CURRICULUM VITAE

Vitalis Kalor Ogemah

1. Personal Information

Current Address: Masinde Muliro University of Science and Technology

School of Agriculture, Veterinary Sciences and Technology

(SAVET)

P.O. Box 190-50100 Kakamega, Kenya.

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Permanent Address: P.O. Box 67 – 50409 Nambale, Kenya.

Email: vogemah@yahoo.com OR vogemah@mmust.ac.ke

Date of Birth: 9th June 1967

Sex: Male
Marital status: Married
Nationality: Kenyan

2. <u>Professional Statement</u>

I am an expert and professional with qualification and experience in Agriculture. My areas of expertise span a wide range of agricultural fields including crop postharvest management, storage pest management, sustainable agriculture and sustainability and climate change adaptation. My many years working with farmers and field research have also perfected my knowledge in general agronomy, agricultural marketing, agricultural extension and ICT innovations in Agriculture. My expertise also hinges very much on experience in leadership, administration and management.

3. Education

2001 – 2004 **Ph. D. (Agriculture)**.

Faculty of Agriculture and Horticulture, Humboldt University of Berlin, Germany $\underline{\text{Thesis}}$: Influence of neem tree derivatives on the biology and behaviour of P. truncatus and its predator, T. nigrescens

1993 - 1998 <u>M.Sc. (Horticulture)</u>.

Department of Crop Science, University of Nairobi, Kenya.

<u>Thesis:</u> Effect of diammonium phosphate and deflowering on yield and quality of cowpea leaves

1988 - 1991 **B. Sc.(Agriculture)** University of Nairobi

Faculty of Agriculture, Nairobi, Kenya

4. Employment

From August 2014 to date—Senior Lecturer, Masinde Muliro University of Science and Technology, School of Agriculture, Veterinary Sciences and Technology

- Chairman of Department of Agro-Industrial Technology (2014 todate)
- Acting Dean, School of Agriculture, Veterinary Sciences and Technology (SAVET)
 (2015-2016)
- Teaching both undergraduate and graduate students
- Lead Lecturer –Agronomy and grain post harvest
- Supervision of students research projects

• Conducting research, extension and outreach

From February 2010 to August 2014 – Lecturer, Masinde Muliro University of Science and Technology, School of Agriculture, Veterinary Sciences and Technology

- Teaching both undergraduate and graduate students
- Lead Lecturer –Agronomy and grain postharvest
- Supervision of students research projects
- Conducting research, extension and outreach
- Coordination of faculty examinations and faculty graduate studies

From April 2008 to February 2010 – Principal, SACRED Training Institute, School and Agriculture and Biotechnology, Moi University

- Overall management of the college, supervision teaching and non-teaching staff
- Supervision of academic programmes, curriculum development and review
- Development and implementation of research programmes
- Coordination of collaborative training programmes with Moi University
- Lecturing, conducting research and supervising student projects

From: September 2006 to April 2008 - Lecturer, SACRED Training Institute, School of Agriculture and Biotechnology, Moi University.

- Head of department of Agricultural Sciences
- Lecturing and conducting research in the department
- Supervision of department activities including academic programmes, examinations and projects
- Supervision of student research projects and coordination of student field attachment

From June 2004 to June 2008 Grain Quality Expert and Coordinator, Maize Marketing Project - Sustainable Agriculture Centre for Research Extension and Development (SACRED Africa)

- Coordination of the activities of the maize marketing project.
- Coordination of crop post-harvest research, development and testing of post-harvest tools
- Conducting of grain quality related research, grain quality assessment and monitoring
- Development and management of project budgets and work plans and reporting to project donors

2000: Agricultural Supervisor- Food for the Hungry International, Marsabit Food Security Programme

- Co-ordination and technical roles for agricultural extension, and crop production, protection and marketing
- Project planning, implementation, monitoring and evaluation
- Networking and information sharing with other stakeholders
- Developing teaching aids for on-farm training

1999-2000: Lecturer –Bukura Agricultural College, Ministry of Agriculture, Kakamega district

- Training of all the trainees in the departments of Horticulture and Agronomy
- Conducting academic duties of the departments
- Conducting research and supervising student research projects, field attachment and technical reports
- Member of the Training and Capacity building committee

1998-1999: Principal-Farmers Training Centre, Ministry of Agriculture, Busia district

- Responsible for administrative and technical matters as far as the running of the day to day activities of the institution are concerned.
- Supervising all the technical and administrative staff to ensure satisfactory agricultural extension and training of farmers.
- Planning and implementation of crop and livestock programmes for the centre.
- Recommending to the Ministry the most appropriate management strategies for efficient, economic and sustainable production systems.

1993-1997: Horticultural Crops & Crop Protection Officer, Ministry of Agriculture, Busia district

- In charge of all matters related to farmers' horticultural extension
- In charge of all matters related to crop protection
- Organising district exhibits at provincial and national Agricultural Society of Kenya (ASK) shows

5. Previous Research Engagements, Grants and Consultancies

2018-2022 Practice Oriented Education for Universities in Western Kenya (PROUNIEDUWEK) – Germany Academic Exchange Programme

2020-2021 Constraints of the Groundnut Value Chain and Interventions for Value Addition in Western Kenya – University Research Fund (URF)

2019 Promoting African Indigenous Vegetables and Poultry Integration for Improved Food Security, Nutrition and Income of Small Holder Farmers in Western Kenya. NRF-KALRO-Agro-Kenya

2018 -2019 Product based resource mapping for Kakamega County under JICA's One Village One Product (OVOP) for Niky Cosultants

2016-2017 Mapping and analysis of projects in Sustainable Land Management in Kenya, IASS, Potsdam Germany, 2016

2016 Convened TICAD VI side event "Japan's Contribution to Capacity Building of Agricultural Researchers in Africa"

2015 - Managing Postharvest Losses for Improved Food Security and Resource Conservation in Western Kenya – UNU-IAS, 2015

2014 – Managing Postharvest Losses for Improved Food Security and Resource Conservation in Western Kenya – UNU-IAS, 2014

2013 – Prioritization of climate change adaptation options for farmers in Western Kenya-UNU-ISP, 2013

2012 – Validation of farmers' methods of postharvest pest management in western Kenya – UNU-ISP, 2012

2011 – Evaluation of pests, diseases and post harvest factors affecting productivity of Taro by Smallholder farmers in Kenya – University Research Fund

2009 – Facilitating Best Practices for Farmers Collective Marketing in Kenya and Uganda-ASARECA

 $2009-Life\ Long\ Learning\ for\ Improved\ Livelihoods\ for\ Farmers\ in\ Western\ Kenya-Commonwealth\ of\ Learning$

- 2006 Feasibility Study for Establishment of a Farmers Company in Siaya District Kenya Consultancy for Millennium Villages Project
- 2006 Strategies for coping with produce surplus at the Millennium Villages in Yala division, Siaya district, Kenya Consultancy for Technoserve
- 2006 Evaluation of Farmers Collective Marketing by AT Uganda- Consultancy with AT-Uganda
- 2005 Improving Collective Marketing of Potatoes and Groundnuts in Eastern Uganda-Consultancy-AT Uganda
- 2005 –Elucidating mechanism for enhancing Smallholder Marketing of maize in Western Kenya-Rockefeller Foundation funded project
- 2003 Maize Marketing Movement-Rockefeller Foundation funded project
- 2001 Influence of neem derivatives on the biology and behavior of the Larger Grain Borer (LGB) *Prostephanus truncatus* and its predator *Teretrius Nigrescens*-PhD Research-DAAD

6. Publications – Journals

Mbakahya G.M., Wandahwa P., Ogemah V. and Ndiema A.C. (2020). Method Approach to Social Network Analysis as an Analytic Tool for Agricultural Information Sharing Among Farmers in Western Kenya. International Journal of Science, Environment and Technology 9(4): 625 – 637. ISSN 2278-3687 (O)

Ogemah, V. Naluyange, V. and Nyandiko N. (2020). Prioritization of Adaption Options to Climate Change for Smallholder Farmers in Western Kenya. Climate 2020-The Worldwide Olline Climate conference. Bonn, Germany

Kageha CO., Chesambu, A., Ogemah, V., Adego, AK (2019). Access and Use of Electronic Information Resources by Small-Holder Farmers In Busia County, Kenya. Researchjournali's Journal of Agriculture 6(7)': 1-8.

Kirongo, C., Omieno, K., Mutua, M, Ogemah, V. (2019). Plant Stress Detection Accuracy Using Deep Convolution Neural Networks. International Journal of Scientific Research in Computer Science, Engineering and Information Technology 5(4): 263-270. ISSN: 2456-3307.

Makahya, GM, Ogemah, V. and Wandakhwa P. (2019) Social Network Analysis: How Social Networks Could Catalyze Social Learning and Knowledge Transfer among Farmers in Busia County. Journal of Science Technology Education and Management (J-Stem) 8(1) 333-346

Tailor, A., Ogemah, V., Murithi, F., Mwangi, P., and Beintema, N.M. (2018). Factsheet on capacities in agricultural higher education: Masinde Muliro University of Science and Technology, Kenya School of Agriculture, Veterinary Sciences and Technology. Washington, DC: Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) and International Food Policy Research Institute (IFPRI). http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/132951

Obonyo, SA., Ogemah, V., Simiyu, RN. (2018). Effectiveness of Sorghum Farming in Addressing Household Food Security in Nyakach Sub-County of Kisumu County, Kenya. International Journal of Management and Commerce Innovations 6(2): 85-96. ISSN 2348-7585

Rono, VK., Ogemah, V. and Chesambu A. (2018). Factors Affecting Adoption Of Hermetic Bags Technology Among Smallholder Farmers In Busia County, Kenya. International Journal of Innovative Research and Advanced Studies (IJIRAS) 5(3):305-322

- Ndiema, A., Ogemah, V. and Kaditi, BS (2018) Common Bean Insect Pest And Disease Identification Techniques And Management Practices By Farmers In Teso North And Bungoma West Of Western Kenya. International Journal of Innovative Research and Advanced Studies (IJIRAS) 5(8):78-83
- Ogemah, V. (2017). Sustainable Agriculture: Developing a common understanding for modernization of agriculture in Africa. Arican Joournal of Food, Agriculture, Nutrition and Developemnt 17(1):11673-11690. ISSN 16845374.
- Ememwa, IK, Were, H., Ogemah, V., obiero, H. and Wekesa, M. (2017) Effect of modified spacing arrangements, fertilizer use and legume intercrop on prevalence of cassava brown streak disease in Western Kenya. African Journal of Agricultural Research 12(44):3181-3888. ISSN 1991-637X
- Mukoye, Benard & Were, Mariam & Osogo, Aggrey & Mangeni, Bonphace & Anteng'a Nyamwamu, Paul & Muoma, John & Winter, Stephan & Were, Hassan & Ogemah, Vitalis. (2016). Occurrence and Distribution of Begomoviruses Infecting Cassava in Western Kenya. Plant. 4. 10.11648/j.plant.20160406.18
- Wekesa, M. W., Were, H.K., Ogemah, V., Woomer, P.L. and Ememwa, I.K.(2016). Effects of agronomic technologies on cassava mosaic disease and Cassava yields in western Kenya. Journal of Current Agricultural Research 4(12)
- Ogemah, V. (2016) Contribution of Masinde Muliro University of Science and Technology tocapacity building of agricultural researchers. RUFORUM Working Document Series No. 14 (1): 205-211. ISSN 1607-9345.
- Were MN, Mukoye, B. Osogo, AK, Mangeni, BC, Nyamwamu, PA, Ogemah, VK, Muoma, JV, Winter, S and Were HK (2016). Occurrence and Distribution of Begomoviruses Infecting Cassava in Western Kenya. Plant 2016; 4(6): 108-113, ISSN 2331-0677.
- Tarus. E, Ogemah V, Ndiema. A, Kipngetich B (2015) Contribution of ICT to Extension Service Delivery for Horticulture Farmers in Uasin Gishu County, Kenya.
- Kariaga, P., Kariaga, M., Ogemah, V and Nyando, V. (2014) Education for Sustainable Development: The case of Masinde Muliro University of Science and Technology. The Southern African Journal of Environmental Education 29:245-259, ISSN 8010-0333
- Ogemah, V and Nyando, V. (2013) Sustainable Agriculture Concept in Modern Horticultural Production. Horticultural Association of Kenya Workshop, Muranga University of Science and Technology, 3rd -6th December 2013.
- Ogemah, V. Reichmuth, C. and Buttner, C. (2013). Feeding Deterence of neem oil on the larger grain borer (LGB). Proceedings of the 1st International Conference on Pesticidal Plant Technologies, Duduvile, icipe, Nairobi, Kenya, 21st-24th January 2013. Vol. 1 112-116
- Keya, N.C.O., Ogemah, V., Wawire, P., Wamocho, L. (2013). Kenya Sugar Industry: Current status. East African Journal of Engineering, Science and Technology 1(2):101-121.
- Nyukuri,, R.W, Kirui, S.C., Wanjala, F.M.E., Ogemah, V. and Cheramgoi, E. (2013) Effect of varying population and feeding preferences of *Helopeltis schuotedeni* Reuter (*Hemiptera: Meridae*) on parts of tea shoot (*Camellia sinensis* Kuntze) in Kenya. Journal of Food Science and Technology Vol.1 (1), pp.1-5, February 2013. ISSN 2328-8248
- Kiptarus, E., Nabiswa, F., Kiongera F., & Ogemah, V. (2013) Assessing the Utilization of Value Addition as a Reengineering Strategy on Livelihoods of Farmers in Keiyo District, Kenya. International Journal of Agribusiness, Innovation and Rural Development Vol. 1 No. 1 May 2013

Kiptarus Edwin. Nabiswa, F. Kiongera, F. and Ogemah, V. (2012). Agricultural Technology and Diversification as Reengineering Strategies and Livelihood of Farmers in Keiyo District, Kenya. Journal of Technology & Socio-Economic Development (JTSED)

Mukhwana, E.J., Ogemah, V. and Odera, J. (2012). Lessons from Cereal Banking in Western Kenya. Sustainable Agriculture Centre for Research Extension and Development in Africa. FAO Workshop Reports. Retrieved from:

http://www.fao.org/fileadmin/templates/esa/Workshop_reports/Smallholders_2012/Presentations_2/SACRED_Africa_Pull_Model.pdf

Ogemah, V., Reichmuth, C., Buttner, C, Ayiecho, P.O. and Keya,N.C.O. (2012). Reproduction Inhibition Effects of Neem Products on the Larger Grain Borer (Prostephanus truncatus) (HORN) in Stored Maize Grains. Egerton J. Sci. & Technol. Volume 12: 100-112

Ogemah, V.K., Mukhwana, E. J., Odera, J.T., Nyando V. V., and Kuloba, M.M. (2011). Quality Factors Affecting Maize Marketing by Small Scale Farmers in Western Kenya. Agro2011 Inaugural Biennual Conference, 27th -29th September 2011, Nairobi, Kenya

Ogemah, V., Reichmuth, C., Buttner, C., Ayiecho, P.O., Keya, N.C.O. (2011). Effect of neem products on population increase of the maize storage pest, Larger Grain Borer (*Prostephanus truncatus*) (HORN). 6th Egerton University International Conference held between 21st and 23rd September 2011, Egerton, Kenya.

Mukhwana, E.J., Sikuku, D.N. and Ogemah, V.K., (2005). Improving Small Holder Marketing of Potatoes and Groundnuts in Eastern Uganda. Consultancy Report, Final Technical Report CPP R8435 (ZA 0653) & R8442 (ZA0666). Appendix 5. Bungoma: Sustainable Agriculture Centre for Research, Extension & Development (SACRED)/AT-Uganda..

Ogemah, V.K., Waqaas, W., Reichmuth C. and Buttner C. (2004). The antifeedant effect of neem oil on *Prostephanus truncatus* larvae and adults. Pakistan Entomologist, 26:2. pp 17-24

Ogemah V.K. (2003). Influence of neem products on the biology and behaviour of the larger grain borer *Prostephanus truncatus* and its predator *Teretrius nigrescens*. PhD thesis, Humboldt University.

Ogemah, V.K., Reichmuth, Ch., and Buttner, C., Adler, C. (2003). Effect of neem oil on the ability of *Teretrius nigrescens* to control the larger grain borer, *Prostephanus truncatus*. International Organisation for Biological and Integrated Control of Noxious Animals and Plants Bulletin (IOBC/WPRS Bulletin), 27:9. pp. 137-146.

Ogemah, V.K., Reichmuth, Ch., and Buttner, C. (2002). Effect of NeemAzal® and other neem products on mortality, fecundity and frass activity of the larger grain borer *Prostephanus truncatus* (HORN) (Coleoptera: Bostrichidae) infesting maize. Advances in Stored Product Protection. Proceedings of the 8th International Working Conference on Stored Products Protection, pp. 588-595.

Ogemah, V and Reichmuth Ch. (2002). Influence of Neemazal and other neem products on Prostephanus truncates infesting maize. 53. Deutsche Pflanzenschutztagung, 16-19 September 2002. Mitteilung aus der Biologischen Bundesanstalt für Land und Forstwirtschaft, Berlin-Dahlem.

Ogemah, V. (1998). Effect of fertiliser application, deflowering and plant age on yield and quality of cowpea (Vigna unguiculata) leaves. MSc. Thesis, University of

7. Publications;- Books and Book Chapters

Kariaga, P., Kariaga, MG. and Ogemah, V. (2015). Education for Sustainable Development: The Case of Masinde Muliro University of Science and Technology (MMUST). **In:** United Nations Environment Programme (2015) Mainstreaming Environment and Sustainability in African Universities: Stories of Change. ISBN: Available at: https://wedocs.unep.org/20.500.11822/11265 (Accessed: 15 May 2022)

Mukhwana E.J., Nyongesa M. and Ogemah, V. (2005). Facilitating Small Scale Farmer Collective Marketing Activities in Africa: The case of cereal banks in Kenya. SACRED Africa, Nairobi Kenya (43 pp)

8. Other Trainings and Workshops

- Final Workshop of the DAAD funded Project ProUniEduWek, Brandenburg, Germany 2021
- MMUST -Cambridge Plant Molecular Biology Lab Training Workshop, 5-9 July 2021, MMUST
- Integrity Assurance Officer's Course 3-7 May 2017. JOOUST
- One Village One Product Concept Training Workshop, JICA, Golf Hotel, Kakamega, Kenya 2018
- Uality Management Systems Documentarion and Risk Management. Bureau Veritas.
 3-5 October 2018. MMUST
- FAO Case Study Methodology for Food Loss Analysis. FAO Online Course, 2018
- Discipline Management and Industrial Relations for Managers , Federation of Kenya Employers. Kakamega Kenya. 2016
- Training on Gender by African Women in Agricultural Research and Development (AWARD) 5th RUFORUM African Higher Education Week and Biennial Conference, Cape Town, SA, 2016
- Sustainable Land Management Practices in western Kenya: Lessons learnt and Future directions, IASS, Kisumu, Kenya, 2016.
- Certificate in Sustainable Agriculture United States Department of Agriculture (USDA) 2015
- Enhancing Capacity in Kenya to quantify greenhouse gas emission reductions from climate-smart agriculture, Kisumu Kenya. 2015.
- University Multiplication Training Workshop on Curriculum Development and Review for Public Universities in Kenya; MMUST, 2014
- Scaling-up of Sustainable Land Management (SLM) in the Highlands of East-Africa, Arusha Tanzania, 2013
- Summer school Training in Molecular Techniques for Plant Disease Diagnosis. DAAD-MMUST- DSMZ-MMUST, Kakamega, 2012
- Client Oriented Breeding and Participatory Plant Breeding Training Workshop, EU/ACP –Kenyatta University, Nairobi, Kenya, 2012
- TOT Climate Smart Agriculture: Regional Course on Land-Water Management: Towards Climate Smart Agriculture AICAD- WBI-JICA-Juja, Kenya, 2012
- Intellectual Property rights and Patenting Training, Masinde Muliro University of

Science and Technology, Kakamega, Kenya, 2011

- Fundamentals of Web Applications Training Course, Masinde Muliro University of Science and Technology, Kakamega, Kenya 2010
- · Client Oriented Breeding Training Course: Developing Capacity for Participatory Plant Breeding to Mitigate Low Crop Productivity and Poverty for Food Security, EU/ACP Kakamega, Kenya, 2010
- · Capacitate East Africa Training Course on Networking for Scientists EU/ACP Kampala, Uganda, 2010
- · Workshop on African Educational and Training Institutions of Sustainable Agriculture and Rural Development-Misereor Baraka Agricultural college 2008
- · Board of Governors training on cooperate management-TAABCO Consultants, Nakuru 2008
- · Financial Management for Non-Financial Managers- TAABCO consultants, Thika 2007
- \cdot How to write a convincing proposal, technical paper and for non-technical readers, IFPRI, 2006
- · Strategic Planning Training Workshop, Participatory Development Consultants, Nairobi, 2005
- Introduction to Computers, Vision Computer College, Nakuru, 1998
- Safe and Effective Use of Pesticides, Safe Use Project, Busia F.T.C. 1998
- How to Grow and Use Neem, 1997. ICIPE.
- Integrated Pest Management in Banana, 1997. ICIPE.
- Participatory Monitoring and Evaluation, 1997. Ministry of Agriculture.

9. Student Supervision to Completion

PhD Students - 2

Masters students - 20

10. Thesis Examination

PhD theses 6 Masters theses 33

11. External Examination

Appointments

- 1. Kenyatta University (2021 todate)
- 2. Kibabii University (2020 todate)

Theses Examinations

- 1. Egerton University 2 (Masters and PhD)
- 2. Kenyatta University 1 (Masters)
- 3. Kibabii University 1 (Masters)

12. Journal Reviewer

- 1. African Journal of Food, Agriculture, Nutrition and Development (AJFAND)
- 2. International Journal of Applied Agricultural Sciences
- 3. Science Publishing Group

13. Professional Membership

Assistant Secretary-Pesticidal Plant Technologies Network

(PEPTEN)

Member-Horticultural Association of Kenya Member-Kenya Society of Agricultural Professionals Member DAAD Scholars Association

Communities of Practice

Developing Local Extension Capacity (DLEC) Community of Practice Food Loss Reduction Community of Practice FAO E-Agriculture Community of Practice

Community Service

Member, Task Force on Mumias Sugar Assets Management County Manufacturing Policy Review Organization of Kakamega AgroExpo Member Regional Centre of Expertise (RCE) Kakamega

14. Computer literacy-

Windows and Networking operations, MS Office, SPSS, SAS, Stata, Sigma Plot, Table- Curve, Basic web design skills and Internet.

15. <u>Languages</u>

English, Swahili, Luhya:- excellent reading, writing and spoken German:- fair reading, writing and spoken

16. Referees

1. Prof. L.S. Wamocho

Masinde Muliro University of Science and Technology

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2. Prof. Hassan Were

Dean, School of Agriculture, Veterinary Sciences and Technology Masinde Muliro University of Science and Technology P.O. Box 190-50100, KAKAMEGA, Kenya

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3. Prof. Joseph Gweyi

Kenyatta University

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Signed:

Vitalis Ogemah (PhD)