

Academic Staff Profile

1.1 Personal Profile

1.1.1 Personal Details

Name: Dr. Paul Thomas Obade Title/Qualification: PhD Department: Environmental Science and Education Designation/Position: Senior Lecturer Email: obade.paul@ku.ac.ke Contact Address: Department of Environmental Science and Education 844 Building P. O. Box 43844-00100 Nairobi Area of Specialization: -GIS/Remote Sensing -Environmental and Climate Change Modelling Research Interests: -land use and land cover changes -Ecosystem dynamics and modelling -GIS/Remote Sensing applications Google Scholar:http://ku.ac.ke/ptobade ORCID ID: https://orcid.org/0000-0002-2233-1834	
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1.1.2 Academic & Professional Qualifications

Vrije Universiteit Brussel Brussels, Belgium	PhD (2006) – grade of great distinction Title of thesis: Modelling spatio-temporal dynamics of a Kenyan mangrove forest
EU/FAO/Lake Victoria Fisheries Research Project, Jinja, Uganda	Regional training course on Geographical Information Systems in Fisheries Management and Planning (2002)
Vrije Universiteit Brussel Brussels, Belgium	MSc (Ecological Marine Management) (2000) – grade of great distinction Title of thesis: Anthropogenically induced changes in a Kenyan mangrove ecosystem explained by application of remote sensing and Geographical Information Systems (GIS)
Vrije Universiteit Brussel, Brussels. Belgium	International training course – Knowledge Organisation for Water Sciences: Hydrology, Oceanography and Water Resources Management (1997 – 1998)
Kenya Wildlife Services Training Institute, Kenya	The Integrated Environmental Management course (1997)
University of Nairobi, Kenya	BSc, honours degree (Physics) (1992)

1.1.3 Employment History

Current employer (Kenyatta University)	Senior Lecturer; Geographic Information Systems (GIS), Remote Sensing, Landuse and landcover Dynamics and their Modelling, Quality assurance processes, Environmental Monitoring and Assessment, Water Resources Management, Wetland Resources Inventory, Natural Disaster Management, Climate change modelling, Environmental Physics, Research Methodology and Ecosystem Modelling, postgraduate students supervision and examination.
Previous employer	Kenya Marine and Fisheries Research Institute, (KMFRI). Worked as a research scientist for over 17 years, participating, developing and implementing research projects in lead roles and also held senior positions within the organization. Additionally, wide experience in regional and international collaborative projects. Centre Director , Naivasha Centre [1998-2004]
Position (KMFRI) [2004-2008]	Programme Coordinator – Information and Database Management (IDM) performing the following tasks; Coordinator of research projects and human resource in IDM Budget preparations and staff appraisals Leader of Information and Database Management Research Programme for Inland Waters Regional (East African Community) Focal point – GIS-based Biodiversity atlas for Lake Victoria basin and its catchment, in Lake Victoria Environment Programme (LVEMP) project, funded by the World Bank. Project was focused on research linkages, resource monitoring and management. Regional (EAC) Chairman of the Information, Communication and Outreach Working Group , Lake Victoria Fisheries Research Organization (LVFO) in conjunction with the IFMP European Union project. In charge of information preparation and packaging of research outputs for dissemination to various stakeholders. Coordinator of multidisciplinary research with other core research programmes at KMFRI Oversee preparation of Standard Operating Procedures (SOPS) for various research sampling programmes.

1.1.4 Achievements

- Kenya Wetlands Atlas, GIS-based Wetlands Atlas and compilation of historical satellite images. Publication supported by UNEP and DANIDA
- Regional (EAC) Chairman of the Information, Communication and Outreach Working Group, Lake Victoria Fisheries Research Organization (LVFO) in conjunction with the IFMP European Union project.
- Vice-chairman (1997-1998), Lake Naivasha Management Technical Committee (Biodiversity), Kenya.
- Coordinator of Rift Valley chapter of the International Documentary Film Production on Impact of

Global Warming (European Union-funded, 1999): Documentary title: Sale temps sur la planete (When storms and clouds are gathering). Produced by RBTF (Belgium), A2 (France) and RTP (Portugal).

-Regional Chairman of the Information, Communication and Outreach Working Group, Lake Victoria Fisheries Research Organization (LVFO) in conjunction with the IFMP EU project (2005-2007).

-Focal Point – Preparation of Regional Biodiversity Atlas on Lake Victoria Basin and its catchment area; GIS maps on thematic biodiversity topics in the framework of Lake Victoria Environmental Management Programme for Kenya, Uganda and Tanzania (including organization of stakeholder workshops). – GIS-based Biodiversity atlas for Lake Victoria basin and its catchment, in Lake Victoria Environment Programme (LVEMP) project, funded by the World Bank. Project was focused on research linkages, resource monitoring and management.

-Facilitator – Consultant lecturer on GIS and Wetland Resource Mapping. International Course on African Wetland Management at KWSTI 20 September 2006-2013.

1.2 Publications

1.2.1 Referred Journals

Kipkemai, I.; Obade, P. and Kungu J. (2026). Political conflict cycles influence forest degradation dynamics in Elgeyo Marakwet, Kenya. Discover Forests. Springer Nature (under review)

Obade, V., Gaya, C.O. & Obade, P.T. (2026). Assessing the spatial characterization of above ground biomass in Africa. Discover Forests. **2**,24. Springer Nature. <https://doi.org/10.1007/s44415-026-00088-7>

Siocha, C; Obade, P. and Ming'ate, F. (2026). Effects of Extreme Temperature and Rainfall on Vulnerability and Climate Change Resilience of Electricity Transmission Infrastructure in Kajiado County, Kenya. International Journal of Research and Innovation in Social Science 10(6):1246-1255 DOI: 10.47772/IJRISS.2026.100600091

Waswa, R., Obade, P. and Njuguna, S. (2025) Land Cover Change Assessment, Prediction Modelling, and Ecosystem Service Implications in Lubigi Wetland, Kampala, Uganda. Journal of Geographic Information System, **17**, 324-334. doi: [10.4236/jgis.2025.175015](https://doi.org/10.4236/jgis.2025.175015).

Sweta, L.; Obade, P. and Muriuki, J. (2025). Land Use and Land Cover Dynamics and Ecosystem Service Valuation in South West Mau Kericho, Kenya (1995–2020). Preprint. <https://doi.org/10.21203/rs.3.rs-8115875/v1>

Kimuyu, B.; Kariuki, D.; Zolver, M; Matamba, E; Nassar, S; Magara, I; Yashin, B; Sweta, L; Obade, P; Muriuki, J; Rolier, D; Kuo, S; Kinyanjui, R and Braun, H. (2024). Comparative Genomics of Barbus and Closely Related Cyprinid Genera in the East African Great Lakes, focusing on Kenyan Samples.

Obade, V; Obade, P. and Gaya, C. (2024). Examining Urban Mapping Veridicality: A Data Analytics of Mexico City. Preprint. DOI: 10.2139/ssrn.4987356

Nyaundi, C. M. and Obade, P. T. (2023). Contribution of Civil Society in Climate Change Adaptation in Nairobi City County, Kenya. International Journal of Life Science and Agriculture Research. DOI: <https://doi.org/10.55677/ijlsar/V02I10Y2023-08>

Mwangi, J., & Obade, P. (2023). Spatial Patterns of Solar Photovoltaic System Diffusion Kisumu County, Kenya. *International Journal of Environmental Sciences*, 6(3), 30–47. <https://doi.org/10.47604/ijes.2160>

King'ori, E.W.; Abdel-Rahman, E.M.; Obade, P.T.; Mudereri, B.T.; Adan, M.; Landmann, T.; Tonnang, E. Z. T. and Dubois, T. (2023). Integrating Sentinel-2 Derivatives to Map Land Use/Land Cover in an Avocado Agro-Ecological System in Kenya. *Remote Sensing in Earth Systems Sciences*. Springer Nature. <https://doi.org/10.1007/s41976-023-00090-z>

Obade, V.P.; Gaya, O.C. and Obade, P.T. (2023). Statistical diagnostics for sensing spatial residue cover. *Precision Agriculture*. Springer Nature. <https://doi.org/10.1007/s11119-023-10024-w>

Mareri B, Kitur E, Obade P. (2021). Assessment of Bioaccumulation of Zn, Pb and Cd in *E.cassipes*, *V.cuspidata* and *C.Papyrus* from River Kisat, Kisumu County, Kenya. *African Journal of Pure and Applied Sciences*. AJPAS -020

Oduor S, Brown J, Macharia G.M, Boisseau N, Murray S, Obade P. (2020). Differing physiological and behavioural responses to anthropogenic factors between resident and non-resident African elephants at Mpala Ranch, Laikipia County, Kenya. *PeerJ* 8:e10010 DOI 10.7717/peerj.10010

Warui W.M, Manohar S, Obade P. (2020). Current status, utilization, succession and zonation of mangrove ecosystem along Mida Creek, Kenya. *Bonorowo Wetlands*. P-ISSN: 2088-110X Volume 10, Number 1, June 2020 E-ISSN: 2088-2475 Pages: 32-43 DOI: 10.13057/bonorowo/w100103

Chelangat J., Mburu, B. and Obade, P. (2020). Effects Of Logging On The Diversity Of Tree Species In Kerisoi Natural Forest, Nakuru County, Kenya. *International Journal of Innovative Research and Advanced Studies (IJIRAS)* Volume 7 Issue 2. ISSN: 2394-4404

Odhiambo N O., Obade, P. and Gathuru, G. (2019): Anthropogenic Impacts on Land Use and Land Cover Change in Ombeyi wetland, Kisumu County, Kenya. *International Journal of Regional Development*. ISSN 2373-9851

Ochieng, J., Kitur, C. and Obade, P. (2016): Assessment of decay coefficients of allochthonous litter for sustainable riparian forage agriculture and environmental monitoring: A study in River Nyangores, Kenya. *Open Atmospheric Science Journal*. Bentham Science Publishers.

Obade, P., N. Koedam, K. Soetaert, G. Neukermans, J. Bogaert, E. Nyssen, F. Vannedervele, U. Berger and F. Dahdouh-Guebas (2009). Impact of anthropogenic disturbance on a mangrove forest assessed by a 1D cellular automaton model using Lotka–Volterra-type competition. *International Journal of Design and Nature and Ecodynamics*. Vol. 3, No. 4 1–25, Southampton, UK

Obade, P. T. (2006): Modelling spatio-temporal dynamics of a Kenyan mangrove forest. PhD thesis, Vrije Universiteit Brussel, Belgium.

Obade, P. T.; Dahdouh-Guebas, F.; Koedam, N.; De Wulf, R., and Tack. J. (2004): GIS-based integration of interdisciplinary ecological data in the detection of land-cover changes of creek mangroves of Gazi Bay, Kenya. In: *Western Indian Ocean Journal of Marine Science* Vol 3, No. 1, pp 11-26.

Harper, D. M.; Smart, A. C.; Coley, S.; Schmitz, S.; North, R.; Adams, C.; Obade, P. T. and Mbogo, K. (2002): Distribution and abundance of the Louisiana red swamp crayfish *Procambarus clarkii* Girard at Lake Naivasha, Kenya between 1987 and 1999. *Hydrobiologia* 488: 143-151. Kluwer Academic Publishers, Netherlands.

1.2.2 University Level Scholarly Books

MEMR (2012): Kenya Wetlands Atlas, GIS-based Wetlands Atlas and compilation of historical satellite images. Publication supported by UNEP and DANIDA

1.2.3 Conference/Workshops/Seminar Papers

Conference Papers

Anthropogenically induced changes in a Kenyan mangrove ecosystem assessed by application of remote sensing and GIS: A case study in Gazi. International symposium on comparing Great Lakes of the World (GLOW III; climate, food webs, biodiversity and integrated management), February 2001 in Arusha, Tanzania

The fishery of Lake Naivasha, Kenya, its potential, threats and implication of the current management strategies. International symposium on comparing Great Lakes of the World (GLOW III; climate, food webs, biodiversity and integrated management), February 2001 in Arusha, Tanzania

Evaluation, restoration and management practises in the conservation of tropical, Mediterranean and temperate forest ecosystems. Botany in Belgium and Belgium's botanical diversity BBB2001 symposium, Bouchout-Meise, Belgium, 2003.

Restoration of mangroves. NECOV (Nederlands-Vlaamse vereniging voor ecologie) Symposium on Exploitation and Restoration of Tropical Aquatic Ecosystems, 7 October, Brussels, Belgium 2004.

Management for Lake Victoria Environment and Resources for Posterity; Synthesis and lessons learnt (17th to 19th October, 2005, Tom Mboya Labour College, Kisumu, Kenya)

Impact of disturbance on Gazi Bay mangrove forest assessed by a cellular automaton model and Lotka Volterra type competition. Proceedings; Int'l Symposium on Aquatic Vascular Plants: 25 Years After. 2nd – 6th February, 2006 Brussels, Belgium.

The equilibrium dynamics of mangroves of Gazi Bay (Kenya)- modelling based on mangrove species competition. Mangrove Macrobenthos Meeting 2 (MMM2), 25-30 June 2006, Gold Coast, Australia

1.2.3 Patented Inventions or Innovations

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1.2.4 Tertiary Level Scholarly Books

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1.2.5 Book Chapters

Obade V. P, Gaya C and Obade P.T (2022). Challenges and Opportunities of Digital Technology in Soil Quality and Land Management Research. C. M. Galanakis (ed.), Environment and Climate-smart

Gichuki, J.; Abila, R.; Lung'aiya, H.; Njoka, S.; Ofulla, A.; Obade, P.; Omondi, R.; Boera, P. and Mwende, K. (2011): Studies on Rapid Assessment of the Ecological Succession and the Dynamic Status of the Water Hyacinth in the Nyanza Gulf of Lake Victoria. ACTS press, African Centre for Technology Studies, Lake Victoria Basin Commission. ISBN 9966-41-153-4

LVEMP (2005): Regional Biodiversity Atlas on Lake Victoria Basin and its catchment area. (compilers: Obade, P. T., Kayanda, R., Sekiranda, S. and SSebugwawo, V.). GIS maps on thematic biodiversity topics in the framework of Lake Victoria Environmental Management Programme for Kenya, Uganda and Tanzania.

1.2.6 Refereed Learning Modules

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1.2.7 Reviewed Conference Papers

Adatia, R., Coley, S., Smart, A., Harper, D., Obade, P. (1999). Changes in the feeding Ecology of the African lily trotter *Actophilornis Africanus* (Gmelin) at lake Naivasha, Kenya. Eds Harper, D; In Ecohydrology; Science and the sustainable management of tropical waters. A summary of the projects presented to the Conference Naivasha Kenya 11-16 April 1999. Prepared and published in cooperation with the UNESCO Venice Office

1.2.8 Secondary School Level Textbooks

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1.2.9 Short Communication in Journals

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1.2.10 Consultancy and Project Reports

Obade, P. T. (2003). Detection of land-cover tendencies, monitoring and modelling along Kenya Coast (with emphasis on mangrove forests) and papyrus of Lake Naivasha, Kenya

Obade, P. T. (2001): Integration of scientific data into GIS environment for Pambala and Galle, Sri Lanka (consultancy technical report for EC-INCO project on mangrove ecology of India and Sri Lanka)

Obade, P. T. (2000): Anthropogenically induced changes in a Kenyan mangrove ecosystem explained by application of Remote Sensing and Geographic Information Systems (GIS). MSc thesis, Vrije Universiteit Brussel, Belgium.

Obade, P. T. (1997): Conservation and management of Lake Naivasha water resources (technical report)

Obade, P. T. (1994): Population dynamics of Louisiana red swamp crayfish (*Procambarus clarkii*) of Lake Naivasha (technical report)

Obade, P. T. (2004). Spatio-temporal changes in papyrus and mangrove vegetation: Quantification of change and possible relation with ecological stability using remote sensing, GIS and computer simulation models (unpublished report)

1.2.11 Non-reviewed Conference Papers

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1.2.12 Refereed Exhibitions and Performances

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1.2.13 Other Publications

Kenyatta University Environmental Policy (2013).

1.2.14 Editorship of a Book or Conference Proceeding-

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1.2.15 Scholarly Presentations at Conferences/Workshops/Seminars

National Consultative Meeting to Develop a masterplan and strengthen regulatory frameworks for sustainable coastal, marine tourism and mining activities Nairobi, Kenya 22 – 24th March, 2023
EEC/KMFRI International workshop on “Lake Victoria Fisheries Research”, September, 1991, Imperial Hotel, Kisumu, Kenya.

The inception and prioritization workshop for the Kenya Climate-Smart Agriculture Investment Plan, 9TH – 11TH MAY 2022 FROM 8:30AM - Hotel Fairmont The Norfolk, Nairobi

Meeting on Climate Change -14th June 2022 Pride Inn Hotel, Nairobi, Kenya

Artificial reef and sustainable lobster fishery management in Western Indian Ocean, Brussels, Belgium (May, 2000),

Wetland Mapping, finalization workshop in the production of a Kenya Wetland Map, 2-6 August, 2011, Lake Naivasha Tourist Resort, Naivasha, Kenya

Workshop for a Kenya National Carbon Accounting System (KENCAS), 29 June 2012, Hilton Hotel, Nairobi

Convened and coordinated workshop on Status of the GIS Biodiversity Atlas for Lake Victoria. National Workshop on the Regional Synthesis Report on the Fisheries Research and Management (7th – 9th September 2005, Tom Mboya Labour College, Kisumu, Kenya)

Convened and coordinated workshop on Status of the GIS Biodiversity Atlas Database for Lake Victoria. National Workshop on the Regional Synthesis Report on the Fisheries Research and Management (18th – 19th September 2005, Imperial Hotel, Kisumu, Kenya)

Convened and coordinated workshop on Aquatic Biodiversity Atlas of Lake Victoria basin and its catchment (22nd – 28th August 2005, Mwanza, Tanzania)

Convened and coordinated workshop on Aquatic Biodiversity Atlas of Lake Victoria basin and its catchment (10th – 14th October, 2005 in Seeta-Mukono, Uganda)

Anthropogenically induced changes in a Kenyan mangrove ecosystem assessed by application of remote sensing and GIS: A case study in Gazi. International symposium on comparing Great Lakes of the World (GLOW III; climate, food webs, biodiversity and integrated management), February 2001 in Arusha, Tanzania

The fishery of Lake Naivasha, Kenya, its potential, threats and implication of the current management strategies. International symposium on comparing Great Lakes of the World (GLOW III; climate, food webs, biodiversity and integrated management), February 2001 in Arusha, Tanzania

Evaluation, restoration and management practises in the conservation of tropical, Mediterranean and temperate forest ecosystems. Botany in Belgium and Belgium's botanical diversity BBB2001 symposium, Bouchout-Meise, Belgium, 2003.

Restoration of mangroves. NECOV (Nederlands-Vlaamse vereniging voor ecologie) Symposium on Exploitation and Restoration of Tropical Aquatic Ecosystems, 7 October, Brussels, Belgium 2004.

Management for Lake Victoria Environment and Resources for Posterity; Synthesis and lessons learnt (17th to 19th October, 2005, Tom Mboya Labour College, Kisumu, Kenya)

Impact of disturbance on Gazi Bay mangrove forest assessed by a cellular automaton model and Lotka Volterra type competition. Proceedings; Int'l Symposium on Aquatic Vascular Plants: 25 Years After. 2nd – 6th February, 2006 Brussels, Belgium.

The equilibrium dynamics of mangroves of Gazi Bay (Kenya)- modelling based on mangrove species competition. Mangrove Macrobenthos Meeting 2 (MMM2), 25-30 June 2006, Gold Coast, Australia

Capacity building for integrated water resources and sanitation management on 28th May 2009 at Kenyatta University, Nairobi.

Wetland Mapping Methodology Definition Retreat: Paper entitled; "Methods for Wetland Mapping; GIS applications", sub-committee to oversee the production of an inventory and mapping of wetlands and hotspots in Kenya, 9-13 November 2010, Waterbuck Hotel, Nakuru, Kenya.

Natural Disaster Management in Arid and Semi-Arid Lands, June 20-24, 2012. Imperial Hotel, Kisumu, Kenya.

Convened and coordinated ESRI Eastern Africa Education User Conference, October 2013, Kenyatta University, Nairobi

International GIS Day Seminars 2015-2019 hosted at Kenyatta University, Kenya

1.2.16 Book Review Published in Refereed Journals

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1.3 Quality Teaching, Learning and Mentorship

1.3.1 Student Evaluations

Evaluations were done and samples are attached

1.3.2 Trainings in Higher Education

Completion of course on Teaching Methodology at Kenyatta University

1.3.3 Ongoing Supervisions

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1.3.4 Supervision of Postgraduate Students

1.3.4.1 Masters

Everlyne Binyanya Obwocha N50/20581/2010 Assessing the effects of climate change on food security: case study in West Pokot County

Christine Adongo N50/10117/2008 Impacts of natural products utilization on the indigenous biodiversity of Kaya Mudzimuvya, A world heritage site in Kilifi District, Kenya

Raphael Wanjala Wanyonyi N50/15427/08 Impact of human population on land degradation in Lugari District, Western Province, Kenya

Mary Wanjiru Warui N50/10690/2007 Current status, utilization and succession of mangrove ecosystem along Mida Creek, Coast Province, Kenya

Lucy Kanana Munyugi N50/10000/2008 The assessment of electronic-waste management strategies in Nairobi, Kenya

Gesicho Andrew The Interaction of Elephants with Habitat and Humans in the Shimba Hills National Reserve and its Environments

Pauline Tolo Ogola N50/24881/2011 Human population growth and its impacts on land resources in Migori District, Migori County

Lavender Alwaka Ondere N50/CTY/PT/24879/2011 Spatio-temporal changes of landcover types in response to anthropogenic and ecological dynamics in Yala swamp wetlands–Kenya

Kipkemai C. Isaac N50/23417/2013 Detecting Forest degradation and modeling a future scenario using GIS and remote sensing, in Elgeiyo/Marakwet County, a case study of Embobut forest

Nicodemus Osoro N50/38336/2016 Anthropogenic Impacts on Land Use and Land Cover in Ombeyi Wetland, Kisumu County, Kenya

Brenda Mareri N50/CTY/PT/28754/2014 Bioaccumulation of heavy metals in macrophytes along river Kisat, Kisumu County, Kenya

Brenda Binge N50/CTY/PT/39731/2016 Impact evaluation of hydroponics technology in Kiambu County, Kenya

Beatrice Chelangat N50/38008/2016 Effects of human activities on utilization and conservation of Keriso Forest station, Nakuru County, Kenya

Eunice Kingori N50/CTY/PT/37338/2016 Implication of landscape structure and dynamics on pollinators in avocado production systems in Muranga County

Eve Njau N50/CTY/PT/37879/2017 Assessing the impacts of land use changes on ecosystem services benefits in Narok County

Sandy Oduor N50/38843/2016 Influence of human activities on the stress hormone levels of African elephants in Mpala ranch, Laikipia County, Kenya

Crispus Michira Nyaundi N50/CTY/PT/28715/2019 Contribution of civil society in climate change adaptation in Nairobi City County, Kenya

Mwangi Joyce Wambui N50/CTY/PT/26322/2018 Spatial patterns of solar photovoltaic system diffusion in Kisumu County, Kenya

Obonyo Babu Michael N50/CTY/PT/31260/2015 Land Use Impacts on Water Quality: A Case Study of Fourteen Falls, Thika Sub County In Kiambu County, Kenya.

Clifford Mouti Siocha N50/CTY/PT/32330/2015 Electricity Transmission Infrastructure's Vulnerability And Climate Change Resilience In Kajiado County, Kenya.

Leah Waswa Malot N50/CTY/PT/37066/2017 Effects of Land Cover Changes On Ecosystem Services and Prediction Modelling In Lubigi Wetland, Kampala, Uganda

Mercy Musengya Minoo N50/CTY/PT/25380/2024 Dispersal Site Experiment and Hydrological Remediation for Mangrove Restoration

Samuel Njoroge Karanja N50/CE/24236/2013 E-Waste assessment and Its Management in repair shops, Nairobi City County, Kenya

Emmanuel Gichuru Muchora N50/CTY/PT/22466/2022 Impact of Tourism Activities on Forest Conservation in Karura Forest, Nairobi City County, Kenya

Everlyne Akoth Onyango N50/CT/PT/25664/2024 Air Quality Assessment in Urban, Peri-urban, and residential areas of Kisumu County, Kenya.

Simon Nguri Mwangi N50/CTY/PT/21364/2023 Spatial and Temporal Assessment of Vegetation Health and Edge Degradation in Karura Forest using Remote Sensing and GIS, Nairobi County, Kenya

1.3.4.2 PhD

Godfrey Shem Juma N85/21804/2023 Enhanced Forage Prediction for Real-Time Monitoring and Early Warning: A Case of Marsabit, Turkana, and Isiolo Counties

Phoebe Kalelwa Murunga N85/24600/2025 Impacts of Climate Change on Urban Sustainability in Nairobi City County, Kenya

David Simba Nyamweya N85/38425/2017 Coupled Effects Of Climate Variability And Land Use Pattern On Surface Water Quantity And Quality In Kisii County, Kenya

John Kamau Wandaka N85/12015/07 Impacts of human settlements in Kitengela on the migratory wildlife of Nairobi National Park, Kenya

Ochieng Jacob N85/37219/2016 Normalized Difference Vegetation Index and Hyphomycete Activity for Selected Allochthonous Detritus in River Nyangores, Kenya.

Gathura James Gichuki N85/23420/2012 Assessment of climate change adaptation in water resource management over the Mwea Tabere rice growing scheme to avert impacts due to frequent extreme climatic events

Benedict Omondi N85/28933/2014 Spatial and temporal variations of hydrological processes and water resources in Sagana Sub-Catchment of the Upper Tana Catchment, Nyeri County, Kenya-

Leonard Sweta N85/39102/2016 Effects of Land use & Land cover changes on Ecosystems, Ecosystem Services & Climate Change in Mau Ecosystem.

1.4 Professional/Consultancy

1.4.1 Networks/Collaborations

EU-ECOFISH

AICCRA-CIAT

FISHERIES AND BLUE ECONOMY STATE DEPARTMENT

NRF

NACOSTI

KWSTI

1.4.2 Editorial Boards/Referee for Professional Periodicals

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1.4.3 Consulting for International/National Boards

Consultant Lecturer at Somali National University for Somali Women's MSc Programme (funded by World Bank) 2026-ongoing

Reviewer for LVEMP's consultant's report (consultancy by SMEC INTERNATIONAL) on Buffering processes and capacity of wetlands in the Kenyan portion of the Lake Victoria basin, including production of wetland maps (2005)

Regional Focal point – Production of GIS-based Regional Biodiversity atlas for Lake Victoria basin and

its catchment, Lake Victoria Environment Programme (LVEMP 1), funded by World Bank/GEF 2004 – 2007

GIS Scientist in the consultancy for studies on a rapid assessment of the ecological succession and the dynamics of water hyacinth *Eichhornia crassipes* in the Nyanza Gulf of Lake Victoria- 2008

GIS Database and remote sensing expert: Integrating BOMOSA cage fish farming system in reservoirs, ponds and temporary water bodies in Eastern Africa – EU 6th Framework Program Sub-priority-INCODEV; contract No. 032103–2006 – 2010

Competitively selected/nominated for a six (6) month International Training Programme on Transboundary Water Management for Lake Victoria Region in Kenya and Rwanda, November 10 – 21, 2008 and in Sweden February 16 – 20, 2009 The Programme was sponsored by the Swedish International Development Agency (Sida) and organised by Ramboll Natura AB and Stockholm International Water Institute (SIWI)

Consultancy in The identification and mapping of ECOLOGICALLY SENSITIVE AREAS (ESAs) in Lake Victoria - 2009-2011

1.4.5 Consulting for Organisations/Institutions

Buffering processes and capacity of wetlands in the Kenyan portion of the Lake Victoria basin, including production of wetland maps (2005)

1.4.6 Membership to Academic/Professional Bodies

Member, Western Indian Ocean Marine Science Association (WIOMSA)

Member, Member of Fisheries Society of Africa (FISA)

Member, Mangrove Management Group (MMG)

1.4.7 Any other (Editorship/Peer Review, external examiner, e.t.c)

External Reviewer, National Council of Science and Technology (NACOSTI)

External Reviewer, National Research Fund (NRF)

External Reviewer, (Kenya Medical Research Institute) KEMRI Internal Research Grants Awarding and Management Committee (2014)

External Reviewer, SANTHI SRI K V (PhD dissertation) Investigation on adoption of integrated pest management practices for red gram crop by the farmers of Prakasam District in Andhra Pradesh, India (2012)

1.5 Administrative and Responsibilities

1.5.1 Recognised University Administrative positions

Departmental Exam Coordinator (ENSED Dept.) in the School of Environmental Studies, Kenyatta University

Chairman of Departmental Postgraduate Committee in the School of Environmental Studies, Kenyatta University

Chairman of Departmental ISO Committee in the School of Environmental Studies, Kenyatta University

School of Agriculture and Environmental Studies E Learning Coordinator

1.5.2 Other responsibilities in the Universities

Vice-Chairman Kenyatta University Environmental Committee in preparation of Kenyatta University Environmental Policy Document

Vice-Chairman of Curriculum Review Board in the School of Environmental Studies, Kenyatta University

Vice Chairman, Collaborations Committee, Division of Research Innovation and Outreach Industry Collaborations

Reviewer for Research Proposal Kenyatta University Vice Chancellor's Grant Award in 2016

1.6 Community Engagements and Other Contributions

1.6.1 Research Funding

Production of GIS-based Regional Biodiversity atlas for Lake Victoria basin and its catchment, Lake Victoria Environment Programme (LVEMP 1), funded by World Bank/GEF 2004 – 2007

Studies on a rapid assessment of the ecological succession and the dynamics of water hyacinth *Eichhornia crassipes* in the Nyanza Gulf of Lake Victoria- 2008

Integrating BOMOSA cage fish farming system in reservoirs, ponds and temporary water bodies in Eastern Africa – EU 6th Framework Program Sub-priority-INCODEV; contract No. 032103–2006 – 2010

The identification and mapping of ECOLOGICALLY SENSITIVE AREAS (ESAs) in Lake Victoria - 2009-2011

1.6.2 Community Outreach

Parents Teachers Association Executive Board, Maryhill High School

Departmental Mentorship, advisor and student counsellor

Lakeview Estate Welfare Association, Naivasha

1.6.3 Professional Affiliation and Portfolios

Member, Western Indian Ocean Marine Science Association (WIOMSA)

Member, Member of Fisheries Society of Africa (FISA)

Member, Mangrove Management Group (MMG)