

Climate trends and tourist flows: first results of the case study in the Sila National Park (southern Italy) within the INDECIS Project

Roberto Coscarelli*, Loredana Antronico*, Anna Boqué Ciurana**, Francesco De Pascale*, Alba Font Barnet**, Antonio Paolo Russo**, Òscar Saladié Borraz**

- * Italian National Research Council, Research Institute for Geo-Hydrological Protection, Rende (CS), Italy
- ** University Rovira i Virgili (Tarragona), Department of Geography, Faculty of Tourism and Geography, Vila-seca, Spain



EGU2020-2978

INDECIS is part of ERA4CS, an ERA-NET initiated by JPI Climate, and funded by FORMAS (SE), DLR (DE), BMWFW (AT), IFD (DK), MINECO (ES), ANR (FR) with co-funding by the European Union's Horizon 2020 research and innovation programme under grant agreement no 690462

INDECIS. Integrated approach for the **d**evelopment across **E**urope of user oriented **c**limate **i**ndicators for GFCS high-priority **s**ectors: Agriculture, disaster risk reduction, energy, health, water and tourism



www.indecis.eu

The **INDECIS Project** intends to develop an integrated approach to produce a series of climate indicators aimed at the high priority sectors of the Global Framework for Climate Services of the World Meteorological Organization (agriculture, risk reduction, energy, health, water), with the addition of tourism.

The **INDECIS** project has involved a partnership of experts in the climate sector, from 12 European countries, in order to develop models and tools for the near-real-time acquisition of climate data and for spatial interpolation, visualization and communication of climate monitoring to territorial stakeholders.

With regards to the tourism sector, the territory of the Sila National Park (Calabria, southern Italy) has been selected as one of the study areas for the acquisition of sectorial data on tourism (in particular, attendance data and tourist arrivals) and for the realization of a Workshop.

Study area: The Sila
National Park, located in
Central Calabria (southern
Italy), is an area of natural,
environmental and
historical-cultural interest

Objective: to identify and enhance climate services that should be provided to stakeholders of the tourist destination, based on their needs

Methodology: Focus group technique. The stakeholders are divided in groups of 6-7 people. Each group focuses on a specific tourism product/aspect.



21 stakeholders/users partecipated (28 invited)

No. of stakeholders/users	Activities
7	HOTELS
4	RESTAURANTS
6	ASSOCIATIONS / GROUPS FOR TERRITORY PROMOTION
3	(SMALL) AMUSEMENT PARKS
7	OUTDOOR ACTIVITIES (SKI, BIKES, TREKKING, etc.)
1	LOCAL POLICY-MAKERS



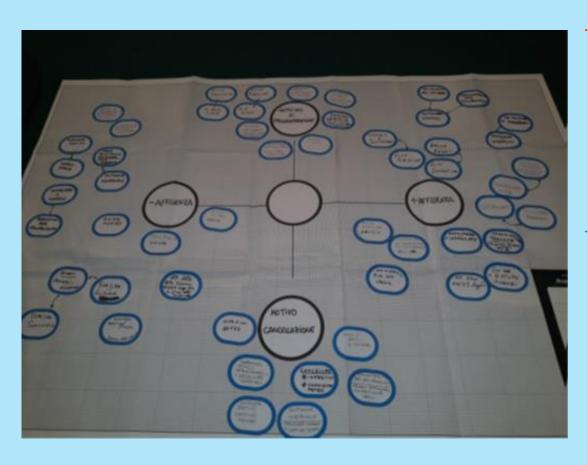




The 21 stakeholders/users were divided into 3 focus groups:

- "Water" (lake)
- "Snow" (ski)
- "Earth" (bike, trekking, etc.)

All the information were organized in the three 'spreadsheets' collecting and positioning the information and opinions obtained from different (but homogeneous) stakeholders, in an ordered way, by employing 'manual thinking tools'. **Query:** How do weather and climate affect concrete activities/products of the destination? (Periods, optimal conditions, suboptimal conditions, demand satisfaction)



- Minimum depends on the typology of activity: from November to April («earth» and «lake» focus groups); all the seasons unlike winter («snow» f.g.)
- Maximum depends on the typology of activity: from July 15th to 15th September («lake» f.g.); Xmas holidays and winter weekends («snow» f.g.); from December to February (for someone of the «earth» f.g.) and from July to October (for the others)

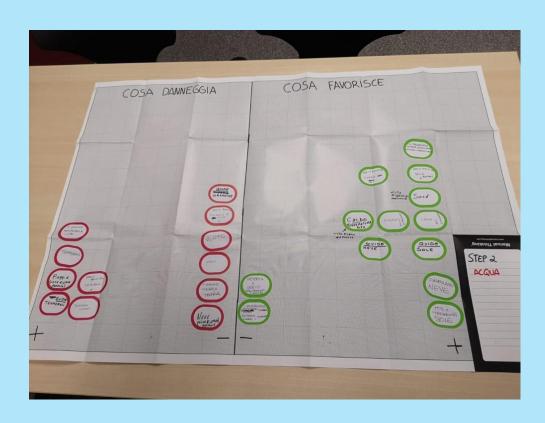
Query: When do the tourists book?

Lake	Snow	Earth
Short time for almost all the activities unlike sport ones.	6 months before for important events	1-2 months before for excursions and hotels booking
Long time for summer and Xmas holidays	1-2 months before for holidays	1 month before for school groups
	4 days before for ski weekends	2-3 weeks before for winter outdoor activities
	2 days before for other activities	2 weeks for summer outdoor activities
	1 day for ski lessons	7-10 days before for mountain-bike, trekking, winter trekking. etc.

Query: Why do the tourists delete their bookings?

Lake	Snow	Earth
Meteo conditions influence the number of staying days	No snow events occurred	Forecasting of bad meteo conditions
Forecasting of bad meteo conditions by TV	Two much snow or rainfall	Summer bad conditions (for summer outdoor activities)
	Fall illnesses	Fall illnesses and family problems
		Bad situations for excursions

Queries: Which meteo/climatic conditions support/do not support the activities?



Globally:

- Positive

Several days with snowfall in winter; hot and sunny days in summer; rainy days in autumn (for mushrooms); bad weather conditions on sea sites....

- Negative

Heavy snowfall in winter; too much heavy rainfall or long wetperiods in autumn; rainy days in summer; too much wind; instable weather conditions; high air moisture Query: How do you face bad/good weather conditions forecasted at various time scales?

Forecast of «bad» weather conditions	Forecast of «good» weather conditions	Time scale
 Change some events from outdoor to indoor (when it is possible). Alternative proposals. 	 More attractive actions. More diffuse publicity campaign with indications of weather conditions for next days. New promotions. 	1-3 days
Re-organization of events and activities.Price decrease.	• Increase of tourist proposals.	10-15 days
 Proposal of a better tourist package. Diversify the tourist proposals. 	 Communication actions with slogans on good weather conditions. Actions to «increase» the tourist season duration. Price increase. Enforce the tourist offers. Increase the investments. 	Seasonal
Adaptive measurements.Diversify the tourist proposals.	 New investments and new tourist proposals. 	5 years
Change the activity.	New investments and new proposals.An infrastructure plane.	30 years

Regarding «Communication and information» the involved stakeholders prefer:

- **as format:** graphs with comments
- **as tools**: e-mails or apps







CONCLUSIONS

- The local community is the key component of the destination and the main stakeholder in tourism planning.
- It is essential to pay attention to communities and work in the context of tourist destinations on a local scale to encourage mitigation and adaptation to climate change.

Many thanks for your attention!!!

Roberto Coscarelli
CNR-IRPI
roberto.coscarelli@irpi.cnr.it
www.indecis.eu