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## SPORTS TOURISM AND MOUNTAIN ACTIVITIES: TRAVELERS' PERCEPTION AND SATISFACTION IN CAMBODIA

*TURISMO ESPORTIVO E ATIVIDADES DE MONTANHA: PERCEPÇÃO E SATISFAÇÃO DE VIAJANTES NO CAMBOJA*

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**ABSTRACT:** This paper examines tourists' satisfaction level visiting the Cardamom mountains in Cambodia based on their feedback published on tourism providers' websites. Visitors' input reflects the quality of the attractions and services at the destination. Our analysis paralleled tourism products that the destination offers with the visitors' opinions. Cambodia's 1980's political changes have allowed the Cardamom mountains region to develop significant tourism super- and infra-structures, enabling this tropical region to host thousands of tourists every year. In the present study, we investigated the supply side of the tourism system as well as the opinions of the visitors published on tourism websites. Based on the reviews, we estimated travelers' satisfaction with their experience during their visit to Cardamom. The most frequently mentioned characteristics of the destinations were the natural environment, accessibility, hospitality, and the provided attractions. To get to know the level of each feature, we set up four categories: poor, basic, satisfactory, and high-quality. Based on the environmental analysis and the tour packages offered by the regional travel agencies, the Cardamom mountains is a tropical destination with jungles, unique water surfaces, and rich wildlife. The area is a bit cooler than the capital city, but in the rainy season, there is more rainfall, which makes it difficult to reach the sites. Tour operators advertise their packages by highlighting the jungle atmosphere, homemade food experience, and adventure activities. The travelers' opinions confirmed the importance of the tourism attractions. Most reviews rated the Natural environment (47.5%), sport and adventure activities (47.2%), hospitality (37.9%), and homemade food (36.6%) as good or excellent. Some of the travelers were less satisfied with the accessibility of the destination and hygiene level. **Keywords:** Sports tourism, adventure activities, tourist satisfaction, Southeast Asia, Cambodia.

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**RESUMO:** Este artigo examina o nível de satisfação dos turistas que visitam as montanhas Cardamom no Camboja, com base no feedback publicado em sites de fornecedores de turismo. A opinião dos visitantes reflete a qualidade das atrações e serviços no destino. Nossa análise comparou os produtos turísticos que o destino oferece com as opiniões dos visitantes. As mudanças políticas dos anos 1980 no Camboja permitiram que a região das montanhas Cardamom desenvolvesse infraestruturas turísticas significativas, permitindo que essa região tropical recebesse milhares de turistas todos os anos. No presente estudo, investigamos o lado da oferta do sistema turístico, bem como as opiniões dos visitantes publicadas em sites de turismo. Com base nas análises, estimamos a satisfação dos viajantes com sua experiência durante a visita ao Cardamom. As características mais mencionadas do destino foram o ambiente natural, acessibilidade, hospitalidade e as atrações fornecidas. Para conhecer o nível de cada característica, estabelecemos quatro categorias: fraco, básico, satisfatório e de alta qualidade. Com base na análise ambiental e nos pacotes turísticos oferecidos pelas agências de viagens regionais, as montanhas Cardamom são um destino tropical com florestas, superfícies de água únicas e uma rica vida selvagem. A área é um pouco mais fresca do que a capital, mas na estação chuvosa, há mais chuva, o que torna difícil chegar aos locais. Os operadores turísticos promovem seus pacotes destacando a atmosfera da floresta, a experiência de comida caseira e as atividades de aventura. As opiniões dos viajantes confirmaram a importância das atrações turísticas. A maioria das avaliações classificou o ambiente natural (47,5%), atividades esportivas e de aventura (47,2%), hospitalidade (37,9%) e comida caseira (36,6%) como boas ou excelentes. Alguns dos viajantes estavam menos satisfeitos com a acessibilidade e o nível de higiene do destino. **Palavras-chave:** Turismo esportivo, atividades de aventura, satisfação do turista, Sudeste Asiático, Camboja.

## INTRODUCTION

The annual tourism growth rate in Cambodia is among the highest globally. However, the tourism industry's impact on Cambodia's economy is relatively insignificant (Chan & Ab Latif, 2013). In 2018, before the global pandemic, the growth rate of the tourism sector in Cambodia was nearly 13 percent (Chheang, 2018). Most of the visitors were from Asian countries (87%), which accounted for 31 percent of all inbound tourists. It expanded rapidly, with over 5 million visitors arriving in the country by 2016 (Walter, P., & Sen, V. 2018, UNWTO, 2019). The tourist flow was influenced by a tourism co-operation contract signed by Cambodia, Laos, Myanmar and Vietnam (CLMV) in September 2012, which aimed to welcome 25 million visitors to the region, with four million 'exchange visitors' in each country (Thett, 2012).

According to Papadimitriou & Gibson (2008) many destinations use tourism as an economic development tool, which needs a deeper understanding of tourists' perceptions and experiences of these places. In Cambodia, the main task of the tourism destinations was to attract more tourists to come, especially to reach the countries with the most travelers (Finland, USA, Sweden) (Chheang, 2018). But the former political conflicts in Cambodia caused a lot of prejudices to visit a country where a couple of years ago still people were killed on behalf of the dictatorship.

Cambodia is targeting international visitors, hoping to build up a positive image of the country. One of the greatest offers to attract tourists was the unique environmental conditions, which provide pleasant location for eco and sport touristic activities while visiting urban and rural areas. In the last few years, it is definitely remarkable how many new activities were born and advertised on the online platforms



internationally. One of them is the TripAdvisor promoting travel packages involving the natural and cultural attractions in the country. On their web pages, the number of feedback from the travelers are significantly increasing compared to past years. According to Winter (2008), the main motivations of the tourists to visit Cambodia were first of all to experience the tropical nature, urban, beach and mountainous areas, historical sites, and doing sport activities for a reasonable price.

Also in Cambodia the main goal of all tourism providers is to make tourists satisfied by improving the positive benefits of all elements of tourism, such as environment, travel and transportation, human services, activities, and fulfilment of physiological needs. All this can be achieved, if providers can stimulate the multisensory. If the perceptions of tourist destinations are positive, they can be significant elements within the destination choice method, regardless of whether or not they are real representations of what that situation has to present (Um & Crompton, 1990).

## LITERATURE REVIEW

### *Tourism in Cambodia*

Rich natural resources and culture at a destination influence tourists' expectations and perceptions (Weiermair, 2000). Nature provides the context where the optimal conditions contribute to the comfort zone of visitors and locals. However, the local culture is the driver for facilitating culturally and naturally sensitive behaviour by visitors (Esfehani, & Albrecht, 2018).

Cambodia's rich and diverse natural resources provide an ideal context for eco and sport tourism. The largest part of the country consists of the Tonle Sap Basin and the Mekong Lowlands (75%), offering several nature-based opportunities such as bike tourism. To the southeast of this great basin is the Mekong Delta, which extends through Vietnam to the South China Sea. The Basin and Delta regions are rimmed with mountain ranges to the southwest (i.e., the Cardamom Mountains, the Elephant Range) and the north (i.e., Dangrek Mountains) covered by tropical forest. Higher land to the northeast and the east merges into the Central Highlands of southern Vietnam. Tourism is a climate-dependent industry. Many destinations owe their popularity to their pleasant climates during traditional holiday seasons (Amelung, Nicholls, & Viner, 2007). One of the main attractions for visitors to Cambodia is the pleasant climate, especially for outdoor activities. This is a remarkable pull factor for tourist sending countries such as the USA, France or Northern China (see Table 1). The primary tourist season lasts from November till April, when the average rainfall is low travellers often escape from the cold environment of their origin country (Table 1). In some cases, however, outdoor lovers are afraid of the high temperature's negative impacts, which complicates long-term outdoor activities. According to Fradkin, Gabbe, and Cameron (2006) the optimal outside temperature for sport performance is 21-23 °C, much lower than monthly average temperatures in Cambodia. The annual average temperature in the country is 28 °C, with an average maximum temperature of 38 °C in April and an average minimum temperature of 17 °C in January (Thoeun, 2015). So, the hot weather can challenge those who want to practice outdoor activities, except mountain areas with above 700 metres of altitude, where the temperature is 5 to 10 °C lower.

Besides the hot weather, there is a confounding factor; the Monsoon season in Cambodia starts in May and lasts until the beginning of November. The average rainfall



can reach 261mm in this season. The forested region is an optimal living space for insects, malaria-riddled mosquitoes, strange creepy crawlies, spiders, which have developed a propensity to feed early and outdoors, limiting the effectiveness of long-lasting insecticide-treated nets and indoor residual spraying (Gryseels, et al., 2015). The risk for travelers to get infected by malaria is relatively low (i.e., 1 case per 100,000 visits; Behrens, et al., 2010). However, based on visitors' feedback, mosquitos make the conditions unbearable for visitors.

Table 1. Average temperature and precipitation in Cambodia compared against major tourist sending capitals (Adapted from climate-data.org)

	Average Temperature (°C)				Average rainfall (mm)			
	Phnom Penh	New York	Paris	Beijing	Phnom Penh	New York	Paris	Beijing
January	26.3	1	4.7	-3.5	6	99.1	33	53.7
February	27.3	4	5.5	-0.5	8	76.2	41	43.7
March	28.6	6	8.5	6	32	101.6	35	48.5
April	29.6	12	10.8	14	70	99.1	18	53
May	29.2	17.5	14.8	20	151	111.8	32	65
June	28.5	20	17.6	24.5	150	88.9	38	54.6
July	27.8	25	20	26.5	155	101.6	36	63.1
August	28.0	27.5	20	25.5	158	104.1	30	43
September	27.7	20.5	16.7	20.5	228	101.6	17	54.7
October	27.2	15	12.5	13.5	261	86.4	24	59.7
November	26.6	8.5	7.9	5	121	114.3	37	51.9
December	26.0	3.5	5.7	-1	31	91.4	49	58.7

In the last decade, significant tourism infrastructure developments have taken place, the management of which has not always been successful, which identifies gaps between policies and their implementation that indicates a need for greater attention by policymakers and planners (Ong, & Smith, 2014). This process also has not been very time efficient due to a lack of accessibility and hospitality development. The unique natural resources provide a solid background to localize the tourism industry. After the armed conflict ended in Cambodia, wilderness areas in the mountains became accessible to the exploitation of natural resources and development (Reimer & Walter, 2013). For example, in the past decade, the tourism sector has established several hiking trails in mountain areas, especially in the 13 national parks, ranked by difficulty, from which the Central and Eastern Cardamom mountains became the most visited ones (Table. 2.).



Table 2. Popular Hiking Trails in Cambodia

Hiking Trails	City/Province	Duration	Level
Cardamom Mountain	Koh Kong	2 or 3 days	Hard
Kirirom National Park (East Cardamom)	Kampong Speu	5 hours	Medium
Virachey National Park	Ratanakiri	2 or 3 days	Hard
Mondulkiri	Mondulkiri	1 day	Hard
Ream National Park	Sihanoukville	1 day	Medium
Phnom Kulen National Park (Kulen Mountains)	Siem Reap	6 hours	Medium
Kep National Park	Kep	3 hours	Medium

Source: <https://www.alltrails.com/cambodia>

Its popularity is due to one of the highest levels of tropical forest cover and a high rate of deforestation, because of the economic developments in those areas, poverty, limited infrastructure, and weak adaptive capacity affect the extremely vulnerable environment (Ngin, 2020). The main question is whether such developments have negatively impacted the tourism attractions in the region. Carter et al. (2015) highlighted the ways that Cambodia can deal with tourism development while sustainably developing its tourism industry (Carter et al., 2015):

- an emphasis on nature-based tourism (ecotourism);
- a call for greater community engagement for sustainable outcomes;
- change in stakeholder perceptions and values as drivers of tourism success;
- protection of cultural heritage as key tourism attractions; and
- foreign investment.

However, sustainable use of those resources depends on the planning and knowledge of the providers and tourists themselves. There is a lack of understanding of how well-planned tourism activities can contribute to sustainable tourism. An analytical category showed the complexity of community-based eco-tourism addressing concerns of environmental conservation, local livelihood, and cultural preservation, and the importance of local context to management of eco-tourism (Ponna, 2009, Reimer & Walter, 2013). There is a disclosed conflict between its business dimension and the local culture in the region (Kimura, 2017).

## GOAL AND RESEARCH METHOD

The goal of this research was:

- to analyze the elements of tourism, such as environment, accessibility, hospitality and activities.



- to evaluate the satisfaction level of some tour packages located in the Cardamom Mountains.

In this exploratory case study, we used participant observation and analysis of project documents. The environmental analysis was based on content analysis such as literature review and national statistics. Satisfaction analysis, widely used in tourism research, is a tool used to gather information about tourists' opinions about a destination (Kozak, 2001, Sadeh et al, 2012, Jayasinghe, Gnanapala, & Sandaruwani, 2015). We considered Kozak's (2001) suggestions regarding the analysis that includes expectation performance, value-efficiency, disconfirmation, and performance-handiest method. Also, Yuksel and Yuksel (2001) suggested that three aspects of visitors' pleasure can be evaluated, such as the definition of purchaser satisfaction, the relationship between customer delight and service excellence and the dimensions of purchaser pride. Usually, tourists select a particular destination based on their expectations and other anticipated tangible and intangible benefits.

In addition, we found it important how travelers evaluate the basic elements of sport tourism, such as environment (natural, socio-economic, infrastructural), accessibility, participants, and the benefits (Banhidi & Moghimehfar, 2022).

The satisfaction level of travelers was evaluated by the feedback of tourists (n=225) visiting the Cardamom mountains. Their opinions were ranked on a scale of 1 to 5 (not satisfied, basic, acceptable, good, and high quality), exploring the details of their travel experiences. Content analysis descriptive statistics, and correlation analysis were used to investigate the relationships among the parameters.

## RESULTS

### *Tourism offers in the Cardamom mountains Geographic conditions*

The Cardamom are located in southwest Cambodia, representing one of the largest, most diverse, and least developed areas of lowland deciduous forest in mainland Southeast Asia (Coad, Lim & Nuon, 2019). The mountain line is connected to six provinces, including Koh Kong, Pursat, Battambang, Pailin, Sihanoukville, Kampong Speu, Kampong Chhnang, Kompot and Kep (Killeen, 2012), some of them having access to the seacoast. It is internationally recognized as a hotspot for biodiversity conservation (Daltry, & Momberg, 2000, Coad, Lim, & Nuon, 2019). The vast blanket of tropical rainforest remains one of Southeast Asia's most pristine expanses of wilderness. The expansive woodland is also home to about 25,000 people and neumerous ethnic minorities. A unique place where wild elephants still roam free. It covers up to one-third of the land of the country. The highest peaks are Phnom Aural 1813 m, Phnom Samkos 1717 m and Phnom Tumpor 1551 m. The Cardamom Mountains generally run from the Thai and Cambodia border in the west in the Pailin Province, south-eastwards for approximately 311 km to the Kampong Bay in the Kampot Province and span more than 10,000 km<sup>2</sup> (Grismer et al., 2007) (Figure 1.).

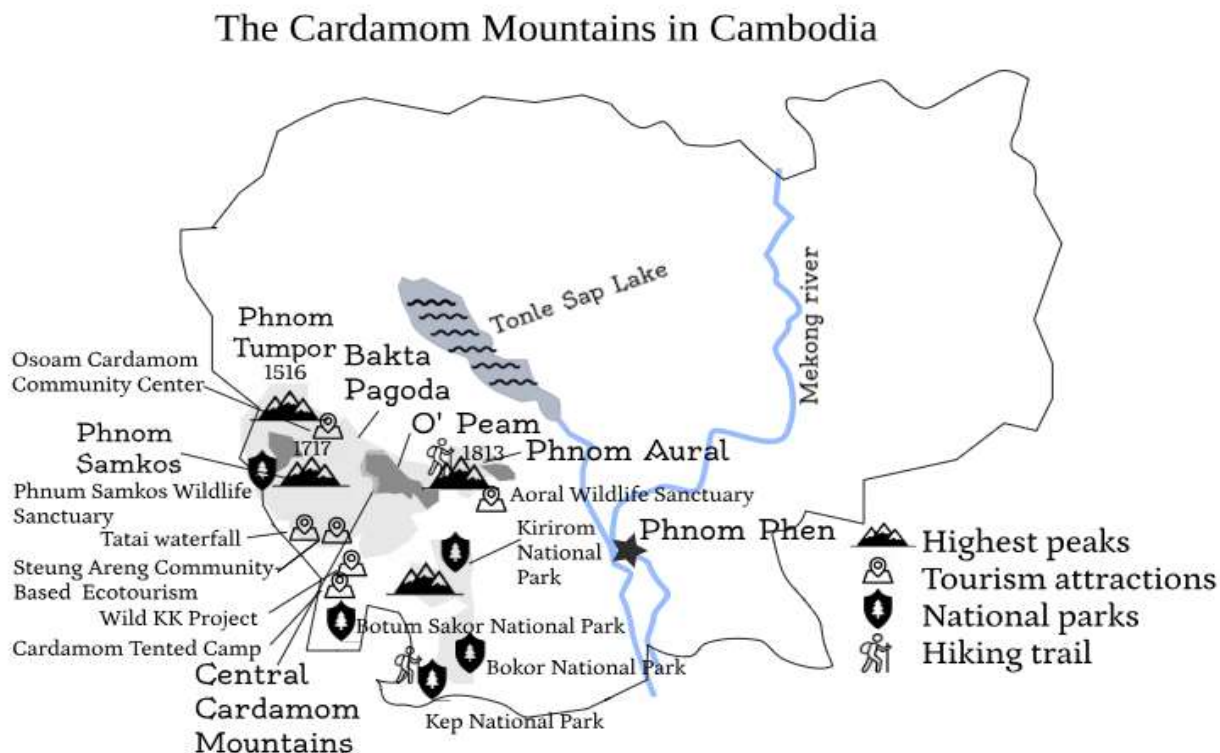


Figure 1. Tourism Destinations in the Cardamom Mountains

Climatic conditions in the region are relatively more stable than in the capital city. The average temperatures are between 22 and 30,8°C. Some tourists reported in their reviews that they did not expect cold nights there. As seen in Table 3. the average precipitation in the Cardamom Mountains is higher in the rainy season than in other regions, reaching 623 mm in July. The ITCZ pressure system causes heavy rainfalls and seasonal flooding. It is also within the Hadley Weather Cell, overturning low-latitude circulations where air rises at the equator and sinks around 30 degrees latitude and flows in a cyclical pattern (Gregg, 2021). There can be a confusing factor: humidity, which significantly strains the body, although this issue was not mentioned in the literature.

Table 3. Climatic characteristics of the Cardamom mountains in monthly distribution (Adapted from climate-data.org)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Avg. Temperature °C	25.9	26	26.4	26.8	26.4	25.9	25.5	25.5	25.3	25.6	26.1	26.1
Min. Temperature °C	22	22.3	23.3	24	24.3	24.1	23.8	23.8	23.5	23.2	23.1	22.3
Max. Temperature °C	30.8	30.7	30.5	30.6	29.4	28.4	27.9	27.8	28	29.2	30.4	31
Precipitation (mm)	45	52	115	153	382	530	623	608	524	305	90	32
Humidity (%)	71%	77%	82%	85%	89%	91%	91%	91%	91%	88%	80%	69%
Rainy days (d)	7	9	15	18	21	20	21	22	21	19	11	5
Avg. Sun hours (hours)	9,2	8,8	8,7	9	7,7	7,2	7,1	7,1	7,3	8,4	9,1	9,4



In the Cardamom mountains can be found the largest wilderness area in southeast Asia. It is a home of varieties of wild and biodiversity such as leopards (*Panthera pardus delacouri*, *Neofelis nebulosi*), world largest habitat for Siamese crocodiles, Asiatic black bear (*Ursus thibetanus*), gaur (*Bos gaurus*), snakes and other large ungulates etc. (Grismer et al., 2007, Coad, Lim & Nuon, 2019). This unique wildlife attracts many eco and sport tourists. Many of the reviewers reported that they could watch them during their jungle tours.

Because of illegal hunting in the area, a wildlife rescue organization was founded, the Wildlife Alliance (WA, 2021) which was busy working with remote communities to help villagers such as in Chi Phat to set up a tourism business. One of their successful projects was to train former poachers to become tourist guides to take guests through the jungle on hikes or bike rides.

### *Local tourism development*

The tourism development in the area does not have a long history. As with the rest of the country, the area came with a bitter recent history and was not so long ago one of the last strongholds for Khmer Rouge soldiers. After the fall of the Pol Pot regime in 1979, many of the soldiers fled to the forest, continuing to fight their battle with the few pockets of locals living there. Although the new government has started infrastructural improvement in the area, it still cannot be found luxury, basic hygienic facilities, hospitals, or just scarce generator-powered electricity. There are insects, malaria-riddled mosquitoes in some areas, strange creepy crawlies, spiders and other odd-looking creatures. It is also slowing down the development of local tourism that in unpopulated regions, outdoor activities can be still dangerous because of landmines. However, the number of reported casualties has sharply decreased, from 800 in 2005 to 111 in 2013 (22 dead and 89 injured) (GICHD, 2016).

The mountain areas offer an excellent environment for ecotourism and sport tourism activities which could have substantial potential to enrich the lives of the citizens of the host community by enhancing economic prosperity, providing additional social and recreational opportunities, and the development of new infrastructure (Fredline, 2006).

In the wake of state efforts in recent years have been seen as pull factors, a series of eco- and community-based tourism projects open up in the area, with an increasing number of homestays and tours into the jungle being launched and led by locals. Still, those areas are not much developed for active tourists. There are some difficulties in finding the marked trails because of the lack of thematic maps or proper markings. A good example in the National Parks is the marked trails, thematic maps and flyers developed by the local tourism department. The parks are still avoided by mass tourism, there are still a couple of people daily in dry seasons, and it does not have much visitors in rainy seasons (Raksmey, 2019). The pandemic situation caused even fewer numbers of tourists in the region. Some tourists reported that even the worldwide famous World's First Tented Hotel hosted only a few visitors.



### Tourism attractions in the Cardamom Mountains

According to international travel agencies, unique tour packages can be found (table 4) based on tourism elements: environment, access, activity, and hospitality. Among the tourist attractions, there are some historic sites mentioned, such as the ancient caves from the 15th to 17th century, containing 60 cm exotic ceramic jars and rough-hewn log coffins set out on remote, natural rock ledges scattered around the mountains (Beavan, Hamilton, Tep, & Sayle, 2015). In the reviews, we did not find any feedback on these sights.

Table 4. Tourism Packages Provided by Tourism Agencies

<b>Tourism destination</b>	<b>Environment</b>	<b>Accessibility</b>	<b>Sport and other activities</b>	<b>Local hospitality</b>
<i>Tatai Waterfall</i> A large rocky cascade located amidst a lush jungle setting in the Tatai river	Hugh magnificent rain forest, quiet River 20-metre depth, and in some places with a thunderous roar	4-5 hrs. by car, or motorbike 30 min. boat ride The road is tricky, dirty and rocky	Swimming, Kayaking, Playing like in pool	Few shops selling food and drinks
<i>Wild KK Project</i> Not-for-profit social enterprise	Rare wild birds, butterflies, fish, the sound of gibbons, monkeys	7 hrs. from Phnom Penh by bus	Motorbike, Kayaking, Hike to waterfall, Jungle walk tour, Swimming	Local food, Sleeping in tents, hammocks, Local way of life Good guide
<i>Aoral Wildlife Sanctuary</i> A protected area covering 2,544.85 km <sup>2</sup>	Fresh air, a quiet remote location to relax, beautiful forest and rain fed streams to explore Feeding animals	3 hrs. by minivan, shared taxi Bus, motorbike	Trekking in the forest Unique wildlife up close before their release,	Local food in Cambodian style and tropical fruits
<i>Cardamom Tented Camp</i> Home to nine comfortable safari-style tents	Safari-style tents, Botum Sakor National Park Preak Tachan river	8 hrs. from Phnom Penh by bus	Eco-friendly adventure packages: hiking (3,1 km), kayaking (4 km) birdwatching	32.6 m <sup>2</sup> tent, Riverside restaurant, English speaking guide
<i>Steung Areng Community-based Project</i> To protect ecosystem from wildlife poaching and deforestation	Central Cardamom Mountains National park Largest mainland forest Home to Asian elephants and Siamese crocodiles	6 hrs. from Phnom Penh by bus 119 km national road, than 60 km dirt road	A range of treks, mountain bike and motorcycle tours	Experienced local guides

The road expansion made the mountains more accessible to natural sights and reduced travel times to main attractions (Coad, Lim & Nuon, 2019). However, some final destinations can be reached only on dirty roads.

The definition of sport tourism is often characterized by a product-experience dichotomy, which has been subject to differing interpretations among scholars in the



field of tourism. Like other forms of tourism, sport tourism is viewed as an industry that encompasses various attractions, products, and services (Uvinha et al, 2018).

Sport and adventure activities such as jungle treks, swimming in a waterfall pool, sleeping in hammocks etc., are offered as main attractions. The region still does not have luxurious services, but several homestays (Reimer, & Walter, 2013) provide unique accommodation, homemade food and programs to the natural sites. The economic benefits are visible to the host families, but the income is not high enough to start significant investments to increase the quality of services.

There is still common illegal felling of trees (Kimura, 2017). Uncontrolled wildlife such as the hornbill or wild pig attack can cause some accidents among visitors.

Among the host destinations, one of the favorite location is the Osoam community, which is 95 km from Koh Kong Airport. The altitude is 700 m, which keeps the weather moderate at 21-26 °C. The location is optimal for visitors because it is not that far from the coastline and close to the mountain ranges and the Stung Tatai Dam Reservoir with waterfalls and tropical plantations. The host community offers medium-quality accommodation with a full pension and some activities to visit the area. The feedback of the travellers reflects the actual values of the region. Analyzing the responses, 64,3% of the tourists enjoyed the most outdoor sports activities, such as hiking, swimming in the waterfalls and mountain biking on the bumpy trails. 43% of them appreciate environmental values.

Other favorite destinations are Chi Phat and Steung Areng, Community-Based Ecotourism villages run by communities that once relied on destructive activities. Now, these communities are playing a leading role in ecotourism development. Both offer - budget travelers an opportunity to thoroughly engage themselves in the Cardamom Mountains offer (WA, 2021). For tourism management, four visitor centers have been opened since 2016.

### *Perceived satisfaction of visitors*

Looking at tourism websites, the visitors' feedback is generally positive, giving high ranks. The statistical analysis results reflect what tourism elements local visitors mentioned as important (Graph 2). The most critical factor for the reviewers was the local hosts and guides, which reflect the warm hospitality of the Cambodians.

Based on the opinions of the visitors about the services they consider important, a higher number of reviewers rated good or excellent for the natural environment (47.6%). One of the most memorable experiences (some of them called highlights) for visitors was learn about nature, meeting with the animals introduced by many knowledgeable guides, or provided by the Wildlife Alliance Centers, which allowed tourists to feed animals being a part of their release.

The local tourism providers pay a lot of attention including sports and other active programs to their packages. The reviewer reported that everyone could experience excellent hiking and water sports activities (47.1%) in a jungle atmosphere or just listen to the sound of birds and feel the magical landscape. In many cases, the providers also offered activities for younger and older ages. Only a few tourists complained about some outdated equipment (kayaks) and lack of marked trails while hiking, and sometimes they were missing more different types of active or cultural programs.

The local food also has a higher rank (36.6%), mentioning the delicious local taste and freshness. Only a few international respondents mentioned missing the continental

food (scrambled eggs, cold chicken and water), which are typical foods consumed by many tourists around the world.

Few visitors (16.7%) were satisfied with the accessibility to the destinations because of the bumpy and muddy roads and some locations could be accessed only with motorbikes or boats. But some people found this issue as a part of their adventure trip.

Some complaints were mentioned about hygiene, which belongs to biological needs (Pendergast, 2006). Especially when after outdoor activities, visitors miss proper showers or toilets. If providers want to develop their services, they should pay more attention to this issue. This can be based on former studies, which emphasize the importance of hygiene, which is a pillar of the tourism industry and an essential condition for improvement (Jovanović, Janković-Milić, & Ilić, 2015). The level of sanitation is also an essential factor in choosing a place to stay (Pendergats, 2006), although the reviewers did not mention that they had to shorten their stay in the mountains. The reviews could also be found a contradictory image of some places. Some visitors were satisfied with the pure environment and the clean accommodation (10.1%), but many complained about the littering problem.

The warm hospitality of Cambodian people and local guides was proved by reviewers' positive opinions, who mentioned how much the local guides helped them visit and understand the local sights and secure the safety to reduce potential confounding factors.

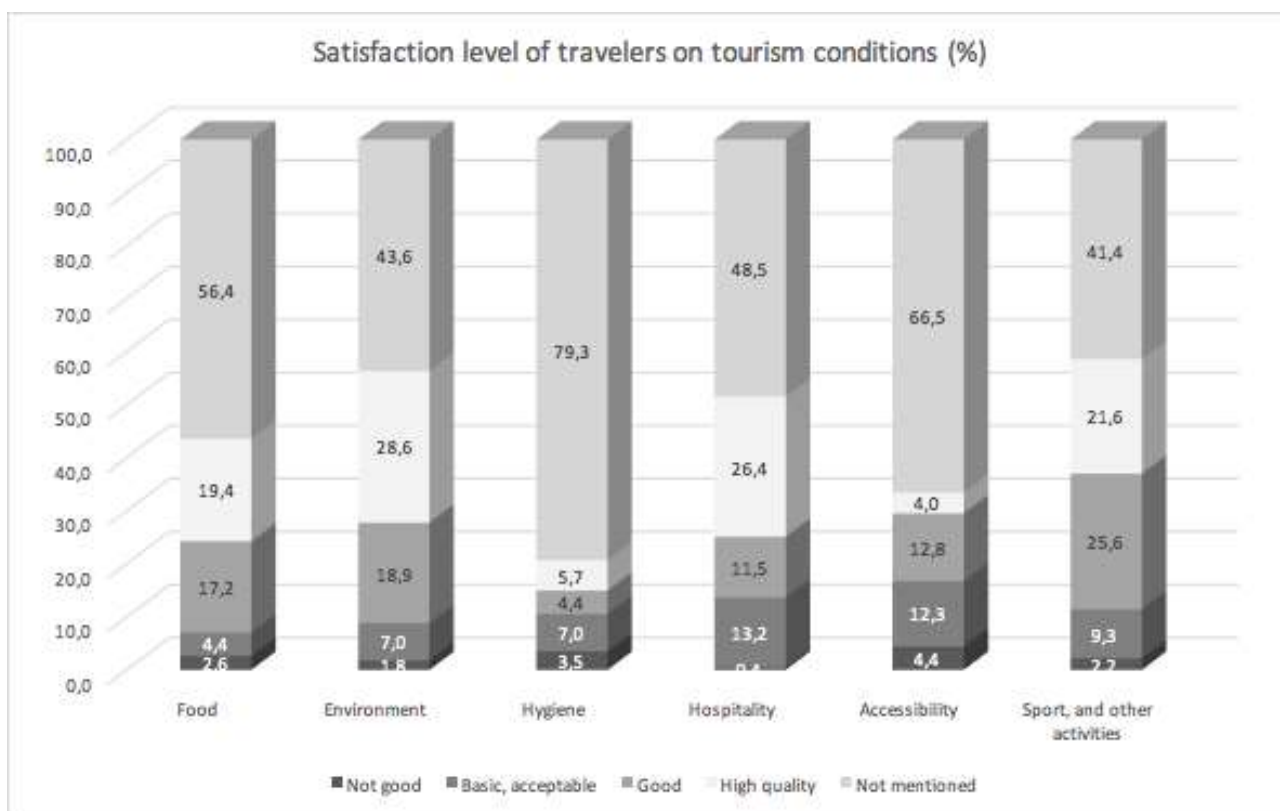


Figure 2. Tourists' feedback on their trips in the Cardamom mountains (from published reviews by Tripadvisor.com)

Table 5. The values (R) of the Correlation Analyses Between the Rated Parameters

	1	2	3	4	5
Food	1				
Natural environment	0,321*	1			
Hygiene	0,456*	0,313*	1		
Local hosts, guides	0,134	0,21*	0,483*	1	
Accessibility	0,545*	0,28*	0,767*	0,108	1
Sport, and other activities	0,62*	0,384*	0,624*	0,321*	0,412*

### CONCLUSION

This study analyzed the tourism conditions of the Cardamom Mountains and to identify the satisfaction level of tourists who visited some popular destinations. The research results were summarized in a SWOT matrix (Table 6.). While zing the travel packages of tourism providers and visitors' feedback, some unique strengths and weaknesses can be mentioned. However, developers should consider further opportunities and warning threats.

The Cardamom mountains is definitely a quiet place with a tropical climate having rich fauna and flora and fluently growing tourism infrastructure. The high percentage of forest cover is a strong pull factor for travelers. Still, the deforestation process, the illegal hunting and lack of proper garbage management are the confounding factors in tourists' satisfaction.

Table 6. SWOT Matrix on the Tourism Development in the Cardamom Mountains

	STRENGTH	WEAKNESSES	OPPORTUNITIES	THREATS
ENVIRONMENT	Tropical forest	Rainy season	More protected areas	Deforestation
	Wildlife	cold nights	Replacement of cut vegetation	60 threatened animals
	Scenario	Destroyed nature	Replacement of cut plants	Locals rely on hunting to feed
ACCESSIBILITY	Mass transportation	Undeveloped roads	Travel packages from the airport	Slow development
	Taxi can be arranged	Dirty roads	More direct connections	Disruptive development
	Shared taxis keep prices low	Slow transportation	Road improvement	Increase in excessive tourist arrivals
HOSPITALITY, HYGIENE	Authentic, homemade food	Lack of tap water	Sustainable water use	Lack of medical services
	Unique accommodation	Littering problem	Alternative electric supply	Better garbage management
	Natural conditions	No alternative food		



ATTRACTION	Unique hiking trails	Lack of sign for orientation	More marked trails with shelters	Lack of knowledge on impacts of the tropical environment
	Outdoor swimming	Few cultural attractions	Involving more cultural attractions	Commercialization
	Kayaking, mountain biking	Some old equipment	Better shopping opportunities	Environmental changes
MANAGEMENT	Friendly host	Lack of English	More training programs for guides	Covid-19 regulations
	Tourism packages	Considering sustainability	More signs in English	Cultural misunderstanding
	Nature protected areas, wildlife sanctuaries	Ignoring or not understanding the need of tourists	Governmental support for private businesses	Economic pressure on pricing

The examined destinations seem to be good models for local development, but according to the reviewers, those places can be difficult to reach public or private transportations, on low-quality roads, especially in the rainy season. Some people might refuse to visit those destinations because they are ever more demanding, requiring service quality and sustainable destinations (Kastenholz, Eusébio, Figueiredo, & Lima, 2012).

The hospitality still lacks modern hotels. However, the growing number of jungle lodges and homestays led by friendly families provide unique opportunities to experience the jungle atmosphere. The conditions for basic needs are present, but hygienic standards should be improved to attract tourists to stay longer. In addition to the many criticisms in the study, many of the reviews were positive about the kindness of the local guides, which could make up for the shortcomings. Their responsibilities are also essential to contribute in protecting natural areas by educating their customers through interpretation and modeling environmentally appropriate behaviors (Randall, & Rollins, 2009).

Some active programs are provided in the mountains, but just a smaller percentage of the reviewers think those are good or excellent organized. The lack of signs for orientation and not updated sport equipment are also negative influencing factors on visitors' satisfaction.

For further local tourism developments, better management is required, which are interfered by many factors. The wildlife is vulnerable because of the depletion of animal habitats, but at the same time their numbers are declining due to illegal hunting or commercial trade, which is more profitable than tourism. It causes wildlife to lose one of the main attractions (Coad, Lim & Nuon, 2019). Also, climate change will lengthen dry periods leading to severe droughts and increasing flooding when the rainy periods start (Gregg, 2021). The problem of landmines is becoming less and less of a problem in the country today, but it is still not advisable to leave designated hiking trails.

One of the best ways to develop tourism attractions in the Cardamom Mountains is to develop eco and sport tourism packages developed and promoted by governmental and non-governmental organizations such as visitor centers and national parks in collaboration with local tourism providers. The satisfaction of the tourists was mostly influenced by the hospitality of the guides, who could be better trained or informed about tourists' needs. For wildlife conversation, the government has established wildlife



sanctuaries, but to stop illegal hunting, more serious control should be introduced. The region is still missing qualified tourism managers who should help the local providers pay more attention to customer's expectations based on opinions, experiences, and information obtained during their visits (Fredline, 2005).

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