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Challenge of Value Based Impact Assessments

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Abstract: Growing challenge of decision making is today the identicfication and respect of value system of susatinability. To deiversity of decision making processes add all kinds of impact assessments and the diversity of participants and their varied value systems. The values system, which focus on evolving of human vital-being, on landscape and on adaptive management of ecosystems and their services, is an essential and indispensable precondition for sustainable orinteted dicision making and for the effetive impact assessment process connected. Our aims: to emphasize fundamental values, and methods which have key role in development of value system of sustainability.

Keywords: sustainable development, decision making, indicators, results, vitality

1. Introduction

These days, there is an increasing need to respect sustainability, and in essence, the term Green Economy underlines the environmental aspects of this need. At an international level, the above tendency is indicated especially in point 136 of the Plan of Implementation, World Summit on Sustainable Development, final version, 24 March 2003; and, if we want to use a Hungarian example, in expressing the need for a sustainability framework strategy and a regional set of values mentioned in the National Regional Development Concept.

According to Blowers, it is easy to refuse the concept of sustainable development with the explanation that it is too obscure and uncertain from the perspective of applicability (Blowers, 1993.). The term – in spite of the disputes on its definition and usability – is slowly becoming one of the core objectives of public policy at many places. The real challenge is caused by the incompatibility between the paradigms of really sustainable development and the currently functioning globalisation of the economy which is increasingly free from real competition. The situation is further aggravated, because current economy is basically profit oriented, while sustainability is based on values (Szilvácsku, 2003).

Presumably, the present (global) crisis situation is exactly about how we can replace the view which correlates development with competition and with the place occupied in competition. The essence of competition is relative advantage – whereas that of sustainability is liveable absolute life for all. It is high time to obtain the theoretical need to explore the „cooperative advantages" besides/in stead of „comparative advantages". The basic problem with the human factor lies also in the fact that the competitive world views human resources as factors to increase the added value, in stead of viewing them as Human Beings. Development is necessary to offer the individuals and the communities a worthy life (Gáspár, 2008).

2. Materials and Methods

Based on my experiences and the results of my researches I shall summarise those challenges which the person performing impact studies is confronted while exploring and enforcing the core values of sustainability. My objective is to stimulate thinking and discussion in order to promote, during the transition for sustainability, **the development of a value based and result motivated decision-making culture guaranteeing the accomplishment of the fullness of life** also via the impact studies.

Challenge 1: A central criteria to sustainability is guaranteeing the accomplishment of the fullness of life

In the course of the impact assessment practice, the expert is confronted with the different interpretation of the sustainability criteria, values. A number of studies discuss the criteria of sustainability assessments also including the environment, social and economic criteria. In its article, Gibson (2008) emphasises the problems of sustainability affecting the society and the biosphere, and proposes central criteria for the sustainability evaluations among which the social and ecological aspects have a fundamental dominance. Further I have formulated a proposal for the central criterion of sustainability, as well as its application potentials and framework conditions.

A number of decision theory and practice researches deal with considering sustainability aspects, the examination of the values however, enforced by the

participants and their development potentials are not in the focus of researches. The multi-coloured nature of the world of the decision-making is further intensified by the number of methods applied in decision-making as well as by the diversity, varied level of expertise and set of values of those taking part in decision-making.

In spite of a number of well-built up decision-making processes on development, developments that are not sustainable and are **pointing not into the direction of the evolution of life** are realised with different additional long-term and short-term negative impacts. The reason for the phenomenon of development decisions and processes strengthening the direction of non-sustainability have been defined by Donella Meadows[1] and colleagues as a philosophy of the Sustainability Institution established by them as follows: "*We believe that unsustainability does not arise out of ignorance, irrationality or greed. It is largely the collective consequence of rational, well-intended decisions made by people caught up in systems – ranging from families and communities to corporations, governments and economies – that make it difficult or impossible to act in ways that are fully responsible to all those affected in the present and to future generations.*"

Besides Donella[2], more and more have pointed out that **in the restructuring of the current system** (e.g., the economy or the government, the public administration) **and the processes in the direction of sustainability, the presumed or actual set of values held by the actors including the decision-makers plays a key role**.

The identification, recognition of the focal point, core value of the set of sustainability values is all the more an urging necessity as the enforcement of the impact studies' objective and potential is in essence not an issue of methodology but much more an institutional, personal and political challenge (Dalal-Clayton and Sadler, 2005; Szilvácsku, 2009). Methodology developments are necessary, but if we consider the different types of impact studies, especially with regard to SEA, we have been witnesses to an explosion of development in the past decade. In respect of an expedient application practice, agreement on the central value of sustainability is an elementary necessity, whose systemic and responsible enforcement may bring about the application of the impact studies to the necessary extent in the decision-making processes.

Two central questions emerge in relation with the development and enforcement of the set of sustainability values and value structure. The first question: what is the relationship between the economic, social and environmental values that serve as

[1] One of the researchers involved in the author group of the Limits of Growth and Word 3 analyses. The identification of the leverage points in the frame of system dynamics and system thinking have been tied to her name.

[2] Leverage Points (Places to Intervene in a System) by Donella Meadows, Sustainability Institute, 1999

the basis of sustainability. Second question: what methodological solutions promote the enforcement of the set of sustainability values in the different impact assessment and decision-making processes. Below I undertake to give a snapshot of some of the aspects of these two questions.

Regarding the first question, in respect of sustainable development, the primary aspect is guaranteeing the conditions of life. Guaranteeing the conditions of life means that the framework conditions to the accomplishment of full life must be ensured both in development as well as in sustenance. Life of full value is applicable to all humans and communities. In this approach, the central value is the human person, and all living things that serve the fullness of human life are considered a value[3]. This statement must be supplemented with three important comments. First: the values are qualities of things to be found on Earth, which make the life of human beings better accomplished. Second: the experienced reality of 'it is' does not always 'has to be' a moral value for the acting human being. Third: not only human beings have self-value. Nature also has self-value but human beings fulfil an outstanding role in the world. Man due to its capabilities is able to enrich the world of nature and prevent its destruction.

As a consequence of the above argumentation, **I propose that the lives of individuals and communities should be placed in the focal point of development, sustenance and operation**, the framework of which will be provided by the natural and artificially arranged environment, and/or the role of economy is defined as a tool to promote development. In this approach the **objective of development**: **is to guarantee** the accomplishment of **the fullness of life**, accomplish the existence and the vitality of living being of **persons and their communities** constituting the society (from families to professional and non-governmental communities). The objective is to promote the development of individuals and communities committed to the joint values, undertaking responsibility, increasing knowledge and culture-related assets, partaking there in by assisting (showing solidarity) and supporting each other, cooperating in challenges, able to stand hardship, fighting hard, having regeneration and load-bearing capacities and abilities.

3. Results and discussions

Challenge 2: The role of impact studies in enforcing the central values of sustainability

On reviewing the impact assessment studies carried out in Hungary and the neighbouring countries, in particular SEA (strategic environmental assessment), the endeavour to identify and enforce the core values of sustainability is quite

[3] Note: metaphysically speaking, it means extra being for the human being.

apparent. Our experiences show that the assessment aspects have been identified in an extremely high number in a number of groups (e.g., the SEA of "New Hungary" Rural Development Programme applied 32, while another SEA applied almost 20 evaluation criteria). Instead of the large number of criteria difficult to overview we recommend the exploration and adoption and systematic application of the sustainability core value as explained in the above point. With the development of the methodology carried out our intention was to support this endeavour.

The staff of Respect Company prepared for the environmental impact assessment (SEA) of the 13 development programmes elaborated for the period between 2007-2013 a so-called Strategic Assessment Methodological Scheme (SÉMA), which gives the opportunity for the strategic assessment of the different social and policy interventions from environmental and sustainability perspectives.

The SÉMA combines three models fundamental from the perspective of the environmental and other policies and programming:

- The DPSIR model,
- The three-pillar model of sustainable development,
- The model of output-result-effect indicators.

The basis of the SÉMA method is the Driving Force-Pressure-State-Impact-Response (DPSIR) model. The DPSIR model is based on the version of the PSR (Pressure-State-Response) model further developed by Anthony Friend (1970), which is also used by the OECD State of the Environment group.[4]

The assessment model developed within the SÉMA facilitates the combined and structured analyses of the actual situation, the objectives, the interventions and the related indicators from the perspective of the sustainability values and the environmental policy objectives.

In the outer circle of the model, we find those terminological areas which should promote the description of the environmental and/or sustainability problems and the definition of the types of interventions.

- The first terminological area is the Driving Forces. These are the economic and social tendencies and phenomena, which have direct impact on the ecological system (the ecological system of water) and on its elements, and which influence the decisions on the existence, operation and the conditions thereof of the systems and elements. These include, besides others, environmental consciousness, landscape attachment, individual set of values, consumption habits, competition, the need for economic growth, community existence, etc.);

[4] Eurostat (1999), Towards Environmental Pressure Indicators for the EU. European Communities, 2000, Luxembourg

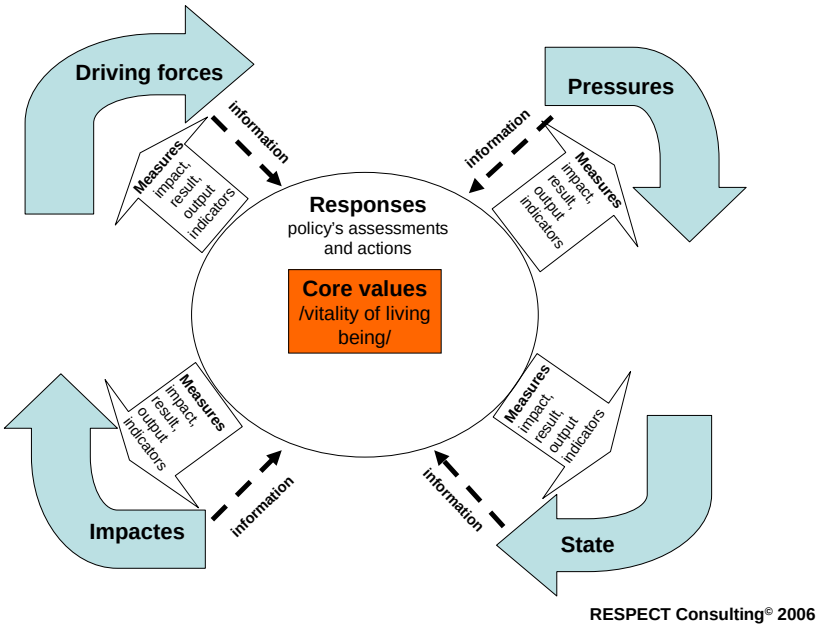

Figure 1: Value Centred Assessment Methodology of IA

- The second terminological area is the Pressure, namely those loads, those human activities, which have a direct impact on the environment (like, for example: CO2 emission, area occupancy, etc.);
- The third terminological area is the State, namely the observable changes in the status of the environment (like, for example: temperature change, quantity and quality of the available food resources, reduction of habitat contacts, etc.);
- The fourth terminological area is the Impacts, the impact of the altered environmental status on the elements of the environment, on the living systems, and on human population (like, for example, changes in the health status of people, reduction of the number of species, etc.).

The actual environment and the sustainability situation can be described in a comprehensive and logically coherent, structured manner with the use of the above terminological areas, and if the method is applied adequately, the environmental changes, together with their causes and consequences in time (from the perspective of the trends and processes) can also be presented and analysed.

In the inner circle of the SÉMA model we find the different policy responses, by which we understand the complexity of all those social interventions which result in changes in any of the presented terminological areas. These include the

priorities and interventions worded in the operational programmes. The planned interventions can be categorised into categories A,B,C and D, in the function of their target areas, depending on what level they treat the problem in question (for example: the programmes for the elimination of damages fall into category C interventions, as they aim at directly changing the environmental status).

The SÉMA model can be very well applied in analysing the impacts of the different plans, programmes and policies. The nature of the planned objectives and priorities can be identified very well with one of the intervention types and offers the investigation of the interventions in their correlations.

The interventions defined within the framework of the responses can be evaluated on the basis of the sustainability principles and set of values. In this case, the question is the following: the implementation of which sustainability principle is supported by the given intervention and if it supports it at all? **I recommend that the assessments focusing on the core value of vitality of living being to be introduced in the impact assessment practice.**

Indicators are attached to the objectives to be realised and enforced in the responses, and they measure implementation at three levels:

- The first is the level of output indicators
- The second is the level of result indicators
- The third is the level of impact indicators

The application of the proposed approach can only lead to success if they have up-to-date information on the actual quality of life of humans, species, ecosystems and that of the landscape as the space for living. This information can be stored and served through different databases and collected and assessed in the course of monitoring and follow-up measures. These are extremely important base data for impact assessment studies, which are often not available because of the incompatibility of the different database structures or due to lack of data.

To offer a solution for these potential problems, a project was launched in Hungary in 2009 titled **Cadastration of Cultural Landscape Heritage for the Implementation of the European Landscape Convention in Hungary and the Development of a Landscape Character Assessment Methodology**, which creates the foundations for the online contact and the cooperation of database administrators of a schematic database containing all landscape values, as a result of which a broad scale institutional and web2 technology based social participation and service focused information flow can be implemented.

One of the objectives of the project is to serve as an example for other information collection and service cooperation arrangements on the state of human life and ecosystems and the quality of vitality of living beings.

4. Conclusion

In the practice of impact assessments with regard to different types of programmes, plans and policies that I have reviewed, a high level of uncertainty can be sensed with respect to the set of values of sustainability and a lack of commitment and responsibility can be experienced on the side of the decision-makers and participants.

In the frame of the development decisions and implementation processes it is important to develop and spread methods that can be applied to raise the awareness and consideration of values regarded as important ones by the different participants and decision-makers. In order to create the foundations of the sustainability and other impact studies and the set of values of sustainable spatial development we need researches and cooperation where in the focal point of the set of values **the accomplishment of personal and community life** is placed.

I recommend that in the course of the impact assessment and decision-making processes carried out in the framework of governmental and public services the enforcement of **the accomplishment of personal and community life and its exposure to threats should be placed in the focal point.**

By building upon the experiences of results-based management, participation-based planning and impact assessment practice accumulated in a number of countries, e.g., in Canada, and Japan, I call for a cooperation in which the vitality of living being is in the centre and which creates the foundation of a multi-coloured and innovative development and sustenance culture on regional, national and international level alike. Its logical model is shown by the following figure:

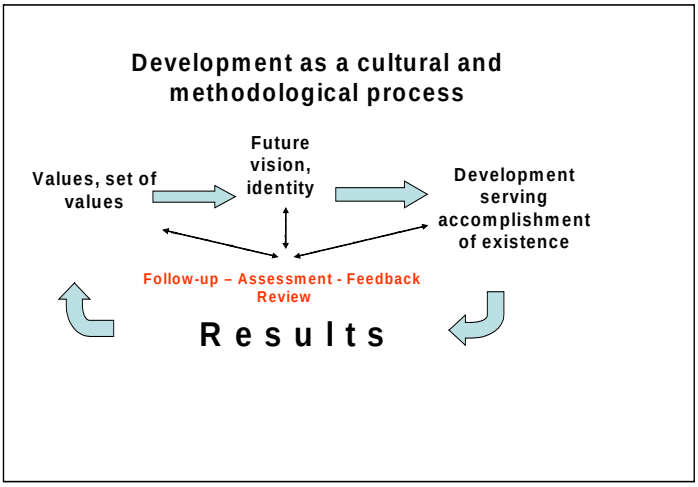

Figure 2: Development as a cultural and methodological process

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