

## **CURRICULUM VITAE**

**DR. CATHERINE NKIROTE KUNYANGA, BSc.  
(Hons) (UoN), MSc (UoN), PhD (UoN)**

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### **I. PERSONAL DATA:**

<b>Name:</b>	Dr. Catherine Nkirote Kunyanga
<b>Nationality:</b>	Kenyan
<b>Place of birth:</b>	Nairobi County, Kenya
<b>Gender:</b>	Female
<b>Religion:</b>	Christian
<b>Language:</b>	English, Meru and Swahili
<b>Address:</b>	P. O. Box 4420-00100, Nairobi, Kenya. Tel: +254722873357 Email: nkirotekatie@yahoo.com <a href="mailto:cathyagriprojects@gmail.com">cathyagriprojects@gmail.com</a> Twitter:@nkirotekatie Linkedin: Catherine Kunyanga Facebook: Catherine Kunyanga

## **II.PERSONAL PROFILE**

- Holder of a valid driving licence class **BCE**.
- Excellent computer and presentational skills.
- Experienced in project proposal writing and budget preparations for institutional funding.
- Excellent in data analysis and interpretation.
- Capacity for original work, a strong character and concern for critical problems in the society, especially in the areas of technology, nutrition and health.
- Responsible, trustworthy, hardworking, team player, leader, result oriented and ability to work with minimum supervision.
- Ability to prioritize tasks, quick learner and good communication skills.

## **III.EDUCATION HISTORY**

- **2009-2011:** Doctor of Philosophy (PhD),  
Food Science and Technology,  
University of Nairobi/University of Hohenheim
- **2003-2006:** Master of Science (M.Sc.),  
Food Science and Technology,  
University of Nairobi  
**Distinction**
- **1998-2002:** BSc. Food Science and Technology,  
University of Nairobi  
**First Class Honors**
- **1993-1996:** Kenya Certificate of Secondary Education (KCSE)  
**Grade A-**
- **1984-1992:** Kenya Certificate of Primary Education (KCPE)

## **IV.ACADEMIC /PROFESSIONAL POSITIONS HELD**

2018 February - to date: Senior Lecturer

Main job responsibilities include:

**Teaching:**

- Teach undergraduates as specified by head of department, continually up-date lecture, practical and tutorial material.
- Initiate and develop courses that are relevant to the needs of the country and are responsive to emerging global challenges.

- Mark examinations scripts or other material as required by the university.

**Research:**

- Undertake research, publish scholarly articles, books/chapters and produce professional reports.
- Actively participate in conferences, workshops and departmental journal club.
- Supervision of undergraduates and post graduate students on their research projects

**Administration:**

- Invigilate university exams and continuous assessment tests.
- Maintain necessary records; participate in departmental marketing / fundraising activities.
- Serve in department, faculty, college and university committees as appropriate.

**2011 February- 2018:** Lecturer,  
Food Science, Nutrition and Technology  
Faculty of Agriculture, University of Nairobi

**2010 Feb-2011 Feb:** Tutorial Fellow,  
Food Science, Nutrition and Technology  
Faculty of Agriculture  
University of Nairobi

**2008 Oct. -2010 Feb:** Part-time Lecturer,  
Food Science, Nutrition and Technology  
Faculty of Agriculture  
University of Nairobi

**2006 Oct.-2008 Feb:** Technical Nutrition Manager  
Bell Industries Limited

**Duties and Responsibilities**

- Formulation and standardization of supplementary food products.
- New product development and research.
- Conducting random in-process checks.

**2005 March-2006 June:** Research Assistant  
Food Research Office  
University of Nairobi

**Duties and Responsibilities**

- Laboratory analysis of food samples- Microbiological and chemical analysis.
- Organizing seminars, workshops and conferences.
- Proposal writing and report write ups.

**2004 Aug-2004 Dec:** Research Assistant - Sorghum & Millets Food and Feed Systems Network (SORMIFFS)  
University of Nairobi

**Duties and Responsibilities**

- Research in ASARECA projects on sorghum and millet production, processing and utilization in Eastern and Central Africa.
- Development of proposals and report writing.

**2003 June-2003 October:** Research Assistant  
Population Services International (PSI)

**Duties and Responsibilities**

- Researched on knowledge, attitude and practice of various tribes with regards to health issues like Malaria, Family Planning, HIV/AIDS and water treatment.

**2003 Feb-2003 May:** Quality Control technician  
Unga Group Limited

**Duties and Responsibilities**

- Laboratory analysis and grading of cereal products like flours.
- Quality control (GMP, ISO & HACCP).
- Conducting random in-process checks.

**V.POSITIONS OF RESPONSIBILITY HELD**

- Regional coordinator for University of Nairobi in the Food Security Centre (FSC) and the University of Hohenheim, Germany sponsored by DAAD through the Federal Ministry of Economic Cooperation and Development (BMZ).
- Head of Section, Food Chemistry, Department of Food Science, Nutrition and Technology, University of Nairobi, 2014 - to date.
- Coordinator, Industrial projects, BSc. Food Science and Technology programme, University of Nairobi.
- Senator, Faculty of Agriculture Representative, University of Nairobi (2012 - to date).
- Faculty of Agriculture Postgraduate Studies Committee member, Department of Food Science, Nutrition & Technology Representative (2013-2018).

- Acting Chair, Department of Food Science, Nutrition and Technology, February to April, 2016.
- Committee Member, College committee on National Values and National Cohesion: Capacity building on corruption prevention, ethics and integrity, CAVs, UoN.
- Member Faculty Sub-committee on Undergraduate Studies Admission
- Member, College committee for UoN Strategic Plan implementation
- Appointed as College National Values Champion, CAVS, 2016
- ALUMNI coordinator, Faculty of Agriculture, University of Nairobi, 2015 to-date.
- Patron, Mentorship of Professional Organizations in the Faculty of Agriculture, Mentor and Chair of AFOSTEC, DFSNT.
- Committee member, Mentorship committee, Faculty of Agriculture
- Committee member, College committee for the Nairobi Innovation Week, College of Agriculture and Veterinary Sciences, 2015-2016.
- Hon. Secretary and Deputy Secretary, Faculty Club House, University of Nairobi, 2016 - 2018
- Technical committee member for Kenya Bureau of Standards (KEBS) in development of standards for processed cereals, pulses & legumes, meat and & meat products, soy textured products.
- Instructor in Experiential Field Training Program on Sustainable Land Use Management with Wangari Mathai Institute in Collaboration with the University of Copenhagen.
- Committee member, College Plagiarism Committee, CAVS.
- Chair and Vice-Chair of Board of Management in two high schools in Meru County for mentorship of young girls.
- Chairman, Ray of Hope Kenya (ROHK), for social outreach in the community.
- Interim Deputy Secretary, Faculty Club House, University of Nairobi (2011-2012)
- Industrial Attachment at Brookside Dairies Limited. (08/2001-10/2001).
- Polling clerk with The Electoral Commission of Kenya. (05/1997-12/1997).
- Captain of University of Nairobi's women soccer team (1998-2002).
- Laboratory Captain Nkuene Girls High School (1994-1996).

## **VI.MEMBERSHIP IN PROFESSIONAL SOCIETIES**

- Institute of Food Technologists (IFT), USA.
- American Society for Microbiology, USA
- Kenya Institute of Food Science and Technology (KIFST)
- Kenya Society of Microbiologists (KSM), Kenya.
- Tiana Professional and Business Forum Association, Kenya.
- Association of Food Scientists and Technologists, Kenya.
- African Women for Biosciences Forum (AWfB)

## **VII.SCHOLARSHIPS, AWARDS AND GRANTS:**

- 2017:** Local organizing committee member and Chairman of the Postharvest Technologies and Innovations Challenge appreciation in the 1st All Africa Postharvest Congress and Exhibition “Reducing postharvest losses: Sustainable Solutions for Africa”, 2017 held on 28th to 31 March, 2017 at Safari Park Hotel, Nairobi, Kenya.
- 2015:** Australia Awards Fellowship
- 2009:** DAAD Scholarship (PhD research in Germany - University of Hohenheim, Stuttgart).
- 2008:** DAAD Scholarship (PhD studies- University of Nairobi)
- 2003:** University of Nairobi Scholarship for Master of Science Degree.
- 1996:** Best overall student, Nkuene Girls High School.
- 1995:** Best overall Students Congress in Science and Technology.

## **VIII. PROFESSIONAL COMPETENCES AND TRAININGS:**

- Trainer and instructor of workshop on Pedagogy, Andragogy and mentorship training programme for Centre for Pedagogy and Andragogy (CEPA) on 15<sup>th</sup> - 17<sup>th</sup> January, 2019 targeting lecturers from the College of Architecture and Engineering (CAE), University of Nairobi
- Trainer and instructor of workshop on Curriculum Development/Review and Constructive Alignment for Centre for Pedagogy and Andragogy (CEPA) on 31st October- 2nd November 2018 targeting lecturers from the College of Humanities and Social Sciences, University of Nairobi
- Organizer and coordinator of short course training on “Role of Technology, Policy Advocacy and Extension in addressing Food security” held on 10-12<sup>th</sup> October 2018 at the 844 building in the College of Agriculture and Veterinary Sciences, University of Nairobi.
- Organized the “Meat Festival Extravaganza”: Reducing Losses And Adding Value (Reload) under “Reduction of Postharvest Losses and Value Addition in East African Food Value Chains” project sponsored by the Federal Ministry of Education and Research (BMBF) in Germany.
- Organizer and coordinator of Regional Workshop for Food and Nutrition Security on “Youth and Innovation Summit: Sustainable Solutions towards ZERO Hunger in Africa” held on 25th-26th October, 2018 at the University of Nairobi in conjunction with the Food Security Center (FSC) of the University of Hohenheim in Germany and EXCEED (“Higher Education Excellence in Development Cooperation”), sponsored by DAAD.
- Organizer of food fortification workshop on “The Future of Food Fortification” held on 29<sup>th</sup> May, 2018 in the College of Agriculture and Veterinary Sciences, between University of Nairobi and industry/government stakeholders in food fortification and Texas University A&M, USA.
- Instructor, Livestock theme of postgraduate students from Copenhagen University and University of Nairobi during the Experiential Field Training Program on Sustainable Land Use Management (SLUSE), 2018 and the Wangari

Maathai Institute For Peace and Environmental Studies, March, 2018 in Othaya Nyeri County.

- Visiting Lecturer, University of Abomey-Calavi in Benin under the Food Security Center (FSC), University of Hohenheim sponsored by DAAD Module 3 (November, 20 - 25, 2017): Food & Nutrition security: Assessment of nutrition status and disease-related malnutrition; chronic, transitory and cyclical, acute and temporary food insecurity; nutrition gaps, Global Hunger Index, Hidden Hunger Index, dietary diversity index, Omega-3; prospects and tools for eradication.
- Lecturer Didactic Training Workshops under PREPARE BSC project and CEPA.
- Facilitator and trainer for Internal Dissemination Workshop for PREPARE-BSC Project “Sharing Results, Experiences, Lessons Learnt and Achievements” and CEPA held on 13 April, 2017, at central catering unit (CCU), University of Nairobi under PREPARE-BSC project funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II).
- Trained on technical evaluation in the context of the Public Procurement and Asset Disposal ACT, 2015 held on Monday April 10, 2017 at the Central Catering Unit (CCU) Hall.
- Supervisor and trainer in Implementation of Sustainable Land Use and Natural Resource Management (SLUSE) and Interdisciplinary Land Use and Natural Resource Management (ILUNRM) under the Wangari Maathai Institute For Peace and Environmental Studies, March, 2017 in Kibugu Location, Embu County
- Trained on “Sensitization Training for Technical Evaluation Committees in the context of Public Procurement and Asset Disposal Act, 2015” held on 10th April, 2017 at Central catering Unit (CCU), University of Nairobi.
- Trained on “ICT in Research Grants Management Information Systems (RGMIS) for University of Nairobi” on 2nd May, 2017, CAVs
- Training on Staff capacity building aimed at improving student retention and student qualification with course in ‘Lecturer didactics’; ‘Experiential learning method’; and ‘Problem based learning’ with course weight of 7.5 ECTS under the PREPARE-BSC project funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II).
- Training course on “Commercialization of research and innovations” during the Nairobi Innovation Week held on 1-2 August, 2016 at Nairobi Safari Club (Lilian Towers).
- Trainer/facilitator in Pedagogy Training Workshop under the Centre for Pedagogy and Andragogy (CEPA) and PREPARE-BSC project funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II) on 2<sup>nd</sup> - 4<sup>th</sup> February, 2016 in CCU, University of Nairobi
- Facilitator and coordinator of short course programme on “Economic Modelling for Food Security Analysis” held on 14<sup>th</sup>-18<sup>th</sup> December, 2015, at 844 building, Department of Agricultural Economics, University of Nairobi sponsored by DAAD.
- Trainer in “Aflatoxin in Food and Feeds Sampling and Proficiency Testing in Kenya” for CHROMAFRICA LLC/LGC-UK, 7<sup>TH</sup> - 11<sup>TH</sup> December, 2015.

- Trainer/facilitator in Lecturer Didactic Training Workshop under the PREPARE-BSC project funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II) on 24<sup>th</sup> - 25<sup>th</sup> September, 2015 in College of Agriculture and Veterinary Sciences, University of Nairobi
- Training of Trainers in pedagogy and didactics under the PREPARE-BSC project, workshop meeting in Sokoine University, Tanzania, June 21-27, 2015
- Australia Awards Fellowship on “Improving Agricultural productivity through Increasing the Impact of Agricultural Research in Africa” at The University of Sydney on 27<sup>th</sup> April to 28<sup>th</sup> May, 2015.
- Summer School DAAD Alumni on Special project “Agritechnica 2013” Agricultural Engineering for Food Security and Resources Conservation by DAAD and Universität Hohenheim, Institute of Agricultural Engineering Tropics and Subtropics Group held on November 04-15, 2013.
- Training of Trainers (TOT) on “Risk Communication”. Arusha, Tanzania, August 26<sup>th</sup> to 30<sup>th</sup>, 2013. Safe Food in ACP ‘Des Aliments Sûrs en ACP’ Program funded by the EU, UN programme Finance Parl’ue (EDES).
- Training of Trainers (TOT) on “Organization of Official Controls in the Food Safety System, Implementation of Official Controls and the Organization and Methodology of Risk Assessment”. Brussels, Belgium, April 15<sup>th</sup> to 26<sup>th</sup>, 2013. Safe Food in ACP ‘Des Aliments Sûrs en ACP’ Program funded by the EU, UN programme Finance Parl’ue (EDES).
- Safe Food in ACP ‘Des Aliments Sûrs en ACP’ Program funded by the EU, UN programme Finance Parl’ue (EDES) - Training on Risk Communication in Nairobi, Kenya, November 26<sup>th</sup> to 30<sup>th</sup> 2012.
- Safe Food in ACP ‘Des Aliments Sûrs en ACP’ Program funded by the EU, UN programme Finance Parl’ue (EDES) - Training on Organization and Methodology of Health Risk Assessment in Nairobi, Kenya, November 19<sup>th</sup> to 23<sup>rd</sup> 2012.
- Safe Food in ACP ‘Des Aliments Sûrs en ACP’ Program funded by the EU, UN programme Finance Parl’ue (EDES) - Training on Execution of Official Controls in Nairobi, Kenya, October 1<sup>st</sup> to 5<sup>th</sup>, 2012.
- Program on Sampling and Analysis Methods used in the context of Official Food and Feed Controls - Training on Microbiology Food Testing in Madrid, Spain, 18 - 29 June 2012.
- Program on “Applied Solar Technology in Developing Countries” held in Witzenhausen, Germany on 4<sup>th</sup> - 15<sup>th</sup> June 2012 organized by the University of Kassel and the German Institute for Tropical and Subtropical Agriculture (DITSL), Germany under the German Academic Exchange Service.
- PhD supervision training workshop by PREPARE-PhD Project under an EU-funded project entitled “Promoting Excellence in Ph.D. Research Programmes in East Africa” held on 13<sup>th</sup> July, 2011 in the University of Nairobi.
- Partner Alliance and Grants management training under the Kenya Horticulture Competitiveness Project (KHCP) funded by USAID (6<sup>TH</sup> - 7<sup>TH</sup> October, 2011 at Methodist Guest House).

## **IX. EDITORIAL FUNCTIONS**

- Reviewer for PLOS ONE journals, plosone@plos.org.
- Reviewed for *Journal of Agriculture and Rural Development in the Tropics and Subtropics*, <http://www.jarts.info/>
- Reviewed for *African Journal of Food and Nutrition* (AJFAND), [www.ajfand.net](http://www.ajfand.net)
- Reviewed for *Food Science and Technology Research Journal*
- Reviewed for *Agricultural and Natural Resources Journal*, Elsevier.
- Reviewed for *Journal of Food Composition and analysis*, Elsevier

## **X. PEER REVIEWED JOURNAL PUBLICATIONS**

1. Werikhe, G., **Kunyanga C.N.**, Okoth, M.W., and Roba, H.G. (2019). Status and process analysis of koche, a traditional pastoral meat product in Kenya. *Pastoralism: Research, Policy and Practice*; 9:6. <https://doi.org/10.1186/s13570-019-0140-1>
2. Mewa, E. A., Okoth, M. W., **Kunyanga C.N.**, Rugiri, M.N. (2019). Experimental evaluation of beef drying kinetics in a solar tunnel dryer. *Renewable Energy*; 139: 235-241. <https://doi.org/10.1016/j.renene.2019.02.067>
3. Ogumo EO, **Kunyanga CN**, Kimenju JW, Okoth MW. (2018). Correlation between Time of Harvesting and Duration before Cooling on the Microbial Quality of French Bean (*Phaseolus vulgaris* L.). *International Journal of Sciences*; 7(12): 8-15. <http://www.ijsciences.com/pub/issue/2018-12/>. DOI: 10.18483/ijSci.1840; Online ISSN: 2305-3925; Print ISSN: 2410-4477
4. Ogumo EO, **Kunyanga CN**, Kimenju JW, Okoth MW (2018). Effects of Harvest Time and Duration before Cooling on the Post-Harvest Quality and Shelf-life Stability of French Bean (*Phaseolus vulgaris* L.). *Journal Nutrition Food Science*; 8: 730. doi: 10.4172/2155-9600.1000730
5. Chikondi Memory Liomba, **Catherine Nkirote Kunyanga**, Angela Adhiambo. (2018). Sensory Quality and Shelf-Life Stability of Complementary Flour Developed From Cereal-Pulse-Vegetable Blends. *Current Research in Nutrition and Food Science*.
6. Hengame, Y., **Kunyanga, C.N.**, Imungi, J.K. (2018). Antidiabetic and Antioxidant Properties of Methanolic Extract for a Diabetic Supplement Developed from Drumsticks Leaves (*Moringa Oleifera*), Garlic (*Allium Sativum*) and Cinnamon (*Cinnamomum Verum*) Powders. *Food Science and Quality Management*; 79: 1-8, ISSN 2224-6088 (Paper) ISSN 2225-0557 (Online).
7. Chikondi Memory Liomba, **Catherine Nkirote Kunyanga**, Angela Adhiambo. (2018). Development of Multimix Composite Flour as Complementary Food for Infants in Malawi. *International Journal of Food and Nutrition Research*; 2:11. DOI: 10.28933/ijfnr-2018-06-1801
8. Karibe, W.G., **Kunyanga, C.N.**, Imungi, J.K., (2018). Isolation and Characterization of Probiotic Microorganisms from the Bovine Tripe. *Asian Journal of Microbiology and Biotechnology*; 3(2): 58-65, ISSN: 2456-8341.

9. **Kunyanga C.N.**, Amimo, J., Kingori L.N., Chemining'wa, G. (2018). Consumer Risk Exposure to Chemical and Microbial Hazards through Consumption of Fruits and Vegetables in Kenya. *Journal of Food Science and Quality Management*; 78:59-69, ISSN 2224-6088 (Paper) ISSN 2225-0557 (Online).
10. Karibe, W.G., **Kunyanga, C.N.**, Imungi, J.K., (2018). Storability and Physico-Chemical Quality of Ready to Eat Bovine Tripe Rolls under Different Storage Conditions. *International Journal of Science and Research (IJSR)*; 7(8): 370-382. ISSN (Online): 2319-7064, Index Copernicus Value (2016): 79.57 | Impact Factor (2017): 7.296
11. Karibe, W.G., **Kunyanga, C.N.**, Imungi, J.K., (2018). Current status and utilization of beef slaughter by-product by the pastoral communities in Kenya: the case of bovine tripe. *Journal of Advances in Food Science & Technology*; 5(2): 48-57. ISSN: 2454-4213
12. Karibe, W.G., **Kunyanga, C.N.**, Imungi, J.K., (2018). Microbiological Status of Ready to Eat (RTE) Bovine Tripe Rolls under Different Storage Conditions. *Journal of Food Science and Quality Management*; 78: 7-16, ISSN 2224-6088 (Paper) ISSN 2225-0557 (Online).
13. Abok, E.O., Okoth, M.W., **Kunyanga, C.N.** and Aliwa, B.O. (2018). Microbiological Quality and Contamination Level of Water Sources in Isiolo County in Kenya. *Journal of Environmental and Public Health*; Volume 2018: page 1-10; Article ID 2139867. <https://doi.org/10.1155/2018/2139867>
14. Chanzu, O., **Kunyanga, C.N.**, Imungi, J.K., Karibe, W.G. (2018). Current Status of Pre-slaughter, Slaughtering and Post-slaughter Practices of Fresh Beef in Pastoral Areas of Kenya. *Journal of Food Science and Quality Management*; 78:17-22. ISSN 2224-6088 (Paper) ISSN 2225-0557 (Online).
15. Mewa, E. A., Okoth, M. W., **Kunyanga C.N.**, Rugiri, M.N. (2018). Effect of drying air temperature and slice thickness on the physical and microbiological quality of dried beef. *LWT - Food Science and Technology*; Volume 92: 484-489. <https://doi.org/10.1016/j.lwt.2018.02.068>
16. Onyango C.M., **Kunyanga C.N.**, Wahome R.G., Karanja D.N., Muchemia G. and Inyega J. (2018). Employer Perceptions and Attitudes towards Agricultural University Training in Kenya. *International Journal for Innovation Education and Research*; 6: 175-185. No-01, 2018www.ijer.net
17. Ogumo E. O., **Kunyanga, C.N.**, Okoth M.W., and Kimenju J. (2017). Current knowledge and performance of existing charcoal coolers in improving the overall quality and shelf-life of French beans. *African Journal of Agricultural Research*; Vol. 12(49), pp. 3399-3409, 7 December, 2017 DOI: 10.5897/AJAR2017.12749 Article No: 563AE8666881 ISSN 1991-637X. <http://www.academicjournals.org/AJAR>
18. Gichure, J. N., **Kunyanga, C.N.**, Mathi, P.M., Imungi, J.K. (2017). Standardization of cut size and pre-drying time of beef to mainstream pastoral processing in Kenya's meat industry. *Pastoralism: Research, Policy and Practice*, 7: 1-7. DOI 10.1186/s13570-016-0073-x
19. **Kunyanga, C.N** (2016), You Are What You Eat: Demystifying Facts on Nutrition and Health Perspectives. Official newsletter of the African Technology Policy Studies

- Network (ATPS), September 2016. ISBN 978-9966-030-89-4. Issue No 0006. [www.atpsnet.org](http://www.atpsnet.org).
20. Pius M. Mathi, **Catherine N. Kunyanga**, Josphat N. Gichure, Jasper K. Imungi, (2016). "Physico-chemical, sensory, chemical stability and cost characteristics of beef sausages produced with substitution of fat with bovine blood." *Journal of Animal Sciences Advances*.
  21. Pius M. Mathi, **Catherine N. Kunyanga**, Josphat N. Gichure, Jasper K. Imungi, (2015). Utilization of beef slaughter by-products among the Kenyan pastoral communities. *Journal of Food Science and Quality Management*, ISSN (Paper) 2224-6088 ISSN (Online) 2225-0557.
  22. **Kunyanga, C.N.**, Imungi, J.K., and Vadivel, V. (2014). Nutritional quality, phytochemical composition and health protective effects of an under-utilized prickly cactus fruit (*Opuntia stricta* haw.) collected from Kenya. ISSN 1684 5374. <http://www.ajfand.net/Volume14>, *African Journal of Food, Agriculture and Development*, 7: 9561-9577.
  23. Gichure, J. N., **Kunyanga, C.N.**, Mathi, P.M., Imungi, J.K. The Present Status of Meat Processing and Preservation in the Pastoral Regions of Kenya (2014). *Food Science and Quality Management*, 34: 42-50. ISSN 2224-6088 (Paper), ISSN 2225-0557 (Online) <http://www.iiste.org/Journals/index.php/FSQM/article/view/18198>.
  24. Onyango, C.M., **Kunyanga, C.N.**, Ontinta, C.G., Narla, R.D., & Kimenju, J.W. (2013). Current status on production and utilization of sider plant (*Cleome gynandra* L.) an underutilized leafy vegetable in Kenya. *Genetic Resources and Crop Evolution*, Vol. 60: 6. ISSN 0925-9864; DOI 10.1007/s 10722-013-0036-7.
  25. **Kunyanga, C.N.**, Imungi, J.K., and Vadivel, V. 2013. Nutritional Evaluation of Indigenous Foods with Potential Food-based Solutions to Alleviate Hunger and Malnutrition in Kenya. *Journal of Applied Biosciences*, 67: 5277-5288 (ISSN 1997-5902).
  26. Vadivel, V., **Kunyanga C.N.**, and Biesalski, H.K. (2012). Review on Health Benefits of Nut Consumption with Special Reference to Body Weight Control. *Nutrition Journal*, 28:1089-1097. ( <http://dx.doi.org/10.1016/j.nut.2012.01.004>)
  27. **Kunyanga, C.N.**, Imungi, J.K., Okoth, M.W., Vadivel, V. and Biesalski, H. K., 2012. Development, Acceptability and Nutritional Characteristics of Low-cost, Shelf-stable Supplementary Food Product for Vulnerable Groups in Kenya. *Food and Nutrition Bulletin*. Vol. 33, no. 1© pp. 43 - 52.
  28. Vadivel, V., **Kunyanga C.N.**, and Biesalski, H.K. (2012). Antioxidant Potential and Type II Diabetes-Related Enzyme Inhibition of *Cassia obtusifolia* L.: Effect of Indigenous Processing Methods. *Food Bioprocess Technology*, 5:2687-2696. DOI:10.1007/s 11947-011-0620-9 (ISSN: 1935-5130, Impact factor: 2.238)
  29. **Kunyanga, C.N.**, Imungi, J.K., Okoth. M.W., Biesalski, H.K., and Vadivel, V. (2012). Total phenolic content, antioxidant ant antidiabetic properties of methanolic extract of raw and traditionally processed Kenyan indigenous food ingredients. *LWT - Food Science and Technology*, 45: 269-276. DOI:10.1016/J.LWT.2011.08.006 (Published by Elsevier, ISSN No. 0023-6438, Impact factor. 2:11).

30. **Kunyanga, C.N.**, Imungi, J.K., Okoth, M.W. (2011). Diversity and Characteristics of Supplementary Foods Sold and Consumed by Vulnerable Groups in Kenya. *Journal of Applied Biosciences* 45: 3019-3031 (Published by Elewa Biosciences, ISSN No. 1997-5902).
31. **Kunyanga, C.N.**, Imungi, J.K., Okoth, M.W., Biesalski, H.K., and Vadivel, V. (2011). Antioxidant and Type II Diabetes Related Functional Properties of Phytic Acid Extract from Kenyan Indigenous Food Ingredients: Effects of Traditional Processing Methods. *Ecology of Food Nutrition*, 50:5, 452-471. DOI:10.1080/03670244.2011.604588 (Published by Taylor and Francis, ISSN No.0367-0244).
32. **Kunyanga, C.N.**, Imungi, J.K., Okoth, M., Momanyi, C., Biesalski, H.K. and Vadivel, V. (2011). Antioxidant and Antidiabetic properties of condensed tannins in acetic extract of raw and processed food ingredients from Kenya. *Journal of Food Science*, 76: C560-C567, doi:10.1111/j.1750-384.2011.02116.x (Published by Wiley- Blackwell, ISSN No.0022-1147, Impact factor: 1601).
33. **Kunyanga, C.N.**, Imungi, J.K., Okoth, M.W., Biesalski, H.K. and Vadivel, V. (2011). Flavonoid content of Ethanolic Extract of Indigenous Foods Consumed by Vulnerable Groups in Kenya: Antioxidant and Antidiabetic Activities. *International Journal of Food Science and Nutrition*, 62(5): 465-473. DOI:10.3109/09637486.2010.550237. (Published by Thomson Scientific Co, ISSN No. 47/188, Impact factor 1.313).
34. **Kunyanga, C.N.**, Imungi, J.K. (2010). Quality Characteristics and Acceptability of Bread Produced with Supplementation of Dolichos lab lab Beans. *Food Science and Technology*, Vol. 16, 6: 593-598 DOI:103136/fstr.16.593.
35. **Kunyanga, C.N.**, Mbugua, S.K., Imungi, J.K., Kangethe, E.K. (2009). Isolation and Characterization of Lactic Acid Bacteria in Kirario, an Indigenous Kenyan fermented Porridge Based on Green Maize and Millet. *Journal of Tropical Microbiology and Biotechnology*, Vol. 5, 1: 21-30.
36. **Kunyanga Nkirote C.**, Mbugua S.K., Kangethe E.K., Imungi J.K. (2009). Microbiological and Acidity Changes Occurring during The Traditional Production of Kirario: An Indigenous Kenyan Fermented Porridge Produced from Green Maize and Millet. *African Journal of Food, Agriculture and Development*, Vol. 9, 6:1419-1435.

## **XI. PRESENTATIONS IN SCIENTIFIC CONFERENCES**

### **Oral Papers**

1. **Kunyanga C.N** Hesse, M, and Imungi, J.K. (2018). "Promoting Nutrition and Food Security in Africa: Role of University Research, technology and Innovation" presented at Tropentag, 2018 "International Conference on Research on Food Security, Natural Resource Management and Rural Development", Global Food Security and Food Safety: The role of Universities held on 17-19 September, 2018 in Ghent, Belgium.
2. Namusalisi, J., Anani, B., De Groote, H., **Kunyanga C.N.** (2018). Evaluation of Hermetic technologies in Controlling Insect Pests, Mould Infestation and Aflatoxin Contamination of Stored Maize" presented at Tropentag, 2018 "International Conference on Research on Food Security, Natural Resource Management and Rural

- Development”, Global Food Security and Food Safety: The role of Universities held on 17-19 September, 2018 in Ghent, Belgium.
3. Ambuko, J., **Kunyanga, C.N.**, Hutchinson, M., Cheminigwa, G., Mburu, J., Owino, W. (2018). “Group Aggregation can Contribute to Postharvest Loss Reduction and Better Market Access for Smallholder Mango Farmers” presented in the International Horticultural Congress (IHC 2018) held on 12 and 16 August 2018 in Turkey.
  4. Namusalisi, J., Anani, B., De Groote, H., **Kunyanga C.N.**, Wagacha, m., Mugo, S. (2017). “Evaluation of Hermetic Storage on the Control of Moulds, Insects and Aflatoxins in Maize.” A-Z Innovation Platform Meeting, January 25, 2018, Africa Technical Research Center in Arusha, Tanzania.
  5. Catarina Vila Real, Ana Pimenta, Jack-Susan Magu, Catherine Kunyanga, Samuel Mbugua, Ndegwa H. Maina, Ana M.P. Gomes and Elisabete Pinto. (2017). Validity and reproducibility of a developed culture-sensitive, semi-quantitative food frequency questionnaire for use among adult population in Kenya presented at the 21st International Epidemiological Association (IEA) World Congress of Epidemiology, 19-22nd August 2017, Sonic City (Convection center) Saitama, Japan.
  6. Catarina Vila Real, Ana Pimenta, **Catherine Kunyanga**, Samuel Mbugua, Ndegwa H. Maina, Ana M.P. Gomes and Elisabete Pinto. (2017). Nutritional Adequacy in a sample of adult urban Kenyan presented at Associacao Protuguesa De Nutricao, Acta Portuguesa de Nutricao (2017) 44-74. [www.actaportuguesadenutricao.pt](http://www.actaportuguesadenutricao.pt).
  7. Ambuko, J., **Kunyanga, C.N**, Hutchinson, M. Owino, W., Chemining'wa, G., Mburu, J. and Amwoka, E. (2017). Oral presentation on “Group aggregation can contribute to postharvest loss reduction and better market access for smallholder farmers: mango case study” submitted to International Symposium on Strategies and Technologies to Maintain Quality and Reduce Postharvest Losses, International Society for Horticultural Science and ROSA - Responsive Online System for Acta Horticulturae submission and review for symposium nr 674, abstract nr 122.
  8. Namusalisi, J., Anani, B., De Groote, H., **Kunyanga C.N.**, Wagacha, m., Mugo, S. (2017). “Advances in drying and storage technologies in aflatoxin management” Workshop on combatting aflatoxins in the maize Value Chain of Africa. In Dares Salaam Serena Hotel, 4-5th December 2017
  9. **Kunyanga, C.N**, Gichure, J.N., Mathi, P.M., Imungi, J.K. (2017). “Reduction of Post-Slaughter Losses in the Meat Value Chain through Value Addition and Innovative Processing Technologies” 1st Africa Post Harvest Congress 2017 held on 28th to 31 March, 2017 at Safari Park Hotel, Nairobi, Kenya.
  10. **Kunyanga, C.N**, Gichure, J.N., Mathi, P.M., Imungi, J.K. (2017). Evaluation of Commercial Feasibility of the Deep-Frying Processing Technology in the Reduction of Post-Slaughter Losses in Kenya. 1st Africa Post Harvest Congress 2017 held on 28th to 31 March, 2017 at Safari Park Hotel, Nairobi, Kenya.
  11. **Kunyanga, C.N.**, and Mburu J. (2016). “Linking Climate-Smart Horticulture to Better Nutrition and Health Outcomes of Rural Households for Improved Livelihoods”, presented at the World Food Day Colloquium, “No Sun - No Food”, Climate Disasters and Food Security 200 years after Tambora , University of Hohenheim, Germany.

12. Cherop G., **Kunyanga C.N**, Oduor F., Boedecker J. and Termote C. (2016). Nutrient adequacy of locally prepared recipes used for complementary feeding of children 6 - 23 months in Vihiga County, Western Kenya. Oral presentation in Sub-theme 'Maternal, Infant and Young Child Nutrition' at the National Food and Nutrition Symposium in Kenya School of Government, Lower Kabete on 23rd Nov, 2016.
13. **Kunyanga, C.N**, Gichure, J.N., and Mathi, P.M. (2015). Production of shelf stable and innovative solar dried meat snacks from chevon with potential for commercialization in pastoral regions of Kenya. Oral presentation at the Nairobi Innovation Week, UoN, 3rd to 7th August, 2015, "Innovate and Prosper: Strengthening Academia, Industry and Government linkages for economic growth".
14. Gichure, J.N., **Kunyanga, C.N**, Imungi, J.K, and Mathi, P.M. (2015). Meat processing and preservation technologies practiced in Kenya's Pastoral areas with potential for improvement based on product competitiveness. "Policies for Competitive Smallholder Livestock Production" conference in Gaborone, Botswana. By International Livestock Research Institute (ILRI) and Botswana Institute for Development Policy Analysis (BIDPA). 4th - 6th March 2015
15. Gichure, J.N., **Kunyanga, C.N**, Imungi, J.K, and Mathi, P.M. (2014): Application of Appropriate Technologies to Minimize Post Harvest Losses and Improve Quality along Pastoral Beef Value Chain in Developing Countries: Case of Kenya. Proceeding of the 17th World Congress of Food Science and Technology & Expo. Research that resonates. Montreal, Quebec, Canada. 17th-21st August, 2015, <http://iufost2014.org/files/book-of-abstracts.pdf>.
16. Onyango C.M., Catherine N. **Kunyanga**, Edward G. Ontita, Rama D. Narla and John W. Kimenju (2013). Production, utilization and indigenous knowledge of spider plant (*Cleome gynandra*) in Kenya. 11th African Crop Science Society Conference (ACSSC), October 14-17, 2013, Imperial Botanical Beach, Entebbe in Uganda.
17. **Kunyanga, C.N.**, Biesalski, H.K., Scherbaum, V., Vadivel, V., Imungi, J.K., Okoth, M.W. 2011. Evaluation of the role of flavanoids present in indigenous foods regarding health and nutrition of vulnerable groups in Kenya. Presented in "II World Congress of Public Health Nutrition and I Latin-American Congress of Community Nutrition" held in Alfundega Congress Centre, Porto, Portugal on September 23-25, 2010.
18. **Kunyanga, C.N.**, Biesalski, H.K., Scherbaum, V., Vadivel, V., Imungi, J.K., Okoth, M.W. 2011. Antioxidant activity of phenolics in indigenous foods. Presented in International Conference on "African Nutritional Epidemiology" organized by Centre for Public Health Research, Kenya Medical Research Institute, held in Nairobi, Kenya on 4-8, October, 2010.
19. **Kunyanga, C.N.**, S. Strum, S. Graham, J. Imungi. Physico-chemical methods for preservation of opuntia cactus fruit syrup: Empowerment of Maasai women in Laikipia, Kenya. African Crop Science Society Conference, Cape Town, South Africa 2009: Science and Technology Supporting Food Security in Africa 28 September to 1 October 2009.

**Posters**

1. Werikhe G., **Kunyanga C.N.**, Imungi, J.K. (2018). “Current Status of Pre-slaughter, Slaughtering and Post-slaughter Practices for Fresh Beef in Pastoral Areas of Kenya” presented at Tropentag, 2018 “International Conference on Research on Food Security, Natural Resource Management and Rural Development”, Global Food Security and Food Safety: The role of Universities held on 17-19 September, 2018 in Ghent, Belgium.
2. **Kunyanga C.N.**, Onyango C.M., Wahome R.G., Karanja D.N., Muchemia G. and Inyega J. (2017) “Employer Perceptions and Attitudes Towards Agricultural Graduates in Kenya”, under PREPARE-BSC project funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II).
3. **Kunyanga C.N.**, Onyango C.M., Wahome R.G., Karanja D.N., Muchemia G. and Inyega J. (2017) “Curriculum Review and Constructive Alignment to Teaching”, under PREPARE-BSC project funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II).
4. Onyango C.M., **Kunyanga C.N.**, Wahome R.G., Karanja D.N., Muchemia G. and Inyega J. (2017) “Use of Problem Based Learning (PBL) Approach in University Education”, under PREPARE-BSC project funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II).
5. Karanja D.N., **Kunyanga C.N.**, Onyango C.M., Wahome R.G., Muchemia G. and Inyega J. (2017) “Knowledge, Attitudes and Practices of University Academic Staff in Training Agricultural Graduates”, under PREPARE-BSC project funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II).
6. Wahome R.G., Karanja D.N., **Kunyanga C.N.**, Onyango C.M., Muchemi G. and Inyega J. (2017) “Assessment of University Student Attitudes, Preparedness, Knowledge and Practices in taking Training in in Agriculture and related Subjects”, under PREPARE-BSC project funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II).
7. Karanja D.N., Wahome R.G., **Kunyanga C.N.**, Onyango C.M., Muchemia G. and Inyega J. (2017) “Improving Quality of Assessment and Feedback Practices in Training Graduates of Agriculture”, under PREPARE-BSC project funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II).
8. Inyega J., Karanja D.N., **Kunyanga C.N.**, Wahome R.G., Onyango C.M., and Muchemia G. (2017) “Training of University Lecturers in Mentorship Programmes for Lecturers and Students”, under PREPARE-BSC project funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II).
9. Wahome R.G., **Kunyanga C.N.**, Karanja D.N., Onyango C.M., Muchemia G. and Inyega J. (2017) “Knowledge, Attitudes and Practices of Secondary School Students, Teachers and Parents Towards Agricultural Sciences in University Education”, under PREPARE-BSC project funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II).

10. Muchemia G., Wahome R.G., **Kunyanga C.N.**, Karanja D.N., Onyango C.M., and Inyega J. (2017) “Training of University Lecturers in Activating Lecturers and Engaging Students to Learn”, under PREPARE-BSC project funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II).
11. **Kunyanga, C.N**, Gichure, J.N., and Mathi, P.M. (2015). Development of innovative fruity wines from Tamarind indica, Opuntia stricta and Opuntia Indica underutilized fruits in Kenya. Nairobi Innovation Week, UoN, 3rd to 7th August, 2015, “Innovate and Prosper: Strengthening Academia, Industry and Government linkages for economic growth”.
12. **Kunyanga, C.N**, Gichure, J.N., and Mathi, P.M. (2015). Development, Acceptability and Nutritional Characteristics of a Low-cost, Shelf-stable Supplementary Food for People Living with HIV/AIDS (PLWHAs) in Kenya. Nairobi Innovation Week, UoN, 3<sup>rd</sup> to 7<sup>th</sup> August, 2015, “Innovate and Prosper: Strengthening Academia, Industry and Government linkages for economic growth”.
13. Gichure, J.N., **Kunyanga, C.N**, and Imungi, J.K (2015). Poster Presentation on “Potential for improvement of deep-fried meat products among four pastoral communities in Kenya” SAAFoST 2015 Congress in Durban, South Africa.
14. Okello, E., **Kunyanga, C.N**. Utilization of mango seeds as an alternative starch source in soup making. International Youth Conference: Factoring Youth Voices into Critical Issues: Agenda on Environmental Sustainability, Climate Change Mitigation and Adaptation, Food Security and Nutrition in Africa held on 9-10 March 2012, Nairobi, Kenya.
15. Miriti, J. D.W, Okello, E., Koech, R., **Kunyanga, C. N**. Production and adaptability of banana wine in Eastern Africa. International Youth Conference. Factoring Youth Voices into Critical Issues: Agenda on Environmental Sustainability, Climate Change Mitigation and Adaptation, Food Security and Nutrition in Africa held on 9-10 March 2012, Nairobi, Kenya.
16. Miriti, J. D.W, Okello, E., Koech, R., **Kunyanga, C. N**. Value addition of meats by adopting salami manufacture. International Youth Conference. Factoring Youth Voices into Critical Issues: Agenda on Environmental Sustainability, Climate Change Mitigation and Adaptation, Food Security and Nutrition in Africa held on 9-10 March 2012, Nairobi, Kenya.
17. Okello, E., **Kunyanga, C.N**. Adaptation of mango nectar processing in small and medium enterprises in sub-Saharan Africa. International Youth Conference, Factoring Youth Voices into Critical Issues: Agenda on Environmental Sustainability, Climate Change Mitigation and Adaptation, Food Security and Nutrition in Africa held on 9-10 March 2012, Nairobi, Kenya.

## XII.CONFERENCES, SYMPOSIUMS AND WORKSHOPS

### ATTENDED

1. Practical training on European phytosanitary regulations: phytosanitary certificates and additional declarations held in Dar Es Salaam - Tanzania, 24 - 26 April 2019 under COLEACP 'Fit for Market' program.
2. Research for Development (R4D) Conference on "Improving the Effectiveness of the Research-to-Translation Value Chain" under LASER PULSE project, the Long-term Assistance and Services for Research (LASER) - Partners for University-Led Solutions Engine (PULSE) consortium on May 6-8, 2019 at the Speke Resort and Conference Centre Munyonyo, Kampala, Uganda.
3. Technical training and promotion conference on Solar Cooling for Agriculture for academia by Strathmore Energy Research Center, Strathmore University by University of Hohenheim on 18<sup>th</sup> March, 2019.
4. 4th International Congress Hunger Hidden, "***Hidden Hunger and the transformation of food systems: How to combat the double burden of malnutrition?***" on February 27 - March 1, 2019 University of Hohenheim, Stuttgart, Germany
5. Inter-regional workshop on "Sensor Technology and Agricultural Robots for Food security in Changing Climates: Opportunity for developing countries" held in Kasetsart University in Bangkok, Thailand on November 15-16, 2018
6. Workshop on Food Safety and Food Loss Issues Prioritization Workshop by ILRI and ReSAKSS-ECA held IN Naivasha on October 2<sup>nd</sup> to 4<sup>th</sup>, 2018
7. World Food Day Colloquium on "Cooperatives: Essentials for food security?!" on 15<sup>th</sup> to 16<sup>th</sup> October, 2018 at the University of Hohenheim, Stuttgart, Germany.
8. Stakeholder workshop on Validation of Poultry and Meat Occupational Standards and Curricula held at Utalii College, Nairobi on 25<sup>th</sup> September, 2018 under TVET Curriculum Development, Assessment and Certification Council (TVET CDACC) and GIZ.
9. Tropentag, 2018 "International Conference on Research on Food Security, Natural Resource Management and Rural Development", Global Food Security and Food Safety: The role of Universities held on 17-19 September, 2018 in Ghent, Belgium.
10. The Food Fortification Summit, Fortifying for Food and Nutrition Security sponsored by GAIN and EU project on Strengthening the Kenya National Food Fortification Programme on 4<sup>th</sup> July, 2018 at Safari Park Hotel, Nairobi.
11. Global Mind Talk, Aflatoxin workshop on "The silent crisis: Why aflatoxin is an unsolved threat to Africa's Food?" held in ICRISAT ON 30<sup>TH</sup> May, 2018, at World Agroforestry Centre in Nairobi.
12. Strengthening African Food Processors (SAP) to reduce food losses project launch workshop, August 21-22, 2018, CAVS, UoN.
13. FAO Sensitization Meeting for Integration of Nutrition in Agricultural and Food Systems Curriculum at the University of Nairobi, Kenya on 13th June 2018.

14. International conference on “Making Small Holder Agriculture More Nutrition-Sensitive: The Role of Innovation and Extension” 22-23<sup>rd</sup> March, 2018, Nairobi Kenya by Africa Harvest, University of Nairobi and Gottingen University.
15. Tropentag, 2017 “International Conference on Research on Food Security, Natural Resource Management and Rural Development”, Future Agriculture: Socio-ecological Transitions and bio-cultural shift held on 20-22 September, 2017 in University of Bonn, Germany.
16. African Women in Biosciences Forum held on Thursday, April, 20<sup>th</sup>, 2017 at the Royal Orchid Hotel in Nairobi sponsored by International Service for the Acquisition of ag-biotech Applications (ISAA) and Association of Women in Science and Engineering (AWSE).
17. The 1st All Africa Postharvest Congress and Exhibition “Reducing postharvest losses: Sustainable Solutions for Africa” 2017 held on 28<sup>th</sup> to 31 March, 2017 at Safari Park Hotel, Nairobi, Kenya.
18. The First East African Food Conference; Speaker (Publishing Ethics) in the Pre-conference Scholarly Writing Workshop organized by AJFAND and FoSTeP-K held on 29-31<sup>st</sup> March, 2016.
19. 4<sup>th</sup> Annual RELOAD project workshop on “Reduction of losses and value addition by strengthening small and medium enterprises in food processing to sustain value chains in East African postharvest systems” sponsored by the Federal Ministry of Education & Research and Unikassel held on November 10<sup>th</sup> to 15<sup>th</sup>, 2016 in Mukono, Uganda
20. Regional Youth Congress on New Learning approaches and Career Opportunities in Agriculture at Makerere University from 2<sup>nd</sup> - 5<sup>th</sup> November, 2016 under PREPARE-BSC project funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II).
21. Presenter at the World Food Day Colloquium, “No Sun - No Food”, Climate Disasters and Food Security 200 years after Tambora at the Food Security Center, University of Hohenheim, Germany held on October 18<sup>th</sup>, 2016.
22. Trainer, “Lecturer Didactic Training Workshop” at CSD Seminar room, University of Nairobi, PREPARE-BSC project funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II).
23. Facilitator, “Interpersonal skills” for Training Workshop for Peer Student Mentors Programme under PREPARE BSC project supported by EU through ACP-EDULINK II programme held on Tuesday 25 October, 2016 in CAVS, Kabete
24. Science Communication Training Program for Biosciences Eastern and Central Africa (Beca) and Virus Resistant cassava for Africa (VIRCA) scientists, facilitated by ISAAA held on 28<sup>th</sup> - 29<sup>th</sup> June, 2016, ILRI, Nairobi.
25. “Reduction of losses and value addition by strengthening small and medium enterprises in food processing to sustain value chains in East African

- postharvest systems” RELOAD Project workshop held in University of Kassel, Witzenhausen, Germany in 16th to 19th September, 2017.
26. Dissemination workshop held on 13th April at Central Catering Unit (CCU), University of Nairobi on “Enhancing the Quality of graduates of agriculture to meet tomorrow’s food security challenge (PREPARE-BSc)” funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II)
  27. Workshop on Development of appropriate nyirinyiri processing technologies manual and hazard analysis critical control point plan 30th January to 3th February, 2017 in Nanyuki under the State Department of Livestock, Regional Pastoral Livelihoods Resilience Project (RPLRP), Ministry of Agriculture, Livestock and Fisheries.
  28. ESCOBOX: Smart Monitoring, billing and control for pro-poor access to energy services workshop held on 11th January 2017 funded by Engineering and Physical Science Research Council (ESPRC) of the United Kingdom.
  29. Co-facilitator, for short course programme on “Social network Analysis for Food security” held on 13th to 17th December, 2016 at 844 building, CAVs, University of Nairobi sponsored by DAAD and Food security Center, University of Hohenheim.
  30. Participant in World Food Day Colloquium, “Grasslands - secret resource for a hungry world”, including presentation of Justus von Liebig Awards, sponsored by DAAD held in the Food Security Center, University of Hohenheim, Germany on October 16th, 2015.
  31. 2015 Joint AAUN Australian Awards Agricultural Research Symposium, 25 November, 2015, Nairobi, Kenya.
  32. Key note speaker on The Role of Agriculture in addressing Food and Nutrition Security, the Annual National Conference on ‘Enhancing Sustainable Food and Nutrition Security in Kenya by JICA Ex-Participants Alumni of Kenya (JEPAK) held on 20TH November, 2014 at Panafric Hotel, Nairobi.
  33. International Conference for Youth in Africa on ‘Factoring Youth Voices into Critical Issues: Agenda on Environmental Sustainability, Climate Change Mitigation and Adaptation, Food Security and Nutrition in Africa held in the University of Nairobi, Kenya on 9th to 10th March, 2012.
  34. II World Congress of Public Health and I Latin American Congress of Community Nutrition” held in Alfandega Congress Center, Porto, Portugal on September 23-25, 2010.
  35. International Conference on African Nutritional Epidemiology (ANEC) organized by Center for Public Health Research and Kenya Medical Research Institute, held in Nairobi, Kenya on 4-8, October, 2010.

36. The African Crop Science Society Conference, Cape Town, South Africa 2009: Science and Technology Supporting Food Security in Africa 28 September to 1 October, 2009.
37. Curriculum Development and review workshop, facilitator in formulation of PhD in Community Nutrition and Monitoring and Evaluation; PhD in Food Science and Nutrition; MSc. Community Nutrition and Monitoring and Evaluation; MSc. in Food Science and Nutrition and review of BSc. Food Science and Nutrition; BSc Human Nutrition and Dietetics for Department of Food Science and Nutrition, Karatina University held on 23rd to 25th February 2016 in the Senior Common Room, Karatina University.
38. Facilitator in Stakeholders' workshop on Proposed Syllabus for MSc in Biosafety held at KARLO Headquarters, Nairobi, Kenya on Monday, 11th November, 2015.
39. Annual RELOAD workshop "Reduction of losses and value addition by strengthening small and medium enterprises in food processing to sustain value chains in East African postharvest systems" sponsored by the Federal Ministry of Education & Research and Unikassel Witzenhausen, held on 29th September-2nd October, 2015 In Egerton University, ARC Hotel-Neissuit Conference Auditorium.
40. Annual workshop meeting held in Arusha on 2nd to 6th February, 2015 under PREPARE BSC project supported by EU through ACP-EDULINK II programme.
41. "Workshop for experienced lecturers: Improving and internationalizing University courses" sponsored by the Swedish Ministry of Finance held in Kasangati Hotel under Makerere University and Swedish University of Agricultural Sciences (SLU) in Kampala, Uganda on 10th to 12th June 2014.
42. RELOAD Project workshop held in University of Kassel, Witzenhausen, Germany in 28th September to 3rd October, 2014.
43. "Africa Days" of BMBF (Federal Ministry of education and Research) and RELOAD Project held on 16th to 18th March, 2014 in Berlin Germany.
44. Study tour at the Department of Science Education, University of Copenhagen, Denmark under PREPARE BSC project supported by EU through ACP-EDULINK II programme on 8th - 16th February, 2014.
45. Inception workshop for needs assessment with stakeholders in the meat value chain under the RELOAD Project held in Naivasha on 29th January to 1st February, 2014.
46. Inception workshop meeting Project with partners under EU project on "Enhancing the Quality of graduates of agriculture to meet tomorrow's food security challenge (PREPARE-BSc)" funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II) - Reference: EuropeAid/132023/D/ACT/ACPTPS held on 9th to 11th January, 2014 at Chak Guest House.

47. FAO/WHO workshop on the official launch of task force to spearhead activities to address the development of antimicrobial resistance in the meat value chain held on October 13th -14th, 2012 at Sarova Panafric hotel, Nairobi, Kenya. Rapporteur, Dr. CN Kunyanga.
48. International workshop of the RELOAD Coordination group held in PIBID Processing Plant, Bushenyi, Uganda in 21 - 22nd May, 2012. Sponsored by the Federal Ministry of Education & Research and Unikassel Witzenhausen.
49. RELOAD workshop “Reduction of losses and value addition by strengthening small and medium enterprises in food processing to sustain value chains in East African postharvest systems” sponsored by the Federal Ministry of Education & Research and Unikassel Witzenhausen, held on 26th - 28th March, 2012 in College of Agriculture and Veterinary Sciences, University of Nairobi.
50. FAO and University of Nairobi workshop on “Prevention and control of aflatoxin contamination in the maize value chain in Kenya” held at Jacaranda hotel, Nairobi, Kenya on 28th to 30th September, 2011. Rapporteur, Dr. CN Kunyanga.
51. FAO Expert Consultation Meeting on the Review of FAO Meat Inspection and Hygiene Guidelines held in Nairobi, Kenya on 25th - 26th August, 2011. Rapporteur, Dr. CN Kunyanga.
52. Development of Food Safety curriculum in the Department of Food Science, Nutrition & Technology, University of Nairobi and UNIDO.
53. Capacity building in grants and Academic research proposal development for staff and graduate students, 27-31 July 2009 CAVS, University of Nairobi, Kenya.
54. Safe Food Fair Food: Launch of Situation analysis paper on animal source foods, GTZ/IRLI workshop on 28th July, 2010, Nairobi.

### **XIII. MEDIA AND NON-JOURNAL ARTICLES**

1. Farm Biz Africa, “Varsity launches solar drier that preserves meat, maize, vegetables and fruits for up to one year”, 01 October 2018.  
[farmbizafrika.com/advertise/10-profit-boosters/2318-varsity-launches-solar-drier-that-preserves-meat-maize-vegetables-and-fruits-for-up-to-one-year?fbclid=IwAR1Y-Yp8oQ8FHW\\_-fCQRxh7RlvZIFuLCGxeYn9TCaPIWVvOwckHhLwo67WY](http://farmbizafrika.com/advertise/10-profit-boosters/2318-varsity-launches-solar-drier-that-preserves-meat-maize-vegetables-and-fruits-for-up-to-one-year?fbclid=IwAR1Y-Yp8oQ8FHW_-fCQRxh7RlvZIFuLCGxeYn9TCaPIWVvOwckHhLwo67WY)
2. Newspaper article on “Solar tunnel dryer for meat preservation” Success stories: Smart Harvest section, The Standard, October, 6, 2018.
3. Newspaper article on “*How mercury finds itself in your sugar*”. Published Wed, June 20th 2018 at 00:00, The Standard. Updated June 19th 2018 at 23:14 GMT +3.

<https://www.google.com/amp/s/www.standardmedia.co.ke/mobile/amp/article/2001284742/how-mercury-finds-itself-in-your-sugar>

4. Newspaper article on “***This is how Agriculture can drive Vision 2030***”, Opinion section, mobile.nation.co.ke, The Standard, Sunday, 21<sup>st</sup> January, 2018.
5. Newspaper article on “***Bleak Future as Violent Strikes Bedevil Tea Sector***”, Weekend Business section, mobile.nation.co.ke, The Standard, Sunday, 26<sup>th</sup> November, 2017.
6. Newspaper article on “***Mechanization of tea harvesting in Kenya***”, opinion section, mobile.nation.co.ke, Nation, Friday, 14<sup>th</sup> March, 2017.
7. KTN news interviews on Postharvest losses in Kenya, 2017
8. GBS TV interview on domestic food safety of fruits and vegetables sold in open air markets and supermarkets in Kenya.
9. Newspaper report, “***Study warns of highly contaminated fruits and vegetables in open markets and supermarkets: Poisoned vitamins*** (Concern over pesticides, lead in vegetables)”. The Standard Newspaper, Monday, June 9, 2014.
10. Baseline Evaluation Report ACIDI VOCA, Mercy Corps, Smart Regional Consultants (SRC) and BOMA under the Feed the Future Kenya Livestock Market Systems, USAID, 2018.
11. Report on “Enhancing Processing Techniques and Market Linkages along the Livestock Value Chain in Kenya” in Meru, Tharaka Nithi and Kitui Counties funded by USDA for the “Kenya K-SALES Food for Progress” (KSA) Program, Land O’Lakes, 2017.
12. Report of AGRA Farmers Organization Support Centre in Africa (FOSCA) for staff retreat and way forward, 2013.
13. Report of FAO/WHO workshop on the official launch of task force to spearhead activities to address the development of antimicrobial resistance in the meat value chain, 2012.
14. Report of FAO workshop on “Prevention and control of aflatoxin contamination in the maize value chain in Kenya, 2011”.
15. Report of FAO Expert Consultation Meeting on the Review of FAO Meat Inspection and Hygiene Guidelines, 2011.

### **Training manuals**

1. Training manual on fabrication of a solar dryer for horticultural crops, a resource manual produced under USAID-funded Kenya Horticultural

- Competitiveness Project (KHCP) and Quality Management Systems and Associates (QSM), April 2014
2. Production and postharvest manual on sweet potatoes, a resource manual produced under USAID-funded Kenya Horticultural Competitiveness Project (KHCP) and Quality Management Systems and Associates (QSM), April 2014
  3. Production and postharvest manual on African Leafy vegetables, a resource manual produced under USAID-funded Kenya Horticultural Competitiveness Project (KHCP) and Quality Management Systems and Associates (QSM), April 2014
  4. Legumes and pulses: A training manual for smallholder producers and processors, a resource manual produced under USAID-funded Kenya Horticultural Competitiveness Project (KHCP) and Quality Management Systems and Associates (QSM), April 2014
  5. Pigeon peas: Training manual for smallholder producers and processors, a resource manual produced under USAID-funded Kenya Horticultural Competitiveness Project (KHCP) and Quality Management Systems and Associates (QSM), April 2014.
  6. Production and postharvest manual on mangoes, a resource manual produced under USAID-funded Kenya Horticultural Competitiveness Project (KHCP) and Quality Management Systems and Associates (QSM), April 2014

#### **XIV. STUDENT SUPERVISION:**

##### **Graduated students**

1. Commercialization Viability of an Upgraded Koche, a traditional meat product prepared in the Pastoral Regions Kenya. **Grace Warikhe**, (A56/87986.2016) MSc. in Food Science and Technology, University of Nairobi, 2019.
2. Development of a Food Supplement for Diabetes Type II Management with Enhanced Antidiabetic and Antioxidant Properties from Selected Local Foods. **Hengame Yousefifar**, (A56/82477/2015), **Master of Science in Applied Human Nutrition**, University of Nairobi, 2019.
3. Modeling of Drying Kinetics and Quality Characteristics of Solar Dried Beef. **Eunice Akello Mewa** (A81/98769/2015), **PhD in Food Science and Technology**, University of Nairobi, 2018.
4. "Development of a Functional Food from Bovine Tripe to Reduce By-Product Losses in Pastoral Slaughterhouses in Kenya". **Wilson Karibe**, **MSc. in Food Science and Technology**, University of Nairobi, 2018.
5. Development of Vitamin A Rich Yoghurt by Supplementation with Orange Fleshed Sweet Potato Puree. **Truphena Gikaara**, **Master of Science in Food Safety and Quality**, University of Nairobi, 2018.
6. Development of Complementary Porridge Flour from Local Malawian Foods with Optimized Iron and Zinc for Children. **Memory Chikondi**, **MSc. in Food Science and Technology**, University of Nairobi, 2018.

7. Continuous solar water disinfection system for rural food processing operations. **Abok Elisha, MSc. in Food Science and Technology**, University of Nairobi, 2018.
8. “Integrating Traditional Techniques into Conventional Preservation Methods to Upgrade Pastoral Deep-Fried Beef Products in Kenya”, **Josphat Njenga, PhD in Food Science and Technology**, University of Nairobi, 2017, RELOAD project, registration no. A81/94473/2014.
9. “Process analysis, nutritional quality and consumer acceptability of porridge composite flours developed from legume-based ingredients grown in Nandi”. **Peninah Gitau, (A56/82018/2018) Master of Science in Food Safety and Quality**, University of Nairobi, 2018.
10. “Development of Iron and Zinc Optimized Composite Flours using Selected Raw Food Materials from Malawi”. **Chikondi Memory Liomba (A56/87035/2016), MSc in Food Science and Technology**, University of Nairobi, 2018.
11. “Dietary Assessment and Nutritional Status of Children (6-23 Months) Consuming Local Food Recipes in Vihiga County, Western Kenya”, **Cherop Gladys, MSC, Applied Human Nutrition**, Registration no. A56/81894/2015, University of Nairobi, 2018.
12. “Development of Beef Sausages through Bovine Blood Utilization as Fat Replacer to Reduce Slaughterhouse By-Product Losses.” RELOAD project, **Pius Mathi, MSc in Food Science and Technology**, University of Nairobi, 2016.
13. “Demystifying the Use of Honey in Diabetes Management: A case of Type II Diabetes Patients at Kenyatta National Hospital, Nairobi.” **Martha Chege, Master of Science in Applied Human Nutrition**, University of Nairobi, 2016.
14. “Adherence to Pre-requisite Handling Practices of Milk Dispensers in Nairobi Supermarkets, Kenya”. **Olivia Adhiambo Olang’. Reg. A11/69925/2013, Postgraduate Diploma in Food Safety and Quality**, University of Nairobi, 2016.
15. “Development of Value Added Rabbit Meat Product and Assessing Their Microbiological Quality”. **Makori Shadrack, Master of Science in Food Safety and Quality**, University of Nairobi, 2015.
16. “Nutrition Knowledge and Dietary Practices and Nutritional Status of Health Practitioners in Naivasha District”. **Kihara Christine Wangui, Master of Science in Applied Human Nutrition**, University of Nairobi, 2014.
17. “Fruits and vegetable Consumption and Determining Factors among Pastoralists of Narok North.” By **Langat Pius Kibet, Master of Science in Applied Human Nutrition**, University of Nairobi, 2014.
18. “Performance of Malezi bora programme on improving the nutritional knowledge of mothers and nutritional status of children aged 6-59 months in Kawangware, Nairobi.” **Gichana Margaret Bochaberi, Master of Science in Applied Human Nutrition**, University of Nairobi, September, 2013.
19. “Prevalence and risk factors of malnutrition among under-five’s in Meru, Kenya: A comparative study of khat (*Catha edulis*) and non- khat farming households.” **Hellen G. Ringera, Master of Science in Applied Human Nutrition**, University of Nairobi, September, 2013.
20. “Influence of Nutrition Knowledge and Attitude on Dietary Practices and Nutritional Status of Female University Students Aged 19-25 Years in Nairobi

Central Business District, Kenya.” *Lucy Kinyua, Master of Science in Applied Human Nutrition*, University of Nairobi, September, 2013.

**Ongoing students**

**Doctoral students**

1. “Effects of Social Networks on Household Food and Nutrition Security among Smallholder Farmers in Rural Kenya” Mercy Mbugua, (A80/50978/2016) PhD student in the Department of Agricultural Economics, University of Nairobi, 2018.
2. “Effect of Maize Lethal Necrosis Disease on Food, Feed and Industrial End Use Quality of Maize in Kenya”. John Ndung'u Ng'ang'a (A80/52347/2017), PhD IN Crop Science and Protection University of Nairobi, 2018.
3. “Impact of Agricultural Pro-Nutrition Interventions on Nutrition Security in Kisii and Nyamira Counties in Kenya”. Davis Nguthi Muthini, REG NO. A80/50979/2016, PhD in Agricultural Economics, University of Nairobi, 2016.
4. “Production and Evaluation of African Yam Bean (*Sphenostylis Stenocarpahochst A. Rich*) Flours for “Igbagidi” Pudding”, Nkechi, PhD in Food Science and Technology, University of Nairobi, 2017.
5. “Upgrading of the existing Cold Chain Management Systems to Enhance Quality and Shelf Stability of Fine Beans along the Supply Chain in Kenya”, Ogumo Erick Otieno (BSc, MSc)”, 2016, PhD in Food Science and Technology, University of Nairobi.
6. “Post-Harvest Management of Horticulture Produce (Avocado) In Rwanda”, Ernest, PhD in Food Science and Technology, University of Nairobi, 2017.

**Masters students**

1. “Development of Ready to Eat Breakfast Cereal from Sorghum-Pigeon Peas Blends” Abdullahi Beinah (A56/9093/2017), MSc. in Food Science and Technology, University of Nairobi, 2018.
2. Influence of maternal nutrition knowledge on Infant and young child feeding practices and nutrition status of children of 6-23 months of age, in Rwanda. Nadine Umwali, Master of Science in Applied Human Nutrition, University of Nairobi, 2019.
3. Quality Characteristics and Drying Kinetics of Mango in a Solar Tunnel Dryer using Mathematical Models. Gerald Musyoki Ndonge, Master of Science in Food Safety and Quality, University of Nairobi, 2017.
4. Pre-Slaughter and Postharvest Handling Practices Affecting Quality Characteristics of Dried and Deep-Fried Beef Products. Oliver Chanzu. MSc. in Food Science and Technology, University of Nairobi, 2017.
5. **Effectiveness of Hermetic Storage Technologies on Mould Infestation and Aflatoxin Contamination of Maize Storage with Special Reference to Post Harvest Insect Pests in Kenya.** Jacqueline Namusalisi, MSc. in Food Science and Technology, University of Nairobi, 2017.
6. Characterization of fermentative bacteria in Mashanza and Musururu traditional fermented foods in Kivu, Eastern RD Congo, Baluku Safari, P, MSc. in Food Science and Technology, University of Nairobi, 2013.

7. Evaluation of physico-chemical properties and microbial quality of deep fried beef in Kenya” Post graduate Diploma in Food Safety and Quality, University of Nairobi, 2016.

## **XV. COLLABORATIVE RESEARCH PROJECTS AND ASSIGNMENTS**

- Coordinator, Food Security Center, UoN, “Capacity building in food and nutrition security in SAGEARP (ACCPAC)” under Food Security Centre (FSC), University of Hohenheim, funded by DAAD in the University of Hohenheim, Germany.
- Framework contract award, “Support to strengthen the competitiveness of the ACP horticultural industry by complying with SPS requirements of domestic and international markets, COLEACP Program, Ref.: AO 181083, 2019.
- Co-investigator, Rockefeller Foundation Project: Strengthening African Food Processors (SAP) to Reduce Food Losses in collaboration with University of Nairobi and Purdue University, USA, 2018.
- Project director, “Data analysis and development of nutrition profiles for Marsabit county” under Concern Worldwide October- November, 2018.
- Co-investigator, “Adaptation and Upscaling of tested and applicable postharvest technologies for smallholder horticultural farmers to reduce postharvest losses” National Research Fund (NRF) Multidisciplinary Research Grant, 2017.
- Co-Investigator on “Establishment of Aggregation Centers for Smallholder Horticultural Farmers in YieldWise Project and Organization of the 1st All Africa Postharvest Congress and Exhibition sponsored by Rockefeller Foundation, 2016”
- Principal researcher: Baseline Evaluation Study in Marsabit, Turkana, Isiolo, Wajir and Garissa for the Feed the Future Kenya Livestock Market Systems under ACDI VOCA, Mercy Corps, Smart Regional Consultants (SRC) and BOMA Program, USAID, 2018. Baseline evaluation on livestock market systems, nutrition and health impacts, food and nutrition security, gender, youth and women, conflict management, disaster management and rangeland management.
- Project director, “Enhancing the Processing Techniques, Marketing and Financial Management Skills of Livestock Enterprises in Meru, Tharaka Nithi, Kitui Counties” under the Kenya Semi- Arid Livestock Enhancement Support Project (K-SALES) under Land O’ Lakes sponsored by USDA.
- Co-investigator, Tailored fermentation for delivery of wholegrain and cereal fibre-rich products:- Promoting dietary fibre intake in Africa and Europe - (FIBRE - PRO)” Era Africa under the European Commission, part of the Seventh Framework Programme of the European Community for Research, Technological Development and Demonstration Activities under the funding scheme of “Collaborative Project”, ERAfrica-ERAFRICA\_IC-025; FIBRE-PRO.
- Sub-project coordinator and WP 3b leader, Meat Value Chain in the RELOAD Project “Reduction of losses and value addition by strengthening small and medium enterprises in food processing to sustain value chains in East African postharvest systems” sponsored by the Federal Ministry of Education, Germany.

- Co-investigator: Enhancing the Quality of graduates of agriculture to meet tomorrow's food security challenge (PREPARE-BSc) funded under the ACP-EU Co-operation Programme in Higher Education (EDULINK II) -Reference: EuropeAid/132023/D/ACT/ACPTPS. 2013 - 2015.
- Co-investigator: Contribution of *Cleome Gynandra* (Cat's whiskers) to food, nutrition and income for rural populations under the Dean's Grant 2011/2012 NO. 500-655-665.
- Co-investigator: Strategies to reduce mycotoxin levels in maize during storage funded by the National Council for Science & Technology and Ministry of Higher Education Science and Technology under the Science, Technology and Innovations (ST&I) grant for Women Scientists/ Researchers (2010-2011)
- Principal Investigator: Nutritional Value and Functional Properties of Bioactive Compounds in Supplementary Food Developed from Selected Local Food Ingredients, a PhD research study sponsored by the German Academic Exchange Services DAAD), 2008-2011.
- Principal Investigator: Microbiological Studies of *Kirario*, an indigenous Kenyan Fermented Porridge Based on Green Maize and Millet/Sorghum. An MSc. research Project Sponsored by the University of Nairobi, 2004-2006.
- Research assistant: Improving the Quality and Nutritional Status of "Gari" through the use of Starter Cultures and Fortification with soybean, palm oil and coconut milk; Training of Kaloleni women group on cassava processing, a European Commission sponsored project INCO-DEV) "GARISECURE" on Technological and Nutritional improvement of Gari, a lactic fermented cassava-based product.
- Award for Support to strengthen the competitiveness of the ACP horticultural industry through technical assistance and training in food safety under the Fit for Market' COLEACP Program for Lot 2: Geographical area 2, Ref.: Tender 16001-lot 2, 2017.
- Project director on "Training in Risk Analysis for FDA project under the TRAQUE Programme" to enhance FDA capacity to regulate food and drugs held on 19<sup>th</sup> to 30<sup>th</sup> January, 2015. REF: FDA/TRAQU E/014/09
- Researcher: Delivery of Training Package 4 on Risk assessment from the 20<sup>th</sup> to the 24<sup>th</sup> of October 2014 in Gaborone, Botswana under the Safe Food in ACP 'Des Aliments Sûrs en ACP' Program funded by the EU, UN programme Finance Parl'ue (EDES). Consultancy under Cardno Emerging Markets East Africa Ltd, (REF: EDES 130318/AO/ACP)
- Researcher: Delivery of Trainings Packages 4 (Risk assessment) and 9 (Risk Communication) from the 13<sup>th</sup> to the 17<sup>th</sup> of January 2014 (P4) and from the 20<sup>th</sup> to the 24<sup>th</sup> of January 2014 (P9) in Accra, Ghana under the Safe Food in ACP 'Des Aliments Sûrs en ACP' Program funded by the EU, UN programme Finance Parl'ue (EDES). REF: (130360/GG/CSFC/001/GHA-REF: 1600)
- Principal researcher: Research on Food Safety for Fruits and Vegetables Sold in Domestic Markets for Solidaridad Eastern & Central Africa Expertise Centre (SECAEC), Solidaridad project number H&F/2013/PDC/Cathy Safe Foods Consultants.

- Principal researcher: Development of a Ready-to-Use Supplementary Food and training in Food safety for Nobel Enterprises Limited, Nairobi.
- Principal researcher: Installation and fabrication of a solar tunnel dryer in Mitunguu, Meru County for SunGold Foods Limited.
- Principal researcher: Product Development and nutritional analysis of dehydrated mangoes and bananas by solar drying for SunGold Foods Limited.
- Principal researcher: Design and layout for a fruit processing plant in Mitunguu, Meru County for SunGold Foods Limited.
- Principal investigator: Preservation and Shelf Life Analysis of Opuntia Cactus fruit syrup: training of Twala women group on product technologies in Laikipia Kenya, a project sponsored by the African Conservation (ACC).
- Principal investigator: Nutritional Analysis and Chemical Composition of Opuntia Cactus Pear Fruits, a project sponsored by the African Conservation Centre (ACC).
- Co-researcher: Transfer of Postharvest handling technologies for fresh produce to rural communities in Kenya and particularly Machakos and Makueni Counties.
- Researcher: Design and fabrication of solar dryers particularly the tunnel and green house solar dryers for SMEs and rural communities.
- Principal investigator: Training personnel of Ministry of Agriculture: Value addition through agro- processing through Kenya Agriculture research Institute (KARI).
- Researcher: CTA on Information and communication Management strategies of small-scale agro- business enterprises in Africa held in Cotonou, Benin in February, 2006.
- Researcher for ICRISAT: proof-reading and editing of scientific papers on research carried out in the Limpopo Water Basin in Zimbabwe.

## **XVI.COMMUNITY SOCIAL RESPONSIBILITY AND SERVICE**

- Chair of the Board of Management (BOM) in Uringu Girls High School in Meru County.
- Vice-chair, Board of Management (BOM) in Nkuene Girls High School in Meru County.
- Chairperson, RAY of Hope Kenya (ROHK) for orphan children under St Joseph' ACK church, Kabete.
- Tree Planting for 2014 Wangari Maathai Day and Africa Environmental Day on "YOUTH - Healing the Earth; Environment. Education. Empowerment" held in Othaya on 3/03/2014 by Wangari Maathai Institute for Peace & Environmental Studies and UoN.
- Experiential learning and community participation under 'Interdisciplinary Land Use and Natural Resource Management (ILUNRM)' course 2014 sponsored by Wangari Maathai Institute for Peace & Environmental Studies.
- Training on solar drying of fruits and vegetables using solar dryers under USAID-funded Kenya Horticultural Competitiveness Project (KHCP) and Quality Management Systems and Associates (QSM), April 2014

- Training on postharvest handling technologies of African Leafy vegetables under USAID-funded Kenya Horticultural Competitiveness Project (KHCP) and Quality Management Systems and Associates (QSM), April 2014.
- Training on tomato paste, sauces and ketch production from tomatoes for smallholder producers and processors under USAID-funded Kenya Horticultural Competitiveness Project (KHCP) and Quality Management Systems and Associates (QSM), April 2014.
- Training on solar drying of fruits using tunnel solar dryers and hygiene practices in processing for Sungold Limited, Meru County, 2013.
- Training on postharvest handling technologies of green banana under USAID-funded Kenya Horticultural Competitiveness Project (KHCP) and Quality Management Systems and Associates (QSM), April 2014.
- Training of meat processing and value addition of meat for SMEs and slaughterhouses in pastoral regions, 2016.

### **XVII.HOBBIES:**

- Traveling.
- Listening to music and watching movies.
- Reading inspirational books and magazines.
- Engaging in social activities and networking.
- Volunteer work.
- Soccer, jogging and volleyball.

### **XVIII.REFEREES:**

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