

CURRICULUM VITAE

DR. BETTY NASAMBU OPILO

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PERSONAL INFORMATION

Nationality	: Kenyan
Gender	: Female
Marital Status	: Married
Religion	: Christianity
Languages	: English, Kiswahili and Luhya (Fluent in Written and Spoken)

PROFESSIONAL PROFILE

I am an experienced academic professional with over 15 years of dedicated service in the university environment. I am motivated by results and aspire to continuously advance in my career. Known for my self-motivation, ambition, innovation, and analytical skills, I am also a quick learner who thrives as a collaborative team member with strong interpersonal abilities. I am deeply committed to excelling in any task I undertake and seek opportunities within challenging and fulfilling environments. My goal is to leverage my expertise and academic background to contribute to personal and organizational growth. With a passion for making a positive impact, I approach all my endeavors with the aim of bettering the world around me.

EDUCATION AND TRAINING

December 2023: Masinde Muliro University of Science and Technology| *Kakamega, Kenya*

Degree Obtained: PhD in Disaster Management and Sustainable Development

Thesis Title: *Impact of Sustainable Land Management Technologies on Flood Risk Reduction in Western Region, Kenya*

December 2019: Masinde Muliro University of Science and Technology| *Kakamega, Kenya*

Degree Obtained: Master of Science in Disaster Preparedness and Engineering Management.

Thesis Title: *Role of dykes in flood mitigation in Lower Nzoia River basin Budalang'i Kenya*

December 2014: Mount Kenya University

Degree Obtained: Bachelor of Science Environmental Health
(Second Class Honors Upper Division)

December 2000: DTEC. (KNEC)- Diploma in Applied Biology awarded - Credit Pass

December 1997: Namwela Mixed Secondary School | *Bungoma, Kenya*

Qualification attained: *Kenya Certificate of Secondary Education (KCSE)*

December 1993: *Emalindi Primary School Kakamega, Kenya*

Qualification attained: *Kenya Certificate of Primary Education (KCPE)*

CORE SKILLS AND COMPETENCIES

- **Digital Skills:** I am Proficient in IBM Statistical Packages for Social Scientists (SPSS); Use of communication Programmes including Google, Mail, Skype, Zoom, Gmail and Google meet; Microsoft Office Packages including Word, excel and power point; Qualitative and Quantitative Data Analysis.
- **Planning and Organization:** I possess refined skills in planning and organization, effectively managing workloads, providing team support, and handling ad-hoc responsibilities in a timely and professional manner, organizing experiential learning through field skills and practicum
- **Team Building:** Demonstrating a strong ability to cultivate relationships across diverse social groups, I excel in connecting with clients and partners directly, addressing their inquiries, issues, and concerns.
- **Reporting:** Proficient in crafting various types of reports, both academic and non-academic, I have the capability to articulate information clearly and concisely.
- **Reflective Listening and Communication:** I exhibit attentive listening skills, carefully following and interpreting instructions or guidelines. Furthermore, I communicate effectively in both written and spoken English and Swahili, fostering clear understanding and dialogue.
- **Data Collection and Analysis:** I am skilled in designing and administering various data collection instruments such as questionnaires, interview guides, and Focus Group Discussion (FGD) guides. Additionally, I am proficient in data cleaning, coding, analysis and interpretation for both qualitative and quantitative data ensuring accurate insights. Additionally, I am adept at utilizing the Internet for research purposes and proficient in email communication

WORK EXPERIENCE

January 2024 to Date: Part-time Lecturer and Technologist Full time, Masinde Muliro University of Science and Technology, Kenya

Teaching and Examining the following Courses:

Masters Degree Level

- DEM 803: First Aid Skills Practice and Management

Undergraduate/Bachelor's Degree Level

- DEM 113: First Aid Skills Practice and management
- DPE 200: Natural & Technological Disasters
- DPE 201: Climatology & Disaster Management
- DSC 121: Atmospheric Circulation and Climatic Classification
- DPE 102: Man, and Environment
- DPE 310: Biotechnology and Disaster Management
- DPG 406: GIS and ICT application in disaster management

Sept. 2022- April 2023: Internal Part-time Tutorial Fellow Department of Health Promotion

and Sport Science, Masinde Muliro University of science and at Technology, Kenya

Teaching and examining the following Undergraduate Degree Courses:

- DEM 102: First Aid Skills Practice and Management
- DEM 100: HIV/Aids Prevention and Management

Diploma courses

- CDM 100: HIV/AIDS Prevention and Management
- HSS 083: HIV/AIDS and STIs

September. 2021- April 2022: Internal part time and Full-time technologist, Masinde Muliro University of Science and Technology, Kenya

Teaching and examining the following under graduate Degree Courses:

- DEM 102: First Aid Skills Practice and Management
- DEM 200: Fire safety Management

September. 2020- April 2021: Internal part time and Full-time technologist, Masinde Muliro University of Science and Technology, Kenya

Teaching and examining the following under graduate Degree Courses:

- DEM 102: First Aid Skills Practice and Management
- DEM 200: Fire safety Management
- DEM 403: Refugee and Camp Management

September. 2019- April 2020: Internal part time and Full-time technologist, Masinde Muliro University of Science and Technology, Kenya

Teaching and examining the following under graduate Degree Courses:

- DEM 102: First Aid Skills Practice and Management
- DEM 200: Fire safety Management
- DEM 100: HIV/AIDS Prevention and Management (Education)

Teaching and examining the following Diploma Courses:

- DDM 002: First Aid Skills and Practice
- DES 007: Behavior, Attitude and Stress in Emergency Personnel
- DDM 011: Refugees and Displaced Persons Camp Organization
- DDM 021: Introduction to Emergency Medical Care
- DES 026: Introduction to Fire Safety

September. 2018- April 2019: Internal part time Bungoma Campus Masinde Muliro University of Science and Technology, Kenya

Teaching and examining the following under graduate Degree Courses:

- DEM 100: HIV/AIDS Prevention and Management (Education)

Teaching and examining the following Diploma Courses:

DDM 021: Introduction to Emergency Medical Care

DDM 005: Fire Disaster Management

DDM 001: Introduction to Disasters

CDM 004: Strategies in Famine and Food Security

September. 2017- April 2018: Internal part time Graduate Assistant, Masinde Muliro University of Science and Technology, Kenya

Teaching and examining the following Diploma Courses:

- DDM 021: Introduction to Emergency Medical Care

Jan. 2014 to Jan. 2016: Acting School administrator, Masinde Muliro University of Science

and Technology, Kenya

Duties and Responsibilities

- Maintenance and Updating of Student records
- Registration and reporting of students
- Providing administrative support to the Dean Centre for Disaster Management and Humanitarian Assistance
- Coordinating of Faculty functions and Board Meetings
- Processing of Student's examinations results
- Faculty ERP Administrator
- Performing other duties as directed by the Dean from time to time

March ,2011- Date: Full time Technologist at the School of Disaster Management and Humanitarian Assistance, Masinde Muliro University of Science and Technology

- Demonstrating practical lessons for post graduate, undergraduate diploma and certificate students at the School
- Taking and assisting students in experiential learning on field trips and field skills and creating awareness on HIV through sensitization and handling of disasters in cases of emergencies.
- Leading presentations for masters and PhDs students at the faculty
- Practical lessons for Students at the GIS laboratory

Feb, 2010- Jan, 2011: Casual- Centro International de Agricultural Tropic (CIAT)

Under Tropical Soil Biology and Fertility (TSBF) -Project Maseno, Kenya

Activities covered:

- Field soil sampling for Laboratory Analysis

- Soil Sample Processing for Laboratory Analysis
- Plant Sample Collection from Experimental Sites
- Plant Sample Analysis for Laboratory Analysis
- Data Collection Using Field Log in Forms
- Data Entry and Analysis (SPSS)
- Surveys on Nitro Fixation for Africa)

June, 2009–Jan, 2010: Intern -Kenya Forestry Research Institute (KEFRI)-
Regional Research Centre, Maseno Kenya

Exposed to wide range of activities

- Experimental designs.
- Data collection and Analysis
- Proposal writing Skills
- Agroforestry extension activities
- Laboratory analytical Skills
- Data Collection and Management of Field trials

SUPERVISION AND REVIEW

Reviewed Thesis

Candidate's Name	Program of Study	Title of Study	Institution
Kerich Nancy	Master of Science in Disaster Management and Sustainable Development	<i>Influence of Electronic security surveillance System on Secondary School Safety in Trans Nzoia County, Kenya</i>	MMUST (February 2024)

Supervision

Candidate's Name	Program of Study	Title of Study	Institution
Frenda Ekisa	Master of Science in Disaster Management and Sustainable Development	Factors affecting-adoption of Rain water Harvesting for improvedhousehold food and Nutritioal Securityunder Changing Climaticconditionsin Bungoma North Sub county, Kenya	MMUST (October, 2024)
Rosebella Nyang'ata Bikoro	Master of Science in Climate Change Adaption	Evaluating Ecosystem-Based Adapation (EbA) Strategies for climate Change Resilience. A case study of Cherangany Hills Trans-Nzoia County, Kenya	MMUST (February, 2025)

Farah Asindu	Master in Disaster Management and Humanitarian Assistance	Assesment of the impact of recurrent Floods on Community recovery efforts in Tana Delta Sub county, Tana River Country, Kenya	MMUST (February, 2025)
Yahya Dahir Osman	Master in Disaster Management and Humanitarian Assistance	Resilience Engineering as a strategy of Building Disaster Resistant Community: A case of Wajir Municipality, Kenya	MMUST (February, 2025)

PEER REVIEWED BOOKS AND JOURNAL

BOOK/JOURNAL NAME	Manuscript Number	Title of the Manuscript	Institution
Research Advances in Environment, Geography and Earth Science	Ms_BPR_1123	Review on heavy metals content in sediment of Makasar Straits (1999 2003 2004)	BP International (Jun, 2024)
Asian Journal of Environment & Ecology	Ms_AJEE_118679	Tertiary Coal of North Eastern part of India and Environment – An Overview	Asian Journal, (Jun,2024)
Conference Proceedings on Calibrating Urban Livability in the Global South	Ms_BP_2811G.36	Enhancing outdoor thermal comfort in rapidly urbanizing environments: insights from a neighbourhood-level study	BP International (Marc, 2024)

PUBLICATIONS

- Opilo, B. N., & Mugalavai, E. (2023). Strategies for Mitigating Flood Risks in Western Region, Kenya. *African Journal of Empirical Research*, 4(2), 1063-1070.
- Nasambu, O. B., Soita, C. S., & Omoyo, N. N. The existing Sustainable Land Management Technologies employed by Farmers in Western Region, Kenya
- OPILO, B. N. (2023). IMPACT OF SUSTAINABLE LAND MANAGEMENT TECHNOLOGIES ON FLOOD RISK REDUCTION IN WESTERN REGION, KENYA.
- Nasambu*, O. B., Masinde, N. E., & Mwikali, K. V. Examining the Geographical Coverage of Floods Using Satellite Images and Discharge In LNRB. Kenya. *The International Journal of Social Sciences and Humanities Invention*, 5(4), 4595-4603. <https://doi.org/10.18535/ijsshi/v5i4.09>

PAPERS UNDER CONSIDERATION FOR PUBLICATION

Nasambu Opilo Betty Omoyo Nicodemus Nyandiko : *Evaluation of Sustainable Land Management technologies promoted by Kenya Agricultural Carbon Project in Western Kenya*

²BOOK CHAPTER UNDER CONSIDERATION FOR PUBLICATION

- **Nyandiko Nicodemus Omoyo ,James Omondi Juma and Nasambu Betty Opilo:** *The Potential of Structural Measures in Minimizing Risk of Displacement from River Backflows in Lake Victoria Region, Kenya*

CONFERENCES ATTENDED

- Pedal Online Technology for Transformative Pedagogy course held on June 7th 2021 to July, 4th, 2021
- 14th Multi-Disciplinary International Virtual Conference on Innovative Technology Transfer for Universal Health Care (UHC), Food Security Affordable Housing and Manufacturing for Sustainable Development’’ 19th-21st May 2021, **Masinde Muliro University of Science and Technology University Kakamega, Kenya**
- South African Research & Innovation Management Association (SARIMA), *On ‘‘10 continuing Education (CE)points for registered Technology Transfer Professional (RTTP) status’’* 4th-6th August, 2020
- International Conference on ‘‘Expanding Theoretical and Applied Roles of GIS in a Dynamic Global Environment’’13th—14th August 2015, **Masinde Muliro University of Science and Technology, Kenya**
- International conference on ‘‘Disaster Risk Reduction and Conflict Resolution for Sustainable Development’’18th-20th July 2012 at **Masinde Muliro University of Science and Technology, Kenya**

WORKSHOPS AND SEMINARS

- Africa Science Leadership Program(MUST-Science Leadership Program under the theme shaping Africa’sNext Generation of Science Leaders held between 5th to 7th February 2025 at Golf Hotel Kakamega.
- Africa Climate Mobility Academy 2024 held at Masinde Muliro University of Science and Technology, Kenya between 14th -19th October, 2024
- Academic Mentorship Training, at Kakamega Golf hotel on 5th February 2024
- First Aid Trainer of Trainee (TOT) 14th-17th March 2023 at Masinde Muliro University of Science and Technology Kenya
- Fire Safety Training on Fire drills and simulation, evacuation procedures, search and Rescue procedures, response and post disaster activities 25TH -26TH January 2022 at Kakamega Fire Department Kakamega County Kenya
- Staff Peer Education Training 20th- 22nd April, 2022 sponsored by Masinde Muliro University of Science and Technology at Golf Hotel KAKAMEGA Kenya.
- International day for disaster risk Reduction_2022 in Kakamega County
- Virtual transforming Education Computing Bootcamp Training for Tertiary Educators by Oracle Academy Global Peace Foundation Kenya’’ 25th-26th March, 2021 on Bytes- Hands On Lab- Intermediate/advanced: Oracle Analytic Cloud and Intermediate : Linus Web Services- Oracle Cloud Compute VM- Install Apache and PHP
- The Gender and Disability Workshop on ‘Embracing Gender and Disability Equality and Zero Tolerance on Discrimination’’ 6th July, 2017 at Main Catering Unit Masinde Muliro University of Science and Technology Kenya.
- Staff Peer Education for MMUST Staff organized by AIDS CONTROL UNIT 16th-17th July 2015 by Masinde Muliro University of Science and Technology at Jamindas Paradise Hotel Kakamega Kenya

- Performance Contracting awareness Training session at Masinde Muliro University Graduation Square on 9th November 2015
- Save the children conference. (2014)

HONOURS AND AWARDS

- Masinde Muliro University of Science and Technology School of Disaster Management and Humanitarian Assistance, facilitating a field Skills Experiential Learning Held at Budalangi Busia for 5 days
- Participated in Shikusa Borstal Humanitarian Intervention on 12th May 2017
- Appreciation for Contributing to Smooth and Peaceful Electoral Process from 2015 to 2024

COMMUNITY SERVICE

- Participated in Food and Humanitarian donations to flood victims in Nyando on 11th February 2025,
- Participated in Food and Humanitarian donations to Flood Victims in Budalangi 2022-2024
- Participated in supervision of MMUSO elections 2015 ,2016, 2017, 2022 as SENIOR polling clerk and Deputy presiding officer in 2024 ELECTIONS
- Donations and visits to people living with disability in Matete Kakamega County,2023
- Participated in curriculum development for the school in Bishop Stam ,2022
- Humanitarian donation to the people living with Disability, elderly and less fortunate in the Community at Bokoli Village in collaboration between MMUST and Kenya Red cross Bungoma Branch-2022
- Participated in curriculum development for the school in Busia ,2019
- Participated in marketing of MMUST at Eldoret show ground 4th-7th march,2015
- Participated in Launching of Webuye campus in April, 2015
- Member of MMUST Greening Initiative committee (2014-Date)
- Participated in marketing Masinde Muliro University of Science and Technology during Golf tournament (2013)
- Member of Editorial committee, Association of Disaster Management and Conflict Resolutions of Kenya- ADMCRK (2011- date)
- Member of GIS KOOP
- Visited and supported in Cleaning of the Environment for school of the Deaf Kakamega County Kenya
- Together with Disaster Environmental Management Association was able to Donate and feed the street Children in Kakamega County Street.
- Clean up activities in various hospitals in Kakamega County

NETWORKS AND MEMBERSHIP

- Life Member Kenya Red Cross Society, Bungoma Branch
- Association of Disaster Management and Conflict Resolution of Kenya (ADMCRK)-2011-date

- Member of Disaster Environmental Management Association DEMA (**2014-date**)
- Member of Masinde Muliro Peer Staff Educator **2018** to **date**)
- Member of Royal Society of Chemistry (**2014-date**)

REFEREES

Dr. Ferdinand Nabiswa, PhD

Dean, School of Disaster Management and Humanitarian Assistance
(SDMHA) Masinde Muliro University of Science and Technology

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Dr. Nicodemus Nomoyo Nyandiko

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Dr Nicholas Kipkorir Ombachi

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