

Development in mountain areas: Sustainable Performance Index (SPI)

V. Castellani, S. Sala

Department of the Environment and Landscape Sciences - University of Milano Bicocca
Piazza della Scienza, 1 - 20126 - Milano v.castellani1@campus.unimib.it, serenella.sala@unimib.it

Abstract

Development of sustainable tourism policies could be a useful way for encouraging new forms of business, promoting employment and assuring an efficient conservation of landscape and environment as stated in Lanzarote Charter in 1995 and Rimini Charter in 2001. Referring to this scenario, the application of European Charter for Sustainable Tourism in Protected Areas represents a referential methodology for local development in protected areas and a possibility to involve local stakeholders in sustainability's policy definition. In many cases integrated sustainability indicators are developed within participated process. The attempt to measure sustainability has to face some conceptual challenges: the concept of sustainability is not univocally defined and the efforts to measure it are difficult to implement; sustainability is not a universal concept: it may be influenced by local environmental, social and economic context, which can require to give more attention to specific aspect rather than others; although in many cases it is difficult to achieve, law compliance is not enough to define as sustainable a model of development. The present study represents an innovative attempt to evaluate sustainability as a whole, in the perspective of defining specific targets, through the definition of indicators suitable to measure and evaluate temporal evolution of development policies, mainstreaming sustainability to reduce adverse effect on the environment and to promote conservation of local and traditional values.



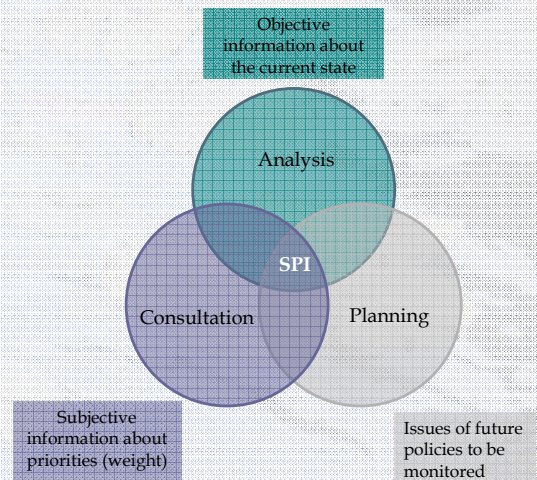
Introduction

The implementation of participated process can be very useful for planning local strategies of development, especially for sustainable tourism and ecotourism.

Here, an implementation of European Charter for Sustainable Tourism in Protected Areas is presented, and new methodologies and indicators of sustainability are defined to evaluate the actual impact of the development policies in a depressed area of Lombardy Region, in northern Italy.

One of the objects of the present study is to analyse the opportunities given by this field of research with the aim of finding a method suitable to measure actual level of development in disadvantaged areas classified as "areas facing structural difficulties" by European Community (see EC Council Regulation 1260/1999), trying to integrate classic economic evaluation with an assessment of social and environmental aspects.

Conceptual scheme for the selection of SPI indicators:



Methodology

The process of European Charter implementation is a local development management system, focused on sustainable tourism and inspired to Deming continuous quality improvement model. It consists of 5 phases:

1. economic, social, cultural and environmental diagnosis
2. consultation of local stakeholders
3. participated process of planning;
4. compilation of a Strategy and an Action plan for sustainable tourism development
5. overall evaluation of the strategy and planning of improvement actions.

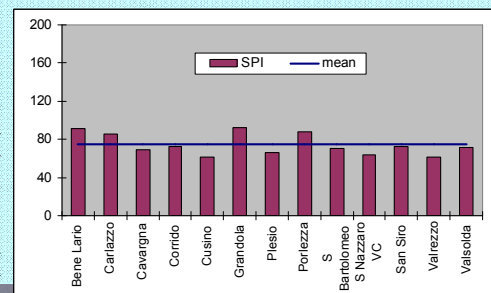
Sustainable performance index

To check the whole process and to verify that the actions planned for the development are targeted to the identified specific pressures and shared by stakeholders, a new index was developed, called Sustainable Performance Index (SPI). SPI is composed by 20 indicators about: demographic dynamics, economic condition and social condition of local community, environmental aspects and tourism characteristics of the territory. The selection of single indicators is based on the results of every step of the planning process. Every indicator can assume a value from 0 to 10, which represents the level of sustainable development assessed for that issue (10 indicates the higher level of development).

Example of results

The procedure was applied to two areas in northern Italy which have undertaken the process of European Charter for Sustainable Tourism in Protected Areas: Oltrepo Mantovano system of Protected Areas and Alpi Lepontine Mountain Community (CMAL). Results of CMAL case study are presented below; total SPI value for the whole area is 74, 41.

1	2	3	4	5	6	7	8	9	10
Net migration	Old-age index	Education	Second houses	Services	Voluntary work	Public transport	Employment rate	Environmental certification	New enterprises
6,41	5,98	2,32	4,91	2,89	6,20	3,29	5,10	0,40	n.d.
11	12	13	14	15	16	17	18	19	20
Female entrepreneurship	Commuting	Urbanisation	Energy from renewable sources	Ecological state of fresh water	Separate waste collection	Organic farming	Overnights	Guest accommodation	Per-capita value added
4,48	2,98	8,63	n.d.	7,50	1,88	3,34	0,79	0,83	6,46



Conclusions

Sustainability indicators and their evolution in time could represent a useful tool for decision makers to assess policy efficacy in defining models of sustainable tourism, particularly in depressed and transforming areas: SPI method enable to assess current level of sustainable development of the area considered and it is also a valuable instrument for the assessment of effective potential of the area.

References

- Europarc Federation, 1995. European Charter for Sustainable Tourism in Protected Areas.
Castellani V., Gusso, G., Lombardo, A., Sala, S., Pitea, D., 2007. Environmental analysis to promote a sustainable tourism. Diagnosis of Alpi Lepontine Mountain Community. Technical Report for the implementation of European Charter for Sustainable Tourism in Protected Areas.
Castellani, V., Lombardo, A., Sala, S., 2007. Strategy for sustainable mountain tourism. A private - public synergy for local development. In: Proceedings of III International Seminar on Mountain Tourism "Sustainable Tourism in mountain protected areas - building partnership between NGOs and managers of protected areas", Sucha Beskidzka, Poland, 25-28 October 2007, in press
Castellani, V., Sala, S., Pitea D., 2007. A new method for tourism carrying capacity assessment. In: E. Tiezzi, J. C. Marques, C.A. Brebbia & S. E. Jørgensen (Editors) Ecosystems and sustainable development VI. WIT Press, Southampton.

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