CURRICULUM VITAE

Anne Nyatichi OMAMBIA, Ph.D.

Address: P.O. BOX 62589-00200, NAIROBI, KENYA

Tel: +254-710240709, +254-722510281

E-mail: <u>tichiomambia@gmail.com</u>

Profession: Environment and Climate Change Expert

Date of birth: 14th June 1976

Sex:FemaleNationality:KenyanMarital status:SingleChildren:One

KEY COMPETENCIES

- ❖ 17 years' experience in environmental management in various capacities from the grassroots to national level of which 11 years have been involved in-depth research and working experience in the climate change field with expertise in carbon markets, international climate change negotiations, multilateral environmental agreements, compliance and enforcement
- Well exposed to national, regional and international environment management and climate change policy formulation. Served as a technical member in the formulation of the Kenya Climate Change Act and Policy; Kenya Climate Change Action Plan; East Africa's Climate Change Strategy and Policy; training manuals for Biennial Update Reports on climate change for developing countries; East Africa Community Plastics Control Bill, Draft EMCA(Plastics packaging control)regulations,2018
- Served as the coordinator for the accreditation of NEMA as the National Implementing Entity (NIE) for the Adaptation Fund
- Demonstrated ability to initiate and guide change management efforts that lead to improved perception, attitude and behavior towards environmental management
- Accomplished team leader with proven capability to develop cohesive team structures that help achieve desired results to accomplish set strategic objectives
- Proficient in research and publication of policy papers and scientific articles in environment and climate change issues
- Successfully organized and hosted the first National Scientific Conference on Climate Change for Tana River County jointly with School of Geography and Environmental Studies, University of Nairobi (Feb 2014)
- Registered facilitator/trainer for the climate change course at the Kenya School of Government
- Excellent skills in use of computer data analysis and presentation tools including TOUGH2, TOUGHREACT, ArcGIS, AutoCAD, SPSS, spreadsheets, MS Office

EDUCATION

Sept 2007-June 2010: Doctor of Philosophy in Environmental Engineering, China University of Geosciences, Wuhan, CHINA. Thesis: Design of carbon dioxide injection in deep saline aquifers in Wangchang Oilfield-Jianghan Basin, China (A collaborative research under the Global Climate and Energy Project) (Chinese Scholarship Scholar)

Oct 2000-Dec 2001: Master of Philosophy in Environment and Development, Downing College, University of Cambridge, United Kingdom. Thesis: Sanitation in Urban Slums – Perception, Attitude and Behavior: The case of Kibera, Nairobi. Kenya. (DFID-Cambridge Commonwealth Scholar)

Nov 1995-Apr 1999: Bachelor of Environmental Studies-Science (*First Class Honors*). Kenyatta University, KENYA. Major: Environmental Science, minor: Environmental Planning and Management

WORK EXPERIENCE

Feb 2018 to date: Chief Compliance and Enforcement Officer and Climate Change Coordinator – National Environment Management Authority

Duties and responsibilities:

- ❖ Formulating environmental regulations, standards, guidelines and license conditions
- Ensuring that Multilateral Environmental Agreements are domesticated
- ❖ Managing compliance through licensing and/or permitting regimes under EMCA 1999 and its regulations
- Liaising with lead agencies and the regulated community on sectoral mandates and compliance assistance
- Coordinate the implementation of NEMA's functions in the Climate Change Act 2016 and the UNFCCC
- Serve as the Desk Officer to the Designated National Authority of the Clean Development Mechanism
- Supervising, developing and appraising staff

June 2016 Jan 2018: Principal Compliance and Enforcement Officer – Head of Waste Management Section and the Climate Change Coordinator: National Environment Management Authority (NEMA-Kenya)

Duties and responsibilities:

- Administration, work plan preparation and supervision of the Waste Management Unit Staff
- Coordinating the issuance of waste licenses in accordance with the Waste Management Regulations, 2006
- Coordinating and supervising environmental inspections and ensure appropriate enforcement intervention and or actions undertaken
- Coordinating joint inspections with Lead Agencies
- ❖ Coordinating the roll out of Compliance Assistance Programs under EMCA 1999 Regulations
- ❖ In liaison with Legal Department, coordinate the review of EMCA 1999 Regulations as need arises

Aug 2010 to May 2016: Senior Environment Research Officer / Climate Change Coordinator: National Environment Management Authority (NEMA-Kenya)

Key responsibilities:

- Coordination of all national climate change activities for the Authority
- National Project Coordinator for the preparation of Kenya Technology Needs Assessment Report on Climate Change (Jul 2011- to date)
- ❖ All duties pertaining to the Designated National Authority for Clean Development Mechanism (CDM)
- National Project Coordinator for the Second National Communication on Climate Change to the United Nations Framework Convention on Climate Change (UNFCCC). Jul 2014 to date)
- ❖ Implementation of the Kenya National Climate Change Response Strategy and Kenya National Climate Change Action Plan(2013-2017)
- Africa's nominated member in the Consultative Group of Experts on National Communications to the UNFCCC for Non Annex I parties
- Participation in UNFCCC activities including the Conference of Parties as Kenya's lead negotiator under the Kyoto Protocol
- Lead Coordinator for the African Group on negotiations under the Subsidiary Body for Scientific and Technological Advice of the UNFCCC (SBSTA)
- Member of the Interim Bureau of the African Group of Negotiators on Climate Change to the UNFCCC
- ❖ Thematic Working Group leader for Chapter 6 "National Performance and Benefit Measurement Framework (NPBMF) of the Kenya Climate Change Action Plan (2013-2017)
- Secretariat member National Task Force on formulation of the Climate Change Law and Policy
- Environmental research and contribution of the Climate Change Chapter of the State of Environment Report

Oct 2004 to Aug 2010: District Environment Officer, Murang'a District National Environment Management Authority

Key responsibilities

- ❖ In charge of all environmental matters within the district
- Coordinate the preparation of the District State of Environment Reports

- Coordinate the preparation of the District Environment Action Plans
- Environmental compliance and enforcement of the Environmental Management and Coordination Act no.8 of 1999 and its related regulations within the district
- Environmental awareness, training and capacity building to lead agencies, NGOs, CBOs and the public
- Coordination of public participation in environmental management and celebration of environmental days
- Secretary to the District Environment Committee
- Secretary to the District Disaster Management Committee

June 2003 – Feb 2004: Gender and Environment Associate Consultant. Centre for Rural Economy Support Services (CRESS), Kenya.

Key deliverables

- Development of a gender and health training manual for CRESS
- Preparation of the CABUNGO-Malawi report on staff capacity building and mainstreaming gender in organizational development
- Preliminary evaluation research for the Phase III Kenya Government/DFID primary schools text book program in conjunction with ADRA Kenya
- Responsible for the Preparation of bankable proposals in gender and environment issues

March – May 2003: Environmental Assistant at the Agricultural Technology Fund Unit, FARM-Africa – Kenya. Key deliverables included appraisal and evaluation of research proposals submitted by applicants for purposes of joint funding by FARM-Africa-Kenya, Gatsby Charitable Trust and Rockefeller Foundation. Provided logistical support for the launch of the third phase of the Agricultural Technology Fund

Apr 2000 - May 2000: Researcher on domestic energy consumption patterns for BP/SHELL Oil Company Kenya Limited. Research was carried out to determine client energy mode selection and consideration for environmental sustainability

May 1998 - Aug 1998: Environmental Intern Vi Agroforestry Project, KENYA.

A Non-Governmental Organization based in the North Rift and Western Kenya funded by Swedish International Development Agency. Duties included monitoring and assessment of research projects and agroforestry trial farms research and data collection using Participatory Rural Appraisal methods and report writing.

CONSULTANCIES DONE

April 2020 to date: Individual Consultant: Steve Nyamori Consulting Nairobi: provision of advisory services on carbon market mechanisms, project investments in carbon markets and green technology

Jan 2018 to date: Consultant lecturer: Kenya School of Government – training of participants undertaking professional course in Climate Change Policy, Planning and Budgeting at National and County Level

Jan to May 2019: Individual Consultant – Jesuit Hakimani Center – Nairobi - Drafting of a working document on climate change, water access within the shared ecosystem of the two river-basin. The specific tasks included drafting a working policy document; illustrating the policy gaps within the two shared ecosystems that needs redressing; offering professional advice on how best the document could be improved and continuous support to improve the policy paper to become a policy document

October 2017 (5 days Individual Consultant – Sub-contracted by Africa Waste and Environment Management Center Nairobi (AWEMAC) – Undertook a Climate Risk and Vulnerability Analysis Report for the Kopere Solar Park Kenya

September to October 2017: Individual Consultant sub-contracted by Ecodev Consultants Limited Nairobi: Undertaking literature review from primary and secondary sources, government data and policy review for the "FAO/UNDP Resource Base Inventory: Climate Change Adaptation and Building Resilience in Agriculture-Kenya"

SHORT-TERM PROFESSIONAL COURSES

Managerial courses:

- Strategic Leadership Development Programme, Kenya School of Government, Nairobi Campus, Dec 2017
- Training of Facilitators Course, Kenya School of Government, March 2017
- Senior Management Course, Kenya School of Government, Nairobi Campus (Grade Distinction), Jan 2013
- Climate Change Diplomacy: Negotiating effectively under the UNFCCC. 8-weeks online course with examinations by United Nations Training Institute (UNITAR) 16th Sep- 10th Nov 2013
- Project Cycle Management of the Clean Development Mechanism training by the CDM Team of the UNFCCC, Marrakesh, Morocco. July 2011

Technical courses in climate change:

- 2006 Intergovernmental Panel on Climate Change (IPCC) online course on development of greenhouse gas inventories. Greenhouse Gas Management Institute, USA (Sep 2018-to date)
- Climate change issues to related to the upstream petroleum sector. Norwegian Environment Agency and Oil for Development. Oslo, Norway. 6 to 9 November 2018.
- ❖ Tools for prioritizing adaptation options and investment planning. World Resources Institute, NEMA and The National Treasury, 29th March to 1st April 2016
- Green Climate Fund Training. LTS Africa and NEMA. 13th to 15th April 2016.
- Standardized Baselines and Program of Activities for Clean Development Mechanism of the United Nations Framework Convention on Climate Change. UNFCCC, Abidjan, Cote d'Ivoire, July 2013
- Clean Development Mechanism methodologies training by the CDM Team of the UNFCCC, Bonn, Germany March 2012.
- Standardized Baselines for the Clean Development Mechanism of the UNFCCC. UNFCCC. Kathmandu, Nepal. October 2011
- Preparation of National Systems for Greenhouse Gas Inventories training. UN-REDD, GIZ, USEPA and vTI. Rome, Italy, Jan 2011

Technical courses in environmental management:

- ❖ Waste (oilfield, waste oil) management in the petroleum sector. Smart Concept Technology Petroleum Trainers and Consulting, KEPTAP training, 19-23 February 2018
- Environmental and Social Impact Assessment: Focus on Oil and Gas. HSE International. KEPTAP training, 24-28 April 2017
- Strengthening Institutional Capacity on Sustainability Criteria for Bioenergy by Rwanda Bureau of Standards, Apr 2011
- Training of Trainers course for Important Biodiversity Areas Monitoring in Kenya by Birdlife Kenya, Apr 2006
- ❖ Basic Enforcement Course by National Environment Management Authority NEMA-Kenya, March 2006
- Governance and Environmental Management training seminar by Forest Action Network, Thika Kenya. October, 2004
- Logical Framework Approach workshop organized by Vi Agro-forestry Project and SNV held at Marich West Pokot, Kenya. July 1998
- Participatory Rural Appraisal (PRA) practitioners training workshop by Vi Agro-forestry Project-Kenya and Ministry of Agriculture, Kitale-Kenya. June 1998

LANGUAGES

- English Excellent written and spoken
- Kiswahili Excellent written and spoken
- French Intermediate spoken, basic written
- Simplified Chinese (Putonghua)- basic spoken
- Ekegusii (Excellent spoken and written)

PEER REVIEWED PUBLICATIONS

- 1. **Anne Nyatichi Omambia**, Sellellah Okoth and David W. Ongare, 2019. *Environmental Pollution and Waste Management in Kenya*, in, Patricia Kameri-Mbote and Robert Kabugi (Eds.), Environmental Governance in Kenya: Implementing the Constitutional Framework. CASELAP (accepted manuscript)
- 2. **Anne Nyatichi Omambia**, Ceven Shemsanga and Ivonne Andrea Sanchez Hernandez., 2015. *Climate Change Impacts, Vulnerability and Adaptation in East Africa (EA) and South America (SA)*. in, Wei-Yin Chen, John Seiner., et al (eds.), "Handbook of Climate Change Mitigation". Springer Science + business Media, LLC. (2nd Edition)
- 3. **Anne Nyatichi Omambia.**, Samuel Owuor, Wilson Busienei & Wallace C.O.Ngolo., 2014: *Tana River County: Sustainable Resource Utilization and Environmental Management An introduction.* In., Elias Ayiemba, Samuel Owuor, **Anne Omambia** & Preetika Bhanderi (Eds), Tana River County: Sustainable Resource Utilization and Environmental Management. Proceedings of the National Scientific Conference on the Tana River County, Mombasa, February 25th to 27th 2014
- 4. **Anne Nyatichi Omambia**, Ceven Shemsanga and Ivonne Andrea Sanchez Hernandez., 2012. *Climate Change Impacts, Vulnerability and Adaptation in East Africa (EA) and South America (SA).* in, Wei-Yin Chen, John Seiner., et al (eds.), "Handbook of Climate Change Mitigation". Springer Science + business Media, LLC.(1st Edition)
- 5. **Anne Nyatichi Omambia**., Yilian Li., Zhang Wei, 2010. *Numeric modeling of carbon dioxide sequestration in deep saline aquifers in Wangchang Oilfield-Jianghan Basin, China*. Journal of American Science, 6(8). 178-187.
- 6. **Anne Nyatichi Omambia**., Ceven Shemsanga., Yilian Li., 2009. *Combating climate change in Kenya: Efforts, Challenges and Opportunities*. Report and Opinion, 1(6). 65-76.
- 7. **Anne Nyatichi Omambia**., 2010. *Sanitation in Urban Slums: perception, attitude and behavior: The case of Kibera, Nairobi-Kenya*. Journal of Environmental Science and Engineering, 4(3). 70-80.
- 8. **Anne Nyatichi Omambia.** Combating climate change in Kenya: Efforts, Challenges and Opportunities. A paper orally presented at the Wuhan International Conference on Environment, October 15th 18th, 2009. Abstract published in Conference proceedings
- 9. David Walunya Ongare and **Anne Nyatichi Omambia**, 2018. *Building Pastoral and Agro-Pastoral Community Resilience against Drought in the context of the Paris Agreement: The case of Isiolo County, in,* Walter Leal Filho, Izrael da Silva,(Eds.), Handbook of Climate Change Resilience, Springer International Publishers.
- 10. Elias Ayiemba, Samuel Owuor, **Anne Omambia** & Preetika Bhanderi (Eds),. 2014. Tana River County: Sustainable Resource Utilization and Environmental Management. Proceedings of the National Scientific Conference on the Tana River County, Mombasa, February 25th to 27th 2014
- 11. Shemsanga, C., Muzuka, A.N.N., Martz, L., Komakechi, H., **Omambia, A.N.,** Statistics in climate variability, dry spells and implications for local livelihoods in semi-arid regions of Tanzania: The way forward. In: Wei-Yin Chen, John Seiner., et al (eds.), "Handbook of Climate Change Mitigation". Springer Science + business Media, LLC. (accepted manuscript awaiting publication, 2015)
- 12. Zhang Wei, Li Yilian, **Anne Nyatichi Omambia**., 2011 Numerical simulation of effects of convective mixing on CO2 geological storage in deep saline aquifers. International Journal of Greenhouse Gas Control, Elsevier, 5. 241-256
- 13. Li, L.Y., Xu, F.T., Zhang, W., Omambia, AN., Qiu, B.Q., Jiang, L., 2009. Reactive transport modeling and comparison of long-term CO2 geological storage in geological formations with different mineralogical assemblages. In: Wang, Y, Zhou, Y., Gan, Y., (Eds.), Proceedings of the 7th International Conference on Calibration and Reliability in Groundwater Modeling, Wuhan China. China University of Geosciences Press, Wuhan. 459-463.
- 14. Ceven Shemsanga, **Anne Nyatichi Omambia**., Yansheng Gu., 2010. *The cost of climate change in Tanzania: Impacts and Adaptations*. Journal of American Science, 6(3), 182-196.

REFEREES

Prof. Mary N. Getui

Professor of Religious Studies Catholic University of East Africa P.O. BOX 62157, Bogani Road NAIROBI, KENYA

TEL: +254-733-759845 Email: mngetui@yahoo.com

David Walunya Ongare

P.O. BOX 67839-00200 **NAIROBI KENYA**

Tel: +254-0722849420 Email: ongare@gmail.com

Prof. Li Yilian

Professor of Environmental Science and Engineering School of Environmental Studies China University of Geosciences, Wuhan 388 Lumo Lu, 430074 Wuhan City, Hubei

P.R. CHINA

Email: yl.li@cuq.edu.cn / yl.li988@yahoo.com.cn