

The Niger, a lifeline

Effective water management in the Upper Niger Basin

Leo Zwarts (RIZA), Pieter van Beukering (IVM),
Bakary Kone (Wetlands International), Eddy Wymenga (A&W)

The Niger, a lifeline

Leo Zwarts, Pieter van Beukering, Bakary Kone, Eddy Wymenga

Hydrological interventions (i.e. dams and irrigation schemes) aim to increase economic independence and food security in the unstable Sahel environment. Tapping the Niger's flow, however, is not without consequences. The costs and benefits of expensive hydrological structures have to be carefully balanced. In this study we incorporate downstream interests into our analysis. Downstream outcomes are inherently difficult to quantify, and are therefore often omitted in similar enquiries. The aim of this study is to develop a decision-support system for effective river management in the Upper Niger, in which ecological and socio-economic impacts and benefits of dams and irrigation systems can be analysed in relation to different water management scenarios. Multidisciplinary in nature, this study draws on the fields of hydrology, ecology and environmental economics.

