

Drago Kos

The Methodology of the Development Scenario

In first part the text presents and comments construction of scenarios as useful methodology to simulate social development. The quality of the methodology is its interdisciplinarity, even transdisciplinarity, which make possible to incorporate rather extensive number of different data and concepts from different expert disciplines. The basic constraint is however the danger of too big reduction of social complexity, as the consequence of intention to construct relatively simple and comprehensive picture of the future society. In the second part four prototypes scenarios of (spatial) development in Slovenia are presented: "scenario of inertia", "premodern", "modern" and "postmodern" scenario. With concrete examples the stimulative interdisciplinary debate on future social and spatial development is proposed.

Bojan Radej

Profitability and Sustainable Development

As a result of frequent lack of integration of profitable investment and non-profitable (social and human) effects, Solow (1986) expressed the need for a sustainable maintenance of development opportunities, which is understood in terms of maintaining the ability to bridge the gap between the needs and resources at all times (Robinson, 1932). This request has only been met in the case of profitable effects of profitable investment because the right to compensate for opportunity losses has only been granted to investment (Hayek, 1992). Hence, we are trying to test the following thesis: as long as profitable resources are managed as relatively rare, investment involving non-profitable resources should be treated as capital. The capitalisation of non-profitable resources does not require their submission to the motive of profit if we first do away with the reductionist view of the bridging problem. Foucault transcends the antagonistic treatment of problems by causal multiplication (Burchell et al., 1991), which identifies a substantive rationality (Weber, 1968) for survival efforts. The discovery of survival-based differences resolves the antagonism of allocation alternatives, while agonising concrete alternatives at the same time. The agony is the result of a mutual challenge resulting from verification of the self-control of investment preferences, which strives for the expansion of the opportunity horizon (integration). By resolving the antagonism, the alternatives may become consistent, that is rational and democratic at the same time (Arrow, 1994). This is why the developmental role of the state and citizens should change: (i) the state should abstain from intervening in the choice and should only ensure the consistency of negotiations, process arbitration, and should train citizens to realise their preferences; (ii) negotiations should become multi-level and differentiated; the incompatible preferences should be excluded first, then the least integrated and finally the least Pareto efficient; (iii) differentiated bridging styles should be identified and then instituted as the basic human economic right.

Anthony Zamparutti

FDI and the Environment in Developing Countries: a Brief Note on the Policy Dilemmas of Globalisation

Over the past two decades foreign direct investment (FDI) flowing to developing countries has increased greatly. This aspect of economic globalisation raises concerns for environmental quality and sustainable development. A review of data and case studies suggests that FDI has not created a simple pattern of either negative or positive environmental effects in developing countries. In the complex pattern that is emerging, prominent FDI projects in the natural resources sector have created significant (and potentially irreversible) damage. Recent projects in the manufacturing sector indicate, however, that in the right circumstances FDI can play a positive environmental role. Yet, one key factor - environmental governance in developing countries - appears to face a significant "implementation gap". This gap, which reflects global patterns, is a serious problem for sustainable development. In the current world political context, however, efforts to improve governance at the global level are encountering significant obstacles.

Renata Slabe Erker

Environmental Sustainability Index Methodology of the World Economic Forum and Results of its first Evaluation

This paper presents the methodology of the Environmental Sustainability Index (OTI) in order to help formulate tools necessary to assess environmental development and the implementation gap. The paper gives the main results of benchmarking, SWOT analysis, and analysis of the OTI dynamics for Slovenia. In terms of OTI, Slovenia is ranked 24th among 122 countries, or 15th in the narrow sample of 25 reference countries (the EU, applicant countries, the USA, Croatia and Macedonia). Slovenia's place is the result of seven non-sustainable indicators out of twenty-two which, taken together, reveal a poor response of the state to environmental problems. Slovenia achieved high values in indicators that show social and environmental aspects of development and the importance of science and technology. A comparison of OTI between 2002 and 2001, when it was first assessed, shows that Slovenia's score improved by 3.47 percentage points (out of the maximum of 18.97) and that it drew closer to the maximum score by 6.59 percentage points. Hence, environmental sustainability improved in Slovenia in 2002. A comparison of the rank in the policy indicator (16th place out of 25) and rank in the state of the environment indicator (11th place) shows that Slovenia is losing its potential for environmental development. The assessed improvement is much too modest to be able to call Slovenia's economic development environmentally balanced.

Viktor Grilc, Mirko Lesnjak

"Cleaner Production" - Approach towards Sustainable Development in Industry

A review of alternative approaches to industrial sustainable development is presented, from the early end-of-pipe actions, towards separate collection of waste streams, recovery and recycling, and finally the most preventive approach at the source, with ultimate goal of zero waste/zero emission production. The regulatory and motivation instruments are shown, aiming the technical development and subsequent economic optimisation of production processes, that contribute to industrial sustainability. Some experience on proactive introduction of environmental management systems by means of Cleaner Production into Slovene industrial environment is also presented.

Roland Clift

An Introduction to Life Cycle Assessment

This paper gives an introduction to Life Cycle Assessment (LCA) and some of its principal applications. LCA is one of the quantitative tools for examining the environmental performance of economic activities which together form the emerging field of Environmental System Analysis. The particular characteristic of LCA is that it examines the complete supply chain leading to a service or function, from primary raw materials to waste management or recycling. LCA is also sometimes known as "cradle-to-grave" analysis. Resource usage, emissions and wastes are evaluated for the whole supply chain in the phase known as Inventory Analysis. Life Cycle Impact Assessment then interprets the inventory in terms of its potential environmental impacts. LCA has been used to improve the environmental performance of products. Extended Producer Responsibility acts as a further incentive for using LCA to design products for management at the end of their service lives. LCA is firmly embedded in the EU's environmental policy, for example through Integrated Product Policy (IPP) and Environmental Product Declarations (EPDs).

Erika Oblak

Packaging Waste Managing and Approaching to EU

In the upcoming years Slovenia will set up a system of managing packaging waste in line with the goals laid down in Directive 94/62/EC. The system will fully incorporate the EU's goals; however, preventive measures, the establishment of a circular flow of materials (recycling), and the principle of the producer's responsibility as the most progressive way of resolving this environmental problem are still waiting to be properly implemented in Slovenia. Namely, the current system is conceived

merely as a curative system and is only intended to meet the minimum level of the EU standards. This lack of ambition may lead us to believe that this stance of environmental policy already implies the particular technology of managing waste by incineration. This is a conventional and centralised large-scale technology, however, it has revealed two major weaknesses after having been used for decades in EU members: unacceptability from the environmental point of view due to the emission of accumulative carcinogens, and a low level of business attractiveness due to higher capital costs compared to the technologically less intensive systems of separated collection and recycling. This article aims to propose an alternative solution by examining the experience of other countries, that is an ambitious system of the separated collection of packaging waste.