

Preface

This publication is a contribution to the fifth phase of the International Hydrological Programme of UNESCO, from The Netherlands. The book comprises a selection of the papers that were presented during the International Conference on “Agricultural Effects on Ground and Surface Waters: Research at the Edge of Science and Society”, which was held in Wageningen, The Netherlands (1–4 October 2000). The Conference followed a workshop on “Agricultural Threats to Groundwater Quality” held in Zaragoza, Spain as part of the same UNESCO programme*. The contributions focus especially on the moderate humid area of the Northern Hemisphere.

Whilst preparing for the Conference the organizers realized that the effects of agriculture on environmental issues do not depend only on the choices made by farmers at the production unit level. The farmer is certainly an important actor with respect to water quantity and water quality issues in agricultural areas, but is not the only actor. The farmer makes choices with respect to the amount of fertilizer to use, application timing for chemicals, application techniques, crops to grow, numbers of cattle, etc., within the constraints set by national and regional policy makers. Such choices should be based on reliable data from good monitoring programmes. Good data are needed for the development and testing of models that can be used for estimating the effects of agricultural activities on ground and surface waters. Also, given clear environmental goals based on good quality data and models, an effective communication process between policy makers and farmers on environmental issues is essential to enable sufficient progress. Based on these ideas, the Conference was organized using as a backbone the three levels of decision and policy making: the production unit level, the regional level and the national level. Within each “policy making level” attention was focused on monitoring, model development and decision support studies.

The Conference was organized by three Dutch research organizations: Alterra, the Institute for Inland Water Management and Waste Water Treatment (RIZA) and the National Institute for Public Health and Environment (RIVM). The organizers wish to thank the Organizing Committee for their valuable advice and the members of the Scientific Committee for the effort they put into the evaluation of the draft papers. The success of the Conference is also the result of the energy input of the chairmen and rapporteurs. The local organizers are grateful to all those who contributed to the Conference and this publication, and made the Conference possible and so interesting. We hope that this publication may inspire those who read the contributions and enhance communication between scientists in the interest of the world’s water resources.

Joop Steenvoorden

Alterra, Wageningen, The Netherlands

Frans Claessen

*Institute for Inland Water Management and Waste Water Treatment,
Lelystad, The Netherlands*

Jaap Willems

*National Institute for Public Health and Environment,
Bilthoven, The Netherlands*

* Candela, L. & Aureli, L. (eds) (1998) *Agricultural Threats to Groundwater Quality* (Proc. Zaragoza Workshop, October 1996). IHP-UNESCO, Mediterranean Agronomic Institute of Zaragoza–International Centre for Advanced Mediterranean Agronomic Studies, and Geotechnical Engineering and Geoscience Dept. University of Catalonia, Zaragoza, Spain. ISBN 84-8497-956-3.