



JOYCE WAMBUI IRUNGU

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Objective

- I am an Environmental Engineer and VLIRIOUS scholar with experience in implementing projects in Natural Resource Management and Water Monitoring. I hold a Master's Degree in Environmental Sanitation from Gent University, Belgium. I possess technical knowledge in assessing and mitigating pollution in environmental compartments of soil, water and air. I am highly motivated to pursue interests in environmental research for development, eradication of poverty and policy sensitization.
- As part of my academic and work experience, I successfully carried out water quality assessment of River Sondu aimed at improving the nutrient management of Lake Victoria Basin. During the project, I was responsible for developing sampling strategy, collecting and analyzing water and soil samples, statistical data analysis and reporting. The output is currently being used to inform Water Resources Authority and Lake Victoria Basin Commission on nitrate management in the Lake region. I have successfully carried out a water monitoring exercise for the assessment of Riparian Encroachment of Nairobi River Basin. During the project, I was in charge of research, data collection, analysis and reporting. I have successfully participated in dissemination of resultant information through stakeholder engagements with both state and non-state actors. I possess knowledge in the legislation of water resources with a clear understanding of international and local regulatory policies and guidelines such as the European Water Framework Directive, US EPA Water Quality Standards and NEMA Water regulations. I have received certification as an EIA Associate Expert from NEMA. I'm also a member of the body for environmental practitioners in Kenya, EIK.

Education

M.SC. ENVIRONMENTAL SANITATION | GHENT UNIVERSITY, BELGIUM | SEPTEMBER 2016 - SEPTEMBER 2018

FINAL GRADE - CUM LAUDE

Coursework: An integration of environmental science and technology to provide preventive and remediation instruments for air, water, waste and soil pollution for sustainable exploitation of the environment and mitigation of climate change.

Master Thesis: Nitrate Source Apportionment, Fractionation and Removal Mechanism using Stable Isotopes – River Sondu, Lake Victoria Basin.

B.SC. ENVIRONMENTAL AND BIOSYSTEMS ENGINEERING | UNIVERSITY OF NAIROBI, KENYA | OCTOBER 2010 - SEPTEMBER 2015

FINAL GRADE - SECOND-CLASS HONORS (UPPER DIVISION)

Coursework: The application of engineering principles to the planning, design and management of natural resources of air, soil, water systems for industrial and agricultural application.

Engineering Design Project: Design of A Biogas Digester at Gicheha Farm.

KENYA CERTIFICATE OF SECONDARY EDUCATION | ALLIANCE GIRLS HIGH SCHOOL| 2005 - 2008
FINAL GRADE (A Minus – 78 points)

Employment

ENVIRONMENTAL CONSULTANT| BIOVERSITY INTERNATIONAL| JUNE 2019 – CURRENT

- Carry out developmental research to ascertain the climate resilience of smallholder farmers in Kenya
- Budget review and implementation
- Recruit and train field research assistants
- Collection of data, analysis and consolidation of the findings in a report geared towards policy sensitization and agroecology advocacy.

WASTE MANAGEMENT CONSULTANT|ENKARETONI CBO| MARCH 2019- CURRENT

- Carry out feasibility study for a decentralized waste management system for Enkaretoni Community-Based Organization
- Design and supervise the construction of a waste sorting facility,
- Train waste handlers and community on waste segregation and proper disposal of different waste material
- Set up a pilot project with components of waste collection, waste disposal and community recycling.

ENVIRONMENTAL CONSULTANT | MILIEU CONSULTANTS LIMITED| DECEMBER 2018 – FEBRUARY 2019

- Develop a research methodology to assess the encroachment of the riparian reserve along Nairobi River Basin
- Carry out analysis of data and draft a report on the status of the rivers in Nairobi
- Propose recommendations on both legal and sectoral changes needed to prevent encroachment
- Dissemination of report findings through stakeholder engagement with state actors: Ministry of Transport (State Department of Public Works), National Construction Authority and NEMA officials.
- Work collaboratively with other interdisciplinary consultants to ensure the objectives of the project were met.

ASSISTANT AUDITOR | WACHIRA IRUNGU AND ASSOCIATES, NAIROBI | JUNE 2015 – AUGUST 2016

- Audit and review internal control systems of diverse small and medium sized clients in healthcare, agriculture, water and sanitation, building and construction sectors
- Audit planning, risk assessment, field audit and data collection activities, review of internal controls, performing compliance and substantive audit procedures, discussions and interviews with the Client's finance and internal audit staff, data/audit evidence analysis, audit review and completion
- Prepare Financial Reports according to IFRS standards
- Preparation of management letters/reports, audit findings and draft opinion of the financial statements.

TRAINEE WATER ENGINEER | BHUNDIA ASSOCIATES, NAIROBI | JUNE 2014 – AUGUST 2014

- Collaboratively carried out feasibility studies, planning, design and implementation of irrigation systems for clients
- Gained specific experience in hydraulic design of pipeline networks; design of canal; computation of crop water requirements; calculation of water supply demand; design of storm water drains; production of profiles; map digitization; tender document preparations and use of GIS and Mapping software.

FABLAB OUTREACH PRORAMME ASSOCIATE | FUNKIDZ GO TECH| 2013 – 2014

- Developing a curriculum for teaching simplified engineering principles and robotics to students aged between 6 – 12 years.
- Teach and train students on the curriculum.

INTERN| STAMP INVESTMENT HOLDINGS, NAIROBI | 2010 – 2011

- Product design and marketing of the first Eco stove prototype
- Community sensitization and education women on the risks of household air pollution exposure
- Gained experience in proposal writing and product design.

Professional Certificates

NEMA CERTIFICATION | ENVIRONMENTAL IMPACT ASSESSMENT/AUDIT EXPERT| ASSOCIATE EXPERT| EXPERT NO.10624

EIK CERTIFICATION| ASSOCIATE MEMBER| EIK/2/2803

Courses

INTEGRATED ENVIRONMENTAL IMPACT ASSESSMENT & AUDIT | MAY 2016 | KENYA SCHOOL OF GOVERNMENT.

ASSOCIATION OF CHARTED CERTIFIED ACCOUNTANTS (ACCA) LEVEL II| JULY 2009 – DECEMBER 2010 | KCA UNIVERSITY.

Conferences

AFRICA CLIMATE WEEK | ACCRA, GHANA | MARCH 2019

DELFT – SOFTWARE DAYS| AMSTERDAM, NETHERLANDS| OCT/NOV 2017

Scholarship Awards

VLIR-OUS SCHOLARSHIP | BELGIUM

Scholarship offered by the Belgian Government for the study of M. Sc. Environmental Sanitation at Ghent University, Belgium.

Skills

Managerial Skills

Financial Reporting
Budgeting
Project Management
Project Implementation
Accounting

Technical Skills

AutoCAD
Microsoft Office
Statistical analysis – R programme/SPSS
Technical Report Writing
Waste management
Water Monitoring
Water Assessment
ArcGIS

Interests

SCIENTIFIC WRITING/REPORTING 2018- CURRENT

Regular contributing author for www.littlemusingsofthemind.com.