

**Full Name, Title**

Steven Okoth Owuor, Mr.

**Motivation**

I am working on a project which focuses on understanding how land use and land cover changes affect groundwater recharge. The adverse effects of land use and land cover alter catchment hydrology as well as recharge of groundwater. Coupled with ever growing population and urbanization there is need to guarantee a proper understanding to monitoring, analyses, and management of groundwater resources so as to be assured of the quantity and water quality. Therefore, I have to continue my study to enrich my skills and broaden my knowledge to be able to carry out the tasks.

In this study, measurements of soil hydraulic properties such as infiltration rate and soil moisture characteristics are conducted. Infiltration rate is measured using double ring infiltrometer while soil moisture characteristics are derived using pressure plate extractor. These soil hydraulic properties are sensitive to topsoil disturbances therefore useful indicators to show how land use/land cover change affects hydraulic properties and processes.

**Short CV***Academic career*

June 2014 onwards | Graduate Fellow (Ph.D. candidate), Mazingira Centre, International Livestock Research Institute (ILRI), Nairobi, Kenya. Thesis: "Impact of land use and land cover change on groundwater recharge in South West Mau, Kenya"

9/2010 – 9/2012 | Graduate Studies, Institute of Applied Geosciences, Technical University of Darmstadt, Germany. Thesis: "Hydraulic Characteristics and Hydrochemistry of Nairobi Area, Kenya"

10/2003 – 7/2007 | Undergraduate studies, Department of Geology, University of Nairobi, Kenya.

*Teaching*

5/2013 onwards | Tutorial Fellow –Tutor for undergraduate students in petrology, mineralogy and hydrogeology, Department of Geological Sciences, South Eastern Kenya University, Kenya.

*Other employment position*

Worked for Ministry of Water and Irrigation, Department Water Resources from April 2008 to September 2013, mainly involved in hydrogeological and geophysical investigations, management of drilling contracts, supervision of drilling works and pump testing operations, borehole design and construction, general management of groundwater resources and policy formulation.

**Expertise**

Groundwater and GIS

## **Publications**

1. **Steven.O. Owuor**, Christoph Schüth, Rouwen J. Lehné, Andreas Hoppe, Joshua Obiri, Daniel M. Nyaberi and Monicah K. Kibet (2016). Estimation of Hydraulic Properties from Pumping Tests Data of Nairobi Area, Kenya. *International Journal of Research in Engineering and Technology*, Vol.5 (2), 331-339. DOI: 10.15623/ijret.2016.0502060
2. Review of Potential of Rainwater Harvesting In Kenya: Partial Solution to Environmental Problems. Presented in the 12<sup>th</sup> Geological Society of Kenya Conference Proceedings, March 2009.
3. Environmental Impacts and Management of Solid Waste, Case Study of Nairobi, Kenya. Presented in the 12<sup>th</sup> Geological Society of Kenya Conference Proceedings, March 2009.