

6 SUMMARY

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The most important contribution of physical geography to the development of landscape ecology in Slovakia was the elaboration of the problem of holistic approach to the landscape, use of geographical paradigms and geographical thinking in general in landscape ecology and environmental planning and philosophical basis of landscape ecology as the science that studies the relationship of human to the environment. The above quoted paradigms, capacities and methodological parts of physical geography have contributed essentially to the basic framework of landscape ecological theory and its conceptual basis, and together with paradigms, approaches and knowledge of ecology and other sciences constitute in final integration the landscape-ecological theory and methodology

The other contribution of the Slovak geography to the development of landscape ecology was strengthening of its position in the system of sciences in Slovakia. The capacity of physical geography to participate efficiently in interdisciplinary landscape-ecological research programmes has been also strengthened and so was the environmental mission of landscape ecology and synthesis in sciences. Very important contribution of physical geography was the application of the environmentally formulated concept of landscape potential is especially topical now when the basic criterion for the governance of the society is the issue of sustainability (the unity of environmental, social and economic dimensions of the development). It also is one of the imperatives contained in the *National Strategy of Sustainable Development of the SR* and its *Action Plan*.

The contribution of land use study to the development of landscape ecology in Slovakia at its metascientific, theoretical-methodical and applied levels is the fact that land use learning represents an important geographic subdiscipline which unites the human-geographic and physical-geographic entities and simultaneously is a relevant theme of regional geography. This geographic duality also finds efficient application in landscape ecology because the land use study implements the integrated geographic approach to the landscape-ecological research particularly in monitoring the landscape structure and its changes in analysis of the relationship between the ecological landscape potential and its economic use and in landscape-ecological planning. Meanwhile, it became obvious that individual land use categories as principal research themes of land use learning integrate spacio-temporal properties, rational and irrational forces which act in their spatial distribution and arrangement in the cultural landscape but simultaneously its corresponding dimensions and signs. Apart from that, it also became obvious that land use learning and landscape ecology classify among crosscut and integrating scientific disciplines that can in common action can contribute to the solution of the contemporary key social paradigm in form of sustainable development of the society and the environment.

The meta-landscape ecology as a newly forming scientific landscape-ecological subdiscipline contributed to the development of theory, methodology, empiric exploration, application and didactics of landscape ecology in Slovakia at two levels:

a) At an internal level in the framework of landscape ecology - it relieved the theoretical landscape ecology from its metascientific superstructure so that it can focus on elaboration

of theoretical aspects of landscape ecology, i.e. generalization of knowledge obtained by empirical and applied ecological research of the landscape. Besides, meta-landscape ecology forms by means of metatheory, methodology, metalanguage and metadata a certain metascientific framework for the development of methodical, empiric, applied and didactic landscape ecology.

b) At an external level, meta-landscape ecology acts as a mediator or "speaker" of landscape ecology in establishing contacts with other scientific disciplines necessary for cooperation and participation of other scientific disciplines in solution of crosscut issues such as sustainable socio-economic development of the society maintaining the ecological-environmental potential of the environment and landscape as its part.

Based on above quoted remarks, it is possible to say that the contribution of landscape ecology to the development of meta-landscape ecology in Slovakia lies in enrichment of its metatheoretical and methodological spectre by new theoretical-methodological approaches of basic and applied landscape ecological research.