Marjan Ravbar

Governance of sustainable settlement development - trends, conceptions and urban management as instruments of settlement governance

As in most of Europe, built-up land in Slovenia has been expanding steadily for decades while the area of land of other categories (particularly of cultivated land) has been contracting. The development of settlements is largely linked to the changing lifestyles of the population. The expansion of built-up land has been underpinned by the rising level of social welfare and the related technological, economic and social changes. The end of industrialisation and the rapid transition to post-industrial societies at the turn of the 20th century are reflected in the rapid development of (post-)urban structures in lowland areas spreading towards suburbia, indicating the development direction of economically and socially developing areas based on structural changes, the fall in employment, and the social and geographical transformation of cities. Slovenia is facing the end of demographic growth in cities, which is being superseded by 'urban development without growth', characterised by the spatial sprawl of urban influences into the suburbs and the inner transformation of cities.

'Suburbanisation' is another term for urban sprawl, which has been used more widely in Slovenian planning literature so far. The standard definition of the term denotes the spatial expansion of towns and urban lifestyles. Within that, we can differentiate between three aspects of this notion: (1) physiognomic suburbanisation, which refers to the dispersion of settlement types, the spread of urban ways of living and changes in the use of land; (2) functional suburbanisation, which is the result of deconcentration trends of urban functions whereby new types of urban production are sprawling into the countryside alongside the expansion of residential areas and the creation of new business, communication and information networks; and (3) social suburbanisation, referring to the process in which suburbs are adopting urban standards and values as well as consumer habits and behavioural patterns characteristic of urban households.

Numerous problems related to the dispersion of economic activities when putting development concepts into practice have prompted increasingly vociferous requests for the creation of project-oriented instruments. The growing relocation of the population, wasteful use of land and increased use of energy contradict the principles of sustainable development and the use of natural resources. It is also essential to identify problems and look for modern methods and instruments to enhance the attractiveness of areas vital for the future settlement development as encoded by new concepts, such as urban management and/or urban marketing. By applying these new instruments, the relatively abstract objectives set out in spatial and development programmes can be made concrete and the developmental aspirations of the bodies responsible can be elaborated with a consensual and environmentally balanced approach. To make plans more concrete, it will also be necessary to provide more detailed information and ensure that the relevant stakeholders have access to it. How successful Slovenia can be in achieving these goals depends on its level of transferring ideas into practice. Urban management/marketing may therefore prove useful in implementing the objectives of spatial development.

Key words: urban geography, settlement, urbanisation, suburbanisation, urban sprawl, urban management

David Bole

The role of cities in Slovenia's strategic development documents

Cities are the cores of economic, social and cultural activities - planning their future development is therefore crucial and is entwined with economic and spatial planning. Globalization is setting up new spatial and developmental challenges. In this sense it is similar to centralisation, a phenomenon which is destroying the balance in urban systems. Most important strategic documents about the future urban development system cite polycentricity and the development of endogenous potentials.

Since we believe that the aforementioned concepts are not fully defined and that they are often used misleadingly, we suggest some new ideas. Most importantly we seek to highlight the proposition that any further development should integrate all economic, social and cultural factors while at the same time guaranteeing democratisation and sustainable spatial development.

Key words: city, globalization, urban development, polycentrism, city region, strategy, regionalization, Slovenia

Metka Špes

Landscape sensitivity of urban ecosystems in Slovenia

The fundamental principle of sustainability is the maintenance of dynamic equilibrium or ecosystemic stability. This allows for the self-renewal of natural systems even in the face of short-term external impacts (shocks). All natural or predominantly natural ecosystems tend towards long-term stability and have the capacity to adapt to external impacts by absorbing or neutralizing them and creating a new equilibrium. The maintenance of ecosystemic stability is most challenging in urban ecosystems, where nowadays more than half of the population of Slovenia lives. There are large regional differences among these urban ecosystems, as is characteristic of the Slovenian landscape diversity, but for all of them, landscape sensitivity represents a serious constraint on sustainable development in the future. The Slovenian urban ecosystems with the largest urban population are adversely located in landscapes which, by virtue of their ecological type, have a high natural sensitivity or lower self-cleaning capacity for their landscape components.

Key words: sustainable development, landscape sensitivity, landscape-ecological types, urban ecosystems

Renata Slabe Erker

Development of eco-industries in Slovenia

For the EU member states in general, eco-industries form one of the most rapidly growing sectors, creating welfare in a sustainable manner. What kind of benefits environmental protection in Slovenia has had and will have will depend upon the path and strategy chosen for this environmental protection. The article compares the IER research of eco-industries sector in the year 2003/2004 with the REC research in 1997. The findings shed light on the development of the sector in the last few years and on its relative position/development compared with the other new EU member states. The results indicate that eco-industries in Slovenia have a long-term perspective, and that it would therefore be reasonable to support them by providing incentives for strengthening their development.

Key words: eco-industries, environmental revenue, environmental employment, environmental export

Dušan Plut

Slovenia's environmental capital and sustainable development strategy

Due to the exceptional geographical diversity, the mosaic-like landscape structure and the geological youth of the territory it comprises, Slovenia has at its disposal limited, modest supplies of non-renewable resources (especially fossil fuel) and diverse renewable resources as well as a great biotic diversity. A study of the aerial availability of the key natural resources shows that various natural resources are present in the Slovene regions. We assessed these resources as a strategic competitive priority of Slovenia and an important factor in the accordant regional development and the improvement of the quality of life.

From a two-layered point of view, that is, with regard to the planned rise in competitive position and the quality of life (more narrowly - the quality of the environment in the period till 2013), the following components of environment capital stand out in their quantity and/or quality in Slovenia:

- 1. various water sources water supply, energy and tourist recreational function;
- 2. biomass, especially timber industrial, energy and settlement function;
- 3. geothermal energy energy and tourist-health function;
- 4. land for acquiring high quality healthy food agricultural, ecosystem and settlement function;
- 5. genuine landscapes recreation and outdoor tourism function;
- 6. biotic diversity ecosystem, cultural and recreational-tourist function;
- 7. lignite energy, partly geopolitical (reduction of import dependence) function.

The quantitative and qualitative balance of the renewable resources and their technological, economic and environmental evaluation underline their (limited) potential for high-quality, raw-material and energy-efficient economic development and simultaneously the exceptional role played by the protection of these resources and their ecosystemically reasonable use in preserving and improving the quality of living or (broader) life in general. Slovenia and its regions form a regionally tessellated territory (natural-geographic, social-geographic, landscape-ecological and developmental). Sustainable and optimal consumption of the environmental capital can therefore only be achieved through the appraisal of the economic, social and environmental influences of all the planned uses of separate resources in the environment in specific regions.

Key words: environmental resources, renewable natural resources, sustainable development, Slovenia

Nataša Ravbar

Management of karst water sources and attitude towards drinking water

Since the mid 1980s, a growing number of business people, policy makers and researchers have recognized the importance of international competitiveness for fostering economic growth and improving living standards. Rapid technological change, increasing mobility of productive resources and the growing structural problems of industrialized economies have called into question the validity of traditional economic theories. The economic prosperity of countries hinges on their ability to generate or attract economic activities which increase the population's living standards Slovenia's ability to catch-up with the EU countries in terms of welfare and economic growth is associated with the application of new technology and knowledge and with the creation of a sustainable economy.

Key words: karst water sources vulnerability, protection of karst aquifers, water sources management, attitude towards drinking water, drinking water consumption

Mateja Breg, Mimi Urbanc

Gravel pits and dilemmas surrounding the (un)sustainable development of flood plain areas

We place the environmentally problematic Jarški Prod area in the theoretical framework of sustainable development and expose gravel pits and illegal dumpsites as factors that threaten natural resources and the health of the population and reduce the quality of life. A basic feature of modern society is the great use of material and energy (natural resources) and growing amounts of waste, the consequence of unbalanced production and consumption in the urban ecosystem. Dealing with waste is a critical element of sustainable development, since it greatly influences the management of natural resources and the quality of the environment. A sustainable and enduring solution to the problem of waste is possible only in harmony with the natural cycle (natural resourcewaste-natural resource). In the future, it will be necessary above all to reduce the amount of deposited waste, where we encounter the unresolved problem of illegal dumping that among other things leaves a burden on the environment, frequently concentrated in abandoned gravel pits.

The flood plain area of Jarški Prod contains numerous natural resources, three of which we consider in this context: water, space, and mineral raw materials. The web of beneficial and damaging natural and social features have today made Jarški Prod-which due to its function as a source of drinking water is strictly protected-a degraded flood plain area. Gravel pits, as an anthropogenic element of the landscape, play a leading role in the landscape's degradation, since three quarters of the waste deposited in the Jarški Prod area is concentrated in abandoned gravel pits. Using a selection of geographical methods, we studied the occurrence of gravel pits from the end of the 1950's to the present day and evaluated the influence of deposited waste on the groundwater. We also studied several more or less environmentally friendly methods of cleaning up abandoned gravel pits in the framework of the sustainable development of degraded flood plain areas.

Key words: flood plain, natural resources, gravel pits, sustainable development, illegal dumpsites

Blaž Komac, Matija Zorn

Geomorphological hazards and sustainable development

In the last few years, many natural disasters have hit Slovenia following periods of heavy rainfall. Several landslips and landslides were triggered, revealing the need for a spatial planning instrument to ensure safe development of land . A law on landslide risk maps exists in Slovenia but it is not adequately implemented, even though one of the main tasks of spatial planning is the assurance of the security of inhabitants. The methodology for elaborating maps of landslide risk is just being prepared. An open question is the availability of funds for its implementation, which will probably occur in 2006. Risk maps cost at least several million tolars each, which, although expensive, is still cheap when compared with the cost of reconstruction.

Key words: geomorphology, spatial planning, natural disaster, landslide, Slovenia

Franc Petek

Correlations between the changes in land use and social processes - case study of the Julian Alps
The paper provides a simple graphical representation of the correlations between the changes in
land use and changes in social and geographical circumstances using the example of the Slovenian
Alps, which, despite regional differences, partly reflect the processes that have taken place in the
Slovenian regions over the last two centuries. The simple graphical presentation in the form of a
timeline is based on a series of data sources and statistical analyses (correlation measures,
hierarchical classification into groups and factor analysis). The interrelations between the processes

Key words: land use, changes in land use, social and geographical factors, correlations, Alpine landscapes, Slovenia

Janez Nared

Tourism as an instrument for sustainable regional development

represented in the graph are expressed as accurately as possible.

Tourism is one of the most important economic activities on a global, European and national level. It offers many opportunities for sustainable development, which can be seen in the development of the local and national economy and in the improvement of supply in individual tourist regions. Tourism represents an important strategy for regional development as long as it considers natural conditions and values of the population living in a specific area. In this manner tourism can assure survival of the local population and preserves a harmonic balance between society and nature, which is the only guaranty for the quality of life.

Key words: tourism, sustainable development, regional development, Slovenia, protected areas, economic geography

Staša Mesec

Implementation of structural funds in Slovenia from the perspective of sustainable development - first experience

Sustainable development is a very important horizontal priority in structural policy of the European Union. This means that supported development activities should focus on the principles of sustainable development. However, it is not always easy to define whether a supported activity is or is not sustainable. The article describes the aims of sustainable development within the Single Programming Document in Slovenia and how to define criteria of sustainability at the project ex-ante or ex-post evaluation. First experience in project implementation in the context of sustainable development will be given.

Key words: regional development, sustainable development, structural funds, Slovenia, European Union, horizontal priorities, environment, geography