The delineation of sub-national spatial areas
(Chapter 2)

Raúl Hernández-Martín
University of La Laguna University, Canary Islands, Spain
Lead of the MST research group on sub-national measurement
The application of international sets of indicators has had little success. One of the reasons is that step 1 has been skipped.

Neglected sub-national measurement within UNWTO statistics

- **Almost neglected issue** in the two main methodological documents on tourism statistics, IRTS 2008 and TSA 2008

Treatment of the sub-national scale within SF-MST
- Version 1 & 2 of SF-MST as a final Chapter.
- Version 3 & 4 of SF-MST
  - Presented on Chapter 2 (Key features)
  - Embedded in Chapters 3 (economic), 4 (environ.) and 5 (social)
Idenifying the main scales of analysis in tourism sustainability

- Global
- Supra-national
- National
- Regional
- Municipal
- Local tourism destinations & local connected
Municipalities are often not a good starting point for MST local
How can we delineate local tourism destinations?

- **Meaningful** areas.
- Using the **same approach** as in the definition of the **usual environment**:
  - Providing some criteria
  - But the final decision on the boundaries, the number of destinations, and the extent of the data production varies among countries.
Criteria for delineating local tourism destinations

- **Non-overlapping**: These areas should not overlap and it is recommended that each area is territorially contiguous, noting the possibility of justified exceptions.

- **High concentrations of tourism supply or demand**: Measured using relevant concentration indicators, including tourism intensity and tourism density.

- **Internal homogeneity**: Tourism within a single spatial area should share similar features. If there is large heterogeneity, splitting the area should be considered.

- **Stability and flexibility**: These areas should be relatively stable over time with changes to spatial boundaries made infrequently on the basis of considering significant changes in context.

- **Confidentiality**: sufficient size to respect statistical confidentiality.

- **Feasibility**: delineated with consideration for the type and range of data that are likely to be available or may reasonably be expected to be collected.

- **Public and private support**: stakeholders in local tourism destinations must be involved in the discussion because information is for decision-making.
• **Municipalities**
  – Well defined, but tourism sustainability hidden behind local population

• **Census sections**
  – There is a lot of geolocated information (people, dwellings)
  – Often not relevant from a tourism point of view

• **Zip codes**
  – Some geolocated information (card and ATM payments, mobile phones, etc.)
  – Often not relevant from a tourism point of view

• **Statistical grid data**
  – Increasingly being used worldwide.
  – Combination of grid cells may allow building local destinations.
  – Alignement the UN Global Statistical Geospatial Framework.

• **Geolocation** of information is the key for local MST

• In addition to **local tourism destinations, local tourism connected areas**
  – Social and environmental relevance.
Some **contributions** of local destination data for tourism decision-making

- Managing **impacts of (over) tourism** congestion-concentration
- **Adressing tourism diversity** within regions and municipalities.
- Management of **mobility** issues (tourists, excursionists, workers).
- Management of **social** impacts of tourism in host communities
- Managment of **energy, water** and **waste** issues in tourism
- **Unveiling hidden patterns** with the help of big data sources
- Supporting DMOs and stakeholder decisión-making
- Supporting destination **observatories** (UNWTO-INSTO)
An example of local tourism destination analysis.
The Canary Islands
Canary Islands 16 tourism zones divided into 47 micro-destinations

3 zones in Lanzarote (coverage 92% of tourist beds)

4 zones in Fuerteventura (coverage 93.4% of tourist beds)

4 zones in Gran Canaria (coverage 96.1% of tourist beds)

5 zones in Tenerife (83.2% coverage of tourist beds)

Source: ISTAC
Tourism beds vs. local population in local tourism destinations

Beds/100 inhabitants
- 0 - 50
- 50 - 125
- 125 - 200
- 200 - 300
- 300 - 650
- 650 +

locations:
- Playa Paraiso
- Playa de El Duque
- Torviscas - Fañabé Alto
- Costa Adeje
- Las Américas - Adeje
- Las Américas - Arona
- Los Cristianos
Population in local tourism destinations (census records)
Las Américas and Los Cristianos local tourism destinations
Geolocation of hotels (blue), apartments (green) and vacation homes (red)
Geolocation of hotels (blue), appartments (green) and vacation homes (red)
250m x 250 grid cells in local tourism destination
Hotel, apartment and vacation home predominance
Predominance of accommodation and inhabitants by grid cells
Thank you very much!!!

Raúl Hernández-Martín (rahernan@ull.es)
Head of the Chair in Tourism CajaCanarias-Ashotel
University of La Laguna