TOURISM IS A huge business. In 2011, there were 983 million international tourist arrivals worldwide, bringing £700 billion into the global economy. These are massive figures and, even in times of economic difficulty, show an annual increase of around 4%. It appears that, despite all the tales of doom and gloom, austerity and pressure on people’s finances, there is still a great desire to forget about it all and head off on foreign holidays. As Figure 1 shows, there is little sign of this trend decreasing, with a doubling of the number of arrivals expected over the next 20 years.

On a global basis, the importance of tourism is fundamental to the world economy but things seem even more crucial when viewed at a local scale. In 2010 it provided 235 million jobs and, in four out of five countries (over 150), it was one of the top five export earners – in 60 countries it was the number one. The majority of these are developing countries where it provides up to 70% of the total income. The rate of growth of tourism in the countries of the developing world is more than twice that of industrialised countries.

People go on holiday for many different reasons – to Las Vegas for the nightlife, shows and slot machines, to Egypt to see the pyramids, and to the Great Barrier Reef for diving adventure – but many want to travel in an environmentally friendly way, and this has led to the recent growth in ecotourism. Defined as ‘responsible travel to natural areas that conserves the environment and improves the welfare of local people’, ecotourists are looking for sustainable experiences that benefit the countries they visit both economically and environmentally. Estimates show that, in 2007, ecotourism accounted for 7% of global tourism and was worth £50 billion, but some believe it could account for up to 25% in the near future. Many countries wish to take advantage of this boom. Amongst them is the South American republic of Bolivia.

**Mad about Madidi**

Bolivia (Figure 2) is an ecotourism paradise, with hugely diverse ecosystems, from the heights of the 6,542 metre Nevada Sajama in the Andes mountains to Lake Titicaca, the highest navigable lake in the world, and on to the Salar de Uyuni, the world’s largest salt-flat. One of the best-kept secrets, however, is the lowland of the Amazon rainforest in the north-east of the country. Making up almost 70% of the total country, the area is not well visited, with more people heading to neighbouring Peru for jungle experiences. This region of Bolivia is accessed through the gateway town of Rurrenabaque (locally known as ‘Rurre’) which, until 2006, could only be reached via a Bolivian Air Force flight (landing in a field) or a tortuous 18-hour bus ride along the famous ‘Road of Death’ (as featured on the BBC’s Top Gear). However, a new road and a paved airfield have
Established in 1995, Madidi has an area of 18,957 km² and is joined with several other regions, including some over the border with Peru, to form one of the largest protected areas and most biologically diverse regions in the world (Figure 3). Many of the tourists who visit take a three-hour trip upriver from Rurre to stay in one of the ecodilges along the banks of the Tuichi and Beni rivers. The oldest and most famous of these is the local community-run enterprise at Chalalan (Figure 4).

**A local initiative**

Deep within the Madidi NP, in the Tuichi valley, lies the small community of San José de Uchupiamonas. It was founded in 1616 by Franciscan missionary priests. The local people are descended from the Quechua Tacana – contemporaries of the Inka of Peru who, archaeological evidence indicates, had some dealings with the people of the Amazon living in this area. The area has a warm year-round climate and high rainfall. One visitor, the famous 18th-century French naturalist Alcides D’Orbigny, said: 'Any foreigner who visits San José stands [in] awe at the sight of her beautiful vegetation and varied fruits that are so abundant there.'

Despite the setting, the community itself suffered from underdevelopment, poverty and what local people perceived as their 'government’s lack of interest in the health, education, basic services and access to [the] region'. Things came to a head in the 1980s when 40 families – a quarter of those living in the town – migrated to try to find a better standard of living. The community began to think about how it could stem these departures and ensure a sustainable future in light of the fact it would probably never receive help from the government. Looking around at the forest, animals, rivers and lakes it seemed obvious that exploiting these resources would be the best way forward, and a plan was devised to concentrate on ecotourism by providing accommodation and activities based on the shore of the local Chalalan Lagoon.

The project began on 28 February 1992 and, although initially plagued by a lack of funds, it quickly gained friends across the globe who contributed money and promises of help to get it off the ground. Most fortuitously, one event led to international recognition when an Israeli adventurer, Yossi Ghinsberg, who had been rescued by local people ten years earlier, returned to help with finance gained from renowned organisations including Conservation International and the Interamerican Development Bank. Swiftly, the plans for the ecodilge around the lagoon took shape and the construction of rustic, traditional Tacana-style cabins began.

From the beginning Chalalan has been a real community project, providing employment to many of the 126 families who live in San José. They are the guides who know the forest intimately and take tourists on wildlife-watching trips in the local area; they are the cooks who use the produce of the forest and the rivers to feed visitors on local delicacies; and they are the boatmen who can navigate the
tricky rivers transporting guests to and from the lodge. In addition, money gained from the project sends some of the young people from the area to schools and universities to gain qualifications in administration, to help them balance the books. So what is life like at Chalalan for those who come to stay?

A day in paradise
The calm of the early morning rainforest is broken by the eerie growl of the howler monkeys (Figure 5), calling to each other from the tree tops. A cool night spent sleeping on white cotton sheets comes to an end and, in the misty pre-dawn, we stumble from our lodges to greet our guides outside the central long house. A slow boat-ride across the lagoon brings us up close with the awakening wildlife – the monkeys, caiman and a plethora of multi-coloured bird species.

A fruit-filled breakfast is followed by a visit from the local crafts specialists who teach us how to hollow out large nuts and seeds to make jewellery as gifts for those back home. On another nature walk the heat of midday brings out different kinds of wildlife, including the inch-long bullet ant, so named because to be stung by it feels like being shot. A couple of hours later we are back at camp for a salad-based lunch grown in the nearby village garden.

A quiet afternoon is needed to recuperate before sundowner drinks on the balcony and a dinner of catfish, stuffed into a bamboo stalk and filled with local vegetables, herbs and rice. An hour to digest is needed, while we are entertained with talks on the forest and its inhabitants by expert naturalists, and a final night-time walk to visit the tarantula, bats and, if extremely lucky, the tapir and jaguar that patrol the jungle after dark.

Living it in ecostyle
The community of San José has wholeheartedly embraced the concept of ecotourism, using local produce as far as possible, including the materials to build the lodges themselves (Figure 6). Bathrooms, kitchens and showers operate by a liquid waste treatment system which uses both solar power and biological processes to minimise the impact on the environment. Solid waste is separated into organic and inorganic piles, with the former making a large compost heap to be used on the community forest gardens, and the latter collected by the Rurre municipal waste collection service.

In addition, solar energy lights the bedrooms and the shared public areas of the lodge, and rechargeable batteries are kept for the torches – essential for night walks. Fossil fuel use is kept to an absolute minimum. Finally, water is purified by treatment with special filters. It is also boiled and stored for later use to ensure its continued purity.

Guidelines on the Chalalan website encourage green activity from the tourists who come to visit, with ideas on how to minimise carbon emissions from transport to the area (one of the inherently damaging aspects of ecotourism), and questions for tour operators to ensure trips are as environmentally-friendly as possible.

The future is eco-bright
Chalalan is now held up as a beacon of good practice for environmentally-friendly and sustainable tourism, directly employing 37 members of the local community with 60 other positions for families who provide produce and gain money in other ways. Education has been improved for the young people of San José and there is increased access to better healthcare, cleaner water and other basic needs. Keeping the lodge 30 km from the village also means it is possible to maintain total community involvement without visitors having a direct impact on the cultural and social traditions of the population.

The final word on the future belongs to the vision outlined by the people of San José: ‘We aim to be a highly competitive and self-sustainable community business that is strong and recognised for its valuable contribution to the development of ecotourism. We aim to be able to offer a comprehensive development model to many indigenous communities around the country: by giving priority to cultural and natural values and using this as a basis from which to fight poverty and social inequality in Bolivia.’
Activities

1. Answer the following questions in full sentences:
   (a) How many international tourist arrivals were there worldwide in 2011?
   (b) How much money did these visitors bring to the global economy?
   (c) How many jobs, globally, were attributable to tourism in 2010?

2. Copy the following paragraph, filling in the gaps:
   The Amazon rainforest makes up almost _____ % of the land area of Bolivia. It contains the ecologically very diverse _____ National Park which covers an area of _____ km². Visitors reach the National Park through the town of _____ and head upriver to the ecolodge at ___________. The lodge is owned by the community of ______ and offers activities including ______.

3. Complete the following using the information in Figure 1:
   (a) Construct a bar chart showing the numbers of international tourist arrivals by region in 2010.
   (b) Construct a pie chart showing the projected international tourist arrivals by region in 2030.
   (c) Write two paragraphs with your own thoughts forecasting the trends in international tourist arrivals in the year 2050. Think about which regions will be the most popular (and, perhaps, why) and any factors that may limit an increase in tourist numbers in the future.

4. (a) Using the latitude and longitude information in Figure 3, locate Madidi National Park in an atlas.
   (b) Now find the latitude and longitude for the following Bolivian cities and towns:
      • La Paz
      • Santa Cruz
      • Uyuni
      • Sucre.

5. Draw a sketch map of Bolivia, marking on the surrounding countries and major cities and tourist attractions within the country itself. You should include brief notes about Madidi National Park and some of the other places that people visit (you will need to use an atlas or the internet, or both, to complete this part of the activity).

6. Look at the information in Figure 7. Calculate how much it would cost to spend two weeks on holiday in Bolivia, including flights and a stay at Chalalan ecolodge. Choose either a Budget or Luxury trip and write out an itinerary for the holiday, listing where guests will stay and what they will do.

<table>
<thead>
<tr>
<th>Flights from London to Bolivia</th>
<th>Luxury (£)</th>
<th>Budget (£)</th>
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<tbody>
<tr>
<td>Hotel outside La Paz (per night)</td>
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<td>15</td>
</tr>
<tr>
<td>Hotel in La Paz (per night)</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>Transport costs in Bolivia (per km)</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

7. Cross-curricular research project
   Complete a factfile on one of the animals found in the Madidi National Park. Although much of your information may be biological, you should also include as much geography as you can with, for instance, details of the climate in the area, and any other countries around the world where the animal is found.

8. Group work exercise
   Working in groups, prepare a plan to establish an ecolodge in Madidi or in any other part of Bolivia. Delegate tasks so that there are individuals in charge of, for instance:
   • finance and fundraising
   • activities within the park
   • building of the ecolodge and its facilities
   • environmental awareness within the lodge.

9. Figure 8 shows the expectations that the local Chalalan community has of guests at the lodge, both before travelling and while on holiday. Summarise these expectations in a report and include your opinions on whether they are reasonable and attainable, and what effects they may have on the people of Bolivia. You could add any extra ideas you think would help to protect the environment.

Before you travel
- Plan your route to minimise carbon emissions.
- Minimise flying time and stopovers.
- Ask to see your tour operator’s eco-policy.
- Read up on local cultures.
- Remove all excess packaging.
- Ask the tour operator if there are useful gifts you can take.

While on holiday
Perfect ecotourism probably doesn’t exist, but everyone can play their part by following these simple recommendations during their stay.
- Use tours and services that demonstrate social, cultural and environmental sensitivity.
- Buy local produce.
- Ask the local people for specific tips.
- Hire a local guide.
- Do not buy products made from endangered species.
- Respect local culture, traditions and holy places.
- Ask people before taking their picture.
- Learn the local language and be mindful of local customs and norms.
- Use public transport.
- Use water sparingly.
- Follow protected area regulations.
- Protect wildlife and flora.
- Think about what happens to your rubbish.