



2016 BHEARD Scholar Chimwemwe Chimbaza

## Profile **Country of Study:** Zimbabwe **University:** University of Zimbabwe **Department:** Water Resource Management Student Position: Graduate Research Assistant-M.Sc. Lilongwe, Malawi Home Country: Ministry of Agriculture, Irrigation & Water Devel-opment, Dept of Land Resource Conservation Home Institution: Land Resources Conservation Officer Home Position: **Mentored By:** Mr. John Mlava

**Research Area:** Relationship Between Precipitation Variation and Water Availability

## BHEARD PROGRAM START DATE: February, 2016

**UNDERGRADUATE EDUCATION:** BSc in Natural Resources Management, Bunda College of Agriculture, University of Malawi

**RESEARCH INTERESTS:** Lilongwe city has of late been experiencing persistent water supply challenges for domestic and industrial uses despite the city lying within high rainfall area (average rainfall of 900mm). The trend of precipitation received in Lilongwe city is not well documented and so too is the river discharge for the Linthipe catchment. The frequent water supply shortage could be attributed to reduced water balance within Linthipe catchment area due to combined impacts of climatic change and anthropogenic activities such as erratic rainfall and degraded water sources respectively. Furthermore, rainfall records are derived from rain gauges which are reported to have poor coverage and only represent point scale estimates and as such do not give accurate rainfall data which has a greater influence to the water balance.

Subsequently, this has further implications in planning for effective water distribution and consumption resulting in negative socio-economic impacts. Effective water resource accounting by combined use of rain gauge and satellite rainfall data could be one of the ways to attain efficiency in sustainable water management and successful planning for water availability to various water users.

**PERSONAL STATEMENT:** When Chimwemwe completes her studies she would like to use the knowledge that she has gained to assist the people of Malawi one day and make a difference in her area. She would like to help more people to have knowledge on how they can protect and preserve the water resources by reducing water scarcity which Malawi is facing in its major cities so that even the future generation should find clean and safe water.

**WHEN I AM NOT WORKING I ENJOY:** When Chimwemwe is not working, she enjoys reading novels, watching movies and visiting new places.