CURRICULUM VITAE
Dr.rer.Agr. Chrilukovian B. Wasike

Contacts

School of Agriculture, Food Security and Environmental Sciences,
Maseno University,
P.O. Private Bag
40105 Maseno, KENYA.
Cellphone No: +254 719 328 099

E-mail: wasikebwire@gmail.com;
Inst. Email: wchrilukovian@maseno.ac.ke
Skype: chrilukovian.wasike
Online Presence: ORCID (ID: 0000-0003- 2018-7071); Google scholar

A. Summary:

Chrilukovian Bwire Wasike is a results/ output oriented research scientist and academician with over 15 years of experience in teaching, research and consultancy. He holds a Doctor of Agricultural Science (Dr. rer. Agr.) degree from Humboldt- Universität zu Berlin in Germany with a bias in Animal Genetics and Breeding, and M.Sc. and B.Sc. degrees in Animal Production from Egerton University, Kenya. He undertook a two year Postdoctoral Fellowship at the Department of Animal Science, Egerton University on a project to strengthen capacity for participatory management of indigenous livestock in Eastern, Southern and Western Africa (iLINOVA) and a 3- month Norman Borlaug research fellowship at Langston University. His research interests include genomics of functional efficiency and productivity in tropical livestock systems. His previous research endeavours included quantitative genetic analyses of complex traits in dairy and beef animals in Kenya as well as institutional analysis of animal recording systems. Currently, he is evaluating the genetics of productive and functional efficiency in indigenous chicken, Sahiwal cattle and dairy goat populations in Kenya under the Kenya Climate Smart Agriculture Project (KCSAP) and is also the country lead scientist for NORPART project that aims to build capacity for advancement of climate smart agricultural practices in East and Southern Africa. Dr Wasike is a Senior Lecturer and Dean of School of Agriculture, Food Security and Environmental Science, Maseno University. He is also a trained curriculum developer with competencies in development of e-learning content and competency/problem-based learning. He has experience working with a variety of stakeholders along the agricultural product value-chains ranging from farm through markets to fork. He has extensively worked with dairy and beef cattle, chicken and goat producers. His engagement in research and development has resulted in improvement of livestock productivity among pastoral communities is several counties. Dr. Wasike has consulted for various organizations among them International Livestock Research Institute (ILRI) and GIZ. He is a reviewer for Tropical Animal Health and Production, Journal of Dairy Research, Journal of Animal Science and South African Journal of Animal Science. He has presented papers in various scientific fora among them the World Congress on Genetics Applied to Livestock Production, International Goat Association conference and All Africa Conference on Animal Agriculture and Tropentag. He has (co)authored over 40 publications in scientific peer reviewed journals and conference proceedings. Dr Wasike is a member of the Animal Production Society of Kenya as well as American Society of Animal Science (ASAS), and is a DAAD and Norman Borlaug fellow.

B. Personal information

Name:	Chrilukovian Bwire Wasike	*Nationality:*	Kenyan
Language proficiency:	Fluent in English and Kiswahili, and basic proficiency in Deutsch		

C. Educational background

Level	Degree title; Grade attained; Institution; Year
Doctoral studies	Doctor of Agricultural Sciences (Dr. rer. agr); suma cum laude; Humboldt-Universität zu Berlin; 2011.

	Thesis Title: *Efficient utilisation of pedigree and performance data in genetic improvement of beef and dairy cattle genetic resources in Kenya*
Graduate studies	M.Sc. Animal Production (Animal Breeding and Genetics); Distinction; Egerton University; 2006. Thesis Title: *Genetic evaluation of growth and reproductive performance of the Boran cattle in Kenya.*
Undergraduate studies	B.Sc. Animal Production; First Class Honors; Egerton University; 2002. Project Dissertation Title: *Systematic sources of variation in milk yield performance of dairy cattle in Egerton University farms.*

D. Professional/skill enhancement training attended

22nd- 24th January 2007	Curriculum development and review
June 2007- September 2007	German language course (Sprachintensivkurs "deutsch")
16th- 18th November 2007	Teamwork and team management
March 24th- April 4th 2008	Introduction to SAS statistical software for data analysis
7th- 12th June 2010	Introduction to international animal genetic evaluations (MACE)
22nd – 29th May 2011	Summer school on quality management and assurance, value chain analysis, soft skills and project cycle management
17th – 22nd June 2013	Advances in quantitative animal genetics and breeding evaluation procedures
1st - 9th February, 2016	Genomic selection in livestock – Egerton university, African centre for clinical trials, Iowa State University
8th May- 21 June 2021	Technology for Transformative Pedagogy course -Pedagogical Leadership in Africa (PedaL) online, PASGR

E. Field of specialisation/key strengths

Animal genetics and breeding/ statistical genetics and Animal evaluation/ Livestock management and breeding programme design and implementation/ Quantitative research methods and data analysis/ problem based/ competency based learning in higher education institutions.

F. Research interest

Exploitation of genetics of functional efficiency and productivity for better adaptability of livestock to climate change and sustainability of livestock systems using high throughput genomic tools and more powerful computational methods.

G. Work Experience

i. Academic work

Period	Designation	Achievements
August 2021 to Date	*Senior Lecturer of Animal genetics and Breeding, Maseno University* Duties: Teach and examine animal science courses to undergraduate and postgraduate students; Supervise MSc. and PhD Students; Conduct research on various aspects of livestock production; Review of undergraduate and graduate animal science curricula	As program leader of BSc Animal Science, guided review of the program to make it more labor market responsive. Currently supervising two PhD students and five MSc students *(see postgraduate supervision section).* Won grant Funding from Norwegian government (NORPART) on climate smart agricultural practices in east and southern Africa *(see research accomplishment section)*
September 2012 – August 2021	*Lecturer, Animal Sciences, Maseno University* *Duties*: Teach and examine animal science courses to undergraduate and postgraduate students Conduct research on various aspects of livestock production Review of undergraduate and graduate animal science curricula	Taught undergraduate and post graduate students in animal genetics and breeding and research methods. Supervised seven graduate and PhD students to completion *(see postgraduate supervision section).* Initiated the development of a BSc curriculum in Animal production and health Been a member of a research consortia that won grant funding from EU and world bank *(see research accomplishment section)*
February 2011 - August 2012	*Lecturer of Animal Science, Pwani University College* *Duties*: Teach diploma, undergraduate and postgraduate students; Conduct research on livestock production; Supervision of postgraduate students; Curriculum development	Taught both certificate, undergraduate and postgraduate students; supervised diploma and undergraduate research project.
December 2007 - January 2011	*Doctoral Research fellow, Humboldt University of Berlin* *Duties*: Conduct doctoral research leading to the award of PhD degree	Developed data collection tools, collected data from livestock farms and developed a database for data entry Carried out analysis of data and published thesis and scientific papers in refereed journals Presented papers in the Tropentag conference, APSK symposium, World Congress on Genetics Applied to Livestock Production (WCGALP)
January 2006 - December 2007	*Ministry of Agriculture- Kilifi Institute of Agriculture, Lecturer II of Animal Science and Production* *Duties*: Teach and examine certificate students in animal production courses.	Taught certificate, students enrolled in general agriculture course; supervised their practical session in livestock production.

June 2005 – January 2006	*International Livestock Research Institute (ILRI), Data analyst* *Duties:* Establish and maintain information database of ILRI-SLU project on capacity building for sustainable use of Animal Genetic Resources (AnGR) in developing countries.	Collected and collate information on indigenous livestock breeds, preparation and editing of case studies for the development of an electronic resource on animal genetic resources (AnGR CD-Rom). Managed data and conducted genetic evaluation of livestock performance.
October 2004 - December 2004	*Kenya livestock breeders' organisation-KLBO, Contract Database Manager* *Duties:* Establishment and management of electronic database of dairy and beef cattle pedigree and performance records	Established an SQL database for management of dairy record and the dairy recording services of Kenya (DRSK). Established a database for pedigree recording for beef cattle in Kenya at the Kenya Studbook (KSB). Converted all the data on cards and milk recording sheets into electronic form.
June 2004 - September 2004	*Kenya Agricultural Research Institute-Lanet, Research Assistant* *Duties*: Computerisation of Boran cattle pedigree and performance records and genetic evaluation of beef cattle growth and reproductive performance.	Established an SQL database for management of Kenya Boran cattle data (pedigree and performance records) at KARI- Lanet
January 2004 - June 2004	*Delamere estates- Soysambu ranch, Livestock management assistant* *Duties:* Organisation and computerisation of ranch livestock recording system, establishment of a computer based livestock database and generation of performance summaries for beef cattle.	Established an SQL database for management of Kenya Boran cattle data (pedigree and performance records) at KARI- Lanet. Facilitated migration of data from paper to electronic and later to InterBeef software. Used the system in generation of monthly performance summaries

ii. Administrative work

Period	**Designation**	**Achievements**
4th July 2022 to date	*Acting Dean, School of Agriculture, Food Security and Environmental Science* Duties: Plan and oversee the day to day running of the school; Coordination of teaching, research and community outreach programs of the school; Provide a seamless link in operations between the school and other units of the university	Initiated renovation and reorganisation of the school building with a view of enhancing safety and efficiency in the office Facilitated departments to develop strategies to increase enrolment in agricultural programs Rationalised teaching in the school in line with the university strategy to reduce costs of academic programs implementation Developing a strategy for research and enterprise to support postgraduate research fellowship and generate revenue respectively

September 2013 – 3rd July 2022	*Chairman, Department of Animal and Fisheries Sciences* *Duties*: Chief Examiner, Department of Animal Science; Develop and review of undergraduate and graduate animal science curricula; Oversee the day to day operations in the department.	Spearheaded development of PhD Animal Science, MSc Animal Science and BSc Animal Production and Health management programs Reviewed undergraduate programs for animal science and aquaculture. Increased student enrolment at both undergraduate and postgraduate levels through implementation of student-centred strategies
February 2011 - August 2012	*The chairperson of the departmental graduate studies committee, department of agricultural sciences, Pwani university college* *Duties*: Evaluation of postgraduate applications and chairing postgraduate presentations	Streamlined postgraduate proposal evaluation; fast tracked postgraduate research and supervision to ensure timely completion of graduate studies
	Academic staff representative to the Pwani university college council	Negotiated for correct placement of academic staff that transferred services from Ministry Agriculture to Pwani University College
	Member of the Pwani university farm management committee	Developed a proposal that resulted into establishment of a a zero grazing unit that enhanced milk production and biogas to support university fuel needs.

iii. Consultancy experience

Dr Wasike has consulted for various organisations namely GIZ, FARA, the International Livestock Research Institute (ILRI), The livestock recording centre (LRC) of the State Department of Livestock Production *(see the section N(vi) on technical consultancy reports for the scope of work undertaken)*

H. University level courses taught

Level	*Course*
Undergraduate	Introduction to animal science, Population and quantitative genetics, Systems of Livestock Production, Fundamental of Research, Animal breeding, Beef Production, Animal Product processing and by-products
Graduate	Research methodology, Quantitative methods, Statistical computer application in Animal Science, Case studies in animal breeding, Population and quantitative genetics, Genetic evaluation of farm animals, Methodologies in animal breeding

I. Postgraduate Student supervision

Student/ project title/ university where registered	***Degree***	***Year of Completion***
i. Supervision to completion		
1. Kabochi, E.N. Evaluation of nutritional value of Croton (*Croton megalocarpus*) nut as a potential livestock feed. *Maseno University*	MSc	2021
2. Odhiambo C.O. Determinants of adaptive strategies to climate change of smallholder dairy farmers of Migori County, Kenya. *Maseno University*	PhD	2020

3. Mose P.B. Indigenous chicken farmers' attitude towards risk and agricultural insurance in Nyanza region, Kenya. *Maseno University.*	PhD	2018
4. Khobondo, J.O. Genetics of immunity of the different ecotypes of indigenous chicken of Kenya. *Egerton University*	PhD	2018
5. Miyumo, S.A. Genetic evaluation of feed use efficiency in indigenous chicken in Kenya. *Egerton University.*	MSc	2017
6. Wamugi, S.M.A. Evaluation of impacts of climate change and adaptation approaches in smallholder farming systems. *Pwani University*	MSc	2016
7. Namasaka, F.W. Effects of sequential teaching methods on achievement, retention and transfer of knowledge of biology by secondary school students in Kenya. *Pwani University*	PhD	2015

ii. On-going supervision	***Degree***	***Status***
1. Miyumo, S.A. Genetics and breeding for humoral immune response, production and feed efficiency in indigenous chicken. *Hohenheim Universitaet, Germany*	PhD	Thesis writing
2. Mwihaki, J.M. Genetic improvement of milk production and persistency of the first three lactations in Sahiwal Cattle. *Egerton University*	MSc	Thesis writing
3. Lihare, G. Genetic analysis of growth patterns of Kuchi indigenous chicken in Kenya. *Egerton University.*	MSc	Thesis writing
4. Kimitei, R.K. Analysis of the influence of pedigree and performance recording on breeding decisions in Kenyan dairy goat populations. *Egerton University*	MSc	Thesis writing
5. Agwona M.K. Genetic Evaluation of Reproductive Traits of Sows in Western Kenya. *Maseno University*	MSc	Thesis writing
6. Ochieng, D.A. Analysis the influence of bull selection strategy on genetic progress in semen and milk production traits of dairy herds. *Maseno University*	MSc	Data collection

J. Research accomplishments

Project Title and Role	**Funding agency**	**Duration**	**Budget**
i. Previous research			
1) Genetic evaluation of growth and reproduction traits of Boran cattle in the Semi Arid Kenya (**Principal Investigator**)	Kenya Boran Breeders Society/ Kenya Livestock Breeders Organisation	2003- 2005	KES 250,000
2) Efficient utilisation of pedigree and performance data on genetic improvement of beef and dairy cattle genetic resources in Kenya (**Principal Investigator**)	DAAD/ Ministry of Livestock Kenya	2007- 2011	KES 3,905,760
3) Biogas production from cashew nut waste and cattle manure: influence of biomass composition on methane yield (**Co-investigator**).	Pwani University Research Board (PURB)	2012-2013	KES 500,000
4) Improving Indigenous Chicken Productivity for Enhanced Livelihood and Food Security in Sub-Saharan Africa (InCIP) (**Associate partner**)	EU/ Africa Union	2012-2015	€ 1,041,578
5) Strengthening Capacity of Higher Education Institutions in Eastern and Western	EU/ACP- Edulink II	2013-2016	€ 693,767

Africa to Enhance Efficiency in the Dairy Value Chain (DairyChain) (**Associate partner**)			
6) Strengthening capacity for participatory management of indigenous livestock to foster agricultural innovation in Eastern, Southern and Western Africa (iLINOVA) (**Associate partner**)	EU/ACP- Science and Technology programme II	2014- 2017	€ 1,234,805.15
7) Genetics and immunity of indigenous chicken of Kenya (**Co- Investigator**)	National Council for Science Technology and innovations (NACOSTI)	2015- 2018	KES 750,000
8) Influence of genotype and metagenomics analysis of indigenous chicken of Kenya; comparative analysis and functional inference for immune competence (**Co- Investigator**)	Bio-Challenge Fund Africa fellowship	2016- 2017	KES 4,000,000
9) Indigenous chicken farmers' attitude towards risk and agricultural insurance and its effects on productivity in Nyanza region, Kenya (**Co- Investigator**)	National Research Fund	2017- 2019	KES 703,000

i. Ongoing research

1) Enhancing productivity and resilience of Sahiwal based pastoral dairy systems through accelerated genetic gains and reproductive technologies (**Co- Investigator**)	World Bank/ KALRO-KCSAP	2019- 2021	KES 22,497,820
2) Improving smallholder farm livelihoods through climate smart community based dairy goat management practices (**Principal Investigator**)	World Bank/ KALRO-KCSAP	2019- 2021	KES 20,081,330
3) Capacity Building for mitigation of GHG emissions and improved ruminant productivity through efficient feeding and manure management strategies in agro-pastoral systems (**Co- Investigator**)	RUFORUM/ GRA	2020- 2022	USD 70,040
4) Building Capacity for Innovation and Advancement of Climate Smart Agriculture in East and Southern Africa (**Co-Investigator and Country coordinator**)	Norwegian Directorate for higher Education and Skills under NORPART programme	2022-2026	NOK 6,700,000

K. Community/ National/ international Assignments and Consultancies

1) External Examiner, Department of Animal Sciences, Egerton University
2) Reviewer of Tropical Animal Health and Production, Journal of Dairy Research, South African Journal of Animal Science and Journal of Agricultural Extension and Rural Development.
3) Advisor to Livestock recording centre on genetic evaluation of national dairy and beef cattle performance data.

4) Consulting geneticist, ILRI to characterize livestock genetics/breeding technologies for improving agricultural productivity in developing countries
5) Chairman, Board of Management, John Osogo High School, Budalangi.

L. Membership to Professional societies

1) All Africa Society of Animal Production (AASAP)
2) Animal Production Society of Kenya (APSK)
3) American Society of Animal Science (ASAS)

M. Fellowships and Awards

2014 Norman E. Borlaug International Agricultural Science and Technology Fellowship tenable at the E (Kika) de la Garza American Institute for Goat Research, Langston University, Oklahoma USA.
2007 DAAD research fellowship to undertake doctoral research leading to a PhD at Humboldt-Universitaet zu Berlin in Germany.
2005 Best Poster presentation award in the All Africa Conference on Animal Agriculture (AACAA) in Arusha, Tanzania.
1997 Kenya Government Scholarship to undertake a B.Sc. degree in Animal Production.

N. Publications

i. Books

1) Ilatsia, E. D., Waineina, R. W., **Wasike, C.B.,** Magothe, T.M., Mutisya, W.M., Serem. R.K., Mukhebi, L.M. and Mwangi, S.I. (2022). Sahiwal resource book for pastoral production systems *(under review)*
2) Waineina, R. W., Kiura, J., Gachina, W.N., Ondoro, D.M., **Wasike, C.B.,** Wahome, C., Mukhebi, L.M., Mwangi,I., Mwangi, S.I and Ilatsia, E. D. (2022) Dairy goat management source book *(under review)*
3) Alaru, P., Ilatsia, E.D., **Wasike, C.B.,** Ngeno, K., Ouko, O., K'Oloo, T., Mwangi, S., Kamidi, C., Miyumo, S. and Magothe, T.M. (2021). Training manual on KALRO chicken breeder management manual. First Edition. Kenya Agricultural and Livestock Research Organization, Nairobi, Kenya. *(under review)*
4) Alaru, P., Ilatsia, E.D., **Wasike, C.B.,** Ngeno, K., Ouko, O., K'Oloo, T., Mwangi, S., Kamidi, C., Miyumo, S. and Magothe, T.M. (2021). Training manual on Hatchery Management Guide. First Edition. Kenya Agricultural and Livestock Research Organization, Nairobi, Kenya. *(under review)*
5) **Wasike, C. B.** 2012. Genetics of growth and reproductive performance of Kenya Boran cattle; an evaluation using field data. LAP LAMBERT Academic Publishing, Saarbruecken. ISBN 978-3-659-18459-8. Pp 115.
6) **Wasike, C. B.** 2010. Efficient utilisation of pedigree and performance data in genetic improvement of beef and dairy cattle genetic resources in Kenya. Verlag Dr. Köster, Berlin. ISBN 978-3-89574-754-0. Pp 158. www.verlag-koester.de.

ii. Papers in scientific peer reviewed journals

1) Miyumo, S.A., Wasike, C.B., Ilatsia, E.D., Bennewitz, J. and Chagunda, M.G., 2023. Genetic and phenotypic correlations among feed efficiency, immune and production traits in indigenous chicken of Kenya. *Frontiers in Genetics, 13, p.1070304. https://doi.org/10.3389/fgene.2022.1070304*
2) Magothe, T.M., Mwangi, D.K., **Wasike, C.B**., Waineina, R.W., Miyumo, S.A., Mwangi, S.I. and Ilatsia, E.D., 2023. Response to hormonal treatment and conception rates of Sahiwal cows subjected to fixed time artificial insemination in pastoral dairy systems. *Tropical Animal Health and Production, 55(1), p.49. https://doi.org/10.1007/s11250-023-03471-0*
3) Miyumo, S., **Wasike, C.B.,** Ilatsia, E.D., Bennewitz, J. and Chagunda, M.G., 2023. Genetic and non-genetic factors influencing KLH binding natural antibodies and specific antibody response to Newcastle disease in Kenyan chicken populations. *Journal of Animal Breeding and Genetics, 140*(1): 106-120. *https://doi.org/10.1111/jbg.12738.*

4) Odoje F.A, Ogello, E.O, **Wasike C.B.** and Obiero, K.O. 2022. Replacement of Fish Meal with Termite (*Coptotermes formosanus Shiraki*) Meal in the Diets of *Oreochromis niloticus L* Fry Cultured in Aquarium Tanks. *Maseno University Journal, 1: 97-110*

5) Kabochi N.E, Wambui C.C. and **Wasike C.B.** 2021. Nutritional composition, in vitro gas production and in-sacco degradability of processed *Croton megalocarpus* nuts for ruminant feeding. *Online Journal of Animal Feed Resources, 11(2): 36-45. DOI: https://dx.doi.org/10.51227/ojafr.2021.7*

6) **Wasike C.B.**, Wambui C.C, Awino J. and Schmidt U. 2021. Bridging the knowledge and skills gap in dairy husbandry. *Rural 21, 55(1):41-43*

7) Lihare G.O., **Wasike C.B.** and Kahi A.K. **2020**. Describing Growth Pattern Using Gompertz Growth Function – A Case Study of Kuchi Chicken in Kenya. *Poultry Science Journal 8(2): 119-127, DOI:10.22069/psj.2020.18194.1606*

8) Kahi A.K. and **Wasike C.B. 2019**. Dairy goat production in sub-Saharan Africa: current status, constraints and prospects for research and development. *Asian-Australasian Journal of Animal Sciences 32:1266-1274 https://doi.org/10.5713/ajas.19.0377*.

9) Odhiambo, C.O., **Wasike, C.B.** and Ogindo, H.O. **2019**. Effect of Socio-Demographic Characteristics on Kenyan Smallholder Dairy Farmers' Adaptive Strategies to Climate Change Effects. *Atmospheric and Climate Sciences, 9, 583- 599. https://doi.org/10.4236/acs.2019.94037*

10) Odhiambo, C.O., Ogindo, H.O., **Wasike, C.B.** and Ochola, W.O. **2019**. Adaptation of Smallholder Dairy Farmers in South Western Kenya to the Effects of Climate Change. *Atmospheric and Climate Sciences. 9: 456-478. https://doi.org/10.4236/acs.2019.93031*.

11) Miyumo, S., **Wasike, C.B.** and Kahi, A.K. **2018**. Genetic and phenotypic parameters for feed efficiency in indigenous chicken in Kenya. *Livestock Science 207, 91–97 https://doi.org/10.1016/j.livsci.2017.11.011,*

12) Wambui, C.C., Njoroge, E.K. and **Wasike, C.B. 2018.** Characterisation of physical egg qualities in indigenous chicken under free range system of production in Western Kenya. *Livestock Research for Rural Development. Volume 30, Article #122.* Retrieved July 9, 2018, from http://www.lrrd.org/lrrd30/7/wambu30122.html

13) Mose P.B., **Wasike C.B.,** Ombok B.O. and Kipsat M.J. **2018**. Farmers' attitude towards risk on indigenous chicken in Nyanza region. *Journal of Agricultural Economics and Rural Development, 4(2), 469-476*

14) Mose P.B., **Wasike C.B.,** Ombok B.O. and Kipsat M.J. **2018**. Attitude of indigenous chicken farmers towards agricultural insurance in Nyanza, Kenya. *Journal of Development and Agricultural Economics, 10(5), 146-151 DOI: 10.5897/JDAE2017.0853*

15) Khobondo J.O., Mwakubambanya, R., **Wasike, C.B.** and Kahi, A.K. **2017**. Genetic and non-genetic sources of variation in natural antibodies titre values among indigenous chicken. *American Journal of Research Communication, 5(7), 31- 45*

16) Namasaka, F.W., Mondoh, H.O. and **Wasike, C.B. 2017**. Effects of sequential teaching methods on retention of knowledge in biology by secondary school students in Kenya. *European Journal of Education Studies, 3 (5), 716- 735, doi: 10.5281/zenodo.574666*

17) **Wasike, C. B.,** Rolf, M., Silva, N. C. D., Puchala, R., Sahlu, T., Goetsch, A. L. and Gipson, T. A. **2016**. 1683 Genome-wide association analysis of residual feed intake and milk yield in dairy goats. *Journal of Animal Science, 94, suppl5, p820, doi:10.2527/jam2016-1683*

18) Miyumo, S., Kahi, A.K. and **Wasike C.B. 2016**. Non-genetic sources of variation and temporal variability in growth and feed efficiency traits among phylogenetically distinct clusters of indigenous chicken in Kenya. *Tropical Animal Health and Production, 48 (8), 1569–1575, doi: 10.1007/s11250-016-1129-z.*

19) Namasaka, F.W., Mondoh H.O. and **Wasike, C.B. 2016**. Effects of Sequential Teaching Methods on Achievement of Knowledge of Biology by Secondary School Students in Kenya. *IAARD-International Journal of Social Sciences, Arts and Humanities, 2016, 2(2), 50-55.*

20) Khobondo, J.O., Makubambanya, R., **Wasike, C.B.** and Kahi, A. K. **2016**. Variation and Repeatability of Natural Antibodies against Keyhole Limpet Hemocyanin of Indigenous Chicken of Kenya. *Genomics and Applied Biology, 7(4): 1-8, doi:10.5376/gab.2016.07.0004*.

21) Ojango, J.M.K, **Wasike, C.B.**, Enahoro, D.K. and Okeyo, A.M. **2016**. Dairy production systems and the adoption of genetic and breeding technologies in Tanzania, Kenya, India and Nicaragua. *Animal Genetic Resources,* 59, 81–95, *doi:10.1017/S2078633616000096*

22) **Wasike, C. B. 2015**. A procedure for on-farm valuation of East Coast Fever management in dairy cattle systems: a case of Coastal lowlands of Kenya. *Livestock Research for Rural Development. Volume 27, Article #197. Retrieved, from http://www.lrrd.org/lrrd27/10/wasi27197.html*

23) Khobondo, J. O., Muasya, T. K., Miyumo, S., Okeno, T. O., **Wasike, C. B.,** Makubambanya, R., Kingori, A. K. and Kahi, A. K. **2015**. Genetic and Nutrition development of indigenous chicken in Africa. *Livestock Research for Rural Development. Volume 27, Article #122. Retrieved, from http://www.lrrd.org/lrrd27/7/khob27122.html*

24) **Wasike, C. B.,** Kahi, A.K. and Peters, K. J. **2014**. Genetic relationship between lactation curve traits in the first three parities of dairy cattle in Kenya. *South African Journal of Animal Science 44:3, 245–253*

25) Khobondo, J.O., Okeno, T.O., Lihare, G.O., **Wasike, C. B.** and Kahi, A. K. **2014**. The past, present and future genetic improvement of indigenous chicken of Kenya. *Animal Genetic Resources 55, 125–135*

26) **Wasike, C. B.**, Kahi, A. K. and Peters, K. J. 2011. Modelling of lactation curves of dairy cows based on monthly test day milk yield records under inconsistent milk recording scenarios. *Animal 5:11, 1780–1790.*

27) **Wasike, C. B.**, Magothe, T. M., Kahi, A. K. and Peters, K. J. 2011. Factors that influence the efficiency of beef and dairy cattle recording system in Kenya: A SWOT-AHP analysis. *Tropical Animal Health and Production 43,141-152.*

28) **Wasike, C. B.**, Kahi, A. K. and Peters, K. J. 2011. A participatory approach to evaluation of efficiency of animal recording practices based on Institutional Analysis and Development framework. *Journal of Agricultural Science 149, 103- 117.*

29) **Wasike**, **C. B.**, Peters, K. J., Magothe, T. M. and Kahi, A. K. 2010. Non-genetic sources of variation in lactation curve traits of dairy cattle in Kenya**.** *East African Agricultural and Forestry Journal 76,155-160.*

30) Kariuki, C. M., Ilatsia, E. D., **Wasike, C. B.**, Kosgey, I. S. and Kahi, A. K. 2010. Genetic evaluation of growth of Dorper sheep in semi-arid Kenya using random regression models. *Small Ruminant Research 93, 126–134.*

31) **Wasike, C. B**., Ojango, J. M. K. And Kahi, A. K. 2009. Direct and maternal (Co)variance components and genetic parameters for growth and reproductive traits in Boran cattle in Kenya. *Tropical Animal Health and Production 41, 741– 748.*

32) **Wasike, C. B**. Wayne, P., Ojango, J. M. K. and Kahi, A. K. 2007. Genetic evaluation of growth of Kenya Boran cattle using random regression models. *Tropical Animal Health and Production* 39, 493– 505.

33) **Wasike, C. B.,** Ilatsia, E. D., Ojango, J. M. K. and Kahi, A. K. 2006. Genetic parameters for weaning weight of Boran cattle accounting for direct-maternal genetic covariances. *South African Journal of Animal Science 36 (4), 275- 281.*

34) **Wasike, C. B**., Ojango, J. M. K. And Kahi, A. K. 2006. Environmental sources of variation in growth and reproductive performance of Boran cattle in ASAL of Kenya. *Bulletin of Animal Health and Production in Africa 54,156- 167.*

35) Kahi, A. K., **Wasike, C. B**. and Rewe, T. O. 2006. Beef production in the Arid and Semi Arid Lands of Kenya: Constraints and prospects for research and development. *Outlook on Agriculture 35, 217- 225.*

iii. Manuscripts submitted for review in refereed journal

1) **Wasike C.B.**, Waineina R.W., Ngeno, D.K., Kamidi, C.M., Miyumo S., Mwabili, J.M., Mbaire, F. and Ilatsia E.D. (2022). Estimates of variance components and genetic parameters for preweaning weekly weight in dairy goats using random regression models. Small Ruminants Research *(Submitted, under review)*

2) Miyumo, S., **Wasike, C.B,** Ilatsia, E.D, Bennewitz, J. and Chagunda, M.G.G. (2022). Meta-analysis on comparative evaluation of genetic and environmental variation in immunity, production, fitness and feed efficiency traits in chicken. Poultry Science *(Submitted, under review).*
3) Ouko V.O, Alaru P.A.O., Miyumo S.A., K'Oloo T.O., **Wasike C. B.**, Ngeno, K., Magothe T.M. and Ilatsia E.D. (2022) Variability of carcass traits of indigenous chicken ecotypes in Kenya. Animal Bioscience *(Submitted, under review)*
4) Miyumo, S., **Wasike, C.B,** Ilatsia, E.D, Bennewitz, J. and Chagunda, M.G.G. (2022). Correlated effects of selection for production traits on feed efficiency and humoral immunity in indigenous chicken. Poultry Science *(Submitted, under review).*

iv. Selected Publications in peer review conference proceedings

1) Kamidi, C.M, Ngeno, D.K, **Wasike, C.B**, Ilatsia, E.D. and Waineina, R.W. 2022. Genetic diversity and population structure of dairy goat populations in Kenya. *12th World Congress on Genetics Applied to Livestock Production. 3-8, July 2022, Rotterdam, Netherlands.*
2) Miyumo, S.A, **Wasike, C.B**, Ilatsia, E.D, Bennewitz, J. and Chagunda, M.G.G. 2022. Genetic and phenotypic associations among production, feed efficiency and immune traits in indigenous chicken of Kenya. *12th World Congress on Genetics Applied to Livestock Production. 3-8, July 2022, Rotterdam, Netherlands.*
3) Miyumo, S., **Wasike, C.B,** Ilatsia, E.D, Bennewitz, J. and Chagunda, M. G. G. (2021). Comparative analysis of variation in immunity, production, fitness and feed efficiency traits in chicken performing in the tropical environment. Book of Abstracts: *Tropentag Hybrid Conference, 15-17th September 2021, Stuttgart, Germany. pp 234.*
4) Njoroge E.K. Wambui, C.C. and **Wasike C.B.** 2021. Processed Croton (*Croton megalocarpus*) Nuts as an Alternative Feed Resource for Increased Ruminant Productivity in the ASALs. *In Proceedings of Kenya Climate Smart Agriculture Project (KCSAP) Scientific conference held in Lake Naivasha resort from 22nd to 27th November 2021*.
5) Miyumo, S., **Wasike, C.B.** and Kahi, A.K. **2019**. Genetic and Phenotypic Relationships between Residual Feed Intake and Production Traits in Indigenous Chicken (*Gallus gallus*). *Presented at the 7th All Africa Conference on Animal Agriculture, Accra, Ghana*
6) Okeno, T.O. and **Wasike, C.B.** 2016. Intensive livestock recording for sustainable breeding programs and adaptation strategy to climate change. *Presented at the 1st World Congress on Innovations for Livestock Development, Elementaita, Kenya*
7) Muasya, T.K., Miyumo, S., Ngeno, K., Khobondo, J.O., **Wasike, C.B**., Magothe, T.M. and Kahi, A.K. 2015. Preliminary selection results for body weight in indigenous chicken in Kenya. *Presented at the annual Animal Production Society of Kenya symposium, Mombasa, Kenya.*
8) **Wasike, C. B.**, Kahi, A. K. and Peters, K. J. 2014. Genetic relationship between lactation curve traits in dairy cattle. *Presented at the 10th World Congress on Genetics Applied to Livestock Production, Vancouver Canada.*
9) Kahi, A.K., **Wasike, C. B.** and Bett, R. C. 2012. Goat breeding in low input production systems: Integrating values and modern breeding technologies for improving intrinsic robustness. *XIth International Conference on Goats. Canary Islands, Spain. September 23rd- 27th 2012.*
10) **Wasike, C. B.,** A. K. Kahi and K. J. Peters. 2011. A mathematical function to describe lactation curves of cows used in medium and smallholder dairy systems in Kenya. *Annual symposium of the Animal Production Society of Kenya. Kitale, Kenya. April 19th- 21st, 2011***.**
11) **Wasike, C. B.**, T.M. Magothe, A. K. Kahi and K. J. Peters. 2010. Describing the lactation process of Ayrshire and Holstein Friesian cattle in Kenya using a Mechanistic lactation function. *9th World Congress on Genetics Applied to Livestock Production. Leipzig, Germany. August 1- 6, 2010. CD-Rom.*
12) **Wasike, C. B.**, R. C. Bett, A. K. Kahi and K. J. Peters. 2009. Methodological approach to analyse the efficiency of animal recording practices. *Poster presented during the Deutsche Tropentag 2009 conference. www.tropentag.de/2009/proceedings/proceedings.pdf.*

13) Bett, R., **C.B. Wasike,** A.K. Kahi, K. J. Peters. 2009. Participatory Assessment of Institutional and Organisational Challenges Confronting Dairy Goat Management in Kenya. *Poster presented during the Deutsche Tropentag 2009 conference. www.tropentag.de/2009/proceedings/proceedings.pdf.*

14) Orenge, J. S. K., Ilatsia, E. D., **Wasike, C. B.,** Kosgey, I. S. and Kahi, A. K. 2007. Estimation of maternal (co)variance components and genetic parameters for growth traits in Polled Hereford. *Animal Production Society of Kenya Annual Scientific Conference, March 2007, Mtwapa, Kenya. CD-Rom.*

15) Migose, S. A. Ilatsia, E. D. **Wasike, C. B.,** Muhuyi, W. B. and Kahi, A. K. 2007. Sex specific (co)variance components and parameter estimates in growth traits of beef cattle. *Proceeding of the Animal Production Society of Kenya Annual Scientific Conference, March 2007, Mtwapa, Kenya. CD-Rom.*

16) **Wasike, C. B.,** Ojango, J. M. K. and Kahi, A. K. 2006. Genetic parameters for growth and reproductive traits in the Kenya Boran cattle. *8th World Congress on Genetics Applied to Livestock Production. 13-18, August 2006, Brazil. CD-Rom.*

17) **Wasike, C. B.,** Indetie, D., Ojango, J. M. K. and Kahi, A. K. 2006. Estimates of variance components and genetic parameters for growth and reproductive traits in the Kenya Boran cattle. *Proceedings of the Animal Production Society of Kenya symposium. March 2006, Isiolo, Kenya. CD-Rom.*

18) **Wasike, C. B.,** Indetie, D. Ojango, J. M. K. and Kahi, A. K. 2006. Estimates of genetic parameters for growth of Kenya Boran cattle using random regression models. *10th KARI biennial Scientific Conference. October 2006, Nairobi, Kenya. www.kari.org/publications/10thproceedings/index.php*

19) Kahi, A. K. **Wasike, C.B.** and Hirooka, H. 2006. Beef cattle breeding in Japan: lessons and prospects for research and development for Kenya. *Proceedings of the Animal Production Society of Kenya symposium. March 2006, Isiolo, Kenya. CD-Rom*

20) Ilatsia, E. D., **Wasike, C.B.,** Muhuyi, W. B. and Kahi, A. K. 2006. Effects of contemporary groups on variance component and genetic parameter estimates for test day yield data of Sahiwal cattle in Kenya. *10th KARI biennial Scientific Conference. October 2006, Nairobi, Kenya. www.kari.org/publications/10thproceedings/index.php.*

21) Magothe, T. M., Ilatsia, E. D., **Wasike, C.B.,** Migose, S. A. and Kahi, A. K. 2006. Genetic evaluation of milk yield of Bos taurus dairy breeds in Kenya. *10th KARI biennial Scientific Conference. October 2006, Nairobi, Kenya. www.kari.org/publications/10thproceedings/index.php.*

22) Migose, S. A., Ilatsia, E. D., **Wasike, C.B.,** Muhuyi, W. B. and Kahi, A.K. 2006. Estimation of maternal (co)variance components for growth traits in the Sahiwal cattle. *10th KARI biennial Scientific Conference. October 2006, Nairobi, Kenya. www.kari.org/publications/10thproceedings/index.php*

23) **Wasike, C.B.,** Indetie, D., Irungu, K. R. G., Ojango, J. M. K. and Kahi, A. K. 2005. Maternal effects on growth traits of Boran cattle in the ASAL of Kenya. *Proceedings of the All Africa Conference on Animal Agriculture. September 2005. Arusha, Tanzania.*

24) **Wasike, C.B.,** Indetie, D., Irungu, K. R. G., Ojango, J. M. K. and Kahi, A. K. 2005. Effects of selection for fertility for improvement of off take on growth performance of the Kenya Boran cattle. *Proceedings of the Animal Production Society of Kenya symposium. March 2005. Egerton University, Njoro, Kenya. CD-Rom*

25) **Wasike, C.B.** Kahi, A. K. and Ojango, J. M. K. 2004. The effect of selection and data structure on genetic evaluation of growth traits in tropical beef cattle. *Proceedings of the Tanzanian Society of Animal Production Conference. October 2004. Moshi, Tanzania.*

26) **Wasike, C.B.,** Ojango, J. M. K. and Kahi, A. K. 2004. Random Regression Models: Applicability in Genetic Evaluation of beef cattle in Kenya. *Proceedings of the First APSK/TSAP/Makerere University Regional Conference on Animal Production. March 2004. Nairobi, Kenya. CD-Rom.*

v. Theses

1) **Wasike, C. B. 2006.** Genetic evaluation of growth and reproductive performance of the Boran cattle in Kenya. *M.Sc. Thesis, Egerton University, Njoro, Kenya.*

2) **Wasike, C. B. 2010.** Efficient utilisation of pedigree and performance data in genetic improvement of beef and dairy cattle genetic resources in Kenya. *Ph.D thesis, Humboldt-Universität zu Berlin, Germany.*

vi. Technical consultancy reports

1) **Wasike, C.B.** 2021. Technical support in the preparation of Radio Broadcast events on climate change and dairy Husbandry at two radio stations in Western Kenya. *Report submitted to GFA Consulting group of GIZ, Kisumu*

2) Ilatsia, E.D., **Wasike, C.B.,** Ouko, O., Miyumo, S. and Okitoi, L. 2021. Commercial poultry success stories in Kenya: Drivers and lessons. *Report submitted to Forum for Agriculture Research in Africa (FARA) and Centre for Development Research (ZEF), University of Bonn-Germany*

3) **Wasike, C. B.** and Ojango J.M.K. 2014. Dairy systems in Burkina Faso, India, Kenya, Nicaragua and Tanzania: an overview of the production systems and the adoption of genetic and breeding technologies. *Report submitted to International livestock research Institute, Nairobi.*

4) **Wasike, C. B.** 2012. A breeding programme for genetic improvement of meat goats in ASAL areas. *Report submitted to Livestock Recording Centre, Ministry of Livestock and Fisheries Development, Naivasha*

5) Kahi, A.K., Ilatsia, E. D., **Wasike, C. B.** and Migose, S. A. 2006. Genetic evaluation methods and pedigree and performance recording systems. *Report submitted to Livestock Recording Centre, Ministry of Livestock and Fisheries Development, Naivasha*.

Referees

Prof. Dr. Alexander K. Kahi,
Director, Centre of Excellence in Livestock Innovation and Business (CoELIB) and Professor of Animal Breeding and Genomics,
Egerton University,
P. O. Box 536,
20107 Egerton, Kenya.

Tel: +254 51 221 7686
Mobile: +254 72 785 0007
E-mail: a.kahi@coelib.org
akahi@egerton.ac.ke

Dr. Evans D. Ilatsia (Dr.sc.agr),
Deputy Director, Livestock Research,
Kenya Agricultural and Livestock Research Organization (KALRO) Headquarters,
P.O. Box *57811*,
***00200, City Square, Nairobi, Kenya*.**

Tel. No. 254 722 58 92 69.
E-mail: Evans.Ilatsia@kalro.org;
evansilatsia@gmail.com

Prof. Dr. Kurt J. Peters
Prof. Emeritus,
Humboldt University of Berlin and Livestock consultant with InVeLCo
Personal Address:
Dieselstr. 10,
D14612 Falkensee, Germany

Tel. +49 3322 230478
E-mail: peters@kjpeters.de
k.peters@agrar.hu-berlin.de