

Charity Nyelele

Department of Earth System Science, University of California, Irvine, Irvine, CA 92697-3100, USA.
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EDUCATION

State University of New York, College of Environmental Science and Forestry (SUNY-ESF), Syracuse, NY

- PhD in Environmental Science (Environmental Monitoring and Modeling) August 2020
- Thesis title: A spatial multi-objective approach for modeling the ecosystem services and benefits of urban trees

University of Zimbabwe, Harare, Zimbabwe

- Master of Philosophy (MPhil) in Geography August 2013
- Thesis title: Habitat fragmentation, tree species diversity and land cover dynamics in a resettlement area in Chimanimani district of Zimbabwe: A spatio-temporal approach

University of Zimbabwe, Harare, Zimbabwe

- Bachelor of Arts (BA) Honors in Geography July 2008
- Dissertation title: Spatial variations of grass biomass along Avondale stream

RESEARCH INTERESTS

- Intersections of public health and the environment, environmental justice, air pollution
- Forestry, land use and land cover change, landscape ecology
- Climate change, poverty, sustainable development, human health and livelihoods
- Geospatial technologies (Geographic Information Systems (GIS) and Remote Sensing), monitoring and modeling techniques in natural resource management.

EXPERIENCE

University of California, Irvine, Irvine, CA

Postdoctoral Researcher, Department of Earth System Science September 2020 - Present

- Undertaking economic valuation and mapping of different beneficiaries for various ecosystem services in California to inform public and private investments in multi-benefit landscape management as part of a Center for Ecosystem Climate Solutions research project.

SUNY-ESF, Syracuse, NY

Research Project Assistant August 2015 – August 2020

- Provided research support on a USDA Forest Service funded project whose goal was to create a decision support system to develop, analyze, and optimize urban and community forests.

Lupane State University, Bulawayo, Zimbabwe

Lecturer in the Department of Geography and Population Studies January 2014 - August 2015

- Developed and presented lectures, led discussions, designed and evaluated problem sets and exams, designed lab exercises, provided students with assistance in office hours and review sessions for six courses.

Institute of Environmental Studies, University of Zimbabwe, Harare, Zimbabwe

Research Associate July 2014 - March 2015

- Supervised teams of researchers in data collection activities for various research projects. Coordinated focus group discussions, carried out key informant interviews and provided reports of the exercise.

Ruzivo Trust, Harare, Zimbabwe

Program Officer/Researcher January – December 2013

- Ensured the coherent functioning (planning, coordination, implementation and monitoring) of activities across the various agriculture and livelihoods research programs.

Institute of Environmental Studies, University of Zimbabwe, Harare, Zimbabwe

Graduate Research Assistant December 2008 – October 2012

- Provided GIS and Remote Sensing technical backstopping and day to day research assistance in various research projects.

PUBLICATIONS

1. **Nyelele, C** and Kroll, C.N. 2020. The equity of urban forest ecosystem services and benefits in the Bronx, NY. *Urban Forestry and Urban Greening*, p.126723. <https://doi.org/10.1016/j.ufug.2020.126723>
2. **Nyelele, C.**, Kroll, C.N. and Nowak, D.J. 2019. Present and future ecosystem services of trees in the Bronx, NY. *Urban Forestry and Urban Greening*, (42). <https://doi.org/10.1016/j.ufug.2019.04.018>.
3. **Nyelele, C.**, Murwira, A. and Dube, T. 2018. Understanding the impacts of human resettlement and projected land use dynamics in Chimanimani District of Zimbabwe. *Physics and Chemistry of the Earth, Parts A/B/C*.
4. **Nyelele, C.**, Murwira, A., Shekede, M.D. and Mugabe, P.H. 2014. Woodland fragmentation explains tree species diversity in an agricultural landscape of Southern Africa. *Tropical Ecology*, 55(3).
5. Kujinga, K., Chingarande, S.D., Mugabe, P.H. and **Nyelele, C.** 2012. Interface between research, development and local actors in enhancing sustainable forest resources management: Lessons from Chimanimani District, Zimbabwe. *Journal of Social Development in Africa*, 27(1), pp.23-56.
6. Manjengwa, J., Chimhowu, A., Matema, C. and **Nyelele, C.** 2012. ‘Poverty Dynamics in Zimbabwe’, in Manjengwa, J., Feresu, S.B. and Chimhowu, A. (eds), *Understanding poverty, promoting well-being and sustainable development. A sample survey of 16 districts of Zimbabwe*. Sable Press, Harare.
7. Mugabe, P.H., Kujinga, K., Chingarande, S.D., **Nyelele, C.** and Magaisa, E. 2012. ‘Land Reforms, Migrations and Forest Resources Management in Zimbabwe’s Resettlement Areas’, in Hecht, S., Kandel, S., and Morales, A. (eds.) *Migration, livelihoods, and natural resources management*. International Development Research Centre (IDRC) of Canada, Canada.
8. Pellegrom, Q., Ching, A., Kempchen, L., Stoffelen, T., Pratama, A., **Nyelele, C.**, Oster, D.A., Farinha, J.S. and Pelupessy, W. 2015. Brief for Global Sustainable Development Report (GSDR) - Horizon Scan on Aquaculture 2015: Management Practices. United Nations Sustainable Knowledge Platform. Available at <https://sustainabledevelopment.un.org/topics/science/crowdsourcedbriefs>.
9. **Nyelele, C** and Kroll, C.N. A multi-objective decision support framework to prioritize tree planting locations in urban areas. (In Review).

CONFERENCE PRESENTATIONS (includes posters. *indicates invited)

1. **Nyelele, C.** “The Equity of Urban Forest Ecosystem Services and Benefits in the Bronx, NY”. Oral and poster presentation in June 2019 at the Global i-Tree Science and Users Symposium: Discovering the Value of Your Forest, Syracuse, New York.
2. **Nyelele, C.** “Present and future ecosystem services of trees in the Bronx, NY”. Poster presentation in June 2019 at the Global i-Tree Science and Users Symposium: Discovering the Value of Your Forest, Syracuse, New York.
3. ***Nyelele, C.** “Benefits of Bronx (NY) trees under different mortality scenarios”. Brown Bag talk at the New York City (NYC) Urban Field Station in December 2018.
4. ***Nyelele, C** and Lin, J. “Present and Future Ecosystem Services and Benefits of Urban Trees in the Bronx: an i-Tree Approach”. Brown Bag talk at the New York City (NYC) Urban Field Station in November 2017.
5. **Nyelele, C.** “Forest fragmentation and tree species diversity in Nyabamba, Chimanimani district, Zimbabwe” poster presentation at Map Africa 2010, Cape Town International Convention Centre, South Africa.

GRANTS AND

- O'Brien and Gere Graduate Fellowship recipient August 2019 – May 2020
- Foreign Fulbright scholarship grantee August 2015 – August 2020
- SUNY-ESF Graduate Student Association Travel Grant recipient December 2018
- German Academic Exchange Service (DAAD) In-country scholarship recipient January 2010 – October 2012
- Imagery grant for IKONOS satellite imagery from the GEOEYE Foundation April 2010