Insights on the selection of indicators

Laia Costa - Global INSTO Meeting - October the 20th, 2022
SITS - OTB: The OTB Sustainable Tourism Indicators System

System of indicators to measure the tourism sustainability of Destination Barcelona and to provide all the stakeholders involved in tourism activity with decision-making tools.

The Destination’s sustainability goals

- To reduce the tourism activity carbon footprint
- To increase the sustainability commitment of stakeholders
- To increase the tourists’ average length of stay and their expenditure
- To improve working conditions and gender equality in tourism
- To redistribute tourism economical and social benefits
- To increase the accessibility at the destination
### Criteria for the selection of indicators
- Calculable for any geographical area
- Capable of being individually understood
- A reliable and stable source must be available over time
- To make it possible to compare destinations

### Issues and challenges
- Multiple stakeholders involved
- Inexistence of data for all geographical areas
- Inexistence of data for some mandatory issues
- Lack of tourism-specific data

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<tr>
<th>Environmental area</th>
<th>Economic area</th>
<th>Sociocultural area</th>
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<td>I01: Average tourist distance from the origin to the destination</td>
<td>I11: Percentage of tourists moving by public transport at the destination</td>
<td>I21: Tourists per night and resident population ratio</td>
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<td>I02: Tourist opinion about noise</td>
<td>I12: Percentage of tourism companies with sustainability certifications</td>
<td>I22: Percentage of good governance instruments</td>
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<td>I03: Number of annual air pollution episode days</td>
<td>I13: Availability of current plans or strategies of sustainable tourism at the destination</td>
<td>I23: Average salary of women and men in the tourism activities ratio (Gender salary gap)</td>
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<td>I04: Percentage of treated wastewater to, at least, a secondary level</td>
<td>I14: Maximum and minimum monthly overnight stays in accommodation ratio</td>
<td>I24: Percentage of tourism marketing actions that apply sustainability criteria</td>
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<td>I05: Solid waste generated per capita</td>
<td>I15: Tourist average expenses during the stay (per person and night)</td>
<td>I25: Percentage of residents that consider that tourism is rather beneficial for the destination</td>
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<td>I06: Water consumption per capita</td>
<td>I16: Tourist tax euros received per inhabitant</td>
<td>I26: Percentage of residents that consider that the destination is reaching the limits of its capacity to absorb tourism</td>
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<td>I07: Energy consumption per capita</td>
<td>I17: Percentage of tourism employment</td>
<td>I27: Tourist global evaluation of the municipality</td>
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<td>I08: Percentage of energy produced from renewable sources</td>
<td>I18: Average salary of tourism activity and average salary of the rest of the activities ratio</td>
<td>I28: Tourism opinion about public safety</td>
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<td>I09: Percentage of tourists arriving by sustainable collective vehicles</td>
<td>I19: Length of stay</td>
<td>I29: Percentage of tourists who have been victims of a crime or a crime attempt in their person or vehicle</td>
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<tr>
<td>I10: Percentage of tourists moving actively at the destination</td>
<td>I20: Percentage of accessible tourist companies</td>
<td>I30: Security at the destination (Counter-terrorism alert level in Spain)</td>
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</tbody>
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SITS – OTB: The results interpretation

- The result of the indicator itself on the basis of an ideal or desired value
- The result of the indicator in relation to other geographical areas of analysis (benchmark)
- The temporal evolution of the results of the indicator in the same geographical area
SITS – OTB: Environmental area

I01: Average tourist distance from the origin to the destination

Calculation method
Km per origin • Tourists per origin / Tourists

Unit
km per tourist

Interpretation
The greater the distance travelled from the origin, the more greenhouse gases will be generated and thus the greater the contribution to climate change.
Desired trend: downward trend over time and lower than the average of the benchmark between territories.

Justification
This is an approach to the carbon footprint of tourism in destinations.

Sources: INE and ECM

Before the pandemic, the average distance travelled by tourists to reach Destination Barcelona was almost 3,500 km. Due to the mobility restrictions to contain Covid-19, the proportion of international tourism decreased, leading to a reduction in the average distance from origin to destination, so that in 2021, the distance travelled was below 2,000 km on average.

Besides, due to the higher prevalence of international tourists in Barcelona city, tourists going to Barcelona city often travel longer distances than those going to Barcelona region.

* The monitoring of this issue is mandatory by the UNWTO's INSTO network.
I18: Average salary of tourism activity and average salary of the rest of the activities ratio

**Calculation method**

Average salary of tourism activities / Average salary of the rest of the activities

**Unit**  
(ratio)

**Interpretation**

If the result is:
- 1: it indicates that the average tourism activity salary is equal to the rest of the activities.
- <1: it indicates that the average tourism activity salary is lower than the rest of the activities.
- >1: it indicates that the average tourism activity salary is higher than the rest of the activities.

**Justification**

It allows to identify salary inequalities in the tourism activity in relation to the rest of the activities.

Salaries in tourism are, on average, lower than in other economic activities.

Before the pandemic, for each euro earned by a worker in other economic activities, a tourism worker earned around 0.7. Once again in this case we can see how Covid-19 impacted on the tourism activity, so that this ratio fell to around 0.6.

*The monitoring of this issue is mandatory by the UNWTO's INSTO network.*
SITS – OTB: Sociocultural area

I21: Tourists per night and resident population ratio

Area

Sociocultural

Issue

Effects of tourism in the community

Linked indicators

I25 - I26

Calculation method

Tourists · Average length of stay / Residents · 365

Unit

- (ratio)

Interpretation

The higher the result, the more social pressure tourism will exert on the resident population.

Desired trend: that the current value does not exceed (+/-) the standard deviation of the last 5 years (depending on data availability).

Justification

The volume of tourists in relation to the population in the census is an indicator of the social pressure caused by tourism and it can impact on the satisfaction/tolerance levels of residents.

Before the pandemic, for every 100 residents in Barcelona city there were around 15 tourists per day, while in Barcelona region, this ratio was much lower, at 3 per 100, meaning that tourism pressure in this geographical area was lower.

In 2020, this ratio decreased drastically in both geographical areas, so that for every 100 residents, there were 4 tourists per day in Barcelona city and 1 in Barcelona region. Once again, Covid-19 had an effect on tourism activity in Destination Barcelona, reducing the tourism pressure recorded in the years prior to the pandemic.

Source: Barcelona Tourism Observatory
SITS – OTB: What’s next?

- Publication of the results
- Active transferring: press, webinars, meetings, workshops...
- Work in progress: new sources
- New scenario after Covid-19
SITS – OTB
The OTB Sustainable Tourism Indicators System results
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