



Fred Kabi, Associate Professor,
Animal Nutritionist
Department of Agricultural Production, School of Agricultural Sciences
College of Agricultural and Environmental Sciences, University Road, Agriculture Building I
Makerere University P.O. Box 7062, Kampala, Uganda
Tell: +256 (701262559)
Email: fred.kabi@mak.ac.ug
Social: <https://scholar.google.com/citations?user=v2SDPGkAAAAJ&hl=en>
<https://www.researchgate.net/profile/Fred-Kabi>

As a leading animal nutritionists at MAK, Fred does research and Consultancies with the United Nations (UN) World Food Program (WFP), International Livestock Research Institute majorly focusing on SDGs 1 and 2 (elimination of extreme hunger and poverty). He has a vast experience of collaborations in public private partnership with over 5 memoranda (MoUs) initiated and legally signed in the last 5 years. In the last 10 years, his focus has been on building strategic partnerships aimed at transforming research into tangible sellable products.

Biography

After undertaking a course on Design and management of Interactive learning at Wageningen (ICRA), Fred has consistently applied Action oriented Research and Outreach in multidisciplinary teams of students from MAK, Swedish University of Agricultural Sciences (SLU), Wageningen University and Ento Organic Farm Ltd. This has been a catalyst to accelerate research, innovations and entrepreneurship in ecological organic agriculture aimed at producing entrepreneurial graduates with skills informed by evidence based research but with a global perspective to solve societal challenges.

Fred has working on possible integration of earthworms with black soldier fly larvae (*Hermetia illucens*) to enrich the frass with cytokinins plant growth hormones and chitinases enzymes as foliar fertilizers and organic pesticide, respectively. Fred is also working on strategies to use atomic nuclear science for food production rather than for war. In addition to research, teaching, supervision of graduate and undergraduates in animal science and ecological organic agriculture, Fred is strongly involved in taking the university to the communities (outreach/consultancies) through agricultural shows, TV and

radio and talk shows. Fred is currently working on **Disentangling secrets of biology, engineering and ICT for linking local organic agricultural business to the global market place through an all-inclusive KeBERA Organic Farming Certification Model** where the geolocation, product traceability components as well as e-commerce components are ready for launching.

Other Activities

Membership

- I am a member of the Tanzania Society of Animal Production (TSAP) since 1996 up-to-date
- I am a member of International Society of Organic Agriculture Research (ISO FAR) since 2017 up to date
- Technical committee member responsible for harmonizing East African community Feed Standards to support regional trade
- Technical committee member of the Uganda National Bureau of Standards (UNBS) responsible for harmonising animal feed standards to support regional export
- I am a Technical committee member of the African Organisation for Standardisation (ARSO) (TC 17 for harmonisation of Animal feeds)

Editorial Membership

- Editorial member of the African Journal of Organic Agriculture and Ecology (Livestock Science) by the Network of Organic Agriculture Researchers in Africa (NOARA)

Teaching

- Animal Nutrition (ANS 2104) a 3 CU course for BSc. Agriculture and Food Sciences undergraduates
- Animal Feeds and Feeding (ANS3203) A 3 CU course for BSc. Agriculture students
- Ruminant Nutrition ANS 7102 a 3 CU for graduate students
- Ruminology ANS 7204 a CU for graduate students
- Graduate Seminars AGE 7201 with emphasis on scholarly writing

- Graduate Crosscutting courses mounted university wide by Directorate of Graduate Training (DGRT) with emphasis on Scholarly writing

Community based work

- Board Member of Huger fighters, Uganda
- Editorial board member of the African Journal of Organic Agriculture and Ecology (Livestock Science) by the Network of Organic Agriculture Researchers in Africa (NOARA)
- I am the patron for the Students innovation social investment club
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Awards or special recognitions received

- National Excellence award as best organic agriculture Research 2022
- Best Scientific paper award During the 2nd ASARECA General Assembly of 13 Nations 9-13 Dec. 2013 in Bujumbura
- Awarded Certificate of appreciation as a board member by Hunger fighters Uganda in 2019
- Awarded at All African Crop Science Society Assembly in 2003 an Award – Best oral presenter (Cash Prize US\$ 150)
- Awarded Certificate of Merit to the consortia of Makerere University, Kakira sugar Works, Kakira Out growers rural Development Fund and Dairy Development Authority by the Uganda National Council for Science and Technology as the best exhibition of innovations in the public private partnership during the Science week at Munyonyo in 2008

Publications

Christian Schader, Anja Heidenreich, Irene Kadzere, Irene Egyir, Anne Muriuki, Joseph Bandanaa, Joseph Clottey, JohnNdungu, Christian Grovermann, Gianna Lazzarini, Johan Blockeel, Christian Borgemeister, Adrian Muller, **Fred Kabi**, Komi Fiaboe, Noah Adamtey, BeateHuber, Urs Niggli, Matthias Stolze 2021. How is organic farming performing agronomically and economically in sub-Saharan Africa? [Global Environmental Change, Volume 70](#), September 2021, 102325.

Fred Kabi, Denis Kayima, Abasi Kigozi, Eric Zadock Mpingirika, Ronald Kayiwa and Dorothy Okello 2020. Effect of different organic substrates on reproductive biology, growth rate and offtake of the African night crawler earthworm (*Eudrilus eugeniae*). Just Accepted for publication and appearing online today by @Springer Nature in @Organic agriculture journal)

Robert Alex Isabirye, Charles Waiswa, **Fred Kabi**, William N. Nanyeenya, Savino Biryomumaisho, James Acai-Okwee, Samuel Okello, Beatrice Omonuk Akello, Moses Mwesigwa, Richard Lumu and George William Nasinyama 2019. Diatomaceous Earth Usage in The Agriculture Sector in Uganda And Its Characterization: Current Status and Anticipated Developments,. *Journal of Agricultural Science and food Technology* 5 (4): 87-95

Robert Alex Isabirye, Charles Waiswa , **Fred Kabi**, William N. Nanyeenya , Savino Biryomumaisho, James Acai-Okwee , Samuel Okello, Beatrice Omonuk Akello, Moses Mwesigwa¹, Richard Lumu and George William Nasinyama 2019. Efficacy of Diatomaceous Earth on *Ascaridia galli*, Blood Parameters: And on Ectoparasites In Chicken. *Journal of Agricultural Sciences and Food Technology* 5(9) : 205-2017

M. Kiggundu, **F. Kabi** 2019. Effect of wilting organic pineapple by-products and jack bean (*Canavalia ensiformis*) foliage inclusion on silage fermentation and its nutritive value. *Animal Feed Science and Technology*. 258: 114303
<https://doi.org/10.1016/j.anifeedsci.2019.114303>

Mette Vaast, Gidi Smolders, Raphael Wahome, Charles Odhong, Muhammad Kiggundu, Fred **Fred Kabi**, Sylvia Nalubwama, Niels Halberg 2019. Options and challenges for organic milk production in East Africansmallholder farms under

certified organic crop production. *Livestock Science* 220, 230-240
<https://doi.org/10.1016/j.livsci.2019.01.006>

Nalubwama Sylvia, **Fred Kabi**, Mette Vaarst, Mohammad Kiggundu and Gidi Smolders 2018. Opportunities and challenges for integrating dairy cattle into farms with certified organic pineapple production as perceived by smallholder farmers in Central Uganda. *Organic Agriculture Official journal of The International Society of Organic Agriculture Research. Org. Agr.*
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Nalubwama Sylvia, **Fred Kabi**, Mette Vaarst, Mohammad Kiggundu and Gidi Smolders 2018. Opportunities and challenges for integrating dairy cattle into farms with certified organic pineapple production as perceived by smallholder farmers in Central Uganda. *Organic Agriculture Official journal of The International Society of Organic Agriculture Research. Org. Agr.*
<https://doi.org/10.1007/s13165-018-0210-5>

Denis Asizua, Denis Mpairwe, **Fred Kabi** David Mutetikka, Felix Budara Bareeba, Torben Hvelplund, Martin Riis Weisbjerg, Jørgen Madsen 2018. Effects of feeding systems on rumen environment, degradability and passage kinetics in Ankole × Friesian crossbred steers. *Livestock Science* 210 (2018) 47–54 . journal homepage: www.elsevier.com/locate/livsci

Pius Lutakome , **Fred Kabi** , Francis Tibayungwa , Germana H. Laswai , Abiliza Kimambo , Cyprian Ebong 2017. Rumen liquor from slaughtered cattle as inoculum for feed evaluation. *Animal Nutrition* 3 (2017) 300e308 Journal homepage: <http://www.keaipublishing.com/en/journals/aninu/>

Denis Asizua, Denis Mpairwe, **Fred Kabi** , David Mutetikkaa, Torben Hvelplund, Martin Riis Weisbjerg, Jørgen Madsen 2017. Effects of grazing and feedlot finishing

duration on the performance of three beef cattle genotypes in Uganda. *Livestock Science* Volume 199, May 2017, Pages 25–30. <https://authors.elsevier.com/a/1Ugla6fSi9Yj88> (you can still share this link until 50 days from now)

SALLYCHIKUTA, T. ODONG, **F. KABI** AND P. RUBAIHAYO 2017. Combining Ability and Heterosis of Selected Grain and Forage Dual Purpose Sorghum Genotype. *JOURNAL OF AGRICULTURAL SCIENCES* 9:122-130

Nalubwama S, **Kabi F**, Vaarst M, Smolders G, Kiggundu M. 2016. Cattle management practices and milk production on mixed smallholder organic pineapple farms in Central Uganda. *Trop. Anim. Health Prod.* 2016 48(8):1525-1532.

Andrew M. Atuhaire, **Fred Kabi**, Samuel Okello, Swidiq Mugerwa, Cyprian Ebong 2016. Optimizing bio-physical conditions and pre-treatment options for breaking lignin barrier of maize stover feed using white rot fungi. *Animal Nutrition* 2 (4) 361–369

Justine Nambi-KasoziEmail, Elly Nyambobo Sabiiti, Felix Budara Bareeba, Eva Spornndly and **Fred Kabi** 2016. Effects of inclusion levels of banana (*Musa* spp.) peelings on feed degradability and rumen environment of cattle fed basal elephant grass. *Tropical Animal Health and Production* 48 (4) 693–698

Joachine Idibu, **Fred Kabi**, Denis Mpairwe 2016. [Behavioural Response of Pure Ankole and Crossbred \(Ankole x Holstein\) Cows to Seasonal Pasture Variations in Southwestern Uganda](#). *Applied Animal Behaviour Science* 174, P 11–18

S Chikuta, T Odong, **F Kabi**, M Mwala, P Rubaihayo 2014. [Farmers' perceptions on dual-purpose sorghum and its potential in Zambia](#). *International Journal of Agricultural Research, Innovation and Technology* 4 (2) 76-81

- S. Chikuta¹, T. Odong, **F. Kabi** and P. Rubaihayo 2015. Phenotypic Diversity of Selected Dual Purpose Forage and Grain Sorghum Genotypes. American Journal of Experimental Agriculture 9(6): 1-9
- Asizua, D.; Mpairwe, D.; **Kabi, F.**; Mutetikka, D.; Kamatara, K.; Hvelplund, Torben; Weisbjerg 2014. Growth performance, carcass and non-carcass characteristics of Mubende and Mubende×Boer crossbred goats under different feeding regimes. Livestock Science, 169, 63-70. DOI: 10.1016/j.livsci.2014.09.010
- Muhammad Kiggundu, **Fred Kabi**, Vaarst Mette, Sylvia Nalubwama, Charles Odhong 2014. Management and use of dairy cattle feed resources on smallholder certified organic pineapple farms in Central Uganda. Journal of Agriculture and Environment for International Development - JAEID 2014, 108 (2): 207 – 225
- S Nalubwama, M Vaarst, **F Kabi**, M Kiggundu, F Bagamba, C Odhong, A Mugisha and N Halberg 2014. Challenges and prospects of integrating livestock into smallholder organic pineapple production in Uganda. Livestock Research for Rural Development 26 (6) 2014. <http://www.lrrd.org/lrrd26/6/nalu26113.htm>
- F Kabi**, F B Bareeba, M Kwizera, P Walekhwa, V D S R Prasad, D V N Raju, J Rubaramira and A Ssekitoleko 2013. Public-private partnerships for unlocking the potential of dairy cattle productivity in Uganda for improved livelihoods. Livestock Research for Rural Development 25 (6) 2013. <http://www.lrrd.org/lrrd25/6/kabi25109.htm>
- Andrew Mwebaze Atuhaire, Swidiq Mugerwa, Samuel Okello, Kenneth Okello Lapenga, Fred **Fred Kabi**, Jolly Mary Kabirizi 2014. [Prioritization of Crop Residues for Improving Productivity on Smallholder Dairy Farming Households in the Lake Victoria Crescent, Uganda](#). Open Journal of Animal Sciences, 4, 103-111

Andrew M. Atuhaire, S. Mugerwa, J. M. Kabirizi, S. Okello, F. Kabi 2014. Production Characteristics of Smallholder Dairy Farming in the Lake Victoria Agro-ecological Zone, Uganda. *Frontiers in Science* 4(1): 12-19 doi:10.5923/j.fs.20140401.03

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Kabi Fred, Lutakome Pius 2013. Effect Of Harvesting Gliricidia Sepium At Different Cutting Frequencies On Quantity And Quality Of Herbage Biomass For Dairy Cattle Nutrition. 2013. *J. Anim. Sci. Adv.*, 2013; 3(6): 321-336doi: 10.5455/jasa.20130703021048

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Podcasts Videos

Videos on earthworm

Videos on BSF

Videos on OA

Our Video showing how Makerere is involved in Organic agriculture research under productivity and growth in organic agriculture ProGRoV

<http://projects.au.dk/progrov/country-pages/uganda/>

And here is our YouTube channel with a number of EOA videos

<https://www.youtube.com/channel/UCWEyeYxGdUA5B5XeBFdy2Ng>