Academic Staff Profile

1.1 Personal Profile

1.1.1 Personal Details

Name: Dr. Ezekiel Ndunda
Title/Qualification: PhD
Department: Environmental Science and Education
Designation/Position: Senior Lecturer
Email: ndunda.ezekiel@ku.ac.ke
Contact Address: P.O. Box 43844 -00100, Nairobi

Area of Specialization:
- Environmental and Natural Resource Economics

Research Interests:
- Environmental Valuation
- Environmental Accounting
- Economics of Climate Change
- Ecological-Economic Modelling
- Environmental Health Economics
- Economics of Sustainable Development

Google Scholar: https://scholar.google.com/citations?user=-n3X0NcAAAAJ&hl=en&scioq=ezekiel+ndunda

ORCID ID: https://orcid.org/0000-0002-8788-7884

1.1.2 Academic & Professional Qualifications

- PhD (Environmental Economics), University of Pretoria, Pretoria - South Africa
- MSc (Agricultural Resource Economics), Moi University, Eldoret - Kenya
- BSc (Agricultural Engineering), University of Nairobi, Nairobi – Kenya

1.1.2 Employment History

- Assistant lecturer - Moi University, Department of Agricultural Economics (September 2006 - February 2009)
- Tutorial Fellow - Kenyatta University, Department of Environmental Sciences (February 2009 - February 2014)
- Lecturer - Kenyatta University, Department of Environmental Sciences (February 2014 - September 2019)
- Senior Lecturer - Kenyatta University, Department of Environmental Sciences (September 2019 - to date)
1.1.4 Achievements

- Participated in the development of a Policy and Bill for Kenya Water Towers Agency
- Participated in the curriculum review for the Department of Environmental Sciences

1.2 Publications

1.2.1 Referred Journals


1.2.2 Books and Books Chapters

Website: https://www.lap-publishing.com/

ISBN: 9789994455751


1.2.3 Conference/Workshops/Seminar Papers

1.2.3.1 Conference Papers


1.2.3.2 Workshops Papers


1.2.3.3 Seminar Papers


1.2.5 Student Co-authored Publications


1.2.4 Other Publications


1.3 Research

1) Maximizing the returns to large scale infrastructure investments using evidence-based decision-making process in Lower Nzoia Irrigation Development, Kenya.
2) Economic benefits of moving up the hierarchy of waste management in Nairobi’s industrial area, Kenya.
3) Economic analysis of innovations in urban and peri-urban wastewater reuse in Nairobi, Kenya.
4) Total economic valuation of Mt. Elgon Ecosystem (Kenya-Uganda)
5) Challenges, Opportunities and the Way Forward for Food Production in Western Kenya

1.4 Funded Projects

1) Consultancy services for the development of a Coordination Policy and a Bill on Kenya Water Towers.
2) Consultancy services for environmental, social and economic analysis of the tree promotion activities in the Coastal Region under Kenya Coastal Development Project. Kenya Coastal Development Project (KCDP).
3) Consultancy services for the analysis of economic benefits of moving up the hierarchy of waste management in Nairobi’s industrial area, Kenya. Royal Danish Embassy in collaboration Kenya Climate Innovation Centre (KCIC).

1.5 Conferenced/Workshops/Seminars Attended

1.5.1 Conferences Attended

1) The 1st Annual International Conference in Machakos University held from 17th – 19th April, 2018.
2) Regional Conference of the International Network of Women Engineers and Scientists in Speke Resort & Conference Center, Kampala Uganda held from 21th October - 23th October, 2015.

3) The 2nd Research Week and International Conference in Egerton University held from 16th July - 20th July, 2007.


5) RUFORUM Biennial Conference held in Mangochi, Malawi from 23rd April – 27th April, 2007.

6) Moi University 2rd Annual International Conference held from 29th August – 2nd September, 2006.


8) Moi University 2nd Annual International Conference held from 29th August – 2nd September, 2006.

1.5.2 Workshops Attended

1) ESPA Professional Development Course Workshop held at Kenyatta University Conference Centre in Kenyatta University from March 5, 2018 - March 7, 2018.

2) System Theory and Higher Education Workshop held at Kenyatta University Conference Centre in Kenyatta University from April 24, 2017 – April 28, 2017.

3) Research Management Cycle Workshop held at Kenyatta University held at Graduate School in Kenyatta University on September 30, 2015.


4) Training of Trainers Course on the use of Smartboard in Teaching held at Kenyatta University held at Kenyatta University Workshop held at Kenyatta University Business and Students Centre in Kenyatta University from February 11, 2014 – February 20, 2014.

5) Teaching Methodology held at Kenyatta University held at Kenyatta University Workshop held at Kenyatta University Business and Students Centre in Kenyatta University from May 28, 2013 - November 14, 2013.

6) Biofuels Research and Training Workshop Under the Environmental Economics Capacity Building Programme held at the Southern Sun Cape Sun Hotel, Cape Town, South Africa from May 11 – May 15, 2009.

1.5.3 Seminars Attended

1) Biosafety Socio-Economic Considerations Seminar held at Kenya School of Monetary Studies in Nairobi on 8th March, 2018
2) String Theory, Particle Physics and Cosmology Seminar held at Kenyatta University Business and Students Centre in Kenyatta University on 4th April, 2017.

3) Shaping the Future of the Nation through Innovation, Science and Technology Seminar held at Kenyatta University Business and Students Centre in Kenyatta University on 21st October, 2016.

4) Using Evidence to Improve Policy and Program Designs Seminar held at Windsor Golf Hotel and Country Club on 14th June, 2016.

1.6 Supervision of Postgraduate Students

1.6.1 Masters

1) Peter N. Kamande (N50/CE/23662/2013) - Assessment of some heavy metals in vegetables, cereals and fruits grown along River Kiu in Kiambu County, Kenya.
   ▪ (Graduated)

2) Joseph M. Mang’oka (N50/CTY/PT/21829/2012) - Evaluation of irrigation water quality of the Yatta Canal in Machakos County, Kenya.
   ▪ (Graduated)

3) Nyanchoka V. Maryvine (N50/CTY/24631/2013) - The importance of ecosystem functions on rural livelihoods of communities around Mt. Elgon Forest, Uganda.
   ▪ (Graduated)

4) Rachel O. Otieno (N50/CTY/24631/2013) - Groundwater quality and its suitability for domestic use in Ruiru Area, Kiambu County, Kenya.
   ▪ (Graduated)

5) David M. Njiru (N50/CTY/PT/20701/2012) - Climate change and potential for development of micro hybrid systems for electricity access in Upper Eastern and North-Eastern Counties, Kenya.
   ▪ (Graduated)

6) Joseph Karanja (N50/29065/2014) - Climate resilient geothermal production in Eburru, Menengai and Olkaria, Nakuru County, Kenya.
   ▪ (Graduated)

   ▪ (Graduated)

8) Kanyaru S. Mbura (N50/CE/20730/2012) - Assessment of the physico-chemical parameters of ground water in Tharaka Nithi County, Kenya.
   ▪ (Graduated)

   ▪ (Ongoing)
10) Simon P. Odawa (N50/CTY/PT/27609/2013) - Impacts of land-use changes on Mau Forest Ecosystem, Narok County, Kenya.
   - (Ongoing)

   - (Ongoing)

12) Joe A. Omwenga (N50/CTY/PT/21830/2012) - Effects of septic tank effluent on groundwater quality in Nairobi County, Kenya
   - (Ongoing)

13) Dorine M. Ngeti (N50/CTY/PT/20726/2012) - Impact of payment for ecosystem services on welfare in Taita Taveta County, Kenya.
   - (Ongoing)

14) Caroline A. V. Mmata (N50/CE/27862/2013) - Effects of indoor air pollution on maternal and infant health in Mombasa County, Kenya.
   - (Ongoing)

   - (Ongoing)

16) Kibe N. Winnie (N50/29004/2014) - Socioeconomic impacts of carbon projects on livelihoods of smallholder farmers in Meru County, Kenya
   - (Ongoing)

17) Mercy M. Wambugu (N50/CE/28769/2014) - Aquaculture as a substitute economic mechanism to disastrous pesticides: integrating fish into rice farming at Mwea Irrigation Scheme in Kirinyaga County, Kenya.
   - (Ongoing)

18) Kevin Nyakundi Morang’a (N50/28237/2013) - Potential of sawdust briquettes as a source of sustainable biomass energy in Kenya.
   - (Ongoing)

   - (Ongoing)

20) Rhoda Njeri Mwangi (N50/39739/2016) – Assessing the social benefits of soil conservation measures by smallholder farmers in Saba-Saba Sub-Basin in Muranga County, Kenya.
   - (Ongoing)

   - (Ongoing)
   • *(Ongoing)*

23) Evaluating the adoption of smallholder irrigation as a climate-smart agriculture and its effects on livelihoods in Machakos County, Kenya.
   • *(Ongoing)*

1.6.2 Ph. D

1) Mbaabu Patrick (N85/CE/27764/2013) - Effects of feed, fertilized water and liming on the production of Oreochromis Niloticus in different culture systems in Meru County, Kenya.
   • *(Ongoing)*

2) Benjamin M. Kinyili (N85/29390/2014) - Effect of agroforestry systems on ecosystem services and livelihoods for smallholder farmers in Machakos County, Kenya.
   • *(Ongoing)*

3) Nyanchoka V. Maryvine (N85/38924/2018) – Modelling urban air pollution within an Urban Canyon in Nairobi City, Kenya.
   • *(Ongoing)*

1.7 Professional/Consultancy (Editor/Peer review in journals, Networks/Collaborations, External Examiner, Patents)

1) Lead Expert, Environmental Impact Assessment
2) Peer Review in journals:
   (i) Agricultural Water Management
       [https://ees.elsevier.com/agwat/](https://ees.elsevier.com/agwat/)

   (ii) Journal of Environmental & Analytical Toxicology

   (iii) Journal of Development and Agricultural Economics
        [https://academicjournals.org/journal/JDAE](https://academicjournals.org/journal/JDAE)

   (iv) British Journal of Applied Science & Technology

   (v) Asian Journal of Agricultural Extension, Economics & Sociology
1.8 Community Service and Other Engagements

1) Appointed as a socioeconomic Biosafety Expert for the National Biosafety Authority of Kenya.
2) Patron, South Eastern University Students Association. Main Campus, Kenyatta University, Kenya.

1.9 Affiliation of Professional Bodies

1) Environmental Institute of Kenya (EIK) - Member
2) National Environmental Management Authority – Lead Expert
3) Organization for Social Science Research in Eastern and Southern Africa - Member

2.0 National and International awards and Recognitions

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2.1 Administrative Positions Held

2.1.1 Recognized university administrative positions

1) E-Learning Coordinator in the School of Environmental Studies, Kenyatta University, Kenya
2) Examination Coordinator in the Department of Environmental Sciences, Kenyatta University, Kenya.
3) Committee member, Kenyatta University ISO 9001:2000, ISO Auditor and ISO Representative of School of Environmental Studies
4) Coordinator, Departmental Board of Postgraduate Studies, Department of environmental Sciences, Kenyatta University, Kenya.

2.1.2 Other administrative positions Held

1) Chairman of the Committee on Agroforestry and Rural Development Programme (Postgraduate). Department of environmental Sciences, Kenyatta University, Kenya.
2) Member of the Committee on Environmental Resource Conservation Programme (Undergraduate). Department of environmental Sciences, Kenyatta University, Kenya
3) Departmental Website Management Committee. Department of environmental Sciences, Kenyatta University, Kenya
4) Member of the Conference Organizing Committee. Joint Conference with the Horticultural Association of Kenya (HAK) and AGRA.