



Cornelius Were Okello, Ph.D.

E-mail: cbokello@gmail.com
P.O.BOX 48664 -00100 NAIROBI
Phone: +254 733 703940

Professional Title

- Freshwater and climate change expert (International Independent Consultant/Research Scientist)
- Licensed Environmental Impact Assessment Associate Expert

Summary

Doctorate graduate from University of Cadiz (Spain) and University of Bologna (Italy) and expert in climate change and freshwater resources. Experience in research and management projects and working in multicultural organisations. Author of three articles in scientific peer-reviewed journals, credited as first author of two of them. Further author credits in three UNEP publications.

Skills

1. Project management
2. Environmental impact assessments, audits and economic analysis
3. Proficient concept proposal development skills
4. Research Skills:
 - Excellent field work and data collection capabilities
 - Comprehensive experience in laboratory work, theoretical research, data mining and analysis.
5. Excellent writing skills, proof-reading and document editing expertise
6. ICT skills including expertise in GIS applications (competent use of ArcGIS software)
7. Strong intercultural communication skills
8. Networking skills
9. Leadership and organisational skills

Software

The MicrotoxOmni Software Version 1.18 from Azur Environmental, SPSS/PC + statistical package®, ANOVA, ICPin, Dunnett, ArcGIS, Grapher 8, HYDRUS 1-D

Education 2011-2015: Universidad de Cadiz and Universita di Bologna
Erasmus Mundus Joint Doctorate in Marine and Coastal Management
Thesis project: Integrated Management of Coastal Freshwater Resources
Topic: *Impact assessment of land use change and climate change on Shela aquifer in Lamu, Kenya*

2009-2011: University of Plymouth and Universidad de Cadiz
Joint European Masters in Water and Coastal Management (MSc)
Project: Acute Toxicity Assessment of an Anti-Breast Cancer Pharmaceutical, Tamoxifen, using the Sea Urchin *Paracentrotus Lividus*, the Microalgae *Selenastrum capricornutum* and *Isochrysis galbana*, and the bacteria *Vibrio Fischeri*

2003-2007: Kenyatta University
Bachelor of Environmental Science.
Project: Effects of Industrial Wastes on Human Health: A case study of Athi River
Mining Company

Others:
July/August 2011: United Nations University-World Institute for Development Economics Research (UNU-WIDER) in conjunction with World Economic Research Consortium
Climate Change Science and Modelling of Biophysical Impacts

May/June 2016: Macquaire University (through the Open2Study portal)
Climate Change

Languages English, Swahili, Spanish (intermediate) and Italian (beginners)

Professional Experience

1. Machakos University, School of Environment and Natural Resource Management (January 2018 to date)

Lecturer (Grade 12)

2. Institute of Climate Change and Adaptation, University of Nairobi (January 2017 to date)

Associate

3. Pwani University (January 2017 to date)

Part-time Lecturer

Courses

- Reservoir Management

- Utilization and Management of Wetland Ecosystems

4. Machakos University College: Department of Agriculture and Natural Resource Management (September 2016 to date)

Part-time Lecturer

Courses

- Climate Change and Community Livelihoods
- Participatory Community Development and Capacity Building
- Disaster Preparedness and Management
- Project Management, Monitoring and Evaluation

5. Technical University of Mombasa: Department of Environment and Health Sciences, Marine Sciences Section (September to date)

Part-time Lecturer

Courses

- Land Use Changes and Resources
- Waste Management in Marine Environment
- Coastal Geomorphology
- Climate change impacts and interventions
- Shoreline changes and management
- Coastal settlements and infrastructure development
- Environmental Impact Assessment and Auditing

6. Eracoma Consultants (July 2016 to date)

Director, Freshwater Resource Management/Climate Change

7. Integrated Geoscience Research Group (IGRG)

Part of: Interdepartmental Centre for Environmental Sciences Research (CIRSA) University of Bologna, Ravenna Campus (2011-2015)

Research Scientist/PhD Fellow

Roles and duties

Managed the project that was part of doctorate thesis and performed the following tasks:

- Designed all parts of the project with the help of colleagues
- Carried out all field work, data mining and collection and analysis
- Ran all numerical and computer models and analysed results
- Organised and presented results in form of journal articles and final thesis

Achievements

- Produced three journal articles, two of which have been published
- Successfully developed new methodologies to model groundwater in areas with little data

8. United Nations Environment Programme (UNEP), Nairobi - Kenya (October 2008-April 2009)

Intern – Division of Early Warning and Assessment (Water Unit)

Roles and duties

- Actively assisted in the preparation of concept project proposals and on-going projects for publication
- Played a key role in the implementation of projects touching on ecosystems management, climate change and their impacts on water resources
- Successfully aided in the drafting, formatting and editing water related documents which are published by the unit on a regular basis
- Procurement of materials needed for publications, e.g. photos, and official permission to use them
- Contributed to reports as an analyst for freshwater vulnerability assessment.

Achievements

- Produced/ credited in 3 UNEP publications

9. Kenya Marine and Fisheries Research Institute (March - May 2007)

Intern/Research Assistant

Roles and duties

- Dealt with assessment and inventory of fish stocks, their spatial and temporal abundance and distribution and their interaction with each other and the environment concentrating mainly on the fish populations and diseases
- Participated in a study of macro faunal biodiversity of inshore areas, stock assessments of rabbit fish
- Fieldwork in Shimoni to collect data on fisheries and marine life of the Kenyan coast thereby strengthening research skills
- Gained hands-on experience in general laboratory practices, analytical techniques, handling and use of laboratory equipment

Others

1. Conferences:

- XXIII International Coastal Conference In Commemorating Of The 100'th Anniversary Of Professor Vsevolod Zenkovich: 5TH-9TH October, 2010 RSHU (Saint-Petersburg, Russia)

“Coastal Evolution Studies: Traditions and Modern Concepts” A Contribution to the Celebration of the 50th Anniversary of the Intergovernmental Oceanographic Commission (IOC of UNESCO)

Presented a paper titled *‘The Role of Erasmus Mundus Water and Coastal Management Course in Promoting Integrative Aspects in Coastal Studies’*

- 6th ITU Symposium on ICTs, the Environment and Climate Change: 7-8th July 2011 (Accra, Ghana)

‘Moving the climate change agenda forward through green ICTs’

- Training Courses/Summer School: 30 June - 4 July 2014, Gelendzhik, Russia

“Challenge for good environmental status in Coastal Waters”, organized by EC FP7 PERSEUS project and the Shirshov Institute of Oceanology Russian Academy of Sciences

- National Geographic ScienceTelling Bootcamp: 16th – 19th October 2017 (Washington D.C., USA)
 - WIOMSA Scientific Symposium: 29th October 2017 – 4th November 2017 (Dar es Salaam, Tanzania)
2. Active member in the **Erasmus Mundus Student and Alumni Association**
 - a. Served as an elected program representative for Joint Masters in Water and Coastal Management (2010-2011) and Erasmus Mundus Joint Doctorate in Marine and Coastal Management (2012-13).
 - b. Elected as the Eastern Africa Regional Coordinator in the African Chapter of Erasmus Mundus Student and Alumni Association (2011-2013).
 - c. Co-founder and current project coordinator of **Sust-EMA-bility**, a project designed to raise environmental awareness within the Association.
 - d. Active member of the Communications Team, writer and proof-reader of articles for the bi-annual magazine, EMANATE.
 3. Registered member of **West Indian Ocean Marine Science Association (WIOMSA)**
 4. **National Geographic Society** Grant recipient (April 2017)

Publications

1. Authored

- **Okello, C.**; Antonellini, M.; Greggio, N. & Wambiji, N. 2014. Freshwater resource characterization and vulnerability to climate change of the Shela aquifer in Lamu, Kenya. *Environmental Earth Sciences*, 73, 3801-3817
- **Okello, C.**; Tomasello, B.; Greggio, N.; Wambiji, N. & Antonellini, M. 2015. Impact of Population Growth and Climate Change on the Freshwater Resources of Lamu Island, Kenya. *Water*, 7, 1264-1290.
- G.V. Aguirre-Martínez, **C. Okello**, M.J. Salamanca, C. Garrido, T.A. Del Valls, M.L. Martín-Díaz 2015. Is the step-wise tiered approach for ERA of pharmaceuticals useful for the assessment of cancer therapeutic drugs present in marine environment? *Environmental Research*

2. Credited

- UNEP Year Book 2009
- Freshwater Under Threat: Africa-Vulnerability Assessment of Freshwater Resources to Environmental Change (UNEP 2009)
- An Assessment of Assessments: Findings of the Group of Experts, Pursuant to UNGA Resolution 60/30 (UNEP 2010)