Lake Abaya Research Station

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The Lake Abaya Chamo Basin is the focus of research since several years. The lakes and the catchment encompass valuable resources for economic development including agriculture, fisheries and tourism. Furthermore, Gamo Region, with Arba Minch as the central town, has a rapidly growing population with increasing demand placed on natural resources such as land, water and firewood.

With the Arba Minch University as a main employer and the Water Technology Institute as a key player in water resources training and research, it was easy to decide that research should concentrate on the immediate environment of Arba Minch. With the project's objective to establish and enhance the water research potential of AWTI it became necessary to establish data networks for scientific field research. The Lake Abaya Research Station is the start of this long term effort. In the first phase, equipment was installed to cover meteorological variables, especially wind direction and speed. Later, research started to expand on the sectors of lake hydraulics and related sediment movements. Additional permanent facilities, besides the two weather stations at the western shores of Lake Abaya in Fura and Wajifo, are planned to replace the unreliable water level gauges and to host the research boat and sampling equipment.

Water resources research depends a wide range of data collected over long time periods by specialised institutions, such as the Meteorological and Hydrological Services. However, only standard variables like rainfall, temperature and water levels have been measured consistently since some decades. Hoowever, data are made available often only after years with limited accuracy and time intervals often unfit for research. Furthermore, data concerning river discharge, water quality, wind speed and direction, sediment load of rivers, and evaporation, to name but a few, are not available at all.

Future research on lake water quality and limnology is planned and shall also be supported by the Lake Research Station. Plans have been submitted to establish the station as a permanent AMU facility with official funding. Researchers from relevant disciplines are invited to join these efforts. Data collected are going to be made available for other researchers through the AWTI Research DataBase.