

Dr JOHN MOENGA NYANGAGA- Curriculum vitae (2010)

Profile Summary:

I am a 50 Year old Kenyan with a PhD in Hydrology with experience in Water Resources management, Environmental conservation and management. My areas of professional interest include hydrology and Environmental management. I have over 19 years experience in water Resources issues and Environmental impact assessment and Audit and worked as a lecturer at a tertiary institute for 4 years and 12 years at the University. I am married with three children. I am excellent in oral and written English and Kiswahili languages, I have co-supervised 15 masters' students to completion and 9 are ongoing, have written four undergraduate modules and contributed 5 articles to international journals.

Qualifications:

2002-2008: Ph.D. in Hydrology-University of Nairobi, KENYA

- ❖ Doctoral research on "The effects of Environmental degradation on Stream flow and Turbidity, in the Itare River catchment, within the lake Victoria basin, western Kenya.

1999: Norkoping University Sweden, Postgraduate Diploma in operational Hydrology

Project Research: Data options available for un gauged basins.

1990-1992: Masters of Science in Hydrology-University of Nairobi, KENYA

- ❖ Thesis research on "Effects of Land use practices on water Quality in Riana river catchment, within the lake Victoria Drainage basin.

1986-1989: Bachelor of Science- University of Nairobi, KENYA

- ❖ Main subjects: Geography, Botany & Zoology. Final year dissertation research on "Banana production in South Wanjare location, Kisii".

Memberships:

Membership in Professional Societies:

Member of the International Association of Hydrological sciences (**IAHS**)

Registered lead expert in Environmental Impact assessment and Audit by National Environmental management Authority (NEMA), Kenya

Member of the hydrological society of Kenya (H.S.K),

Member of the British hydrological society (BHS)

Member of the American water Resources Association (AWRA)

Registered water professional (Hydrologist), MWI Kenya

Professional Training:

2010 March: Water Resources Assessment in sub Saharan Africa; predictions in un gauged and data scarce basins, Cape town, South Africa.

- 2009:** Professional Environmental impact Assessment and Audit course, Kenya National cleaner production Centre, Nairobi Kenya.
- 2009:** Introduction to Groundwater Modelling workshop, University of Nairobi Kenya, by USSGS and Combined Task force, Horn of Africa Water resources programme.
- 2008** (September): Hydrologic Modelling with HEC- HMS workshop, University of Nairobi Kenya, by the US Army Corps of Engineers, by US Combined Task force, Horn of Africa Water resources programme.
- 2006:** Training in Soil and Sediment Transport, at Mekele University Ethiopia, organized by Unesco
- 2006:** IFC Consultant Training / Briefing on the new IFC Policy & Performance Standards on Social and Environmental Sustainability.
- 2005:** Programme for Training Lecturers in Pedagogy, organized by the University of Nairobi, at Kenya School of Monetary studies, Nairobi, Kenya.
- 2002:** ISO 14000:1996 - Environmental Management Systems, 5-Day Lead Auditor Training Course 4th – 8th November 2002. Conducted by Bureau Veritas Quality International, Kenya
- 1999:** Induction on strategic human Resource management, Kenya college of Communication technology (KCCT), Nairobi Kenya

Employment Record:

- April.2001-Present: Lecturer, Department of Geography and Environmental Studies University of Nairobi, Kenya.**
- Main responsibility is teaching, supervision and examination of Certificate, Diploma, Bachelors, Masters and PhD programmes in Hydrology, and Environmental management.
- 1996- Feb. 2001: Lecturer Kenya Water Institute (KEWI)**
- Main responsibility is teaching, supervision and examination of Ordinary Diploma and Certificate programmes in Hydrology and water supply, management.
- 1995-96: District Hydrologist (Kericho District).**
- Incharge of Hydrology and Water bailiff sections) and water catchment conservation including river gauging, Water resources management and planning, and pollution control

1991-94: District Hydrologist (Bungoma District).

- Incharge of Hydrology and Water bailiff sections) and catchment conservation, Water resources management and planning, and pollution control.

1990 -1991: District Hydrologist (Kakamega).

- Incharge of surface water and water catchment conservation including pollution control.

Professional development:

- ❖ Water resources assessment and management,
- ❖ Natural resources management
- ❖ Environmental studies and management,
- ❖ Environmental impact Assessment and Audit,
- ❖ Hydrologic and Hydro- geologic modeling
- ❖ Pedogogy in university and tertiary level teaching and training
- ❖ GIS Applications in Hydrology and resources management

Skills, Capacities and competencies:

- ❖ Teaching at University and tertiary levels
- ❖ Water resources Assessment for water supplies and Irrigation schemes
- ❖ Environmental Impact Assessment and Audit for all projects
- ❖ Development of new practical/market oriented courses in hydrology, Environmental studies and Natural resources Management
- ❖ Coordination of academic undergraduate, Masters and PhD programmes
- ❖ Team leader of project technical teams

Consultancies & projects:

2013: February: Kamumum dam, feasibility study, batcassociates LTd

2013: January: Muungano small holder irrigation scheme, Tharaka Ninthi batcassociates LTD

2013: January: Murachake small holder irrigation scheme,Embeere, Bhundia and Associates Consulting Engineers, Kenya Ltd.

2013: January: Gatitu Muthaiga small holder irrigation scheme Laikipia, Bhundia and Associates Consulting Engineers, Kenya Ltd.

2012: October: Keroka water supply Kisii, Gibb International.

2012: October: Mwea resettlement water supply Kirinyaga, Gibb International.

2012: August: Isabania water supply Kuria, Gibb International.

2012: February: Mara river basin dams project (Kenya and Tanzania), Bhundia and Associates Consulting Engineers, Kenya Ltd, and Tahal Consulting Engineers Ltd, of Israel.

2012: January- June, Kenya, Consultant hydrologist for Homa bay-Mbita irrigation cluster, Agricom consultants, Kenya Ltd, Nairobi.

2012: January- June Kenya, Consultant hydrologist for Bondo – Rachuonyo irrigation cluster,

2011: November - June: Kenya, Consultant hydrologist for bulk water supply for Coast water Services board (CWSB) and development of water Master plan, Bhundia and Associates, Consulting Engineers, Kenya Ltd, and Tahal Consulting Engineers, Ltd of Israel.

2011: November- June: Tanzania, Consultant hydrologist for Mara, Isanga, Manonga , Ngoni and Bugwema irrigations schemes in the Lake region of Tanzania Gibb International.

2011: October: Kenya, Consultant hydrologist for Eastleigh roads upgrading project Bhundia and Associates, Consulting Engineers, Kenya Ltd

2011: September: Kenya, Consultant hydrologist for Perkera Irrigation Development project in Marigat, Bhundia and Associates, Consulting Engineers, Kenya Ltd

2011: August: Kenya, Consultant hydrologist for Kaagari and Gaturi Irrigation Development project in Embu, Bhundia and Associates, Consulting Engineers, Kenya Ltd

2011: May: Consultant hydrologist, for Loruk-Tot-Marich passes road project, detailed design and Supervision, by Multiscope Consulting Engineers, Nairobi Kenya.

2011: May: Consultant hydrologist, Thiba dam project, by Nippon Koei, Engineering Consultants.

2011: April: Consultant hydrologist, flood data collection for updating of the national water master plan, Japan international cooperation agency (JICA)

2011: March: Consultant hydrologist, dam data collection for updating of the national water master plan, Japan international cooperation agency (JICA)

2011: February: Consultant hydrologist and river morphologist for Munda-Munda irrigation scheme at Nante Quelimane- Zambezi Province Mozambique, Gibb international.

2010: October- November, Kenya, Consultant hydrologist for Runyenjes Irrigation Development project in Embu, Bhundia and Associates, Consulting Engineers, Kenya Ltd

2010: September-October' Kenya, Consultant hydrologist for Tatu satellite city Development Project in Kiambu, Gibbafrica LTD

2010: May- August, Kenya, Consultant hydrologist for Lower Sio Irrigation Development project in Busia, Bhundia and Associates, Consulting Engineers, Kenya Ltd

2010: February- October' - Kenya, Consultant hydrologist for Lower Kuja Irrigation Development Project in Migori, Gibbafrica LTD.

January 2010: Consultant Environmentalist, leader of the water resources component of G4 industries Ltd Kenya farming project in Tana delta EIA. Africa Waste and Environment Management centre (AWEMAC).

December 2009- January 20210: consultant Environmentalist and assistant team leader for the EIA of Mt. Elgon resettlement project, in Mt. Elgon by Masuro Environmental Management Company.

2009 (November): consultant Environmentalist and Key team member for carrying out an EIA for the proposed Faculty of agriculture, of Kisii University College, at Nyosia farm, Kisii, Masuro Environmental Management Company.

August - December 2009 – Kenya, consultant hydrologist for Kilome / Mikuyu Water supply and sanitation, project in Kibwezi, by Palkars Engineering consultants.

June 2009: Kenya, Consultant hydrologist for Ahero and West Kano Irrigation schemes Development project, by Bhundia Associates, Consulting Engineers.

2009: Kenya, Consultant hydrologist for Mwea irrigation expansion project in Kirinyaga, by Jica / Gibb Africa

2008: Kenya, Consultant hydrologist for Bonyunyu dam development study, by Multiscope Consulting Engineers, Nairobi Kenya

2008: Kenya, Consultant hydrologist for Kiserian Dam study Ngong Nairobi, Samez Consultants

2008 : Kenya, Consultant hydrologist for Mwachi Dam study by Samez Consultants

2007 : Kenya, Consultant hydrologist for Munyu and Thwake dam's feasibility study in Machakos by Samez Consultants.

2006 – 2007: Kenya, Consultant hydrologist for feasibility study for the expansion and Development of Ahero and West Kano Irrigation schemes: Coda and Partners Nairobi Kenya

2006: Kenya - Consultant hydrologist for Siyio Dam feasibility study by Samez Consultants, Nairobi Kenya

2006: Kenya Consultant hydrologist for Kapenguria water supply feasibility study by Multiscope Consulting Engineers, Nairobi Kenya

2000 – Kenya, Consultant hydrologist for Hydrological studies for Lake Victoria Environmental Management Programme (LEVEMP)

Research/project supervision and co-ordination: (completed)

1. Muchiri Peris I/56/7730/2004 (MSc: Hydrology Thesis)
2. Masika Denis I/56/7585/2000 (MSc. Hydrology Thesis)

3. Abebe Tufa C50/71520.2008 (M.A EPM project)
4. Kenduiwo, A.K. C50/p/7268/2004 (M.A. EPM project)
5. Mwangi R.Njoki C50/p/7626/2005 (M.A. EPM Project)
6. Mulonga J.K C50/7856/04 (M.A. EPM project)
7. Ngugi A.Z.M (M.A. EPM project)
8. Makokha E.W. (M.A. EPM project)
9. Maina Anne C50/8725/2000 (M.A. EPM project)
10. Ongoro Elizabeth C50/9176/01 (M.A. EPM Project)

11. Beatrice Jepkorir Mugo 71493/08 (M.A. EPM Project)
12. Stephen Tirop C50/60180/010 (M.A. EPM Project)
13. Juosto Ambuchi C50/75633/09 (M.A. EPM Project)
14. Muchiri Nancy W. C50/72834/09 (M.A. EPM Project)
15. Tufa Abebe Birutu C50/71520/08 (M.A. EPM Project)
16. Otieno H.o coi/0827/07 (undergraduate Dissertation)
17. Gachoki J (undergraduate Dissertation)
18. Maluki P. M (undergraduate Dissertation)

(On-going Projects)

Ph.D. Magambo K.E

(M.A. EPM projects)

1. Mulwa Moses C50/76620/09 (M.A. EPM Project)
2. Wachira S. W. C50/9041/06
3. Kenneth Ndungu C50/8493/2000
4. Kibos S.J C50/p/8651/03
5. Masai M.M C50/p/78655/04
6. Migui P W.
7. Kinyua A.m C50/77830.009
8. Julia Magiri Kiruri C50/ 71734/08
9. Kuria J.N I/56/7242/2003 (MSc: Hydrology Thesis)

Departmental Responsibilities

2010- Date: Time tabling officer

2006- 2009: Member of the Welfare committee

2001-2005: Examination and time tabling officer

2008- 2010: Assistant coordinator B.Ed Science Distance Learning programme

2002- Date: Coordinator post graduate Hydrology programme

Conferences and Seminars:

2010 March: Water Resources Assessment in sub Saharan Africa; predictions in un gauged and data scarce basins, Cape town, South Africa

2010-5- 1 – 4 : Writers / Reviewers / Revision workshop for module III course material preparation at KWS training centre Naivasha, Kenya, by the Institute of open and distance learning, University of Nairobi Kenya

2010- 2- 21-26 : Writers orientation for sciences levels 2,3, and 4 study material preparation at ARC Egerton University, by the Institute of open and distance learning, University of Nairobi Kenya

2009-11-8-13: Writers workshop for module III course material preparation at KWS training centre Naivasha, Kenya, by the Institute of open and distance learning, University of Nairobi Kenya

2006: Highland 2006, International conference on Environmental change, Geomorphic processes, land degradation and rehabilitation in Tropical and Sub-tropical highlands, at Mekele University, Ethiopia, organized by Unesco.

2008: The Friend Nile Joint Workshop, Erosion and sediment Transport Monitoring component (ESTMC), at Kenya School of Monetary studies, Nairobi Kenya, organized by Unesco Cairo office

2007: The Friend Nile, Erosion and sediment Transport Monitoring component (ESTMC), workshop at Unesco Water Resources Centre, Khauritum Sudan, organized by Unesco Cairo office

2006 (August): The soil and water Assessment Tool (SWAT), Unesco Friend Nile second Phase launching workshop, The Nile Catchment, Cairo Egypt.

2001: Regional Workshop on Cleaner Production: Role of Research in Policy Change for Increased Adoption of Cleaner Production Technologies in East Africa, Conducted by Industrial Ecology Institute, Kenya

Scholarships & Research Awards:

2002-2007: PhD Research grant, Deans committee, University of Nairobi and sponsorship by Nagoya University Japan, through the Department of Geology University of Nairobi).

1990-92: University of Nairobi Scholarship for the Postgraduate studies (M.Sc.) at the University of Nairobi.

1999: Ministry of water Development, external scholarship for a postgraduate Diploma in operational hydrology, Norkoping University

1986: Undergraduate Scholarship (B.Sc.), Government of Kenya scholarship .

Publications:

Modules

1. J. M. Nyangaga and Japhan K. Omoke (2003): CGP/SGP: 103, Practical geography (level I)
2. J.M. Nyangaga and Mwaura F. (2010): CGP/SGP 105: Physical geography I (level I)
3. J. M. Nyangaga and Assumpta R (2010): CGP/SGP, 221, Physical geography II (Level)
4. J.M. Nyangaga (2010): CGP/SGP, 323 Geomorphology (level III)

Articles

Nyangaga J.M., Ondieki C.M and Matiasi T. (2010): Flood Frequency Analysis to determine design flood using Different Probability Distributions, case study of river Kuja, Kenya, in the Journal of Geography and Geology, (accepted for publication in September 2011 Edition)

Nyangaga J.M. and Matiasi T. (2010): Spatial Distribution of Sediment within the Lake Victoria drainage basin, in Kenya, accepted for publication in the Journal of Hydrology next edition.

Ondieki C. and Nyangaga (2010): Ecohydrological processes; and integrated watershed Management in the Gucha Catchment, Kenya (accepted for publication in the Journal of Hydrology next edition after April 2010).

Matiasi T. and Nyangaga J.M. (2010): Strategy for Water Resources Management in Relation to Climate Change Impacts and Adaptations: presented as poster presentation in the Hydropredict 2010 20-23 September 2010, Prague, Czech Republic.

Nyangaga J.M. (2010): Assessment of Water Resources and water use in the Thiba River catchment, within the Tana River basin in Central Kenya resubmitted to the hydrological Sciences Journal (HSJ) in October 2010.

Publications before recruitment in 2001

Nyangaga j. M (1999): quantity and Quality of water in Riana catchment, within the Gucha catchment(*Ministry of Water Resources Publications*).

Ongwenyi, G.S.Nyangaga J.m. (1999): Watershed degradation, soil and water conservation challenges in Riana river catchment, IAHS publication.

Nyangaga J.M. (1998): Surface Water resources development in Riana catchments (*Ministry of water publication*).

Nyangaga J.M. (1997): Soil erosion and sedimentation as agents of water pollution in western Kenya

Nyangaga J.M (1996): Effects of nutrients from chemical fertilizers and animal manure on water quality, case study of Riana catchment (*Ministry of water publications*).

Nyangaga J.M and Ongwenyi G.S (1993): Impact of hydrological and land use processes on water quality of the Gucha catchment, western Kenya, in IAHS publications

Nyangaga J.M (1992): Water resources management challenges, in Bungoma District(Ministry water publication).

Other interests:

- Participation in Environmental conservation efforts
 - Interest in the local and international Environmental and Political issues
 - The politics of shared water resources
 - Socializing with others
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Referees:

[1]. Professor Justus B. Barongo, Associate Professor Department of Geology, University of Nairobi, P.O Box 30197-00100, Nairobi- KENYA; Phone: [+254-020] 318262.

[2]. Dr. Daniel Kapule, Senior Lecturer, Department of Geography & Environmental Studies, University of Nairobi, P.O Box 30197-00100, Nairobi- KENYA; Phone: [+254-020] 318262,

[3]. Prof. David Mungai , Associate Professor Department of Geography, University of Nairobi, P.O Box 30197-00100, Nairobi- KENYA; Phone: [+254-020] 318262.

Certification

I, the undersigned, certify that these data correctly describe me, my qualifications, and my experience.

Dr John M. Nyangaga
Signature

11/2/2013
Date