Managing the Environmental Impacts of Tourism at County Level

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Introduction

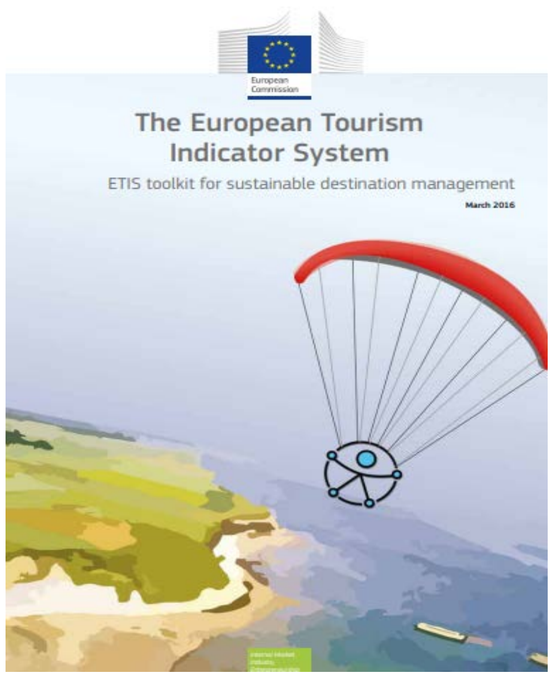
Local Authorities across Ireland have a statutory obligation to plan and maintain the natural environment which tourists put such a high value on. Without an evidence based approach to tourism planning, Local Authorities would be at a disadvantage to anticipate future planning needs, thus potentially diminishing the tourism product. Such an approach to tourism planning can be achieved through the application of the European Tourism Indicator System (ETIS).

Wild Atlantic Way Research Group

This research group formed with a principal focus on investigating and contributing to the sustainable development of tourism along the Wild Atlantic Way (WAW) and to better understand the key indicators for sustainable destination management.

European Tourism Indicator System (ETIS)

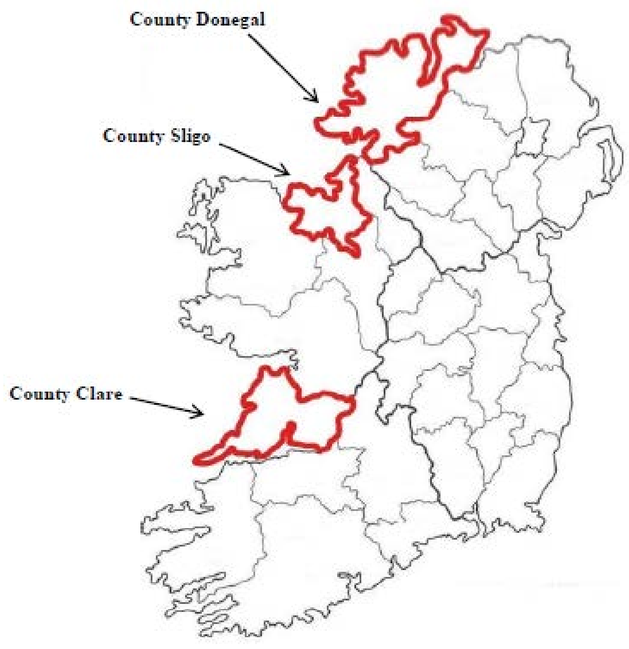
- The ETIS is a free indicator system developed by the European Commission (EC)
- This particular indicator system contains seventeen environmental indicators to enable destinations to monitor their sustainability performance and progress over time



- Several of the environmental indicators of the ETIS also complement the EEA TOUERM (Tourism and Environment Reporting Mechanism) which seeks to measure the environmental impacts and sustainability trends of tourism in Europe.
- This study presents results from the application of the environmental indicators of the ETIS in three separate destinations along the Wild Atlantic Way (WAW).

Methodological Approach

- The three destinations chosen for the pilot study were Counties Donegal. Clare and Sligo, all located along the WAW.
- Surveys were carried out in several 'honey pot' destinations in each of the three counties.



- Preliminary research was desk-based and investigated the availability of information on the various indicators held by a variety of organisations
- All visitor, resident and enterprise surveys were then undertaken using the survey templates provided in the ETIS toolkit.
- Sample numbers for surveys were determined by the use of a standard formula, which used the number of the entire population and applying a confidence level of 95% and a standard margin of error of 8%.
- All calculations were facilitated through the formulas provided by the ETIS

Results and Analysis

- The ETIS contains 17 environmental indicators, 9 of which are core indicators.
- The indicators cover a range of areas including transport, climate change, solid waste management, sewage treatment, water management, and energy usage and landscape and biodiversity management.
- It was difficult to obtain data for a number of the environmental indicators at a destination level particularly for solid waste management, water management and particularly energy usage. This area requires further research.

Comparison of Environmental Indicators of the ETIS along the WAW

Section	Criteria	Indicator Ref	Indicator	Destination Monitoring indicator	EEA TOUERM	Unit of Measure	Suggested Target	Destination Results Clare	Destination Results Donegal	Destination Results Sligo
D. Environmental Impact	D.1 Reducing Transport Impact	D.1.1	Percentage of tourists and same day visitors using different modes of transport to arrive at the destination			%	No EC Target	31%	65%	60%
		D.1.2	Percentage of tourists and same day visitors using local/soft mobility/public transport services to get around the destination			%	15.1%	20%	15%	17%
		D.1.3	Average travel (km) by tourists and same day visitors from home to the destination		✓	km	No EC Target	2584km	1815km	1369km
		D.1.4	Average carbon footprint of tourists and same day visitors travelling from home to the destination= TV (For International only see IV. The ETIS requests one way, for a round trip the figures need to be doubled).			kg	No EC Target	TV=218 kg CO2 IV= 333kg CO2	TV=158 kg CO2 IV= 275 kg CO2	TV=193 kg CO2 IV= 229 kg CO2
	D.2 Climate Change	D.2.1	Percentage of tourism enterprises involved in climate change mitigation schemes—such as: CO2 offset, low energy systems, etc.—and "adaptation" responses and actions			%	No EC Target	9%	1%	1%
		D.2.2	Percentage of tourism accommodation and attraction infrastructure located in "vulnerable zones"		✓	%	No EC Target	29%	72%	37%
	D.3 Solid Waste Management	D.3.1	Waste production per tourist night compared to general population waste production per person (kilos)			kg	No EC Target	R=0.73kg T=1.5kg	R=0.37kg T=0.74kg	R=0.64kg T=1.3kg
		D.3.2	Percentage of tourism enterprises separating different types of waste			%	No EC Target	78%	73%	79%
		D.3.3	Percentage of total waste recycled per tourist compared to total waste recycled per resident per year			%	23%	R=67%	R=52%	R=49%
	D.4 Sewage Treatment	D.4.1	Percentage of sewage from the destination treated at least at secondary level prior to discharge			%	No EC Target	82%	72%	96%
	D.5 Water Management	D.5.1	Water consumption per tourist night compared to general population water consumption per resident night		✓	Litres	No EC Target	150(N)	150(N)	150(N)
		D.5.2	Percentage of tourism enterprises taking actions to reduce water consumption			%	No EC Target	30%	16%	36%
		D.5.3	Percentage of tourism enterprises using recycled water			%	No EC Target	22%	16%	20%
	D.6 Energy Usage	D.6.1	Energy consumption per tourist night compared to general population energy consumption per resident night		✓	%	No EC Target	R=49.68MJ T=226MJ	R=49.68MJ T=226MJ	R=49.68MJ T=226MJ
		D.6.2	Percentage of tourism enterprises that take actions to reduce energy consumption			%	No EC Target	60%	18%	24%
		D.6.3	Percentage of annual amount of energy consumed from renewable sources (Mwh) compared to overall energy consumption at destination level per year			%	No EC Target	9.1% (N)	9.1% (N)	9.1% (N)
	D.7 Landscape and Biodiversity Management	D.7.1	Percentage of local enterprises in the tourism sector actively supporting protection, conservation, and management of local biodiversity and landscapes.			%	9%	22%	17%	19%

- Information on the average distance travelled by tourists to each destination was obtained from the visitors surveyed. Average travel (km) by tourists and same day visitors from home to each of the three counties varied. Clare had the highest (2584 km), with Donegal (1815 km) and Sligo (1369 km).
- The carbon footprint is closely linked to the distance travelled by the tourist and hence the highest carbon footprint was evident for tourists in Co. Clare.
- There is growing awareness among all citizens in relation to global warming and climate change yet the enterprise surveys revealed that there is a very low uptake in climate mitigation schemes by tourism enterprises.
- County Donegal (72%) was found to have the highest percentage of tourism enterprises located in 'vulnerable zones' when compared to Clare (29%) and Sligo (37%).

- Environment related services should be designed to cope with peak demand and to ensure the sustainability of tourism within the destination.
- However, it was difficult to obtain data for several the environmental indicators at a destination level particularly for solid waste management, water management and particularly energy usage. This area requires further research.
- The percentages of tourism enterprises involved in these initiatives were low with the highest observed in Clare (22%) and lower percentages observed in Donegal (17%) and Sligo (19%).

Conclusion

- While there is a drive towards the sustainable management of tourism destinations within the EU, an evidence based approach to future tourism planning in Ireland is needed so Local Authorities along the WAW can protect the tourism product going forward by basing future planning on data collected locally and benchmarked every year.
- The development of smart destinations along the WAW using data gathered from the application of the ETIS may provide the necessary lens to inform and guide landscape policy, action plans and Local Authority development plans, thus further protecting Ireland's natural environment.

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