

Sustainable Regional Development - an Integrative Concept

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Abstract

Economic and social issues have become a top priority in the public debate in Europe, whereas environmental concerns more and more often are considered as obstacles to economic development. The concept of Sustainable Development, which in many European countries until recently has been perceived as a foremost environmental approach, could be an important political and scientific tool for integrating different aspects of development. Especially considering the regional level can help to integrate economic, environmental and socio-cultural dimensions. Within the INSURED project (Instruments for Sustainable Regional Development), a research project funded by the European Commission and carried out by partners in five European regions, a system of ten „Principles of Sustainability“ has been developed. It tries to integrate a wide variety of approaches to define Sustainability and provides a language and a guideline for discussing Sustainable Development in different contexts. Sustainability is considered as a „regulative idea“ , similar to concepts as freedom or health, from which we cannot simply derive concrete norms. It must be acknowledged that the operationalisation of this concept is an enormous task for our societies in the years to come. The proposed framework has proved to be very useful for intercultural and interdisciplinary cooperation. Tools and procedures for program and project assessment are being developed on this basis.

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1 Sustainability, employment and human resources

As unemployment has increased, in the last years public concern about economic issues and the labour market has grown throughout Europe. This has caused considerable shifts in the public perception of problem priorities. Compared to the eighties, when environmental issues were considered as a top priority problem in the developed countries, the climate of discussion has changed. Globalisation has become an important key word and is often being misused as an argument for short-sighted and narrow-minded economic reasoning. In this view environmental requests and social equity increasingly tend to be blamed to be an obstacle to economic development. Indeed, if we suppose that quality of life and quality of the environment are not only something for opulent societies, approaches and policies are needed that integrate the different concerns and development aspects much better than the concepts which are prevailing today.

The key elements of the concept of sustainability are to integrate different aspects of development, to ensure openness for the future and to enhance learning capabilities. Until recently, in the northern industrialised countries Sustainable Development has been mainly considered as an environmental concern. Increasingly it is being perceived as a new and integrative approach that might be helpful for reconciling endeavours that seemed to be incompatible until now. Economic development and human resources therefore tend to play a more important role in the discussion on sustainable development. We think that the concept of sustainability has a far reaching potential in politics and in science for reintegrating aspects of life that have been separated in the course of the development of modern science and industry.

2 Sustainable Development and the Regional Dimension

Sustainability still is a somewhat elusive concept midway between politics and science. The discussion about it is old and new at the same time. In the last three decades we have witnessed widespread debate concerning environmental issues, regional development approaches and international development policy questions. The emerging concept of sustainability brings about a new situation in the sphere of political and scientific debate as it tries to combine all these efforts. Due to its broad perspective and the widespread acceptance that this concept enjoys, frequent reference is made to it in all kinds of discussions. It is becoming obvious that Sustainability is not only a scientific term but also, and prominently so, a political one. It has gained importance in a specific historical situation as an answer to specific problems. Its political usefulness is mainly due to its novelty and its flexibility as well as its potential to generate consensus and to shift perceptions and values at the same time. However, in order to be useful and fruitful the meaning of this concept and its relevance for political action needs to be more clearly defined. Considering the broad perspective and the fundamental questions raised by the concept of sustainability this would appear to be a major task for the years to come.

The concept of sustainability has emerged at a point in history when the idea of unlimited growth through technical progress has begun to be questioned, when the dominant development model of industrial mass production is failing to meet economic and social needs and when the realisation that natural resources are finite has led to serious doubts concerning the future of our civilisation. Drawing on a wide range of scientific and political lines of thinking which have changed our understanding of nature, economy and society during the last decades, the concept of sustainability stands for a more systemic, some would say a more holistic, view of the world.

Concurrent with the increasing discussion of these issues during the last three decades, we have assisted to an increasing importance of the regional dimension. This has not come about by accident. As a counter-movement to the on-going internationalisation the regions are becoming increasingly important as a framework for orientation, as source of identity

and as the place where globally necessary changes in policy must be communicated and implemented in a specific context. There is a growing consensus that the regional dimension is most important for the actual implementation of more sustainable development. This holds for most single aspects of sustainability. Also labour market policy in the last years has discovered the importance of the regional level. Local employment initiatives, new forms of self-employment, support for networks of SMEs and the development of the specific human resources of a region have been identified as most important for overall economic development.

The contribution of European regions to a policy of sustainability is therefore essential. Regional policies have gained increasing weight in the national and European context and will be amongst the most influential promoters of a shift towards a more sustainable development model. A detailed analysis of the paradigm shift in regional development policies during the last three decades shows that these changes take the same direction as that indicated by the basic principles of sustainability.

3 Learning from the debate of the last decade

The most popular definition for sustainability has been given in the so-called Brundtland-Report of the World Commission on Environment and Development in 1987², Sustainable Development is here defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". This definition pushed questions of equity to the fore. The realisation that natural resources are limited immediately led to the question of who should be allowed to use them and to which extent. The Rio Declaration which has been formulated by the UN Rio Conference in 1992 attempts a much more comprehensive approach in its 27 principles. Since then numerous efforts have been made to devise a more precise definition of the meaning of sustainability.

The Rio declaration can be regarded as a good basis for reaching a wide consensus on what sustainability should mean to us. The 27 principles have been formulated from an international perspective and embrace quite different approaches, they have been put together in a rather pragmatic fashion and are far from being systematic. In trying to apply these principles on a national or regional level and in trying to translate them into concrete policies, different problems have arisen:

- The scope of the concept of sustainability is so vast that attempts to formulate more tangible guidelines result in very long lists of statements covering most of the debates we have had in the last decades. New, necessary and fruitful discussions are thus inspired which, however, do not necessarily lead to consensus.
- Some have hoped to be able to deduce conclusive and clear guidelines for policies and individual behaviour. This old and misleading hope of all doctrines of salvation has been disappointed by the discussions of the last years. Homann, who works on business ethics writes: "As yet there is no satisfactory definition of sustainability. It cannot exist as the quest itself is erroneous. We will know more about what sustainability is or what can meaningfully be understood by this term after a searching, learning and experiencing process that is going to take decades. However, we will never know it in a definitive way. Just as a physician does not need an operational definition of health before beginning a therapy, an operational definition of sustainability is no precondition for politics."³
- Discussions in the international and in the European context have shown that different cultures and different regions inevitably interpret the general idea of sustainability in a different way. Even within the relatively homogeneous context of the European Union we

² WCED 1987

³ Homann 1996, see also Brand 1997

find considerable differences in terms of interpretations and perspectives between central and peripheral regions, south and north, latin and germanic cultures.⁴

It appears that Sustainability is a "regulative idea" in the sense of Kant, of the same kind as health, freedom, justice or beauty. Considering the tremendous effort that had to be made in order to operationalise the idea of freedom by way of devising and implementing a body of law which allows for the assessment of the meaning of "freedom" in a given situation, it is evident that there is still a long way to go before the term "sustainability" will be operationalised. However, there will always be different interpretations in different regions and cultures.

4 Towards a consensus on general principles

Practical politics, in dialogue with the public debate, play the central role in the present transformation process. Acknowledging that we are in a historic situation in which our view on the world is fundamentally changing and in which we collectively engage in searching for a new development model and at the same time recognising that differences in perspective are inevitable and fruitful, we can distinguish two basic approaches for intervening in this discussion:

- To propose a consistent high-profile interpretation of sustainability proposing concrete guidelines, targets and thresholds for central problems and to present this proposal as a provocative minority statement in order to encourage discussion and collect consensus.
- To propose a general framework of basic principles which can expect to reach a widespread consensus in order to build a foundation for further discussion, to develop a common language for the exchange of experiences and in order to reveal different interpretations which may be mutually enriching.

In order to facilitate a european discussion, at present, the second approach seems to be the appropriate one. Looking at the different interpretations and experiences will be the most stimulating thing we can do. The concept of sustainability can be looked upon as a tool for learning how to cope with our problems, as a tool for building a new vision. It seems that the best we can expect for the moment is new guidance for learning.

Therefore a limited set of basic principles of sustainability can serve as a common frame of reference for which we can easily find a consensus. This frame of reference can then be used for describing similarities and differences in approaches, interpretations, preferences and experiences.

5 Proposal for a set of basic principles of sustainability

In the debate of the last decade we can distinguish three basic approaches to defining sustainability by a series of elements. However, none of these approaches matches the complexity of the Rio approach.

- The approaches originating from the international development policy discussion put the aspects of equity into the foreground. The Brundtlandt report cited above, which has given us the most widely known and densest definition, is an example for this view.
- A simpler way to put it would be to ask: What do we want to sustain?⁵ Over the last years widespread consensus has been reached on that sustainability should not only embrace environmental but also economic and socio-cultural aspects⁶. Understanding

⁴ see e.g. ARPE 1997

⁵ Gale and Cordray 1994

⁶ This is the so-called three-column-approach see UBA 1995

sustainability as the "maintenance of the capacity to generate human well-being for generations to come"⁷, there is general agreement that a healthy environment, a functioning economy and satisfying social relationships are the basis for human well-being now and in the future.

- A third perspective places the emphasis on the new concepts for analysing and structuring our world, which the paradigm shift from a mechanistic to a more systemic view has brought about. Adopting systemic principles should enable us to deal with the interrelatedness of a wide variety of problems and to be open for learning processes.

We think that it is necessary to look at the concept of sustainability at least from these three points of view.

In principle we are asking three simple questions:

- What do we want to sustain?
- How shall we deal with different interests, needs and opportunities?
- Which systemic approaches can help us to solve these problems?

Based on the political and scientific debate of the last decade we propose to address these questions with reference to the following list of principles:

Sustainability Principles

• development dimensions

- Respect for ecological integrity and the heritage of the man-made environment (environmental dimension)
- Satisfaction of human needs through efficient use of resources (economic dimension)
- Conservation and development of human and social potentials (socio-cultural dimension)

• equity dimensions

- Social and gender equity (inter-personal equity)
- Interregional and international equity (spatial equity)
- Equity between present and future generations (inter-temporal equity)

• systemic principles

- diversity/ redundance
- subsidiarity
- partnership/ networking
- participation

By using this list two fundamental ideas of the concept of sustainability have to be given consideration:

⁷ Pinter 1996

- **Integration:** The approach is innovative as it combines all of the above principles. The combination of principles such as economic efficiency, diversity and intertemporal equity obviously appears to us as a great challenge.
- **Learning:** The ability to learn is the factor which enables a society to bring about creative and progressive change and deal with both uncertainty and opportunity in a dynamic economic, social and environmental context. It is a basic evolutionary principle as it allows physical or mental systems to adapt to various contexts and to expand in space and time. Many of the above principles are designed to ensure the necessary openness and flexibility.

6 Explaining the Sustainability Principles

6.1 Development dimensions

With regard to the question "What do we want to sustain?" there appears to be a growing consensus on a general level. The broad scope of the Rio Declaration which embraces not only environmental aspects but also economic and social ones can be considered as being widely accepted. One interpretation associates these three aspects with the conservation and further development of natural capital, human-made capital and human capital (individual and collective assets). However, there are further connotations:

- Environmental aspects should include a deep respect for ecological systems which are the basis and precondition for all life. Bearing in mind that our European landscapes have been strongly shaped by human activities in the course of thousands of years, environmental aspects should also include those mental characteristics of the man-made environment - like cultural landscapes and the built cultural heritage - which are unseparably linked to features of the natural environment
- The economic dimension includes the way of dealing with any kind of scarce resources. Efficient use of natural, man-made and human capital is the essential principle of economy.
- The social aspect is perhaps the most complex and difficult concept to grasp, since at its core lies the value system which binds the different and sometimes competing segments of a society in a consensus of common actions which results in: 1. the satisfaction of social needs such as communication, support and security, love and care, recognition and distinction etc.; 2. respect for different forms of societal organisational and belief systems; and 3. a concern to ensure equity and equal opportunity to all members of the society. As the matter of equity will be dealt with separately in this context, we will here consider the satisfaction of social needs and the conservation and development of the socio-cultural heritage as the main elements of the social dimension of sustainable development.

Very generally speaking we can devise the following principles with regard to the different dimensions of development:

- Respect for ecological integrity and the heritage of man-shaped environment (environmental dimension)
- Satisfaction of human needs through efficient use of resources (economic dimension)
- Maintenance and development of human and social potentials (socio-cultural dimension)

6.2 Equity dimensions

The question of how to deal with different interests, needs and opportunities of individuals or groups, is not exclusively, but principally a question of equity. Equity questions have played an important role in the development of the concepts of Regional Development (RD) and Sustainable Development (SD). In the last century social equity has dominated the political debate and has led to the labour movement. Simultaneously the gender issue has gained importance as the process of industrialisation has changed traditional gender roles. After World War II, in the context of efforts towards economic recovery, the concept of "development" emerged. Disparities between regions as well as nations, the issue of "spatial equity", were put on the agenda. The environmental debate from the seventies onwards, finally, has highlighted the problem of inter-generational or inter-temporal equity. It has never been possible to discuss one kind of equity separately from the others. There is widespread consensus that social equity (or in combination with the gender issue we could speak of interpersonal equity), international equity and inter-generational equity are essential to sustainability. Several authors only distinguish between inter-generational and intra-generational equity. However, this categorisation neglects the spatial aspect. Based on the above considerations we propose the following set of equity dimensions:

- inter-personal equity (social and gender)
- inter-spatial equity (inter-regional and inter-national)
- inter-temporal equity

The inter-spatial and inter-temporal dimensions can be further sub-divided depending on scope. For our purposes the inter-spatial equity is of particular interest as in regional development we are dealing with the regional dimension in particular and we will have to clarify its relationship with the national and global level. In practice we will therefore distinguish between inter-regional and inter-national equity.

6.3 Systemic principles

The nascent, more systemic way of looking at our world has not only made us look closer at the problems that the dominant development model has created over the last two hundred years and has made us realise that there is a requirement for a more integrated approach. It also gives some indications as to how to avoid mistakes and cul-de-sacs, albeit in a situation of uncertainty and with very limited knowledge about the details of the systems we are influencing. The primary shift of perspective concerns the way of looking at interrelationships and organisational patterns. New concepts have emerged concerning systemic principles which are seen to be essential for living systems and relationships. They have been developed focusing on different aspects of the vast realm of subjects covered by the concept of sustainability. Contrary to the development dimensions described above, these principles do not describe specific aspects of our life on this planet or specific development problems, but they rather constitute general approaches to deal with reality. They are tools that help us to describe, understand and structure the world we live in. The underlying idea is, that systems that follow these systemic principles in a balanced way, will probably be able to evolve and to behave sustainably.

Different types of systematization have been discussed by various authors. Without referring in detail to the scientific discussion we propose to consider the following set of systemic principles as essentials.

- Diversity
- Subsidiarity
- Partnership
- Participation

The concept of Diversity has its origins in 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. The evolution of life on earth strongly accelerated when sexual reproduction allowed for greater diversity. Biodiversity is regarded as a most important indicator for the stability of ecosystems. At the Rio Conference a special convention has been dedicated to biodiversity. The concept of sustainability supports the notion that diversity is not only a value in the realm of biology, but also in human societies. Furthermore diversity is an essential prerequisite to cultural and economic vitality. However, according to the systemic view, diversity cannot be understood as an absolute value. As every system can be understood as subsystem of a larger one, there is always a tradeoff between autonomy and integration⁸. The principle of redundancy, which gives stability to systems, is strongly linked to the principle of diversity, in fact it could be regarded as a special case of diversity. The diversity of sub-systems reaches its limits where it disrupts the coordinating capacity of the larger system. In this sense the concept of diversity is strongly linked to the next principle: subsidiarity, which stresses more explicitly the dialectic tension between autonomy and integration addressing the interrelationship between a series of system levels. Whereas the concept of diversity originates from natural sciences, the concept of subsidiarity stems from the social sciences, more precisely it has its origins in the catholic social doctrine. According to this principle decision-making competencies and power should be allocated to the lowest possible level in the hierarchy of policy-making and be delegated upwards only if tangible advantages for all parties concerned are to be expected.

The emerging more systemic, holistic view which emphasises co-evolution, complementarity and interdependence instead of fierce competition, exclusiveness, hierarchy and domination, stresses the importance of partnership in human and institutional relations and of participation of individuals in decision- making processes by which they are concerned.

The concept of partnership concerns the character of relationships between individuals and between institutions in a horizontal dimension. It has to do with trusting cooperation within a common framework and with mutual respect. Giddens has shown how much the development of modern society is reliant on trust. The concept of partnership emphasises the common responsibility of all parties involved. Partnership also involves striving for fair and peaceful resolution of conflicts. Informal or formal, contractual or facultative partnerships are important means of reenforcing local capacities in order to reach a sufficient „critical mass" in a globalized economy.

Participation, finally, is concerned with the relationship between individuals and institutions. The concept implies that the individuals concerned should be involved in diagnostic, decision-making, planning and implementation processes which will impact on their future. Participation, therefore, concerns the vertical dimension of societal relationships, the legitimacy of hierarchies. In this sense it is linked to the concept of partnership which concerns horizontal relationships.

7 Applying the framework

The framework of ten principles presented here has been successfully used in different contexts. The INSURED project in which it has been developed, is evaluating policies and innovative actions in five european regions in order to develop instruments and strategies for sustainable regional development. Here the framework has proved to be useful for finding a common language that allows to describe different approaches and priorities, to identify commonalities and to communicate with local actors on the general significance of their single projects.

⁸ see Varela 1979

The framework stresses the interdisciplinarity of the concept of sustainability. Whereas the development dimensions still somehow allow a partitioning of problems into well-established disciplines, the equity dimensions and the systemic principles urge to consider interlinkages. Especially the systemic principles seem to be useful for discussing commonalities across different regional cultures and different disciplines. Looking for promising general instruments for the promotion of sustainable regional development we were confronted with a wide variety of backgrounds for regional policy making which differed strongly from region to region and from policy field to policy field. Considering the difficulties to compare regional policies between different regions even within the same policy field (such as labour market or agricultural policies), we have shifted our research focus on the interaction patterns and decisionmaking procedures. We suppose that - speaking on a general level - the most promising innovative instruments will concern procedures. These may include procedures for establishing a system of more concrete development targets for specific issues at different political decisionmaking levels as well as procedures for the systematic assessment of policies.

On the basis of this framework a rapid impact assessment methodology for project appraisal is being developed and has already given good results in another project where representatives from seven other european regions jointly evaluated 15 best practice projects concerning sustainable regional development in order to develop recommendations for regional decisionmakers⁹.

8 Consequences

This approach deliberately does not propose detailed targets or indicators for sustainable development in the different development dimensions. Every discipline and every policy field has a long record of detailed discussions and proposals which cannot be easily aggregated. The approach focuses on how to handle interrelationships between disciplines, between policy fields and policy levels. Finding paths for a sustainable development is not primarily a question of academic methodology but a huge task for our societies in the decades to come, involving the way of decisionmaking at all levels in all kinds of organisation and in personal life. Therefore the human potential aspect of sustainable development is of utmost importance.

During the period of industrialisation, specialisation, division of labour, scientific methods for dividing problems into subproblems, engineering approaches to solve societal problems by technical devices have been highly developed and have deeply shaped our working life. If we understand sustainable development as the necessity to reintegrate aspects of life which have been treated too separately, this has far reaching consequences for the structure of communication, for the organisation of companies, of administrations and of daily work. In fact, important roots of the emerging paradigm of sustainability can be found in business and organisational sciences of the last decades. Looking at the debates on sustainable development in different european regions and considering the enormous economic success of networks of SME's in less "modern" regions in the last two decades, it does not seem unprobable that the most industrialised countries, which until now were quite successful with a highly differentiated environmental policy, will not be among the most innovative and the most successful in terms of sustainable development.

⁹ ARPE 1997

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