Foreword

In accordance with the Programme of Cooperation in Science and Technology agreed between the Government of the Republic of Hungary and the Government of the United Kingdom of Great Britain and Northern Ireland a seminar was held in Debrecen at the Debrecen Academic Committee of the Hungarian Academy of Sciences from 14 to 15 February 1994 on Sustainable Land Use in Long-term Field Experiments.

The participants, from Rothamsted Experimental Station, the Research Institute for Soil Science and Agricultural Chemistry of the Hungarian Academy of Sciences and Debrecen University of Agricultural Sciences, considered the ways in which agriculture pollutes the environment and proposed alternative methods based on long-term field experiments. The programme of the seminar included lectures on the present state of the environment and on the ecological background of sustainable land use. The lectures offered a chance to analyze different possibilities of decreasing environmental pollution in agriculture and proposed solutions as to how to maintain soil fertility effectively and efficiently.

Although the seminar focused primarily on soil fertility research for sustainable agriculture, it also provided useful information and tools for environmental policy. Long-term field experiments such as the Rothamsted Classical Experiment in the United Kingdom and the Westsik crop rotation experiment in Hungary can be used to study the effects of organic manure treatments in order to develop models for predicting the likely effects of different cropping systems on soil properties and crop yield. The seminar also provided information on plant and soil processes which control soil fertility in long-term field experiments and on the sustainability of agricultural production.

The papers in this volume represent the lectures presented at this valuable, wide-ranging seminar. The editors have kept to the original texts, with the responsibility of the authors, only minor changes have been carried out in certain cases when the editorial policy of the journal or the limits of this volume made it necessary.

J. LAZÁNYI Chairman of the Organizing Committee