

# WATER INFRASTRUCTURE AND SUSTAINABLE ENERGY FUTURES (WISE – Futures).

## PUBLICATIONS 2019

1. **Yotham Andrea**, Tatiana Pogrebnaya, and Baraka Kichonge (2019) Effect of Industrial Dust Deposition on Photovoltaic Module Performance: Experimental Measurements in the Tropical Region: <https://doi.org/10.1155/2019/1892148>  
Volume 2019 |Article ID 1892148 | 10 pages
2. Edwin N. Richard, **Askwar Hilonga**, **Revocatus L. Machunda** & **Karoli N.Njau** (2019) A review on strategies to optimize metabolic stages of anaerobic digestion of municipal solid wastes towards enhanced resources recovery: [Sustainable Environment Research](#) volume 29, Article number: 36 (2019)
3. **Lynder E. Gesase**, Cecil K. King'onde, **Yusufu A.C.Jande** (2019) Manihot glaziovii-Bonded and Bioethanol-Infused Charcoal Dust Briquettes: A New Route of Addressing Sustainability, Ignition, and Food Security Issues in Briquette Production: <https://doi.org/10.1007/s12155-019-10076-9> [BioEnergy Research](#) (2019)
4. Mateso Said, **Hans Charles Komakech**, Linus Kasian Munishi & Alfred Nzibavuga Nyarubakula Muzuka (2019) Evidence of climate change impacts on water, food and energy resources around Kilimanjaro, Tanzania. <https://doi.org/10.1007/s10113-019-01568-7> [Regional Environmental Change](#) volume 19, **pages2521–2534(2019)**
5. Emmanuel J. Waweru, Tatiana Pogrebnaya, **Thomas T. Kivevele** (2019) Effect of Antioxidants Extracted from Clove Wastes and Babul Tree Barks on the Oxidation Stability of Biodiesel made from Water Hyacinth of Lake Victoria Origin. Waste Biomass Valor (2019) <https://doi.org/10.1007/s12649-019-00871-y>

6. Said, M. **Komakech, H.C.**, Munishi, L.K. *et al.* Evidence of climate change impacts on water, food and energy resources around Kilimanjaro, Tanzania. *Reg Environ Change* 19, 2521–2534 (2019) <https://doi.org/10.1007/s10113-019-01568-7>
7. **Joyce Elisadiki, Y.A.C.Jande**, Talam Kibona Enock, Revocatus Machunda (2019) Porous carbon derived from *Artocarpus heterophyllus* peels for capacitive deionization electrodes : <https://doi.org/10.1016/j.carbon.2019.03.036> Carbon Volume 147, June 2019, Pages 582-593 (Regional)
8. **Chris de Bont, Hans C. Komakech**, Gert Jan Veldwisch (2019) Neither modern nor traditional: Farmer-led irrigation development in Kilimanjaro Region, Tanzania: <https://doi.org/10.1016/j.worlddev.2018.11.018> World Development, Volume 116, April 2019, page 15-27
9. Veldwisch, Gert Jan, Jean-Philippe Venot, Philip Woodhouse, **Hans C. Komakech**, and Dan Brockington. "Re-introducing politics in African farmer-led irrigation development: Introduction to a special issue." *Water Alternatives* 12, no. 1 (2019): 1-12.

## PUBLICATIONS 2018.

10. AW Wagutu, RL **Machunda, Y.A.C.Jande** (2018) Preparation and Characterization of Biogenic Chitosan-Hydroxyapatite Composite: Application in Defluoridation : <https://doi.org/10.1557/adv.2018.206> Published online by Cambridge University Press: 20 February 2018 Volume 3, Issue 36 (African Materials Research Society 2017) 2018 , pp. 2089-2098 (Regional)
11. **Hans C. Komakech, Chris de Bon** (2018) Differentiated Access: Challenges of Equitable and Sustainable Groundwater Exploitation in Tanzania; [www.water-alternatives.org](http://www.water-alternatives.org) *Water Alternatives* 11(3): 623-637, Volume 11 | Issue
12. Wilhelm A.Kiwango, **Hans C. Komakech**, Theodeo M. C. Tarimo, Lawrence Martz (2018) Levels of community participation and satisfaction with decentralized wildlife management in Idodi-Pawaga Wildlife Management Area, Tanzania: *International Journal of Sustainable Development & World Ecology* Volume 25, 2018 – Issue 3.

13. Aldo. J. Kitalika, **Revocatus. I. Machunda, Hans. C. Komakech** and Karoli. N. Njau (2018) Land-Use and Land Cover Changes on the Slopes of Mount Meru-Tanzania Journal Website: [www.cwejournal.org](http://www.cwejournal.org) Current World Environment, ISSN: 0973-4929, Vol. 13, No. (3) 2018, Pg. 331-352
14. Talam Kibona Enoch, Cecil K. King'onde, Alexander Pogrebno, **Yusufu Abeid Chande Jande** (2017) Biogas-slurry derived mesoporous carbon for super capacitor application: <https://www.sciencedirect.com/science/article/pii/S2468606917300084>, energy vol.5 september, 2017 page 126-137 (Regional)
15. Muhammad Wajid Saleema, **Y.A.C. Jande**, Woo-Seung Kim (2017) Performance optimization of integrated electrochemical capacitive deionization and reverse electro dialysis model through a series pass desorption process: <https://doi.org/10.1016/j.jelechem.2017.04.025>, Journal of Electro analytical Chemistry Volume 795, 15 June 2017, Pages 41-50 (International)
16. Talam Kibona Enoch, Cecil K. King'onde, Alexander Pogrebno, **Yusufu Abeid Chande Jande** (2017) Status of biomass derived carbon materials for supercapacitor application: <http://hdl.handle.net/20.500.11810/4676>, repository.udsm.ac.tz (Regional)
17. Agatha W. Wagutu, **Yusufu Abeid Chande Jande, Revocatus Machunda** (2018) Crustacean derived calcium phosphate systems: Application in defluoridation of drinking water in East African rift valley: <https://doi.org/10.1016/j.jhazmat.2017.12.049>, Journal of Hazardous Materials Volume 347, 5 April 2018, Pages 95-105 (National)
18. Muhammad Wajid Saleem, **Yusufu Abeid Chande Jande**, Woo-Seung Kim (2017) Pure water and energy production through an integrated electrochemical process: <https://link.springer.com/article/10.1007/s10800-017-1045-6>, Journal of Applied Electrochemistry March 2017, Volume 47, Issue 3, pp 315–325 (International)
19. Muhammad Wajid Saleema, **Y.A.C. Jande**, Woo-Seung Kim, Muhammad Asif (2017) Hybrid CV-CC operation of capacitive deionization in comparison with constant current and constant voltage: <https://www.tandfonline.com/doi/abs/10.1080/01496395.2015.1127258>, Separation Science and Technology Volume 51, 2016 - Issue 6 (International)

20. John karuga, **Y.A.C.Jande**, Hee T.Kim, Cecil K.King'onde (2016) Fish Swim Bladder-Derived Porous Carbon for Defluoridation at Potable Water pH: <http://www.scirp.org/journal/aces>, Advances in Chemical Engineering and Science, 2016, 6, 500-514(Regional)
21. H.J.Kipasika, J.Buza, W.A.Smith, K.N.Njau (2016) Removal capacity of faecal pathogens from wastewater by four wetland vegetation: Typha latifolia, Cyperus papyrus, Cyperus alternifolius and Phragmites australis: <https://doi.org/10.5897/AJMR2016.7931v>, African Journal of Microbiology Research(International)
22. Halima Kiwango, Karoli N Njau, Eric Wolanski(2017) The application of nutrient budget models to determine the ecosystem health of the Wami Estuary, Tanzania: <https://doi.org/10.1016/j.ecohyd.2017.10.002>, Ecohydrology & Hydrobiology Volume 18, Issue 2, April 2018, Pages 107-119(International)
23. U.R.Seleman, J.Zhang, A.N.N.Muzuka, **K.N.Njau**, G.Zhang, A.Maggid, M.K.Mzuza, Jie Jin, S.Pradhan,(2017) Seasonal water chemistry variability in the Pangani River basin, Tanzania: <https://link.springer.com/article/10.1007/s11356-017-0221-x>, Environmental Science and Pollution Research November 2017, Volume 24, Issue 33, pp 26092–26110(Regional)
24. L.J.Kivuyo, **K.N.Njau**, C.K.King'onde(2017) Eggshells – assisted hydrolysis of banana pulp for biogas production: <https://doi.org/10.5897/AJEST2016.2155>, African Journal of Environmental Science and Technology(Regional)
25. S.Mtavanga, A.M.Rugaika, **A.Hilonga**, K.N.Njau,(2017)Performance of constructed wetland integrated with sand filters for treating high turbid water for drinking: <http://wpt.iwaponline.com/content/12/1/25>, Water Practice and Technology Volume 12, Issue 1(National)
26. K.N.Njau, R.I.Machunda, **H.C.Komakech**, A.J.Kitalika(2018) Fluoride Variations in Rivers on the Slopes of Mount Meru in Tanzania: <https://doi.org/10.1155/2018/7140902>, Journal of Chemistry Volume 2018, Article ID 7140902, 18 pages(National)

27. A.I.N.Tchoupe, M.Lufingo, Rui Hu, W.Gwenzi, S.K.O.Ntwape, C.Noubactep, **K.N.Njau**(2018) <https://doi.org/10.3390/w10050591>, Water 2018, 10(5), 591;(Regional)
28. H.A.Mboya, A.I.Mrema, C.K.king'onde, K.N.Njau Measurement of Pozzolanic Activity Index of Scoria, Pumice, and Rice Husk Ash as Potential Supplementary Cementitious Materials for Portland Cement: <https://doi.org/10.1155/2017/6952645>, Advances in Civil Engineering Volume 2017, Article ID 6952645, 13 pages(Regional)
29. A.Weistein, S.J.Oliva, C.J.Ebinger, S.Roecker, C.Tiberi, M.Aman, A.N.N.Muzuka, G.Mulibo, G.Kianji, R.Ferdinand-Wambura, M.Msabi (2017) Fault-magma interactions during early continental rifting: Seismicity of the Magadi-Natron-Manyara basins, Africa: <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2017GC007027>, Geochemistry, Geophysics, Geosystems(Regional)
30. Eliapenda Eliasante, Alfred N.N.Muzuka (2017) Occurrence of nitrate in Tanzanian groundwater aquifers: A review: <https://link.springer.com/article/10.1007/s13201-015-0269-z>, Applied Water Science March 2017, Volume 7, Issue 1, pp 71–87(National)
31. C.Shemsanga, A.N.N.Muzuka(2017) Lawrence Martz, **H.C.komakech**, Eliapenda Eliasante, M.Kisaka, C.Ntuza (2017) Origin and mechanisms of high salinity in Hombolo Dam and groundwater in Dodoma municipality Tanzania, revealed: <https://link.springer.com/article/10.1007/s13201-017-0569-6>, Applied Water Science October 2017, Volume 7, Issue 6, pp 2883–2905(International)
32. J.R.Seleman, A.N.N.Muzuka, J.Zhang, G.Zhang, M.K.Mzuza, A.Maggid(2017) Nutrients' distribution and their impact on Pangani River Basin's ecosystem – Tanzania: <https://doi.org/10.1080/09593330.2017.1310305>, Environmental Technology Volume 39, 2018 - Issue 6(Regional)
33. L.Martz, A.N.N.Muzuka, E.Mcharo, **H.C.komakech**, C.Shemsanga (2018) Indigenous knowledge on development and management of shallow dug wells of Dodoma Municipality in Tanzania: <https://link.springer.com/article/10.1007/s13201-018-0697-7>, Applied Water Science(International)

34. P.Woodhouse, J.P.Venot, G.J.Veldwisch, **H.C.komakech**, D.Brockington, A.Manjichi(2017) African farmer-led irrigation development: re-framing agricultural policy and investment: <https://doi.org/10.1080/03066150.2016.1219719>, The Journal of Peasant Studies Volume 44, 2017 – Issue(Regional)
35. W.A.Kiwango, **H.C.komakech**, T.M.C.Tarimo, L.Martz(2017) Levels of community participation and satisfaction with decentralized wildlife management in Idodi-Pawaga Wildlife Management Area, Tanzania: <https://doi.org/10.1080/13504509.2017.1378750>, International Journal of Sustainable Development & World Ecology (International)
36. N.G.Mlalila, H.S.swai, **A.Hilonga**, D.M.Kadam(2017) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5191622/>, Nanotechnol Sci Appl. 2017; 10: 1–9 Published online 2016 Dec 20. doi: 10.2147/NSA.S123681(International)
37. N.G.Mlalila, H.S.Swai, **A.Hilonga**, F.Devlieghere, P.ragaert(2018) <https://doi.org/10.1016/j.tifs.2018.01.015>, Trends in Food Science & Technology Volume 74, April 2018, Pages 1-11(International)
38. A.Mkindi, Y.Tembo, N.Mpulima, P.C.Stevenson, P.A.Ndakidemi, **R.Machunda**, K.Mtei, S.R.Belmaind(2017) Invasive weeds with pesticidal properties as potential new crops: <https://doi.org/10.1016/j.indcrop.2017.06.002>, Industrial Crops and Products Volume 110, 30 December 2017, Pages 113-122(Regional) Assessment and Experimental Carbonization in Dar es Salaam, Tanzania. *Waste Management and Research* 2015, Volume 33(2), 175-182.