Swiss Federal Institute of Aquatic Science and Technology

Eawag is a Swiss-based and internationally-linked aquatic research institute committed to an ecological, economical and socially responsible management of water – the primary source of all life. It carries out research, teaching and consulting and forms a link between science and practical application. Multidisciplinary teams of specialists in the fields of Environmental Engineering, Natural and Social Sciences jointly develop solutions to environmental problems. The acquired knowledge and know-how is transmitted nationally and internationally by publications, lectures, teaching, and consulting to the private and public sector.

400 employees are active at the locations in Dübendorf (near Zurich) and Kastanienbaum (near Lucerne). Eawag was founded in 1936 as an information centre for wastewater treatment of the ETH Zurich. It is a Swiss Federal Research Institute which is part of the ETH-Domain.

The project will essentially be implemented by:

-   Dr. Hong Yang is an Economic Geographer by training and is currently a senior scientist at Eawag,, and a visiting professor of the Institute for Geographical Science and Natural Resources Research, the Chinese Academy of Science. She is the leader of the group for Water, Food and Environmental Studies in the Department of Systems Analysis, Integrated Assessment and Modeling at Eawag. Her main research interests include integrated land and water resources management, water scarcity and its impacts on food security and implications for the global food trade, environment, regional development, poverty alleviation and agricultural policies.
-   {tooltip}Dr. Karim Abbaspour{end-texte}

 Dr. Karim Abbaspour is a soil scientist and hydrologist. He has studied at UBC in Vancouver, Canada, and ETHZ in Switzerland. He has been working at the Eawag, Swiss Federal Institute of Aquatic Science and Technology since 2000. His main specialization is in application of flow and transport models at small and large scales. He is also working on methods of model calibration, validation, and uncertainty analysis. He is the leader of WP4 in the EnviroGrid

project and responsible for development of a hydrologic model of the Black Sea Basin.{end-tooltip} is in the field of hydrology and soil physics with a background in civil engineering and mathematics. He has done extensive work and published numerous articles in modelling of flow and transport in soils, groundwater, and catchments. On the mathematical side, he had developed internationally used inverse modelling techniques. He also has substantial expertise in using GIS and developing GIS-based risk analysis systems.

- {tooltip}Elham Rouholahnejad{end-texte}

Elham Rouholahnejad is a PhD student in Environmental science at ETH university of Switzerland working at EAWAG, Swiss Federal Institute of Aquatic Science. She had studied Civil Engineering as her bachelor and Environmental Engineering as a master. She is continuing her study as a PhD working on WP4 of EnviroGrids project to predict a hydrological model for Blacksea catchment.{end-tooltip}, PhD student

Role in the project:

Eawag is the leader of WP4 (Black Sea Hydrological Model) and will hence be responsible for the development of a catchment hydrological model. Eawag will develop a detailed watershed-scale hydrologic model of the Black Sea region. This model will allow analysis of the impact of landuse and climate change on water resources and water quality. Eawag will also be responsible for developing system analysis techniques for calibration, validation, sensitivity, and uncertainty analysis of the hydrologic model. in Work package 5.3, Eawag will be responsible for the integrated assessment of environmental impacts on agricultural production in the Black Sea catchment. Eawag will lead the work on modeling agri-environmental issues with the GIS-based EPIC model (GEPIC). In 5.7, Eawag will also be involved in the assessment of sustainability and vulnerability.