



## **Water and environmental conflicts – can spatial information support confidence-building?**

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The stability of livelihoods depends to a large degree on the secure access to the primary resources – land and water. At the root of conflicts about access to natural resources we often find that the relevance of the available data or their interpretation is debated among the conflicting parties. An important factor for the successful mediation of conflicts is the ability of the parties to agree on a common data model from where information is derived in a transparent way to allow the development of options and the assessment of impacts from possible decisions/solutions. In this process, satellite data could serve as the unbiased base; the conflicting parties jointly develop the rules for the translation into information and explore options for sustainable solutions by simulations based on well-defined meaningful objects. Against the background of regional or global challenges (as in the case of global change), monitoring can turn as common activity, in which common pressure facilitates cooperation (instead of polarization).

Water related conflicts arise either by a situation characterized by too little water (e.g. in transboundary basins) or too much water (e.g. flood hazards) as well as pollution of water bodies required for recreation or freshwater supply. The presentation explores experiences made during the implementation of

- the FP6 research project BRAHMATWINN (Twinning European and South Asian River Basins to enhance capacity and implement adaptive management approaches) which is carried out in the case study areas of the Upper Danube and Upper Brahmaputra river basins, and

- the regional cooperation project INTERREG IIIa: Water Quality in Lakes (Bavaria, Germany, and the County of Salzburg, Austria) which investigates the influx of nitrates and phosphates from agricultural production into the water cycle. The detection of the initial input parcels and the development of alternative land-use practices form the focus for remote sensing applications.

For the different cases the role of remote sensing and the effectiveness of derived geoinformation products for the conflict resolution process are discussed.