

Climate Change and Your Business Briefing Note Series | April 2014

# Climate Change and the Tourism Sector



he tourism sector is a highly climate-sensitive sector. Climate change is not a remote future event for your business; it is happening and has had negative impacts on tourism in Kenya. As an example, in mid-2012, the main highway to the Masai Mara National Reserve, one of the most popular tourism destinations in Kenya, was closed for three days due to flooding and earth movement damage. Around the same period, Mombasa, a major tourist destination city, experienced flooding. Climate change affects tourism destinations, and their competitiveness and sustainability.

Coastal rainforests, marine ecosystems, wildlife and Mt. Kenya's glaciers make Kenya one of the top tourist destinations in the world and Africa's fifth largest tourist destination. In 2012, Kenya received 1.24 million international visitors; and in 2011 the tourism industry contributed approximately 14 per cent to GDP and employed about 12 per cent of Kenya's workforce.<sup>1</sup> Wildlife tourism, including to Kenya's numerous national parks and reserves, represented around 70 per cent of tourism revenue.<sup>2</sup>

Tourism is Kenya's third largest earner of foreign exchange after tea and coffee exports; generating US\$ 4.7 billion in 2011 according to the World Travel and Tourism Council.

Climate change is beginning to influence decision-making in the tourism sector, but accounting for climate change is not common in business activities and decisions. Your business will need to adapt and build resilience, preparing assets and operations for climate impacts. While the tourism sector is a low overall emitter of greenhouse gases in Kenya, a good business decision is to reduce emissions and the overall environmental footprint of your business. This leads to cost savings and can position your company as sustainable or eco-friendly. **Sustainable tourism is a growing and important segment of the tourism industry.** 

## How Climate Change İmpacts Your Tourism Business

Climate change affects a wide range of environmental resources that are critical attractions for tourists, such as wildlife, biodiversity, and water levels and quality. It also has an important influence on environmental conditions and incidents that can deter tourists, such as very high temperatures, infectious disease, wildfires, increased wildlife mortality, and insects and waterborne pests. Damage to infrastructure, such as roads and buildings, can

### **Box 1: Sustainable Tourism**

Chris Breen, Chairman of the Association of Independent Tour Operators' Sustainable Tourism Committee, has noticed an increased desire from people travelling overseas to ensure that they are doing it the right way. He remarked, "If a company cannot be bothered to offer sustainable holidays, by definition it must have a limited lifespan. If what a company is offering is destroying the very place it relies upon, then the product is finite."

Sustainable tourism is better for destinations, better for people, better for the environment – and better for your business.

Source: Blue and Green (2012), Striving for Sustainability, The Guide to Sustainable Tourism 2012 (Lincoln, UK: Blue and Green Communications), page 20. limit access to tourist attractions and add to your operating costs.

Several possible future risks to your tourism business were identified in Kenya's National Climate Change Action Plan (NCCAP):

 Coastal and island destinations are highly vulnerable to the impacts of climate change (such as storms, coastal erosion, physical damage to infrastructure, sea level rise, flooding, water

### Box 2: Reducing Your Greenhouse Gas Emissions

- Monitor energy consumption to determine opportunities for reduction.
- Install energy-efficient lighting replace incandescent lamps with compact fluorescent lamps or light emitting diodes (LEDs).
- Install sensors for lighting in areas and rooms that are not constantly used.
- Install sensors and timers to control heating and lighting based on occupation of areas.
- Install double-glazing and draught excluders.
- Install environmentally friendly hot water systems (such as solar thermal or heat recovery systems).
- Maintain equipment regularly to prevent efficiency losses and reduce heat losses or gains. This includes appliances, pipes, air-conditioning systems and insulation.
- Regularly monitor energy usage and observe any trends.
- Explore ideas from staff they may suggest useful energy-saving options.
- Install shading to reduce heat gain from the sun.

Source: Australian Government (2009), Climate Change Guide: Mitigation and Adaptation Options for Australian Tourism Operators (Canberra: Commonwealth of Australia).



shortages and water contamination) because most tourist establishments are located within a short distance of the shoreline.

- Extreme events, especially more frequent droughts, negatively impact wildlife and biodiversity and can lead to fewer opportunities for resorts and safari operators.
- Gradual changes in temperature and precipitation prompting species to migrate to more favourable habitats can negatively impact certain locations for wildlife-based tourism.
- Changing environmental conditions caused by climate change can deter tourists, such as infectious disease, wildfires, and insect or water-borne pests (jellyfish, algae blooms).
- Increases in average annual temperature are likely to severely compromise or eliminate certain ecologically sensitive tourist destinations, such as the glaciers of Mount Kenya, sensitive marine ecosystems, and coastal rainforests.<sup>3</sup>
- The action plan shows that climate change is real and happening in Kenya, and has impacted businesses in the tourism sector:
- Extreme weather events have reduced access to tourist destinations because of damage to road infrastructure, as was the case in the Maasai Mara in 2011 due to flash flooding.
- Reduction in Mara River flows (driven in part by climatic variation, but also by degradation of the Mau catch-

**ment) has negatively impacted the migration of wildebeests** through the Mara River from the Serengeti National Park in Tanzania to Kenya's Maasai Mara National Reserve.

- The Kenya Wildlife Service has claimed that **droughts are pushing lions clos**er to waterholes adjacent to human settlements, fuelling human-wildlife conflict.
- Bleaching of Kenya's coral reefs has been observed.
- The Grevy's Zebra population in Samburu National Reserve was placed under severe threat in 2007 due to an outbreak of anthrax caused by drought in Northern Kenya.<sup>4</sup>

The tourism industry has a strong potential to deliver continued economic growth and employment for Kenya, but adaptive actions are important to manage the worst impacts of climate change. While climate change certainly poses risks to your business, it brings new economic opportunities such as sustainable tourism.

### Reducing Greenhouse Gas Emissions in the Tourism Sector

Greenhouse gas emissions in the tourism sector are low relative to Kenya's overall national emissions, less than one per cent of national emissions, mainly from transport and energy use.<sup>5</sup> Many low carbon actions are being applied by tourism operators – such as solar water heating, the use of energy efficient lighting and appliances, and the use of more efficient passenger vehicles. A concerted program could help to create a niche market by branding Kenya as an environmentally responsible low-carbon footprint destination.

### Climate Change and Your Tourism Business: What can you do?

- Assess the climate risks to your business. A systematic risk analysis would help to identify specific risks to your business and provide information for your business planning (see Briefing Note #2 – Climate Proofing Your Business).
- Take action to adapt to climate change. Your actions depends on the location and nature of your business, and can include:
- Ensuring your premises will be comfortable in hotter weather, without relying on air conditioning.
- Ensuring your buildings and infrastructure can cope with heavier downpours.
- Being prepared in the case of floods.
- Managing your grounds for changing conditions and making space for wildlife to adapt.

### Box 3: Sustainable Tourism in Kenya

Some Kenyan community lodges have developed into sustainable tourist destinations. Originally these lodges were built by farmsteads, particularly in the Laikipia region, that decided to switch from livestock to wildlife conservation as a means of income. The sustainable tourism aspect comes from engaging the local community as a stakeholder in the building of accommodation in these private conservation areas and directing a percentage of the profit to that community. In addition, some of these lodges have installed solar water heaters and energy efficient lighting

Source: Blue and Green Tomorrow (2012), Authentic Travel, The Guide to Sustainable Tourism (Lincoln, UK: Blue and Green Communications), pages 31-32.  Incorporating expected climate impacts in planning and decision-making, such as siting of resorts and hotels.

KEPSA can assist you by providing a list of publically available climate risk assessment tools (see *Tools and Planning Instruments to Assess Climate Change Impacts*).

- Be part of the solution by reducing greenhouse gas emissions. Your tourist business has numerous opportunities to reduce greenhouse gas emissions (see Box 2 for examples). Cost savings will result from reductions in your energy use through improvements in lighting, heating, cooling, appliances, fuel use and energy management, among others. You can support voluntary carbon offsetting, including for flights, which is one aspect of sustainable tourism.
- Become a sustainable tourism operator. Sustainable tourism is usually defined as holiday travel that attempts to reduce harm to the environment and local people and cultures.<sup>6</sup> The Kenya Federation of Tourism identifies responsible tourism business practices that you can adopt, including:
  - Use of sustainable and eco-friendly materials.
- Resource saving initiatives.
- Waste reduction and management.
- Health and safety policy and procedures.
- Supporting local economies and communities by supporting local initiatives.<sup>7</sup>
- Work with the Kenya Tourist Federation to promote Kenya as a leader in sustainable tourism by creating a positive, climate-friendly image. Many tourists are looking to reduce their environmental footprint and produce fewer greenhouse gas emissions. The Kenya Tourist Federation can promote ecotourism and sustainable tourism by highlighting successful business models with an environmentally responsible low-carbon footprint. Encourage the federation to develop guidelines on resource efficiency and greening the sector. You, as a business owner, play an important role in increasing resource efficiency, protecting attractions and wildlife, and developing Kenya as a sustainable tourism market.

# Acknowledgements

This briefing note was written by Deborah Murphy and Melissa Harris (International Institute for Sustainable Development). The authors thank Victor Ogalo, Kenya Private Sector Alliance, Maliza van Eeden and Margaret Kamau, Climate and Development Knowledge Network, and Tom Owino, ClimateCare, for providing useful comments.

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### Endnotes

- 1. World Travel and Tourism Council (2012), Travel & Tourism Economic Impact 2012: Kenya (London: World Travel and Tourism Council).
- 2. Cheung, H. (2012), Tourism in Kenya's National Parks: A cost-benefit analysis (Guelph, Canada: University of Guelph).
- 3. Government of Kenya (2013), Adaptation, National Climate Change Action Plan 2013-2017 (Nairobi: Ministry of Environment and Mineral Resources).
- 4. Government of Kenya (2013).
- 5. International Institute for Sustainable Development and Energy research Centre of the Netherlands (2012), Mapping of GHG Emissions and low-carbon development opportunities to Kenyan Planning Sectors, prepared for Kenya's National Climate Change Action Plan.
- 6. Blue and Green Tomorrow (2013), Authentic Travel, The Guide to Sustainable Tourism (Lincoln, UK: Blue and Green Communications), pages 31-32.
- 7. Kenya Federation of Tourism (2011), Kenya Tourism Awards, http://www.ktf.co.ke/documents/AWARD\_CATEGORIES\_NOMINATION\_CRITERIA\_&\_ENTRY\_FORM.pdf.





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The Climate and Development Knowledge Network ("CDKN") is a project funded by the UK Department for International Development (DFID) and the Netherlands Directorate-General for International Cooperation (DGIS) and is led and administered by PricewaterhouseCoopers LLP. Management of the delivery of CDKN is undertaken by PricewaterhouseCoopers LLP and an alliance of organisations including Fundacion Futuro Latinamericano, INTRAC, LEAD International, the Overseas Development and SouthSouthNorth.

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