

# CURRICULUM VITAE

<b><u>Robinson Kinuthia Ngugi</u></b> Associate Professor (Range Management) & Chairman, Department of Land Resources Management & Agricultural Technology College and Veterinary Sciences University of Nairobi P.O. Box 29053-00625 Nairobi, Kenya	<b><u>Date of Birth:</u> 1954</b> <b><u>Telephone:</u></b> +254-20-3592736(Office), +254-20-721-294097 (Mobile) <b><u>e-mail:</u> <a href="mailto:rkgugi@gmail.com">rkgugi@gmail.com</a> or <a href="mailto:rkgugi@yahoo.com">rkgugi@yahoo.com</a>; <a href="mailto:krngugi@uonbi.ac.ke">krngugi@uonbi.ac.ke</a></b>
--	--

I. **RESEARCH INTEREST:** Integrated rangeland resource focusing on livestock production/management.

## II. EDUCATION

- Bachelor of Science (Agriculture), University of Nairobi, Kenya, 1975-1978.
- Master of Science, Range Management, Texas A & M University, USA, 1980-1982.
- Doctor of Philosophy, Range Management, University of Wyoming, USA, 1986-1990.

## I. ACADEMIC CAREER

- Associate Professor (Range Management) and Head of Department, University of Nairobi, Department of Range Management, **May, 2011 to Date**
- Senior Lecturer and Head of Department, University of Nairobi, Department of Range Management, **2000-April, 2011**
- Lecturer, University of Nairobi, Department of Range Management, **1990-2000**
- Assistant Lecturer, University of Nairobi, Department of Range Management, **1985-1990**

## III. LEADERSHIP POSITIONS HELD IN UNIVERSITY OF NAIROBI

- Chairman, Department of Land Resources and Agricultural Technology (LARMAT) (2008-Date)
- Acting Chairman, of Land Resources and Agricultural Technology (LARMAT) - various dates
- Acting Chairman, former Department Range department & LARMAT - various dates
- Head, Range Management Section, LARMAT, (2005-2008)
- Chairman, Faculty of Agriculture Post Graduate Committee (2004-2008)

- Departmental representative, Faculty of Agriculture Board of Post Graduate Committee (1997-2004)
- Coordinator, Department of Range Management Postgraduate Programme (2000-2004)
- Member to Committee working on Proposal to Establish “The Wangari Maathai Empowerment Centre: Leadership Training for Sustainable Development”
- University Representative, Global Environmental Facility (GEF) National Steering Committee, 2010-Date
- Board Member, Wangari Maathai Institute of Peace and Environmental Studies (WMIPES)
- Patron, Range Management Alumni Chapter, University of Nairobi

#### IV. M. Sc. STUDENTS’ SUPERVISED

1. Nyagito, M.M. 1995. "Effect of poultry waste and grain sorghum supplement on utilization of range hay by Small East African Goats". **Supervisors: RK Ngugi and NKR Musimba**
2. Ndung'u, J.N. 1995. Forage intake and nutritive value of sheep and goat diets in Southern Central Kenya". **Supervisors: RK Ngugi and NKR Musimba**
3. Doyo, G.J. 1995. “Gum Arabic production potential from Acacia senegal (L.) Willd. in northern Kenya.” **Supervisors: RK Ngugi and NKR Musimba**
4. Kahsay, N.G. 1998. "Effects of restricted water intake on live weight gain, milk production and kids' growth rate of Husani goats in the southwestern lowlands of Eritrea". **Supervisors: RK Ngugi and NKR Musimba**
5. Oliver, V.M. 1999. Effects of tree canopy cover on soil organic matter, soil moisture and above ground biomass productivity of understorey grasses in southern Kenya rangelands, M.Sc. 1999. **Supervisors: RK Ngugi and DM Nyariki**
6. Henry C. Kahi. 2002. Effects of Prosopis Juliflora and Acacia tortilis canopies on understory plants and soil properties in Baringo District, Kenya. **Supervisors: RK Ngugi and JC Ng’ethe**
7. Kilonzo J.Mutuku. 2002. Feeding ecology and nutrition of sheep (*Ovis aris*) and Grant’s gazelle (*Gazella grantii*) on Kapiti Ranch, Kenya. M.Sc. **Supervisors: W Ekaya and RK Ngugi**
8. Najjoke N. Tabbiruka. Effect of watering frequency on nutrition and body weight changes in Nganda sheep in mid-eastern Uganda. **Supervisors: RK Ngugi and CK Karue**
9. Silvanos G. Otieno. 2002. Wildlife/cattle/plant interactions: An analysis of herbaceous layer productivity and utilization of primary production in black cotton soil ecosystem in Laikipia, Kenya. **Supervisors: TJ Njoka and RK Ngugi**
10. Omondi Francis E. Opiyo. Rangeland rehabilitation: Ecological and socio-economic effects of land preparation methods on *Cenchrus ciliaris* (L), *Eragrostis superba* (Pier) and *Enterogogon macrostachyus* (Hochst and Rich) Munro Ex Benth in Kitui District, Kenya. **Supervisors: W Ekaya and RK Ngugi**

11. Kipkoech Bernard Korir. 2008. Effects of housing, helminthes control and supplementary feeding on performance of weaner kids in southcentral Kenya rangelands. **Supervisors: RK Ngugi and DM Nyariki**
12. Koech, O.K.. 2010. Effects of *Prosopis juliflora* seedpod meal supplement on weight gain of weaner Galla goats in Kenya. **Supervisors: RK Ngugi and R Wahome**
13. Kimathi Isaac. 2009. Effects of burn size and burn patterns on the aboveground net primary production on savanna ecosystem, Laikipia Kenya. **Supervisors: T J Njoka and RK Ngugi**
14. Vednessa Wambua. Writing Thesis to graduate 2011. Effects of weather and soil type on rate of cattle and Zebra dung decomposition. **Supervisors: T J Njoka and RK Ngugi**

## V. Ph. D STUDENTS' SUPERVISION

### Graduated

1. Karimi, S.K. Socio-economic and epidemiological factors affecting morbidity, mortality and growth rate of calves among the Maasai pastoralists of Kajiado District, Kenya. **Supervisors: J M Gathuma, J J McDermott, G K Gitau, R K Ngugi**
2. Chomba, N. Thesis Title: Factors affecting productivity, mobility and mortality of camel calves, kids and lambs in the Rendille livestock production systems. . **Supervisors: J M Gathuma, G K Gitau, F M Njeru, RK Ngugi**
3. Vivian O. Wasonga. 2009. Linking desertification to society: The case of Baringo rangelands, Kenya. **Supervisors: DM Nyariki and RK Ngugi**

### Continuing

1. Joseph Ndungu. Continuing student. Research Title: "Quantitative and qualitative prediction of cattle diets and performance by analysis of fecal near infrared spectra in southeastern drylands of Kenya". **Supervisors: R K Ngugi and M M Wanyoike, L Macopiyo**

## IV. PUBLICATIONS

### a. Book Chapter

- **Chapter 7: Part II: LIVESTOCK-In:** Resources, Rangeland Resources in Eastern Africa: Their Ecology and Development. Dennis Herlocker (Editor), Published by GTZ, German Technical Cooperation, Nairobi 1999.

### b. Papers published in refereed journal before last promotion

1. **Kinuthia R. Ngugi**, J. Powell, Frank C. Hinds and Richard A. Olson, 1992: Range Animal diet composition in South Central Wyoming, Journal of Range Management 45(6): 542-545.
2. **Kinuthia R. Ngugi**, Frank C. Hinds and J. Powell, 1995. Mountain big sagebrush

browse decreases dry matter intake, digestibility, and nutritive quality of sheep diets, *Journal of Range Management* 48(6): 487-492.

3. **Kinuthia R. Ngugi**, Frank C. Hinds and J. Powell, 1995. Influence of mountain big sagebrush browse on intake, digestibility, and nutritive quality of sheep diets. USDA, Wyoming Agricultural Experiment Station, Department of Rangeland Ecology and Watershed Management, College of Agriculture, RJ-213.
4. Moses M. Nyangito, **R.K.Ngugi** and N.R.K. Musimba, 1998. Effects of poultry waste and grain sorghum supplements on utilization of range hay by Small East African Goats. *East African Agricultural. & Forestry Research Journal* 62:4.
5. Kahsay, N.G., **Ngugi, K.R.** Musimba, N.K.R. & Nyariki, D.M. 1999. The performance of Husani dairy goats under water restriction in the arid western lowlands, Eritrea. *Bulletin of Animal Health and Production in Africa.* 47:97-101.
6. Kahsay, N.G., **Ngugi, R.K.**, Nyariki, D.M. & Musimba, N.K.R. 2000. Effect of restricted water intake on liveweight gain, milk production and kids' growth rate of Husani does in Eritrea's arid western lowlands. *East African Agricultural. & Forestry Research Journal* 63(1)

### **c. Papers published in refereed journal since the last promotion**

1. Farah, K.O., Nyariki, D.M., Noor, A.A., **Ngugi, R.K.** & Musimba, N.K. (2001). The socio-economic and ecological impacts of small-scale irrigation schemes on pastoralists and drylands in northern Kenya. *Journal of Social Sciences* 6:1-8
2. Mengistu, R.A., **Ngugi, K.R.** Musimba, N.K.R. & Nyariki, D.M. 2002. Feeding value of *Acacia tortilis* pods in goats. *Indian Journal of Animal. Science.* 73(7):826-828
3. Mengistu, R.A., **Ngugi, K.R.** Musimba, N.K.R. & Nyariki, D.M. 2002. Effects of *Acacia tortilis* pods on intake, digestibility and nutritive quality of goat diets in southwestern Eritrea. *African Journal of Range. & Forage Science.* 20(1):59-62
4. Wasonga, V.O., **Ngugi, R.K.**, Nyariki, Kironchi, G., & Njoka, T.J. 2003. Effect of *Balanites glabra* canopy cover on grass production, organic matter and soil moisture in southern Kenya rangelands. *African Journal of Range & Forage Science.* 20(3)259-264.
5. Nyariki, D.M. & **Ngugi, R.K.** 2002. A review of African pastoral production systems: Approaches to their understanding and development. *Journal of Human Ecology.* 13(6):237-250.
6. Wasonga, V.O., **R.K. Ngugi** and A. Kitalyi. 2003. Traditional Range Condition and Trend Assessment: Lessons from Pokot and Il Chamus Pastoralists of Kenya. *Anthropology*, 5(2): 79-87(2003)
7. Njanja, J.C., Gathuma, J.M., Gitau. G.K. Njeru F.M. and **R.K. Ngugi.** 2003. Pastoralists' perception of livestock production systems and opportunities for improvement in southwestern Marsabit, Kenya. *Journal*

of Research in Livestock and Rural Development. (Accepted 1 June 2003)

8. **Ngugi, R.K.**, Ndung'u J.N., Musimba, N.K.R. & Nyariki, D.M, (2004). Seasonal Botanical and Chemical Composition of Sheep and Goats Diets on Semi-Arid Rangeland in Southeastern Kenya. *African Journal of Range & Forage Science*. 21(1):11-19
9. Kilonzo, J.M., Ekaya W.N. and **Kinuthia R.N.** (2004). Feeding characteristics of sheep and Grant's gazelles on Kapiti ranch, Kenya. *African Journal of Range & Forage Science* 22(1):1-10.
10. K.O.Farah, D.M. Nyariki, R.K. Ngugi, I.M. Noor and A.Y. Guliye. 2004. The Somali and the Camel: Ecology, Management and Economics. *Anthropologist*, 6(1):45-55.
11. Bariagabre, S.A., **Ngugi R.K.**, Musimba N.K.and Nyariki D.M. (2004). Chemical composition and feed value of spiny and spineless cacti (*Oputia*) to livestock. *Bulletin of Animal Production in Africa*. 52:198-202
12. Najjoke N.T., **Ngugi R.K.** Karue C.N. and Nyariki D.M. (2004). Effects of increasing duration of water deprivation on water intake, feed intake, feed digestibility and body weight gain by Nganda sheep. *Bulletin of Animal Production in Africa*. 52:259-261
13. **Ngugi, R.K.** & Nyariki, D.M. 2005. Rural livelihoods in the arid and semi-arid environments of Kenya: Sustainable alternatives and challenges. *Journal of Agricultural and Human Values* 22:65-71
14. Karimi S.K., G.K. Gitau, J.J. McDermott, **R.K. Ngugi** J.M. Gathuma. 2005. Estimation of birth weight of Maasai Zebu calves and their crosses with Sahiwal and Boran in Kajiado District, Kenya. *Bulletin of Animal Health and Production in Africa*. 53: 35-41
15. Karimi S.K., Gitau G.K., McDermott J, McDermott B., Gathuma J.M. and **R.K. Ngugi**. 2008 Causes of calf mortality and morbidity in Maasai herds in Kajiado District, Kenya. *E.Afri. Agric. For. J.* 74 (3) 185-192
16. Karimi S.K., Gitau G.K., McDermott J., McDermott B., Gathuma J.M. and **R.K. Ngugi**. Risk factors for seroprevalence of tick-borne diseases of calves in Maasai pastoral herds in Kajiado District, Kenya. *Proceedings of Research Conference at Egerton University 2008*
17. Kahi, C.H., **Ngugi, R.K.**, Mureithi,S.M. and J.C. Ng'ethe. **2009**. The effects of *Prosopis juliflora* Hyne (DC) and *Acacia tortilis* (Forssk) trees on herbaceous plants species and soil physical and chemical properties, on Njemps flats, Baringo District, Kenya. *Tropical and Sub-tropical Ecosystems* 10 (3) (441-449).
18. Opiyo F.E. O., Mureithi S.M. and **Ngugi R.K.** 2010. Water availability influence on pastoralist's resource use in Mwingi and Kitui Districts in eastern Kenya. (Accepted, July 22, 2010 *Human Ecology*)
19. Koech, O.K., **R.K. Ngugi**, Wahome R.G. and Choge, S.K.2010. Effects of *Prosopis juliflora* seedpod meal supplement on weight gain of weaner Galla goats in Kenya. *Research Journal of Animal Sciences* 4 (2):58-62, 2010

20. Korir, B.K., **R.K.Ngugi**, Nyariki, D.M. 2010. Effects of selected routine husbandry practices on growth rate of weaned Small East African Goats. *Research Journal of Animal Sciences* 4 (2):66-71, 2010

## V. TECHNICAL REPORTS & WORKSHOP PROCEEDINGS

1. Nyariki, D.M. & **Ngugi, R.K.** (1999). Resources, livelihoods and opportunities for community development in the ASAL. Proceedings of a Workshop on “Improving Rural Livelihoods and the Environment in Arid and Semi-Arid Areas through Small Enterprise Development”; organised by Fibec, University of Nairobi and Genesis, held on 23<sup>rd</sup> June 1999 at Fairview Hotel, Nairobi.
2. Nyariki, D.M. & **Ngugi, R.K.** (2001). Contribution of livestock to food security in agropastoral systems: Cases from southeast Kenya. Proceedings of the Animal Production Society of Kenya (APSK) Annual Symposium, held on 7<sup>th</sup> – 12<sup>th</sup> March 2001 at Egerton University, Njoro, Kenya.
3. **Ngugi, R.K.** (2002). Climate forecast information: the status, needs and expectations among small-holder agro-pastoralists in Machakos District, Kenya. A Report for the International Research Institute for Climate Prediction of Columbia University, NY. USA.

## VIII. FUNDED RESEARCH PROJECTS

1. **“Managing risk, reducing vulnerability and enhancing productivity under a changing climate”** A four-year regional (Kenya, Tanzania, Ethiopia, Sudan) project supported by International Development Research Centre (IDRC). **Grant Amount Canadian \$: 1,100,00**
2. **“Making the Best of Climate: Adapting Agriculture to Climate Variability”**. A regional (Kenya, Ethiopia, Madagascar) Collaborative Research Project supported by Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA) Competitive Grant System (CGS) (FS-B), **Grant Amount: EUROS 420,000**
3. **“Capacity Building in Regional Climate Prediction and Application for the Greater Horn of Africa”**. A 2-year, USAID-funded collaborative research project between Department of Range management, the Drought Monitoring Centre, Nairobi (DMCN) and the International Research Institute for Climate Prediction (IRI) of Columbia University, NY, (200-2002). **Grant Amount: USD 75,000**
4. **“Regional Climate Prediction and Risk Reduction in the Greater Horn of Africa**. 2-year extension of the above collaborative research project between Department of Range management, the Drought Monitoring Centre, Nairobi (DMCN) and the International Research Institute for Climate Prediction (IRI) of Columbia University, NY, (2003-2005). **Grant Amount USD: 185,284**
5. **“Foe or friend: Management and Utilization of Prosopis juliflora in Kenya using value chain approach”** A 3-year collaborative research project funded by Government of Kenya and European Union through the Kenya

Agricultural Productivity Programme of Kenya to provide alternative solutions to problems of managing *Prosopis juliflora*. **Grant Amount: USD 100,000**

6. **Creating Wealth for Smallholder Farmers In Arid Areas Of Kenya: The Case of Mukau (*Melia Volkensii*)**. A 3-year collaborative research project funded by Government of Kenya and European Union through the Kenya Agricultural Productivity Programme of Kenya to promote propagation and cultivation of of Mukau (*Melia volkensii*) in southeastern Kenya. **Grant Amount: USD 100,000**

#### **IV. RESEARCH COLLABORATION LINKAGES**

1. University of Nairobi and International Research Institute/Columbia University (NY)
2. University of Nairobi and Strengthening Agricultural Research in Eastern and Central Africa (ASARECA)
3. University of Nairobi and Kenya Agricultural Research Institute (KARI)
4. University of Nairobi and Ethiopia Agricultural Research Institute (EARI)
5. University of Nairobi and Colorado State University
6. University of Nairobi and ICRISAT
7. University of Nairobi and USAID
8. University of Nairobi and SOMEAH, Madagascar
9. University of Nairobi and FOFIFA, Madagascar
10. University of Nairobi and IDRC
11. University of Nairobi and ASARECA
12. University of Nairobi and RUFORUM
13. University of Nairobi and KEFRI
14. University of Nairobi and the SOROS Foundation
15. University of Nairobi and START

#### **X. RESEARCH/CONSULTANCY ASSIGNMENTS**

1. Environmental Impact Assessment Study (PEIAS) on proposed Tana River Hydroelectric power project for Kenya Power and Lighting Company, (1991).
2. Environmental Impact Assessment Study (PEIAS) on proposed Ewaso Ng'iro south hydroelectric power project for Kenya Power and Lighting Company,(1991)
3. Climate forecasting and drought knowledge, Rural Appraisal Survey in Mwingi District for UNDP's Office to Combat Desertification and Drought (UNSO) and World Meteorological Organization (WMO). April/May, 1999.
4. Improving rural livelihood and Environment in arid and semi-arid (ASAL)

through small enterprise development in Kenya, April/May, 1999

### **XIII. KEY CONFERENCES/WORKSHOPS ATTENDED**

1. 7<sup>th</sup>-11<sup>th</sup> September, 2000: Workshop on “Great Horn of Africa Climate Outlook Forum” held in Arusha Tanzania
2. 24<sup>th</sup>, March, 2000: Conference on “Forecasting, Food and Farming in Africa” held at Columbia University, NY, USA
3. 18<sup>th</sup>--21<sup>st</sup>, 2006: Workshop on Climate Information for Development Needs: An Action Plan for Africa, Addis Ababa.
4. 17<sup>th</sup>-21<sup>st</sup>, 2006: Conference on “Living with Climate Variability and Change” held in Helsinki, Finland.
5. 21<sup>st</sup>-25<sup>th</sup>, August 2006: ASARECA-CGS Project, Stakeholders Consultation Meeting, Melkassa Agricultural Research Center.
6. 15<sup>th</sup>- 22<sup>nd</sup>, January 2007, Annual Review of SWMnet Steering Committee, Ethiopia, Addis Ababa

### **XIV. PROFESSIONAL SKILLS**

1. Short course on curriculum development for climate change in African Universities (Nairobi, Kenya).
2. Short course on scientific writing and oral communication (Kigali, Rwanda)
3. Writing, teaching (trained in pedagogy) and presentation (Power Point)
4. Formulation of winner research proposals
5. Development of research work-plans and budgets
6. Planning, organization and coordination of seminars and workshops
7. Computer skills with sound knowledge of MS Office, Windows (2007 and Vista), and Internet

### **XV. REFEREES**

#### **1. Professor M.M. Wanyoike**

Department of Animal Production  
College of Agriculture & Veterinary Sciences  
P.O. Box 29053  
KABETE

#### **2. Prof. Mohamed Badamana**

Department of Animal Production  
College of Agriculture & Veterinary Sciences  
P.O. Box 29053  
KABETE