

Land Use Changes in Europe

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Land Use Changes in Europe

Processes of Change, Environmental Transformations and Future Patterns

A study initiated and sponsored by the
International Institute for Applied Systems Analysis
with the support and co-ordination of
the Stockholm Environment Institute

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Preface

The patterns of land use that have evolved in Europe reflect the boundaries set by the natural environment and socio-economic responses to the needs of the population. Over the centuries man has been able to overcome increasingly the constraints placed on land use by the natural environment through the development of new technologies and innovations, driven by an increasing population and rising material expectations. However, activities are still ultimately constrained by natural limitations such as climatic characteristics and associated edaphic and vegetational features.

A major problem for land management, in its broadest sense, can be a reluctance to foresee the consequent ecological changes. This means that mitigating strategies will not be implemented in time to prevent environmental degradation and social hardship, although in many parts of Europe, over some centuries, demands have been met in a sustainable way, by sound, prudent and temperate expectations that have dictated management regimes.

The management of land in Europe has always been a complex challenge: land is the primary, though finite resource. Decisions regarding the use of land and manipulation of ecosystem dynamics today may affect the long-term primary productivity of the resource. Decisions to change land use may be virtually irreversible; urbanization is an illustration of the influence of population density on the land resource. The International Institute for Applied Systems Analysis (IIASA), in co-operation with the Institute of Geography and Spatial Organization of the Polish Academy of Sciences, organized a Workshop on *Land Use Changes in Europe* in Poland in September, 1988 to consider all these interacting features of European land use against the background of possible global climatic change. The Workshop was the source of draft papers and these, in an edited form, constitute the majority of Chapters in this book. The meeting focused on six discrete but interrelated topics including: i) major land use determinants; ii) present land use patterns; iii) the main processes of change of major importance for future land use; iv) historical land use changes in Europe; v) likely future land use patterns; and vi) policy implications and the identification of management strategies. Thus, this book covers a wide spectrum of issues. Most are related to the potential impact of climatic change and how this must be considered in the long-term and on a broad-scale. Some of the questions that need to be addressed include the topics listed. How will the characteristics of the land resource change and what are the implications of those changes on the environment and its capacity to supply these? What policies need to be introduced to encourage sensitivity to environmental supply limitations? What scale of response is required?

Following the workshop sponsored by IIASA, the editing tasks were undertaken by F.M. Brouwer (formerly of IIASA), and Alison Thomas and M.J. Chadwick of the Stockholm Environment Institute at York (SEIY). The Stockholm Environment Institute (SEI), Stockholm, Sweden, financed

this phase of the work. Isobel Devane prepared the manuscript for publication along with Susan Sparrow who provided the final version of many of the figures. Andrew Lees assisted in the preparation of the Index.

During the Workshop in Poland many of the arrangements were made by Dr. R. Kulikowski of the Institute of Geography and Spatial Organization of the Polish Academy of Sciences. The Stockholm Environment Institute and IIASA express their warm appreciation of his efforts and those of the Director of the Institute, Professor J. Kostrowicki.

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September, 1990, York.

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