

CURRICULUM VITAE

NAME: Dr. Duncan Onyango Mbuge
SEX: Male
DATE OF BIRTH: 28th Sept. 1971
NATIONALITY: Kenyan
I/D No.: 10927677
MARITAL STATUS: Married
LANGUAGES: English, Kiswahili, Dholuo
PERMANENT ADDRESS: P.O. Box 315, OYUGIS.
PRESENT ADDRESS: Dept. of Environmental and Bio-systems Engineering,
University of Nairobi, P.O. Box 30197-00100 NAIROBI.
Tel: 254-736-429414, 254-725-949093
Email: dmbuge@yahoo.com, duncan.mbuge@uonbi.ac.ke

EDUCATION

2005 –2009: Ph.D. Environmental and Bio-systems Engineering, University of Nairobi. Research Thesis: 'Predicting Service Life of Plastic Lining for Water Reservoirs Using Viscoelasticity'
1997 - 2000: M. Sc. in Agricultural Engineering, University of Nairobi. Thesis: 'Mechanical Properties of Bamboo Grown in Muguga, Kenya.'
1990 - 1996: B. Sc. in Agricultural Engineering, Egerton University (2nd Class Hons., Upper Division)
1986 - 1989: Alliance High School, KCSE.

CONSULTANCIES

June 2003, World Vision International, Evaluation of rainwater harvesting projects in Makueni ADP
March 2006, World Vision International, Training community leaders in rainwater harvesting technologies at Ndabibi ADP, Naivasha
July 2007, Kenya Rainwater Association, Training of agricultural officers from Malawi on rainwater harvesting technology for agricultural production
August 2007, World Vision International, Training community leaders in rainwater harvesting technologies at Ndabibi ADP, Naivasha
May 2008, Rapporteur at the IMAWESA writeshop on agriculture water management for managers of ADP projects in East and Central Africa
April 2009, Rapporteur at the closing workshop of the Nile Basin Initiative (NBI) EUWAP project
2010 – DATE Processing Engineer / Course Coordinator, Seed Enterprise Management Project involving training in seed processing and construction of seed processing plant at Kabete Campus, University of Nairobi.

WORK EXPERIENCE

UNIVERSITY OF NAIROBI – DEPARTMENT OF ENVIRONMENTAL AND BIOSYSTEMS ENGINEERING

September 2002 to Date

Position: Tutorial Fellow

Supervisor: Prof. Elijah Biamah (Chairman of Department)

Responsibilities:

Teaching the following courses

Materials Science and Engineering, Renewable Energy, Power and Machinery Engineering, Solid and Structural Mechanics, Processing and Structures, Infrastructure Engineering, Construction Materials, Workshop Techniques

JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY – BIOMECHANICAL AND ENVIRONMENTAL ENGINEERING DEPARTMENT

September 2007 to December 2008

Position: Part-time Lecturer in Post harvest technology, Materials Science and Engineering, Production Engineering

KENYATTA UNIVERSITY – ENERGY ENGINEERING DEPARTMENT

September 2008 to December 2008

Position: Part-time Lecturer in Materials Science

KENYA RAINWATER ASSOCIATION

February 2001 to 2003 - Information Officer on rainwater harvesting and management

February 2003 to 2004 - Information Adviser on rainwater harvesting and management

February 2006 to Date – Board Member

PUBLICATIONS

- Mbuge, D. O. , L. O. Gumbe, and G. O. Rading, 2011. Analysis of the Weld Strength of the High Density Polyethylene (HDPE) Dam Liner, African Journal of Science and Technology (AJST), Science and Engineering Series Vol. 11, No. 2, pp. 12-24
- Langat, S., D. O. Mbuge and E. B. K. Mutai, 2011. Determination of the Parameters for Design of Flexible Plastic Tank, African Journal of Science and Technology (AJST), Science and Engineering Series Vol. 11, No. 2, pp. 35-44
- Mbuge, D. O., L. O. Gumbe and G. O. Rading, 2011. Predicting the Service Life of HDPE Plastic Lining for Water Reservoirs Using Viscoelasticity, Journal of Polymer Science and Engineering, Wiley Publications (in press).
- Mbuge, D.O. and P.K. Langat. Principles of a Mechanical Shaker for Coffee Harvesting. CIGR Electronic Journal, Vol. X. January, 2008.
- Mbuge, D.O. and L.O. Gumbe, 2000. Strength Properties of the East African Bamboo, Proceedings of the Kenya Society of Agricultural Engineers Annual Conference, September, 2000.
- Mbuge, D.O., 2006. Design Protocol for the Design of Flexible HDPE tanks. Southern and Eastern Africa Rainwater Network (SEARNET) Conference, Mombasa.
- Mbuge, D.O., D.M., 2003. Advantages of Harvesting Rainwater in Urban Areas. Kenya Society of Agricultural Engineering (KSAE) Annual Conference, Nairobi.
- Mati, B., D. Mbuge, H. Mahoo, G. Kajiru and L. Gallet, 2008. Regional Training Workshop and Writeshop to Document Lessons Learnt from Projects and Programmes in Agricultural Water Management, IMAWESA Proceedings No. 17, November 2008.
- Ngigi, S., J. Thome, K. Mutunga and D. Mbuge, 2004. Proceedings of the GHARP/USAID OFDA Project Planning Workshop, GHARP Publication No. 4.
- Adhiambo, B., A. Oduor and D. Mbuge, 2003. Rainwater Harvesting for Improved Livelihoods, Exposition Catalogue 2003, Global Water Partnership (GWP) Associated Project of the the Regional Land Management Unit (RELMA) and Kenya Rainwater Association.
- Onyango, D.M., 2003. Women at the Source of Life: The Experience of Kenya Rainwater Association, FAO Dimitra Newsletter, No. 8, October 2003, Brussels.
- Obiero, J.P.O, C.O. Thine and D.O. Mbuge, 2003. Rainwater Harvesting for Crop Production in Semi-arid Areas – A Hydrology Based Teaching / Training Manual, UON / Cranfield University / HR Wallingford / ITAD / DFID collaboration.
- Wanyonyi, J.S., S. Ngigi, P. Mwangi and D. Mbuge, 2001. Workshop Proceedings, GHARP Strategic Planning and Project Implementation Planning Workshops, GHARP Publication No. 1.

REFEREES

Prof. E. K. Biamah
Chairman and Associate Professor,
Department of Environmental and Biosystems Engineering,
University of Nairobi,
P.O. Box 30197, NAIROBI

Prof. L. O. Gumbe
Associate Professor,
Department of Environmental and Biosystems Engineering,
University of Nairobi,
P.O. Box 30197, NAIROBI.

Dr. A. N. Gitau,
Senior Lecturer,
Department of Environmental and Biosystems Engineering,
University of Nairobi,
P.O. Box 30197, NAIROBI.