

## **Landscape Planning in Austria**

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The following presentation is meant to give a brief overview about landscape planning in rural areas of Austria including an introduction to the educational system.

### *Landscape terminology used in Austria*

Landscape sciences in general describe the interaction between humans and nature. As there were contributions of many different academic disciplines (agronomists, architects, biologists, ecologists, engineers, geographers, foresters, planners, social scientists and others) landscape sciences are differentiated into various groups, which are closely connected and should not be regarded in isolation from each other. Following terms are commonly used:

- landscape architecture
- landscape conservation
- landscape ecology
- landscape management
- landscape planning

As the objective of our meeting is to discuss landscape planning there should be mentioned some related planning terms:

- land use planning
- regional planning
- economic planning
- resource planning

Landscape planning is particularly relevant in rural areas and where it is not expressed explicitly, it is performed indirectly in connection with the related planning terms.

### *Landscape education in Austria*

In 1993 the new study direction "landscape planning and landscape management" was established, replacing the temporary courses in "landscape ecology and landscape design".

According to the number of students, the Vienna University of Bodenkultur is with 1200 persons studying landscape sciences the most frequented university in the world. There does not exist a "numerus clausus" for Austrians. However, there is a selection due to limited places in compulsory exercises and the average study length for a master's degree takes seven to eight years. About one third of the students quits without successful completion. It is hoped this situation will vanish as there are now four chairs in landscape sciences:

- landscape planning
- landscape architecture
- nature conservation and landscape management
- landscape engineering and landscape protection

From October 1994 on all chairs will work with four full professors and some 25 assistants. Up to now there are still less than 500 landscape specialists working in public administration or as private consultants.

#### *Main problems of landscape planning in rural areas*

Austria is an Alpine country with 84,000 km<sup>2</sup> and a population of 7.6 million inhabitants. Two thirds of the territory is situated in the Alps. There is only cultural landscape in Austria. Agriculture and tourism are the main socio-economic activities in rural Austria and have a significant influence on the appearance of the landscape. Farmers have a most important role in the maintenance of this cultural landscape.

Main problems of landscape planning derive from:

a) marginalisation processes, e.g. poorly managed agricultural and forest lands due to a lack of economic incentives lead to large scale destabilizations of landscape in Alpine areas and an increase of natural hazards.

b) Urbanisation of tourist areas, e.g. the increase of settlement areas, traffic densities, waste problems and often a non existing canalisation or sewage treatment increase pollution in rural areas.

c) Large scale environment degradation processes, e.g. acidification (forest die back), toxification (heavy metals) and the possible global climate change as well as synergetic effects of several phenomena are expected accelerate the rate of external change.

d) Passive conservation strategies protecting selected areas (often to increase their touristical value) are not sufficient to maintain the current level of environmental quality. A system protection covering the entire rural landscape is needed.

e) Absence of long term planning due to a lack of awareness of possible future environment problems and inadequate tools to incorporate them into current planning processes.

### *Current research on long term planning*

Usually landscape planning in Austria is short term planning up to a ten years time horizon. While this kind of planning can perhaps satisfy current demands it is not sufficient for possible future problems. Usually long term studies on environmental impacts are available for larger areas, but they are not adjusted to specific local conditions. Therefore a research program was started to investigate how these studies can be used on the local level (communities, districts).

A local model of one Austrian district, Hermagor in the Eastern Alps is under development. It is divided into three sub models (demographic economic sub model, land use sub model, hydrologic sub model) describing the past development since 1951 and forecasting the future situation.

The assumptions of the International Panel of Climate Change (IPCC) based on model calculations were used for an approach of integrating climate change impacts into the local planning process. This should not only allow landscape planners to evaluate potential changes in the future landscape, but also enable local decision makers to integrate potential future developments into their considerations.