

3 Economic competitiveness

- 3.1 This chapter examines the evidence that the natural environment can enhance the economic competitiveness of a particular region. Economic competitiveness refers to the ability of a particular region to attract businesses and investment, and therefore encourage economic activity.
- 3.2 There are several ways this could occur. On a very local scale, the natural environment in an area may increase employee productivity. Consumers in greener areas may spend more locally. Tourists may be drawn to the area and spend money on accommodation and other activities.
- 3.3 If households or businesses would prefer to be located in greener areas, this is likely to show up in the amounts they pay to purchase or rent in the area. This chapter therefore includes a section on house prices, and also on regional investment (which includes investment in office buildings).

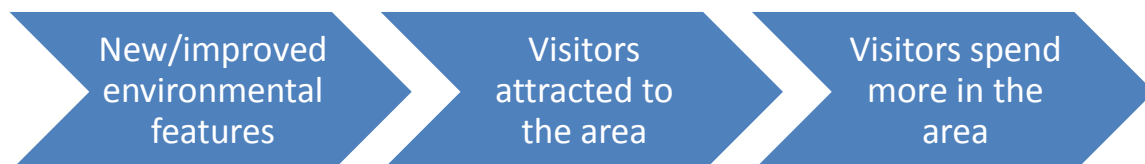
3e Tourism and recreation

Many tourist attractions and recreational activities are heavily driven by the natural environment. The economic VALUE of these activities to society can be significant. The economic IMPACT is also significant, but to a lesser extent as many of the activities (such as hiking) involve minimal expenditure.

Introduction

- 3.23 Tourism is an important industry in the UK, particularly in terms of regional employment. In 2008, an estimated 1.36 million people were employed in tourism (Deloitte and Oxford Economics 2010)²¹. This makes attracting tourism and recreation an important element of local authority economic development plans. Improvements in tourism and recreation performance by a local authority are relative, rather than absolute economic benefits, if they occur at the expense of local tourism or economic activity elsewhere. However, if the UK draws in tourism from overseas, this is an absolute benefit to the UK.
- 3.24 Nature based holidays may be based around activities such as walking, which although they may have great VALUE to those taking part, lead to limited economic IMPACT because they require little expenditure. Even expenditure on equipment is reasonably small – in 2004, the Marine Institute estimated that the average angler spent approximately €100 (around £80) per year on equipment, whilst the average birdwatcher spent just 70 euro cents per year (Marine Institute 2004).
- 3.25 Rural environment-based tourism may be particularly welcome because it is a growing economic sector in localities where many traditional agricultural and industrial sectors are declining (Shiel, Raymont et al. 2002). However, the environmental link can sometimes be somewhat tenuous - it is not necessarily the case that those taking part in rural tourism have particularly 'environmental values' or that rural tourism is more environmentally friendly than urban tourism. There is therefore not necessarily any virtuous circle between environmental tourism and environmental quality (Roberts and Hall 2004).

Theory of change



Can the benefit be quantified?

- 3.26 It is possible to quantify relationships for this benefit, and most of the research seeks to do exactly this. It is worth noting, however, that for the vast majority of studies the quantified link is based on responses to questionnaires by the public – hence the quantitative connections are based on what people say they would do, rather than what they are actually observed to do²². Additionally assessments of economic impact necessarily rely on assumptions about the linkages and flows of money in the economy, making them estimates.

²¹ Note that this is likely an overestimate, as there is no official sector classification for the tourism industry, and this estimate is a composite of 8 different sectors including bars, restaurants and sporting activities.

²² Observing what people actually do (also known as revealed preferences) is the stronger sort of evidence because people may miss-state their preferences when asked, either for social or strategic reasons, or because they are not clear themselves.

How strong is the evidence?

3.27 The evidence that the natural environment provides tourism and recreational benefits is relatively strong. However caution can sometimes be needed – it would be wrong, for instance, to assume that all rural tourism is particularly concerned with landscape or biodiversity quality. As an example, four wheel driving experience days are only loosely linked to environmental or landscape quality (Roberts and Hall 2004).

Evidence

Nationwide England or UK

- In 2012-13 the Monitor of Engagement with the Natural Environment (MENE) survey found that there were an estimated 2.85 billion visits to the natural environment in England. On average, each adult visited the natural environment 67 times. 27 percent of these visits involved some form of expenditure, with an average of £27 spent during these visits. Total expenditure is expected to lie between £17.6 and £24.5 billion in total (Natural England 2013)²³.
- Modelling for the UK National Ecosystem Assessment suggests that in 2000, there were 3.23 million day visits to the natural environment, valued at £10.04 billion. Under the most positive environmental scenario, this could potentially increase to £24 billion by 2060 (Sen, Darnell et al. 2011)²⁴. This is an economic VALUE estimate, not economic IMPACT, and is not directly comparable to the previous bullet point.
- It is estimated that RSPB reserves support more than 1,000 full time jobs in the UK, and because they tend to be on less favourable agricultural land, tend to lead to an increase in economic activity when acquired (Shiel, Rayment et al. 2002)²⁵.

England sub-national

- Leighton Moss RSPB reserve, and neighbouring sites in Silverdale, Lancashire, are estimated to attract visitor spending of at least £0.95 million per year to the local economy within 20 miles of the reserve. It is estimated that the reserve supports 59 full time jobs directly or indirectly (Rayment and Dickie 2001)²⁶.

²³ This estimate is based on an England-wide nationally representative survey. It can be considered the most robust data available on visits to the natural environment.

²⁴ The visit data presented is largely based on MENE survey results from 2010. Visit levels recorded by MENE have fluctuated between 2.49 and 2.86 billion per year over 2009-2013, so the estimated 2.86 billion visits in 2000 may be in the right range. Expenditure is generally equal to or less than the value of a recreational visit, so it is surprising that expenditure in 2012-13 was between £17.6 and £24.5 billion, yet in 2000 the total value of visits was estimated at just £8.85 billion. This suggests that either expenditure may be overestimated, or economic value may be underestimated. The study examined all the UK NEA 2060 scenarios, but only the Nature at Work scenario is presented here.

²⁵ This figure is based on direct employment, expenditure (including on contractors), grazing lets and agricultural tenancies and the impact of spending by employees, volunteers and visitors to the reserve. The methodology is conservative and appropriate.

²⁶ This review is based on a summary of a longer report by Cooper and Rayment. The expenditure figures are calculated based on surveys from people attending the reserve and apportioning their expenditure depending on whether the reserve was the main reason for visiting the area. The employment figures are based on estimated expenditure by visitors from outside the area, and expenditure by the RSPB and linkage and multiplier effects from both. They assume a local employment multiplier of £35,000 per full time job.

- It is estimated that £420,000 of the £1.68 million per year spent by visitors to the Dodd Wood and Whinlatter part of the Lakes was due to the presence of Ospreys (Dickie, Hughes et al. 2006)²⁷.
- Wren's Nest is a National Nature Reserve (NNR), designated for its geo-diversity interest in the Dudley area of the West Midlands. It has been estimated that access to the NNR with interpretive material is valued at £21.26 per household per year. Additionally, the ability to collect fossils from the site (with the proviso that important fossils were protected) was valued at £6.58 per household per year (Webber and Christie 2006)²⁸.
- It is estimated that tourists spend £191 million per year in North and West Norfolk and that this provides 7,870 full time jobs representing 17.5% of employment in the two districts. A survey of six sites on the coast associated with landscape and biodiversity estimated that the annual spend of visitors to these sites was £21 million which supports 442 full time jobs (Rayment, Lewis et al. 2000)²⁹.
- It is estimated that Symond's Yat Rock in Gloucestershire attracts £0.5 million of visitor spending to the Forest of Dean each year (Dickie, Hughes et al. 2006)³⁰.
- A survey of anglers on the Wye River found that 'scenery' was the most common influence affecting where anglers fished, just ahead of quality/abundance of catch. On average, the anglers surveyed were willing to pay £37.7 per year for river habitat improvements that significantly improved the quality and quantity of trout and salmon in the river (Thomas and Blakemore 2007)³¹. This is an economic VALUE estimate.
- It is estimated that access to the Jurassic Coast with interpretive material was worth £62.35 per household per year. Additionally public fossil collecting (with a code of conduct to protect important fossils) was valued at £57.73 per year (Webber and Christie 2006)³².
- It is estimated that the presence of choughs in the Lizard area of Cornwall attracted an additional £118,000 in tourist expenditure [in 2004], supporting the equivalent of 3.2 full time jobs (Dickie, Hughes et al. 2006)³³.

²⁷ This estimate is generated from an RSPB study in which visitors filled in questionnaires detailing what they had spent and whether seeing the Ospreys was the main reason for the trip, a reason, or irrelevant. The methodology is appropriate and conservative.

²⁸ This result is based on a choice experiment, in which a sample were asked to choose between different scenarios in which attributes and tax rate vary, thus allowing the calculation of an implicit price for the attributes. The survey methodology was appropriate.

²⁹ The methodology in this RSPB research is conservative and appropriate. The first set of figures which relate to West and North Norfolk are estimated from nationally available databases by Geoff Broom based on the Cambridge Economic Impact of Tourism Model (which has not been reviewed). The second set of figures which relate to the six sites is based on interviews at the six sites and then feeding these figures into the Cambridge Economic Impact of Tourism Model (which has not been reviewed). It seems highly likely that a significant percentage of tourism to the area is attracted by biodiversity and landscape quality, but because this research, which was carried out by the RSPB focused on sites of specific interest to wildlife enthusiasts it is not possible to generalize to the wider population.

³⁰ This result is based on the updating of results, from a reported study by Andrew Case in 1999, to 2005 visitor numbers and pounds. As such, it should be taken as indicative only.

³¹ There is some uncertainty about the representativeness about the study sample, as they were unable to survey anglers who were not members of local angling clubs. One-off visitors may have a lower willingness to pay for habitat improvements.

³² This result is based on a choice experiment, in which a sample were asked to choose between different scenarios in which attributes and tax rate vary, thus allowing the calculation of an implicit price for the attributes. The survey methodology was appropriate.

³³ This estimate is based on research by the RSPB but based on a study in which visitors filled in questionnaires detailing what they had spent and whether seeing the Choughs was the main reason for the trip, a reason, or irrelevant. The methodology appears appropriate and relevant.

Outside England

- It is estimated that between £1.4 and £1.6 million of the £38 million spent annually by visitors on the Isle of Mull is attracted by the presence of sea eagles. It is estimated that this economic impact supports 36 to 42 full time jobs on Mull (Dickie, Hughes et al. 2006)³⁴.
- A recreational visit to Silverstrand Beach, near Galway, Ireland, was estimated to be worth €22.23 (approx. £20) per visitor in 2011 (Barry, van Rensburg et al. 2011)³⁵. This is an economic VALUE estimate.
- Access improvements to two specific countryside walks in Ireland were valued at €12.22 (approx. £10.50) per walker per year for a lowlands walk, and €9.08 (approx. £7.80) for an uplands walk (Buckley, Van Rensburg et al. 2009)³⁶. This is also an economic VALUE estimate.

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³⁴ This estimate is generated from an RSPB study in which visitors to the Isle of Mull filled in questionnaires detailing what they had spent and whether seeing the Sea Eagles was the main reason for the trip, a reason, or irrelevant. The methodology is appropriate and conservative and fits well with a previous study and observed tourism spend.

³⁵ This is a very scenic Blue Flag beach with easy access to Galway city, so is likely to be at the higher end of values for recreational beach visits.

³⁶ These results are median values (i.e. 50% of the population surveyed was willing to pay €12.22 or more). A significant number of walkers surveyed were not willing to pay anything as they liked the trail in its current state. Only walkers on the trails were surveyed, therefore results cannot be generalised across the wider population.

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