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Thierstein, Alain; Walser, Manfred

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Sustainable Regional Development: Interplay of top-down and bottom-up approaches

Alain THIERSTEIN,

Institute for Public Services and Tourism IDT-HSG University of St. Gallen Varnbuelstrasse 19 CH-9000 St.Gallen Switzerland.

Phone: +41 71 224 23 42 Fax: +41 71 224 25 36

e-mail: Alain.Thierstein@unisg.ch

Manfred WALSER,

Institute for Public Services and Tourism IDT-HSG University of St. Gallen Varnbuelstrasse 19 CH-9000 St.Gallen Switzerland.

Phone: +41 71 224 23 44 Fax: +41 71 224 25 36

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ABSTRACT:

The paper presents an integrated framework to manage regional and local development in a sustainable way. The framework is based on an analysis of public policies and private activities. The key questions were the following: What is the degree of orientation of public policies towards regional sustainability? Which factors help to express the regional social potential for development? Which levers can be used for dynamizing the regional transformation process?

The theoretical framework is based on two research projects. The main focus of the overall results was on the interplay between innovative actions from below, so-called bottom-up approaches, and supporting missions, which stand for top-down activities for regional development. The results has been deepened with two consulting projects in the Lake of Constance- region. These two projects represent the top down respectively the bottom-up approach of sustainable regional development.

Most parts of the theoretical framework and the integrated framework has been worked out within the international group of consultants of the INSURED- project. Here we have to commend our colleagues Gerry Sweeney (SICA, Ireland), Robert Lukesch (ÖAR, Austria), Filippo Strati (SRS, Italy) and Ruggero Schleicher-Tappeser (EURES, Germany) and their collaborators.

1 Sustainable Regional Development

Sustainability is predominantly a political term. It has gained importance in a specific historical situation as an answer to specific problems. Its political usefulness consists largely in its novelty and flexibility, in its capacity to gather consensus and to shift perceptions and values at the same time. These characteristics do not correspond to the scientific endeavour for precise meanings.

Today the concept of sustainability is a melting pot for a lot of different approaches. It is used for different policy issues, development processes and planning strategies also on a regional level. There exists a few important characteristics connected with the term 'sustainable' (see Thierstein, Walser 1997b):

- the first is the fact that sustainability requires an awareness about the interconnectedness of social, ecological and economical problems;
- secondly all concepts of sustainability are based on different needs within a region and therefore require a lot of know-how in how to deal with different interests;
- as a third characteristic the implementation of concepts of sustainability on a regional level should bring together local needs - formulated in the 'Local Agenda 21's' - and the requirements of co-operation created by problems ranging above the local level.

The three characteristics together describe a certain quality of development. Regional planning on the other hand means planning on a certain spatial level. But in spite of the different contexts – quality and space – the scientific discussions show a lot of correlation. The three characteristics of sustainability can be connected with the goals of regional planning (see Schleicher-Tappeser et. al. 1997).

Globalisation has become a keyword in all fields of business and politics. As a reaction, regional development policies have gained importance. Today they are not only looked at as compensatory policies for less advantaged regions as in the post-war period. They are increasingly considered to be essential for redefining the role of economic, socio-cultural and political entities in a changing continental and global context. Confronted with this challenge, the concept of regional development, which had often been interpreted only in economic terms, has been broadened to include environmental and socio-cultural aspects. The duty to meet

different needs and the local – global view also can be found in the discussion about regional development.

Regional development is a socially complex process through which local actors conceive and implement innovative courses of action based on a synergetic utilisation of endogenous resources. On the other hand a most important aspect of the context of sustainability are the social interrelationships, communication patterns and institutional settings which strongly differ from one region to another.

But first of all the three characteristics of sustainability describe approaches of how to act and the discussion about 'how to act' is prominent in theories of (regional) planning since years. The important meaning of the 'how to act' is based on the existence of different goals for development. There exist no single system of goals towards sustainability and there exists no single system of goals for a certain region. There always exist a lot of parallel or even conflicting goals at the same time. It means that a lot of different approaches towards Sustainable Regional Development are possible, according to the specific situation of the region and the interests and needs of the actors involved. Therefore the main interest points at the process of how the goals have to be formulated and the measures designed and implemented.

But it does not mean that all measures of regional planning should be labelled now as 'sustainable'. In fact it is nowadays a trend to use the term 'sustainable' for all plans and programmes to demonstrate progress and modernity. But in most cases only some elements of sustainability has been integrated like the establishing an roundtable as an advisory board or the integration of some ecological aspects. A real change in mind mostly is not yet visible. Therefore sustainable regional development needs a tool to assess policies and projects in terms of sustainability and to support regional actors in formulating appropriate goals.

2 Assessing Sustainability

It is easy to formulate essentials of sustainability in a very rough way, but you can't use it as a catalogue of measurable criteria. But you can formulate single elements included in the term 'sustainability' as a regulative idea. These elements have a meaning of a value that should be conserved or aimed at. At the same time each element represents a more methodological dimension, a way of looking at things (see Schleicher-Tappeser et. al. 1997). The concept of sustainability gives the general orientation.

Figure 1: The 'Flower of Sustainability' (see Thierstein, Walser 1997a)

Above all the ten elements form a scheme that can help the users to ask all the right and relevant questions in terms of sustainable development. These questions concern 1) the material core of the goals, 2) the organisational structure of the project or programme and 3) the ethical implications of the whole strategy (see Schleicher-Tappeser et. al. 1997).

The broad approach of the Rio Declaration can be associated with the conservation and further development of natural capital, man-made capital and human/social capital. This can be seen as the material core of sustainability. The material dimensions include:

- The ecological dimension: Environmental aspects should include a deep respect for ecological systems which are the basis and precondition for all life. Bearing in mind that our landscapes in Europe have been strongly shaped by human activities, environmental aspects should also include the care for traditional landscapes and the cultural heritage. The ecological dimension is to maintain the natural resources including ecosystems and their biodiversity and to respect ecological principles.
- The social dimension in different aspects: 1) the satisfaction of all kinds of social needs such as communication, support and security, love and care, recognition and distinction etc.; 2) the respect for the different cultural forms in which societies have organised themselves; and 3) the general call for some kind of equal opportunities. The social dimension is to make social resources accessible for all and to maintain the diversity of cultures.
- The economic dimension: efficient use of natural, man-made and human capital is the
 essential principle of economy. The economic dimension describes the way of dealing with
 any kind of scarce resources. Economic sustainability is to meet human needs and a
 satisfying quality of life with an efficient allocation of resources.

The three material dimensions together form the 'flower of sustainability' (see figure 1). The humus from where the flower grows are the organisational characteristics and systemic principles of sustainability. They refer to the political system and culture on all political levels on the one hand. On the other hand they refer to the way of looking at interrelationships and organisational patterns in situations of uncertainty and limited knowledge. The principles do not only describe specific aspects of the organisational structure, they also constitute general approaches to reality, tools for describing, understanding and structuring. In this sense they

constitute important tools of perception and stand at the same time for new values. The systemic elements include:

- Diversity as a concept originating from biological ecology: The diversity of subsystems and
 organisms is essential for ecosystems in order to be able to adapt to changing conditions
 and to develop new dominant patterns. Also, in cultural and in economic development
 diversity is an essential prerequisite of vitality. It means the diversity and redundancy of
 approaches, actors and goals.
- Subsidiarity addressing the interrelationship between different levels of action: As every system can be understood as subsystem of a larger one, there is always a trade-off between autonomy and integration. In general terms subsidiarity calls for a high degree of autonomy and self-governance in the smallest possible units. This applies for policy making, social systems of solidarity and welfare, technical systems or flows of goods and resources. However, no level has to dominate all the others. Finding a new balance allows problem-solving on a regional level with the support of the state level and increase the degree of autonomy of the regional actors;
- Partnership and networking as not only a social but also a technical and an ecological concept: It is based on the emerging more systemic, holistic view on development which emphasises co-evolution, complementarity and interdependence instead of fierce competition, exclusiveness, hierarchy and domination, stresses the importance of cooperation in human, institutional and also other relations. Partnership has to do with trustful co-operation in a common framework and with mutual respect. Different ways of co-operation in a non-hierarchical way can create innovative networks based on shared visions.
- Participation as the relationship between individuals and institutions: It means that the
 individuals concerned should be involved in decision making about their future.
 Participation, therefore, concerns the vertical dimension of societal relationships, the
 legitimacy of hierarchies while the concept of networking and partnership concerns the
 horizontal relationships. The effort to strengthen participation and empowerment allows to
 meet all people's needs in a region.

The frame, which holds together the whole thing is the flowerpot built out of the ethical principles of sustainability. The question how to deal with different interests, needs and opportunities of individuals or groups, is not only, but mainly a question of equity. Equity

questions have played an important role in the development of the concepts of sustainability as well as concepts of regional development. They integrate a long-term view in all goals and measures:

- Inter-individual equity means the equity between social classes, races and genders. It means the equity of chances and possibilities but it does not mean the equity between individuals which cannot be a political goal. Regional development policies have a strong influence on the degree of social segregation and therefore on these chances and possibilities.
- Inter-regional equity means the equity between neighbouring regions concerning material flows and conditions of living. The inter-regional equity also means regions which are far from another but connected by different relations like trade, environmental issues, migration and so on. Problems of inter-regional equity has been the main driving forces to establish policies of regional development.
- The equity between generations is an essential of sustainability. It means to leave a sound world to future generations which includes questions of how to use natural resources, how to deal with technological and environmental risks, how to maintain the stock of man-made capital and how to provide knowledge and skills.

This tentative scheme out of ten elements can be used to make sure whether all elements of sustainability are taken into account. It is the result of two research projects in the last four years.

The one was funded by the Swiss Federal Department of Spatial Planning. The project analysed the interdependencies between the new Swiss guidelines for spatial planning and development, the influences of global structural change and the requirements of the concept of sustainability.

The other project was funded by the European Union within the Fourth Framework for Research and Technological Development. A theoretical framework has been elaborated out of theories of regional development and the different roots of the sustainability- concept. Within this framework the project compared five European regions in Austria, Germany, Italy, Ireland and Switzerland. The main focus was on the interplay between innovative actions from below, so-called bottom-up approaches, and supporting missions, which stand for top-down activities for regional development. As a result a scheme for a 'sustainable regional quality management ' has been described.

3 Top-down and Bottom-up Strategy

The INSURED- Project showed the importance of different key factors for regional sustainable Development. The main result in all the five region is the necessity of co-operation of different actors within a local context to create a kind of shared vision. The co-operation contains different aspects, for example:

- working out Guidelines of Development
- planning the synergetic use of resources and capacities
- co-ordinating the work of different departments
- co-operating above political borders
- negotiating between different interests and so on.

But there are different ways of co-operation depending from the way of initiating an development process. In principle two strategies of implementing concepts of sustainability on a regional level can be distinguished. The one is the top-down strategy. It starts on initiative of regional decision-makers and tries to involve important actors of the region. The other strategy starting from bottom-up is based on local activities of different nature. It depends on private actors and cannot be planned but supported by the regional decision-makers.

The paper now describes the two strategies with two examples out of the transborder 'Lake of Constance-Region'. The first example is a regional Agenda 21 called the 'Lake of Constance-Agenda 21. The other example is a private initiated network for sustainability called the 'Lake of Constance- Academy':

4 The Agenda 21 in the 'Lake of Constance Area'

The 'Lake of Constance Agenda 21' was initiated by the 'International Council of the Lake of Constance- Region, a transborder intergovernmental institution. This Council represents the governments of the Swiss Cantons, the German and Austrian Bundesländer as well as the Principality of Liechtenstein. It is a high-level consultation board with different working groups. In 1997 the working group for environmental issues has been instructed to mandate a pre-study for a regional Agenda 21. The task of the pre-study was to define the important

policy fields for such an agenda according to the needs of the region and to design the organisational and financial framework for an Agenda 21. Three consulting institutions were carrying out the study. The main problems of the pre-study can be described as follows:

Only a few persons had a share in the starting of the Agenda-project. Between some regional political stakeholders demarcation disputes grow in the run. The consultation group also had the hidden task to put the project on a broader base to create political legitimation.

Instead of conceptional ideas about the issues of a regional agenda 21 existing documents like concepts and guidelines should be taken into account. These documents include a lot of contradictory issues. The consultation group had the task to define issues considering the political priorities of different institutions as a precondition of the success of a regional Agenda 21. The pre-study followed a three step consecutive approach (see figure 2).

figure 2: Three step consecutive approach

The first methodological step was a workshop with the initiating group of the mandating institution: the working committee for environmental issues of the Lake of Constance-Council. They got a first try at defining and narrowing down the relevant issues for a regional Agenda 21 in the Lake of Constance Area. Their task was to check whether the chapters of the Agenda 21-document adopted on the UNCED-Conference in Rio de Janeiro 1992 are represented in the main goals of the 'Guidelines of the Lake of Constance-Region'. Missing Agenda issues in the 'Guidelines' then were discussed whether they could also be relevant for the region and therefore would have to be integrated in a regional Agenda 21.

In the second step selected stakeholders in the region were invited personally. A turnout of approximately 50 individuals represented the different issues of sustainability as well as the different sub-parts of the region. The first round results were fed back to them for comment and supplements. These participants strictly tried to view the necessary content of an Agenda 21 from their personal and professional background. The result of this second workshop consisted of an aggregated list of ten Agenda 21 topics.

In the third step the circle of invited stakeholders was even enlarged. A group of 90 people again assessed the selection and the motives of their predecessors. In addition this workshop also elaborated on procedural organisational aspects of a regional Agenda 21. This third workshop served not only to consolidate the Agenda 21 topics but was also geared towards mobilising support and establishing a personal network of concerned people for a regional Agenda 21.

The consolidated results of the three consecutive workshops were cast into recommendations for the International Council of the Lake of Constance-Region. The then following discussion about starting the Agenda-process showed some major problems which are connected with the top-down approach:

There is a distinct gap between decision-makers involved in the pre-study and others public officials not involved. Innovative actors has been engaged in the process while the more traditional- thinking actors obstruct the ongoing efforts. Even the renunciation of the term 'process' has been proposed because it would tie down the region for a long time. The ten months of the pre-study could reach a broad legitimation towards an Agenda- process among

regional actors. But it was not possible to reach the same legitimation within the public administration on a higher level. But on the other hand a 'Lake of Constance- Agenda 21' needs the material and organisational support from the higher level which forms the International Lake of Constance- Council.

On different political levels diverting views on the meaning of participation can be seen. The discussions during the pre-study integrated many regional and local actors. Most of the actors judged the participation of all stakeholders and people concerned as a important pre-condition for an Agenda 21- process. Another view dominated on the upper political level. Actors in politics and administration predominantly define participation as the co-operation between the state level and the municipalities. From this view in political planning and programming the citizens sometimes even don't exist.

Mainly due to this gap, the process of a 'Lake of Constance-Agenda 21' has not yet started. In the meanwhile decisions about first steps set the course but it will need a few years to create the personal base and awareness on all levels which is necessary for an Agenda- process.

5 The 'Lake of Constance- Academy' for Sustainable Development

The 'Lake of Constance- Academy' was founded by a private consultant in 1996. He wanted to establish a private network of actors in the region concerning a wide range of issues of sustainable regional development. The network should launch into activity in a pre-economic way which means that no pay for work should take place. Important elements of request are learning, empowerment and a mutual understanding of sustainability. In a first phase of set-up the network got co-financing by the European Community with the INTERREG II-Programme for transborder co-operation to work out the organisational structure and to carry out a set of first events in different parts of the region as a prelude. The main problem of the first phase can be described as follows:

The phase of defining the goals and structures of the network needs a long time. Goals and structures are inseparable connected to each other and produce a very complex self-understanding. To practice openness and not to fall for profitable strategies only is quite difficult to communicate. Most time the network has been confronted with the question: "cui bono?" (who has the benefit).

A second problem was the relationship between the network and other projects and institutions. The implementation of concepts of sustainability with concrete projects often looks like a competition and all actors try to claim for their own work a copyright on the right approach towards sustainability. The main effort was to answer the question "what's new and missing in the region and therefore meets a regional need?" Here it seems that the network is challenged very strongly to define its own role accurately and to mediate between keeping somebody out and co-operating with as many partners as possible. Ecological issues for example are in the area if responsibility of an transborder network of NGOs which should not be in competition with the Lake of Constance- Academy.

The actors of the first phase has been five institutions of research and permanent education and a registered society of the founder of the network. Their project within the INTERREG II programme was divided in two parts:

In a transborder working group and a lot of informal discussion with different regional actors they worked out the goals and the organisational structure of the network. To formulate this in a few words which easily can be understood nearly needed two years. In parallel first meetings with the electronic and multimedia supplier in the region took place to establish a electronic information infrastructure combined with a 'best practice'- database.

In the parts of the region where the participating institutions reside first events took place. In different kinds of conferences the idea of the network has been presented to regional actors and all people interested in questions of regional planning and sustainability. Through these events the idea of the network was spread and became well-known within the relevant circles.

As a result there exist three regional groups in full activity and two others are at the beginning. Different working groups on different topics try to meet the needs of the people in the Lake of Constance-Region. Until now the daily work shows some problems connected with the bottom-up approach:

Until now the functioning of the network depends on the activities of a few members. It is an enormous step from an informal alliance of interested people towards an active group which is able to work. The informal alliance can work with enthusiasm and trust as main resources. A

long-lasting activity needs more personal resources which on the other hand needs a minimum of infrastructure and therefore money and other material resources. To get over this step the regional groups until now concentrate on their sub-part of the region and neglect the transborder co-operation.

The actors forming the regional groups mostly are officials out from different associations and interest groups. Few citizens participate and therefore the choice of issues and solutions can easily correspond to the existing political agenda and obstacles of the region. Also there is the danger that the good reputation of the network will be used for political interests by the different stakeholders.

As a result the 'Lake of Constance- Academy' has not overcome its 'labour pains' yet but is on the way to become a serious player in sustainable regional development.

6 Conditions for success

Both projects for sustainable regional development are still at a very early stage. The examples show some advantages and disadvantages of the two different approaches concerning resources and realm of activity. As in many cases it seems to be the best to strike a happy middle ground. But independent from the chosen approach there are some conditions of success which can be generalised.

To define these conditions of success the above mentioned INSURED- Project created a system of elements, key factors and options of action which can support and manage steps towards sustainable regional development. The ten elements for a rapid assessment of sustainability have already been described.

The ten elements are supplemented by a system of regional key factors which shows the basic social capital of a region. All innovative actions analysed need a certain kind of social capital in one way or another. The potential of a region to support social action is a key to sustainability. The key factors therefore show the strengths and weaknesses, threats and opportunities of a region as well as possible fields of action. Sixteen key factors have been defined (see Schleicher-Tappeser et. al. 1998):

- 1. The perception of a variety of development approaches to increase the capability to cope with change. Such a perception includes openness towards different kinds of actors and a co-operative competition towards new models of (self) governance.
- 2. An entrepreneurial culture of creativity and innovation which emphasises responsibility towards the community. In such a culture people are used to take responsibility for their own destiny in a proactive way.
- 3. The capacity to cope with complexity and ambiguity and to anticipate change which needs the coexistence of different reference systems in a region or community.
- 4. The discovery and re-encoding of territorial peculiarities and local knowledge which means to use them carefully and to adapt them to the context of sustainability.
- 5. The openness to enrich the own culture and to enhance multicultural cohesion which means to make a conscious and careful use of local knowledge and territorial peculiarities.
- 6. The ability of each to reach their optimum level of attainment and fulfilment which includes for example aspects of lifelong learning, women's empowerment and an increasing importance of tacit skills.
- 7. The fractal distribution of competencies which means to share responsibilities while using the counterflow principle and the principle of subsidiarity for all kinds of issues.
- 8. The autonomy of strategic decision making which requires a facilitating infrastructure This includes organisational issues but also the opportunity to act in a concrete and visible way.
- 9. The primary reliance on own resources which includes not to compromise the resources of others according to the concept of sustainability.
- 10. A shared value system which takes into account environmental, socio-cultural and economic interdependencies. A common perception within a community is essential for a coherent development.
- 11. The capacity to create a shared vision which includes the capability of long-term strategic thinking and the co-operation between different actors and the public combining different approaches of development..
- 12. The social cohesion within a region which supports non-traded interactions and relationships as a pre-condition of common action.
- 13. The opportunities for equitable interaction which need an adequate room and facilitating procedures including a negotiation culture between actors acting autonomously.
- 14. The integration of social and technical skills into the innovation process which can minimise frictions, conflicts and failures associated with change.

- 15. The access to information and to the arena of dialogue and debate which is the precondition for participation of all stakeholders in processes of collective decision-making.
- 16. The multiplicity of interactions which should be enhanced by local animators acting as 'change agents'. It enables the growing of local initiatives and to develop networks.

As a third part of the 'system of regional sustainability' the so-called 'transformation levers' can be identified. A successful strategy towards sustainable regional development should focus on a few driving forces and elements of transformation. The six levers represent basic types of strategies for the implementation of concepts of sustainability within a region.

- 1. Enhancing problem understanding focus on the common awareness on risks and opportunities and is the pre-requisite of further action.
- 2. Open collective learning combines different experiences from other actors or regions with self-reflection and confidence in the own personal and regional resources and identity.
- 3. Negotiation and co-decision are necessary to reach trustworthy agreements. It is part of the regional culture and the base of participation, networking and subsidiarity.
- 4. Creating a shared vision enables all actors to make purposive decisions towards sustainability in their own environment.
- 5. Service orientation implies an consequent orientation towards clients, results and effects to meet the interests and needs of the people within the region.
- 6. Self-governance implies the external possibilities and the internal capability of the community to control its own destiny.

7 Result and prospect

Sustainability as a 'regulative idea' is a global project starting from a normative base. The project is aimed at a paradigmatic change in the awareness and behaviour of all people. The first conclusion: Implementing a global project which is aimed at all people needs a translation on a spatial level which can be overlooked by the people. The local and regional level gains importance. The second conclusion: a project starting from a normative base needs a public debate about norms and needs and there is no single 'route of development'.

The regional and local implementation can be done with different approaches: top-down or bottom-up, looking for best practices or concentrating on an organisational framework of political steering. In any case there is a close relationship between the issues and the

procedures. Regional sustainable development needs an integrated social approach which puts emphasis on a co-operative process between different interest groups on the regional level.

The strong emphasis on the social capital of a region can be illustrated with the idea of the 'Regional Innovation Coalitions for Sustainability' (RICS, see Thierstein 1997): The idea is to promote 'sustainable innovations'. This means innovation defined in a systemic way that surpass the Schumpeterian dynamics with its built-in environmentally destructive tendencies. The innovation process is a multi-faceted endeavour in which the immaterial aspects - that is to say the untraded or tacit knowledge and skills - are getting more attention. The main properties of the innovative milieu as a spatial or regional set are

- a collection of players like firms, research and training institutes, local authorities;
- physical elements like firms and infrastructure, but also non-physical elements (know-how) and institutional elements:
- an interactive logic that derives from cooperation;
- a learning dynamic that is manifested by the players' ability, formed in the course of time, to
 modify their behaviour and to implement new solutions as a function of the changes in their
 environment.

How can the requests of innovation be used for the implementation of sustainability? It will be vital for successful implementation to form an encompassing coalition which represents a wide range of interests. This coalition is both cause and outcome of concertation of those interests around the common goal of Sustainable Development. The obvious core membership for such a 'Regional Innovation Coalitions for Sustainability' (RICS) are the agencies or the key actors that have necessarily fixed interests in regional development and the region's well-being. RICS have to identify and shape regional sustainable development with three interrelated processes:

- 1. to develop and share a common vision on RSD
- 2. to mobilise and involve material and immaterial resources
- 3. to evaluate and reorient goals and instruments while proceeding

Working in this way a few people are sufficient to act as a catalyst for sustainable regional development.

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