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A. Cieszewska (red.) Płaty i korytarze jako elementy struktury krajobrazu – możliwości i ograniczenia koncepcji, 2004, Problemy Ekologii Krajobrazu tom XIV, Warszawa

## **MAIN ASPECTS OF PATCHES AND CORRIDORS CONCEPT IN SPATIAL PLANNING OF MACEDONIA**

### **Introduction**

The concept of patches and corridors is not in practice in the spatial and urban planning activities in the Republic of Macedonia. An attempt is made to recognize the of this concept in the planning experiences on large, mezzo and micro scale that could be of interest concerning the physical and very mosaic landscape structure in Macedonia and the rich planning experience.

### **The Physical and Landscape Context**

The Republic of Macedonia is situated in the central part of the Balkan Peninsula. The total are of the country is 25.713 km<sup>2</sup>. The highest peak is Golem Korab on the 2764m.

The physical structure is complex, with varied relief and all of the nature features too. It is conducted of high mountains and broad and deep valleys that form almost mosaic pattern. Rich and diversified ecosystems, habitats, flora and fauna can be found. For example there are over 3700 floral species registered with over 120 of them being endemic. Although fauna still is not fully investigated, there are over 674 endemic species. Those facts are the reason why the Country is joining the "European Hotspots". The landscapes also are diversified. Some of them are natural in high degree, but in some areas landscapes are the real representatives of cultural landscape types with an obvious balance between the nature and man and are important for conservation different environmental qualities.

Above 2 million inhabitants live in 1632 settlements. On macro scale it is evident that there are no big or strong conflicts between the areas and landscapes of important qualities and values and human activities. They exist almost parallel to each other. Making an attempt to enlighten those aspects, spatial planning activities have defined a methodology suitable for the area of land management and strategic decision making for the comprehensive development.

The spatial plan is the most important strategic document for the comprehensive development of the country especially focused on land use and environmental protection. In the article, the experience of the most important methodological principals for the biodiversity patterns and sustain natural processes is briefly presented for several scales of spatial and urban planning.

### **The Spatial Plan of the Country**

In the Republic of Macedonia the planning activities are developing since 1969 since when broad activities take part processing spatial plans for the country (the last one is accepted on the Government in October, 2003), for many regions, national parks and communities.

In the planning process landscapes are seen as main ecological and territorial unites. They are analyzed and evaluated according their potentials and constraints. They are evaluated as important environmental element and the main spatial pattern. Involving the landscape structure in the process of investigation and decision making was created the bridge among nature and man. Being aware of many consequences produced by human activities, the goals of the spatial plans were not turned toward the possibility of development of the society only but also they include the goals connected with the nature balance and protection. Namely the most important of them were habitat fragmentation, loss of species and habitats, land transformation and so on.

On the macro scale – for the spatial plan of the country- a very powerful instrument was the ecological net. It was created from the existing knowledge on species, populations and habitat values and locations. It was designed as a net of cores, tampon zones and corridors and it included not only the important areas for nature protection but also refugees, migratory paths, and other elements suggested with the methodology for designing the PEEN for Central and Eastern Europe.

This concept and net was the main basis for the creation of all the other concepts for future land use and development.

On the maps (Fig. 1., 2.) are shown: the ecological network, the system of environmental protection.

*Main problems: lack of mechanisms and instruments to realize the planning solutions, inconsistent further elaboration of the strategic determinations especially on the lower scale.*

### **Regional Spatial Plans**

Different elements that show the development of the concept of patches matrix and corridors were used in two different regions.

In the Spatial Plan for Ohrid – Prespa Region the concept of future tourist development was based on the information of the importance of the littoral zone on the both lakeshores. Therefore the proposed tourist zones are located as clusters in the less important (valuable) areas (Fig. 3.: Plan for the future organization and land use management of the National park “Galicica”)

In the other region, which is the greatest water supply area in the Country the main criteria for the determination of the future development was the assessment of the sensibility of the underground water baseness (the threat of the possible pollution of the underground waters). This is how a large area was treated as matrix of the landscapes where the geological structure and characteristics are the dominant element .

*Main problems: lack of instruments for the implementation of the planning solutions, lack of public understanding of the problems and therefore insufficient support of the planning decisions, insufficient skill of the local government, involvement of local political parties and conflict of interest.*

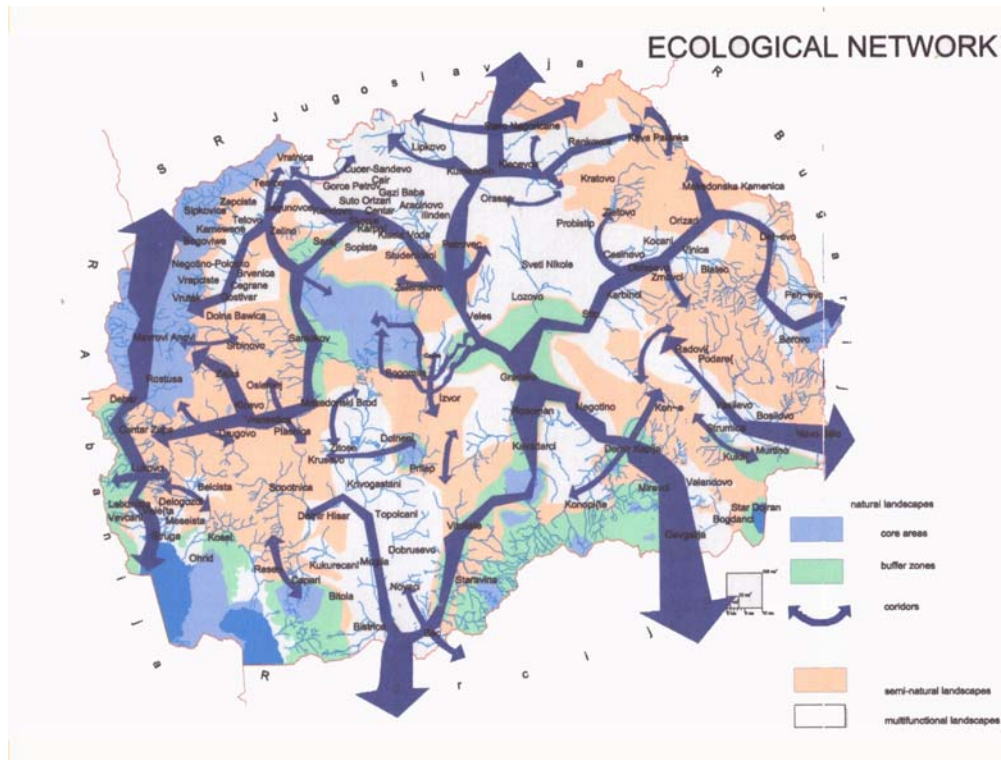


Fig 1. Ecological Network of Macedonia Republic

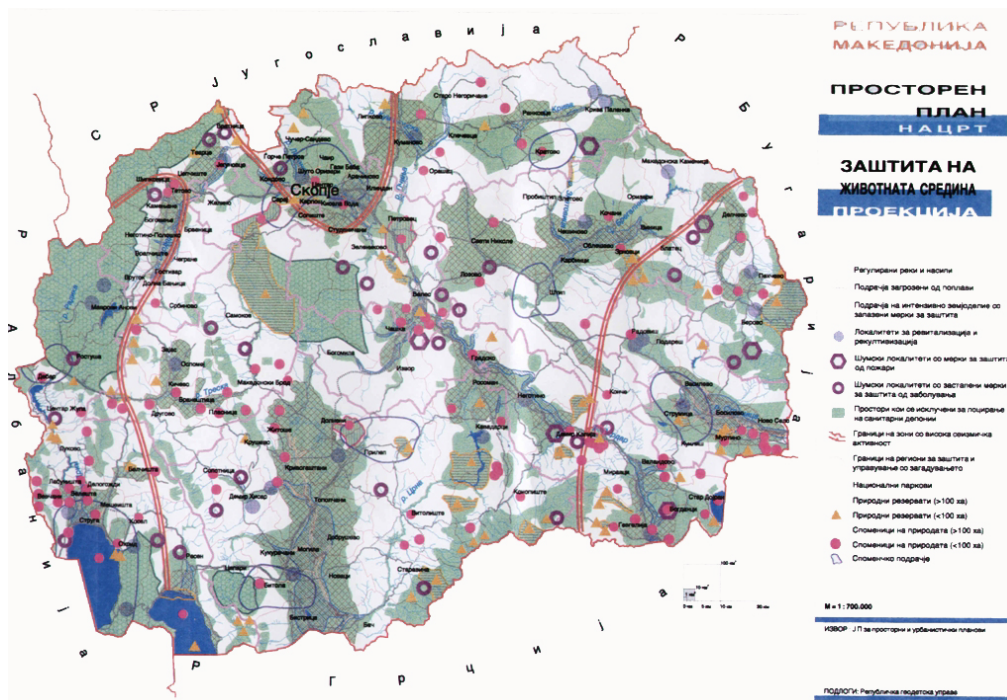


Fig 2. The system of environmental protection of Macedonia Republic

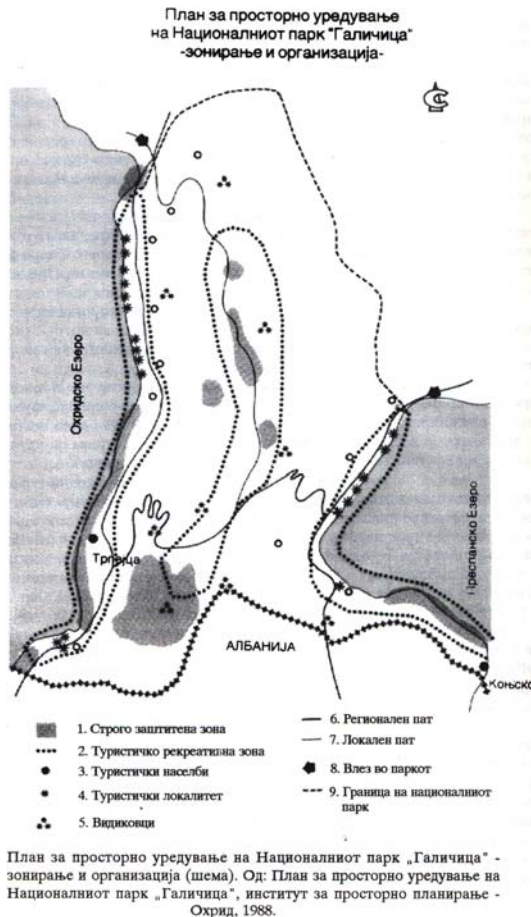


Fig 3. Plan for the future organization and land use management of the National park "Galicica"

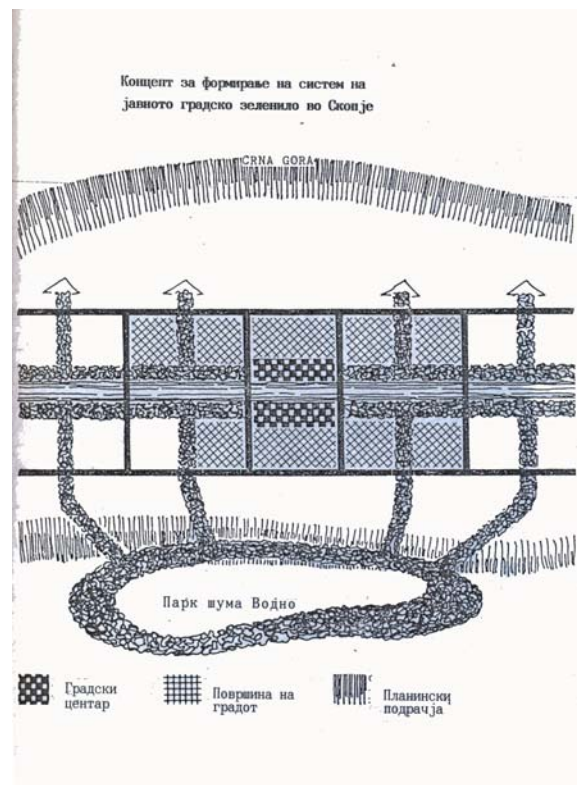


Fig.4. Design concept for the system of green areas of Skopje

In the urban area of the capital of the Republic, Skopje, a concept of system of open and green areas were created as a part of the Master Plan of the City. It is a net of interconnected system of linear and green belt paths, green areas down the river, cores of parks and matrix of natural parks in the suburban area.

As an interesting micro scale example an urban plan of the community in Skopje can be analyzed. Here, the core area (a community park) was designed in the middle of the community and green belts were created as connections (corridors) with the river nature area and the park (Fig. 4. : Urban plan for the community).

*Main problems: the land designed for open green area has not been realized in all parts of the city, in the transition period an intensive attack on the open areas happened, it happens that some of them are changed into building areas, lack of knowledge in the local community stuffs, lack of instruments for long lasting protection of the open and green areas, lack of instruments to involve the professionals and the citizens into the decision making process.*