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## THE HISTORY OF LANDSCAPE ECOLOGY IN CENTRAL EUROPE

In former Czechoslovakia conditions were created for the foundation of interdisciplinary centers devoted to the ecological problems at the level of the landscape representing a set of ecosystems. The Slovak Academy of Sciences organized in the years 1967 - 2003 thirteen triennial meetings of scientists coming from countries with different social systems and various continents. The started symposia were like a bridge between the East and the West. The symposia fulfilled also the role to kindle an interest about development of landscape ecology in the world science. It confirmed the rise of International Association for Landscape Ecology (IALE). On the 4th International Ecological Congress INTECOL in U.S.A. in 1986 too, where was received an acknowledgement to landscape ecology as ecological discipline. The tradition of international symposia played an important role at the enhancement of international contacts supporting the research of the landscape ecology in many European countries. The establishment of IALE was realized on the VIth International Symposium on Problems of Landscape Ecological Research held in 1982. The fact that the establishment of the International Association of the Landscape ecologists took place in Czechoslovakia was an honor to the Slovak science and research, which laid the foundations to the development of international cooperation in this area.

### History

All of the European states efforted, after the end of second war, for removing the consequences of the war events and to renew the land. In the former Czechoslovakia begin the intensive development of the economical basis of heavy metal and chemical industry, building of manufacturing and dwelling areas. After incomplete twenty years, the negative incidence on environment, especially on nature and mankind, begin to express in exceedingly. The local problem grows gradually to regional level and following they were identified as a global problem for the state territory. The government search for solving to stop and remove this negative incidence. For the science it come the handy, to show the way for solving the environmental problems. This created the conditions for carrying the ecological point of views to solve problems of environmental quality.

This reality gave conditions for the foundation of interdisciplinary centers devoted to the ecological problems at the landscape level representing a set of ecosystems. The Slovak Academy of Sciences organized thirteen (1967-2003) triennial meetings of scientists coming from countries with different social systems and various continents. These symposia were like a bridge between the world in the East an West, and fulfilled also a role to kindle an interest about development of landscape ecology in the world science. It confirmed the rise of IALE and 4th International Ecological Congress INTECOL in U.S.A. in 1986 too, where was received an acknowledgement to landscape ecology as ecological discipline. The tradition of international symposia played an important role at the enhancement of international contacts supporting the research of the landscape ecology in many European countries.

Landscape planning on ecological principles is a world wide problem. It appears as one of the most serious directions of the landscape ecological research, which is developing under the influence of requirements and needs

of the development of society and increasing problems in the interaction between man and nature.

### Conditions for development of landscape ecology

The international research in this direction and the cooperation are developing within the framework of the system of international nongovernmental and international programmes. First of all it is the cooperation organized by UNO programme for environment (UNEP), and in the programme of UNESCO - Man and Biosphere. The question of the promotion of cultural countries was involved in the programme of the project of the International Union for Conservation of Nature (IUCN). The International Association for Landscape Ecology (IALE) is focused on the problems of the ecological planning. IALE was established in 1982 in the CSSR at the VIth International Symposium on the Problems of the Ecological Research of Landscape as a result of a long-term Slovak activity in this field. Effort of the Slovak scientists was aimed at strict application of the ecological point of view as for the solution of the questions of a relationship between man and landscape. In the centre of attention there are natural laws, man and all organisms living in the landscape. The method of the landscape ecological planning is a specifically Slovak approach to the solution of these questions.

Landscape ecological research methods, oriented on territorial planning, developed in Slovakia on his separate original way. The scientific technical cooperation of the Council of Mutual Economic Cooperation (CMEA) countries on the programme Protection of ecosystems and landscape give the possibility confront these methods with the methods in other countries. The East Germany scientist approach was very near to conception elaborated in Slovakia. The begin of landscape ecological research in East Germany, former Soviet Union and Poland was developed on geographical institutes, whereas the former



CSSR was biological and ecological profiled. These institutes, from 1972 to 1990 take part on collaboration in CMEA programme. The representatives of different national landscape ecological schools have each other respected but without evident interaction.

In the other countries involved in CMEA cooperation on the programme Protection of ecosystems and landscape developed the landscape ecological research till under the influence of this cooperation. In the Hungary, Bulgaria, Romania and Yugoslavia was successive originated institutions landscape ecological directed, expressive oriented on nature protection.

The contact of the Central and Eastern European countries with the West European countries was not so intensive on account of political situation, but also for different conception. It was difficult to unit and to compare the methods used for directive planning with methods of market mechanism.

The Slovak endeavor to enhance the international cooperation was formulated in the Final Recommendation of the Vth International Symposium on Ecological Research (1979) in the requirement to find an adequate organization form for supporting the landscape ecological research. The establishment of IALE was realized on the VIth International Symposium on Problems of Landscape Ecological Research held in Piešťany (Slovakia) 1982. The fact that the establishment of the International Association for Landscape Ecology took place in Czechoslovakia was a honor to the Slovak science and research, which laid the foundations to the development of international cooperation in this area.

### The Slovak landscape ecological planning conception (LANDEP)

The period after the end of second war, was signified by tendency to impute the landscape biology in the territorial planning, especially valorization of vegetation, analysis of positive and negative influences on landscape and to offer the proposals for minimalizing of ecological disharmony. This period prepared the conditions for form up the ecological approach, based on completeness of landscape ecological research.

Elaborating of the theoretical and methodical base of landscape ecological planning is very near connected with the progress of landscape ecology, one of the sciences, which significant participated on solving the environmental problems. The landscape ecological planning in the Slovak republic was in general as LANDEP marked. It is abbreviation of **LANDscape Ecological Planning**. (RUŽIČKA, MIKLÓS, 1981, 1990, RUŽIČKA, 2000) for a specific form of completeness ecological research of landscape, on the level of ecological synthesis with a practical degree of application for planning of environmental carefulness.

The tradition of international symposia on problems of landscape ecological research organized in Slovakia since 1967 is the basis for forming and collation of obtained experiences. Equally give the possibility to development the modern trend of basic landscape ecological research, but also the widely and deeply applying the ecological aspects in territorial planning documentation.

The landscape ecological approach was in the Slovak Republic after 1990, applied in several governmental documents, for instance in territorial systems of ecological stability, the law of National Council No. 127/94 about environmental impact assessment and the amendment No. 237/2000 of law of National Council No. 50/1976 about territorial planning and building order.

### Conclusion

All planning activities aimed at utilization, protection and development of the territory, its environment and natural sources should be based on the knowledge of the ecological characteristics of the landscape. The hitherto efforts have been focused till now to know the preconditions for the ecologically optimum utilization of a territory. Methodical approaches are different with respect to the complexity and heterogeneity of landscape - the study object itself - as well as of the target like optimization of its utilization. Overlapping of the regularities of the development of nature and society, interaction between man and the nature have not been yet unambiguously elucidated and they call for concentrated efforts.

### References

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