



## **Land Use Change, Erosion and Landslides in the Three Gorges Reservoir Area: The Sino-German YANGTZE project**

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The Sino-German YANGTZE project aims to study the impact of the Three Gorges Dam (P. R. China) on the environment in the Three Gorges Reservoir area. The main focus lies on the four research fields water quality, vegetation, slope stability and atmosphere. The research activities of the four research fields are coordinated by Research Centre Jülich.

Within this YANGTZE project geoscientists from four German universities (Erlangen, Gießen, Potsdam and Tübingen) and their Chinese partners (Aero Geophysical Survey & Remote Sensing Center for Land and Resources, Beijing and China University of Geosciences, Wuhan) are working on topics related to slope stability. They focus on the assessment of the risk potential caused by land use change, soil erosion and landslides in consequence of the Three Gorges Dam construction.

The main objectives are:

- \* to develop a better understanding of mechanisms and triggers of mass movements by means of remote sensing,
- \* to predict the long term slope stability,
- \* to assess the landslide risk by analysing the vulnerability of buildings, infrastructure, and people and by analysing the susceptibility for landslides,
- \* to assess and analyse mechanisms of soil erosion for different landscape morphologies,
- \* to assess and analyse sediment and matter transport pathways into the reservoir,
- \* to develop an integrative, data-based methodology to predict the erosion risk potential at high spatial resolution,
- \* to develop a multi-temporal land use classification.

The project started in spring 2008 for a duration of three years. The funding for the German project partners is provided by the German Federal Ministry of Education and Research (BMBF).