



CEETO Conference on Protected areas and Sustainable tourism

22-24 October 2018

Opatija, Croatia



Croatian Sustainable Tourism Observatory: Establishing indicators system

Dr. Izidora Marković Vukadin

CROSTO Facts



- Focal area: Adriatic Croatia
- 7 counties, 6.4 thousand km coastline
- 1.4 million residents
- 17.4 million arrivals and 86.2 million overnights
- 85% of overnights in June-September

CROSTO Facts



- Established in 2016
- Mission: measuring tourism sustainability at regional level (Adriatic Croatia) and promoting sustainable tourism development at local level
- Main Tool: 15 core indicators modeled on ETIS



CROSTO core indicators

UNWTO mandatory issue

ETIS section

Percentage of residents who are satisfied with tourism

Local satisfaction with tourism

C Social and cultural impact

Number of tourist nights per 100 residents

Percentage of tourists who are satisfied with overall experience

Percentage of repeat/return tourists

A Destination management

Percentage of tourism enterprises using voluntary certification/labelling for environmental CSR

Number of tourist nights

Destination economic benefits

Daily spending per tourist overnight

B Economic value

Direct tourism employment as percentage of total employment

Employment

Gross annual occupancy rate in commercial accommodation

Tourism seasonality

Energy consumption per tourist night compared to general population energy consumption per resident night

Energy management

Water consumption per tourist night compared to general population water consumption per resident night

Water management

Percentage of sewage from a destination treated to at least secondary level prior to discharge

Waste water (sewage) management

D Environmental impact

Waste production per tourist night compared to general population waste production per resident night

Solid waste management

Percentage of destination area out of the settlement's boundaries built for tourist purposes

Governance

Percentage of the destination area within the construction zone of the settlement where the facilities of catering and tourist purposes

Governance



What have we done so far?

- **The first complete process of measurement in 2017**
 - We learned that there are many region specific challenges related to measurement process
 - We learned that measurement at regional level can blur the real picture of sustainability
- **The pilot project of measuring tourism sustainability at the level of towns and municipalities in 2018**
 - Faced with the problem of overtourism, 6 Croatian towns were willing to participate in the pilot project



Main data sources

- Central Bureau of Statistics, Croatian Agency for Environmental and Nature Protection, Energy Institute Hrvoje Požar, Ministry of Construction and Physical Planning
- Longitudinal TOMAS Summer Survey on attitudes and expenditures of tourists in Croatia
 - Since 1987, every three to four years (last available results for 2014)
 - Population: Tourists in commercial accommodation in Adriatic Croatia, June - September
 - Sample: Stratified quota sample, 5 to 6 thousand respondents
 - Survey instrument: Questionnaire
 - Data collection method: Personal interview (CAPI)
 - Content: Profile, motives, sources of information, means of transport, length of stay, repeat visits, activities in destination, satisfaction and expenditures
- ✓ *STS in Croatia is enabling sufficient disaggregation and extraction of indicators, but....*



The pilot project of measurement tourism sustainability at level of towns and municipalities

- six destinations have been selected for the purposes of measurement: **Rovinj, Mali Lošinj, Novalja, Hvar, Ston and Dubrovnik**
- each destination appointed a **local coordinator** and the local coordinators in each destination have formed a **local working group**
- Main conclusions (so far):
 - For the local coordinator it is beneficial if it is a person who has a position of “power” in the destination
 - The local coordinator should preferably be from the city administration, not the DMO;
 - Data collection in the smaller cities is hampered by the fact that there are no specific institutions in them;
 - In smaller places, it is easier to carry out ad-hoc surveys (eg satisfaction of guests or local population).



Challenges of the measurement process: national scope

- **Availability** of needed up-to-date information, especially for tourists in different aspects of sharing economy (non-commercial accommodation, VFR, and same-day visitors);
- Secondary data often cannot be used directly, thus often **requiring additional ad-hoc analysis** - time and money consuming;
- Some of the indicators need to be **slightly modified** in their scope and/or estimation process;
- Longitudinal surveys on attitudes and expenditures of tourists in Croatia are always highly **dependent on availability of financial resources**;



Challenges of the measurement process: international scope/comparability

- **Unified list of core indicators** applied by each of the observatories
- **Fine tuning of indicators** in order to, eventually, redefine the scope of some of the indicators (especially regarding the main tourism demand segments)
- **Region specific, internationally harmonized approach**, dependent on region's development level (i.e. percentage of sewage treated to at least secondary level prior to discharge depends on the rate of households/dwellings connected to a public sewer system)
- Internationally harmonized approach is also highly dependent **on portfolio/structure of tourism products** so an aspect of tourism product in measurement process should be also considered (e.g. gross occupancy rate, tourists loyalty/return visits as well as other indicators that are highly dependent on type of destination tourism product)
- Development of some kind of **aggregate/compound indicator**/ based on a specific weighting procedure (at the section level)
- Inauguration of some **baseline values/intervals** in order to enable benchmarking and/or recognition of 'good value practice'



Possibilities for PA implementation

- Possibility of implementation is very high, but with few main questions...
 - Do all pillars of sustainability have the same weight in PA's?
 - What are the specific needs?
 - Can indicators be comparable?
 - Who will be local coordinator?
 - What is the aim of measuring?
 - ...



THANK YOU FOR YOUR ATTENTION

Izidora Marković Vukadin,
izidora.markovic@iztzg.hr

**Institute for Tourism
Vrhovec 5
10 000 Zagreb
CROATIA**

www.iztzg.hr