Geophysical Research Abstracts,
Vol. 10, EGU2008-A-11367, 2008
SRef-ID: 1607-7962/gra/EGU2008-A-11367
EGU General Assembly 2008
© Author(s) 2008

The WADE experience - twinning hydrological research and IWRM in European and Southern African drylands

C. Kuells (1), O. Dahan (2), G. Benito (3)

(1) Inst. of Hydrology, Freiburg, (christoph.kuells@hydrology.uni-freiburg.de, FAX +49 761 203 3594), (2) Ben Gurion Univ., Sde Boker Campus, Israel, (3) CSIC, Madrid

As part of the EU Water Initiative and the EU Basin Twinning Programme, the implementation of IWRM in arid and semi-arid basins has been supported through several basic and applied research projects (e.g. WADE, GABARDINE, TWINLATIN projects). One of these, the WADE Project, has studied specific aspects of water resources assessment from floods in arid basins in northern and southern countries and has examined the socio-economic ramifications for the southern hemisphere partners. The experience gained from this project indicates that the objectives, methodology and instruments of IWRM need to be carefully re-framed to the specific conditions encountered in such environments. These specific conditions vary considerably between north and south, and IWRM is often interpreted differently in developed countries and developing countries. In drylands, where the resources are minimal and the relatively needs are high, ephemeral river basins surface runoff and indirect (flood) recharge of alluvial aquifers (influenced by vegetation cover and associated land management) dominate the generation of water resources and constitute important local elements for water supply and therefore need to be encompassed into IWRM planning. Institutional and sectoral integration that takes into account cultural heterogeneities and historic conflicts should precede technical knowledge related to available water resources in order of importance in the process of IWRM planning. Instruments for the efficient communication between, and participation of, stakeholders with extremely different economic productivity, with strongly different degrees of social aggregation, or with an unbalanced political representation, need to be developed. The WADE Project has

provided experimental data and a detailed understanding of hydrological processes for the assessment, management and use of alluvial aquifers. The development of common hydrological understanding based on field data and a common research experience was a central element of WADE.