Indicators of Sustainable Development for Tourism Destinations

A Guidebook
3.6.1 Tourism Seasonality ➜ Baseline Issue

*Occupancy, Peak Season, Shoulder Season, Infrastructure, Product Diversity, Employment*

Very few destinations have consistent tourism throughout the year. Some destinations experience extreme seasonality. Even resorts which seek all-season status through a diversity of offers can have low seasons where it is difficult to justify operation. Tourism seasons, especially in beach tourism, are largely dependent on climate and weather patterns both at the destinations and at the source markets (“push-pull factors”). Low seasons reflect unfavourable weather conditions at destinations (cold, rain, excessive heat and humidity, storms). High seasons with optimal weather at destinations can be affected by warmer and more favourable weather conditions in source countries. For example, warmer summers in Northern Europe can result in tourists choosing destinations closer to home and fewer of them leaving for the Mediterranean region.

A growing trend is the establishment of four season resorts, (e.g., Whistler British Columbia, Cortina d’Ampezzo Italy) which attempt to diversify the tourism product and serve a range of different niche markets in different seasons (skiing, golf, swimming, bicycling, conferences, and festivals) to fill the calendar. During the summer, many of the winter trail facilities are able to convert to mountain bike trails with converted ski lifts to carry bikers and their bicycles up the mountain. Where there are larger population centres nearby, smaller towns or venues will bolster their income by advertising mainly to locals, sometimes offering discounts to attract domestic tourists in shoulder or off seasons. During the shoulder seasons for skiing at many Rocky mountain resorts, operators market directly to nearby residents with advertisements for low cost packages, 50% off lift tickets or free lessons, since few tour operators will take the chance that the snow will be there early or late in the season. Such discounts can also help to keep local residents content, particularly if high prices (sometimes eliminating locals, students etc) are charged in peak season.
The local impacts of seasonality—examples from WTO indicators study sites

Villa Gesell (Argentina) is a beach destination with a local population of about 25,000. During the January and February peak season, the small town among the dunes hosts over 100,000 visitors at a time, with the peak day reaching 200,000, most of whom stay at least one night. In summer, streets are crowded; there are lines for seats in restaurants, auto services, and entry to parking areas. While the summer peak has brought Villa Gesell a wide range of tourist-related services, only a small percentage are open year round. In the winter, many key services are closed, and residents of Villa Gesell may have to drive long distances to obtain them.

Lake Balaton (Hungary), and the north coast of Prince Edward Island (Canada) show the same pattern, and locals complain that the services are there mostly for the tourists, with serious gaps outside the peak season. Jobs in these regions are also seasonal, and many leave the area for any upward mobility. Often jobs in the brief peak season are filled by students, or migrants from other areas who stay only for the season—themselves stressing the available accommodation during the time when it is most heavily used. In communities like these, the year-round economic base is often insufficient to support the infrastructure needed to handle the peak periods, even to pay those who are needed to maintain it if it is built.

The key components of the seasonality issue and corresponding indicators are the following:

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<th>Components of the issue</th>
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<td>Measuring degree of seasonality (And the results of management actions to respond this issue)</td>
<td>• Tourist arrivals by month or quarter (distribution throughout the year) &gt; Baseline Indicator; • % of annual tourist arrivals occurring in peak month, in peak quarter; • Ratio of number of tourists in peak month to lowest month; • Occupancy rates for licensed (official) accommodation by month (distribution throughout the year) &gt; Baseline Indicator; • % of all occupancy in peak quarter (or month); &gt; Baseline Indicator; • Inquiries at tourism information centres by month (ratio peak month to lowest month).</td>
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<td>Strengthening shoulder season and low season tourism (measuring the level of effort designed to reduce seasonality)</td>
<td>• % tourism authority budget spent promoting off-peak and shoulder seasons; • Number of facilities offering alternative activities during shoulder and low season (capacity and use levels per activity type); • % of main attractions open in shoulder/off seasons; • Special events (e.g., festivals, conferences) held during shoulder and low season (number of events, participants). See also the exit questionnaire (Annex C 5) which can be used to ask what would cause the respondent to visit outside peak season.</td>
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<td>Provision of sufficient infrastructure year-round (especially services for tourists in high seasons and for local communities in low seasons)</td>
<td>• % of business establishments open all year; • % accommodation and services open all year (can be further subdivided into e.g., hotels, attractions, restaurants etc.); • % of water, electricity, sewage and garbage system capacity used for tourism and for locals. Seasonality of use; • Funding allocated for the operation and maintenance of infrastructure, especially in high seasons. (See also &gt; Community and Destination Economic Benefits p. 128).</td>
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Components of the Issue | Indicators
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Short term and seasonal employment, with related issues of lack of training, retention of good employees, provision of career paths | • Number and % of tourist industry jobs which are permanent or full-year;
• % tourist industry jobs which are for less than 6 months;
• Local unemployment rate in off-season.

Indicators measuring degree of seasonality (and the results of management actions to respond this issue):

- **Tourist arrivals by month or quarter (distribution throughout the year)** - see also Use intensity ➪ Baseline Indicator;
- % of annual tourist arrivals occurring in peak month, in peak quarter;
- Ratio of number of tourists in peak month to mean and to lowest month (and % of all occupancy in peak quarter, or month (can be subdivided by type) ➪ Baseline Indicator;
- Occupancy rates for licensed (official) accommodation by month (distribution throughout the year);
- Inquiries at tourism information centres by month (ratio peak month to lowest month).

*Reason for use of these indicators:* These indicators are direct measures of seasonality and can show the economic impact of seasonality on the key sectors of tourism. Accommodation is the easiest to measure in most jurisdictions. Data for the opening dates of tourist establishments may be available from local governments, or tourism associations. Also the indicators show changes in services available to local residents over the season.

*Source(s) of data:* Tourist counts where arrivals/departures are directly measured (easiest for sovereign states, islands, attractions, controlled access points). Indirect measures may be done through sample counts. An alternative source can be providers of officially recognized accommodation based on records of occupancy (below). Users of this source will need to recognize the existence in many destinations of unofficial accommodation and also day-visitors that stay outside the destination, and subjective adjustments may be needed to make the information useful.

*Means to use the indicators:* Monthly distribution of tourist arrivals throughout the year helps identify peak, low and high periods; it is easy to portray in graphs. Peak absolute numbers (peak day), percentage of visits concentrated in peak season show stress on the destination; ratio of peak to average may be better measure regarding decisions on infrastructure, services. These indicators can show both stress on accommodation in season and potential economic problems in low seasons and can show progress in programs aimed at lengthening the season.

*Benchmarking:* This can be compared to other destinations as many collect these data. A useful form of benchmarking is against similar destinations or similar accommodation classes. Tourism authority websites are a useful source for published data on occupancy rates.

*Note:* Peak day may be associated with particular events, as in Box 3.13 below. In Sturgis, a quiet town in the Black Hills of South Dakota, the population expands immensely during the annual cyclists rally, making provision of basic services an issue. For example, portable toilets are brought in from hundreds of miles away to serve the event, and planning for the event is a major year-round activity.
Box 3.13 Sturgis South Dakota Motor Cycle Rally - An example of extreme seasonality

“They came by train, RV, plane and motorcycle. They sweltered in the 108 heat early in the week, then covered themselves with leather and rain gear for the 70 temperatures at the end of the week. They watched concerts racing, rode in the Black Hills and met new and old friends. It was the 2001 Sturgis Rally. The numbers were down from the 400,000 to 600,000 in 2000 but the 200,000 to 300,000 was a comfortable rally.”

Source: www.Sturgis.com

Indicators regarding strengthening shoulder season and low season tourism (and measuring the level of effort designed to reduce seasonality):

- % of tourism authority budget spent promoting off-peak and shoulder seasons;
- Number of facilities offering alternative activities during shoulder and low season (capacity and use levels per activity type);
- % of main attractions open in shoulder/off seasons;
- Special events (e.g. festivals, conferences) held during shoulder and low season (number of events, participants);
- See also the exit questionnaire (Annex C) which can be used to ask what would cause the respondent to visit outside peak season.

Reason for use of these indicators: Many factors can affect the seasonality of a destination. These show level of effort to address the issue and identify many of the factors which may enable or impede efforts to lengthen seasons.

Source(s) of data: Local tourist authorities.

Means to use these indicators: Can be a public measure of efforts to attract tourists in off season. This can also show some reasons why tourists do not arrive outside peaks.

Benchmarking: Compare over time for the same destination. Tourist guidebooks often show dates of opening for attractions and hotels and can be a source of comparative information about competing destinations.
Indicators relating to provision of sufficient infrastructure year-round (especially services for tourists in high seasons and for local communities in low seasons).

- % of business establishments open all year;
- % of accommodation and services open all year (can be further subdivided into e.g., hotels, attractions, restaurants etc.);
- % of water, electricity, sewage and garbage system capacity used for tourism and for locals. Seasonality of use (see Energy p. 152, Water Availability p. 165, Sewage p. 171, Solid Waste p. 173);
- Funding allocated for the operation and maintenance of infrastructure, especially in high seasons.

See also Effects of Tourism on Communities (p. 57).

*Reason for use of these indicators:* Tourism can place stresses on facilities ranging from private businesses to infrastructure. If capacity is built to serve peak levels, it may be unused off season. If insufficient is built, it will be overstressed in peak season.

*Source(s) of data:* Local business associations, municipal authorities.

*Means to use the indicators:* These indicators show a form of carrying capacity (See p. 309) and what is being done to suit capacity to tourism and community needs. They also relate to seasonality of demands for labour and services.

Indicators regarding the effects of seasonality on employment:

- Number and % of tourist industry jobs which are permanent or full-year;
- % tourist industry jobs which are for less than 6 months;
- Local unemployment rate in off-season.

*Reason for use of these indicators:* Tourism seasonality is a factor in unemployment, seasonal employment and turnover of staff, as well as having social and economic impacts on the destination. In extreme cases, tourist communities may virtually shut down in the off season, and even those residents who choose to stay may have to leave the community to obtain basic services.

*Source(s) of data:* Governments normally collect employment data on a monthly basis, but may not be able to separate jobs by sector. For destinations without formal employment records, hotel records can be used, but many establishments may not collect these variables, or be persuaded to provide the data for use. In many destinations the employment of undocumented workers may make data collection difficult. In the absence of a government data program, an industry association may be able to collect and aggregate data from members.
Means to use the indicators: Both raw data and percentages/ratios are useful to show changes in the nature and seasonality of the workforce.

Benchmarking: Published government data is available at appropriate scales from many destinations.

(See the Balearic example of labour seasonality indicators Box 3.14)

**Box 3.14 Index of labour seasonality: Balearic Islands, Spain**

**Socio-economic Indicator**

**Status:** Indicator

**Scope:** Balearic Islands

**Period:** 1989-2000

**Observed trend:** The labour occupation is higher in the summer months than in autumn and winter.

**Desirable trend:** Stabilise the values along the year.

**Description:** This index measures the labour seasonality using monthly occupation data and monthly averages.

**Methodology:** The index of labour seasonality results from dividing the monthly occupation by the annual average occupation. It is desirable that the occupation remains stable throughout the year.

**Data sources for the indicator:**
- Evolució Econòmica de Sa Nostra, Caixa de Balears.
- Institut Nacional d’Estadística, INE.
- Institut Balear d’Estadística, IBAE.
- Instituto Nacional de Empleo, INEM.

**Labour stability**

\[
\text{Labour stability} = \frac{\text{Average monthly occupation} \times \text{year} \times \text{year}^{-1}}{\text{Average year occupation} \times \text{year}^{-1}}
\]

**Source:** Centre d’Investigacions i Tecnologies Turístiques de les Illes Balears (CITTIB)