

Permanent

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I. PERSONAL DETAILS

Age:	Born in 1976
Marital Status:	Married
Nationality:	Kenyan
Languages:	English, Kiswahili, French – (Learning)
Areas of Specialisation:	Soil, Land & Water Management, Restoration of degraded drylands, Rangeland management
Current occupation:	Lecturer – Department of Land Resource Management and Agricultural Technology (LARMAT), University of Nairobi

II. CAREER OBJECTIVE

I endeavour to: 1) be an accomplished researcher in the field of natural resources management with a special focus on sustainable land management, application of range and soil science knowledge to land use planning, and dryland ecosystem and watershed restoration. 2) be an innovative teacher and mentor contributing significantly to the welfare of humankind, combating land degradation and poverty and hunger through prolific relevant research.

My research and academic interests are:

- ✓ *Application of soil and range science knowledge to sustainable land management and land use planning for sustainable management of natural resources especially at local community level.*
- ✓ *Application of GIS and Remote Sensing tools to land-use/NRM planning and decision-making, and in evaluation and management of land resources*
- ✓ *Soil, Land and Water, and Watershed Management and in the tropics*
- ✓ *Land degradation in arid environments, degradation assessment protocols, rangeland restoration and improvement, especially enhancing revegetation of indigenous plant species and*
- ✓ *Plant-soil interactions and land quality monitoring in natural, disturbed and restored ecosystems – developing indicators of change*
- ✓ *Multi-use ecosystem carbon sequestration approaches in drylands (addressing climate change, conservation of biodiversity and pastoral livelihoods)*

III. HIGHER EDUCATION

-**PhD in Geology (Land Resources Management)** (29th Nov. 2012), Ghent University, Belgium March 2011 – March 2013.

My doctoral research addressed restoration of degraded semi-arid environments by enhancing re-vegetation of indigenous plant species in enclosures and land zoning for conservation, livestock production and pastoral livelihoods, funded by the Special Research Fund (BOF) of Ghent University, and African Wildlife Foundation (AWF).

-**Master of Science in Physical Land Resources** (Distinction) Ghent University, Belgium Oct 2004 – Sept. 2006.

-**Bachelor of Science in Range Management** (Second Class Honours – Upper Division) – University of Nairobi, Oct 1996 – June 2000.

IV. SHORT COURSES & PROFESSIONAL TRAINING ATTENDED

1. **Certificate in Writing and Critical Thinking**
University of Michigan & University of Nairobi, Nairobi Kenya July 5 - 8, 2015
2. **Certificate in Web 2.0 Tools**
CTA and Baraka Agricultural College, Molo, Kenya. 27 Sept –1 Oct. 2010
3. **Certificate in E-Learning**
ICTC, College of Physical & Biological Sciences, University of Nairobi. 25-31st July. 2009
4. **Certificate in Effective Scientific Communication and Publishing**
Training Centre in Communication (TCC), School of Biological Studies, Chiromo Campus. 12-16th Nov. 2007
5. **Certificate in Conservation of Biodiversity in Desert Ecosystems**
Jacob Blaustein Institute of Desert Research, Ben Gurion University of the Negev, State of Israel 1-30th May 2003

V. PROFESSIONAL EXPERIENCE

University of Nairobi, Department of Land Resource Management & Agricultural Technology (LARMAT)

Lecturer

May 2014 – present

Teaching following courses: Land Degradation and Rehabilitation (MSc); Soil & Water Conservation (MSc); Land Evaluation for Agric. Planning (4th Yr); Watershed Management (4th Yr); Landforms and Soil Formation (1st Yr); Environmental Hydrology (1st Yr).

1. **Supervising Students** - PhD, MSc and undergraduate student's thesis and research projects respectively.
2. **Curricular Development** - Modules preparation and teaching new courses: Land Information Systems (3rd Yr); Environmental Hydrology (2nd Yr); Soil Science for Conservation Biology (3rd Yr) for Agriculture, Management of Agro-ecosystems and Environment Under-graduate Programmes respectively.
3. **Current Research:** Involved in a number of research activities as a PI or Co-PI:

Period (Start – End)	Research/ Project; Role	Partner(s)/ Consortium	Donor
2016 - 2020	Improved management for nitrate pollution in the Lake Victoria catchment of Kenya: Role: Co-PI	UoN; Ghent University	VLIRUOS, Belgium
2015 - 2017	Identifying Sources of Nitrate Pollution in major river catchments of the Lake Victoria Catchment (Kenya) via Isotopic Fingerprinting - Coordinated Research Project. Role: PI	Ministry of Water and Irrigation	IAEA, Austria
2012 - Present	Triple L Initiative - Land, Livestock and Livelihood dynamics in dryland systems. Role: Senior Researcher	Various, www.triplel.se	Various
2014 - 2016	Enhancing the resilience of livestock-based production systems in northern Kenya. Role: Researcher	UoN; KALRO; PACIDA	IGAD
2014 - 2016	System for Land-based Emissions Estimation for Kenya (SLEEK)	Various,	Clinton Climate Initiative with funding from AUSAID

4. **Web-Champion** for LARMAT and Faculty of Agriculture.
5. **Member, Board of Examiners** for PhD and MSc Thesis defences at the Faculty of Agriculture.
6. **Chairperson**, Faculty of Agriculture Journal Pioneering Committee (2013-date).
7. **Contact person**, Contact person for UoN, CABI-RUFORUM Collaboration (2013-date).

Previous Positions

University of Nairobi, Department of Land Resource Management & Agricultural Technology (LARMAT)

Tutorial Fellow

Feb 2009 – April 2014

1. **Teaching** following courses: Land Degradation and Rehabilitation (MSc); Land Evaluation for Agric. Planning (4th Yr); Soil and water Management (4th Yr); Landforms and Soil Formation (1st Yr); Range and Agro-ecology I (1st Yr).
2. **Curricular revision and Modules preparation:** Modules: Land Information Systems (3rd Yr); Environmental Hydrology (2nd Yr); Soil Science for Conservation Biology (3rd Yr); New curricular: Management of Agro-ecosystems and Environment; Water Resources Management, Dryland Economics and Agro-ecosystems Management.
3. **Research:** Involved in a number of research activities in the Faculty of Agriculture, as a PI or Co-PI.
 - a) Assessing the effects of enclosures and land-use planning on carbon sequestration and ecosystem health in rehabilitated African Savannah [PI]
 - b) Ecological restoration of gullies using hay bales in degraded grazing lands in Laikipia, Kenya [PI]
4. **Web-Champion** for LARMAT and Faculty of Agriculture.
5. **Member, Board of Examiners** for PhD and MSc Thesis defences at the Faculty of Agriculture.

Ghent University, Department of Geology and Soil Science, Belgium

Collaborating Scientist and PhD Student (thesis defended 29th Nov. 2012)

Mar. 2011 – Mar 2013

Research topics:

1. Rehabilitation of degraded arid environments using enclosures in Lake Baringo Basin, Kenya.
2. Impact of land zoning and community conservation management on a semi-arid savannah at the livestock-wildlife interface.

African Institute of Scientific Research and Development (AISRED)

Research Assistant

March 2007 – Dec. 2008

1. **Research and Project work:** Dryland Livestock Wildlife Interface Project (DLWEIP) – Project aimed to mainstream biodiversity and livestock resources at the interface between mixed production ecosystems and protected areas in Africa through the promotion and support to sustainable land management systems for livestock and wildlife at the interface to improve community livelihoods, biodiversity conservation and reduce land degradation in Samburu and Laikipia in Kenya and Arly in Burkina Faso. Project implementing partners included AWF, IUCN, Government Ministries in Kenya and Burkina Faso.

2. **Land degradation mapping:** Used GIS and Remote Sensing tools for identifying hotspots for rehabilitation and conservation interventions for the African Wildlife Foundation. Monitoring of rehabilitated areas.
3. **Collaboration initiatives:** Assisted in preparing a Pan-African project proposal on 'Climate change adaptation through livestock management strategies and policy review harmonization' led by AU-IBAR and ILRI. This project sought to address the impact of climate change on livestock production systems in Africa and targeted EU- climate change mitigation and adaptation funding.

Remarks: - Team-working in a multi-cultural international environment. -Gained practical skill of applying Sustainable Livelihood Frameworks (SLF, DPSIR, PESTLE, SWOT, Action Research) in project planning, monitoring and evaluation; - Land degradation mapping; -Policy briefs formulation; - Participatory formulation, review and adjustment of project Logical frames and Tracking tools; Learnt delivering outputs to tight deadlines. Great exposure to conservation work at community level has built a strong desire and commitment in me to be involved in international organizations or projects dealing with natural resource management with a goal to achieve pragmatic results in conservation at community, restoring ecosystem/habitats and landscape echelons and same time addressing policy and livelihood issues.

African Union – Inter-African Bureau for Animal Resources (AU-IBAR), Nairobi

Workshop Technical Rapporteur (Contract)

12th – 24th April 2008

Recorded proceedings using various tools and proceedings; Technical reporting of following workshop proceedings:

1. DLWEIP Steering Committee Workshop, Nanyuki (12th-13th April 08)
2. DLWEIP Finding and Synergies Workshop, Nanyuki (13th-14th April 08)

Lessons/skills learnt: Gained knowledge of Community Conservation Approaches; Capacity Building for conservation at livestock Wildlife environment interface.

International Centre for Physical Land Resources, Ghent University, Belgium

Researcher and MSc Student

Oct. 2004 – Sept. 2006

Topics:

3. Rehabilitation of degraded arid environments using enclosures in Lake Baringo Basin, Kenya
4. Impact of enclosures on land quality and pastoral livelihoods

World Outreach - Kenya (now AfriLift-Kenya)

Farm Manager at Osiligi Centre, Isinya

June – Sept 2004

Work done/Activity

1. Identified, planned, and implemented income generation activities for hands-on training for the boys e.g. -Established a 45 ha passion fruit plantation to make the Centre self-reliant;
2. Led participatory planting of more than 600 indigenous trees in the centre
3. Was overall headship of the daily running of the Centre and 100 ha Farm with more than 70 workers

Remarks: This opportunity strengthened team-leadership skills and team spirit; -Was able to actuate the workers to devote themselves to their work; -Worked for 3 months period before proceeding to Gent for MSc.

-I still offer Technical advisory to the Board and Management of Osiligi Center to date.

University of Nairobi, Department of Range Management

Graduate Research Assistant

Sept. 2001 – June. 2004

1. Conducted field research, Data collection and Analysis: involved setting experiments for ecological surveys, determining range condition and trend; Analysing data using various Statistical Packages.
2. Wrote case studies and papers: Study on Development and Ecological Sustainability in Africa; Paper titled "Rational Range use and Fodder Crop Development in Combating Desertification in Africa" For UNCCD.
3. Project Proposal writing: Trans-boundary Transhumance Management and Ecosystem Rehabilitation Programme for Egypt, Sudan, and Eritrea. GEF/UNCCD/UNEP Land Degradation Project; -Co-developed Conflict resolution, Community development and Natural Resource Management in the Tana River Delta region: Investing in Ecotourism as a facilitating tool. -Co-developed and wrote Kibwezi Dairy Goat Project Proposal for Kibwezi Smallholder farmers – Proposal funded by KARI-ATIRI programme.
4. Literature search, writing and synergistic activities: I was involved in updating Teaching Materials and Course Contents for various courses (Desertification and Rehabilitation of Tropical Rangelands, Ecology of Tropical Grazing Lands, Range-Wildlife Interactions).

Remarks: - Learnt rangeland inventory/research methods, setting up experiments, data collection and analytical skills; Exposed to use of library resources in international organizations e.g. ILRI, UNDP, UNEP, FAO, ICRAF, IUCN, World Bank - Nairobi Office; -Enhanced writing skills; -Exposed to critical current Regional perspective of priority issues in NRM and SLM; -Developed of critical thinking; Learnt how to develop ecological/ agricultural-based project proposal for rural livelihoods to solicit funds for implementation. -Learnt budgeting skills; - Exposed to set up in writing scientific research/ project reports.

Agrisystems East Africa, Nairobi

Researcher

Dec 03-Feb 2004

Baseline Survey for Promotion of Private Sector Development in Agriculture (PSDA) of GTZ/GOK Ministry of Agriculture in 7 Pilot Districts in Kenya

1. Practically revised and adopted questionnaires/check lists and interview tools for the survey

2. Facilitated workshops (Small groups Team leader)
3. Conducted Questionnaires in PRA

Remarks: Learnt Rapid Assessment and PRA skills of gathering data; -Discovered that I have strong leadership, analytical and facilitator skills

World Neighbours –East Africa, Nairobi

Workshop Rapporteur and Side-events Facilitator

7th – 9th August 2002

World Neighbours –East Africa Experience in Rural Development Workshop

1. Co-reporting workshop proceedings
2. Facilitating side-events

Remarks: Gained knowledge of Community Development, Capacity Building and Participatory Rural Appraisal (PRA)

Vacational School, Nairobi

Tuition Programme Coordinator

2001-2002 (During school holidays)

1. Organised and conducted tuition classes
2. Mobilized teachers
3. Taught Mathematics, Biology and Chemistry

Remarks: Motivated and mentored High School students; Strengthened teamwork spirit; Learnt working without supervision

VI. CONSULTANCY ASSIGNMENTS

1. Rehabilitation of degraded lands project in Kojia Tiamamut Kijabe and Nkiloriti (KTKN) Group ranches, Mukogodo Laikipia. **Date:** Sept. 2007 – 2010; **Client:** AWF-Kenya (Samburu Heartland); **Role:** Lead Range Rehabilitation Scientist
2. Rapid assessment for fodder production in targeted areas of Turkana, Northern Kenya. **Date:** Dec. 2009; **Client:** VSF-B Kenya; **Role:** Co-Consultant, Co-Team Leader
3. Internal Evaluation and Mid-term evaluation (participatory) Medium Sized Project, Dryland Livestock Wildlife Interface Project (DLWEIP) in Samburu and Laikipia in Kenya and Arly in Burkina Faso. **Date:** March-Sept. 2008; **Client:** UNEP; **Role:** Assistant Consultant
4. Rational use of Rangelands and Fodder Production in Sub-Saharan Africa. **Date:** November, 2001; **Client:** UNEP/FAO; **Role:** Assistant Consultant

VII. STUDENT SUPERVISION

PhD Research

1. **Charity Konana. (On-going)** Drivers of Gully Erosion and Control Measures on a Sandy Loam Volcanic Ash Soils in Mount Suswa catchment in Kenya. Supervisors: Prof. CKK Gachene; Dr. S.M. Mureithi, University of Nairobi, Kenya, Dr. D. Mburu, Jomo-Kenyatta University of Agriculture and Technology (JKUAT).
2. **Philista Malaki (On-going)** Effects of land use and land cover change on the hydrology of Nguruman Sub-catchment, Magadi, Kenya. Supervisors: Prof. Geoffrey Kironchi; Dr. S.M. Mureithi; Dr. V.M. Kathumo, University of Nairobi, Kenya.
3. **Benjamin Kyalloh Nyilitya. (On-going)** Identifying Sources of Nitrate Pollution in Lake Victoria Catchment (Kenya) via Isotopic Fingerprinting. Supervisors: Prof. Pascal Boeckx, Ghent University; Dr. S.M. Mureithi, University of Nairobi, Kenya.
4. **Oscar K. Koech. 2014.** Comparative growth and interspecific competition responses of range grasses to varying watering schedules in the rangelands of Kenya. Supervisors: Prof. R. Kinuthia Ngugi; Dr. George Karuku; Dr. Stephen M. Mureithi. LARMAT, University of Nairobi, Kenya.

Masters Research

1. **John Mwangi (On-going).** Assessment of land degradation extent in Lake Ol Bolossat catchment in Nyandarua County, Kenya. Supervisors: Prof. CKK Gachene; Dr. S.M. Mureithi (LARMAT, University of Nairobi); Dr. BP Kiteme (CETRAD, Nanyuki, Kenya).
2. **Antony Ituika (On-going).** Key soil ecosystem services offered by rangeland enclosures in Chepareria, West Pokot Kenya. Supervisors: Prof. Ann Verdoodt (UGent, Belgium), Dr. S.M. Mureithi (UoN, Kenya).
3. **John Wairore. 2015.** The impact of enclosure management on rehabilitation success in Chepareria, West Pokot County, Kenya. Supervisors: Dr. S.M. Mureithi; Dr. V.O. Wasonga (LARMAT, University of Nairobi, Kenya); Dr. G. Nyberg (SLU, Umea, Sweden).

VIII. PUBLICATIONS

Peer reviewed Journals

Submitted

1. Koech OK, Kinuthia RN, Karuku GN, **Mureithi SM** and Wanjogu R. (**Submitted, May, 2016**). Irrigation levels affects biomass yields and morphometric characteristics of range grasses in arid rangelands of Kenya. *Ecological Processes*
2. Watete PW, Makau WK, Njoka JT, MacOpiyo LA, Mureithi SM. (**Submitted**). Moving in and out of poverty: A case of the Somali and Turkana of northern Kenya. *Nomadic Peoples*.

3. Watete PW, Makau WK, Njoka JT, MacOpiyo LA, Mureithi SM. **(Submitted)**. Protecting pastoral granaries: an application of the FAO resilience model among households in northern Kenya. *Pastoralism: Research, Policy and Practice*.
4. Wairore JN, **Mureithi SM** and Verdoodt A. **(Submitted)** Approaches for resilience building through restoration of degraded dryland ecosystems in Kenya. *Journal of Environmental Planning and Management*, SP - Land Restoration.
5. Wairore JN, **Mureithi SM**, Wasonga VO, and Nyberg G. **(Submitted)**. Impacts of enclosure age and management on herbaceous layer characteristics and woody species density in Chepareria, West Pokot County, Kenya. *Agriculture, Ecosystems and Environment*.
6. Wairore, JN, **Mureithi SM** and Nyberg G. **(Submitted)**. Utilization, management and maintenance of private enclosures in Chepareria, West Pokot County, Kenya. *Journal of Human Ecology*.
7. Otieno SG, Njoka JT, Young TP, Ngugi RK and **Mureithi SM**. **(Submitted)**. Aboveground net primary productivity in grazed and ungrazed pastures: grazing optimisation hypothesis or local extinction of vegetation species. *Journal of Agro-Sciences and Technology*.
8. Koech OK, Kinuthia RN, Karuku GN, **Mureithi SM** and Wanjogu R. **(Under-review)**. Effect of varying soil moisture content on aboveground biomass yields and morphometric characteristics of six dryland grasses of Kenya. *Aridland Research and Management*.
9. **Mureithi SM**, Njoka JT, Gachene CKK, Olesarioyo JS, Verdoodt A, Warinwa F and Van Ranst E. **(Revision submitted)**. Community-based conservation: An emerging land use at the livestock-wildlife interface in northern Kenya. *International Journal of Biodiversity and Conservation*.

Accepted/Published

1. Koech OK, Kinuthia RN, Karuku GN, **Mureithi SM**, Wanjogu R. **2016**. Field curing methods and storage duration affect the quality of hay from six rangeland grass species in Kenya. *Ecological Processes* 5(3) DOI: [10.1186/s13717-016-0048-2](https://doi.org/10.1186/s13717-016-0048-2)
2. Watete PW, Makau WK, Njoka JT, MacOpiyo LA, **Mureithi SM**. **2016**. Are there options outside livestock economy? Diversification among Turkana and Mander communities of northern Kenya. *Pastoralism: Research, Policy and Practice* **3**. DOI:[10.1186/s13570-016-0050-4](https://doi.org/10.1186/s13570-016-0050-4)
3. Nyberg G, Knutsson P, Ostwald M, Öborn I, Wredle E, Otieno D, **Mureithi S**, Mwangi P, Said M, Jirstrom M, Grönvall A, Wernersson J, Svanlund S, Saxer L, Geutjes L, Karmebäck V, Wairore J, Wambui R, de Leeuw J and Malmer A. **2015**. Enclosures; transforming land, livestock and livelihood in dryland landscapes. *Pastoralism: Research, Policy and Practice* 5:25 DOI: [10.1186/s13570-015-0044-7](https://doi.org/10.1186/s13570-015-0044-7)
4. Koech OK, Kinuthia RN, **Mureithi SM**, Karuku GN, Wanjogu RK. **2015**. Water Stress Tolerance of Six Rangeland Grasses in the Kenyan Semi-arid Rangelands. *American Journal of Agriculture and Forestry*. 3(5): 222-229. doi: 10.11648/j.ajaf.20150305.18
5. Wairore JN, **Mureithi SM**, Wasonga VO and Nyberg G. **2015**. Enclosing the Commons: Reasons for the Adoption and Adaptation of enclosures in the Semi-arid Rangelands of Chepareria. *Journal of Human Ecology*. *Springer Plus* 4:595 DOI: [10.1186/s40064-015-1390-z](https://doi.org/10.1186/s40064-015-1390-z)
6. Wairore JN, **Mureithi SM**, Wasonga VO and Nyberg G. **2015**. Characterization of Enclosure Management Regimes and Factors Influencing their Choice among Agro-pastoralists in North-Western Kenya. *Pastoralism: Research, Policy and Practice* 5(14) DOI: [10.1186/s13570-015-0036-7](https://doi.org/10.1186/s13570-015-0036-7)
7. Wairore JN, **Mureithi SM**, Wasonga VO, and Nyberg G. **2015**. Benefits derived from rehabilitating degraded semi-arid rangelands through private enclosures in Chepareria. *Land Degradation & Development* DOI: [10.1002/ldr.2420](https://doi.org/10.1002/ldr.2420)
8. Koech OK, Kinuthia RN, Karuku GN, **Mureithi SM** and Wanjogu R. **2015**. Water use efficiency of six rangeland grasses under varied soil moisture content levels in the arid Tana River County, Kenya. *Afr. J. Environ. Sci. Technol.* 9(7): 632-640. DOI: [10.5897/AJEST2015.1917](https://doi.org/10.5897/AJEST2015.1917)
9. Opiyo FEO, Wasonga VO, Nyangito MM, **Mureithi SM**, Obando J, Munang R. **2015**. Determinants of perceptions of climate change and adaptation among Turkana pastoralists in north-western Kenya. *Climate and Development*, DOI: [10.1080/17565529.2015.1034231](https://doi.org/10.1080/17565529.2015.1034231)
10. **Mureithi SM**, Verdoodt A, Njoka JT, Gachene CKK, and Van Ranst E **2015**. Benefits Derived from Rehabilitating A Degraded Semi-Arid Rangeland in Communal Enclosures, Kenya. *Land Degradation & Development* DOI: [10.1002/ldr.2341](https://doi.org/10.1002/ldr.2341).
11. **Mureithi SM**, Verdoodt A, Njoka JT, Gachene CKK, Warinwa F, Van Ranst E. **2014**. Impact of community conservation management on herbaceous layer and soil nutrients in a Kenyan semi-arid savannah. *Land Degradation & Development* DOI: [10.1002/ldr.2315](https://doi.org/10.1002/ldr.2315)
12. **Mureithi SM**, Verdoodt A, Gachene CKK, Njoka JT, Wasonga VO, De Neve S, Meyerhoff E, Van Ranst E. **2014**. Impact of enclosure management on soil properties and microbial biomass in a restored semi-arid rangeland, Kenya. *Journal of Arid Land*. *Journal of Arid Land* 6(5): 561-570.
13. Koech OK, Ngugi RK, **Mureithi SM**, Karuku JN, Wanjogu RK. **2014**. Effect of Different Soil Water Content and Seed Storage on Quality of Six Range Grasses in the Semi-Arid Ecosystems of Kenya. *Environment and Ecology Research* 2(7): 261 - 271.

14. Koech OK, Ngugi RK, **Mureithi SM**, Karuku JN, Wanjogu RK. **2014**. Effect of varied soil water content on seed yield of six range grasses in the rangelands of Kenya. *Universal Journal of Agricultural Research* 2(5): 174-179.
15. Ngugi RK, Kilonzo JM, Kimeu JM, **Mureithi SM**. **2014**. Seasonal botanical characteristics of the diets of Grant's (*Gazella granti* Brooke) and Thompson's (*Gazella thompsoni* Guenther) in the dryland habitats. *International Journal of Biodiversity and Conservation* 6(8): 581-588.
16. Opiyo FEO, Wasonga VO, Schilling J, **Mureithi SM**. **2012**. Resource-based Conflicts in Drought-prone North-western Kenya: The Drivers and Mitigation Mechanisms. *Wudpecker Journal of Agricultural Research* 1(11): 442 – 453.
17. Ngugi RK, **Mureithi SM**, Kamande PN. **2011**. Climate forecast information: the status, needs and expectations among smallholder agro-pastoralists in Machakos District, Kenya. *International Journal of Current Research* 6(11): 006-012
18. Opiyo FEO, Ekaya WN, Nyariki DM, **Mureithi SM**. **2011**. Seedbed preparation influence on morphometric characteristics of perennial grasses of a semi-arid rangeland in Kenya. *African Journal of Plant Sciences* 5(8): 460–468.
19. Opiyo FEO, **Mureithi SM**, Ngugi RK. **2011**. The influence of water availability on pastoralist's resource use in Mwingi and Kitui Districts in eastern Kenya. *Journal of Human Ecology* 35(1): 43-52.
20. Verdoodt A, **Mureithi SM**, Van Ranst E. **2010**. Impacts of management and enclosure age on recovery of the herbaceous rangeland vegetation in semi-arid Kenya. *Arid Environments* 74(9), 1066 - 1073.
21. Kahi CH, Ngugi RK, **Mureithi SM**, Ng'ethe JC. **2009**. The effects of *Prosopis juliflora* Hyne (DC) and *Acacia tortilis* (Forssk) trees on herbaceous plants species and soil physical and chemical properties, on Njemps flats Baringo District, Kenya. *Tropical and Sub-tropical Ecosystems* 10(3): 441-449.
22. Verdoodt A, **Mureithi SM**, Ye L, Van Ranst E. **2009**. Chronosequence analysis of two enclosure management strategies in degraded rangeland of semi-arid Kenya. *Agriculture, Ecosystems and Environment* 129 (1-3): 332–339.

Books Chapters

1. **Mureithi SM**, Verdoodt A, Njoka JT, Gachene CKK, Kamande PN, Meyerhoff E and Van Ranst E. **2015**. Impact of enclosures on range condition and trend in a semi-arid rangeland, Kenya. In: Zeinabu Khalif, Charles KK Gachene, Patrick Gicheru, David Mwehia Mburu, Christopher Gatama Gakahu (Eds). *Sustainable Land Management in Drylands of Kenya. Improving Land Productivity through Participatory Research and Technology Transfer*. United Nations Development Programme - Kenya 2015. Nairobi, Kenya. ISBN 978 9966 1805 5 1. Pp: 275-293.
2. Verdoodt A, Moussandek R, **Mureithi SM**, Vermang J and Ye L. **2013**. Opportunities and challenges in assessing and combating land degradation. In: De Boever, M., Khlosi, M., Delbecque, N., De Pue, J., Ryken, N., Verdoodt, A., Cornelis, W., Gabriels, D. (Eds.). (2013). *Desertification and land degradation: processes and mitigation*. Gent, Belgium. Ghent University and UNESCO Chair of Eremology. pp. 35-42.
3. **Mureithi SM**, Verdoodt A and Van Ranst E. **2010**. Effects and implications of enclosures for rehabilitating degraded semi-arid rangelands: Critical lessons from Lake Baringo Basin, Kenya. In: *Land Degradation and Desertification: Assessment, Mitigation and Remediation*. (Pandi Zdruli, Marcello Pagliai, Selim Kapur and Angel Faz Cano, Eds). Springer Dordrecht Heidelberg London New York. DOI 10.1007/978-90-481-8657-0. 490pp. 111-130.

Selected Conference Proceedings, Reports, Extended Abstracts and Posters

1. **Mureithi SM**, Verdoodt A, Gachene CKK, Njoka JT, Wasonga VO, De Neve S, Meyerhoff E, Van Ranst E. **2015**. Impact of enclosure management on soil properties and microbial biomass in a restored semi-arid rangeland, Kenya. 1st Conference on Afro-Mediterranean Soils, 18-19th December 2015. Marrakech, MOROCCO. <http://www.fao.org/soils-2015/events/detail/fr/c/345436/>
2. Koech OK, Kinuthia RN, Karuku GN, **Mureithi SM** and Wanjogu RK. **2015**. Poster: Irrigated pasture production for enhancing resilience of pastoral livelihoods in Kenya. 1st Annual Rangelands Congress. August 11-12, 2015. KBC Leadership Center, Karen, KENYA.
3. Gert Nyberg, Jan de Leeuw, Peter Mwangi, Mohammed Said, Shem Kifugo, **Stephen Mureithi**, Ewa Wredle. **2014**. Enclosures – a productive, carbon sequestering and sustainable alternative to pastoralism? The Triple L Initiative – Land, Livestock and Livelihood. The World Congress on Agroforestry. 10 – 14th February, 2014. Delhi, INDIA. <http://www.wca2014.org/>
4. **Mureithi SM**, Verdoodt A, Njoka JT, Gachene CKK, Kamande PN, Meyerhoff E and Van Ranst E. **2013**. Impact of enclosures on range condition and trend in a semi-arid rangeland, Kenya. In Proceedings, National Conference on Sustainable Land Management. 'Sustainable Land Management in Drylands of Kenya: Towards increasing Land Productivity'. The Great Rift Valley Lodge & Golf Resort. 25th to 29th November, 2013. Naivasha, KENYA.
5. **Mureithi SM**, Verdoodt A, Njoka JT, Gachene CKK, Warinwa F and Van Ranst E. **2013**. Impact of land zoning under community natural resource management programme a Kenyan semi-arid rangeland. In Proceedings: 1st Student-Led Conference organised by the Centre for Sustainable Drylands and Societies (CSDES) of the University of Nairobi. 29 - 30th May, 2013. Nairobi, KENYA.
6. **Mureithi SM**, Verdoodt A, Njoka JT, Gachene CKK, Warinwa F and Van Ranst E. **2013**. Impact of community conservation management on a Kenyan semi-arid savannah. In Proceedings: Desertland. Conference on Desertification and Land Degradation. 17 & 18 June, 2013, Gent, BELGIUM. <http://www.desertland.eu/>
7. **Mureithi, S.M.**, Verdoodt, A. Njoka, J.T., Gachene, C.K.K., Meyerhoff, E. and Van Ranst, E. **2012**. Direct benefits derived from a rehabilitated semi-arid rangeland in Kenya. In Proceedings Vol. 1: Deforestation, Overgrazing and Desertification ;

- Land Degradation, Remediation and Reclamation ; Wetland Soils and Climate Change. Ed. S Kapur, MT Esetlili, & F Özen. 2012. 143-148. 8th International Soil Science Congress on "Land Degradation and challenges in Soil Management". May 15-17, 2012. Çeşme-Izmir, TURKEY. www.soilcongress.ege.edu.tr
8. Verdoodt, A., Moussandek, R., **Mureithi, S.M.**, Vermang, J. and Ye, L. **2012**. Opportunities and challenges in assessing and combating land degradation. Paper presented in the Desertland: Fourth Conference on Desertification and Land Degradation. 17-18th June, 2012. Gent, BELGIUM. <http://www.desertland.eu/>
 9. **Mureithi, S.M.**, Verdoodt, A., Wasonga, V.O., Njoka, J.T., Gachene, C.K.K. & Van Ranst, E. **2012**. Effectiveness of enclosures in restoration of degraded semi-arid rangeland in Lake Baringo Basin, Kenya. Poster. Eurosoil 2012, 2-6th July, 2012. Bari, ITALY.
 10. **Mureithi, S.M.**, Njoka, J.T., Gachene, C.K.K., Verdoodt, A., Warinwa, F. & Van Ranst, E. **2011**. "Impact of Rehabilitated Sites on Herbivore Dynamics in a Livestock-wildlife Interface in Laikipia, Kenya." CBD Technical Series. Ed. Jacqueline Grekin & Jo Mulongoy. Vol. 62. Montréal, QU, CANADA: Secretariat of the Convention on Biological Diversity World Trade Centre, 2011. 78–80. <http://www.cbd.int/doc/publications/cbd-ts-62-en.pdf>
 11. Opiyo, F.E.O. and **Mureithi, S.M.** **2011**. Strategies for Mitigating Drought-induced Resource Use Conflicts among Pastoralists of Northwestern Kenya. The African Centre for the Constructive Resolution of Disputes (ACCORD). International Conference on Climate Change and Conflict 15 & 16 September 2011, Durban, South Africa.
 12. **Mureithi, S.M.** **2011**. Final evaluation of scaling up range rehabilitation project in community areas in Laikipia-Kenya: Biophysical and socio-economic impacts of range rehabilitation in Tiamamut-Kijabe-Nkiloriti Community Ranches. African Wildlife Foundation Report. 40 pp. May 2011.
 13. **Mureithi, S.M.** and Opiyo, F.E.O. **2010**. Resource Use Planning Under Climate Change: Experience from Turkana and Pokot Pastoralists of North-western Kenya. In Proceedings: [2nd International Conference on Climate, Sustainability and Development in Semi-Arid Regions](#), Fortaleaza, Ceara, BRAZIL 16th – 20th August 2010.
 14. **Mureithi, S.M.**, A. Verdoodt and Van Ranst, E. **2008**. The effects of enclosures for rehabilitating degraded semi-arid land in Lake Baringo Basin, Kenya. In: Zdruli, P. and Constantini, E. (Eds). "Moving ahead from assessments to actions: Could we win the struggle with land degradation?" Books of Abstracts Vol. II. [5th International Conference on Land Degradation](#). Valenzano, Bari, ITALY 18-22 September 2008. Pp 135-141 ISBN 2-85352-399-3

Theses

1. **Mureithi, S.M.** **2012**. The effects of enclosures and land-use zoning on the restoration of degraded semi-arid rangeland in Kenya. Published PhD thesis, ISBN 978-9-4619708-4-8 Link: <https://biblio.ugent.be/publication/3069166>
2. **Mureithi, S.M.** **2006**. The effect of enclosures on rehabilitation of degraded semi-arid land in Lake Baringo Basin, Kenya. Unpublished M.Sc. Thesis, Ghent University Belgium. Link: http://www.plr.ugent.be/pedon_18.pdf

IX. SCIENTIFIC JOURNAL EDITOR AND PEER-REVIEWER

I am currently serving as the Executive Editor for the Faculty of Agriculture Journal of Agro-Sciences and Technology. <http://journals.uonbi.ac.ke/index.php/jast/index>

I also occasionally conduct peer-review for Web of Science Journals: Restoration Ecology, Land Degradation & Development, Agriculture, Agro-ecosystems and Environment, The Rangeland Journal and Aridland Research and Management. <https://publons.com/author/453764/stephen-m-mureithi#profile>

IX. RESEARCH PROJECTS GRANTS

1. Enhancing resilience of livestock-based livelihoods in Northern Kenya, an IGAD funded project being implemented by the University of Nairobi and Kenya Agricultural and Livestock Organisation (KARLO) (as a Co-PI).
2. Identifying Sources of Nitrate Pollution in Major River Catchments of the Lake Victoria Catchment (Kenya) via Isotopic Fingerprinting - Global IAEA's Co-ordinated Research Project titled 'Application and Development of Isotope Techniques to Evaluate Human Impacts on Water balance and Nutrient Dynamics of Large River Basins'. IAEA Research Contract No. 18471/R0 [Principal Investigator]
3. Land, Livestock & Livelihood (Triple-L) Dynamics in East African Drylands. Research initiative started in 2012 in collaboration with SLU, Lund University, Chalmers, JKUAT, University of Nairobi, ILRI and ICRAF, with planning grants from ILRI, SLU and GCGD. [Co-Principal Investigator]
4. Rehabilitation of degraded community grazing lands project in Laikipia, Kenya. Source of funds: GEF via African Wildlife Foundation (AWF) Sept. 2007 – June 2009 [Principal Investigator]

X. CONFERENCES/SEMINARS/WORKSHOPS ATTENDED

1. 1st Conference on Afro-Mediterranean Soils: Constraints and Opportunities, 18-19th December **2015**. Marrakech, **MOROCCO**. <http://www.fao.org/soils-2015/events/detail/fr/c/345436/>
2. 1st Annual Rangelands Congress. Status and trends in the rangelands and options for the future. August 11-12, 2015. KBC Leadership Center, Karen, **KENYA**.
3. System for Land-based Emissions Estimations for Kenya (SLEEK) Quarterly Meeting. Mt. Kenya Safari Club. July 27-29, **2015**. Nanyuki, **KENYA**.

4. Training on RothC modelling for the System of Land-based Emission Estimation for Kenya (SLEEK). University of Nairobi, LARMAT GIS Lab. July 20-24, **2015**. Nairobi **KENYA**.
5. Michigan Difference – Scientific Writing and Critical Thinking. Workshop organised jointly by the Centre for Dryland Sustainable Dryland Ecosystems and Societies, University of Nairobi and the University of Michigan. July 6-8, **2015**. University of Nairobi. Nairobi, **KENYA**.
6. System for Land-based Emissions Estimations for Kenya (SLEEK) Quarterly Meeting. Sarova Shaba Game Reserve. April 13-15, **2015**. Samburu, **KENYA**.
7. Enhancing community-based farming systems by integrated and efficient soil-water-nutrient management regimes in sub-Saharan Africa: from research to farm business enterprises. Australia-African Universities Network (AAUN) PRDF Workshop. CHAKS Guest House and Conference Centre, University of Nairobi. February 23 - 24, **2015**. Nairobi, **KENYA**.
8. Dryland Collaborative Knowledge Network Workshop: Collaborative Institutions and Innovative Transformations to Sustainability. Colorado State University (CSU). January 28-31, **2015**. Colorado, **USA**.
9. Triple L - Land, Livestock and Livelihood Dynamics in Dryland Systems. 18-22nd Nov. **2014**. Kitale, **KENYA**.
10. Rangeland Management National Consultative Workshop on ". Zen Garden, Lower Kabete, 10/11/2014. Nairobi, **KENYA**.
11. First Research co-ordinated Meeting on 'Application and Development of Isotope Techniques to Evaluate Human Impacts on Water balance and Nutrient Dynamics of Large River Basins'. 20-24th October, 2014. **IAEA-VIC. Vienna, AUSTRIA**.
12. System for Land-based Emissions Estimations for Kenya (SLEEK) Quarterly Meeting. Mt. Kenya Safari Club. 7 – 9th July, **2014**. Nanyuki, **KENYA**.
13. System for Land-based Emissions Estimations for Kenya (SLEEK) Quarterly Meeting. Great Rift Valley Lodge & Golf Resort. 14 – 16th April, **2014**. Naivasha, **KENYA**.
14. National Land Conference on Sustainable Land Management in Dry lands of Kenya: Towards increasing Land Productivity. Organised by Mainstreaming Sustainable Land Management in Agro-Pastoral Production Systems of Kenya Project. 25th – 29th Nov. **2013**. Naivasha, **KENYA**. www.slmkenya.org
15. Triple L - Land, Livestock and Livelihood Dynamics in Dryland Systems. 18-20th Nov. **2013**. Kitale, **KENYA**.
16. 6th Africa Soil Science Society (ASSS) and the 27th Soil Science Society of East Africa (SSSEA) Conference. Soil is Wealth, Protect it. 21-25th October, **2013**. Nakuru, **KENYA**.
17. Desertland: The Fourth Conference on Desertification and Land Degradation. 17-18th June, 2012. Gent, BELGIUM. <http://www.desertland.eu/>
18. 1st Student-Led Conference organised by the Centre for Sustainable Drylands and Societies (CSDS) of the University of Nairobi, **KENYA**. 29 - 30th May, **2013**.
19. Day of the Young Soil Scientist: 20th Feb. **2013**. Organised by The Belgium Society of Soil Science. Brussels, **BELGIUM**.
20. 8th International Soil Science Congress on "Land Degradation and Challenges in Sustainable Soil Management" 15-17th May **2012**, Çeşme-İzmir-TURKEY.
21. CBD SBSTTA 15 - Fifteenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice. 7 - 11 November **2011**. Montreal, **CANADA**. <http://www.cbd.int/ts>
22. Web 2.0 Learning in Agriculture at Baraka Agricultural College, Molo **KENYA**. 27th Sept – 1st Oct. **2010**.
23. 2nd International Conference on Climate, Sustainability and Development in Semi-Arid Regions, Fortaleaza, Ceara, **BRAZIL** 16th – 20th August **2010**.
24. Practical Action Workshop: "Informing adaptation to Climate Change among Pastoralists in Northern Kenya". 7 – 8th July, **2010**. Nairobi Safari Club, Nairobi, **KENYA**.
25. 19th East African Environmental Network Conference 22nd -23rd May **2009**, AMREF International Training Centre, Nairobi **KENYA**. Theme: Energy, Gender and the Environment.
26. 5th International Conference on Land Degradation. Valenzano, Bari, **ITALY** 18-22 September **2008**. Theme: "Moving ahead from assessments to actions: Could we win the struggle with land degradation?"
27. Dryland Livestock-Wildlife Environment Interface Project (DLWEIP) Steering Committee Workshop, 12th-13th April **2008**, Nanyuki, **KENYA**
28. DLWEIP Finding and Synergies Workshop, 13th-14th April **2008**, Nanyuki, **KENYA**
29. World Neighbours – East Africa Experience in Rural Development Workshop, Nairobi, **KENYA**. 7th – 9th August **2002**

XI. SCHOLARSHIP/FELLOWSHIP AWARDS AND HONOURS

1. Awarded **Special Research Fund (BOF) Doctoral Fellowship** of Ghent University (March 2011 – March 2013) for completing my PhD studies at Ghent University, Belgium.
2. Awarded Sponsorship by **CTA, Wageningen University** to participate in Web 2.0 Learning in Agriculture at Baraka Agricultural College, Molo Kenya. 27th Sept – 1st Oct. 2010.
3. Awarded **Full Sponsorship by DFID** to attend and present a paper in the 2nd International Conference on Climate, Sustainability and Development in Semi-Arid Regions, Fortaleaza, Ceara, Brazil 16th – 20th August 2010.
4. Awarded **Travel Grant by CTA, Wageningen University thro' CIHEAM, Italy** to attend and present a paper in the 5th International Conference on Land Degradation, Bari Italy 18th – 22nd September 2008.
5. Awarded **Flemish Inter-University Council (VLIR) Scholarship** (Oct. 04 – Sept. 06) for International Course Programme in Physical Land Resources (MSc) at Ghent University, Belgium
6. Awarded **MASHAV Scholarship** by Israeli Ministry of Foreign Affairs to attended 6th MASHAV International Course on Conservation of Biodiversity in Desert Ecosystems, Ben Gurion University of the Negev, State of Israel
7. Awarded Government of Kenya (**GOK**) Undergraduate Sponsorship for BSc Oct. 96 – June 00

- Awarded Certificates of Academic Excellence, Best Student-District Day Schools (DD2) Category, Kenya Certificate of Secondary Education (**KCSE**) 1994. Mathira Division and Nyeri District

XII. MEMBERSHIP IN PROFESSIONAL SOCIETIES

- Member, International Society for Ecological Restoration (SER) www.ser.org
- Member, World Association of Soil and Water Conservation (WASWC) www.waswc.org
- Member, Soil Science Society of East Africa (SSSEA)
- Member, Eastern Africa Environmental Network (EAEN) www.eaenet.or.ke
- Member, the East Africa Natural History Society (Nature Kenya) www.naturekenya.org
- Member, Kenya Forest Working Group (KFWG) www.kenyaforests.org

XIII. SKILLS & PROFESSIONAL DEVELOPMENT

- Fluent in Microsoft Office applications
- Statistical analysis (GenStat, SPSS, S-Plus, RETC-for Soil Science)
- Use of GPS, IDRISI & ArcView GIS
- Analysis of Geostatistical data
- Competent driving skills: Clean DL Class BCE

IVX. LEADERSHIP EXPERIENCE

- Chair, Development Committee - Deliverance Church – Uthiru (2013-present)
- Youth Patron – Deliverance Church – Uthiru (2013-present)
- Entrepreneurship – Board Member of three enterprises to date
- Caring Community (C²) Leader – International Christian Center (ICC), Mombasa Rd. (2003-2007)
- Bible Study Leader-Upper Kabete Campus Christian Union (UKCCU) (1998-2000)
- Library Captain-Ruthagati Boys High School (1992-1994)

VX. HOBBIES AND INTERESTS

- Involvement in Community Development activities
- Travelling, camping, nature adventure and retreats
- Gardening and Tree planting; Reading and creative writing
- Sports – Biking, Swimming
- Blogging – Environmental Matters, Personal Financial Management/Financial Education

VXI. REFEREES

- Prof. Dr. Jesse Theuri Njoka, Ecologist, NRM Specialist
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