

Foreword

Among the hazards related to climate change, the research of water shortage and drought are of special importance both in Serbia and Hungary, since the planning of water management requires a much more complex approach than that of today, due to the more and more frequent climate extremes and to the consequences of hydro-climatic hazards. The management of water shortage cannot only mean rehabilitation, but the emphasis must be placed on prevention and preparation (agricultural production security, water retention, maintenance of wetland habitats). The problems related to catchments and water resources do not take borders into consideration, thus the problems can only be solved with the help of a close cross-border co-operation.

Our research was motivated by the above mentioned issues, and we decided to initiate a complex assessment in the framework of the Hungary-Serbia Cross-border Co-operation Programme 2007-2013, with the co-operation of the Department of Physical Geography and Geoinformatics at the University of Szeged, the Faculty of Sciences, the Faculty of Technical Sciences at the University of Novi Sad, and the Directorate for Water Management of Lower Tisza District. Now the reader is holding in his hands the summary of our nearly one and a half year long work.

The activities of our project provide professional background for the elaboration of adaptation strategies on the basis of local and regional research, starting from the assessment of environmental conflicts related to water shortage. Its specific objectives are the allocation of sensitive areas, risk assessment, assessment of the severity, frequency and extent of future hydro-climatic hazards using regional climate models, and the investigation of possibilities of sustainable water management (water retention-irrigation).

Presenting our activities to the stakeholders and to the decision makers was an important activity during the project, thus, we aimed to write this summary for a broader readership, not only for a specific scientific audience, so that those interested will be able to get to know the investigated environmental problem of the region. The studies can be read in Hungarian, Serbian, and English, as well. The results of the research contribute to the sustainable water management of the investigated border region.

The Editors