



CURRICULUM VITAE

1.0 PERSONAL INFORMATION

NAME : Dr. **Esther Lean Kitur**

PHYSICAL ADDRESS : Kenyatta University, School of Environmental Studies

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NATIONALITY : Kenyan

DATE OF BIRTH : 6TH OCTOBER 1962

[https://scholar.google.com/citations?hl=en&view_op=list_works&gmla=AJsN-](https://scholar.google.com/citations?hl=en&view_op=list_works&gmla=AJsN-F5cBXDMTNzvkg_W0J1GiqzfNEfA9rxAxjBkw4dKJ5pLO03cVKrDf-sI2MS3k6wYD2Y8H4UBphnm-oXel-RWoXplK5hn-7r1cBUJV3yWcBnAm2le6uZ9_Sz6LrCUUkAaJdr9IqkF&user=flFvodQAAAAJ)

[F5cBXDMTNzvkg_W0J1GiqzfNEfA9rxAxjBkw4dKJ5pLO03cVKrDf-sI2MS3k6wYD2Y8H4UBphnm-oXel-RWoXplK5hn-7r1cBUJV3yWcBnAm2le6uZ9_Sz6LrCUUkAaJdr9IqkF&user=flFvodQAAAAJ](https://scholar.google.com/citations?hl=en&view_op=list_works&gmla=AJsN-F5cBXDMTNzvkg_W0J1GiqzfNEfA9rxAxjBkw4dKJ5pLO03cVKrDf-sI2MS3k6wYD2Y8H4UBphnm-oXel-RWoXplK5hn-7r1cBUJV3yWcBnAm2le6uZ9_Sz6LrCUUkAaJdr9IqkF&user=flFvodQAAAAJ)

2.0 QUALIFICATIONS

2.1 Academic Qualifications

- 2009: Ph.D. in Environmental Science (Aquatic Ecology), Kenyatta University.
Title of the thesis: A Comparative Study of the Influence of Variations in Environmental Factors on Phytoplankton Properties of Selected Reservoirs in Central Kenya.
- 1989-1990: MSc (Fisheries) Aligarh Muslim University (India)

- 1985- 1988: Bachelor of Science, Punjab University (India)
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- 1980-1981: Kenya Advanced Certificate of Education
- 1976-1979: East African Certificate of Education

2.2 Professional courses

- 28th M ay and 14th Nov 2013—Certificate in teaching Methodology
- May 3rd -7th May 2010- Introductory Tools of Environmental Management (UNEP/SENKE)

3.0 EMPLOYMENT HISTORY

- 2004: Lecturer, Department of Environmental Sciences,
Kenyatta University
- 1994-2004: Tutorial fellow, Department of Environmental Sciences,
Kenyatta University
- 1991-1994: Chemists 111, (Material Branch) Ministry of Public Works

4.0 ADMINISTRATIVE RESPONSIBILITIES (AT KU)

4.1 At Kenyatta University

- **5TH February 2020** Coordinator (Second Term) Regional Centre for Expertise Greater Nairobi (RCE-GN).
- 5th February 2018, Appointed Coordinator Regional Centre for Expertise Greater Nairobi (RCE-GN).
- 3rd august 2015 to 5th October 2015: Acting Dean School of Environmental Studies
- 3rd August 2013 to Sept.2015: Chairperson (second term) Department of Environmental Sciences.
- 3rd August 2011- 2nd August 2013: Chairperson, Department of Environmental Sciences.
- 9th September 2008 - 3rd August 2011: Examination Coordinator in the Department of Environmental Sciences.

- 18th April to date: Member .Ad-hoc Committee to spearhead collaboration with Government chemist, Kenya Bureau of standards (KEBS) and Kenya Plant Health inspectorate service (KEPHIS).

5.0 Fellowships

6.0 POSTGRADUATE SUPERVISION

6.1 Ph.D. Supervision

6.1.1 COMPLETED

1. **2015: Dr.Nzeve Julius Kioko; (N85/24137/2011):** Assessment of heavy metal contaminatinats in water, sediments and three selected food fish species in Masinga reservoir in Kenya.. Graduated during the 38th graduation held on 17th July. 2015 at Kenyatta University.

6.1.1.1. ON GOING

2. **2013: Mbaabu Patrick (N85/CE/27764/2013):** Effects of economic stimulus aquaculture projects on small fish farmers live hoods. Aquaculture performance and agroforestry in Meru County.
3. **2014: Kinyili Mutuku Benjamin (N85/29390/2014):** “Effect of Agroforestry on the Supply of Ecosystem Services and Livelihoods for Smallholder Farmers in Machakos County Kenya”
4. **2015: Wahome Morris Mathenge (N85/31028/2015):** Influence of Land use and Land cover changes on groundwater resources in the stony Athi- Sub Catchment, Kiajado County, Kenya.

6.2 Masters Supervision

6.2.1 COMPLETED

5. **Sigoria E. Nasenya (N50/10391/2008).** Investigation of heavy metals pollution in Pharsalus Vulgaris and Vigna Unguiculata grown using untreated sewage water in Ruai Nairobi Kenya. Graduated in June 2012.
6. **Muturi. J. N. (N50/CE/11396/08).** Assessment of environmental and health risks associated with abattoir wastes at Thika Municipal Slaughter House Kiambu

County. Graduated during the 36th graduation held on 3th June 2014 at Kenyatta University.

7. **Kiarie C. Kamau (N50/CE/21020/2010)**. Impacts of subdivision of ranches in Malili Division, Makueni county Kenya. Graduated during the 36th graduation held on 3th June 2014 at Kenyatta University.
8. **Gitahi M. Wangombe (N50/10024/07)**. Potential risk of agrochemicals on environment and human health in Mukaro Location Nyeri Kenya. Graduated during the 37th graduation held on 19th Dec. 2014 at Kenyatta University.
9. **Kinyanjui J. Ngera (N50/CE/11393/08)**. Challenges and Opportunities of inorganic solid waste reuse and recycling systems in Thika Town Kenya. Graduated during the 37th graduation held on 19th Dec. 2014 at Kenyatta University.
10. **Gitau J. Kinyua (N50/CTY/PT/)**. Effectiveness of natural wetlands in waste water treatment, Graduated during the 37th graduation held on 19th Dec. 2014 at Kenyatta University.
11. **Mbugua P. Karanja(N50/CTY/PT/23012/2011)**. Suitability of waste water sludge for agriculture use with respect to heavy metals; Ruai sewage treatment plant,
12. **Maina E. Wairangu (N50/10024/07)**. Utilization of potential by-products and cleaner production in industrial Nile perch processing in Kenya. Graduated during the 38th graduation held on 17th Dec. 2015 at Kenyatta University.
13. **Abdirahman.H. Abdow (N50/CE/22649/2010)**. Impact of lime/whitewash mining on the Environment in Wajir County. Graduated during the 38th graduation held on 17th July. 2015 at Kenyatta University
14. **2010: Mugun K. Kipchumba (N50/CTY/PT/24604/2010)**. A comparison of the levels of nitrate, phosphorus and cadmium contamination in groundwater by fertilizer application. Graduated during the 38th graduation held on 17th Dec. 2015 at Kenyatta University.
15. **Atieno J. Halwenge;(N50/CTY/PT/24874/2011)**. Dust pollution and its Health Risks among rock Quarry Workers in Kajiado County Kenya'. Graduated during the 38th graduation held on 17th Dec. 2015 at Kenyatta University.
16. **2011: Ochieng Jacob (N50/CE/PT/24875/2011)**. Phosphorus levels and in-situ processing coefficients of selected allochthonous forage detritus in river Nyangores, Bomet County. Graduated during the 38th graduation held on 17th Dec. 2015 at Kenyatta University.
17. **2011: Kagendo M. Njiru (N50/21026/2011)**. Impedance of Germinative Emergence of Maize and Finger millet by plastic waste material in soil. Graduated during the 40th graduation held on 15th July. 2016 at Kenyatta University.

- 18. Carol, J. Rotich; N50/CTY/PT/23013 /11-** Ecology of Medical Plants and their Integration into Primary Healthcare in Marigat District, Baringo County, Kenya. Graduated during the 40th graduation held on 15th July. 2016 at Kenyatta University.
- 19. 2012: Seswa Fred N50/CE/21360/2012;** Assessment of Human Activities on the Vegetation of Tropical Rainforest, Kakamega County Kenya. Graduated during the 41th graduation held on 16th Dec. 2016 at Kenyatta University.
- 20. 2012: Kibet Faith Cherono N50/222295/12;** Water Quality and Species Composition of Chemususu Dam, Baringo County, Kenya. Graduated during the 41th graduation held on 16th Dec. 2016 at Kenyatta University
- 21. 2012: Otieno A. Odoyo:** Planktonic diatoms as indicators of Water Quality of River Kisat (Lake Victoria Catchment), Kenya. Graduated during the 41th graduation held on 16th Dec. 2016 at Kenyatta University.
- 22. 2014: Protus W. Mulati (N50/ CTY/PT/22819/2014).** Impact of Neonicotinoids on Honey Bees (APIS MELLITERAL SCUTELLATA) and their Ecological Services in Selected Apiaries in Kiambu County. Graduated during the 41th graduation held on 16th Dec. 2016 at Kenyatta University.
- 23. 2014: Bruce Musoni N50EA/27059/14:** The Impacts of Solid Wastes on Groundwater Quality in Dandora, Nairobi Kenya. Graduated during the 41th graduation held on 16th Dec. 2016 at Kenyatta University.
- 24. Bingo M. Adhiambo. (N50/CE/23023/2011).** Impacts of Sand Harvesting on the Nyamasaria Riparian Land, Kisumu County, Kenya. Graduated during the 41th graduation held on 16th Dec. 2016 at Kenyatta University.
- 25. 2013: Somoni Prisca Bonareri N50/ CE/28234/2013:** Effects of human activities on physicochemical quality of water at selected points of river Rupingazi in Embu county, Kenya. Dec. 2017.
- 26. Getonto Abrahams John, N50/CE/22820/2012;** Impacts of Geothermal Power Station on Avifauna at Hell/'S Gate National Park, Nakuru County, Kenya.
- 27. 11: Otieno J. Oluoch. (N50/CTY/PT/23970/2011).** Phytoremediation Efficiency of Cyperus, Alternifolius, Cyperus Dives and Cannas Indica in Flamingo Farm Constructed Wetland. Graduated 14th Dec. 2018.
- 28. 2013: Mwanzia Tabitha Nzula: N50/ CTY/PT/24844/2013:** Physico-Chemical Effects of Sand Harvesting on the Riparian Land along River Thwake Machakos County, Kenya.

29. **Ann Nyaguthii Kimotho N50/ CE/26010/2011:** Growth Performance of Nile Tilapia (*Oreochromis niloticus*) in Cages Suspended in Ponds and its Implication on Small Scale Farmers Livelihood in Kirinyaga, Kirinyaga
30. **Theuri Olive Wairimu N50/CE/323973/11,** Impacts of Aquaculture Development on Quality of fish pond effluent and livelihoods of farmers in Gatundu, Kiambu .
31. **2011: Mbuthia Milkah Gathoni N50/24126/2011;** Assessment of Water Quality in Aquaculture Ponds; A Case of Tigoni area of Kiambu County, Kenya. **graduated Dec 2020**
32. **Anne Muthange Mbora N50/27705/2013;** Tree Seed Sources and Distribution in Selected Sites Within Central and Western Kenya graduated Dec 2020
33. **Hezekiah Okioma Nyandika, N50/CTY/PT/ 32733/2015.** Assessment of selected trace elements contamination in crops grown in Urban Area of Ruai, Nairobi City County, Kenya. . Graduated Dec.2020

6.2.2. ON GOING

1. **2011: Geoffrey Onchangwa Mbeche N50/ CE/26879/2011:** Physico-Chemical and Microbial Parameters of Nyakomisaro Tributary of river Kuja, Kisii County, Kenya defended successfully
2. **Osei Appiah Janet N50F/26050/2018:** Utilization of Agricultural Food Waste Product for Bioethanol Generation, Kiambu County, Kenya. defended successfully
3. **Amos Ogutu N50/ 27710/2013;** determinants influencing the purchase of woven products using water hyacinth and papyrus reeds among consumers in Kisumu county, Kenya. Thesis to go to graduate school
4. **Njoroge Samuel Karanja; N50/CE/24236/2013;** E- Waste Management Practices by Repair Shops in Nairobi County Kenya. Thesis writing
5. **2014: Mareri Brenda Moraa:** Bio-magnification of Heavy Metals along the Food Chain in Biota of River Kisat, Kisumu County, Kenya. **Proposal registered at graduate school**
6. **Tabby Kabui Njunge N50/CTY/PT/ 23189/2012;** Estimation of Above Ground Biomass and Carbon Stocks of Ololua Forest, Nairobi County, Kenya **Proposal to be submitted to graduate school.**

7. **2012: Sanga K. Silas (N50/CTY/PT/20714/2012).** Impacts of Petroleum Contamination on the Chemical Characteristics of Soil and Groundwater Quality, A case study of Mombasa Joint Terminal, Changamwe.
8. **Kamau Elizabeth N50/CTY/PT/28674/2014. Delineation of Leachate Leaking Points and Migration Pathways from Sewage Plant, Nakuru County, Kenya.**Approved At Graduate School
9. **Jean Paul Ntunge, NEA50/CTY/PT/33289/2014:** Assessment of the Impacts of Agrichemicals Run-Off on the Biodiversity of Lake Kivu Basin, Rwanda.**School Level**
10. **StyversKirimiKathuni, Q21/CTY/PT/28807/2014.** School Hygiene Promotion Approaches and its Influence on Hygiene Practices in Dagoretti Nairobi City County, Kenya. **To defend the Thesis**
11. **KanyiNdugu,** suitability of small water reservoirs for the growth of fish in Nyahururu County Kenya
12. **John OndiekiNyasimi N50/CE/20273/2010;** Impacts of Human Activities on the Quality and Quantity of Water in Ruiru River Catchment Kiambu County Kenya.**Writing**

7.0 CONFERENCES/SEMINARS/WORKSHOPS

7.1. Participation in workshop/conferences

9th African RCE On 26th June 2018, RCE-GN (Coordinator) with the support of NEMA, hosted a climate change awareness seminar which was attended by 26 participants from various organizations. The meeting was held at Central Park Hotel in Nairobi. The stakeholders shared best practices towards mitigation and adaptation to climate change.

24th-28th 2017, Certificate of Attendance- System theory and higher education didactics, introduction to system theory the city as a system and urban metabolism higher education didactics, introduction to problem based learning (40hours) training workshop at Kenyatta university.(DAAD)

28TH September 2016.Certificate of Participation in Intellectual Property Rights Workshop. Theme; Industrial Properties in Education Development. Kenyatta University.

24th- 28th April 2017, Participated in the training of trainer workshop on systemtheory and higher education didactics, Kenyatta University Nairobi, Kenya.

24th- 26th August 2016- Participated in the sixth African regional centres of expertise conference 2016 ‘Empowering African RCEs’. Theme, “Developing capacities of African RCEs for the implementation of the Global Action Programme on ESD and the Achievement of Sustainable Development Goals.” Venue, Kenyatta University Conference Centre (Nairobi- Kenya).

25th to 27th April 2016- Participated in an international atomic energy conference (Atoms for peace) Conference , Expert mission to prepare the education and training review services and systematic assessment of regulatory competence needs. Venue, Kenyatta National Hospital Complex.

22nd to 23rd October 2015 –Participated in Natural Resources Management Curriculum development workshop. Venue, Kenyatta University.

7.2 Presentation of papers at Academic and professional Conference

3rd -25th November, 2016-Participated in the 1st Eastern Africa Aquaculture Symposium and Exhibition (EAASE) 2016. Theme ‘Strengthening Aquaculture Value Chain in the Eastern Africa Region’. Venue, African Institute for Capacity Development (AICAD) Kiambu, Kenya. 23rd – 25th November, 2016. Presented a paper Impacts of Aquaculture Development on Quality of fish pond effluent and livelihoods of farmers in Gatundu, Kiambu.

7.3 Convening and coordinating Conferences

Kenyan RCE Coordinators meeting 2018. The RCE coordinators and their youth counterparts held their annual meeting on 14th November 2018. The meeting was hosted by RCE Greater Nairobi (coordinator) at the Kenya School of Monetary Studies. The meeting was funded by NEMA.

8.0 RESEARCH AND PUBLICATIONS AND GRANTS

8.1 Articles in Refereed Journals

Joint with students

1. Gitau, J. K¹,and Kitur, E.,¹.(Aug 2014).Efficiency of Tibia wetland in the treatment of waste water. *IOSR Journal of Environmental Science, Toxicology and Food Technology* (IOSR-JESTFT) e-ISSN: 2319-2402, p-ISSN: 2319-2399. Volume 8 issue 8 Ver. II (Aug.2014), PP 00-00. www.iosrjournals.org.

2. Nzeve, J.K.¹, Njuguna, S. G¹. and Kitur. E.C¹. Bioaccumulation of Heavy Metals in *Clarias gariepinus* and *Oreochromis Spirilus niger* from Masinga Reservoir, Kenya. *IOSR Journal of Environmental Science, Toxicology and Food Technology* (IOSR-JESTFT) e-ISSN: 2319-2402, p-ISSN: 2319-2399. Volume8.Issue 10 Ver.1 (Oct. 2014). PP 58-63 www.iosrjournals.org.

3. Nzeve, J.K.¹, Njuguna, S. G¹, and Kitur. E.C¹. Determination of Heavy metals in Sediments of Masinga Reservoir, Kenya. *Journal of Environment and Earth Science*. ISSN: 2224-3216, Vol.4, No.20, 2014. www.iiste.org.
4. Nzeve, J.K.¹, Njuguna, S. G¹, and Kitur. E.C¹. Assessment of Heavy Metal Contamination in Surface Water of Masinga Reservoir, Kenya. *Journal of Natural Sciences Research*. ISSN 2224-3186 (Paper) ISSN 2225-0921. Vol.5.No.2, 2014.
5. Gitau, J. K¹, and Kitur¹, May 2016: Variations in the levels of Physic-Chemical parameters of waste water before and after passing through tibia wetland and conformity to NEMA Kenya and general Standards Permissible Effluent Discharge Limits. *IOSR Journal of Environmental Science, Toxicology and Food Technology (IOSR-JESTFT)* E- ISSN: 2319-2402, P-ISSN: 2319-2399, Volume 10, Issue 5 Ver. 1 (MAY 2016), PP 14-24.
6. Ochieng J¹. Kitur, E¹. Obade, P¹. August 2016. Assessment of Decay Coefficient of Allochthonous Litter for Sustainable Riparian Forage Agriculture and Environmental Monitoring, A Study in River Nyangores, Kenya. *The Open Atmospheric Science Journal*. Toascj@ benthamopen.org. BSP-TOASCJ-2016-7.
7. Manohar, S¹; Kitur, E.L¹ and Kibet, F.C¹. (2016); Water Quality and Plant Species Composition of Selected Sites within Chemususu Dam, Baringo County, Kenya. *Journal of Environmental and Analytical Toxicology*. ISSN-216-0525 Jeat: Open Access Journal, Volume 6, Issue 4-1000390.
8. Wairangu E¹. E .Kitur². & G. Macharia² (2016) Utilization of By- Products and Cleaner Production in Industrial Nile Perch Processing in Kenya. *International Journal of Environmental Sciences*, Volume 1 Issue 2 Year 2016. IPRJB, International Peer Reviewed journals and Book Publishers, Journal@iprjb.org. www.iprjb.org.
9. Manohar, S¹. Otieno A¹. Kitur. E². Planktonic Diatoms Species Composition and Water Characteristics along Selected Sites of River Kisat, Kisumu County, Kenya. *Journal of Environmental and Analytical Toxicology*. 10. 4172/2161-0523.1000469.
10. Otieno., A.A; Kitur, EL. and Gathuru, G. Physico- Chemical Properties Of River Kisat, Lake Victoria Catchment Kisumu County, Kenya, *Journal of Environmental Pollution and Climate Change*. 2017. 1:137.104172/2573-458x, 1000137.
11. Somoni, P.B¹. E. Kitur¹, Koske, J². Effects of Human Activities on Quality of Water at Selected Points on River Rupingazi in Embu County, Kenya. *IJRDO- Journal of Biological Science*. ISSN: 2455-7676. Volume 3, issue 9 September 2017.
12. Ann Kimotho, Charles Ngugi, Esther kitur & Elijah Oyoo Okoth. Growth performance of Nile Tilapia cultured under different cage stocking densities in a cage-cum-pond system based on Laboratory conditions and among farmers in Kirinyaga County, Kenya. *International journal of Fisheries and Aquatic studies*, 2018, 6 (8).
13. Mwanzia Thabitha Nzula* Gathuru Gladys* & Esther kitur* Physico-chemical effects of sand harvesting on water quality in River Thawake Machakos county, Kenya. . *International journal of scientific and research publications*, Volume 8, issue 9, Sept. 2018. DOI: 10.29322/Ijsrt,8.9.2018p8197

14. Kitur, E. Kotut, K & Kerich, R; Variations in the physic-chemical characteristics of water in the five peri- urban reservoirs in Kiambu and Nairobi counties,, Kenya.. *Journal of Environmental and Analytical Toxicology*. **10**. 4172/2161-0523.1000469.

15. Mthenge, M.W., Gathuru, G.M., **Kitur, E.L** 2019. Spatial- Temporal Land Use and Land Cover Changes in the Stony Athi River Sub Catchment, Kenya. *Journal of applied geology and geophysics*. ISSN 2321-0982, Volume 7 Issue 5, pp 43-49

16. Kinyili, B.M., Ndunda, E. & Kitur, E. (2019). Trade-Off Between Agroforestry and Ecosystem Services among Smallholder Farmers in Machakos County, Kenya. *East African Journal of Forestry & Agroforestry (EANSO)* . **4(1)**: 13-23.

17.Kinyili, B.M., Ndunda, E., Kitur, E. (2020). Socio-Economic and Institutional Factors Influencing Adoption of Agroforestry in Arid and Semi Arid (ASALs) Areas of Sub Saharan Africa. *International Journal of Forestry and Horticulture (IJFH)* .**6(1)**: 8-18.

18. Kinyili, B.M., Ndunda, E., Kitur, E. (2020). Influence of Agroforestry on Rural Income and Livelihood of Smallholder Farmers in the Semi-Arid Region of Sub Saharan Africa. *Journal of Tropical Forestry and Environment*. 87-100.

19.Kinyili, B.M., Ndunda, E., Kitur, E. (2020). Influence of Duration of Agroforestry on Physico-Chemical Soil Quality Parameters in Machakos County, Kenya. *Journal of Applied Sciences, Engineering and Technology for Development (JASETD)*. DedanKimathi University of Technology (5th DeKUT ICSTI&E). DOI: 10.33803/JASETD.2020.4-1.4.

THESIS EXAMINED

EXTERNAL EXAMINER

2015; Cornelius Wekesa Lupao:The efficacy of Kenyas Critical SectorialEnvironmental policies in meeting Womwn’s Climate Change Mitigation and Adaptation needs; A case study of Bungoma County. **University of Nairobi. (M.A Thesis).**

2016: Caroline Muthoni Wachiuri: An Assessment of the Use of Road Runoff Harvesting for Irrigation in Makueni County, Kenya. **University of Nairobi. (M.A Thesis).**

2016: Mathews J. Wakhungu: A cost benefit analysis of water recycling in Manufacturing industries: A case study of the East Africa Breweries limited, Kenya. **University of Nairobi (M.A in Environmental Policy. Thesis).**

2018; Kimwei Benjamin Kiplagat Z50/69400/2013. Assessing The Management of Solid Waste Generated by the Independent Electoral and Boundaries Commission in Nairobi City County, Kenya. **University of Nairobi (M.A in Environmental Policy. Thesis).**

INTERNAL EXAMINER

2015: Mwangi Maina Albert: Environmental Challenges caused by Fish Trade Activities in Gikomba Fish Market Nairobi County.

Margaret Wambui Mathenge: Effects of Natural Resource Based Conflicts on Community livelihoods in Lake Ol'bolossat Catchment Area, Nyandarua County, Kenya.

Matano S. Mwatenga: The Diversity and Abundance of Gastrointestinal (GTI) Parasites among Grevy's Zebra (*Equus grevyi*) in the Samburu Landscape.

Thomas Owino Juma : The Impact of Dumpsite and Domestic Waste Leachate on Ground Water Quality within Kilifi Town in Kilifi County Kenya.

Reuben Gloria: Assessment of the impact of industrial effluent on the water quality in Karanga Tanzania.

Pando Samson: Effects of Rooftop Rainwater Harvesting on Domestic Water Supply for small-scale farms in Muoni Catchment Machakos County, Kenya.

Dedan Mungai: Assessment of Post-Harvest losses of Nile Perch (*Lates niloticus*) incurred by Fisherman from Lake Victoria, Kenya.

Aching Ndeda: Assessment of heavy metals in hydrophytes, water and sediments of Nairobi dam, Kenya.

Lucy Kanana Munyugi: The assessment of electronic waste management strategies in selected institutions in Nairobi, Kenya.

Maruti Edwin: Assessment of water accessibility and availability for sustainable livelihoods in Garissa County, Kenya.

Patrick Mbaabu: Propagation of *Ocotea Usambarensis* to enhance biodiversity conservation in Mt. Kenya.

8.2 Articles in Conference Proceedings

Impacts of Aquaculture Development on Quality of Fish Pond Effluent and Livelihood of Farmers in Gathundu Kiambu, County. The 1st Eastern Africa Aquaculture Symposium and Exhibition. African Institute for Capacity Development (AICAD) Kiambu Kenya 23rd- 25th November 2016. Organizers, Department of Agriculture and Livestock and Fisheries, County Government of Kiambu, Kenya. Kiambu Aquaculture Stakeholders Forum, KENYA.

8.3 Books

Annah Otieno & Esther Kitur, 2018; Planktonic Diatoms as Indicators of water quality. 978-620-2-31060-4. Publishing Company, S'cholars Press Latvia

8.4. Chapters in book (s)

9.0 NETWORKING AND COLLABORATION WITH EXTERNAL ORGANIZATIONS

- IAEA,INTERNATIONAL ATOMIC ENERGY AGENCY (Atoms for peace)
Workshop on Expert mission to prepare the education for training reviews services and systematic assessment of regulatory competence needs, 2016, Kenyatta National Hospital Complex Nairobi, Kenya.

10.0 EXTERNAL AND INTERNAL GRANTS

The Centre hosted a stakeholders' breakfast meeting on 27th November 2019 at KUCC. The breakfast meeting brought in **income of Ksh. 98,000. Official receipt to Kenyatta University O6222130 73,000 and 045147 25,000**

Ministry of higher Education, Science and Technology (National council for science and technology. Science technology and innovations (ST&I). 5th competitive Research Grants (Thematic area, Health, Water and Sanitation) 2012-213.

11.1LOCAL, REGIONAL & INTERNATIONAL APPOINTMENTS

Appointed as an external examiner for several students at Nairobi University

Appointed asMember of the Board Management of SONGIROI Girls, Bomet County(chair of the Academic board)

2015 September 28th: Appointed asMember of the Board Management of Sosiot Girls (chair of the Academic board)

11.2Review of Professional Periodicals

Member of the editorial board with international peer reviewed journal and book publishers. IPRJB-Journals. Journal@iprjb.org.

11.2Being invited to a Conference as a Guest Speaker

- **5th -7th August 2019;** 9th African Regional Centre of expertise regional conference; gave a keynote speech on the role of youths in achievement of Sustainable development Goals in African, Luyengo University Eswatini (recognition certificate).
- **9th October 2014:** Guest speaker at Mbogo Vale Primary School, Gave a motivational talk to the candidates before the Kenya Certificate of Primary Education Examination

12.0 AWARDS/RECOGNITION

Certificate- Journal of Organization of Scientific Research Community of Researchers; ISOR Journals.

Certificate of Participation by Nema, Participated as a National Steering Committee and the Technical Sub-Committee Member of World Environment Day (WED 2019).

Recognition certificate: Gave a keynote speech on the role of youths in achievement of Sustainable development Goals in African. On the 9th African RCE meeting held in Eswatini.

13.0 COMMUNITY OUTREACH

Member of Mbogo Valley Free Pentecostal Church welfare group wrote a proposal and won 500,000 shillings which was used by the church welfare group to construct a 100,000 litre water tank and a tree nursery.

14.0 ACADEMIC LEADERSHIP

14.1 Development of teaching /academic programmes in the Department/School/University

- Development of the Ph.D. Course through coursework and Research. (School Curriculum Committee).
- Development of Undergraduate and Post graduate Programs in the Department of Environmental Science (Chairperson- Curriculum Committee).
- 2020 to date- Chair School of Environmental Studies Curriculum Development Committee. To liaise with Department Curriculum Development Committee to ensure programs at Certificate, Diploma, Undergraduate, post graduate, diploma Masters and Doctoral levels as per University policy and revised to conform To Competency Based Curriculum

14.2. Developing programmes external to Kenyatta University

- Curriculum review member, Karen bible college on environment and religion

14.3. Initiating/leading Research Projects

- RCE Greater Nairobi with Nema is at an advanced stage in developing proposal for Climate Green Fund. (All Kenyan RCE-coordinators) 2020-
- National Research Fund; Multidisciplinary Research Grant Programme Financial Year. Impact of the Economic Stimulus Programme on Fish Productivity and Water Quality for Sustainable Food Security.

15.0 OTHERS

15.2 Contribution to University Advancement

2019 RCE Youth SDG Challenge: Kunec, a member of RCE Greater Nairobi with the help of the secretariat, participated in the 2019 RCE Youth SDG Challenge after their project plan was approved. The theme for the SDG Challenge was ‘Youth for the Goals: Social Inequalities’

Green Gown Awards: RCE Greater Nairobi participated in the global Green Gown Awards on the students’ engagement category and managed to be the finalists. Kenyatta University was therefore awarded a Finalist’s Certificate in the global award (certificate attached).

2019 RCE Awards: RCE Greater Nairobi was awarded a certificate for innovation projects in Education for Sustainable Development. This award is given annually to RCEs that have made outstanding contributions to address local sustainable development challenges in their regions.(certificate attached).

15.3 Membership to Professional Bodies

November 2009 to date Member, Nature Kenya

16.0 REFEREES

The names and address of my referees are

1. Prof Kiplagat Kotut

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