

An Eco-tourism Case Study – Costa Rica

Costa Rica is a small, peaceful and democratic country (just less than half the size of England) located between Nicaragua and Panama in Central America (Figure 1). As with many other Latin American countries, following independence from Spain (in 1821) it developed an economy based on agriculture, with banana and coffee the most important crops. Also in common with its neighbours, the politics of the country suffered from violent conflict between rich landowners, an urban political elite, the poor landless workers of both urban and rural areas, and occasional military coups.

These conflicts ended in 1949 when, following a brief but bloody civil war, progressive politicians abolished the armed forces and ushered in an era of peace and prosperity that has been unbroken since. This stability has in no small part been responsible for the growth of the tourism sector in the country,

attracting millions of visitors – many of whom come from the United States and receive a much warmer welcome than they would in, for instance, nearby Guatemala or Colombia.

A geologist's and ecologist's dream

Along with the standard tourist attractions such as sun-drenched beaches, Costa Rica's great biological diversity has been pivotal in attracting visitors. Almost everyone who comes to the country, even those who come to spend time getting a tan, will visit at least one of the country's many national parks and nature reserves (Figure 1).

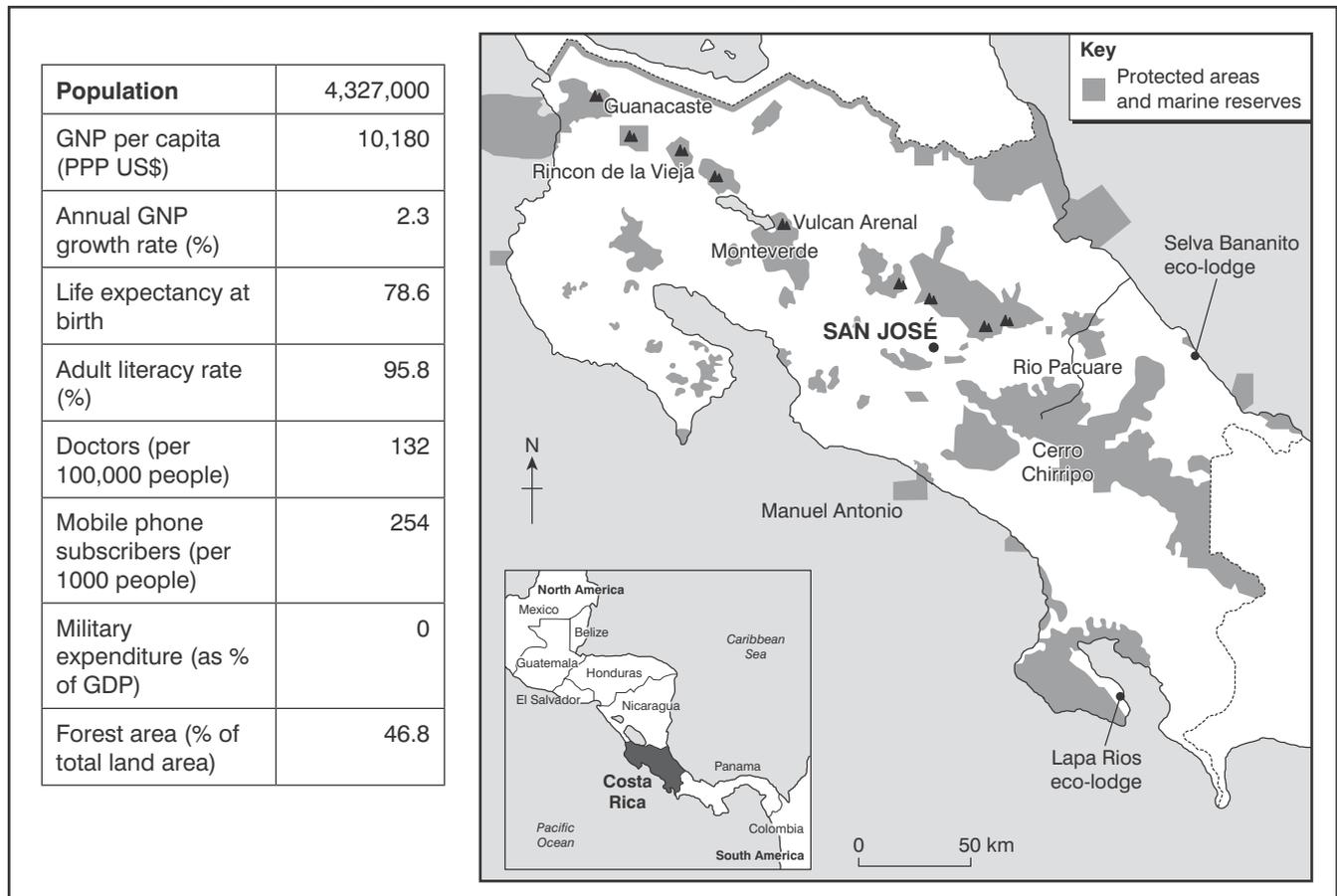
Geologically, Costa Rica lies near the boundary between the Cocos and Caribbean plates, and tectonic events, including earthquakes, are common. There are seven active volcanoes, some easily visited by tourists, along the central mountain

range which runs the length of the country separating the Pacific and Caribbean lowlands. Off the Caribbean coast lies a series of coral reefs, although many were destroyed following an earthquake in April 1991 which raised parts of the coastline by around 1.5 metres.

The variations in altitude and competing maritime air masses mean climate variations across the country are very complex. Precipitation ranges from 6000 mm per year in the central Cerro de la Muerte, down to 1500 mm in the north-eastern province of Guanacaste. Temperature is more constant and averages in the low to mid-20s, although it can be considerably hotter on the Pacific coast in the March and April dry season. Even when the weather is wet, this constant warmth is a considerable plus point in attracting tourists.

Climatic and altitudinal variations across the country have had a

Figure 1: Location of Costa Rica, protected areas (including marine reserves) and selected statistics



Sources: <http://costa-rica-guide.com/Natural/NaturalMap.html>; <http://hdr.undp.org/en/statistics/>; <http://www.worldatlas.com/webimage/countrys/camerica.htm>

dramatic effect on plant and animal life. Costa Rica has 12 of the 30 **life-zone** classifications developed by scientist L.R. Holdridge in the 1940s, the most dominant being tropical moist forest and tropical wet forest. These life-zones have a huge biological diversity and are home to 870 species of birds, 205 mammals, 215 reptiles and 160 amphibians (the UK has a combined total of 284), together with 130 freshwater fish and 360,000 species of insects. There are also 10,000 different types of plants. In total, the country has just under 5% of the world's total terrestrial species, and is the most biologically diverse country on the planet.

Protecting paradise

From the 1940s to the 1970s Costa Rica had one of the highest rates of deforestation in the world, as land was cleared to allow planting of high-value export crops. Falling demand and increased competition amongst banana and coffee suppliers led to a radical rethink of this policy. The educated population, who valued their own environment, recognised that protecting it and encouraging tourism could bring in a lot of money.

The government set up the National Park Service to take charge of conservation in 1970, and Costa Rica is now often viewed as a model of good environmental practice. A little over a quarter of the country has protected status of some kind, whether as a forest or biological reserve, or wildlife refuge. Much of the protected land (12.23% of the country's total land area) is found in 25 national parks. As well as protecting the environment, these parks also contain important watersheds for hydroelectric plants and sources of drinking water.

The Costa Rican government has encouraged foreign investment to help protect the land and has often made it easy for land to be bought for the purposes of protection. Back in the 1950s, for instance, a pacifist group of Quakers who objected to the military draft in the USA settled in an area called Monteverde. They built a cheese factory and started buying up the surrounding cloud forest to form a reserve that now attracts more than a million visitors a year.

The growth of eco-tourism

Fast-paced technological developments since the 1960s have revolutionised air travel, making long-haul flights accessible to large numbers of people for whom it was previously prohibitively expensive. Increased wealth and leisure time, together with greater opportunities for travel from early retirement and gap years, have also contributed to the huge growth in tourism worldwide. Greater knowledge of the world has led people to visit areas for specific interests – fuelling a growth in niche tourism.

One of the most successful tourism specialisations over the last decade or so has been the growth in eco-tourism, a style of travel in which an emphasis is placed on unspoiled, natural destinations, and on disturbing the environment as little as possible.

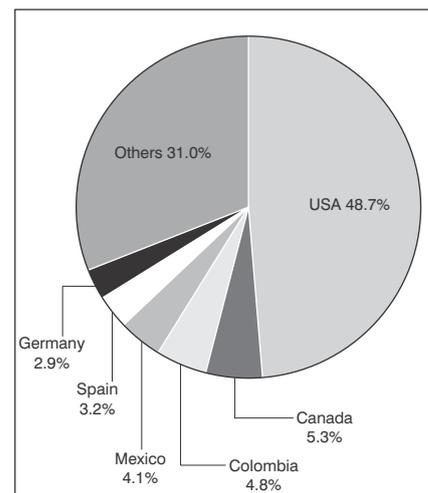
Costa Rica, with its protected land, generally well-educated population and high standard of living (for an LEDC) has been ideally placed to take advantage of the boom in eco-tourism. In addition, public investment since the 1950s has ensured a potable water supply and eradication of diseases normally associated with many tropical countries. Malaria, for instance, is only really a problem on the Caribbean coast.

The country has long appealed to visitors from the USA, who are attracted by the stability of the government, friendly welcome and short flight time (around three hours from Miami). Other tourists come from Canada, Germany and Spain and, within Latin America, from Colombia and Mexico (Figure 2). Visitors from the UK are still relatively rare because of the lack of a direct flight, but their numbers are on the increase.

The benefits to the economy of the country are huge. In 2002, there were 1.1 million visitors, contributing US\$1.1 billion to the economy and employing 140,000 people. Tourism now contributes 17% of the country's GNP, and is growing at a rate of 5% per year.

In order to maintain this growth, innovative solutions have been sought to ensure that Costa Rica remains at the forefront of people's

Figure 2: The main countries providing tourists to Costa Rica



minds when they book an eco-holiday.

Case study 1: The growth of the eco-lodge

One recent eco-tourism development has been the provision of eco-lodges – accommodation 'in tune' with the environment and run by local people. Originally these lodges were very basic, with a couple of beds in wooden huts and little else but, as the expectations of tourists have grown, so has the level of luxury.

In Costa Rica there are still reasonably priced options available. On the Caribbean coast, for example, the Selva Bananito lodge is located on an 850 ha farm dedicated to providing holiday accommodation and associated activities. Built from wood discarded by loggers, the number of guests is limited. There is no electricity, solar energy being used to heat the water. Bio-degradable soaps are used for washing, glass and plastic is recycled, and drinking and cooking water is purified using bacteria, enzymes and water lilies. The owners, the Stein family, have set up a charitable trust to educate people about the rainforest and provide activities such as jungle hikes and birdwatching. Prices are around £250 for a three-day stay.

There are hundreds of lodges in Costa Rica. Along with the cheaper ones, there are some of the world's most opulent and expensive options. The Rainforest Package at the multi award-winning Lapa Rios lodge, overlooking the Pacific Ocean, for instance, costs around £2,500 per person over the Christmas period.

Figure 3: The Lapa Rios eco-lodge



Source: By permission of Lapa Rios Eco Lodge

The main lodge and restaurant is connected to 16 private bungalows (Figure 3) by a series of walkways, all made with sustainable materials and thatched roofs. Staff from surrounding villages are employed as guides, cooks, waiters and cleaners. Among the activities available are overnight jungle tours, educational walks to find medicinal plants, dolphin watching and surfing lessons.

Lapa Rios has won many awards from international travel magazines such as Conde Naste Traveller and Forbes. However, along with many lodges in Costa Rica, it is owned by expatriates from the United States, rather than local people. This has brought criticism that the eco-tourism sector has few benefits, apart from local employment (which may be poorly paid), for nearby communities.

Case study 2: Eco-adventure holidays

Being one of the first countries to embrace eco-tourism, Costa Rica has benefited enormously from its international reputation. Over the last decade, however, competition for the eco-tourist dollar has grown. Many MEDCs have increased their market share and have been joined by LEDCs including Madagascar, Borneo and Namibia – all hoping to become the ‘next big thing’.

Costa Rica, with its well-educated and entrepreneurial population, has not been slow to react and its natural resources are now being used to appeal to a different sector of the market. Less drawn to bird- and wildlife-watching (although these still appeal as part of the holiday), young, single professionals and families with a larger disposable income want to take part in more active eco-adventure holidays. Costa Rican-owned companies such as Aventuras Naturales and Rios Tropicales, who were originally involved in the development of the country’s white-water rafting business, have now expanded to take advantage of this eco-adventure market. Activities they offer include:

- flying through the canopy of the rainforest on zip wires (Figure 4). The largest of these is located near Vulcan Arenal and involves being hurled at speeds of up to 40mph along 700 metre-long cables, 65 metres above the forest floor
- other canopy adventures where participants travel through the trees using ropes, harnesses and treetop platforms
- horse riding, ranging from gentle meanders taking in mud baths near active volcanoes to high-speed gallops across the plains of Guanacaste
- Central America’s longest water slide (measuring 450 metres) near to Rincon de la Vieja National Park

Figure 4: High-wire adventure in the rainforest canopy



Figure 5: White-water rafting on the Rio Pacuare



Source: Aventuras Naturales

- rafting or kayaking down some of the world’s best white-water rivers with grades of rapids from easy to the extremely tough grade six (Figure 5). Some trips may involve overnight stays in eco-lodges that are only accessible from the water
- mountain biking, either cross-country or downhill, from the central highlands to the oceanic plains – Costa Rica also plays host to two of the world’s toughest endurance races each year
- popular hiking trips through the rainforests and up the mountains on single- or multi-day excursions – a four-day ascent of Chirripo, the country’s highest peak at 3820 metres, for instance, books up several months in advance.

By providing such a wide variety of activities, Costa Rican eco-adventure tourism appeals to many different types of traveller and the business has expanded greatly from its initial concentration on surfing and scuba diving. Although no actual figures exist for the economic benefits, this sector of the economy is growing

and employs an increasing number of people, from highly qualified guides to chefs and drivers.

Problems in Paradise

The growth of eco-tourism has brought undoubted benefits to the economic well-being and employment opportunities of the Costa Rican people, and has encouraged land-owners to view their property as a long-term asset that needs to be conserved or managed sustainably, rather than exploited for short-term gain. The country has grown to be one of the richest in Latin America, and money gained from tourism has been reinvested into education and health facilities and improving the country's infrastructure. Rapid growth, however, has brought its own set of problems.

Unrestricted development of sensitive areas, especially along the Pacific coastline is a major cause for concern. Although the government has introduced strict rules to regulate the environmental impact, these are often ignored when the lure of cash, especially from foreign companies, is strong. Many farmers have sold land privately to developers for huge sums of money and there is anecdotal evidence that some have blown their money within a couple of years and returned home to join the landless peasantry in search of employment.

The growth of tourism inevitably brings pressure on the environment in direct conflict with the principles of eco-tourism. Increasing amounts of litter and hotel waste are a nationally recognised problem. A recent edition of the *La Nacion* newspaper carried a report on rubbish piling up in the streets of the popular Pacific resort of Samara. Waste disposal as landfill takes up precious land and, if burnt in incinerators, adds to air pollution. Vehicles carrying tourists add to air and noise pollution in sensitive areas, unrestricted building scars the landscape as visual pollution, and there are questions over the impact on climate change of the long- and short-haul flights used to access Costa Rica's eco-holidays.

With the growth in tourist numbers, there is a very real fear that some parts of Costa Rica are approaching visitor overcapacity. Manuel Antonio, one of the country's most popular national parks, receives an average

of 1000 visitors a day. People feeding animals in the park has led to ecosystem decline, with monkeys preferring to find food in waste bins rather than in the forest.

It is very easy for tourist companies to pass themselves off as environmentally friendly, through a process known as 'greenwashing'. If a hotel uses biodegradable soaps and adopts solar heating it may attain an eco-tourism label, despite having other practices that cause harm to the environment. Little regulation and enforcement in the tourism sector means many businesses get away with promoting themselves falsely as eco-friendly.

Together with the environmental problems associated with eco-tourism, there are economic concerns as well. Although around 75 per cent of tour agencies and the vast majority of small hotels are owned by Costa Ricans, a sizeable proportion of the biggest (and possibly most environmentally damaging) projects are owned by foreigners, and the profits they make are taken out of the country. The local population working in the tourism trade may also be exploited in low-paid work, especially in areas where there is little alternative employment.

Finally, the tourism industry is very fickle. While Costa Rica has maintained its position as a market leader through innovation, a stable government and a very positive international image, all this could change in an instant. With a huge reliance on the continuing success of tourism, any loss of favour as a destination could prove disastrous for the economy as a whole.

Conclusion

As an eco-tourism destination, Costa Rica has been amazingly successful and has, on the whole, managed to balance the needs of travellers with a successful economy, conservation and environmental stability. The challenge for the country is how to keep the economic benefits without losing sight of the initial vision of preservation of its natural heritage.

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- Further information on Costa Rican eco-tourism and current concerns can be gained from *The Tico Times*, an English language newspaper published in San Jose and available online at www.ticotimes.net.
- Further details about L R Holdridge's 'life zones' classification can be found on Wikipedia at http://en.wikipedia.org/wiki/Holdridge_life_zone
- Selected web sources:**
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Focus Questions

1. Describe the geographical advantages, both physical and human, that have enabled Costa Rica to develop its eco-tourism industry.
2. Explain how the eco-tourism industry in Costa Rica has changed to reflect the different expectations and characteristics of its visitors.
3. Using examples, describe the eco-tourism facilities available to visitors in a country that you have studied.
4. With reference to specific examples, describe and explain the advantages and disadvantages a country faces in developing an eco-tourism industry.