

CURRICULUM VITAE

PROF. JOYCE G. MAINA

CONTACT:

Department of Animal Production
College of Agriculture & Veterinary Sciences.
University of Nairobi.
P. O. Box 29053 (00625)
Nairobi, Kenya

Tel: (Office) (020) 4916024
Cell phone: 254722 891680
Email: maina.joyce78@gmail.com
joyce.maina@uonbi.ac.ke

CAREER GOAL

To build capacity, provide leadership and mentorship in the Faculties of Agriculture and Veterinary Services, and contribute to the attainment of Sustainable Development Goals (SDG's) in Kenya through generation and dissemination of relevant knowledge, skills and technologies in Agriculture.

ACADEMIC QUALIFICATIONS

- 2012 Master of Arts in Project Planning and Management. (University of Nairobi).
- 2001 Doctor of Philosophy in Animal Nutrition (University of British Columbia) in Vancouver, British Columbia, Canada.
- 1990 Master of Science in Animal Production (University of Nairobi).
- 1981 Bachelor of Science in Agriculture (Upper Second Class Honours) (University of Nairobi).
- 1977 East African Certificate of Advanced Education (EAACE) (Kaaga High School, Meru) (3 Principals, 1 Subsidiary).
- 1975 East African Certificate of Education (EACE) (Mugoiri Girls High School, Muranga) (Division 1).

EMPLOYMENT HISTORY

October 10th 2019 – Present

Associate Professor – Department of Animal Production

2013 – 10th October 2019

Senior Lecturer, Department of Animal Production, College of Agriculture and Veterinary Sciences, University of Nairobi.

October 2001 To 2013:

Lecturer: Department of Animal Production, College of Agriculture and Veterinary Sciences, University of Nairobi.

Responsibilities:

- Head of Section – Bsc Fisheries and Aquaculture Management.
- Training and providing mentorship to students in the Faculties of Agriculture and Veterinary Sciences,
- Supervision of Graduate and Undergraduate Students and other Faculty and Departmental duties.
- Effectively represented the Department of Animal Production in the Faculty of Agriculture and Faculty of Veterinary Medicine Timetabling Committees (2002 – 2009),
- Member of the Faculty of Veterinary Medicine Projects and Attachment Committee (2001 – 2009)
- Member of the Faculty of Agriculture Curriculum Committee.

1993 – 2001:

Assistant Lecturer: Department of Animal Production, College of Agriculture and Veterinary Sciences, University of Nairobi.

Responsibilities:

- Taught courses in Animal Nutrition, Livestock Production Systems, Feed Resources, Aquaculture and Aquatic Production Systems.
- Supervised Undergraduate and Graduate Students.

1991 – 1992:

Head of Poultry Section: Ministry of Livestock Development (Kenya).

Responsibilities:

- Formulation and implementation of policies which stimulated poultry production in Kenya.
- Provided guidance on technical issues relating to the Sector
- Represented the Ministry of Livestock Development at the Kenya Bureau of Standards.

- Co-ordinated Poultry Projects and Programs in Kenya.

1985 – 1990:

Lecturer: Animal Health and Industry Training Institute (AHITI Kabete)

Animal Health and Industry Training Institutes are Certificate Awarding Post-Secondary School institutions which train students on various aspects of Animal Production and Health and Leather Technologies.

Responsibilities:

- Trained students on various aspects of Animal Production and Agricultural Extension.
- Acted as the Head of the Animal Production Department between 1987 and 1988.
- Provided Mentorship, Guidance and Counseling to students.

1981 – 1984:

Agricultural Extension Co-coordinator: Ministry of Agriculture and Livestock Development- Nyandarua district.

Responsibilities:

- Provided leadership in the implementation of Extension Programs and Projects, particularly the Training and Visit (T & V) Extension Program which was funded by World Bank.
- Co-ordinated Staff and Farmers Trainings in the District.

PUBLICATIONS

1. **Maina, J.G.**, Beames, R.M., Higgs, D., Iwama G., Mbugua, P.N. and Kisia S. (2002). Digestibility and feeding value of some feed ingredients fed to tilapia *Oreochromis niloticus* (Linn). *Aquaculture Research* **33** (11), 853-862.
2. **Maina, J.G.**, Beames, R.M., Higgs D., Iwama, G., Mbugua, P.N., and Kisia S. (2003). Partial replacement of fishmeal with sunflower cake and corn oil in diets for tilapia *Oreochromis niloticus* (Linn): Effect on whole body fatty acids. *Aquaculture Research* **34**, 601 – 608.
3. **Maina, J.G.**, Beames, R.M., Higgs, D., Iwama, G., Mbugua, P.N. and Kisia S. (2005). A Comparison of the Nutritional Quality of Kenya's omena fishmeal and

- LT. Anchovy fishmeal fed to tilapia *Oreochromis niloticus* (Linn). *Veterinary Journal* Vol. **29** (2005) 1-6.
4. **Maina, J.G.**, Beames, R.M., Higgs, D., Mbugua, P.N., Iwama, G., and Kisia, S.M., (2007). The feeding value and protein quality in high-fibre and fibre-reduced sunflower cakes and Kenya's "omena" fishmeal for tilapia (*Oreochromis niloticus*) *Journal of Livestock Research for Rural Development* 19 (11) (Electronic journal).
 5. **Maina, J.G.**, Beames, R.M., Higgs, D., Iwama G., Mbugua, P.N. and Kisia S. (2007). Evaluation limiting amino acids in tilapia diets based on sunflower cake. *Bulletin of Animal Health and Production*. Vol **55** (3) 187-194.
 - 6 **Maina, J.G.**, Kamau, W.N., Kabuage, L.W. (2013). Evaluation of high levels of rice milling byproducts in chicken layer diets: effects on layer performance, egg quality and economic returns. *Livestock Research for Rural Development* 25 (7)
 7. **J G Maina**, P G Mbuthia, J Ngugi, B Omolo, P Orina, S M Wangia, E G Karuri, T Maitho and G O Owiti (2014). Influence of social-economic factors, gender and the Fish Farming Enterprise and Productivity Project on fish farming practices in Kenya. *Livestock Research for Rural Development* 26 (2) 2014.
 8. Orina, P.S., **Maina, J.G.**, Wangia, S.M., Karuri E.G., Mbuthia, B. Omolo., Owiti, G.O., Musa, S., and Munguti J.M. (2014). Situational analysis of Nile tilapia and African catfish hatcheries management: a case study of Kisii and Kirinyaga counties in Kenya. *Livestock Research for Rural Development* 26 (5) 2014
 9. Waititu, S.M., A. Rogiewicz, B.A. Slominski, **J.G. Maina**, J.O. Ochanda, and C.M. Nyachoti. 2014. Effects of multi-enzyme mixtures on performance and nutrient utilization in broilers fed diets containing different cereals and industrial by-products. *J. Poult. Sci.* 51:402-410
 10. **Maina, J.G.**, Githure, J.N and Karuri E.G (2015). Farmed Fish Value Chain Analysis with Emphasis to Value Addition and Traceability: Case of Kirinyaga County in Kenya. **Food Chain Volume 5 (3) 1 - 19**
 11. Nicholas Musyoki Ngwili, **Joyce G. Maina** and Patrick Irungu (2015). Characterization of fish farming systems in Kiambu and Machakos counties, Kenya. *International Journal of Fisheries and Aquatic Studies* – 3(1): 185-195
 12. Nicholas Musyoki Ngwili, **Joyce G. Maina** and Patrick Irungu (2015). Market characterization and consumption of farmed fish in Kiambu and Machakos

Counties. *Journal of Agricultural Science and applications (JASA)* Vol 5, Issue 1
2016 (1 – 5)

13. Nyunja, C., **Joyce Maina** , Joshua Amimo, Felix Kibegwa , David Harper and Joseph Jung'a (2017). Stock Structure Delineation of the African Catfish (*Clarius gariepinus*) in Selected Populations in Kenya Using Mitochondrial DNA (Dloop) Variability. *Journal of Aquaculture Research & Development* Volume 8 • Issue 5 • 1000485.
14. Wesonga Paul Shikoli, Mukoya-Wangia Sabina, **Maina Joyce G**, Njoka Jesse T and Serykhan Nicholas (2016). Enabling environment for fish farming as an alternative livelihood in Makueni, Kenya. *International Journal of Fisheries and Aquatic Studies* 2017, Vol. 5 Issue 2, Part I.
15. SK Mavuti, RM Waruiru, PG Mbuthia, **JG Maina** and JM Mbaria. Evaluation of fish farmer management practices in Nyeri County, Kenya. *International Journal of Fisheries and Aquatic Studies* 2017; 5(3): 165-170
16. Wesonga, P.W, Mukoya-Wangia, Njoka, J.T and **Maina, J.G** (2016). Profitability of Economic Stimulus Program (ESP) fish farming adopters in makueni County, Kenya. *International Journal of Fisheries and Aquaculture Research* Vol.2, No.3, pp.1-12, December 2016
17. **Maina, J. G.**, Wesonga, P.S., Mukoya-Wangia, S., Njoka, J. T. Status of Fish Farming in Makueni County, Kenya. *Universal Journal of Agricultural Research* 5(1): 61-68, 2017 <http://www.hrpub.org> DOI: 10.13189/ujar.2017.050110
18. S K Mavuti, R M Waruiru, P G Mbuthia, **J G Maina**, J M Mbaria and R O Otieno. Prevalence of ecto- and endo-parasitic infections of farmed tilapia and catfish in Nyeri County, Kenya. *Livestock Research for Rural Development* 29 (6) 2017.
19. Mwangi, J.M, **Maina, J.G.** and Gachui, C.K. Evaluation of fish farming management practices and utilization of rice milling byproducts as fish feeds in Kirinyaga County – Kenya. *International Journal of Fisheries and Aquatic Studies* 2017 5 (6) 191 - 197
20. J.M. Mwangi, **J.G. Maina** and C.K Gachui (2018). Effects of dietary protein levels on performance of African catfish *Clarias gariepinus* in fertilized and unfertilized earthen ponds. *Livestock Research for Rural Development* 30 (3) 2018.
21. Dorcas Lusweti, Joel W. Ochieng, **Joyce G. Maina** and Peter Kenyanjui. DNA evidence for population bottleneck in Victoria Nile perch. *African Journal of Tropical Hydrobiology and Fisheries* (16) 24 - 32 (2018)

22. Evalyn Wanjiru Mwihiya, Paul Gichohi Mbuthia, Gunnar Sundstøl Eriksen, James K. Gathumbi, **Joyce G. Maina**, Stephen Mutoloki, Robert Maina Waruiru, Isaac Rumpel Mulei and Jan Ludvig (2018) Occurrence and Levels of Aflatoxins in Fish Feeds and Their Potential Effects on Fish in Nyeri, Kenya. *Toxins* 2018, 10(12), 543; <https://doi.org/10.3390/toxins10120543>
23. Gelle S.J*, Mbugua P.N and **Maina J.G.** (2018). Evaluation of Management Practices in Layer Chickens and their Influence on Welfare Status in Kabete Sub-County, Kenya. *Open Access Journal of Agricultural Research*. Volume 3 Issue 12. Published Date: December 31, 2018.
DOI: 10.23880/oajar-16000214
24. Kola, Samwel, Kanja, L.W., Mbaria, J. M., Maina, J. G. and Okumu, O. M. (2019). Levels of Mercury in Nile Tilapia (*Oreochromis niloticus*), water and sediments in the Migori gold mining belt, Kenya and potential ramifications to human health.
25. Dr. Samwel Kola, Dr. Laetitia Kanja, Prof. James Mbaria and Dr. Joyce Maina (2019). Mercury in Farmed Fish and Environmental Pollution in Migori Gold Mining Belt. Policy Brief presented to the State Department of Fisheries and Blue Economy.

PAPERS PRESENTED IN CONFERENCES

1. E.W. Mwihiya, J.L. Lyche, P.G. Mbuthia, J.K. Gathumbi, J. Maina, L. Ivanova, S. Uhlig, I.R. Mulei and G.S. Eriksen (2018) Co-occurrence of multiple mycotoxins in fish feed in Kenya. Paper presented at the second mycotoxins conference at Bahari Beach lodge (Mombasa) 24 – 27th June 2018.
2. Shukri G. J, P. N. Mbugua and J.G. Maina (2018). Welfare of layers in Kabete sub-county. In proceedings of the Poultry Workshop, Pride Inn, Nairobi Kenya , 9th March 2018
3. Joyce G. Maina (2018). Characterization of markets for small scale fish farmers in Kenya. Presented as a poster at the Sustainable Blue Economy Conference 26th - 28th November 2018 in Nairobi, Kenya
4. Maina, J.G. (2018). Appropriate feed formulation ingredients and Fish nutrition requirements. Presented at the Aquaculture Stakeholders workshop at La Mada hotel, Nairobi (3rd July 2018)
5. Maina, J.G. (2017). Through the eyes of African Scientists. In proceedings of the USAID sponsored event - Connecting the Dots: Strengthening African R&D, a

dialogue with African Diaspora in the United States" at the Grand challenges annual meeting in Washington, D.C (1st - 4th October 2017)

6. Wakibia, F.W., Mitaru, B.N. and Maina, J.G (2015). Potential of green grams, cowpeas and lablab beans as broiler chicken feed. Kenya's Animal Agriculture: Macro-Trends and Future Prospects. In Proceedings of the Animal Production Society of Kenya Annual Scientific Symposium at Whitesands hotel, Mombasa.
7. Joyce G. Maina, Josphat N. Gichure, Edward G. Karuri (2015). An analysis of fish farming value chain with emphasis to value addition and traceability: case of Kirinyaga County in Kenya. In Proceedings of the Animal Production Society of Kenya Annual Scientific Symposium at Whitesands hotel, Mombasa
8. Mwangi, J. M*, Maina, J.G., Gachuiiri, C.K. (2016). Growth performance of the African catfish (*Clarias Gariepinus*) fed varying dietary protein levels under semi intensive production system. Presented at the 1st East Africa Aquaculture Symposium and Exhibition (EAASE) 2016 at the African Institute for Capacity Development (AICAD) Kenya 23rd - 25 November 2016
9. Mwangi, J.M., Maina, J.G., and Gachuiiri C.K (2015) Effects of Protein levels and Pond Fertilization on Performance of African Catfish (*Clarias gariepinus*) in Kirinyaga County of Kenya. Presented at the Nairobi Innovation Week 5th - 7th August 2015.
10. Mwangi, J.M., Maina, J.G., and Gachuiiri C.K (2015) Evaluation of rice based feed resources and management practices of African catfish (*Clarias gariepinus*) in Ndia Sub-County, Kirinyaga County . Presented at the Nairobi Innovation Week 5th - 7th August 2015.
11. Joyce G. Maina and Josphat N. Gichure (2016). Fish Production, marketing and traceability in Kenya. In proceedings of the First International Conference on Tropical Animal Science and Production (TASP 2016) held on July 26-29, 2016, Bangkok, Thailand.
12. Wesonga P.W, Wangia S.M, Njoka J.T, and Maina J.G. (2016). Profitability of Economic Stimulus Program (ESP) Fish Farming Adopters in Kibwezi, Makueni County, Kenya. In proceedings of the Animal Production Society of Kenya annual symposium Kenya's Animal Agriculture Macro-trends and Future Prospects Kisumu, Kenya. 27-29 October 2016
13. Mwangi J.M, Maina J.G, and Gachuiiri C.K. (2016). Growth Response of African Catfish (*Clarias Gariepinus*) to different protein levels in a Semi- Intensive Production System. In proceedings of the Animal Production Society of Kenya annual symposium Kenya's Animal Agriculture Macro-trends and Future Prospects Kisumu, Kenya. 27-29 October 2016.

14. Mwangi J.M., Maina J.G. and Gachuri C.K. (2016). Evaluation of Fish Farming Management Practices and Rice Milling Byproducts in Kirinyaga County, Kenya. In proceedings of the Animal Production Society of Kenya annual symposium Kenya's Animal Agriculture Macro-trends and Future Prospects Kisumu, Kenya. 27-29 October 2016.
15. Cynthia Nyunja., Maina, J.G., Amimo, J.O., and Junga, J.O (2017). Genetic variation of cultured populations of the African catfish in Kenya. In proceedings of the Animal Production Society of Kenya annual symposium (2017) at Eldoret (5th – 7th April 2017).
16. S K Mavuti., R M Waruiru., P G Mbuthia., J G Maina., J M Mbaria and R O Otieno (2016). Influence of fish farmer management practices on the prevalence of farmed tilapia and catfish parasites in Nyeri county, Kenya. Presented at the proceedings of the 50th Kenya Veterinary Association annual Scientific conference and 16th World Veterinary Day celebrations at the Three Steers hotel in Meru (27th to 30th April 2016)
17. Wesonga, P. S., Maina, J. G., Fish farming as an alternative livelihood in Makueni County. Kenya (2017) Animal Production Society of Kenya (APSK) Scientific Symposium April 5-7, 2017 at Stardust Hotel, Eldoret, Kenya
18. R.M. Waruiru, P.G. Mbuthia., J.G. Maina, J.M. Wairia, K.W. Maina, S.K. Mavuti, I.R. Mulei and R.H. Mdegela (2018). Overview of farmed fish parasites in central Kenya with emphasis on importance and control. Proceedings of the 52nd Annual Scientific Conference and World Veterinary Day celebration 25th - 28th April 2018 at Green Hills Hotel - Nyeri
19. J.M. Mwadime, R.M. Waruiru, P.G. Mbuthia, D.W. Wanja, J.G. Maina, S.K. Mavuti, J. Nzalawahe and R.H. Mdegela (2018). Heavy Neascus species infestation of farmed Oreochromis niloticus in Kirinyaga County, Kenya. Presented at the Proceedings of the 52nd Annual Scientific Conference and World Veterinary Day celebration 25th - 28th April at Green Hills Hotel in Nyeri.
20. S K Mavuti, R M Waruiru, P G Mbuthia, J G Maina, J M Mbaria and R O Otieno (2017). Prevalence And Risk Factors Associated With Parasitic Infections Of Farmed Fish In Central Kenya. Presented at the Joint International Scientific Conference of the Kenya Veterinary Association (KVA) , 16th East, Central, Southern African Regional Meeting of Commonwealth Veterinary Association and 10th Biennial Conference of the University of Nairobi, Faculty of Veterinary Medicine Scientific at Safari Park Hotel, Nairobi, Kenya. 25th - 29th April 2017.
18. Josphat N. Gichure, Joyce G. Maina (2017). Network governance, value addition, gender and traceability in the aquaculture sector. In Proceedings of the 1st All

- Africa Post-harvest congress and exhibition 28th - 31st March at Safari Park hotel, Kenya.
19. Maina, J.G., Mbuthia, P.G., Ngugi, J., Omolo, B., Orina, P., Wangia, S. M., Karuri, E.G., Maitho, T., and Owiti, G. O. (2012).
Effects of the fish farming enterprise and productivity program on fish farming practices in Mwea Division, Kirinyaga County, Kenya. In Proceedings of the Southern and Eastern African Association for Farming Systems Research-Extension (SEAAFSRE) in Pretoria, South Africa (19th – 21st November 2012).
 20. Maina, J.G., Mbuthia, P.G., Karuri, E.G., Wangia, S.M and Ngugi, J. (2012).
Effects of Economic stimulus program on fish production in Mwea Division of Kirinyaga County. Proceedings of the Joint Faculty of Veterinary Medicine 8th Biennial conference and 46th Kenya Veterinary Annual Scientific Conference at Safari Park on 25th – 27th April 2012.
 21. Maina, J.G., Ambuko, J. L., Lopokoyit, M. and Cheminingwa, G.N.(2012)
Teaching and learning approaches that promote the achievement of Vision 2030 for the Agriculture sector. Proceedings of the Joint Faculty of Veterinary Medicine 8th Biennial conference and 46th Kenya Veterinary Annual Scientific Conference at Safari Park on 25th - 27th April 2012.
 22. Ambuko, J., Maina, J.G., Chemining'wa, G.N. , and Lopokoityit M. (2011).
A Paradigm shift in Curricula Development Processes in Public Universities – Towards a responsive and participatory multi-stakeholder approach.
Proceedings of Agro-2011 Biennial Conference, Faculty of Agriculture, University of Nairobi, Kenya (26th – 28th September, 2011).
 23. Cheminingw'a, G. N., Ambuko, J., Maina, J.G., Muiiru, M.W. and Magomere, T. (2011).
Strengthening Capacity of Local Universities to Promote and Teach Rural Innovation Processes. Proceedings of Agro-2011 Biennial Conference, Faculty of Agriculture, University of Nairobi, Nairobi, Kenya (26th – 28th September, 2011).
 24. Waititu, S.M., Nyachoti, M., Maina, J.G., Slominski, B. A and Ochada J.O. (2011).
Application of Enzyme Technology to improve the nutritive value of High-fibre feedstuffs for Non Ruminants. Proceedings of Agro-2011 Biennial Conference, Faculty of Agriculture, University of Nairobi, Nairobi, Kenya (26th – 28th September, 2011).
 23. Njuguna, K.W., Kabuage, L.W., and Maina, J.G. (2011).
Effects of substituting maize with rice-milling by-products in commercial layer chickendiets. Proceedings of Agro-2011 Biennial Conference, Faculty of Agriculture, University of Nairobi, Nairobi, Kenya (26th – 28th September, 2011).
 24. Karimi, N., Wahome, R., and Maina, J., and Kuria P. (2011).

- Effects of Enzymes and Probiotics on growth performance and gastro-intestinal morphology in broiler chicken. Proceedings of the Agro-2011 Biennial Conference, Faculty of Agriculture, University of Nairobi, Kenya (26th – 28th September 2012).
25. Maina, J.G., and Ambuko, J.L. (2011) – Curriculum Development process at the University of Nairobi - Strengths and weaknesses. Proceedings of the International workshop on Interactive Learning Competency for Rural Innovation in Higher Education, Wageningen, Netherlands (7th – 25th February 2011).
 26. Maina, J.G. (2010). Fish production, current status and future trends in a changing Climate. 7th Biennial Scientific Conference, Faculty of Veterinary medicine, University of Nairobi, Kabete, Nairobi, Kenya, 8th - 10th September 2010.
 27. Maina, J.G., Kabuage, L.W. Owiti, C. (2007). The Challenges and Possibilities of integrating fish culture into rice and livestock farming at the Mwea Irrigation scheme in Kenya – Paper presented at the Annual Symposium of the Animal Production Society of Kenya, held in Mombasa on 13 – 15th March 2007.
 28. Maina, J.G., Kabuage, L.W and Owiti C (2005). Integrating Fish Culture into rice farming at Mwea Irrigation Scheme in Kirinyaga District Phase 2: Choice of species, stocking density and potential of local fish species to be used in the control of mosquito larvae – In Proceedings of the AICAD Final Reports Presentation Workshop at the Jomo Kenyatta University of Agriculture and Technology (12th – 14th September 2005).
 29. Kabuage, L.W. and Maina, J.G. (2005). Assessment of Rice Based Feedstuffs for Poultry Production at Mwea Irrigation Scheme. In Proceedings of the African Institute for Capacity Development (AICAD) conference (12th – 14th September 2005) at Jomo Kenyatta Institute of Agriculture and Technology, Nairobi.
 30. Maina, J.G., Beames, R.M., Higgs, D., Mbugua, P.N., Iwama, G., and Kisia S. (2002). The nutritional quality and feeding value of Kenya's omena fishmeal fed to tilapia *Oreochromis niloticus* (L.). Paper presented at the Biennial Scientific Conference of the Faculty of Veterinary Medicine, College of Agriculture and Veterinary Sciences, University of Nairobi, 7th – 9th August 2002.
 31. Maina, J.G., and Mwangi T.K. (2002). Current land tenure system and the feminization of poverty – the case of the Central Kenya highlands. Paper presented at the Biennial Scientific Conference of the Faculty of Veterinary Medicine, College of Agriculture and Veterinary Sciences, University of Nairobi, 7th – 9th August 2002.

32. Maina, J.G. (2002). Aquaculture in Kenya – Past Constraints and Future Prospects. Proceedings of the 2nd Scientific Conference of the Kenya Livestock Technologists Association (KELITA). 10th to 13th September 2002. Nairobi, Kenya.
33. Maina, J.G., Beames, R.M., Higgs, D., Iwama, G., Mbugua, P.N. and Kisia A. (2000). Digestibility, feeding value and limiting amino acids in high-fibre and fibre-reduced sunflower cake fed to tilapia *O. niloticus*. Proceedings of the Canadian Association of African Studies. Edmonton, Alberta, Canada (April 30th – May 4th 2000).
34. Maina, J.G., Mbugua P.N. and Mitaru B. (1992). Effect of Biotin supplementation in broiler chicken: Effect on growth, Feed Conversion Ratio, Hepatic lipid content and plasma biotin levels. In Proceedings of the Animal Production Society of Kenya, Egerton, Njoro. July 1992.
35. Maina, J.G. and Gichohi C.M. (1992). Poultry Production and Marketing in Kenya. In Proceedings of the All Africa Conference on Animal Agriculture. Nairobi, Kenya. November 1992.
35. Maina J.G. (1996). Fish Production Trends in Kenya. Proceedings of the Intensive Aquaculture Workshop. Shefayim, Israel, 9th March – 16th April 1996.

RESEARCH PROJECTS

COMPLETED PROJECTS

1. **Evaluating the Digestibility, Feeding Value and Limiting amino acids in High- fibre and Fibre-reduced Sunflower Cake fed to tilapia *O. niloticus*.**
Funded by Rockefeller Foundation through a competitive grant – The Sub-Saharan African Internship Dissertations Awards. (US \$ 29,000)
2. **Integrating Fish culture into Rice and Livestock farming at Mwea Irrigation Scheme in Kirinyaga district (Contract number AICAD/RD-01).**
Funded by the Japanese International Co-operation Agency (JICA) through the African Institute for Capacity Development (AICAD). Approximate funding was One Million and Eight Hundred Thousand Kenya Shillings 1.8 Million.
3. **Assessment of Rice Based Feedstuffs for Poultry Production in Mwea Division, Kirinyaga District** – Also funded by JICA through the African Institute for Capacity Development (AICAD). Approximate level of funding: (KSH.1.8 Million).
Kariuki, Francis and Maina, J.G. (2011) Participatory Development and Validation of Culture Models of Integrating Fish Polyculture and Livestock into

- Irrigated Ricefields to Enhance Competitiveness of Rice farming in Mwea, Kenya (RU/GRG/10/10-019) (US\$ 60,000. Collaborative project between University of Nairobi and Kenyatta University.
4. **Enhancement of a Sustainable Aquaculture Industry** (UON – Grants (500-653-284). Funded by the National Council of Science & Technology. Total funding is seven million Kenya Shillings for a period of three years (Ksh. 7 Million).
 5. **Strengthening Institutional Capacity of Participatory Action Research in sustainable aquaculture in Kenya.** Funded through the USAID-PEER Science Program US \$ 185,000). Collaborators: University of Nairobi, St. John Fisher University, USA
 6. **Building a Strategic Framework for Aquaculture Education in Kenya.** Collaborative project involving the following partners: Kenya Marine and Fisheries Research Institute, University of Nairobi, Karatina University, Maseno University, University of Eldoret, South Eastern Kenya University (SEKU), Ghent University, Wildlife Training Institute – Naivasha, Commission of University Education (CHE), National Aquaculture Training, Research and Development Centre (Sagana). Funded by VLIR – UON (Total budget 299,874 EUR)

ONGOING PROJECTS

STARTED FEBRUARY 2019

1. **Aquaculture Production and Sustainable Livelihoods in Africa** – Lessons from Uganda and Kenya. Partners: Prof. Richard Vokes, University of Western Australia (Perth), University of Nairobi and Makerere University. Funded under the Australia-Africa Universities Network Partnership Research & Development Fund (PRDF) 2018. (Seed Grant given by Australian government (AUS \$ 20,000) to travel to Australia in July to develop full project for funding.

STUDENTS SUPERVISED

PhD (COMPLETED)

1. Dorcus Lusweti – Low genetic variation in the Lake Victoria Nile perch – PhD Animal Genetics and breeding (UON) – Completed -September 2014
Gender - Woman
2. Paul Wesonga - An analysis of fish value chain under Economic Stimulus Programme in Kibwezi, Makueni County, Kenya. Completed September 2018..
Gender - Man

- 3 Stephen Kitonga Mavuti - Fish production systems and effects of water quality, pollution and parasitism on farmed fish in Nyeri county, Kenya –Completed September 2018.
Gender – Man

ONGOING PhD STUDENTS

4. Dr. Evalyn Mwihia (Supervision in collaboration with Professors from the Norwegian University of Life Sciences)– Prevalence of aflatoxins in fish feeds and their effects on farmed fish in Kenya. Not completed
Gender – Woman
5. John Otieno Okumu - Assessment of tannery beam-house solid wastes as a source of protein for fish feed- Not completed
Gender –Man
6. Jackson Mwangi Muchiri- Evaluation of Compost Heat Recovery as a coping strategy to climate change in fish farming – Not completed

MASTERS STUDENTS (COMPLETED)

1. Njuguna Kamau (2008) (Msc, Animal Production).
Evaluation of rice milling by-products from Mwea Irrigation scheme in layer chicken diets.
Gender man.
2. Samuel Mwangi (2012) (Msc in Agricultural Biotechnology). Centre for Biotechnology and Bioinformatics, College of Biological and Physical Sciences, University of Nairobi. Application of Enzyme Technology to Improve the Nutritive Value of High-Fibre feedstuffs for Non-Ruminants.
Gender - man
3. Lonita Manoa (2012) (Msc Animal Nutrition and Feed Science). College of Agriculture and Veterinary Sciences, University of Nairobi.
Evaluation of dry matter yields and silage quality of six sweet potato varieties
Gender - woman.
4. Karimi Harriet Njeru - Effects of alloenzyme and yeast culture (diamond v xpc) on performance, immune responses, gastrointestinal morphology and intestinal microbiota in broiler chicken (*gallus domesticus*)
(graduated September 2013)
Gender - Woman
5. Kugo Chepchirchir Maureen I56/64376/2010 - Effects of β -mannanase on nutrient utilization and performance of laying chicken - Master of Science degree in Biotechnology, at the Center for Biotechnology and Bioinformatics. (graduated September 2014)
Gender - Woman
6. Winnie okumu - Nutrient digestibility and growth performance of pigs fed diets containing steeped canola meal with or without enzyme supplementation. Master

- of Science degree in biotechnology, at the center for biotechnology and bioinformatics. (Graduated 2014)
Gender - woman
7. Amos K. Kiragu - Pig production systems in Central Kenya and effect of feeding sweet potato silage on performance of grower pigs – Msc Animal Nutrition and feeding. (Graduated 2015) (UON). Gender - Man
 8. Ngwili Nicholas Musyoki – Characterization of fish farming systems in Kiambu and Machakos Counties, Kenya - Msc Livestock Production systems (UON) (Graduated September 2015)
Gender - man
 9. Waikibia Faith Wairimu – Effects of pearl millet and selected grain legumes on growth and carcass performance of broiler chicken – Msc Animal Nutrition and feeding. (Graduated September 2016) (UON, 2014)
Gender - woman
 10. Odede Rezin Ochieng – Assessing use of non-antibiotic growth promoters in chicken broiler production in Kenya - Msc Animal Nutrition and feeding (UON (Graduated sept 2016). Gender - man
 11. Jackson Muchiri - Evaluation of fish farming practices and effects of dietary protein levels and pond fertilization on performance of African catfish (*clarias gariepinus*). (Graduated September 2017)
Gender – man.
 12. Cynthia Nyunja - Morphometric and DNA variation of the African catfish (*clarius gariepinus*) in selected cultured and wild populations in kenya. Graduated September 2017)
Gender – Female
 13. Shukri Jama Gelle - Effects of welfare of laying hens (layers) on production in smallholder poultry farms in Kikuyu Sub-County, Kenya. (Master of Science in Livestock Production Systems) – Graduated September 2018
Gender – Female.
 14. Dr. Samwel Kola. Determination of levels of mercury in Pond Water, Sediment and Tilapia Fish Tissues from the Gold Mining areas of Migori County and Lake Victoria Kenya. Masters of Science in Pharmacology and Toxicology, University of Nairobi. Graduated December 2018.

ONGOING MASTERS STUDENTS

15. Anne Chepkoech (Master of Science in Food Safety and Quality – Department of Food Science, Nutrition and Technology) – Evaluation of factors influencing Food safety in the farmed fish value chain in Kenya – Not completed
Gender – Female

16. Inoti, Dorcus Karwirwa – Effects of calcium dietary source on egg production and egg quality. (Master of Science in Animal Nutrition and Feeding 208). Completed awaiting thesis defence.
Gender – Female.
17. Achikule Alex Azaria Yensuk – Evaluation of factors influencing management and welfare of broiler chicken under small scale intensive production systems in Kiambu County, Kenya. (Msc in Livestock Production systems 2018).
Completed.- awaiting graduation.
Gender - Man

Professional development – Participation in Trainings.

- Facilitating multistakeholder processes and social learning. Wageningen, Netherlands (September – October 2015).
- Mentor(s) – Mentee Relationship in Doctoral Research: Issues, Challenges and Strategies Organized by the Institute of Social Ministry (ISMM) and Carnegie Diaspora Fellowship Program at Tangaza College (3rd August 2018).
- PhD Supervision – Training of Trainers at Central Catering Unit (CCU), University of Nairobi. Organized by Research, Production and Extension Section, UON (February 15th – 19th 2016)
- Learning Labs organized by the Agriculture, Nutrition and Health (ANH) Academy (ANH) (20th – 21st June 2016) in the Hilton, Addis Ababa, Ethiopia.
- International workshop on Sustainable Aquaculture in Southern and Eastern Africa at Aquaculture Research and Development Center, Kajjansi, Kampala, 5th – 8th February.
- Southern and Eastern African Association for Farming Systems Research-Extension (SEAAFSRE) - Eleventh Regional Conference in Pretoria, South Africa, (19 – 21st November 2012)
- Policy Dialogue to Identify Areas of EU-AU Cooperation under “*Improved Technologies for Increasing Production in Crops, Livestock, Fisheries*” Workshop, 25th – 26th October 2012, Kibo Palace Hotel, Arusha, Tanzania.
- Outreach project planning and Review meeting organized by the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) in Entebbe, Uganda (19th – 21st March 2012).
- Developing Interactive Learning Competency for Rural Innovation in Higher Education in Wageningen, the Netherlands (7th – 25th February 2011).

- Academic Integrity and Excellence Training Workshop (5th – 6th May, 2011) at the Kenya Institute of Education, Nairobi, Kenya.
- Five workshops organized through the Edulink funded project on ‘Strengthening of university capacity for promoting, facilitating and teaching rural innovation processes’ between September 2008 and May 2009.
- NEPAD Universities Dialogue Meeting 28th – 31st July 2009, Accra, Ghana.
- Value Links, Introductory Training Seminar in Naivasha (Organized by GTZ, Kenya) 26th – 30th July 2010.
- Kenya Agricultural Productivity and Agri-business Project (KAPAP) Workshop to formulate Agricultural Products Value chain based Framework for Research Call. 15th – 19th September 2010 in Embu, Kenya.
- Gender Mainstreaming in Agricultural Research. (Asareca gender mainstreaming project of policy analysis and advocacy programme) Laico Regency, Nairobi. 23rd to 26th November 2010.

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

Animal Production Society of Kenya

- Member of the Executive Committee in charge of Universities and gender (between 2015 – 2017)
- Member of the organizing committee for the “All Africa Conference on Animal Agriculture”, held in Nairobi, Kenya, in 1993.

COMMUNITY SERVICE

- Member of the School Management Board at **Mugoiri Girls High School** in Muranga district.
- Previously served in the Board of Governors at **Moi Forces Academy**, Nairobi.

REFERENCES

Prof. Faith Maina

Texas Tech University, College of Education
 Department of Curriculum and Instruction, 3008 18th Street, Lubbock, TX 79409-1071.
 Tel. 806-834-7808. Email: faith.maina@ttu.edu

Prof. Barnabas Mitaru

Department of Animal Production
 College of Agriculture and Veterinary Sciences
 University of Nairobi – P. O. Box 29053 – 00625, Nairobi Email: rad@uonbi.ac.ke