

RATIO OF LOCAL RESIDENTS TO TOURISTS IN MAJOR TOURIST REGIONS AND DESTINATIONS		
Demographics	Tourism	

1. INDICATOR

- (a) **Name:** Ratio of local residents to tourists in major tourist regions and destinations
- (b) **Brief Definition:** Number of visitors (tourists and same day visitors) divided by the number of local residents in tourist destinations (average and in peak seasons or days)
- (c) **Unit of Measurement:** % of tourists of total local population
- (d) **Placement in the CSD Indicator Set:** Demographics /Tourism.

2. POLICY RELEVANCE

- (a) **Purpose:** The ratio can indicate seasonal pressure on the environmental and social resources of host regions and populations.
- (b) **Relevance to Sustainable/ Unsustainable development (theme/sub-theme):** Tourism has been one of the most remarkable socio-economic phenomena of the past half century, generating the temporal movement of a large number of people around the world. Between 1950 and 2005 international tourist arrivals grew from 25 million to 808 million, and domestic tourism has been also growing dynamically in both developed and developing countries. While tourism represents a key source of income and employment in most tourist receiving regions and destinations, it also exerts considerable pressure on the environmental and socio-cultural resources of host populations. Tourism is an activity highly concentrated in space and time, and many destinations experience huge seasonal influx of tourists and visitors. In many destinations the tourist population outnumbers local residents in peak periods, and the ratio of the number of tourists can be a multiple of the number of locals. During their stay tourists share the public spaces, public services (e.g. transport, communication), and natural resources (e.g. consumption of water and energy, waste generation) with local residents. If tourism activities are not adequately managed, they can result in the reduced availability and quality of scarce natural resources, cause extra burden for local authorities and facilities, disruption of social structures and customs, causing frustrations and discontent of locals. In many coastal destinations, geared for conventional beach tourism, the peak seasons coincide with dry periods when water resources might be scarce. The increased demand for water in tourism facilities can place considerable stresses on the supply for both tourists and locals.

It has to be underlined that the negative environmental and social impacts of tourism can be prevented and mitigated with appropriate planning, management and

monitoring of tourism activities, following integrated approaches and sustainability principles. Therefore, the seasonal increase of population by tourism not necessarily leads to the degradation of the environment. The cooperation between public authorities and the tourism private sector is a must to reduce negative impacts of tourism and increase its contribution to the wellbeing of local communities. A key challenge for regional and local authorities is to develop capacities for handling the seasonal increase of demand for public services, in order to satisfy the needs of both residents and tourists.

The ratio of tourists to local residents can be used as an indication of potential pressure on natural and social resources and conditions of major tourist receiving regions. It can be applied especially in peak periods, and at sub-national levels in tourist regions and local destinations, where tourists concentrate and the impacts occur.

(c) **International Conventions and Agreements:** None

(d) **International Targets/Recommended Standards:** None

(e) **Linkages to Others Indicators:** This ratio can indicate potential stresses on local environment and social systems, but it has to be interpreted in the local context, through analyzing policies, governance and management capacities, environmental and socio-economic issues of tourism. Therefore, this indicator is suggested to be used with other indicators measuring environmental and socio-economic impacts of tourism (both negative and positive), in order to detect specific implications in the local context and allow adaptive management.

There are a number of SD indicators related to the use of natural resources in this set, with sectoral applications suggested (for example related to energy and water use, air pollution, waste management). In these indicators it would be useful to specify the share of tourism in order to identify the impacts derived from tourism activities. For example, water and energy consumption, waste generated in tourism facilities (total volume, annual distribution and in peak periods, % of total consumption in a region, consumption per tourist) can be measured.

For the evaluation of the economic impacts of tourism in destinations, tourism's contribution to the local economy and employment can be evaluated (see SD indicator on *Tourism contribution to GDP* - Economic Development Theme, Tourism Sub-theme).

In order to have complete information on the local impacts of tourism, it is key to regularly evaluate the opinion of local residents. The most commonly used tools are resident surveys, which can provide information on local attitudes towards tourism and the perception of tourism's environmental and socio-economic impacts. Other means are analyzing complaints received and information gathered at resident forums and through consultation processes.

3. METHODOLOGICAL DESCRIPTION

(a) **Underlying Definitions and Measurements Methods:**

(b) Limitations of the Indicators:

National statistical sources may not always provide satisfactory estimates at subnational levels. Filling information gaps at subnational levels would require initiatives (that sometimes may be complementary) such as:

- in regions or tourism destinations where there is evidence of the importance of a specific accommodation segment (second homes for tourism use and holiday homes, as well as the lending or renting out of homes by residents are examples in many countries of direct competition with existing collective accommodation supply), it would be necessary to supplement the survey with other procedures for making a quantitative assessment of the segment. It would also be advisable in such cases to carry out specific surveys to estimate the expenditure on maintenance and the rent paid.

- administrative records may provide data that are extremely valuable both for completing the measurement of basic statistical units (such as overnight stays and trips) and for identifying information that is especially relevant to the regions, for instance, on itineraries (by interviewing travel agents). Furthermore, is more, tourist activity itself increasingly leaves “electronic fingerprints” of various kinds, thereby boosting the number of potentially usable records: the use of toll roads, credit cards, mobile telephones and access to specific tourism websites are some examples of this

- it may also be relevant to develop specific indicators for modelling exercises that will serve to estimate the number of visitors and to apportion the number of overnight stays among all the trips they take in the region.

(c) Alternative Definitions: The following alternative indicators can be suggested to detect seasonality trends, thus indicate pressure on the resources of tourist receiving regions and destinations:

- Occupancy rates in licensed (official) accommodation facilities by month (distribution throughout the year)
- Number of tourist overnight stays in accommodation facilities (annual distribution) ²⁸
- % of water, electricity, sewage and garbage system capacity used for tourism and for locals (annual distribution)
- Funding allocated for the operation and maintenance of infrastructure, especially in high seasons.

4. ASSESSMENT OF DATA

Data needed to compile the Indicator: flows of visitors and resident local population

UNWTO proposes an approach limited to two territorial levels: ²⁹

²⁸ EUROSTAT suggests the indicator “Number of tourist overnight stays in various accommodation facilities” as an indication of “pressure” on destinations (Methodological work on measuring the Sustainable Development of Tourism – Technical Report, 2005).

²⁹ It should be noted that there are other territorial divisions that are important for tourism analysis (e.g. tourism area and tourism community) but that do not precisely correspond to a region or tourism destination).

- the **region**, identified as the administrative unit corresponding to the first level of territorial disaggregation of a country in terms of its political and administrative organization (for instance, level 2 of the Nomenclature of Territorial Units for Statistics - NUTS in the European Union, the provinces of Canada, and the states of USA and Brazil);

- the **tourism destination**, treated as a subregional territory (which may correspond to a single municipality or group of municipalities) with substantial tourism activity.

Measuring flows of visitors at subnational levels, there is a need to check the relevance of same day visitors as the measurement of this subset of visitors requires specific measurement instruments. Additionally, the coverage of accommodation information should be analyzed as not always all type of accommodation are included

Tourist flows can be measured identifying number of guests at all types of accommodation establishments as well as visitors staying in private houses. Correction of tourist figures should include same day visitors estimate (where relevant).

Resident local population should be measured according to the ILO standards.

(b) National and International Data Availability and Sources: Accommodation occupation statistics are regularly available in most countries. Annual average data as well as tourism peak season estimates would be the most relevant indicators in the absence of monthly or quarterly data

(c) Data references: UNWTO does not compile this data in its general statistical publications

5. AGENCIES INVOLVED IN THE DEVELOPMENT OF THE INDICATOR

(a) Lead Agency: The lead agency is the World Tourism Organization, the United Nations' Specialized Agency in Tourism. Contact:
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(b) Other Contributing Organizations: None

6. REFERENCES

(a) Readings:
Indicators of Sustainable Development for Tourism Destinations (UNWTO 2004)

Making Tourism More Sustainable: a Guide for Policy Makers (UNWTO-UNEP 2004)
Guide for Local Authorities on Developing Sustainable Tourism (UNWTO 1999)
Tourism Congestion Management at Natural and Cultural Sites (UNWTO 2004)

(b) Internet site:

UNWTO: <http://www.unwto.org>

Sustainable Development of Tourism: <http://www.unwto.org/sustainable>

Statistics and Economic Measurement of Tourism:

<http://www.unwto.org/statistics/index.htm>