

Curriculum Vitae: Dr. Ronald Twongyirwe

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DOB: 06 – March – 84. **Nationality:** Ugandan

EDUCATION

2012-2015. Ph.D. (physical) Geography: University of Cambridge, England

Date of completion: June, 2015

2011-2012. M.Phil. Environmental Science: University of Cambridge, England

Grade: Merit

2008-2010. MSc. Environment and Natural resources: Makerere University, Uganda

Grade: 4.15 on 5.0 scale (for graded coursework/exams)

2004-2007. BSc. (Hons) Agricultural land use and management: Makerere University, Uganda

Class: Second–upper division (GPA 4.15 on 5.0 scale)

2002-2003. A- Level: King’s College Budo, Uganda

Mathematics (A), Chemistry (C), Biology (D), Foods and Nutrition (D), General paper (D1)

1998-2001. O-Level: King’s College Budo, Uganda

10 subjects offered: 8-Distinctions, 2-Credits

SCHOLARSHIPS AND AWARDS

2012-2015. IBD Cambridge International Scholarship, and the Cambridge Overseas Trust. 3 year funding to pursue a Ph.D. in Geography at the University of Cambridge. Received numerous research grants for the Ph.D. project.

2012. Santander Award. For continuing to a Ph.D. at St. Edmund’s College.

2012. Philip Lake Fund. For conducting fieldwork in Uganda in June-July, 2012 as part of the M.Phil. in Environmental Science at the University of Cambridge.

2012. St. Edmund’s College Tutorial Award. For conducting fieldwork in Uganda in June-July, 2012 as part of the M.Phil. in Environmental Science at the University of Cambridge.

2011-2012. Cambridge Commonwealth Trust. 1 year funding to pursue an M.Phil. in Environmental Science at the University of Cambridge.

2009-2010. McArthur foundation. 1 year funding to complete an MSc. dissertation at Makerere University.

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2004-2007. Government of Uganda. 3 year funding to pursue a BSc. in Agricultural Land Use and Management at Makerere University.

WORK EXPERIENCE

Oct 2014 – June, 2015. Demonstrator GIS and Statistics, Department of Geography, University of Cambridge.

- Supporting teaching and lab classes for the Masters course on Spatial Data Analysis and the Part 1B course on GIS and Spatial Analysis. The modules introduce students to the capture, display and statistical analysis of spatial data. Some of the sessions dealt with the construction of a geo-database (using secondary data) and data mapping in a Geographical Information System (GIS), dealing and working with spatial autocorrelation – one of the fundamental properties of spatial data and fitting a regression model (to estimate the association between a dependent variable and a set of independent variables) using spatial data. Conducted a part 1A course on descriptive and inferential statistics using SPSS.

June 2014 – June, 2015. Consultant, PhD Tutors, UK.

- Providing freelance educational consultancy to PhD Tutors' clients on wide-ranging environmental topics; including mentoring students at undergraduate– and graduate–levels.

Feb 2011 – Oct 2011. Forestry Carbon Specialist, Uganda Carbon Bureau.

- Worked on the REDD pilot study in Western Uganda, Forestry Clean Development Mechanism (CDM) Programme of Activities (PoA) and improved cook stoves CDM PoA.
- Engaged in new business development in forestry carbon projects; participated in the management of the Bureau's existing forestry work; company briefings (both written and oral); maintenance of knowledge about latest forestry carbon developments in the voluntary and compliance markets, best practice standards from international organisations; development of the UCB REDD work.
- Client relationship management; publicity and educational event planning and participation; site visits to clients and offset projects; communications with Ugandan and international companies, groups and agencies engaged in forestry offset projects; training of any other staff working on forestry and allied topics employed by the Bureau.

May 2010 – Jan 2011. Consultant, Institute of Tropical Forest Conservation.

- Lead consultant on identifying the opportunities and threats of REDD for conservation and human welfare in South-western Uganda.

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- Produced a discussion paper now published in an international journal, and identified research activities required to address the key unknowns.

Jan 2010 – May 2010. Field team leader, National Agricultural Research Systems-Pan African Bean Research Alliance, CIAT Uganda.

- Assessed environmental impacts of growing climbing beans in South-Western Uganda.
- Collected survey data in the field; analysed and reported the findings in a Technical report.

June 2009 – May 2010. Research Fellow, Institute of Tropical Forest Conservation, Mbarara University of Science and Technology.

- Characterised land use/cover change in and around Bwindi impenetrable forest (used GIS databases).
- Quantified the effect of conversion of native forest to crop and/or pasture lands on carbon stock and soil properties around the forest and conducted laboratory analysis of soil (and wood) samples for pH, SOC, N, P, K, Ca, Mg, Na, soil texture, K sat. among others.

Sept 2007 – Dec 2008. Research Assistant, National Crops Resources Research Institute (NaCCRI), Namulonge, Wakiso District.

- Involved in research on the biochemistry of cassava starch. Conducted physical-chemical characterisation of cassava starch for quality and quantity. Analysed cassava starch for parameters (not limited to) moisture content, swelling power, dry matter content, cold water soluble materials, ash content, amylase content, reducing sugar content.
- Compiled, analysed data, and made recommendations for dietary and industrial applications.

OTHER SKILLS AND ABILITIES

Oct 2014 – June 2015. Convenor, Geographical Information Science Forum meetings, University of Cambridge.

- Demonstrated strong communication (written) skills with a group of Cambridge academics

2013 – 2014. Environmental Officer, Graduate Union, University of Cambridge.

- Participated in graduate student leadership, and demonstrated advocacy skills

2012 – 2015. Team player, St. Edmund's College football team.

2005 – 2006. General Secretary, Makerere University Land Managers Association.

2002 – 2003. Prep Perfect, King's College Budo.

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- Computing skills in Environmental analysis (competent in ArcGIS and Erdas software), MS office, statistical analysis packages with ability to work with large amounts of data

SELECTED PUBLICATIONS

Twongyirwe, R., Bithell M., Richards K. S (in prep). Characterising Rural Livelihood Typologies in Forested and Non-Forested Agro-Ecological Zones in a Tropical Landscape. *Transactions of the Institute of British Geographers*.

Twongyirwe, R., Bithell M., Richards K. S (in prep). Local and Key Informant Perceptions of Forest Cover Change around Budongo and Bugoma. *Journal of Rural Studies*.

Twongyirwe, R., Bithell M., Richards K. S., Rees W. G. (in review). Three Decades of Forest Cover Change in Uganda's Northern Albertine Rift Landscape. *Journal of Land Use Policy*.

Twongyirwe, R., Sheil, D., Sandbrook, E. L., Sandbrook, C. G. (2015). REDD at crossroads? The opportunities, challenges of REDD for conservation and human welfare in Southwest Uganda. *International Journal of Environment and Sustainable Development* 14 (3): 273-298.

Twongyirwe, R., Sheil, D., Majaliwa, J.G.M., Ebanyat, P., Tenywa, M.M., Heist, M. Kumar, L. (2013). Variability of Soil Organic Carbon stock under different land uses: A study in an afro-montane landscape. *Geoderma* 193-194: 282-289.

Twongyirwe, R., Majaliwa, J. G. M., Ebanyat, P., Tenywa, M. M., Sheil, D., Heist, M, Oluka, M. Kumar, L. (2011). Forest cover conversion dynamics in and around Bwindi Impenetrable Forest in South-western Uganda. *Journal of Applied Sciences and Environmental Management* 15 (1): 189-195.

Majaliwa J. G. M, **Twongyirwe, R.**, Nyenje R., et al. (2010). The effect of land cover changes on soil properties around Kibale National Park in South Western Uganda. *Applied and Environmental Soil Science* Article ID 185689, 7 pages. doi: 10.1155/2010/185689.

REFEREES

Prof. Keith Richards, Department of Geography, University of Cambridge. E-mail: ksr10@cam.ac.uk

Dr. Mike Bithell, Department of Geography, University of Cambridge. E-mail: mb425@cam.ac.uk

Dr. Neil Burgess, Head of Science Program, UNEP-WCMC. E-mail: Neil.Burgess@unep-wcmc.org