



Water management in Benin in the view of Global Change - National strategies and use of research projects

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Fresh water has already become at present a critically scarce resource in many regions of the world. In many developing countries, particularly in Africa, insufficient water supply infrastructure aggravates this problem. With the ongoing Global Change and the rapid population growth water security will become one of the major problems in the 21st century. Regarding the annual water balance the West African Country Benin is not suffering from physical water scarcity; less than 1% of the renewable water resources are used per year. Nevertheless the rural population is often suffering from water shortage, particularly during the dry season where no surface water is available and shallow aquifers dry out. As most of the rural population has no access to a secure water source, water from rivers or self-constructed shallow wells are used. Therefore the national water authority and development organisations are focussing on improving the water supply infrastructure. But also Integrated Water Resource Management (IWRM)-issues are discussed in Benin in order to develop a long-term strategy for future water management on a catchment level. This is of major importance because the water need of the population but also for food production and industry will increase in the future. With the effects of climate change, like increasing inter-annual rainfall variability and decreasing rainfall amount, the water availability in the region will become more insecure in future. For a better water resource planning an assessment of the actual and future water availability and water need is required. In this context the results of the interdisciplinary research project IMPETUS are of high interest for the Beninese water authorities. Within the IMPETUS-project an integrated modelling approach is used to assess the impact of socio-economic and environmental changes on

the future water availability and water need in the Ouémé catchment in Benin. In order to make the scientific results exploitable for Beninese stakeholders a Spatial Decision Support System (SDSS) is developed. The SDSS will be provided for stakeholders of national water authorities in order to support the IWRM-process in Benin. After a brief overview of the actual water management problems the paper will point out the impact of Global Change on the water availability and water supply in Benin. The national water management strategies and the use of research projects to deal with the water management problems will be discussed.