

## **Watershed Management in the Abaya-Chamo Basin, South Ethiopia**

- Poster -

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At the present Ethiopia in most of its areas faces serious threats concerning food production and rural livelihood mainly induced by population growth and unsustainable resource management. Land degradation by soil erosion is one of the major issues within these increasing problems, causing a decline of soil fertility and, hence, a decrease of agricultural productivity.

In order to prevent land degradation and soil erosion it is necessary to record soil erosion processes, and to assess the factors controlling them as well as their impact. Concepts for a sustainable management of the limited water and soil resources are based on such assessments. The second International Course on Watershed Management at the Arba Minch Water Technology Institute (AWTI, Ethiopia) dealt with this challenge. Between the August 1<sup>st</sup> and September 6<sup>th</sup> 2003 students from the Freie Universität Berlin, the Universität Siegen (both in Germany) and from the Arba Minch Water Technology Institute, Ethiopia, accomplished a course on *Watershed Management*. Special focus of that course had been on the assessment of soil erosion risk and water balance in the Gina River catchment, a tributary of the Hare River in south Ethiopia (Figure 1). Due to this target several characters of the Gina River drainage basin were recorded. A special focus was on the water – soil – land use interaction and the resulting processes. Therefore, especially soil type and texture, land use and soil conservation measures as well as the natural and human induced relief forming processes were mapped. Based on these spatial data modelling approaches to estimate soil erosion risk and water balance were applied and evaluated. Additionally, future scenarios for the year 2025 were developed and implemented into the modelling approaches to generate a base for rural planning.