# Fostering Sustainable Regional Development with Indicator Based Certification Procedures

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Abstract: Sustainable regional development is the long-term aim of alpine landscape and habitats. Therefore, areas with high ecological qualities and sufficient socio-cultural potential, but insufficient economical subsistence will have to develop into respective 'Label regions'. An adequate implementation strategy should be supported by a reliable indicator system, which finally will lead to certification procedures for regional management. With the certification, 'Label regions' are identified and gain an advantage on the market for sustainable tourism.

## Introduction

Sustainable development is rooted in Switzerland's Federal Constitution as one of the goals of public-sector action. Taking the 'Sustainable Development Strategy 2002' and the relevant legislation as specific points of reference, the Swiss Federal Office for Spatial Development (ARE) has put the importance of sustainability to spatial development in concrete terms. The ARE's thinking concentrates on key aspects of sustainable development: Socioeconomic elements, urban development, land usage and mobility. The assumption is that sustainable spatial development in this sense will have a positive knockon effect on sustainability as it relates to other sectoral policies, such as the conservation of the countryside, areas of particular historical or cultural importance and biodiversity (ARE 2005).

Given the concept of sustainability as the relevant normative base of regional development, the value-reduction of traditional alpine landscapes in terms of production mode has to be seen as a possible negative impact on sustainability which finally will lead to new regional policy strategies. Furthermore, state subsidies are continuously decreasing in Switzerland. That is why Boesch et al. (2003) proposed a new typology of alpine regions (Fig. 1) which enables a more efficient focussing of the scarce public funds. In this new typology, intensely used alpine regions should not get subsidies anymore, because their high value added enables them to survive in the market by themselves. On the other side, depleting regions characterised by decreasing value added and ongoing depopulation should not get subsidies anymore too, because for these problems subsidies are not an efficient instrument. Certified 'Label regions' (Fig. 1) may well be a solution in order to focus the scarce public funds to locations and activities with a maximum promotion of sustainable development. In addition, 'Label regions' will have a market advantage, e.g. in nature-based tourism or in quality agricultural products. Also, in the context of governmental sustainability strategies, they can obtain state transfer payments more easily due to the approved efforts for sustainable regional development.

In this context, the key question to be answered is: What would a future certification system for these Label regions look like?



Figure 1: New typology of alpine regions (Boesch et al. 2003).

#### Goals

The intended main result of this Swiss research project (Boesch et al. 2003) was to come up with regional policy recommendations, with the longterm objective of contributing to a sustainable development of alpine regions. The core element is outlining the concept of 'Label region', both in the context of justification (i.e. reasoning about trends, aims and goals) and in the context of operation (i.e. establishing operational tools, like indicator-based certification procedures).

## Implementation

Through a sustainability goal analysis and complementary Delphi-expert questioning an adequate set of indicators for sustainable regional development has been set up. From the plethora of certification systems a performance- and a process-oriented one have been selected as the most useful for the purpose of indicator-based sustainable regional development. With this selection not only the most important orientations (performance and process) of certification systems are covered but also the different ways of controlling quality (self-assessment and public control).

Statistical values for indicators are mostly not available or are only processed with difficulty. Normative values for indicators are often not readily at hand and cannot be 'retrieved' without difficulty (depending on the societal and political context). Should the availability of data actually advance to the critical volume, then the enquiry into, and assessment of sustainable regional development by means of check lists (in which indicators are included in question form) would have to be taken into account, which would in turn be carried out by independent auditors.

An integral goal and indicator set for the three dimensions – society, environment, and economy – is particularly suited for the task of transferring the concept of sustainable development at regional level. Amongst other things, indicators are able to depict space-oriented and socio-economically relevant facts.

Depending upon the certification system that is finally adopted and the data situation on a regional level, sustainability indicators will have to be put into action in different ways.

- In a process-oriented certification system, the continual improvement of sustainable regional development will have to be verified. For self-declaration, check lists can be used to assess the indicators development.
- In a performance-oriented certification system, data for each single sustainability indicator will have to be retrieved for comparison with comparable regions, with a certain time frame and/ or with the threshold value needed to keep.

A combination of the strengths of both certification systems is in our opinion the most suitable solution for the identification of 'Label regions' as thereby the participation of the concerned region as well as the accuracy of performance data are guaranteed.



Figure 2: Swiss Regional Dashboard.

## Visualisation

Visualisation of indicator results with colour-coded pie charts and maps is suitable for decisionmakers and others interested in sustainable regional development (Jesinghaus 1999). For this end, the Swiss Regional Dashboard (figure 2) has been developed, aggregating indicators and combining them with GIS maps. Benchmarking can guide the search for best practice. However, data availability is the limiting factor at local level for many of the core indicators selected within the case-studies.

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## References

ARE (2005). Spatial Development Report 2005, Bern.

- Boesch, M. et al. (2003). FUN-Alpin New Types of Alpine Landscapes, Universität St. Gallen, http://www.fwr.unisg.ch/ (Projekte: NFP48).
- Jesinghaus, J. (1999). Dashboard of Sustainability, IISD Consultative Group on Sustainable Development Indicators, http://esl.jrc.it/envind/mdg.htm.