



Rahel Eshetu Haile

Home Country: Ethiopia

Degree: PhD in Water Resource Engineering & Management

Expertise: Agricultural Engineering, Mechanization, Irrigation

Research Focus: Water Resource Engineering, Hydrology

Host University: UNESCO-IHE, Delft, the Netherlands

Fellowship Awarded: 2016

Rahel Eshetu Haile was born in Showa Robit, Ethiopia, a town located around 225 km from Addis Ababa, the country's capital. She performed well at school and continued studying towards the Ethiopian School of Leaving Certificate Examination (ESLCE) despite a tradition in her community that girls should be married by the age of 15. During Rahel's childhood, part of her family house was rented by irrigation engineers who worked on their designs in the garden, and this sparked an interest that has led to her current career.

After passing the ESLCE, Rahel attended the College of Agriculture of the Debub University (now Hawassa University), graduating in 2004 with a BSc in Agricultural Engineering and Mechanization. Following this she worked as an Instructor at the Dilla Agricultural Technical and Vocational Educational College. In 2008 Rahel gained an MSc in Irrigation Engineering from Haramaya University, and since then she has lectured in several Ethiopian government universities and worked as an Engineer for an International Fund for Agricultural Development (IFAD) irrigation project in the country.

Ethiopia is prone to drought due to an uneven distribution of water resources in the country, a process that is exacerbated by climate change, deforestation and land degradation. Though problems with water resources exist in many developed and developing countries, water levels in several lakes in Ethiopia are at historic lows with one lake disappearing completely. Rahel's PhD project is investigating the impact of large-scale irrigation projects and other hydrological variables on Lake Ziway, a vast freshwater lake that has decreased in volume and increased in salinity as a result of these projects. She hopes that the outcomes of her research will help inform decision-making to address the sustainability of the lake.

After completion of her studies in the Netherlands, Rahel plans to work as a professor with the Ethiopian Institute of Water Resources at Addis Ababa University. She also hopes to engage in community outreach to support improved water management practices.