Global Travel & Tourism Partnership (GTTP)
Research and Award Competition

“Technology and Sustainability”

Chukka: Caribbean Adventure Tours

Calvin Wright
Jordan Fraser

Mrs. Deloris McLeod
About the Authors

**Calvin J. Wright**

My name is Calvin Wright. I am 17 years old and currently attend the great St. George’s College in Kingston, Jamaica. I have been involved in the Tourism Action Club for the last 3 years, of which I am the current vice-president. I have entered several competitions including this Case study. I have certainly learnt a lot about Tourism, my country and the phenomena that is Chukka Adventures while undergoing this research. I have developed amazing life skills such as communication and presentation, that I’m sure to make use of in the future. As such, I am fervent to mention that my future occupation will be in the tourism industry!

**Jordan B. Fraser**

My name is Jordan Fraser and I attend St. George’s College. I’ve been an avid member of the Tourism Action Club for the last 4 years. During that time I have been able to explore places I could only dream of and they have been awesome! As my dream is to become an airline pilot, travelling across Jamaica to fulfil the requirements of this project has been a dream come true. I am also a firm believer in preserving our environment for future generations. As such, I am thankful for being given this opportunity to descry what Chukka Adventures is doing to protect the environment while contributing to Jamaica’s most important economic sector!
Acknowledgement

Words, amidst their abundance, are too pedestrian to express our utmost gratitude to all who made this research paper a success. Regardless, the researchers extend our gratitude and appreciation to several key people who provided prodigious assistance in the completion of this project. Firstly, we would like to thank The Global Travel and Tourism Partnership (GTTP) for holding this competition. This competition has allowed us to undergo extensive research on one of the island’s many assets, Chukka Adventures. It has also allowed us to visit sections of our island that we have never visited before, allowing us to truly experience Jamaica.

We would also like to thank the Tourism Awareness Unit of the Jamaica Tourist Board for giving us an opportunity to participate in this competition and the extremely generous courtesies they provided. Special thanks to Mrs. Shauna Housen, Mr Kirk Whyte and Ms Essie Gardener for their extreme kindness and guidance in times of difficulty. It is also of paramount importance that we thank our Staff Co-ordinator, Mrs. Deloris McLeod for her motivation and wisdom throughout this extensive research and our dear friend Trevani Grant for his assistance and motivation.

Lastly, we would like to thank our parents who provided transportation to Chukka and for the staff and managers at the site for providing us with information relating to this case study.

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**Thesis Statement**

**Chukka: Caribbean Adventure Tours: It’s time to play** at a truly environmentally and culturally conscious tourist attraction that preserves Jamaica’s natural beauty and culture with the help of innovative technology.
Abstract

Indubitably, the Jamaican phenomenon of tourism has and continues to expand, incorporating the natural resources. Several initiatives have been put in place by the island’s authorities so as to capitalize on the idyllic concept of ‘Sun, Sea and Sand.’ Sustainable tourism, however, does not only focus on conserving the natural resources of an attraction, but also human resources, history and a myriad of others.

This project will look at the idea of Sustainable Tourism in Jamaica and the positive contribution that technology has made to ensure the latter. In doing so, this research will feature Chukka: Caribbean Adventure Tours as a model that embodies the Jamaican scenario. Moreover, however this research will seek to highlight the challenges hindering successful sustainable tourism and the opportunities for useful intervention of technology to the tourism sector. This project will also seek to propose solutions to these issues.
Introduction

Jamaica has certainly embraced tourism and has acknowledged the lucrative phenomenon that it has become and how pivotal not only the culture, sports and sites are but also the culinary factors that foster a diverse tourism package. Tourism is an essential part of Jamaica’s economy. The tourism industry earns over 50 percent of the country’s total foreign exchange earnings and provides about one-fourth of all jobs in Jamaica and tourism revenues account for roughly 6% of GDP in 2013.

Jamaica is blessed with an abundance of natural phenomena that attracts several hundred thousand tourists each year. It’s distinctive and varying natural environment and diverse culture makes the island an ideal tourist attraction. The island’s tropical climate draws thousands of tourists from North America and Europe annually to the attractions and the natural beauty it offers. Many claim that the ‘Sand, Sea and Sun’ concept was first crafted in Jamaica. Furthermore, many voyage to embark in not only the assorted number of beaches, waterfalls, rivers, forests, mineral baths and mountains but also to explore the rich history of the island through museums such as the famous Bob Marley museum, Great Houses and even famous rum estates. However, while Jamaica has all these stupendous attractions, what is being done to ensure their sustainability?

It is widely held that in order to protect the cornucopia of trees and the over 324 species avifauna of Jamaica, sustainability is a requisite factor. The clean, cerulean waters, the
flora and fauna, the rich cultural heritage are all stakeholders in Jamaica’s tourism package and are also forces at risk by reason of either pollution or any other erroneous factor. As such, **Sustainable tourism** is experiences as countries, like Jamaica, attempt to make as low an impact on the environment and local culture as possible, while helping to generate future employment for local people. The ultimate aim of sustainable tourism is to ensure that development brings a positive experience for local people, tourism companies and the tourists themselves.

We live in a constantly changing world, where technology has made remarkably positive impacts on human life. In this view, the possibilities that exist for the technology in sustaining the tourism package are astounding. As is seen today, from being able to book a room/flight online with the simple click of a button, to fully solar powered hotels and the internet in all its glory clearly demonstrated that technology is a true marvel in the tourism industry. **But, how exactly is this presented in Jamaica?**

Adventure travel, a type of tourism, involving exploration or travel with perceived (and possibly actual) risk, and potentially requiring specialized skills and physical exertion is a rapidly growing sensation in Jamaica. Notably, **Chukka: Caribbean Adventure & Tours** fuses the necessity of sustainable tourism, technology and adventure tourism and delineate clearly the relevance of sustainability on the Jamaican scale, an arena so widely prone to depletion of resources if not properly sustained.

The aforementioned alludes to the fact that mountains, rivers and coral reefs serve as habitats for many plants and animals, some of rare number and can only be found in
Jamaica. Provisions have to be made to ensure that they are safely secured for future enterprises. Moreover, it is necessary to note that there is an incomprehensible line between being environmentally conscious and being profitable. Much organization needs to be put in place for tourism to be a stable industry. In this view, it is clear Jamaica, in its entirety requires the active practicing of sustainable tourism through the use of technology to allow the development of Adventure tourism.

Despite the fact that Jamaica is dependent on the income that tourism generate, it is important to recognize and tackle the negative effects that it has on the environment. For the purpose of this research, the researchers have realized Chukka Caribbean Adventures as a model of how an attraction should cater greatly to the needs of the tourist and environment concurrently.

Chukka Caribbean Adventures was established in 1983. It is the number one nature adventure tour company in the truest sense and continues to offer tours that are sure to be the high point of vacation. Chukka Caribbean Adventures develops a tour that will make the best use of the site and provide the Chukka ‘wow’ factor. In doing this however, through their sagacity, much attention is paid to the retention of the physical beauty of the attraction, cultural heritage and human resources.

Having examined these facts, we will examine thoroughly the concept of sustainable tourism at Chukka and the uses of technology in doing so, providing examples and recommendations where necessary.
Definition of Key Terms

Tourism:
The partaking in travel and activities related to touring especially for pleasure. It may also be for recreational and business purposes. Therefore tourism is also the business or industry of providing information, accommodations, transportation and other services to tourists.

Technology:
This is the use of science in industry, engineering, etc., to invent useful things or to solve problems. Moreover, it is a branch of knowledge that deals with the creation and use of technical means and therinterrelation with life, society and the environment drawing upon such objects as industrial arts, engineering, applied science and pure science.

Sustainable Tourism:
This is tourism that seeks to make as minimal impact on the environment and local culture as possible, while seeking to preserve employment and generate future employment for locals.

Sustainability:
This speaks of the ability of a resource to be used without being completely used up or destroyed. Furthermore, sustainability speaks of maximizing the resources of the present without compromising the needs of the future.

**Adventure:**
An exciting or dangerous experience.

**Tour:**
An activity in which you go through a place (such as a building or city) in order to see and learn about different parts of it.

**Endemic:**
Species or race native to a particular place or found only there.

**Extinct:**
Term used to describe a species or population that has been lost.

**Fauna:**
The animal life occurring in an area

**Flora:**
The plant life occurring in an area.
Pollution:
Introduction of elements, compounds or any matter, into places, resulting in living organisms being harmed.

Species:
Basic unit of Classification consisting of population or series of populations of closely related or similar organisms.

Wildlife:
Animals and plants which exist in a relatively untouched state; usually considered a natural resource of economic, scientific or cultural value.
Rationale

(i) **Pollution**

Example of pollution from unmultimedia.com

Polluted beach from shutterstock.com

(ii) **Solution**

Picture from pixlr.net

Picture from shutterstock.net

(iii) **Conclusion**

Picture from shutterstock.net
Ever since the beginning of time man has lived on planet Earth. Our environment is like none other when we take into consideration its ability to sustain life, biodiversity and just sheer beauty. Over the years our environment’s number one threat are the persons it seeks to protect: man.

Periods of industrialisation produced mass amounts of pollution that damaged our environment and continues to destroy it. Currently, with the effects of pollution such as: global warming and potentially fatal climate change, world Governments are scrambling to sustain our environment. This calls for sustainable activities to become a part of daily activities.

The tourism industry is not one to be left out when discussing man’s impact on the environment, for the tourism industry is responsible for some aspects of environmental degradation. Tourism is responsible for: stands of forest being cleared for the construction of hotels or other tourist attractions such as amusement parks, destruction of natural resources which include: coral reefs (due to the improper disposal of waste from cruise ships). This environmental damage stresses the need for sustainable tourism.

In investigating sustainable tourism many concerns include “How can the environment be fun and adventurous?”, and that is where Chukka Adventures comes in to play. The
amazing thing about Chukka is that while protecting the environment they also have managed to incorporate technology and most importantly fun into a total package that only they can provide. Chukka’s adventurous tours and thrill filled activities take advantage of Jamaica’s natural resources without disrupting their various natural processes.

As such, we will examine thoroughly exactly how they incorporate these three factors that don’t normally fall in the same category. Moreover, the researchers, as members of the Tourism action Club (TAC) of our school, have acknowledged that we are a part of Jamaica’s tourism plan and are responsible for the preservation of the environment. As such, buying into the idea of sustainable tourism, Chukka Adventures was the perfect fit.
Tourist Haven: Jamaica

Brief Overview of Jamaica

Jamaica is the third largest island in the Caribbean of which it is the largest English speaking island. Although, the official language is English, a variation of the language is spoken on the island called “patois”- This broken English started out as a pidgin during the period of West African enslavement and was used as a means of communication for the latter and the English planters.

The island was occupied by the British, Spanish, Indians, Chinese, Africans and Lebanese and this factor accounted for the present motto: “Out of many, one people.” However, before the inhabitancy of the island by these people, it was first occupied by the Tainos.

Jamaica was first inhabited by the Tainos who named it Xaymaca which translates to mean “land of wood and water”. The peaceful Tainos welcomed Christopher Columbus when he first visited the island in 1494. Columbus’ visit marks the beginning of nearly 500 years of European occupation and governance over Jamaica. The British captured Jamaica from the Spanish during the 1650’s. Jamaica then gained independence on August 6, 1962.
The capital of Jamaica is Kingston which is located in the southeast section of the island. Jamaica has definitely come a long way to capitalize on the natural resources present on the island today. Even though the full potential of the island has not yet been exploited it still lives up to international standards in the tourism market.

From the delectable food, beaches, breath-taking waterfalls, sports, culture, music, sites, tourist attractions to the warmth of our Jamaican people, Jamaica has embodied the true tourism experience. Here you can find popular sites such as the historical Port Royal and New Kingston where you can find the most intense clubbing scenes in the island.

As it relates to tourism, New Kingston in the location of several hotels such as The Pegasus and The Wyndham Hotel and also is the location of The Misnistry of tourism and the very celebrated Jamaica Tourist Board.
In essence, Jamaica has certainly embraced tourism and has acknowledged the lucrative phenomenon that it has become and how pivotal not only the food, culture, sports and sites are but also the technological and sustainability factors that ensure an eco-friendly tourism package.
Sustainable Tourism

It goes without saying that the tourism package of any country requires keen attention to durability and preservation over time and space. Sustainable Tourism emphasizes this phenomenon so as to ensure that the spine-tingling attractions of a country and their positive effects last for a long time without compromising the benefits of future generations in any way.

<www.sustainabletourism.net> outlines a wealth of information on the global issue of sustainable tourism. Some of this information includes:

WHAT IS THE ISSUE WITH TOURISM TODAY?

As more regions and countries develop their tourism industry, it produces significant impacts on natural resources, consumption patterns, pollution and social systems. The need for sustainable/responsible planning and management is imperative for the industry to survive as a whole.

FACTS:

TOURISM IMPACTS:

• Over 1 billion people travelled internationally in 2012 and this is expected to reach 1.5 billion by 2020
• The average international tourist receipt is over US$700 per person
• Travel and tourism represents approximately 9.5% of total global Gross Domestic Product (GDP) in 2013 (if it include tourism related business (eg catering, cleaning)
• The global travel and tourism industry creates approximately 10% of the world’s employment (direct & indirect)
• At least 25 million people spread over 52 countries are displaced by violence, persecution and/or disasters - tourism receipts in every country are affected by this.

ENVIRONMENTAL IMPACTS:

• Although the Bellagio hotel in Las Vegas recycles its water - it still uses 12 million litres of water per year in a water scarce region
• Buying local could achieve a 4-5% reduction in GHG emissions due to large sources of C02 and non C02 emissions during the production of food
• The average Canadian household used 326 litres of water per day....a village of 700 in a developing country uses an average of 500 litres of water per month AND a luxury hotel room guest uses 1800 litres of water per person per night...
  • The average person in the UK uses approximately 150 litres of water per day - 3 times that of a local village in Asia
  • A species of animal or plant life disappears at a rate of one every three
minutes

• 70% of marine mammals are threatened
• The Western world (with 17% of the world's population) currently consumes 52% of total global energy.
• 1 acre of trees absorbs 2.6 tonnes of CO2 per year
• 58% of the world's coral reefs are at risk. 2010 was the warmest year on record
• Seawater is expected to rise 70 cm in the next 10 years
• By 2050 climate change could have directly led to the extinction of 30% of species, the death of 90% of coral reefs and the loss of half the Amazon rainforest.
• Since 1970 a third of the natural world has been destroyed by human activity
• Half the world's population lives in urban areas and this figure is expected to increase. In Latin America and the Caribbean, 76% of the population live in urban areas
• 10% of the world's coral reefs are in the Caribbean - most under threat
• By 2036, there will be 1200 million cars on earth - double the amount today
• A European uses 14x more energy than someone living in India
• For every 1 degree rise in temperature above 34 degrees Celsius, yields of rice, maize and wheat in tropical areas could drop by 10%
• Every day we dump 90 million tons of carbon pollution into our atmosphere
• Although 70% of the earth's surface is water, only 3% is potable

SOLUTION:

Sustainable tourism is about re-focusing and adapting. A balance must be found between limits and usage so that continuous changing, monitoring and planning ensure that tourism can be managed. This requires thinking long-term (10, 20+ years) and realising that change is often cumulative, gradual and irreversible. Economic, social and environmental aspects of sustainable development must include the interests of all stakeholders including indigenous people, local communities, visitors, industry and government.

Of course, the solution to this global crisis can be seen as one examines the efforts of Chukka.

The world has recognized the need for sustainable tourism in the form of eco-tourism/green tourism and the pictures below attest to this fact.
“These wetlands boast great biodiversity, with quite a few rare and unique species, such as the Romer’s Tree Frog which is unique to Hong Kong. A visit to this eco-wonderland will certainly be unforgettable.”

“Glendalough is surrounded by semi-natural oak woodland. Glendalough is a good place to look for some of Ireland’s newest breeding species.”

“Described as one of the most beautiful and fascinating tour caves in Australia, Careys Caves offers opportunities not found on conventional cave tours.”

“The Nairobi Serena Hotel has been constructed according to the tenets of eco-sensitive architecture, using local materials, skills and labour wherever possible.”
Sustainability and Technology: What’s the connection?

We live in a globalized world where the positive effects of technology are rampant. Over 75% of the world’s population have a cell phone, even little children. The use of other technological devices spirals around this same figure. As such, all aspects of life is affected by technology: The future of tourism in the Caribbean will depend largely on the ability of the region to deliver a high quality product that corresponds to the changing tastes, needs, wants and demands of the international traveller. In order to do this, countries must seek to maximize the use of technological devices to ensure efficacy, durability and longevity in the tourism sector- infrastructure, logistics, customer care and eco-friendly expansion.

Sustainable tourism development and technology

Clearly, the future economic survival of the Caribbean region seems to largely depend on the development of a sustainable tourism industry. Sustainable development is a concept that marries two conflicting ideas: development and sustainability. (Generally from an environmental perspective)

The sustainability of tourism in the Caribbean is threatened by negative environmental impacts, escalating competition, loss of control of air access, low profitability of some sectors of tourism, rising level of crime and harassment of tourists in some countries and failure of the local population to benefit directly from tourism.
This sustainable development will require not a divine intervention but the manipulation of technology that has been done so efficaciously done by countries afoot. Some proficient examples are as follows:

Electronic menu from travelandleisure.com

Solar powered luxury hotel from efergy.com
Sustainable Tourism: Jamaica

Jamaica proudly boasts an unflagging ministry of government (Ministry of Tourism) that is dedicated to the mission of enhancing and transforming Jamaica’s tourism product, while ensuring that the benefits which flow from the tourism sector are increased for all Jamaicans. In addition, there exists a plethora of agencies such as the Jamaica Tourist Board, Tourism Enhancement Fund and Tourism Product Development Company that work assiduously to ensure the successful sustainable development of Jamaica’s tourism.

The Tourism Product Development Company (TPDCO)

Undoubtedly, the TPDCO is the embodiment of Jamaica’s take on the concept of Sustainable development with the incorporation of technology. Accordingly, they have outlined several objectives that concretize their view of Sustainable Development.

The Tourism Product Development Company aims to: Develop plans and programmes for the improvement of resort areas; Assist with the improvement of the infrastructure and physical environment of resort towns; Encourage investment in tourism-related activities; Establish, inspect and monitor the standards of all entities operating in the tourism sector and; Create, organize and
conduct training programmes which will facilitate human development in the tourism sector.
Chukka’s Activities and Tours

Known for its abundance of adventure-filled activities, Chukka offers several opportunities for anyone to become enthralled by the beauty of Jamaica’s nature and cultural escapade. From Active to Cultural and leisure adventures, Chukka offers no ‘rides’ but strictly user-involved adventures and experiences.

ACTIVE ADVENTURE

Chukka’s active adventure is low-impact, ecological, socially compatible and high quality. Active Adventure aims to combine recreation, education and bring benefits to both the tourist as well to the visited land as it requires the physical and mental participation of the tourist.

ATV SAFARI

“This adventure offers a scenic ride through rugged terrains of the Blue Hole Estate. Experience a quaint local community nestled immaculately in the parish of Hanover.”

-Chukka.com
HORSEBACK RIDE ‘N’ SWIM

“Combine trails and waves in this one-of-a-kind adventure, the Horseback Ride ‘N’ Swim! After riding horses through Jamaica’s backcountry trails, swim horseback in the Caribbean Sea!”

-Chukka.com

JUNGLE RIVER TUBING

“Drive through the untouched jungle terrain of Jamaica’s interior to set out on your Jungle River tubing adventure”

-Chukka.com
**ZIPLINE CANOPY**

“Starting in the heart of the jungle, you’ll fly along zip lines through the rainforest, over river canyons and across mountains.”

- Chukka.com

**CANOPY AND TUBING**

“Enjoy a leisurely ride down the Great River and top it off with a thrill-seeking zip above the Jamaican jungles.”

- Chukka.com
JEPP 4 X 4 SAFARI

“Take the Chukka 4x4 Safari and immerse yourself in Jamaica’s natural beauty and experience her culture, history and diversity.”

-Chukka.com

ULTIMATE KYAK ADVENTURE

“Take this adventure, and you’ll find breath taking, heart pumping, blood rushing excitement is the name of the game.”

-Chukka.com
FLIGHT OF THE WHITE WITCH

“Take a flight to new heights! In the rolling hills that surround the once thriving, historic Rose Hall Estate lays yet another intriguing Chukka adventure- Flight of the White Witch!”

- Chukka.com

AMAZING ATV SAFARI

“Ride through a river bed, lush forests and tropical foliage stopping at the Village of Chester”

- Chukka.com
CULTURE AND LEISURE

REGGAE ZION BUS LINE

“This pilgrimage has been specifically designed for Reggae enthusiasts and hardcore Bob Marley fans who would like to visit the “Graceland of Reggae.”

-Chukka.com

ESTATE PARK PASS

“Explore a beautifully preserved plantation and discover its unique culture! Chukka’s Good Hope Estate boasts more than 2000 acres of lush plant life, a bird aviary and the majestic Martha Brae River.”

-Chukka.com
CULTURAL EXPLORERS PASS

“Immerse yourself in culture at one of the oldest historic sites in the Western Hemisphere to here! This package features a guided tour of the Good Hope Estate, as well as access to our new pool and leisure area, colonial village and children’s playground!”

- Chukka.com
Chukka and Sustainability

Chukka provides pleasurable adventures while leaving the smallest carbon footprint possible for an organisation its size. In a world that faces constant threats of global warming and other natural phenomena, it cannot be stresses enough how important it is for business to make concerted efforts to preserve Mother Nature’s blessing. Fortunately, Chukka is certified by EarthCheck, a truly reputable certification in the world of sustainability.

What is EarthCheck?

EarthCheck is an organisation that since 1997 has helped businesses, communities and governments enhance the environmental, economic and social sustainability of their tourism initiatives. Some of their clients include: The Hong Kong and Shanghai Hotels, Limited, Banyan Tree Holdings and Chukka's regional compatriot Sandals Resorts International. Their mission is as follows:

"We recognise sustainable outcomes should benefit both business and communities. We’re researching and developing the best solutions for conserving and caring for our planet. At the same time, we’re equally focused on providing solutions to maintain the health of our clients’ bottom lines. We’ve found the link between sustainable practices and increased profits, and work with global companies and governments to build and reinforce that link."
Chukka’s environmental preservation/protection initiative:

Chukka outlines 6 primary award-winning ways by which it encourages sustainability in day-to-day activities and administrative functions. These include:

I. **Staff Awareness:**

Chukka allows its staff members to participate in workshops and seminars conducted in-house or by local government organizations, and by non-governmental environmental organizations.

II. **Water Conservation Program:**

Chukka conserves on water by monitoring of total water use on property: kitchen, dining room, garage, stables and garden areas.

III. **Energy Management Program:**

Chukka encourages the use of timers on electrical equipment such as air conditioners, outdoor lighting, etc.

IV. **Waste Management Program:**

Practice of waste disposal procedures at the tour sites including recycling of office paper and packaging.
V. **Control of Hazardous Substances:**

Before purchase, the Green Team determines the suitability of products and provides full training for staff whenever new chemicals or equipment are purchased for use in the operation.

VI. **Social and Cultural Development and Interaction:**

Hire and train people from our neighbouring communities and utilize existing community shops as refreshment stops for the tours that pass through these communities. We work with these operators to maintain the aesthetics and sustainability of their businesses. We also educate our clients on our heritage, culture, cuisine, flora, fauna, and our environmental efforts while we entertain them on our nature excursions.
Chukka and Sustainable Technology

Chukka uses several devices daily that are used to reduce the negative effects on the environment and promote awareness of the relevance to preserve Jamaica’s natural beauty. Upon physical research at Chukka, the researchers realized that much of the above mentioned environmental preservation/protection initiatives. However, on site research equally revealed that there exists several other technologies that Chukka uses that simply cannot be found on the website.

One such technology is a solar powered farm. The benefits of this solar energy technology proves to be abundant to Chukka. This is as solar energy is not only sustainable, it is renewable and this means that we will never run out of it. It is about as natural a source of power as it is possible to generate electricity.

The creation of solar energy requires little maintenance. Once the solar panels have been installed and are working at maximum efficiency there is only a small amount of maintenance required each year to ensure they are in working order. They are a silent producer of energy. There is absolutely no noise made from photovoltaic panels as they convert sunlight into usable electricity. There are continual advancements in solar panel technology which are increasing the efficiency and lowering the cost of production, thus making it even more cost effective.
Plans for the future

Chukka plans to ‘go green’ even further by replacing all current air conditioners with inverter ACs. This project has already started and the benefits are promising. Compared with a non inverter air conditioning Inverter air conditioners are:-

- At least 30% - 50% cheaper to run as it consumes less power
- Far quicker to achieve desired temperature
- The start up time is reduced by 30%
- Much quieter
- No temperature fluctuations, maximising comfort level
- No voltage peaks from compressor
- All EcoAir inverter air conditioning are heat pumps which in itself is one of the most energy efficient form of heating
Field work, photo and notes summary at Chukka Cove, St. Ann

The researchers

Researchers have fun too!
Chukka owes much of its accolades of sustainable tourism to these guides. They are so well informed and versed on Jamaica’s history. This is what Cultural sustainability is! The guides could inform tourists on Christopher Columbus’s arrival to JA, the history of the plants and the story surrounding the plantation we viewed. They all lived in the surrounding community and are VERY hardworking!

The amazing guides
Oh those horses!

We thought how the horses uniformly formed single file lines without even being pulled by the guides was truly mind-boggling! We also noted that Chukka uses the horses for manure also. This is done so as to not pollute/harm the environment with harmful chemicals. We can attest that the farm at Chukka benefits significantly from this manure! Environmentally friendly? Yes!
The breath-taking, history filled sites

Photo of Peter’s Point, Chukka St Ann. This is where the horses are taken for the Horse back Ride ‘N’ Swim activity.

A picture of the famous Richmond Estate plantation used during the time of slavery for growing sugarcane.

This beautiful scenery can be seen on one of the Horse back tours. Notably, this was the scene of the 1973 movie, “Papillon.”

A different angle of the same scenery of where the famous movie “Papillon” was shot.
The friendly tourists
This page was left blank intentionally.

All pictures seen under the section: “Fieldwork, photo and notes summary” were taken by the researchers, Jordan Fraser and Calvin Wright. The relevant rights were acquired from tourists and managers to use these pictures for the purpose of this research.
Chukka’s Awards

Chukka advertises itself as the best of its kind in the Caribbean. This is not just a marketing gimmick by their public relations department, Chukka has the awards to prove that indeed they are the best at what they do. Several of these awards are from The World Travel Awards and they include:

- 2007 Caribbean’s Leading Nature Adventure Excursion Operator
- 2008-2010 Caribbean’s Leading Adventure Excursion Operator
- 2011 Caribbean's Leading Tour Company
- 2012 Caribbean's Leading Adventure Tour Operator.

Chukka was also awarded a certificate of excellence from Tripadvisor, ranked #25 out of 82 activities to do in Montego Bay and given 4 ½ stars out of five on their website. The company was also featured in newspapers such as: The Sun, USA Today, Yahoo News Canada and Lonely Planet.

Chukka also boasts the following credentials

- Voted Caribbean’s best adventure tour operator
- Best variety of experience
- Industry’s best certified guides
Data Collection, Presentation and Analysis

Upon completing this case study, it was pertinent for the researchers to not only visit the locations but to gather relevant information from various authorities and of course, actual tourists who have experienced Chukka for themselves. The authorities and tourists will provide credible and useful information such as: opinions, responses to questions, recommendations in relation to the Chukka not only as a tourist attraction but as a sustainable entity. As such, the researchers employed research methodology such as:

- Face to face interview
- E-mail interview
- Interview over the phone
- Questionnaires
- Comment/Suggestion Boxes
- Studies of online comments on Tripadvisor.com

This will foster a fair, impartial and completely practical conclusion of Chukka Adventure Tours. Having done all of the above, the researchers will also make use of analysis skills learnt from pure mathematics course taken to ensure an advance and accurate analysis of the data gathered.
To start, the researchers wanted to understand completely the view of tourists of the Jamaica Jerk Trail and the jerk centres. The age of respondents ranged from 13 years to 79 years old. As illustrated in the chart below, the majority of respondents fell in the 21-330 age groups.

Figure 1

The means at which respondents (tourists) were chosen was completely random and all responses were used. The only requirement necessary was that they had to have been on at least one activity at Chukka.
So as to acquire the general thoughts of tourists of Chukka, we asked the tourists how they would rate Chukka as a tourist destination. In expanding on the question, the researchers told tourists to rate the location as it relates to hospitality, professionalism, uniqueness over-all environment/ambiance. As the pie chart above shows, the results favoured Chukka highly as a total of 70% of tourists (60%-9 and 13%-10) gave Chukka an astounding 9 or full 10 out of 10. 13% percent gave Chukka an 8, 7% a 7 and 7% below 6. The researchers noted however that the respondents who gave Chukka a below six had just gotten off a huge JUTA coach bus and they had suffered from slower service as a result of an influx of tourists. After all, Manager Ms Azan, had mentioned that it was an extremely busy day during out interview.
As seen in Figure 3, the researchers started to ask tourists more specific questions of the location. As such, in reply to the question above, an unsurprising 73% of tourists said that their favourite activity was the Horseback Ride ‘N’ Swim, some of whom did not even hesitate when they were asked this question by Jordan. That was our favourite activity too. In second place was Horseback riding with 13%. Many of the persons who chose Horseback riding through the beautiful scenery that Chukka offered mentioned that they chose it solely because they did not want to go in the water. On the other hand the gift shop was chosen by 3% of the tourist while ATV riding received 13% of the votes by tourists. Of note, several persons at that location in St. Ann had not gone ATV riding and as such could not have opted for that option in this question.
Figure 4 shows response to a question on the presence of sustainable tourism at Chukka. On one hand, a phenomenal 80% of tourists said that “yes” sustainable tourism was a valued factor at Chukka. When asked to elaborate on their answers, many tourists laughed and said: “Have you not seen the horses?” They also acknowledged the knowledge of the guides, the history of the sites explored and the fact that the horses defecation was used as manure on the farms. Moreover, many of them had tons to say about what they had seen on the website Chukka.com. On the other hand, 20% said that “No” sustainable tourism wasn’t a very obvious/valued factor at Chukka. Some went on to mention that there was no solar energy present while others were unfamiliar with the topic.
Figure 5 below shows that, contrary to the views of 80% of the tourists in the graph above, sustainable tourism is not a valued element in Jamaica’s tourism at all. This is as a slight 53% of tourists said No while only 47% said yes to the question posted below. When asked for reasons for their answers, many tourists alluded to pollution caused by hotels to the environment by jet skis and even the fuel used by ATVs at even chukka. On the cultural scale of things some very knowledgeable tourists spoke about how Americanized the tourist package is in Jamaica that a true Jamaican experience is lost.

*Figure 5*
As seen in figure 6 above, tourists have mixed feelings as it relates to how technologically up-to-date Chukka is. This is seen as 60% of tourists said that Chukka is simply up-to-date with technology while 7% said that they were Very up-to-date with advanced technology. Upon being asked to elaborate on their responses several tourists spoke of the fact that they could make reservation online, see the prices alongside pictures and very descriptive pictures before they even got to Jamaica. They also spoke of a very well maintained website, the fact that they accepted debit/credit cards and that their pictures were taken while in the water, printed on a CD and handed to them in no time. However, 13% said that Chukka was essentially very average with technology, 13% said they were below average
while a mere 7% said they were not up-to-date. For these latter answers, respondents gave reasons such as the recurring issue of solar energy.
Sustainable Tourism vs. Conventional Tourism

Recently, sustainable tourism and conventional tourism have gained some similarities, but the differences between the two remain conspicuous. They may at times have the same goal in mind but when these goals were perceived and how they will be achieved are what differentiates them. So, how does sustainable tourism compete with conventional tourism? The comparison between conventional tourism and sustainable tourism can be made in three categories

The Environment

The environment has been of major concern due to the adverse effects of global warming and climate change. Conventional tourism does not maintain innocence concerning environmental degradation. Negative impacts of conventional tourism arise when demand for resources such as food, water, energy and natural habitat areas exceed what can be supplied. Deforestation for the construction of new facilities such as hotels and amusement parks, discharge of waste from cruise ships and hotels into the sea and nearby waterways, increased pressure on endangered species of animals
and plants, and loss of biodiversity are also consequences of conventional tourism. Of recently conventional tourist sites have implemented eco-friendly measures. For example, all Sandals Resorts participate in the EarthCheck program, and The Half Moon Resort executed environmental programs which earned them Green Globe certification. It is pleasing to see conventional tourists site such as these undertaking the task of preserving the environment but, if the main focus of these conventional tourist sites were the environment from the beginning we would not have the immense negative impact of tourism on the environment in the first place. One of the main focuses of sustainable tourism has been the environment, and it has been so since its inception. Unlike its conventional tourism competitors, sustainable tourism sites have a negligible impact on the environment. On the Jamaican scheme of things, Rainforest Adventures, operators of Mystic Mountain, advocate for the protection of the rainforest:

“At Rainforest Adventures, we offer Sustainability Programs designed for rainforest conservation, thus preserving it and its secrets for future generations and the Earth. We help everyone learn more facts and information about the rainforest. Our programs reach all sectors of society, from young school children and high school students...
to adult members of local communities. **Together, we can protect and save the rainforests.**

-Rainforest Adventures (rainforestadventures.com)

The many pieces of land in which Chukka Adventure Tours occupies contain many species of flora which are cared for by the operators, contributing to Jamaica’s biodiversity, which has been negatively affected by urbanisation.

**Culture and Community**

Jamaica has a very rich culture, many foreigners travel to the country to experience the island’s unique heritage. Although tourism can encourage the preservation of socio-cultural aspect of the host country, conventional tourism may also erode traditional values by introducing foreign elements which are in conflict with the cultural, historical and religious heritage of the community. Another concern is the employment of persons in the surrounding community to provide an experience that is truly unique to the host country. Conventional tourist sites, especially hotels address these concerns to prevent this from happening in Jamaica. For example, the Franklyn D. Resort & Spa (F.D.R) maintains its identity of being 100% Jamaican and implies that it preserves the Jamaican culture by stating the following on their website:

**“Jamaican owned, this boutique, beachfront, all inclusive Resort exudes good old fashioned Jamaican hospitality, culture and flavour..........Our staff are all Jamaican, naturally warm, entertaining and friendly. You will learn**
about the Jamaican way of life through our staff, our food and our activities. At the best family hotel in Jamaica, there is no better way to experience the Jamaican culture!"

F.D.R is not the only resort seeking to preserve the culture of Jamaica and provide employment for Jamaicans, resorts such as Sunset Resorts Jamaica, who states on their website that:

"Always for everyone...Uniquely Jamaican....... Sunset Resorts is dedicated to delivering a uniquely Jamaican experience. Real all-inclusive value will be offered in price, choice and quality along with a service standard that is defined by the personal warmth and friendliness of our greatest asset, our caring Jamaican staff."

Sustainable tourism also ensures that it is deeply involved with the community, because the sub-sector is not only concerned with the preservation of the environment but also the preservation of the community’s culture. A prime example of sustainable tourism preserving the culture of the community is delineated by Chukka’s tour guides. The researchers found that the tour guides at Chukka were extremely educated and aware of the various sites along the trail we rode along on horses. This is an excellent way of preserving the country’s culture. One of the guides even began to sing some of
Bob Marley’s music while on the trail, which the researchers and many of the tourist enjoyed so much that we began to sing along. All members of staff that the researchers encountered were Jamaican. Rainforest Adventures also has a small Jamaican museum displaying the country’s heritage at its Mystic Mountain adventure park.

The Attractions

Technology is rapidly becoming a part of everyday life. According to BI Intelligence (Business Insider’s Research Subscription), by the end of the year 2013, 6% of the global population will own a tablet, 20% will own PCs and 22% will own smartphones. These numbers are only expected to rise with technology such as these becoming more advanced and increasingly available to larger consumer markets. With the advancements in technology, it is increasingly evident that we live in a world where persons are far more entertained by the latest technology, everyday persons are lost in the 5 inch screens of their phone, decreasing their appreciation of nature and preventing them from seeing the beauty and fun that can be derived from our environment, even on vacation in exotic destinations such as Jamaica.

Thus, when on vacation, tourists tend to be attracted to those activities with more technological intervention than sustainable attractions such as Chukka. Conventional tourist sites keep abreast with rapidly changing world of technology, and strive to
implement them where necessary. For example, today hotels are not competitive unless they have Wi-Fi internet connection, to attract a younger patronage museums implement robotic technologies that bring extinct species back to life. Sustainable tourist sites simply cannot implement these technologies which may serve as distractions, taking away attention from the main attraction, Mother Nature. Therefore, are the attractions at conventional tourist sites more enjoyable than those at sustainable tourist sites? Absolutely not!

As the researchers are teenagers grown in the age of rapidly developing technology, we were a bit sceptic as to how much fun we could have without the use of our electronic devices and social media. We were surprised at how much fun we had on the Horseback Ride N’ Swim adventure. It was just a horse and sweet nature, having experienced breath-taking views, amusing interactions and an excellent swim with a horse, we came to the conclusion that nature really is as fun as watching a funny video on YouTube, riding a high tech rollercoaster or driving bumper cars

The experience of the researchers is not enough, however. As such we ventured to ask the tourists at Chukka the question illustrated in Figure 7 below.

**Figure 7**

Would you consider Chukka a more sustainable entity than the conventional tourist attraction that you visited?

- 90% Yes
- 10% No
Figure 7 above shows that 90% of respondents claim that “Yes” Chukka is a more sustainable entity than the other conventional tourist attraction that they visited, as opposed to 10% who said “No.” Notably, the researcher observed that the “conventional tourist attractions” that most tourists lamented to included hotels and water parks.

By extension, figure 7 confirms the aforementioned points that Sustainable tourism outclasses Conventional tourism when one considers the effect each has on the environment and culture. This was corroborated by the above question posed using Chukka as the bench mark for sustainability and all conventional tourist attractions the tourists visited as opponents.
Summary of Findings

We have found that Chukka's Adventure Tours is a proud symbol of sustainable tourism and a much needed asset in the fight against global warming and climate change, without sacrificing the fun people have on their vacations. Chukka encourages appreciation for nature by showing tourists and Jamaicans picturesque landscapes that cannot be replicated anywhere else on the island. While doing this, Chukka fortifies its fight to preserve the environment with the use of modern technology. Moreover, albeit the phenomenal service offered at Chukka, nothing is perfect and so there is room for improvement.

The information gathered by the researchers shows that the general opinion of the tourist were extremely positive, with 60% of those interviewed giving the attraction a score of 9 on a scale of 1 to 10, 13% gave Chukka a full score of 10 out of 10 with only a minor amount of visitors giving it a score of below 6 out of 10 (7%). Among the many activities offered at Chukka we found that the favourite among visitors is the Horseback Ride N’ Swim with 73% of all visitors interviewed selecting it as their favourite. The researchers also discovered that tourists (80%) view sustainability to be valued at Chukka however, not overall in Jamaica (53%) because of environmental measures the island has not put in place or enforced. On the issue of technology, the researchers found that majority (60%) of tourists view Chukka as being technologically up to date; those who said otherwise kept referring to the fact
that solar energy was not used for power. Researchers also noted that the prowess in sustainability and technology that Chukka has acquired allowed 90% of visitors to prefer environmentally aware/sustainable entities like Chukka as opposed to typical conventional tourist attractions (10%).

Centrally, the researchers discovered that Chukka Adventure Tours, though is a prime example of sustainable tourism in Jamaica. Even though Chukka practices sustainability, other tourist attractions on the island of Jamaica need to embrace this practice. Chukka has taught us that prioritizing the environment and our culture can an option that may still prove to be profitable.
Conclusions

Indubitably, tourism is big business, with big effects! With the Americanization of the Caribbean, the threat of global warming, climate change and pollution, there is a need for tourist attractions to become more cognizant of the negative effects that they might pose to the environment and to Jamaica’s culture. With this in mind, the researchers have drawn the conclusion that Chukka is a truly environmentally and culturally conscious tourist attraction that preserves Jamaica’s natural beauty and culture with the help of innovative technology.

Chukka believes in sustainable tourism. They recognize that they have an important role to play in protecting the environment and improving the communities where they operate. This is done by providing quality nature adventure tours and services in a clean, safe and sustainable environment.

By virtue of Chukka’s staff awareness, control of hazardous substances, water conservation, energy management and waste management programs, researchers conclude that Chukka embodies the idea of sustainable tourism in Jamaica and appreciation of the environment. Moreover, as a result of Social & Cultural Development & Interaction initiatives, Chukka proves itself to be truly caring of the future of Jamaica’s tourism package and the need for community involvement.
It can further be concluded that there exists a clear appreciation for technology at Chukka. With the plans for development currently on its way, Chukka seeks to replace all ACs with inverter ACs so as to reduce the use of electricity and the negative effects on the environment.

Having examined all factors, we can say that for countries like Jamaica, strapped for cash, the environment may not be the number one focus, but instead a burden to bear. This is why tourists highlight that the sustainability is not prevalent across the island. However, Chukka demonstrates that sustainable tourism is a good way to counter that belief as it is not that costly of an alternative that not only has environmental benefits but also those of economics.
Recommendations

The extensive data collection done by researchers shows that Chukka: Caribbean Adventure Tours has taken several steps to prove itself to be a truly sustainable entity that preserves Jamaica’s natural beauty and technology with the assistance of innovative technology. Albeit the many amazing assets Chukka displays, the researchers have identified several areas that could be improved to ensure a faithfully sustainable tourism package that maximizes the use of technology. As such, the researchers propose the following recommendations:

- Chukka should provide access to wifi in the Gift shops and other waiting areas. Wifi technology would complete the technological aspects of Chukka as it serves as a means of publicity as tourists upload pictures, videos and other media of the activities that they take part in. This allows real time sharing.

- The researchers also suggest that Chukka makes a significant technological upgrade by switching from providing tourists with pictures on Compact-Disks, to emailing pictures the persons who enjoyed the Horseback Ride ‘N’ Swim so much that they would like to take home their photography souvenirs. This technological improvement not only cuts the price for the pictures, but it also provides a more user-friendly and modern way to tourists to access the pictures.

- Chukka should also invest in eco-friendly fuel for ATVs such as Ethanol and Bio
Diesel. Even though the cost to replace current fuel intake with this eco-friendly substitute may be costly, the benefits prove to be abundant to the environment.

➢ On the cultural sustainability side of things, the researchers recommend that Chukka continues doing the great job that it is doing with their VERY informed guides. However, we also recommend that there be signs put up on the Richmond Estate plantation and other historical sites on the location with a brief description so as to inform tourists of the history of the sites they view.

➢ The researchers recommend that Chukka invests in a touch free hand sanitizer dispenser. This we think, will prove to be a beneficial option as often times people might want to wash their hands after petting or riding the horses. Given the current drought state of Jamaica, after water, hand sanitizer lotion is the next best eco-friendly and technologically modern option.
St. George’s College
LESSON PLAN

Subject: Social Studies
Topic: Sustainability and Technology in Tourism
Class: Fifth Form (Grade 11)
Duration: 60 minutes

General Objective:

Students will develop an awareness of the importance of sustainability and technology within the tourism industry. Develop an appreciation for sustainable practices that the country has to entice our visitors. This will not only enhance the tourist experience, but will provide an opportunity to show case Jamaica as a sustained and technologically friendly environment and a fascinating tourist destination.

Specific Objectives:

At the end of the lesson students should be able to:

Define and use correctly terms associated with sustainability and technology:

- Sustainable tourism
- Technology
- Tourism
- Sustainability
- Adventure
- Tour
- Fauna
- Pollution
- Extinct
• Explain how a destination becomes sustainable
• Describe how destinations are sustained
• Outline how technology helps sustainability
• Analyze the problems associated with sustainability in tourism
• Explain how travel and tourism products become sustainable
• Describe how technology can be used to promote sustainability
• Assess ways in which technology supports sustainability at Chukka Adventure Tours
• Design a poster depicting technology sustainability: Chukka Adventure Tours
• Work cooperatively to complete a task

Resources

✓ J.T.B Website www.visitjamaica.com
✓ Video
✓ Multimedia Projector
✓ Smart board
✓ White board
✓ Map of Jamaica
✓ Laptop
✓ Handouts

Methodology:

Observation, Discussion, Brainstorming, Role play, Questioning, Cooperative learning, Silent reading
**Introduction:**

Students will do a skit depicting a tourist resort area they visited and the concerns they had after noticing that the level of sustainability and involvement of technology needs improvement. They will mention visiting other destinations where enhancement was seen. The group will be encouraged to visit Chukka Adventure Tours.

*(3 minutes)*

**Development:**

**Step 1**

**What is sustainable Tourism?**

The class will be invited to watch a video of Chukka Adventure tours which focuses on the use of technology to enhance sustainable tourism. Students will observe keenly where the use of technology aids in sustainable development. After watching the video students will be asked to compare what they observed in the skit and video.

*(10 minutes)*

**Step 2**

**How are tourists destinations sustained?**

Students will be brainstormed on the concepts given. Correct responses will be written on the board. Handouts will be given to students with information on tourism management and opportunities associated with tourism. Students will
read then answer focus questions that follow. How are destinations sustained? Explain how travel and tourism companies become sustainable? Outline the problems associated with sustainable tourism. The smart board will be used to highlight students’ response (via the use of concepts, maps, figures etcetera).

(15 minutes)

Step 3
Where is sustainable tourism practiced in Jamaica?

On a map of Jamaica, students will be required to identify Chukka Adventure Tours and other places where the use of technology enhances sustainable tourism.

(5 minutes)

Step 4
How can technology promote sustainable tourism?

In groups students will discuss some activities that can be used to enhance sustainability within the tourism sector. Students will also discuss the role of technology as an integral aid to the industry’s sustainability. Each group will be given specific tasks/questions as well as guide lines for their presentation.

(7 minutes)

Culminating activity:

Each group will be given 3 minutes to present their findings creatively.
Homework:

Create a poster to show the effective use of technology in the sustainability of the tourism industry. Focus on one aspect of tourism eg. (eco - tourism, heritage tourism, special event tourism)

Rubric: Creativity (5 marks)
        Presentation (5 marks)
        Content (10 marks)
References

The following were used as references for the successful completion of this project:

Managers on site at Chukka:

§ Ms. Janet Azan, Manager on site at Chukka, Peter’s Point, St. Ann

Internet:

§ Sustaining tourism from <www.sustainabletourism.net>

§ Tourism Product Development Co. Ltd. From <http://www.tpdco.org/>

§ Chukka Caribbean Adventure Tours from <http://chukka.com/>

§ The future of tourism in Jamaica from <http://jamaica-gleaner.com/>

§ The Jamaica Tourist Board from <http://www.jtbonline.org/>

§ ICT and its role in tourism from <http://www.academia.edu/>

§ Role of ecotourism in sustainability from


§ Tripadvisor available from <www.tripadvisor.com>

§ The Star available from <www.thestar.com>

§ Island Buzz Jamaica available from <www.islandbuzzjamaica.com>
Books:

Appendix

In this section, the researchers will feature the interviews that were conducted with the various managers of the jerk Centres. A copy of the questionnaire and letters issued to tourists and managers will also be included. Moreover, other information that is not extremely essential to explain our findings, but that support our analysis and validate our conclusions will be included.
Interview with Ms. Azan, Manager on site at Chukka, Peter’s Point, St. Ann

Q: How does Chukka define “Sustainable Tourism”?

A: Well, apart from what the website so wonderfully outlines, Chukka believes Sustainable tourism is not only being conscious of the negative effects that tourism might have on the environment, but also taking measures to reduce them.

Q: Could you elaborate why Chukka considers itself a sustainable entity? (environment, energy, culture)

A: Chukka prides itself with a myriad of activities that allows us to boast that lovely title of a sustainable entity. First, our water system and water conservation programs are phenomenal especially considering the state of the island right now as it relates to the drought. Chukka gets water from a river and we consider that very eco friendly. Moreover, we deal with live animals and we ensure extensive training of our guides and members of staff so that they are knowledgeable of Jamaica’s culture and history. We also have an adult literacy program and a lot of work with the surrounding communities.

Q: What kind of technology does Chukka use? How does this technology facilitate sustainability?
A: We have several technological devices here at Chukka. The ones that are readily seen are the camera that we use to take live photos of tourists on the Horse Back Ride ‘N’ Swim. We then burn these pictures on a Compact Disk from our computer on site. Moreover we have technology installed that monitors the water use on the attraction and facilitates the use of timers on electrical equipment such as air conditioners, outdoor lighting. We also have a solar powered farm.

Q: What are Chukka’s plans for the future? Anything specific to sustainable tourism/technology?

Well, Chukka always has plans for expansion. I can’t reveal too much (smiles), but there is always plans to expand and accommodate new tourists. We also plan to go completely green pretty soon by replacing all our air conditioners with Inverter ACs.
Copy of Questionnaire issued to tourists

Please answer the questions below truthfully. Place an X in the box with your response and write full responses on the dotted lines.

1. To which of the following age groups do you belong?
   
   11-20 [ ]  
   21-30 [ ]  
   31-40 [ ]  
   41-50 [ ]  
   51-60 [ ]  
   61-70 [ ]  
   71-80 [ ]

2. On a scale of 1-10, how would you rate Chukka as a tourist attraction?  
   [ ] Very Good  [ ] Good  [ ] Average  [ ] Bad  [ ] Very Bad

3. Is this your first time at Chukka?  
   [ ] Yes  [ ] No

4. Have you ever been to another tourist attraction/hotel in Jamaica before?  
   [ ] Yes  [ ] No

5. Would you consider Chukka more of a sustainable entity than the attraction you visited above?  
   [ ] Yes  [ ] No

6. How is it better or worse?
   ………………………………………………………………………………………………………………………………………………………………………………………
   ………………………………………………………………………………………………………………………………………………………………………………………

7. What was your favourite thing about Chukka?  
   ………………………………………………………………………………………………………………………………………………………………………………………
   ………………………………………………………………………………………………………………………………………………………………………………………

8. Is sustainable tourism an obvious/valued element at Chukka?  [ ] Yes  [ ] No

9. Is sustainable tourism an obvious/valued element in Jamaica’s overall tourism package?  [ ] Yes  [ ] No
10. How technological up-to-date would you say Chukka is?

☐ Very up-to-date
☐ Up to date
☐ Average
☐ Below average
☐ Not up-to-date
Copy of Letter of Permission issued to Tourists

Dear Tourist,

We are students from a local high school in Jamaica, named St. George’s College doing a research on Sustainability and technology in Tourism in Jamaica. We would like to your permission to take your photo or a video of you and include it in our study. Indicating that you have given us permission please affix your name and signature in the table below, Thank You.

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Pictures

Signs

Miscellaneous
Gift Shop
“Selfies”
The researchers were so excited to meet former Prime Minister of Jamaica, The most Honourable, Percival Noel James Patterson

Two thumbs up for Chukka, Sustainability and Safety!