that can connect with guests, answer questions, provide helpful and interesting information during hikes/walks or tours are an integral component to a tourist experience. Of the two groups that attended Baray Reach Dak tours on 17 February 2015, the guide leading my group spoke better English and had more enriching details to offer, reportedly, than the guide leading the other tour. Training, language confidence, and requisite knowledge of the tour and its emphases are key in order to fully engage with an international audience. At the Kulen Nature Trail, the guides seemed to possess a great deal of local historical, biological, and topographical knowledge—the only problem was that we could not communicate directly with them, so the hike was somewhat limited in the sense of information being imparted (and awareness of local culture, customs, and norms could have been more significant). It might also be important that both tours build up their welcome centers—having information available to guests would be a great way to not only draw people in the vicinity to the tours, but also to give background or supplemental information about the tours to all guests. As a tourist, I most enjoyed the local knowledge that the guides offered on both these tours, whether that information related to the current events the communities are facing, the history of the area, a layout of contemporary environmental or cultural initiatives prioritized by the communities and the tours, or information about traditional practices in the area. This is a strength of CBET programs, and I think a continued celebration of this facet of this particular kind of tourism should continue to be an emphasis of the Baray Reach Dak Community Tour and the Kulen Nature Trail.

Kulen Nature Trail

The Kulen Nature Trail is a hiking trail through PKNP consisting of two optional routes: a long loop and a short loop. The trail runs through the Popel Village Community Protected Forest (CPF), which was established in 2004. The community of Popel's approval was necessary to build the trail, and the trail opened to tour groups in June 2014. The program was created to protect the langur population in Phnom Kulen National Park. Ben Hayes and Tony Yon presented the idea to the Popel villagers, and a community committee was formed to organize villagers, clear the trail, and patrol/guide tourists. It is the first nature and patrolling trail in the park and was founded to promote conservation and to create jobs for and train community guides and patrollers. The trail was initially funded by an \$8,000 grant from the Rufford

Foundation and has involved participation of the Ministry of Environment (MoE) from its beginning.

This trail is about an hour and a half from Siem Reap by car. Upon entering the national park, there is a \$20 fee to drive on the road. On each guided hike, one MoE ranger and one community member come as guides and receive payment. The ranger and guide wait at the ranger station at the front of the Preah Ang Thom village where tourists meet for the guided tour. The long hike takes about four hours to complete and the short hike is about an hour and a half. The trail goes through a beautiful part of the forest, which includes a river, caves, look-out-points, and a lot of wildlife if the tour is early enough in the morning. The guides point out edible plants, carnivorous plants, insects, birds, mammals, and trees (Plofchan, Field Notes, Kulen Nature Trail, 23rd February 2015).

Strengths

A strength of this CBET program is that it shows visitors a side of Cambodia that they won't get to see if they stay in Siem Reap. There are not a lot of hiking opportunities in Cambodia because of landmines, and this is an absolutely beautiful, well-maintained trail. The guides were very kind and knowledgeable of the forest. Additionally, the tour is located right next to the Phnom Kulen Waterfall which is a more popular tourist destination, and a great opportunity after the hike. If the tour can advertise the waterfall along with the tour, people might be more apt to come the distance. It is also positive that the villagers of Popel are able to use the trail for their advantage. During fruit season, they go into the forest via the trail and collect food. It is important for the villagers to be able to use the trail because it helps supplement their diets and might also establish value for the trail and forest conservation. (Plofchan, Field Notes from Interview, Kulen Nature Trail, 23 February 2015)

The tour is reasonably priced and the profits go back into the community. The price per group to go on a guided hike is \$20. Half of the profit goes to the local guide and MoE ranger and the rest goes to local villagers patrolling the area. This is a reasonable price for a guided, group hike (Plofchan, Field Notes from Interview, Kulen Nature Trail, 23rd February 2015).

Finally, the tour brings community members into the forest to protect it from hunters and loggers. There is an incentive to conserve the forest, and this could potentially turn into a widespread value for conservation. While not every villager receives economic return from the CBET project, there is hope for a community fund in the future, and if the tour is successful, more community members will need to be involved.

Weaknesses

The weakness of the project mostly stem from the newness of the project because strategies and details are still being worked out. One of the project initiators Tony Yon, a MoE ranger, and a local guide at the Kulen Nature Trail expressed that because they are a new program, tour agencies don't know about them and are not advertising the nature trail to clients. They need

to convince tour companies in Siem Reap to both advertise for them and provide transportation and a translator for international visitors.

The translator is necessary for the trip because of the lack of English spoken by the guides and rangers. Without a translator, non-Khmer speakers miss out of flora/fauna identification and history of the area. English skills also hurt the marketing of the campaign because their ability to post online is limited. The guides do not have a formal training beyond an informal training with Tony. This is a major weakness; if guides had more training in English skills and wildlife identification the tour would be more interesting for visitors.

Seasonality has also negatively affected visitor attendance. They have had most of their visitors from August-September, had a few from December-January, and were expecting one group in February. They haven't been open for a full year so the seasonality data is still to be determined, but there is inconsistent visitor attendance which makes funding salaries, advertising, and trail maintenance difficult. They had 17 groups in total in 2014 and have had 3 so far in 2015. (Plofchan, Field Notes from Interview, Kulen Nature Trail, 23 February 2015) An additional weakness of this program is that Cambodians don't recreationally hike, and they especially don't pay this much to hike in the woods. This limits the tourists coming to the site because domestic tourists are not interested. Thus, the tour is aimed at international tourists. However, hotel and travel agencies that might arrange for them to come to the Kulen Nature Trail want commission fees which hurts the Nature Trail's already slim profit. (Plofchan, Field Notes from Interview, Kulen Nature Trail, 23 February 2015) While the initial price of \$20/tour is reasonable, tourists might be deterred by the additional cost of transportation, translator, road fee, and time it takes to drive to the site.

Opportunities

An opportunity for growth would be lessons for rangers and guides about the wildlife in the area and perhaps English language. Kulen Nature Trail's goals for the next year are to build an information center for their tours, increase tourism, increase patrolling, and protect more wildlife. These are all opportunities the community should work toward. Additionally, once the tourism brings in more visitors, they could create a community fund for their profits. This way, more community members would feel the benefit of the program and want to work toward its success. (Plofchan, Field Notes from Interview, Kulen Nature Trail, 23 February 2015)

Threats

Two threats to the Kulen Nature Trail's goals would be a loss of biodiversity in the forest and the loss of the forest itself. Logging and hunting is illegal because this is a CPF, but there are still problems with hunters in the forest, and logging is common. The rangers and locals on patrol can hear illegal activity happening in the forest, but, typically, loggers and hunters go to the other end of the forest. Additionally, the villagers are happy about the trail because they can use it to access food, but they still want to cut the trees. They view large trees as old trees that should be utilized before they die. Logging is bad for this CBET project because if there are no

trees, wildlife die, and no one will want to come on the tours. (Plofchan, Field Notes from Interview, Kulen Nature Trail, 23 February 2015). The challenge for the community members on patrol is that they don't have a lot of time outside of farming to watch over the forest. For the rangers on patrol, most people coming into the forest are going to places that are out of ear shot of the ranger station.

For Tony, the main struggle is commissioning tour agencies because he is learning that people aren't coming to Cambodia to hike. Because ecotourism is new to Cambodia, the demand isn't high yet. Most tourists spend time in Siem Reap, and PKNP is farther than they might wish to travel. (Plofchan, Field Notes from Interview, Kulen Nature Trail, 23 February 2015)

Recommendations

My recommendation for the program is for the Kulen Nature Trail to improve its marketing. The program is new and it is understandable that Tony and Ben are having struggles getting Cambodians to hike. I believe they should address their advertising toward young international groups. Because the price can be high in smaller groups, it might be effective to work with visiting school groups or study abroad programs like ours. Additionally, they should advertise in hostels and hotels around Siem Reap. I believe adventurous travelers would be interested because there aren't a lot of landmine free places to hike and see wildlife in Cambodia. This program has the added bonus of being a remote site, a solace from vendors and a million other tourists in Siem Reap. Besides advertising in the city, they should create a Trip Advisor page and potentially write a blog post and share it on their Facebook page. They could also reach out to travel bloggers online and offer a free trip through the forest if they do a write up on their program. They could ask a Cambodian journalist to write about the tour and submit it to a local newspaper or the *Phnom Penh Post*. Looking at the Kulen Nature Trail page on Facebook, there are not any updates and they don't have very many followers.

CBET encounter two was in Kulen National forest. The area it encompasses was designated a community forest in 2012 and the tour guides have been employed there for almost a year. The tour consisted primarily of a walk through semi evergreen forest intermittent with silent stops in the rare event a silver langur might be in the vicinity. The trail wound past multiple different sites including a boulder forest, a meditation viewpoint, a bat cave and a swimming spot. Two rangers, trained in the art of wildlife identification, led the tour. The trail boasts over twenty recorded species of global conservation concern and while rarely they become visible the hike was still a thoroughly enjoyable experience. The forest cover found here plays an essential role in not only protecting biodiversity, but doubles as a water shed for the surrounding province of Siem Reap. (Ranger, interview notes, Kulen nature trail, date: Feb 23, 2015)The proceeds from a day visit goes to providing a day's wage for two rangers as well as the sustainable management and protection of Phnom Kulen National Forest.

Strengths and Weaknesses:

The relaxing walk and beautiful scenery is enough to draw any nature enthusiast to this nature trail over and over again, each visit's proceeds go towards the conservation of wildlife. As stated in the flier tourists visiting the trail have the opportunity to view 20 different rare species of animals, this fact alone has the potential to draw large crowds of nature enthusiasts. The location of this trail is set next to two other massive tourist attractions, Preah Ang Thom and a waterfall. Once tourists find themselves at either of these two attractions it is hard to give up the opportunity to see a langur, pigtailed macaque or a black giant squirrel...if it were clearly visible that a guided tour existed nearby. Weaknesses were apparent and similar to the Baray tour in that the guides spoke minimal English. This kept explanation of key details and site descriptions along the trail to a minimum unless one is fortunate enough to have hired a supplementary translator for the hike. Strict access and inevitable payment one must make when entering Phnom Kulen National Park is a weakness because it adds funds onto an already expensive expedition. The ride is a decent ways away from Siem Reap, and matched with costs to get in as well as go for the hike, tourists must be willing to dish out a pretty penny. This seems unrealistic and not advantageous to frugal tourists who may not know exactly what the hike will consist of. Lack of advertising is in part to blame for the low visitation rates, if people don't learn about what Kulen has to offer then a visit is out of the question. No visit equals no knowledge of Kulen's existence can be spread from tourist to other potential tourist visitors.

Threats and Opportunities

At one time deforestation was a massive problem in this forest but since the implementation of ranger patrols this threat has decreased. Currently the biggest threat is illegal poaching. (Ranger, interview notes, Kulen nature trail, date: Feb 23, 2015) To prevent poaching night patrols have been set into place where both rangers and locals are involved. Illegal harvesting and illegal poaching lead to less biodiversity in the park, this will mean less funding from tourists and in turn less financial benefit for conservation purposes and alternative livelihoods alike. Simple actions such as locals frequenting the forest to gather non-timber forest products can also have an effect on the probability of wildlife frequenting any given area. (Ranger, interview notes, Kulen nature trail, date: Feb 23, 2015) One final threat that could potentially put the whole operation out of business is disclosure of the trail map and directions around the forest to outside guides. This information would mean tourists could bypass the rangers and contribution toward conservation and support of alternative livelihoods altogether. Kulen nature trail is a relatively new project and has opportunity for improvement. Increasing advertising and getting the pamphlets to the correct audience is a simple and effective way to tell the tourist audience where and how to experience Kulen. Mentioned in the guards self-critique was their hope to improve the center from which the trip began into an information center in order to attract more guests, also they would like to see an increase in the amount of rangers on patrol, both viable options for increasing tourism, revenue as well as local biodiversity. (Ranger, interview notes, Kulen nature trail, date: Feb 23, 2015) Lastly the main issue here was the language barrier, the opportunity lies within increasing proficiency in English, this will make the experience more enjoyable for the tourists, allow for more

awareness to be spread about the fundamental goals of Kulen as well as increase support for this conservation site through recommendation from tourists.

Recommendations

Informing officials about the goals of Kulen might increase the probability of tolls being decreased at the main gate for those who planning to visit Kulen Nature trail and contributing to conservation in the local forest. Implementing hands on programs where tourist can help rangers search for illegal activity in the woods is a good activity for more adventurous tourists. The final recommendation is simply spreading the word that this trail exists, passing out multiple copies of brochures to students, tourists, and hotels as well as creating posters that are colorfully enticing. Removing trash surrounding the local village is a little side note that will benefit the whole community aesthetic not just Kulen Trail.

Only when an organization is picked apart and all of its functions are laid flat is one able to discern the strengths, weaknesses, threats and opportunities that it faces. In the case of Community Based Eco Tourism there is a certain balance that must be achieved in order for it to be deemed successful. The two organizations critiqued show promise that CBET is effective in creating alternative livelihoods for people existing in areas where the goal is to preserve the natural heritage of the attraction that draws tourists in while promoting conservation. Cambodia's massive tourist economy will prove pointless unless tourists, corporations and especially locals involved, grasp that sustainable methods are crucial for continued success of alternative livelihoods and ecofriendly tourism.

Kulen Nature Trail

The Kulen Nature Trail was established approximately one year ago by the Ministry of Environment and local villages of Popel and Preah Ang Thom with the conservation of biodiversity and natural resources in mind, and the trails became the first in Phnom Kulen National Park (PKNP) to be designated for wildlife viewing and ranger patrolling (Arensen, Lecture notes, Siem Reap, 16 February 2015). The trail, which crosses through the Popel Community Protected Forest, was created specifically "to protect [at-risk] species, to prevent further deforestation, and to provide sustainable, alternative livelihoods for community members in the park" (Kulen Nature Trails, n.d.). Finally, the rangers have set goals for the future which include creating an information center, increasing tourism, and improving quantity and quality of patrols to preserve wildlife and resources that serve as attractions (Kulen nature trail rangers, Interview notes, Preah Ang Thom Ranger Station, 23 February 2015).

There are three community rangers and two rangers from the Ministry of Environment (MoE) stationed near Preah Ang Thom village who patrol and lead tours of the trails (Kulen nature trail rangers, Interview notes, Preah Ang Thom Ranger Station, 23 February 2015). Before tours and patrols could begin operation, these rangers participated in two months of training with the MoE and other leaders in conservation (Kulen nature trail rangers, Interview notes, Preah Ang Thom Ranger Station, 23 February 2015). There are also nine villagers from Popel who patrol

the trails, and several of the guides who accompany the rangers on tours are also from Popel village (Arensen, Lecture notes, Siem Reap, 16 February 2015).

Though development of the site began in 2012, the first guided walk of the Kulen Nature Trail occurred in June 2014, according to the local rangers, and about 17 groups total have participated in the eco-tour (Kulen nature trail rangers, Interview notes, Preah Ang Thom Ranger Station, 23 February 2015). The tours begin at the ranger station in Preah Ang Thom village, and are advertised as easily combined with other sites in PKNP, such as the waterfall and the reclining Buddha (Kulen Nature Trails, n.d.). Hikes on the trail range from one and a half hours to “half-day adventures, perfect for a day trip to PKNP, where you can arrive back in Siem Reap by sundown” (Kulen Nature Trails, n.d.). The tour is divided into sections based on the natural features found along the trail, including a “boulder forest,” a large boulder outcrop viewpoint, bat caves, langur viewing areas, and a riverside swimming spot (Kulen Nature Trails, n.d.).

Strengths

Kulen Nature Trails features strong community involvement and village benefits, such as the consideration of the community’s opinions and ideas when developing the trails, compliance with the rules of the community protected forest which allow villagers to continue using the forest for non-timber forest products, and the raising of conservation awareness (Kulen nature trail rangers, Interview notes, Preah Ang Thom Ranger Station, 23 February 2015). The project’s focus on biodiversity conservation is essential, as well, and the emphasis on langur monitoring and patrolling for illegal activities is a particular strength (Arensen, Lecture notes, Siem Reap, 16 February 2015). “The trails help to ensure Kulen’s long-term viability, protecting its high value both as a wildlife habitat and as an essential water catchment” (Kulen Nature Trails, n.d.).

Weaknesses

First, the Kulen Nature Trails project is situated two hours from the city of Siem Reap, meaning it can be complicated and expensive for tourists to locate and travel to the ranger station where the tour begins (Kayla Deur, Field notes, Kulen Nature Trails, 23 February 2015). The project’s lack of advertising also impacts tourist’s abilities to locate and participate in the hikes, though this is due mostly to a lack of funding and marketing resources. Also, perhaps due to a lack in training and guiding resources, the guides on the tour do not share as much information about the environment as some visitors may be hoping for on their hikes. Moreover, although locals do patrol the trails at night, poachers and others committing illegal activities are rarely caught, which is likely due to a lack of enforcement training and available resources for arrests (Kulen nature trail rangers, Interview notes, Preah Ang Thom Ranger Station, 23 February 2015). Finally, although a “walk on the trails pays a day’s wages to two rangers and a conservation fee for trail maintenance and patrolling” (Kulen Nature Trails, n.d.), the rangers themselves mentioned that there are no standard salaries for many of the people working on the trails and tours; rather, there is an income of \$20 per tour when tours are operating, and much of the

project's start-up funding was part of a grant (Kulen nature trail rangers, Interview notes, Preah Ang Thom Ranger Station, 23 February 2015).

Opportunities

Similar to the Community Tour for Baray Reach Dak, if Kulen Nature Trails were to receive more funding, then advertisements might be affordable and tourism might increase. An increase in visitors going on the hike would bring more revenue to the rangers and the community, which would allow them to increase the effectiveness and quantity of patrols. More funding would also give the rangers the opportunity to create an information center, which might draw in tourists from the other sites in PKNP. Furthermore, should the project receive more funding and the opportunity to collaborate with an NGO, perhaps, then efforts to preserve wildlife in the area could be maximized.

Threats

Deforestation and habitat degradation are two prominent threats to the Kulen Nature Trails, for if the forest and the wildlife within are no longer present, there will be fewer attractions for the tours. Perhaps the other sites in PKNP could be threats to the success of Kulen Nature Trails, too, as those like the waterfall are better known and debatably more attractive to tourists.

Recommendations

There are several actions each CBET project could take in order to improve their business and the overall experience for tourists. ...Kulen Nature Trails primarily needs to improve upon advertisement, as the tour is quite far from most tourist destinations, and without reassurance that it is easy to arrange and afford, potential tourists likely feel discouraged. Advertising through popular travel websites, online social media like Facebook, and through multiple businesses would likely increase the number of groups going to the trails, particularly if the businesses selected for advertising are popular spots for backpackers and younger travelers who might be more interested in ecotourism. The educational aspects of the hike could be improved upon as well, particularly regarding the guides' level of English communication and thus the information they are able to share with visitors. Perhaps English lessons or the inclusion of a translator for those who do not hire their own would be encouraging to potential tourists. Finally, perhaps the tour would benefit from providing more specific informational materials explaining the itinerary and structure of the hike in more detail. It seems, however, that Kulen Nature Trails also struggles with funding, so reaching out to NGOs or fundraising in some other capacity might be the best first step in improving the project overall.

Popel Nature Trail

Another organization that works to promote beneficial tourism is the Popel Nature Trail. This program is more of a true eco-tourism adventure that was set up in 2012. A local guide, along

with a MOE ranger, will escort visitors on an extended hike through the woods that can be as long as four hours. The hike goes along religious sites, like shrines and meditation points, as well as through boulder fields and to a river. There is a viewpoint on top of the mountain that over-looks the national park. In addition to the scenery, tourists are able to see rather rare wildlife. Birds can be heard throughout the hike, and on some occasions langurs and macaques can be seen. The hike goes through a community protected forest that many of the locals rely on for supplementary livelihood activities. The goal of the program is to provide income for locals and MOE rangers as well as protect and patrol the CPF. The program was just opened for operation in June of 2014 and has only conducted twenty tours. Due to the very young nature of the project and the lack of funds, there is no community fund. However, once income starts to be more prevalent, the project would like to be able to contribute to the local community as well as the employees (Tony Yon, Interview Notes, Popel Nature Trail, date: 23 February, 2015). Three community guides, two MOE rangers, and six other community patrollers are the only locals who currently benefit from the Popel Nature Trail project. The rangers had eco-tourism training with the MOE as well as informal training from the on-site manager, Tony Yon. The project was initially funded by an international grant. The trail itself was cleared and is maintained by the villagers who use the CPF for NTFPs including: bush meat, traditional medicine, fruits, as well as other products. Additionally to the tour, the project also pays six visitors to conduct patrols of the forest and assure that nobody is using the forest for illegal logging. The patrols have yet to find anyone violating the law. The program also uses camera trapping to attempt to monitor the mammals and birds along the trail (Tony Yon, Interview Notes, Popel Nature Trail, date: 23 February, 2015).

Strengths

The strongest aspect of the Popel Nature Tour is simply that it is a great tour. The guides are skilled at spotting and identifying animals and the sights and trails are beautiful. It is also beneficial that the MOE doesn't allow anyone to move into the CPF and has rules in place to deter people from illegally harvesting timber. Another plus is that it is located close to two very traveled areas: Preah .ng Thom Wat and the Phenom Kulen waterfall. These attractions will bring tourists up the mountain so that the Popel Nature Trails can hopefully appeal to some of them. The community patrols, though seemingly ineffective, are theoretically very beneficial for the protection of habitat and animals. The fact that langurs and macaques could potentially be seen is also a major bonus – even if they aren't always present. The lack of competitor nature paths is also a major benefit. They have very little competition in the market of nature trails (Tony Yon, Interview Notes, Popel Nature Trail, date: 23 February, 2015).

Weaknesses

The biggest weakness of the program is definitely funding. Because of the lack of funds and income the Popel Nature Tour is unable to hire more community members to patrol the forest more often and more thoroughly. The lack of funds also stifles the organizers from advertising and promoting the trail. Thus far there has been very little advertising done and thus the trail is still rather unknown. There is also no meeting center for the visitors to congregate at. Lastly,

the tour guides, though very good at their job, only speak Khmer. The program has anecdotally surmised that Cambodians don't like to walk. Thus, the Popel Nature Trail has a very specific market that must run through hotels that have the ability to provide translators for international guests (Tony Yon, Interview Notes, Popel Nature Trail, date: 23 February, 2015).

Threats

Some of the threats that the Popel Nature Trail must deal with are access to the trail, pressure on the wildlife, dependency on hotel business, and ranger availability. A major issue that the Popel Nature Trail faces is the illegal hunting and logging that occurs in the CPF. Both of which drive away the animals that many visitors will come to see as well as destroy the natural beauty of the trail. The logging of the CPF is particularly problematic because of how shy the langurs and macaques are. They are driven off by both the act of logging and the habitat destruction. The patrols are supposed to curb this from happening but have proven ineffective to this point – the patrols haven't caught anyone doing anything illegal in the CPF. Another threat is the twenty dollar fee to use the access road. The money generated from that does not go to the project and will only deter people from making the trek out to the trail. Also, because of their dependence on the hotel industry, they are susceptible to the corruption of the hotel receptionist who often demand commission for sending guests to the trail. Since the project is so underfunded this is not possible which means less tourists. Lastly, due to insufficient funds, many of the patrollers can't dedicate enough time to actually patrol because they need to farm for income (Tony Yon, Interview Notes, Popel Nature Trail, date: 23 February, 2015).

Opportunities

With an increase in funds the Popel Nature Trail has a great opportunity to expand. With more funding, the trail would be able to building the desired information center. It could also increase patrols and hire more staff to increase the efficiency of the program. Due to the high quality of the project, if the program can advertise effectively and market properly, many backpackers and tourist would likely be quite willing to drive out to the trail and pay the fee for the tour. Tourists from the cities, as well as those already on the mountain to see the waterfall and pagoda, just need to be informed of the trail to spark their interest. The tour could have a great market amongst backpackers because it is one of the only mountainous hikes available around Siem Reap.

Recommendations

The Baray Reach Dak tour would do best to further advertise to birders and tourists interested in seeing the wildlife of the lake. If they promoted the heritage tour as more of an eco-tour, as well as the cultural aspect, they would likely have more demand for tours. They should look to train the guides better in species identification so they could help novice wildlife observers. Further training of the tour guides in English and in knowledge of the tour would go a long way to helping promote the tour through positive reviews. They should also build a better platform

to access the viewing platform so it is a more accessible tour. The tour would also do best to advertise at Angkor Wat as a temple alternative.

The Popel Nature Trail has great room for expansion as well. The biggest market that has yet to be tapped is backpackers. Once the trail gets better advertising, many backpackers would be happy to pay for a nature tour like the one that the Popel Nature Trail provides. It would be advantageous for the program to train the tour guides in English. If they are able to communicate, the very knowledgeable guides could provide a great experience for backpackers. The trail should also emphasize that the trail is right next to Preah Ang Thom Wat and the Phnom Kulen waterfall. That way tourists can make full day commitments to go to Phnom Kulen and thus the distance it takes to get there from the cities would be more manageable. The Popel Nature trail should build their information session and promote themselves in hostiles to better reach the back-packer community.

Conclusion

With eco-tourism becoming a newly emerging and important source of income for Cambodians, it is important that it is done properly. The goals of CBET should be to conserve the ecosystems that the operations are running out of as well as to provide alternative livelihoods to the people who inhabit the region. It is crucial that CBET be non-exploitive by allowing them to have agency in representation and participation as well as receive a fair cut of the income (Arensen, Lecture Notes, Firefly Guest House, date: 13 February 2015). These projects should be aimed at improving the lives of individuals as well as the community as a whole. The Baray Reach Dak community tour theoretically does a good job of assisting the local villages but needs to expand its tourism volume in order to really assist the community members. The Popel Nature Trail is still in a very early phase. Once it can start advertising effectively and drawing a sustainable amount of tourists, it should look towards helping the local community in indirect ways like community development funds. Both organizations have very good intentions and can do a lot to promote conservation and sustainable incomes to their staff. Both projects will benefit the communities they are stationed out of once they have a sustained income.

Kulen Nature Trail

The Kulen Nature Trails CBET is located in the Phnom Kulen National Park (PKNP) about one hour and thirty minutes from Siem Reap by vehicle. The creation of the trails as a tourism attraction were in response to various threats to the national park such as illegal logging, agricultural expansion, in-migration, low levels of enforcement and pressure on wildlife (Lisa Arenson, class presentation, 14 February 2015). The Kulen Nature Trails were created one year ago and are the first nature and patrolling trails in the PKNP; this specific site is also a community forest. Local tour guides work with MoE rangers to give tours and to patrol the forest. The goals of this CBET are to create and train patrol teams for the forest and to provide alternative livelihood options for the local community members of the Popel village (Kulen Nature Trails, n.d.). There are over 30 km of trails with various trail length options including a short loop and a longer loop; the longer loop will be assessed. This loop passes through the

local village, through the forest, a boulder site and a river. At the end of both the short and long trails, tourists can go to a nearby natural waterfall. The cost for the tours is \$20 per tour group; \$10 of which goes to patrolling, \$5 goes to the local community member who guided the tour and \$5 goes to the MoE ranger who co-guided the tour (Sarah Dillabough, interview with local guide, MoE ranger and Tony, Kulen Nature Trails, 23 February, 2015).

Strengths

The Kulen Nature Trails supplement the low salary of the government MoE rangers, plus allows other community members to receive revenue from giving tours and patrolling (Sarah Dillabough, interview with local guide, MoE ranger and Tony, Kulen Nature Trails, 23 February, 2015). This creates value around the protection and preservation of that area which is home to endangered species such as the langur. There is training for eco-tourism given to some guides by the MoE, others receive informal training. The revenue from the tours has allowed for increased patrolling in the community forest, including night patrolling. The forest area in which this tour functions is marked with many key features such as a river, a boulder site, viewpoints of the surrounding forest and a waterfall at the end. The hike is moderately challenging; there is always the option of doing the shorter loop.

Weaknesses

The site is far out from Siem Reap; organizing travel to the area may be difficult for tourists who do not go through a tour company. The local guides do not speak foreign languages; therefore, if a group would like to do the tour, there is a need for a translator to be present. If going through a tour company, the company may want to charge extra for commission to provide a translator (Sarah Dillabough, interview with local guide, MoE ranger and Tony, Kulen Nature Trails, 23 February, 2015). This CBET project is new so there is little information about it circulating. Currently there is not a dependable flow of tourists to the area. There is little advertising for the tour and there is no website. If searching online for tours in Cambodia, or even by the name of Kulen Nature Trails, no results appear. Most tourists do online research; not being able to find information for the tour online will affect the flow of tourists to the area. There is currently not enough revenue from tours to create a community fund; a quota of 10 groups per month is needed to pay the wages of the guides and MoE rangers- this quota is currently not being met (Sarah Dillabough, interview with local guide, MoE ranger and Tony, Kulen Nature Trails, 23 February, 2015). There is a fee to enter into the park and tourists must coordinate travel there, as well. This could end up being costly and deter tourists from visiting the site.

Opportunities

One way to inform tourists about the biodiversity in the area is to set up an information center with a map of the area and potential species that may be sited. The information that is provided should be adequate enough that the lack of foreign language skills on the guides' behalf would not pose a problem. There is a potential to partner with more tour companies in

Siem Reap and in surrounding areas and also transportation companies. If a partnership is created with a reliable transportation company, a fixed price could be set for the travel between Siem Reap and the Kulen Nature Trails. This would make visiting the site much easier for tourists who would not like to go through a tour company. Creating a website would be beneficial and would make finding information about the trails easier for tourists doing dependent online research. There is also an opportunity to create an overnight stay for tourists, wither camping or perhaps a home stay. This would perhaps increase the likely hood of tourists travelling a far distance to go on the tour. If tourism increases and becomes stable, a community fund could be developed.

Threats

Threats to the CBET project of the Kulen Nature Trails include hunting and illegal logging. There are time constraints of the local guides to give tours and do patrolling, especially during farming season (Sarah Dillabough, interview with local guide, MoE ranger and Tony, Kulen Nature Trails, 23 February, 2015). Another threat is that it is difficult to convince tour agencies to send tourists to the site due to the fact that a translator from the agency would need to be present.

Baray Reach Dak Recommendations

It is recommended that the Baray Reach Dak community committee attempts to work with APSARA to lower the entrance fee into the Angkor Park area for the tourists who will be going on the tour of the Baray Reach Dak. It is also recommended that they strengthen their relationship with APSARA and the community to curb misunderstandings on the community's behalf and to ensure future community involvement with the project. Partner with restaurants and local shops located in the Angkor Park to do advertising to increase the tourist flow to the area. Biodiversity surveys should be done to track the impact of the tours and the efforts of the patrolling on the protected area. It is recommended that the guides develop better foreign language skills to be able to communicate with the tourists. The Baray Reach Dak should keep the boat tours because one of the draws to the trip is that it is peaceful in comparison to the rest of the bustling park. It would also be good to keep the various tour options which differ in length, price range and itinerary. It is highly recommended to maintain the community development fund and if possible, try to enlarge it. Involvement of more community members in the program would increase the opportunity of locals to have alternative livelihoods and potentially increase participation in protection of the area. It also highly recommended that patrolling remain a vital part of the project to ward off illegal activity in the area and to protect the forest ecosystem.

Kulen Nature Trails Recommendations

Partnering with local transport services would make getting to the park easier for independent tourists and would add ease to the trip which is more of an incentive to go. It is recommended that the price scheme is reworked to have the price of the tour be dependent on the amount of people in a group rather than a flat rate of \$20 per group. This would create more revenue if

groups of more than two came to the park. Biodiversity monitoring should be done to assess the impacts of patrolling in the protected areas surrounding the trails to indicate trends in species presence and populations. It is recommended that as visitors center be created with information available in multiple languages. It is imperative to have a searchable Facebook name that corresponds to the name used on the brochure, Kulen Nature Trails. Furthermore, it would be beneficial to get the tour rated on travelfish.org or trip advisor. If possible, a website should be created. When researching the Kulen Nature Trails online, I was not able to find their Facebook page or any other information online, which is how most people do research for trips. It is important to maintain partnerships with Siem Reap travel agencies to try and increase the amount of tourists sent to the park. It would be worthwhile to look into overnight camping or home stay opportunities which may make the one and a half hour drive to and from the site more worthwhile for some people. It is good that there are two length option; these two options should be kept. Tours should be used as opportunities to teach visitors about conservation and sustainability at the Kulen Nature Trails and in the PKNP. One there is a steady flow of tourism to the site it is recommended that a community fund is created to spread benefits to the whole community and to promote community development. It is imperative that a relationship is maintain with MoE rangers and that patrolling continue in the area to decrease illegal logging and hunting activities.

Phnom Kulen Nature Trail

Integrated Solutions Asia Cooperation and the Ministry of Environment (MoE) have collaborated to produce the Phnom Kulen Natural Trail, which is situated in Phnom Kulen National Park. The nature trail builds upon footpaths that local communities utilize to forage for non-timber forest products (NTFPs). By turning these footpaths into a tourist attraction, community members can develop alternative livelihoods such as community guides and community patrol members. These livelihoods can direct community members away from logging and exploiting the forest for its resources.

The project seeks to improve livelihoods in the village of Popel. The nature trail is based within the Popel Community Protected Forest. Logging is not permitted in this area and therefore villagers must find alternative livelihoods. Participating in this CBET project allows the villagers to benefit from the conservation efforts. Money made from the tour goes towards a development fund that is used by the community members of Popel. (Phnom Kulen Rangers, Interview notes, Phnom Kulen National Park, 23 February 2015).

The long version of the tour is a four-hour guided hike through the forest. The tour is a loop through the forest beginning and ending at the Ministry of Environment Ranger center in Preah Ang Thom village. Tourists can navigate through boulders in the forest. There is also a chance to see the many mammal species that live in Phnom Kulen National Park, with a silver langur viewing area along the trail. During the tour, the community guide shares information about the villagers' dependence on the forest and the NTFPs they can extract.

Strengths

The strength of the tour is that it is very unique to Cambodia. There are not many places where one can travel through the woods in the country. Because of Cambodia's war history most sites are not safe due to landmines and unexploded ordnance. The chance of seeing mammals, reptiles, amphibians and other species is another big selling point for this project. Even if not animals are seen, the ability to walk through the forest and beautiful fauna is an experience many tourists would not turn down. The boulder forest is also unique, and an interesting part of the trail is an excellent viewpoint of the PKNP. The field coordinator Tony is also very knowledgeable as well.

Weaknesses

Weaknesses for this project range stem from a lack of funding. A lack of funding limits the training of the community guides who cannot speak much English. Only one staff member can translate for tourists but he cannot be present for all tours. The project tries to coordinate with hotels in Siem Reap, but tourists are deterred from the added cost of a translator (as well as the entrance fee into PKNP).

Lack of funding can also be attributed to low visitor attendance, because it results in less money for the community. Aside from the rangers and project staff, Khmer people generally do not like to walk in the woods so participation from domestic tour groups is not high. There is a lack of marketing for the tour. Participation from the community is also low. There are only nine villagers on staff, three of which are community guides, and the rest are patrolmen. These are the people who directly benefit from the project along with the MoE rangers. Only three MoE rangers work with project, even though there are 60 rangers working in PKNP. Furthermore, the community guides and patrolmen have to farm to supplement their incomes and therefore cannot patrol the forest frequently. Because of the low visitor attendance they do not receive income to solely work as patrolmen, which leads to more habitat degradation (Phnom Kulen Rangers, Interview notes, Phnom Kulen National Park, 23 February 2015).

Opportunities

There is potential for this project to succeed because of the number of opportunities. There is potential to expand the trail into the village, where tourists can learn firsthand from the Popel people. Tourists can learn about their livelihoods and their relationship with the forest for things like traditional medicine to furniture made from rattan, a vine found in the forest. Tourists could also accompany rangers on their patrol and this could also encourage more rangers to patrol if they make additional money leading tourists. This could also be exciting for the tourist. There is also potential to improve the ranger center in Preah Ang Thom to place information boards and turn it into a welcome center. This is where tourists can learn about the conservation efforts and the partnership between the government and villagers. This will give the project a very positive light and improve the project's reputation and expand the tour's educational resources. There is also opportunity to market to national tourists who visit the

pagoda in Preah Ang Thom. However, prices will have to be different because national tourists will not pay what the foreign tourists pay to walk the trail. If the project's educational outreach is more developed and if there are more foreign tourists there will be enough funds to support this program.

Threats

Degradation is the major threat to this project. Due to inability of frequent patrol, logging is still a threat to the forest, particularly at night. The patrolmen are also unable to reach the site in time before the loggers run away. Overharvesting of NTFPs is another threat. The project has expanded the footpaths so now villagers can navigate the forest easier and perhaps log the hardwoods. Hunting of mammals is also prevalent. There is also a chance that tour agencies will bypass the Phnom Kulen Nature staff and use the trail on their own.

Recommendations

Both the Baray Reach Dak Community Tour and the Kulen Nature Trail projects could benefit from more guides training. If the Phnom Kulen and the Baray Reach Dak guides can learn English then some issues with poor communication between the tour guides and guests will be resolved. For the Baray Reach Dak project the guides also need more training in how to identify animals and wildlife. The guides should also talk more about the cultural importance and point interesting facts about the forest, like edible plants and insects. Furthermore, they should include temples in their tours and maybe even branch into providing temple tours as this could help bring in more revenue.

The Phnom Kulen Nature Trail should provide tours at different times of day, like an early bird tour where there could be a better chance of spotting mammals. To improve marketing, they should also set up information boards at other sites in PKNP, and advertise to tourists who seek a hiking experience that cannot be found elsewhere in Siem Reap. With more participation from the villagers they can also provide transportation to and from the site. Villagers can be hired as drivers, although a translator will still be needed but this could lower the cost and attract more visitors.

Alex Case, Community-Based Ecotourism in Cambodia

A new kind of tourism has been recently emerging in the last 10 years from Cambodia, the term is called community-based ecotourism (CBET) and it combines the economic benefits of tourism with the concepts of sustainable development, environmental conservation, and social equity. This kind of ecotourism emphasizes a push to create value around preserving natural resources in communities while creating new alternative livelihoods, thus attempting to reduce the dependence on dwindling natural resources and unsustainable practices. However, In Cambodia, the government has not been choosing the best options for its natural resources and population, for example, corruption in politics and limited awareness has led to habitat destruction, overharvesting of natural resources, overhunting of wildlife, and high poverty.

The government has shown an interest in taking advantage of the economic profits that tourism provides, but not in the sense of being sustainable or equitable. With the help of non-governmental organizations (NGOs), communities have been funded and assisted with creating CBET projects. However, when creating a successful and non-exploitative CBET, the following key factors must be emphasized by NGOs: the encouragement of full participation of local community members, the community's freedom to represent themselves however they want, and the allocation of a fair share of profits to the community. These factors in some form should be used to analyze and determine if CBETs are being non-exploitative as well as reinforcing a kind of mutually symbiotic relationship between environmental conservation, local economic livelihood, and cultural preservation (Reimer & Walter 2012, page 2).

In this paper, two Cambodian community-based ecotourism projects were analyzed: the Baray Reach Dak Tour and the Popel Ecotourism Trail. Qualitative study methods included participant observation, interviews, and presentations. These study methods helped identify and categorize the strengths, weaknesses, opportunities, and threats (SWOT analysis) of each ecotourism site. A seven-part analytical framework was also used from Reimer and Walter's paper (2012) to understand the strengths and weaknesses of the projects. This framework includes the following seven components: (1) involves travel to natural destinations; (2) minimizes impact; (3) builds environmental awareness; (4) provides direct financial benefits for conservation; (5) provides financial benefits and empowerment for local people; (6) respects local culture; and (7) supports human rights and democratic movements. The latter analytical part about the support of human rights and democratic movements will not be used much in this paper. Lastly, the social dimension of gender may be a key analytical category to recognize growth and equality, and should be considered in community-based ecotourism and sustainable development. Each component is considered in turn, and then applied to the Baray Reach Dak Tour project and the Popel Ecotourism Trail project (Reimer & Walter 2012, page 4).

The first component of the seven-part analytical framework- *travel to natural destinations* - involves remote natural areas, which may be under some form of national, private, communal or international protection, and may be inhabited or uninhabited by human beings. These areas contain ecotourism attractions that are appealing to tourists, for example, waterfalls, wildlife, flora, archaeological sites, and much more.

The second component – *minimizes impact* – refers to the ecotourism effects on the environment and local culture. Extensive research must be done to understand the ecological impacts of ecotourism at all levels. Ecotourism should include opportunities that encourage visitor participation in habitat restoration and other environmental conservation activities that increase awareness and help minimize impacts (Reimer & Walter 2012, page 5).

The third component – *builds environmental awareness* – involves ecotourism initiatives that help visitors learn about both place and people, through the provision of pre-experience information (internet sites about local biodiversity, environmental issues, community conservation efforts, the sustainable ecotourism model employed, the ecotourism curriculum

of natural attractions, livelihood activities and cultural knowledge) and well-trained, multilingual naturalist guides with skills in natural and cultural history, environmental interpretation, ethical principles, and effective communication. Among villagers, a growing awareness of environmental conservation and environmental issues should be communicated through such examples as environmental education activities for children, open workshops on endangered species and threatened habitat, and public screening of environmental videos.

The fourth component – *provides direct financial benefits for conservation* – involves the park entrance fees, voluntary donations and environmental conservation levies are targeted directly at conservation, while eco-lodges, campsites, homestay accommodations, restaurants, transport and guiding services provide economic benefits directly to local people in the service of community development, at the same time offering indirect financial incentives for environmental conservation. That is, community support for conservation efforts helps ensure the viability of the natural attractions upon which ecotourism depends. In many ecotourism initiatives, the fifth component reinforces the fourth component, for example, a revenue sharing strategy with 80% of the revenue going directly to the service provider and 20% going to a CBET fund managed by the CBET committee shows that benefits are split among service providers and conservation efforts to keep the area fit for conservation and ecotourism. Indirect benefits to conservation comes from the circular cycle of services providers benefiting from conserving and preserving natural resources.

The fifth component – *provides direct financial benefits and empowerment for local people* – reinforces the fourth component through ecotourism strengthening local governance institutions and skills in leadership, which were empowering forms of participation leading to social foundations for conservation.

The sixth component – respects local culture – involves the right for communities to continue their way of life without much disturbance to their local traditions, so ecotourism must respect local culture while teaching and instilling conservation strategies and sustainable living and development.

The first strength of the Kulen Nature trail is the attraction of the natural fauna and flora that the site provides, for example, the gibbons and langurs that reside in the national park. The second strength is its location next to Angkorian ruins and waterfalls that attract many tourists and locals to this specific site. The third strength is the conservation, awareness, and protection done by the rangers to minimize impacts to the area. The fourth strength is the benefits of tourism to the area allows for alternative livelihood through souvenir stores, restaurants, and ranger incomes for people in the community.

The weaknesses of the project are the limited rangers; limited guides; lack of community awareness, participation, and communication; limited information and marketing; and limited funds. The limited funds causes all the other weaknesses in the program, for example, the limited rangers causes the natural wildlife in the area to be destroyed from illegal logging and

hunting. The limited members associated with the conservation of this area causes limited awareness of the efforts and efficiency of the program.

The opportunities associated with this program are the possible communication and awareness that can be taught to the community through proper management and community involvement. More awareness of the conservation efforts and attractions in the area as a whole will bring more tourists and financial benefits, so involvement and communication among all local members will help create community objectives and goals for the future that will benefit the community. Effective marketing of the whole area and the attractions in the area will benefit all tourism in the area. Communication with tourists and local members will help spread awareness to conserve the natural environment, so everyone can benefit from the tourism and the beauty of the natural environment and wildlife.

The main threats to the area are the illegal loggers, the extra costs to drive up to the location, and the pollution caused by local people and tourists. The limited awareness and rangers cause the national park to be illegally logged and hunted, damaging the natural attraction and the natural resources in the area. The extra costs to drive on roads up to the location limits the number of people visiting the site. The rubbish and pollution near attraction sites does not help the national park and may cause damages to the Kulen Nature Trail.

The main recommendations are to increase community communication and education about the attractions and their importance and the need to limit pollution and unsustainable practices in the area. A few individuals from the local community must attempt to gather all community members and instill the need to conserve, protect, and sustain their natural resources and their livelihoods that depend on them. More online marketing and information about the Kulen Nature Trail and other attractions in the area must be created and dispersed to attract more tourists to the area.

The seven-part analytical framework from the Reimer & Walter paper is a great tool to analyze the many parts of ecotourism projects to see what is missing, what can be done to make it better, and what is not working. The CBET programs in the Baray Reach Dak and the Kulen Nature Trail are both beneficial to the communities and the natural environment, but further research, community

Kulen Nature Trail

For many tourists, getting out to experience the natural beauty of Cambodia is a huge desire. The problem is that very little infrastructure exists for allowing those interested in exploring. Implementation of CBET programs has started in some areas though. An example of one of these programs is found in the Kulen Mountains north of Siem Reap called the Kulen Nature Trail. The program has a total of nine employees involved with five of them being active rangers. The goal of the program is to get eco tourists to come and hike the trails while educating them about Cambodia's wildlife and forests. In doing so, this project funds the protection of the wilderness area and provides alternative income for local villagers around the

park. The program offers two separate trail loops, one short and one long that take tourists through the mountainous terrain of the Kulen forest.

Strengths

The Kulen nature trail has many excellent attributes that could potentially make it a top tourist destination in the coming years. The beautiful forests in the Kulen Mountains are a massive draw for those wishing to see the dwindling forests of Cambodia. On the trail, adventurers get the ability to see many exotic species of birds, mammals, reptiles, and flora that are indigenous to the country. Some of these species include silver Langurs, wild pigs, a variety of butterflies, the slow loris, giant squirrels, and many others. Furthermore, there are many interesting natural formations along the trail that are very interesting to see. Towards the end of the hike, one can go for a refreshing swim in a tranquil river that is both clean and cool. Prior to this stream, there are large boulder gardens which those of an adventurous nature can climb on to see breathtaking views of the canopy below. These unique features make the Kulen Nature Trail an attractive option for those looking to get off the beaten track and explore some of Cambodia's beautiful wilderness.

Besides the wonderful hiking trail, those who come up the mountain also will get to experience traditional Khmer culture in the village of *Preah Ang Thom*. On the way to this village, those with an adventurous stomach can try red bananas that are indigenous to the mountains. Once inside the village, it is possible to go a local temple and see traditional Buddhist religious practices intertwined with ancient animistic beliefs. These natural interactions between tourists and villagers helps increase the draw of outsiders to the area while also providing income to locals. This is further exemplified by the fact that the money paid to go on the guided tour of the trails goes to maintaining the forests as well as providing a livelihood for the rangers involved (Young Ranger, field notes, Kulen Nature Trail, 23 February 2015). Thus, by coming to this park tourist's aid in preserving the area for future generations and help villagers sustain themselves by nondestructive methods.

Weaknesses

Despite the large number of strengths associated with this CBET program, there is also room for improvement in a number of key areas. Since the park only saw its first visitors in June of 2014, it is still very young and in the early stages of development. This means that the program is virtually unheard of to many of those who come to Cambodia. The lack of online information related to the trail and park area makes it even more difficult for those interested to locate the park. Another large issue is that domestic visitors don't have any desire to come to the park and experience what it has to offer (Tony, field notes, Kulen Nature Trail, 23 February 2015). This stems from a widespread cultural belief that nature is an unsafe place and harbors illness, thus many Khmer people find hiking to be an unenjoyable pastime (Lisa Arenson, Lecture notes, firefly guesthouse, 9 February 2015). This lack of visitor's means there is very little capital going to the program which leads to several issues. Without proper funding, the program only is able

to employ five ranger with very informal training and very small salaries. Such a small number of people employed means that it is difficult to monitor the forest as well as they would like.

Furthermore, the relatively high cost of getting to the area could also be considered a deterrent for those traveling on a budget. Just to get to the park one must rent a van or taxi due to the distance from any major cities. Then, there is the \$20 cost to use the road which goes straight into a corrupt generals coffers and doesn't aid the local villagers in any way. Once these fees have been dealt with, visitors must then pay an additional \$20 for a guide to lead them on the trail. The issue with this is that the guides who work in the forest do not speak English or French, only Khmer (Rangers, field notes, Kulen Nature Trail, 23 February 2015). Thus, non-Khmer tourists must hire a translator for the afternoon to understand what is being said by the guides. Despite these issues and fees, the nature trail is still an incredible idea with much potential for improvement.

Opportunities

The Kulen Nature Trail could become an extremely popular destination for both domestic and foreign tourists with several small improvements. First, the rangers in charge of the park must increase the parks online presence to get the information about the park out. This simple task is free and would help tremendously in getting some much needed notoriety for the park. Next, the rangers must hire multilingual guides to talk to international tourists who come to the park. Furthermore, if the park could setup cooperative programs with outside tour agencies, this would help them increase the flow of tourists into the area. It would also be prudent to find ways to get more community members involved through various supplementary occupations. Examples of what could be created include community restaurants, locally-produced wares in gift shops, and possibly even home stays or camping sites. Doing so would help local villagers change to more sustainable livelihoods as well as increasing their initiative to protect their forests. An example of this system being implemented effectively is at the floating village of *Prek Toal*. Here an international NGO called Osmose has gotten over 100 families to change to sustainable livelihoods while funding the protection of a nearby ecological biosphere (Osmose representatives, Lecture notes, Firefly guesthouse, 18 February 2015). With improvements such as these, the Kulen Nature Trail could reach peak potential as well as helping to protect the park for years to come.

Threats

As with much of Cambodia's forests, the Kulen National Park that houses the nature trails is under threat from a variety of sources. Two of the largest threats to the area are poaching and illegal logging. Many people who live in the area depend on forest resources as their main source of income as well as for basic living needs. The lack of monitoring from the rangers in the area only makes this problem worse as very little is done to actively stop these activities. Pollution is another large issue for the area around the nature trail just as it is in the rest of the country. Many local villagers simply burn or bury their trash which is not only damaging to their health but also the environment around them. Fixing these issues will require a multi-faceted

approach from both the local population and the national government. Once these issues are under control, the park and nature trail will be able to reach full potential while protecting the forest for years to come.

Recommendations

The CBET programs at Baray Reach Dak and Kulen National Park are, undoubtedly, a breath of fresh air for Cambodia's tourist industry. They help to provide local villagers with sustainable income as well as aiding in the preservation of the countries forests. However, this isn't to say that several key improvements couldn't be made that would help both parks tremendously. It is highly recommended that both programs create a much stronger online presence. This simple and virtually free endeavor could create a massive boom to the number of tourists that both programs see. One idea would be to create webpages on sites such as Facebook, trip advisor, and any others that travelers use to find activities to do when abroad. Hiring guides who are multilingual in languages such as Korean, French, or English would also increase the appeal for tourists majorly. Having to hire a translator isn't ideal as it costs additional money and reduces fluidity in conversation between both parties.

There are, indeed, a few things that I highly recommend continue to be done at both sites. It is crucial that both projects continue giving tours through their respective sites. These fun and interactive tours are an excellent way for outsiders to learn about the local culture and landscapes. Furthermore, the friendly and inviting attitude of the guides who worked with us was extremely refreshing. We may not have always understood what was being said between each other but the guides always kept a sunny disposition. Thus, it is crucial that guides be confident when speaking with tourists. It is crucial to the programs that they continue these activities to ensure that tourists continue to flow in.