

China related projects/activities where master students can be involved (offered for the next 5 years)

Our research group is currently collaborating with a number of institutes/universities in China on the following two general topics with the funding from the Swiss and Chinese sides. Students from my group and from the relevant course in Basel University can be involved in our collaborative researches with the following four institutes both within and beyond project periods. A small amount of living allowance can be provided to master students involved in the collaborative research in China.

- Beijing Normal University
- Beijing Forestry University,
- Institute of Geographical Science and Natural Resources Research, the Chinese Academy of Sciences,
- Research Center for Ecological and Environmental Sciences, the Chinese Academy of Sciences (I would like to emphasize that through my coordination of the Eawag-RCEES workshop on environmental science and technology, three joint projects involving scientists from other groups of Eawag and RCEES were developed under the current Sino-Swiss Science and Technology Program).

Topic: Determination of environmental flow requirement and its safeguard measures at the river basin/catchment level in China.

The overall objectives of the research are to develop estimation methods for environmental flow requirement (EFR) appropriate to the characteristics of rivers and catchments in consideration in China, to put forward protection measures to safeguard environment flows with the participation of stakeholders, and to provide theoretical guidance and technical support for restoring healthy ecosystem of the rivers.

We currently have a SNF founded project on the topic in collaboration with Beijing Normal University. The project will end in July 2011. However, the topic and the relevant research questions are the continuous interest of our group.

Topic: Water, environment, and food security: an integration of economic and environmental objectives

We have already conducted a number of projects under this general topic. This is a continuous research topic and our focus is on the following aspects:

- Farmers' water and fertilizer use behaviors at the catchment level in China.
- Application of SWAT model in water quality simulating and management
- Non-point source pollution monitoring and control in the Haihe River Basin in China
- Participatory water management in irrigation schemes in China
- Application of the GEPIC model for the analysis of water and food production relations in China,
- Institutional innovation in water pricing and water right management.

