

CURRICULUM VITAE

AGNES MBACHI MWANGWELA (MVULA)

PROFESSIONAL SUMMARY

Dr. Agnes Mwangwela is a Food Scientist with 27 years of experience in university teaching in food science, food product development and food analysis at Lilongwe University of Agriculture and Natural Resources. From 2008, Dr. Mwangwela has served in university leadership as deputy head and later Head of Home economics department, two terms as Dean of Food and Human Sciences, Chair of Deans, College Director of Bunda College and currently as Deputy Vice Chancellor of the University.

Dr. Mwangwela is a holder of PhD in Food Science from the University of Pretoria, an MSc and BSc from the University of Malawi. Dr. Mwangwela currently leads Food Composition data compilation and management for Malawi (MAFOODS) and is a seasoned researcher who has been awarded research grants of over US\$1.9 Million from McKnight foundation, International Institute for Tropical Agriculture (IITA) & Africa Rising; International Foundation for Science (IFS), South African NRF, USAID- Bean Cowpea Collaborative Research Support Program (CRSP), USAID Peanut and Mycotoxin Innovation Lab (PMIL). She has published 24 pieces of research articles international peer reviewed journals and supervised 3 PhD, 44 MSc and 69 BSc students.

She has substantial knowledge of leading project supported by development partners (United States Agency for International Development- USAID, Irish Aid, European Union Delegation- EU and Japanese International Cooperation Agency-JICA), farmers and food processing companies (Valid Nutrition, Technoserve- Malawi). She has provided consulting services to private companies and public value addition programs such as One Village One Product (OVOP). Dr. Mwangwela is experienced in domestic and international partnership engagement, currently Dr. Mwangwela is the Focal point for the Alliance for African Partnership (AAP) which is a consortium of MSU and ten leading African universities that are committed to working in equitable partnership to transform lives and address global challenges.

Dr Mwangwela is a recipient The Norman E. Borlaug International Agricultural Science and Technology fellowship. As part of a career development program for African Women in Agriculture Research and Development (AWARD), Dr. Mwangwela was one of the first Mentors in 2008 and has proceeded to mentor two more women in 2013 and 2014 under this program and continues to do so through the Southern Africa Regional Universities Association (SARUA) and UK Research and Innovations (UKRI) Food Security network (FSnet). As a citizen of the country Dr. Mwangwela is engaged in government policy formulation and implementation in her area of expertise through the National Nutrition Coordinating committee, Policy Advisory Team for DNHA and also served as Board Chairperson for Malawi Bureau of Standards.

A. PERSONAL INFORMATION

Nationality : Malawian, National ID- N8H7RC9K
Date of Birth : 23 July 1973
Gender : Female
Languages : English, Chewa and Tumbuka
ORCID ID : 0000-0001-9577-1024

CONTACT

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B. ACADEMIC QUALIFICATIONS and

- PhD in Food Science, University of Pretoria, South Africa (2003-2006)
- Master of Science in Food Science and Human Nutrition, University of Malawi 2000 (Sandwich Programme with Oregon State University and Tuskegee University in the United States of America)
- Bachelor of Science in Agriculture, Home Economics and Human Nutrition option with credit, University of Malawi. 1995

CONTINUING PROFESSIONAL DEVELOPMENT

- Management of Higher Education Institutes, Galilee International Institute of Management, Israel (February, 2023)
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C. PROFESSIONAL EXPERIENCE

1. University Leadership

1.1 University Deputy Vice Chancellor (1st November 2021 to Date)

i. Leadership and Management

- Assist the Vice Chancellor to provide innovative leadership to the University geared at the furtherance of the objectives of the University.
- Assist the Vice Chancellor to spearhead strategic planning, policy formulation and implementation targeted at the University and responsive to the needs of Malawi in particular and the world in general.
- Ensure high standards of discipline among staff members and students alike especially the academic members of staff.
- Ensure that all Academic Staff adhere to academic, research, outreach and financial policies, rules, and regulations.

- Participate in the development and implementation of the university's policies, procedures and guidelines that create a framework for academic excellence.
- Chair various statutory committees of the university as delegated by the statutes and the Vice Chancellor
- Jointly with the University Registrar ensure that the Performance Management system is improved and is fully functional.
- Carry out any assignment delegated by the Vice Chancellor from time to time.

ii. Research and Publications

- Ensure implementation of University Research Agenda which fosters application of research results to improve knowledge and human welfare.
- Facilitate collaborative research projects and innovative research that can result in improved production, processing, and marketing of agricultural products.
- Encourage academic members of staff to embark on investigative research that brings about socio-economic changes in people's habits.

iii. Academic Affairs

- Advise the Vice Chancellor on all academic matters.
- Ensure that LUANAR implements a robust performance culture for all staff members
- Explore and facilitate alternative teaching and learning avenues (including open and distance learning) to widen access to higher education.
- Establish systems for the planning, development, and review of undergraduate, postgraduate, research programs and any other academic programs of the University.
- Oversee the selection and admission of students.
- Work hand in hand with Senate on academic programmes, standards, research, and consultancies for policy guidelines.
- Liaise with external stakeholders to develop and maintain strategic academic partnerships.
- Initiate and coordinate the development and review of curricula for academic programs offered at the University.
- Monitor compliance in setting and marking all examinations in accordance with the established regulations.

iv. Marketing and Publicity

- Assist the Vice Chancellor to provide leadership for the development and execution of a comprehensive strategic communications and marketing plan to enhance the universities leadership position, reputation, and brand.

- Market the University by giving desirable visibility through interaction with government, the public, the donor community, and the outside world on higher education issues.
- Promote partnerships and networking for academic growth and development in the University

v. Financial/Business Management

- Assist the Vice Chancellor to undertake resource mobilization initiatives and ensure that funds raised by the University and those provided by government are managed properly.
- Work closely with Management to develop and manage strategic alliances and partnerships with the public and the private sectors in areas of mutual interest.

vi. Quality Assurance

- Ensure that mechanisms for quality control and inspection are in place and are functioning properly so that the quality of the graduates is consistent with both regional and international expectations.
- Assist the Vice Chancellor to champion the process of obtaining ISO certification.
- Oversee the development, implementation, and review of the policy framework for monitoring the quality, standards, and management of the University's academic programs.
- Develops, implements, and monitors quality assurance systems that will enable the University to meet and maintain the highest standards in teaching, learning and research

1.2 College Director for Bunda College (1st January 2021 to 31st October 2021) and Acting College Director May 1, 2019- 31st December, 2020)

Leadership and Management-Duties

- i. Monthly meetings with the Dean of students to ensure active engagement of student leadership and a conducive learning and social environment at the college.
- ii. Introduced monthly check – in meetings with individual members of college executive management (CEM), weekly operational update meetings with the CEM and biannual individual meetings with heads of departments and deans. These meetings are aimed at identifying systemic problems, performance challenges and to ensure accountability and adherence to policies and regulations.
- iii. Participated in university management, council sub-committees and senate in developing policies, strategic direction of the university and ensuring quality service delivery and integrity within the institution.

- iv. Facilitated the development of performance plans, implementation and review for Faculty Deans, Dean of Students, College Registrar, College Head of Finance, College Librarian, City Campus Coordinator and ODL Coordinator.

Notable Accomplishments

- i. Facilitated operationalization of statutory committees at college level, these committees include Integrity, Human resource and training, Research and Outreach, Estates and Development.
- ii. Facilitated the operationalisation of College management structures and reporting schedules for the College executive Management, College Management, College Resource Mobilisation, College Funds allocation.
- iii. Streamlining of communication channels for staff and students to ensure that all aspects of the College are running efficiently.
- iv. Development and implementation of a campus security strategy to ensure a safe and secure environment for staff and students.
- v. Led the College during Covid -19 crisis and ensuring safety of staff and students while ensuring continued operations at the college despite constrained resource budgets.
- vi. Championed digital migration of the university's processes such as Performance Management, Human Resources Platform, Curriculum review, Approvals of financial transactions, postgraduate student tracking system, staff personal profiles.

Academic Affairs

- i. Introduced a system of monitoring teaching and learning by students, Heads of Departments and Deans.
- ii. Ensured quality and timely administration of examination. We reviewed the examination papers to ensure adherence to Vetting guidelines and the results were shared with Heads and Deans.
- iii. Ensured that academic staff have been assigned a minimum of 3 courses there by improving value for money for the College.
- iv. Processed overstayed postgraduate students, so that they can officially exit from the system.
- v. Championed the utilisation of ICT for online capturing of continuous assessment grades throughout the semester.
- vi. Supported the development of an ICT platform to aid the Curriculum review process for Bunda College.
- vii. Guided the college to transition to Emergency Remote Teaching and Learning (ERTL) following the advent of COVI-19.

Financial Management, Resource Mobilisation and Partnerships

- i. Enforced adherence to budget and active involvement of full college management through funds allocation meetings resulting in overall reduction in statutory arrears and supplier debt burden and age.
- ii. Despite the loss of one year revenue due to COVID-19, the college managed to deliver excellent service and support for staff and students. Negotiated an internet Data package for staff and students with TNM, obtained K5 Million support from EGENCO for outdoor sitting for students, equipped an isolation center and ensured adequate supply of Personal Protective Equipment for staff.
- iii. Strengthened financial control measures and acted on whistleblower information by commissioning audit of the Security section and Bunda Farm LTD finances. This audit led to the uncovering of fraud cases which are undergoing disciplinary process.
- iv. Consolidation of resource mobilisation activities at the College:
 - a. Instituted a Bunda Farm technical Committee. I led the committee in seeking alternative financing, that included US\$ 50 000 CAT grant, K30 Million loan from EDF and K12 Million related party loan. A five year revitalization plan is under development.
 - b. Commissioned an assessment of Bunda College Enterprises, to identify challenges and opportunities for further development of business acumen among departments through the Agribiz Hub.
 - c. Management of Bunda Filling station.
- v. Actively engaged with development partners, government and private sectors, drawing MOUs and development of proposals for collaboration (Lilongwe Water Board, USAID, MACRA, Reserve Bank of Malawi, Ministry of Youth, Ministry of Agriculture)
- vi. Reconstituted the Internal Procurement and Disposal Committee (IPDC), introduced an online procurement platform and ensured active involvement of user departments. These changes have significantly reduced misprocurements, ensured value for money and protected the institution from accumulating new debts.
- vii. Ensured that students at both Bunda and City campuses followed registration deadlines and administration of examinations. As such, there was significant improvement in fee collection. Tuition and rentals were added to SARIS Accounts.
- viii. I serve as the Focal Point for Alliance for African Partnership (AAP) since 2020.
- ix. I serve as the institutional Champion for Food Systems Research Network for Africa (FSNet – UKRI) project 2020-2023
- x. Led the Bunda College team in developing a proposal to World Bank-Ministry of Education Skills for a Vibrant Economy (SAVE) for which the college got US\$4.5 Million.

Human Capacity Building

- i. Ensuring that the Human Resources and Training policy is adhered to
- ii. Updating the records and following up on progress by staff on long term study leave
- iii. Facilitated Short course training for staff members in the region and in country
- iv. Supported an In house training of Heads and Deans on Finance Management for Non-Finance executives in April to May 2021.

Infrastructure Development and Estate Management

- i. Hostels were in very poor shape, although, resources were constrained, we managed to keep them clean and fumigated. The management also tackled the problem of overcrowding in hostels by reducing occupancy. In addition, hostel rent charges were included to the students SARIS accounts to address defaulting of rental payments. In the same line, Postgraduate students, who had overstayed and were still maintaining hostel rooms on campus were informed to vacate the hostels to create space for 1st year and international students.
- ii. ICT department, developed a room allocation platform giving priority to 1st years 40%, and 20% for each of the continuing student classes. This approach ensured fair access by all students to campus accommodation, and reduced undue pressure from guardians and staff.
- iii. Engaged the Aquafish ACE to support the completion of the PhD Hostel
- iv. Designated of rentals for maintenance of Hostels and Staff houses
- v. Engaged the Agribiz Hub, Agribusiness Management and Agriculture Economics Departments to contribute towards finalization of the Multipurpose Hall and Classroom.
- vi. Commissioned the grading of a perimeter road and enforcing planting of a sisal live fence to ensure the integrity of the university boundary.

Research, Publications and outreach

- i. Operationalized the College Research and Outreach Committee. The committee consolidated the faculty response to the proposed Research grants and Consultancy policies and organized a virtual field day.
- ii. Organized a briefing session for upcoming scientists to respond to call for proposals by International Foundation for Science (IFS). Two members of staff were awarded research grants
- iii. Facilitated staff participation in responding to a call from the Alliance for African Partnership (AAP) for Partnerships for Innovative Research in Africa (PIRA) and two teams from LUANAR were awarded grants.
- iv. Facilitated staff participation in responding a to call from SARUA-UKRI Food System Network postdoctoral fellowship and two members of staff have been awarded the Fellowship while two senior academicians have been identified as mentors.

1.3 Chair of Deans in 2015-2016 and facilitated the following:

- Drafting of discussion papers for: Professor Emeritus, Adjunct academic staff positions, and Non qualification awarding admission of students
- Development of tools to facilitate effective functioning of senate, deans and heads of departments in academic functions
 - Development of Teaching and Learning monitoring tools
 - Development of Examination Vetting tools and Examination assessment tools
 - Curriculum review rubric for senate committee

- Representing LUANAR at the NCHE coordinated public university selection processes
- Chairing meetings of the committee of Deans and deputizing the DVC on academic affairs upon delegation.

1.4 Dean of Faculty, Food and Human Sciences; November 2013 to November 2019, facilitated the following:

- Facilitated a Visioning process for the faculty and subsequent development of the faculty strategic plan
- Introduced the position of Faculty grants and accounts assistant, which is fully funded by projects being implemented by the Faculty. This office is pivotal in the faculty to meet donor financial reporting requirements, control and report financial status of faculty accounts, and facilitate timely transactions of faculty financial processes.
- Putting up mechanisms to finance the Dean's office to ensure sustainable funding and operations of the office.
- Setting up of the Beatrice Mtimuni Scholaships to support students with financial challenges
Introduced academic and social support for students in the faculty through Tutorials offered by PG students, provision of meals, and piece work for students in need of financial support.
- Introduced faculty achievement awards for staff and students
- Mobilised resources to support **140 Postgraduate** students in the faculty
- Led the faculty to develop the following academic programs and presented them for approval to senate:
 - Diploma in Gender and Development
 - BSc Nutrition and Food Science
 - BSc Food Science and Technology
 - BSc Human Science and Community Service
 - BSc Gender and Development
 - Post Graduate Diploma in Clinical Dietetics
 - MSc Human Nutrition
 - MSc Food Science and Technology
 - Msc Gender and Development
 - MSc Clinical Dietetics
- Facilitated productive partnerships between the faculty with:
 - Government (Ministry of Health, Department of Nutrition HIV and AIDS, Directorate of Clinical Services, Plant Genetic Resources Centre, Community Health Services Unit, Ministry of Gender, Children, Disability, and Social welfare and Ministry of Industry, Trade, and Tourism, Malawi Bureau of Standards)
 - Development Partners (USAID, Irish Aid, UN Women, EU Delegation)
 - Private sector, (Valid Nutrition, and SMEs)
- Facilitated the development of new Academic programs ie Diploma, Bachelors' and Masters in gender and Development; Postgraduate Diploma in Clinical Dietetics and sourced funding for the initial cohorts.

- ix. Established a mechanism for tracking annual leave system that compels staff to take much deserved holidays as stipulated in the conditions of service.

1.5 Head of department, Home Economics and Human Nutrition department, August 2008 to October 2013.

- i. Facilitated the development and implementation of Diploma in Youth development work in Collaboration with the Commonwealth Youth Program
- ii. Developed the proposal for the Faculty of Food and Human Science and successfully managed the transition from a department to a faculty with three departments.
- iii. Facilitated partnerships between faculty with:
 - a. Government (Department of Nutrition HIV and AIDS, Plant Genetic Resources Centre, Community Health Services Unit, Ministry of Gender, Children, Disability, and Social welfare and Ministry of Industry, Trade, and Tourism, Malawi Bureau of Standards)
 - b. Development Partners (USAID, Irish Aid)
 - c. Private sector, (Valid Nutrition, and SMEs)
 - d. Research institutes (IITA, ICRISAT, CIAT)

1.6. Deputy Head of Department, Home Economics and Human Nutrition, 2006 to July 2008.

2. SCHOLARY CAREER ACHIEVEMENTS

2.1 Associate Professor of Food Science (July 2015 to date)

As associate professor of Food Science at Bunda College, a college of Lilongwe University of Agriculture and Natural Resources, I am involved in:

- i. Teaching of undergraduate (Food Chemistry, Introduction to Food Science, Legume and Oilseeds Technology, Food Product Development) and post graduate courses (Advanced Food Chemistry, Food Analysis, Food Composition Data Production, Management and Utilisation)
- ii. Conducting research with the following highlights:
 - Released 3 varieties of Bambara groundnuts in 2018 (**Section H1**)
 - Published 9 research articles in peer reviewed journals, one book chapter and one book (**Section H2**).
 - Made 24 presentations at international and local scientific conferences (**Section H5**)
 - Managed seven research grants (**Section H7**)
- iii. Implemented two outreach projects in collaboration with government department of Nutrition HIV and Aids, Irish Aid and USAID. These projects involved supporting government to implement Scaling up Nutrition activities, Capacity building for Nutrition sector officers, development of area specific food calendars, compilation of the Malawian Food Composition database and introduction of dieticians as one of the health care service cadres (**Section H6**)

- iv. Supervised one PhD, 34 MSc and 27 undergraduate student research projects (**Section H8 and H9**)
- iv. Developing new curricula for BSc Food Science and Technology, BSc Nutrition and Food Science,
- v. External examiner for 2 PhD and 2 MSc thesis; and internal examiner for 2 MSc thesis (**Section H11**).

2.2. Senior Lecturer in Food Science, July 2008 - June 2015.

- i. Teaching of undergraduate (Food Chemistry, Introduction to Food Science, Legume and Oilseeds Technology, Food Product Development) and post graduate courses (Advanced Food Chemistry, Food Analysis, Food Composition Data Production, Management and Utilisation)
- ii. Conducting research with the following highlights:
 - Published 7 research articles in peer reviewed journals, two technical Reports (**Section H2**)
 - Made 24 presentations at international and local scientific conferences (**Section H5**)
 - Managed seven research grants (**Section H7**)
- iii. Conducting 15 consultancy assignments providing food processing trainings through Technoserve, providing food safety audit services and capacity building. (**Section H6**)
- iv. Supervising two PhD, 10 MSc and 41 undergraduate student research projects (**Section H8 & H9**)
- v. Mentoring 3 women scientists under the AWARD Program (**Section H10**)
- vi. Developing new curricula for food science related courses for the university

2.3 Lecturer in Food Science, January 2000 to June 2008

- i. Conducting research with the following highlights:
 - Published 4 research articles in peer reviewed journals and two technical reports (**Section H2**)
 - Made 10 presentations at international and local scientific conferences (**Section H5**)
 - Managed three research grants (**Section H7**)
- ii. Supervised 2 MSc students (**Section H8**)
- iii. Conducted one consultancy to provide food safety capacity building for Food Processing Companies in Collaboration with the EU-DG Sanco (**Section H6**)

2.4 Staff Associate in Food Science, August 1996 – December 2000

- 3. **Intern with UNICEF**- Child Survival project at Mangochi District Council, Malindi Ward. December 1995-July 1996.

D. EXTERNAL BOARD RESPONSIBILITIES

2021 to Date **Board member** - MWAPATA
 2020 to April 21 **Board Chairperson** – Board of Directors for Malawi Bureau of Standards
 2018 to Date: **Policy Advisory Team** member for the Ministry of Health and Population, Department of Nutrition HIV and AIDS.
 2020 to Date **Chairperson** – National Council of Higher Education, Gender Policy Taskforce
 2020 to Date **Advisory Board Member** for the Centre for Agriculture Transformation
 2018 to 2021 **Project Steering Committee** member for Strengthening Agriculture and Nutrition Extensions (SANE) project
 2018 to 2019 **Advisory Board member** for the Zero Hunger Strategic Review for Malawi, for the Sustainable Development Goal 2.
 2012-2016 **Council Member**, Malawi Assemblies of God University (MAGU).
 2011-2012 **Taskforce member** for the University Formation Team (UFT) for the Malawi Assemblies of God University

E. UNIVERSITY COMMITTEES, TASKFORCES

2021 to Date Chairperson – LUANAR Pension Fund Board of Trustees
 2021 to Date Chairperson- LUANAR Senate Committee on Teaching and Learning
 2021 to Date Chairperson- LUANAR Senate Committee on Academic Policy and programs
 2021 to Date Chairperson- LUANAR Senate Committee on Academic Planning and Finance
 2021 to Date Chairperson- LUANAR Senate Committee on Research and Outreach
 2021- to date Chairperson – LUANAR Institutional Integrity Committee
 2020 to date Coordinator – LUANAR Gender Coordinating Unit
 2015-2016 Taskforce Member- LUANAR Senate Handbook
 2016-2017 Team Leader – LUANAR Gender Policy
 2015 Taskforce Member –LUANAR- NRC integration -
 2015-2016 Taskforce Member –Research and Outreach policy,
 2014-2015 Taskforce Member –Revised LUANAR staff promotion Criteria,
 2014-2015 Taskforce member –LUANAR Performance Management System
 2015 -2018 Chairperson of the LUANAR graduation Committee,
 • Design of the graduation tradition elements e.g. Mace,
 • Facilitated the production of Graduation Magazine
 • Double session graduation that was successfully implemented
 • Out door graduation, that faced a lot of challenges

F. MEMBERSHIPS

- Forum for African Women Vice Chancellors (FAWoVC) 2022- to date
- Global Leadership Network – Lilongwe Chapter member 2020 to present
- Organisation of Women in Science in Developing Countries (OWSD) 2019 to Date

G. REFEREES

Prof. Emanuel Kaunda, LUANAR, Bunda Campus, P.O. Box 219, Lilongwe- MALAWI Tel : 1 277 222 ; Fax 1 277 364/436 Email: ekaunda@luanar.ac.mw	Prof. Richard M. Mkandawire, Africa Director, Alliance for African Partnership P.O. Box 379, Lilongwe - MALAWI Tel + 265 881380104 Email: Mkandaw2@msu.edu
Associate Prof. Alexander Kalimbira, LUANAR, Bunda Campus P.O. Box 219, Lilongwe - MALAWI Tel : 1 277 222 ; Fax 1 277 364/436 Email: akalimbira@luanar.ac.mw	

H DETAILS OF SCHOLARY ACHIEVEMENTS

H1. Research - Technology release

Khaki-Mponya, **Mwangwela A.M.**, Kabuli.H.J., Mazuma. E.L., Siyeni D., Pungulani L. Milinyu, M., and Bickiel W. 2018. Release of four consumer preferred bambara varieties (Chikope chanyani-CBAM1-16, Khaki - CBAM2-16, Nalbam 3- CBAM3-16 and Nalbam 4 - CBAM4-16) for cultivation in Malawi. Agriculture Technology Clearing Committee; Department of Agriculture Research Services.

H2. Research publications- Journal papers

1. Sanele Nkomani, Lynne M. Ausman, Elizabeth Marino-Costello, Bernadette Chimera, Alexander Kalimbira, **Agnes Mwangwela**, Molly Uebele-Harrigan, John Phuka, Shibani Ghosh, 2021. Nutrition Capacity Building to Meet National Priorities: Lessons Learned in Developing and Implementing Malawi's First Dietetics Program, *Global Health: Science and Practice*, 9(4):928-935
2. Mulenga, H., **Mwangwela, A.M.**, Kampanje- Phiri, J and Mtimuni, B. 2021. Influence of gendered roles on legume utilization and improved child dietary intake in Malawi. *African Journal of Food Agriculture, Nutrition and Development*, 21(3): 17764-17786 <https://doi.org/10.18697/ajfand.98.18205>
3. Jere, A.D., **Mwangwela, A.M.**, Mlotha, V., Phan, U.T.X., Adhikari, K. 2020. Acceptability of traditional cooked pumpkin leaves seasoned with peanut flour processed from blanched,

deskinmed and raw peanuts of different varieties. *Scientific African*, **10**: DOI: 10.1016/j.sciaf.2020.e00598

4. M. Chimbaza, H. Kankwamba, **A.M. Mwangwela** and W. Kamthunzi (2020). Post-harvest groundnut aflatoxin management among smallholder farmers in Malawi. *World Mycotoxin Journal*, **13**(1):37-43.
5. Aggrey Gama, **Agnes Mwangwela**, Gichoi, Simmons, and Koushik Adhikari (2020). Sensory and Nutritional Properties of Peanut-Based Beverages: A Promising Solution for Undernutrition in Malawi and Possibly Beyond, *Journal of the Science of Food and Agriculture*, **100** (6): 2460-2467; DOI 10.1002/jsfa.10266
6. Martin Kalumbi, Limbikani Matumba, Beatrice Mtimuni, **Agnes Mwangwela** and Aggrey P. Gama, (2019). Hydrothermally Treated Soybeans Can Enrich Maize Stiff Porridge (Africa's Main Staple) without Negating Sensory Acceptability. *Foods*, **8** :650; doi:10.3390/foods8120650
7. Theresa N. Ngoma, Ulemu Chimimba, **Agnes Mbachi Mwangwela**, Chrissie Thakwalakwa, Keneth M. Maleta, Mark Manary and Indi Trehan, (2018). Effect of cowpea flour processing on the chemical properties and acceptability of a novel cowpea blended maize porridge, *PLos one*, **13**(7): e0200418. <https://doi.org/10.1371/journal.pone.0200418>.
8. Geresomo NC, Mbuthia EK, Matofari JW, and **AM Mwangwela**. 2017. Risk factors associated with stunting among infants and young children aged 6 - 23 months in Dedza district of central Malawi. *African Journal of Food Agriculture, Nutrition and Development*, **17**(4):12854-12870. Doi 10.18697/ajfand.80.16730
9. Anitha Seetha, Takuji W Tsusaka, Timalizge W Munthali, Maggie Musukwa, **Agnes Mwangwela**, Ziona Kalumikiza, Tinna Manani, Lizzie Kachulu, Nelson Kumwenda, Mike Musoke and Patrick Okori. 2018. How immediate and significant is the outcome of training on diversified diets, hygiene and food safety? An effort to mitigate child undernutrition in rural Malawi. *Public Health Nutrition*. **21**(6):1156-1166. doi:10.1017/S1368980017003652.
10. Kaneene J B, Thiagarajan D, Chigwa F, Gondwe T, Gunaseelan L, Thirunavukkarasu M, Babu M, Balakrishnan V, Kambewa D, Mvula R, Dzanja J, Bakili O, Mlotha V, Kakwera M, Chmombo M, **Mwangwela A**, Sivaselvam S N, Miller R, Asokan S A, Palanidorai R, Prathaban S, Kumanan K, Ramesh Saravanakumar R and MohanKumar P S. (2016). A tri-lateral capacity building approach to strengthen the dairy value chain in Malawi: overview of the design and implementation. *Livestock Research for Rural Development*. **28**: <http://www.lrrd.org/lrrd28/9/kane28154.html>
11. Vincent Mlotha, **Agnes Mbachi Mwangwela**, William Kasapila, Edwin W.P. Siyame & Kingsley Masamba (2015). Glycaemic responses to maize-flour stiff porridges prepared using local recipes in Malawi. *Food Science and Nutrition*; **4** (2):322-328.

12. Mizeck G.G.Chagunda, **Agnes Mwangwela**, Chisoni Mumba, Filomena Dos Anjos, Bettie S. Kawonga, Richard Hopkins and Linley Chiwona-Kartun. 2015. Assessing and managing intensification in smallholder dairy systems for food and nutrition security in Sub Saharan Africa. *Regional Environmental Change* **15** (6). DOI 10.1007/S 10113-015-0829-7.
13. Lora Forsythe, Mala Nya Manda, **Agnes Mbachhi Mwangwela** and Ben Bennett (2015) Beliefs, taboos and minor crops: the case of Bambara groundnut in Malawi. *Food Culture and Society* **18**(3) :501-517; DOI:10.1080/15528014.2015.1043112.
14. Katungwe, Patricia, **Mwangwela Agnes** and Geresomo Numeri (2015) Dietary adequacy of rural school children among bambara groundnut growing farmers in Ntchisi district of Malawi. *African Journal of Food Agriculture, Nutrition and Development*, **15**(1)9621-9634.
15. Tinna Austen Ng'ong'ola-Manani, Hilde Marit Østlie, **Agnes Mbachhi Mwangwela** and Trude Wicklund. 2014. Metabolite Changes during Natural and Lactic Acid Bacteria Fermentations in Pastes of Soybeans and Soybean-Maize Blends. *Food Science and Nutrition*, **2**(6):768-85. doi: 10.1002/fsn3.171.
16. Tinna Austen Ng'ong'ola-Manani, Hilde Marit Østlie, **Agnes Mbachhi Mwangwela** and Trude Wicklund (2015). Identification and characterization of lactic acid bacteria (LAB) involved in natural and lactic acid bacteria fermentations of pastes of soybeans and soybean-maize blends using culture-dependent techniques and denaturing gradient gel electrophoresis. *Food Biotechnology*, **29**(1):20-50
17. Tinna A. Ng'ong'ola-Manani, **Agnes M. Mwangwela**, Reidar B. Schuller, Hilde M. Østlie and Trude Wicklund. 2013. Sensory evaluation and consumer acceptance of naturally and lactic acid bacteria-fermented pastes of soybeans and soybean-maize blends. *Food Science and Nutrition*, **2**(2):114-31. DOI:10.1002/fsn3.82.
18. **Agnes M. Mwangwela**, Ralph D. Waniska and Amanda Minnaar. 2007. Effect of micronisation temperature (130 °C and 170 °C) on functional properties of cowpea flour. *Food Chemistry* **104**: 650-657.
19. **Agnes M. Mwangwela**, Ralph D. Waniska, Cassandra McDonough and Amanda Minnaar. 2007. Cowpea cooking characteristics as affected by micronisation temperature: a study of the physicochemical and functional properties of starch. *Journal of the Science of Food and Agriculture* **87**, 399-410.
20. Gabriella Phiri, Peter Mumba and **Agnes Mwangwela**. 2006. The quality of cooking oil used in informal food processing in Malawi: A preliminary study. *International Journal of Consumer Studies* **30**, 527-532.
21. **Agnes M. Mwangwela**, Ralph D. Waniska, and Amanda Minnaar. 2006. Hydrothermal

treatments of two cowpea (*Vigna unguiculata* L. Walp) varieties: effect of micronisation on physico-chemical and structural characteristics. *Journal of the Science of Food and Agriculture* **86**: 35-45.

H3. Research publications- technical reports

1. Kaunda, E; Maliro, D; Khaila, S; Kamanga, L; Mwangwela, A and Chapotoka, O. 2003. Chambo: Is it taste or something else? Preference and acceptability of roasted, fried and boiled *Oreochromis* spp (Chambo), *Ramphochromis* spp (Ncheni) and *Bagrus meridionalis* (Kampango) from Lake Malawi. *Aqua-Fish Technical Report* **2**: 6-9.
2. Kenji G.M., Mvula A.M., Koaze H and Baba N. 2000. Aflatoxin Contamination of Kenyan Maize Flour and Malted Kenyan and Malawian Grains. *The Scientific Reports of the Faculty of Agriculture, Okayama University*, **89**: 5-7.

H4. Research publications- books and book chapters

1. Seetha Anitha, Victor Afari-Sefa, Inviolante Dominick, Zione Kalumikiza, Khumbo Mhango, **Agnes Mwangwela**, Yasinta Muzanila, Justus Ochieng, Patrick Okori, and Takuji Tsusaka, 2022. Improved household nutrition through home-grown produce and consumption of nutritious and healthy products. In *Sustainable Agricultural Intensification: A Handbook for Practitioners in East and Southern Africa*, Edited by: Mateete Bekunda, Jonathan Odhong and Irmgard Hoeschle-Zeledon, CAB International; DOI: 10.1079/9781800621602.0000
2. MAFOODS. 2019. *Malawian Food Composition Table*. 2020; 1st Edition. Averalda van Graan, Joelaine Chetty, Malory Jumat, Sitilitha Masangwi, **Agnes Mwangwela**, Felix Pensulo Phiri, Lynne M. Ausman, Shibani Ghosh, Elizabeth Marino-Costello (Eds). Lilongwe, Malawi. ISBN:978-1-928340-41-6, South African Medical Research Council, Biostatistics Unit-SAFOODS; Tygerberg 7505, South Africa.
3. David Jordan, Rick Brandenburg, Gary Payne, David Hoisington, Nick Magnan, James Rhoads, Mumuni Abudulai, Koushik Adhikari, Jinru Chen, Richard Akromah, William Appaw, William Ellis, Maria Balota, Kumar Mallikarjunan, Kenneth Boote, Greg MacDonald, Kira Bowen, Boris Bravo-Ureta, Jeremy Jelliffe, Agnes Budu, Hendrix Chalwe, Alice Mweetwa, Munsanda Ngulube, Awere Dankyi, Brandford Mochia, Vivian Hoffman, Amade Muitia, **Agnes Mwangwela**, Sam Njoroge, David Okello and Nelson Opoko. 2018. Preventing mycotoxin contamination in groundnut cultivation. In *Achieving sustainable cultivation of grain legumes* Vol 2., Sivasankar, S. Editor. Burleigh Dodds Science Publishing Limited, Cambridge, UK

H5. Research publications- conference presentations and proceedings

1. Agnes Mwangwela, Sitilitha Masangwi, Frank Kayange, Tina Manani and Isabel Banda. Integrating neglected and underutilised crop species in food product development. Oral paper presentation at the 23rd Biennial SAAFoST Congress, 2-4th September, 2019.
2. Khumbo Mhango, Agnes M. Mwangwela, Zione Kalumikiza & Vincent Mlotha Effect of Nutrition Education and Milk Processing on Milk Consumption and Nutritional Status of Under-five Children among Dairy Farming Households in Dedza District, Malawi. Agriculture, Nutrition and Health Academy, 25-29 June 2018, Accra, Ghana.
3. Longwe, T.V., Mwangwela, A.M., Kasapila, W., Mlotha, V., Mallikarjunan, K., and Adhikari, K. (2018). Proximate composition, phytochemical properties and functionality of blanched full fat groundnut flour. Oral presentation made at the International Food and Nutrition Research Dissemination Conference held at Bingu International Convention Centre, Lilongwe, Malawi, 20th -21st June 2018.
4. Ng'ong'ola-Manani, T.A., Østlie, H.M., Mwangwela, A.M. and Wicklund, T. (2018). Effect of natural and lactic acid bacteria fermentation processes on nutritional quality of soybeans and soybean maize blends pastes. Oral presentation made at the International Food and Nutrition Research Dissemination Conference held at Bingu International Convention Centre, Lilongwe, Malawi, 20th -21st June 2018.
5. Mulenga, H., Mwangwela, A.M., Kampanje-Phiri, J. and Mtimuni, B. (2018). Association of women's control over household resources on infant and young child feeding practices in Dedza and Ntcheu districts. Oral presentation made at the International Food and Nutrition Research Dissemination Conference held at Bingu International Convention Centre, Lilongwe, Malawi, 20th -21st June 2018.
6. Geresomo, N.C., Kamau-Mbuthia, E., Matofari, J.W. and Mwangwela, A.M. 2018. Risk factors associated with stunting among infants and young children aged 6-23 months in Dedza district, Malawi. Oral presentation made at the International Food and Nutrition Research Dissemination Conference held at Bingu International Convention Centre, Lilongwe, Malawi, 20th -21st June 2018.
7. Mhango, K., Mwangwela, A.M., Kalumikiza, Z., and Mlotha, V. 2017. Oral presentation at the National Commission for Science and Technology Research Dissemination Conference (NRCD) at Sunbird Nkopola in Mangochi, Malawi. 28th to 29th September, 2017.
8. Magombo, C.A., Mwangwela, A.M., Ng'ong'ola-Manani, T., Mallikarjunan, K., and Adhikari, K. 2017. Aflatoxin contamination in whole peanut flour produced by small scale peanut flour processors in Malawi: Aflatoxin awareness and management practices. Oral presentation at the National Commission for Science and Technology Research Dissemination Conference (NRCD) at Sunbird Nkopola in Mangochi, Malawi. 28th to 29th September, 2017.

9. Chimbaza, M., Mwangwela, A.M., Kamthunzi, W., Mallikarjunan, K., and Adhikari, K. 2017. Effect of groundnut drying methods on drying rate and aflatoxin contamination. An oral presentation made at the 49th Annual Meeting of the American Peanut Research and Education Society, July 11-13, Albuquerque, New Mexico; USA.
10. Longwe, T.V., Mwangwela, A.M., Kasapila, W., Mlotha, V., Mallikarjunan, K., and Adhikari, K. 2017. Effect of blanching on composition, physical and functionality of full fat groundnut flour. An oral presentation made at the 49th Annual Meeting of the American Peanut Research and Education Society, July 11-13, Albuquerque, New Mexico; USA.
11. Kasakula, C.T., Mwangwela, A.M., Matumba, L., Adhikari, K. and Mallikarjunan, K., 2017. Response surface optimisation of aqueous-ethanolic decontamination of aflatoxin in peanut oil. Poster presentation at the 49th Annual Meeting of the American Peanut Research and Education Society, July 11-13, Albuquerque, New Mexico; USA.
12. Magombo, C.A., Mwangwela, A.M., Ng'ong'ola-Manani, T., Mallikarjunan, K., and Adhikari, K. 2017. Aflatoxin contamination in whole peanut flour produced by small scale peanut flour processors in Malawi: Aflatoxin awareness and management practices. Poster presentation at the 49th Annual Meeting of the American Peanut Research and Education Society, July 11-13, Albuquerque, New Mexico; USA.
13. Monica Chimbaza, Agnes Mwangwela, and Wellam Kanthunzi. April, 2017, Effect of drying method on drying rate and aflatoxin contamination. Poster presented at the Legume Platform conference organised by African Institute of Corporate Citizenship-. Lilongwe; Malawi.
14. Monica Chimbaza, Agnes Mbachu Mwangwela, Wellam Kanthunzi, Kumar Mallikarjunan, and Koushik Adhikari. 2016. Effect of groundnut drying methods on drying rate, quality and aflatoxin contamination. Poster presented at the 5th Biennial General meeting of RUFORUM in Cape Town, South Africa. 16 -22 October, 2016.
15. Theresa Nakoma Ngoma, Agnes Mwangwela and Ken Maleta. (2016) The potential of cowpea as an intervention in mitigating effects of environmental enteropathy in Malawi. Nutrition Congress 2016 (26th Congress of the Nutrition Society of South Africa (NSSA) and 14th Congress of the Association for Dietetics in South Africa (ADSA)) whose theme was "Science at the centre of sound nutrition", held at Lord Charles Hotel, Somerset West, South Africa from 3 – 5th September 2016.
16. Timalizge Wezi Munthali, Agnes Mwangwela, Seetha Anitha, Zione Kalumikiza and Tinna Manani. (2016). The potential of cereal-legume based complementary foods in eradicating undernutrition in Malawi. Nutrition Congress 2016 (26th Congress of the Nutrition Society of South Africa (NSSA) and 14th Congress of the Association for Dietetics in South Africa (ADSA)) whose theme was "Science at the centre of sound nutrition", held at Lord Charles Hotel, Somerset West, South Africa from 3 – 5th September 2016.

17. Agnes M. Mwangwela., P. Kumar Mallikarjunan and Manjeet S. Chinnan. (2016). Food processing priorities to reduce food losses in Malawi. Oral Presentation made at IFT 16 , Chicago, IL; USA. July 16 -19.
18. Moyo, T.T., Mwangwela, A.M., Adhikari, K., Chinnan, M. and Malikarjunan, K. (2016). Quality characterisation and improvement of peanut butter on the Malawian Retail Market. Poster presented at the IFT 16 , Chicago, IL; USA. July 16 -19.
19. Autile Chiwaula Sanyila, Agnes Mbachii Mwangwela and James Bokosi. (2016). Nutrient Composition and Consumption Pattern of Underutilized Pulses in Three Districts of Southern Malawi. Poster presented at the Pan African grain Legume and World Cowpea Conference, Livingstone, Zambia; 27th February-4th March 2.
20. U. Kankwatira, A. Mwangwela., K. Maleta., M. Manary., I. Trehan., and C. Thakwalakwa. (2016) Effect of Processing on Proximate Composition and Sensory Acceptability of Biofortified Bean Flour. Poster presented at the Pan African grain Legume and World Cowpea Conference, Livingstone, Zambia; 27th February-4th March 2.
21. Samuel Kapota and Agnes Mwangwela. (2016) Legume consumption pattern of households in selected areas of districts in Malawi. Poster presented at the Pan African grain Legume and World Cowpea Conference, Livingstone, Zambia; 27th February-4th March 2.
22. Tamara Tumasile Machinjili, Agnes Mwangwela and Vernom Kabambe. (2016). Evaluation of cooking characteristics for six pigeon peas varieties (whole and dehulled). Poster presented at the Pan African grain Legume and World Cowpea Conference, Livingstone, Zambia; 27th February-4th March 2.
23. Therese Nakoma Ngoma, Agnes Mwangwela and Ken Maleta. (2016). Acceptability of cowpea-fortified maize porridge by under five children and their mothers. Poster presented at the Pan African grain Legume and World Cowpea Conference, Livingstone, Zambia; 27th February-4th March 2.
24. Timalizge Wezi Munthali, Agnes Mwangwela, Seetha Anitha, Zione Kalumikiza, and Tinna Manani. (2016). Effects of aflatoxin exposure and legume based complementary foods on nutritional status of children in Mzimba and Balaka. Poster presented at the Pan African grain Legume and World Cowpea Conference, Livingstone, Zambia; 27th February-4th March 2.
25. Fanny Chigwa, Timothy Gondwe, Ronnie Mvula, Joseph Dzanja, Agnes Mwangwela, Vincent Mlotha, Daimon Kambewa, Oliver Bakili, S. A. Asokan, R. Palanidorai, V. Ramesh Saravanakumar, S. N. Sivaselvam, V. Balakrishnan, M. Babu, S. Prathaban, M. Thirunavukkarasu, L. Gunaseelan, Deepa Thiagarajan, John Kaneene and P. S. MohanKumar. 2013. Strategies for improving small-holder dairying in Malawi: Trilateral approach. A poster presented at the “International Symposium on Dairy Value Chain” held on 23 – 24th June 2013 at Madras Veterinary College of TANUVAS, Chennai, India.

26. Agnes Mwangwela, Vincent Mlotha, Ronnie Mvula, Joseph Dzanja, Deepa Thiagarajan, N. Karthikeyan, A. Ilango, V. Ramesh Saravanakumar, T. Sivakumar, M. Thirunavukkarasu, R. Palanidurai. 2013. Easily adaptable milk value addition strategies for Malawi: TANUVAS experience. A poster presented at the “International Symposium on Dairy Value Chain” held on 23 – 24th June 2013 at Madras Veterinary College of TANUVAS, Chennai, India.
27. Agnes M. Mwangwela and Amanda Minnaar. 2008. African traditional legumes. Paper presented at the IFS-SIK-University of Pretoria seminar on Traditional grains for low environmental impact and good health. 23 September, 2008, Gothenburg, Sweden.
28. Agnes M. Mwangwela, Ralph D. Waniska, and Amanda Minnaar. 2007. Micronisation of cowpeas: Effect on physicochemical properties of proteins and starch. Poster presented at the IFS-SIK-University of Pretoria workshop on Traditional grains for low environmental impact and good health. 5-8 November 2007, Pretoria, South Africa.
29. Katungwe, P. Mulwafu, A. and Mwangwela, A.M. 2007. Utilisation of flour milled from micronised (130°C) cowpeas in maize based traditional Malawian snacks. Poster presented at the IFS-SIK-University of Pretoria workshop on Traditional grains for low environmental impact and good health. 5-8 November 2007, Pretoria, South Africa.
30. Agnes M. Mwangwela, Ralph D. Waniska, Louis Pelembe and Amanda Minnaar. 2005. Development of a simple rapid screening method for measuring food quality characteristics of cooked beans and cowpeas. Poster presented at a Conference on “Regional partnerships to enhance Bean/Cowpea Consumption and Production in Africa and Latin America” Bean/Cowpea CRSP, Dakar, Senegal, (September 12-16 September 5th -7th).
31. Agnes M. Mwangwela, Ralph D. Waniska, and Amanda Minnaar. 2005. The quest for convenient, dried, whole cowpeas: Use of micronization to reduce the cooking time of cowpeas (*Vigna unguiculata* L. walp). Oral paper presented at the SAAFoST biennial congress (September 5th -7th), Stellenbosch, South Africa.
32. Agnes M. Mwangwela, Ralph D. Waniska, and Amanda Minnaar. 2005. Effect of micronization temperature on structure and cooking characteristics of cowpea (*Vigna unguiculata* L. Walp) seeds. Poster presented at 1st International Edible Legume Conference and 4th World Cowpea Congress, (April 17th – 21st), Durban, South Africa.
33. Agnes M. Mwangwela, Ralph D. Waniska, Alan N. Hall and Amanda Minnaar. 2004. Structural changes during hydrothermal processing of cowpea seeds. Extended abstract published in the Proceedings of the 43rd annual conference of the Microscopy Society of Southern Africa. (30th Nov – 3rd December), Pretoria, South Africa.

34. Agnes M. Mwangwela, Ralph D. Waniska, Alan N. Hall and Amanda Minnaar. 2004. Structural changes during hydrothermal processing of cowpea seeds. Poster presented at the Microscopy Society of Southern Africa (30 Nov – 3rd December), Pretoria, South Africa.
35. Phadi M.M; Mwangwela A.M. and Minnaar A. 2003. Effect of micronization on some physico chemical properties of cowpea seeds. Poster presented at the South African Association of Food Science and Technology (SAAFoST) Biennial conference, Pretoria, South Africa.
36. Mwangwela A.M. and Ngwira M.M. 2003. Consumer knowledge and experience with cassava-maize blended flour in Malawi. IITA-SARRNET research dissemination conference, May 2003, Lusaka, Zambia.
37. Mwangwela A.M and Ngwira M.M. 2003. Physico-chemical properties of cassava-maize blended flour. IITA-SARRNET research dissemination conference, May 2003, Lusaka, Zambia.

H6. Professional activities- consultancies and outreach

Principal Scientist for Malawi Food Composition Data Program- Nutrition4Health Activity USAID 2021-2025

Institutional Champion for ARUA-UKRI Food System Network (FSNet)) 2020

Principal investigator for Nutrition Capacity Development to Meet National Priorities project funded by USAID through the Feed the Future Innovation Lab for Nutrition at Tufts University, 2012-2021.

Principal investigator for the Capacity building for SUN: 1000 Special Days, NECS and food fortification in Malawi project that is funded by IrishAid (2011-2017).

Training of food processors in aflatoxin Management in August 2013, in Partnership with Technoserve, Partners in Food Solution.

Training of Trainers for Extension Workers in Chipata Zambia, organized by CIP. February 18 to 21st 2013.

Training of Trainers of MEDI officers in Food Processing from 26th to 29th November 2012.

Training of Corn/Soy blend processors in Malawi in Partnership with Technoserve, Partners in Food Solution. Mount Soche Hotel, 12th November 2012.

Training of Bakers from Malawian bakeries. The Training was conducted together with Technoserve Malawi and Partners in Food Solutions from 16 to 18th July 2012. Lilongwe Hotel.

Training of OVOP food processing group in Dedza Malawi. The women were trained in processing of Tomato juice, jam, sauce and puree.

Local expert for EU-DG SANCO project on Better Training for Safer Food in Africa (May to September 2010). Involved in training students and providing food safety management systems technical expertise to local food processors in Lilongwe Malawi.

Consulting Food Technologists for Valid Nutrition in Malawi, a not-for-profit company producing Peanut based RUTF (Ready to Use Therapeutic Food). 2007 to 2019. Responsible for conducting third party audits for the factory, validate the HACCP plan, conduct food safety and hygiene training for the factory workers based on Good Manufacturing Practices (GMP), Good Hygienic Practices (GHP) and HACCP, provide expertise on any technical trouble shooting.

Lead consultant for the development of a complementary feeding recipe book for Malawian children commissioned by USAID funded I-life project and Department of Nutrition, HIV and AIDS in the office of president and cabinet. (March 2009-June 2009).

Lead consultant on Sensory studies for sugar fortification commissioned by UNICEF in preparation for fortification of sugar in Malawi. 2008-2009.

UNIDO – JSV National Consultant on Capacity Building in Food Processing (Soya Beans) – July 2001

H7. Research projects grants

Co-Investigator in the Africa RISING Project– Sustainable Intensification and Diversification of Maize-based Farming Systems in Malawi. Phase II 2016-2021.

Co-Principal Investigator for CCARDESA-APPSA funded project on Improving rice processing and nutrition through supplementation of rice sub products to rural women and orphan children in Mozambique, Malawi and Zambia; 2016-2019.

Co- Investigator for an IFAD funded project on Strengthening capacity of local actors on nutrition-sensitive Agri-food value chain in Zambia and Malawi; 2016-2018.

Lead investigator for Bambara market growth and nutrition in Malawi, Mozambique and Tanzania (BaMGNut) funded by McKnight foundation from 2014 to 2018.

Co-Investigator in the Africa RISING Project– Sustainable Intensification and Diversification of Maize-based Farming Systems in Malawi ().

Co-Investigator Creating a Profile of legume use, demand, and exchange in informal urban markets in Malawi, funded by USAID through Michigan State University- Global Center for Food Systems Innovation (2014).

Co-investigator on a project “Aflatoxin management interventions, education, and analysis at various steps within the peanut value chain” funded by USAID through the Peanut and Mycotoxin Innovation Lab. Collaborators from University of Georgia and Virginia Tech University, 2014- 2017.

Lead investigator on Nutritional value and acceptability of quinoa among Malawian farmers 2013-2015.

Lead Principal investigator for a project on “Integration of Small-Scale Farmers into the Market Economy through Soybean Value Chains in Malawi and Malawi” funded by IITA (2013-2014).

Lead Principal Investigator on “Development and Promotion of Bambara Groundnuts for Improved Human Nutrition in Malawi, Mozambique, and Tanzania” funded by McKnight foundation (2011-2014).

Lead Principal Investigator on “Situation analysis of Bambara nut value chains in Malawi, Mozambique and Tanzania”, funded by McKnight foundation (2009-2010).

Co-researcher on “Development and promotion of alectra resistant cowpea varieties” funded by McKnight Foundation (2008-2010). As part of this research work we trained women cowpea farmers on utilization of cowpeas, by including a diversity of food items in their diet. The recipes developed were published into a book.

Bean and cowpea researcher under the Bean Cowpea Collaborative Research Programme (2000 – 2007). Increased Food Utilization of Beans and Cowpeas in East and Southern Africa.

Co-authored a module on Post harvest Technology and Utilisation for “The Light House Project” funded by IDEAA, 2002.

Researcher on the potential of cassava flour processing at commercial level, the work was funded by The International Institute of Tropical Agriculture (IITA) through Southern Africa Root Research Network (SARRNET) 2001-2003.

H8. Supervision of postgraduate student research

PhD Supervision

- 1) Martha Masango (University of Sydney) Mapping the groundnut value chain for aflatoxin contamination in Malawi. Deceased
- 2) Tinna Manani (UMB – Norway): Improving soybean’s protein availability, acceptance and utilization through lactic acid bacteria fermentation (2009-2014) 2014; PhD Thesis.

3) Numeri Geresomo (Egerton University): Effect of aflatoxin contamination mitigation practices in complementary food processing on nutritional status of children in Dedza district, 2019; PhD Thesis.

MSc Supervision

4) Lazarus Gonani: Quality of bread from different wheat and grain amaranthus flour blends 2001-2003; MSc Thesis.

5) Madalitso Tsakama: Characterisation and physical modification of sweet potato starch extracted from various sweetpotato varieties: Suitability for starch noodle processing 2006-2008; MSc Thesis.

6) Yamikani Chewere: Effectiveness of rapid screening method as a tool for predicting consumer preference of beans (*Phaseolus vulgaris* L.). 2006-2010; MSc Thesis.

7) Olivia Mpulula: Effect of home-based maize processing methods on apparent iron and zinc bio-availability. 2012; MSc Thesis.

8) Chimwemwe Chilenga: Effect of variety and processing methods on physical and chemical characteristics of maize flour and sensory properties of maize *nsima*. 2012; MSc Thesis.

9) Herminio Abade: Characterization and Evaluation of twenty rice (*Oryza sativa* L.) genotypes under irrigation and rainfed environments in Malawi and Mozambique. 2012; MSc Thesis.

10) Richard T. Mzumara: Determination of optimal species ratio of *Oreochromis shiranus* and *Tilapia rendalli* in polyculture systems. 2012; MSc Thesis.

11) Patricia Katungwe: Food consumption and acceptability of bambara groundnut food products among rural school children. 2013; MSc Thesis.

12) Martha Mwale: The effect of mixing usipa (*Engraulicypris sardella*) and goat meat (*Capra hircus*) on nutrition quality of maize/soy bean blend (Likuni phala) complementary food: a case study for zinc and iron bioavailability using a rat model. 2013; MSc Thesis.

13) Vincent Mlotha: Determination of glycemic indices of maize flour thick porridges 2014; MSc Thesis.

14) Grace Kaunda: Effect of incorporating fish (*Engraulicypris sardella*) and processing on acceptability, nutritive value and shelf life of maize-soy blend (Likuni phala)- 2016; MSc Thesis.

15) Abdalla Faya: Genetic analyses of progenies derived from aromatic and non-aromatic rice (*Oryza sativa*) selected crosses of genotypes from Mozambique and Malawi grown under irrigation, 2016; MSc Thesis.

- 16) Grace Chikowi: Knowledge and practices of farm families on processing and utilization of soybean (*Glycine max*): a case of Chitekwe EPA 2017; MSc Thesis.
- 17) Jaquiline Chalemera: Nutritional quality of complementary foods based on trials of improved practices (TIPS) recipes in Malawi: a case study of Kasungu and Mzimba districts. 2017; MSc Thesis.
- 18) Sofilet Mwafulirwa: Effect of TIPS approach and primary processing of legumes on household consumption and utilization. 2017; MSc Thesis.
- 19) Autile Sanyila: Nutrient composition and consumption pattern of underutilized pulses in three districts in southern Malawi. 2017; MSc Thesis.
- 20) Tamara Machinjili: Evaluation of cooking and sensory characteristics, consumer acceptability and proximate composition of different varieties of pigeon peas. 2017; MSc Thesis.
- 21) Theresa Nakoma Ngoma Effects of processing methods on zinc, flavonoid, dietary fibre and acceptability of cowpeas flours. 2017; MSc Thesis.
- 22) Tchiwe Moyo: Characterising and improving peanut butter on the Malawian retail market. 2017; MSc Thesis.
- 23) Brian Mhango: Analysis of the relationship between complementary food aflatoxin exposure and impaired underfive child linear growth: a cross sectional study of Mchinji and Nkhota-kota districts. 2017; MSc Thesis.
- 24) Prisca Waluza: Evaluation of the nutrient content and acceptability of seasonal and locally developed complementary foods for Dedza and Balaka districts. 2017; MSc Thesis.
- 25) Timalizge Munthali: Assessing the effects of reducing aflatoxin exposure and the benefits of legume-based complementary foods on child growth. 2017; MSc Thesis.
- 26) Stella Mlewa: Consumption patterns and processing qualities of sorghum in lower shire valley 2017; MSc Thesis.
- 27) Haswel Mlenga: Gender roles in legume utilisation for complementary child feeding. 2018, MSc Thesis.
- 28) Clara Kasakula: Effects of processing conditions of aflatoxin contaminated ground nuts on carryover in edible oil during processing. 2018. MSc Thesis.
- 29) Chikondi Alice Magombo: Characterizing and improving quality and safety of groundnut flour in Malawi. 2018; MSc Thesis.

- 30) Maggie Musukwa: Nutrient content, acceptability and functionality of chickpea (*Cicer arietinum* L) /pigeon pea (*Cajanus cajan*) and maize (*Zea mays*) blend complementary foods. 2018; MSc Thesis.
- 31) Ruth Zimba: Dietary patterns and seasonal food availability calendars for Dedza and Balaka- 2018 –MSc Thesis.
- 32) Tiwonge Longwe: Influence of storage conditions and packaging materials on the quality and shelf life of groundnut flour. 2018; MSc Thesis.
- 33) Monica Chimbaza: Assessment of drying and sorting technologies on management and control of aflatoxin in groundnuts. 2018; MSc Thesis.
- 34) Khumbo Mhango: Cross sectional study of nutritional status of under-five children and milk consumption among dairy households in Dedza district. 2018; MSc Thesis.
- 35) Esnart Samuel Kalunga: Assessing gender roles in soybean production and marketing in matrilineal and patrilineal societies: a case study of Lilongwe and Mzimba districts. 2018; MSc Thesis.
- 36) Ulemu Kamkwatira: Effect of processing on nutritive value, sensory acceptability and shelf life of bean (red kidney, *Phaseolus vulgaris*) flour. MSc Thesis. 2019
- 37) Martin Kalumbi: Improving nutritional value of Malawian traditional maize-based *nsima* by blending with soybean flour. MSc Thesis. 2020
- 38) Safirah Mwanja: Assessment of the impact of reduced aflatoxin complementary food project on the growth of underfive children in Mzimba district. Under Examination; MSc Thesis.
- 39) Angella Sangala: Organoleptic quality and shelf life status of differently processed and packaged fish. *Voluntary withdrawal*; MSc Thesis.
- 40) Steve Afuleni: Stability of vitamin a in fortified soya bean and sunflower oils stored in opaque plastic bottles under different light exposures; MSc Thesis; 2021.
- 41) Frank Gibson Kayange: Effect of processing on bioactive compounds in sorghum/cowpea blends to ameliorate diabetes mellitus. *Voluntary Withdrawal*; MSc Thesis.
- 42) Gomezga Chitsulo: Isolation, characterization and identification of lactic acid bacteria for chambiko starter culture. MSc Thesis, 2021.
- 43) Price Shaibu: Proximate analysis of mice: contribution claim to protein and micronutrient intake in Malawian diet. MSc Thesis, 2021.

- 44) Rahim Liguluwe: Determinants of adoption of dietary diversity technologies in Ntcheu and Dedza MSc Thesis, 2021
- 45) Kondwani Luwe: Effect of maize-goat powder blend and maize-bean flour blend on nutritional status of children aged 6 to 18 months in Dedza On going 2019-2021; MSc Thesis
- 46) Melise Mwachumu: Assessment of nutrient content, functional properties, aflatoxin levels and consumer acceptability of complementary flour blends comprising of maize, groundnuts, beans and goat meat powder, On going; 2019-2021 MSc Thesis
- 47) Sunganani Chowa: Effectiveness of community learning and growth monitoring as a tool for promoting appropriate infant and young child feeding practices among agro-ecological intensification farmers. On going, 2019-2021; MSc Thesis
- 48) Omega Phethi: On going 2020- MSc Thesis
- 49) Sitilitha Masangwi: Spatial distribution, social-demographic and economic determinants of access to fatty acids in Malawi. On going

H9 Supervision of undergraduate research

1. **Gift Kambanyena, Lex Billiat and Clement Chitala, 2022;** Effect of processing methods on functional properties, sensory attributes and consumer acceptability of finger millet porridge.
2. **Temwa Msuku and Joseph Masamba 2021.** Assessing the effect of sorghum (*Sorghum bicolor* L.) varieties on alcohol content, physical and sensory properties of opaque beer.
3. **Thomas Malinki, Kingsley Chimwaza, Ishamel Mbeya, Dreah Phiri, 2019;** The anthropology of *nsima* in Malawi-how sensitive is the nsima consumer to changes in sensory properties.
4. **Kingsley Chimwaza, Maryam Wasi, and James Chataika, 2019;** Shelf life of groundnut flour
5. **Enert Kayira: 2019;** Use of moringa leaf powder in porridge;
6. **Blessings Kaipa: 2018;** Cooking characteristics of beans from different agro ecological zone;
7. **Dan Chimbaza: 2018;** Aflatoxin contamination of traditional brew (*Masese*);
8. **Madalitso Chiundira: 2018;** Antibiotic activity of bambara protein isolates;
9. **Lusungu Mfinda: 2018;** Effect of milling process on sensory properties of *thendo*;

10. **Monica Nthondo: 2018;** Functional properties of eleven rice varieties;
11. **Chikumbusko Sibande: 2018;** Effect of storage temperature on fresh bambara;
12. **Mwapasa, Chikondi: 2017;** Sensory and cooking characteristics of rice breeding lines under development at Lifuwu research station- Salima (Malawi);
13. **Zimba, Dumisani: 2017;** Effects of variety on functional properties and acceptability of pigeon pea dhal;
14. **Lora, Tiwonge: 2017;**Quality and consumer preference of soy pieces brands found on the Malawian market;
15. **Mawanga, Emmanuel: 2017;** Effectiveness of sun drying and electric food drier on consumer acceptability of brined CG7 and Chalimbana groundnut varieties;
16. **Chisale, Precious: 2017;** Nutrient content and acceptability of orange maize, fish (*Engraulicypris sardella*) and soy flour blend (*Likuni phala*);
17. **Banda, Dorothy: 2017;** Development of precooked breakfast cereal from sorghum (*Bicolor (L.) Moench*) and chickpea (*Cicer arietinum L.*) flour blends;
18. **Carolyn Kang'ombe: 2016;** Cooking characteristics and consumer preference of new varieties of bambara groundnuts
19. **Nancy Manyenje: 2016;** Development and assessment of acceptability of instant thendo among the households surrounding LUANAR.
20. **Maggie Josiah: 2016;** Impact of feeding children on maize-soya blend (*likuni phala*) enriched with fish powder on their nutritional status. A case study of Mitundu EPA.
21. **Moses Masewo: 2016;** Development of bambara/groundnut snack food.
22. **Isabella Banda: 2016;** Consumer acceptability likuni phala enriched with fish powder.
23. **Sandra Latif: 2015;** Shelf life of heat treated bambara groundnut flour.
24. **Albert Jere: 2015;** Effect of blanching and variety on sensory characteristics of pumpkin leaves with groundnut flour.
25. **Francis Nthalika: 2015;** Standardisation of *thobwa* recipes in Malawi.

26. **Elizabeth Eja: 2015;** Effect of harvest time on nutritional and functional properties of maize flour and *nsima*.
27. **Mavuto Kinkhoma: 2015;** Effect of blanching and variety of groundnuts on nutrient content of food products containing groundnut flour.
28. **Doris Simenti: 2015;** Effect of *Lactobacillus fermentum* on sensory quality of *thobwa*.
29. **Buthelezi Sichali: 2015;** Standardisation of *nsima* recipes in Malawi.
30. **Alexander Kondwani: 2015;** Analysis of quality of milk and milk products along the value chain in Lilongwe.
31. **Damaless Dzingomvera: 2015;** Effect of harvest time on processing and sensory characteristics of maize flours and *nsima* product.
32. **Rabbecca Malemba: 2014.** Sensory and cooking characteristics of *nsima* prepared from different maize varieties.
33. **Paul Nego: 2014.** Effects of processing methods on frying quality and sensory characteristics of cowpea frozen meatballs.
34. **Samuel Kapota: 2014.** Legume consumption patterns in Kalira EPA in Nchisi and Embangweni in Mzimba District.
35. **Chisomo Magagula: 2014.** Urban and rural consumer acceptance and preference of maize-quinoa quick bread.
36. **Tiwonge Longwe: 2014.** Cooking quality and consumer preference of maize, quinoa and soy blended porridge.
37. **Madalitso Chuma: 2013.** Functional properties of bambara bean starch.
38. **Chikondi Magombo: 2013.** Sensory and cooking characteristics of rice in Malawi.
39. **Timalizge Munthali: 2013.** Assessing the cooking quality of beef fillet in Lilongwe
40. **Benson Thomas: 2013.** Functional properties of Bambara protein.
41. **Tchiyiwe Moyo: 2012.** Nutrient content of corn-soya blend flour used in school feeding program.
42. **Chimwemwe Nyasulu: 2012.** The effect of processing methods on cyanide degradation during annealing of cassava.
43. **Bannet Gwaza: 2012.** Effects of processing methods and packaging on shelf life of pre

cooked sorghum flour.

44. **Chifundo Rambiki: 2012.** Effects of different preparation methods on sensory characteristics and consumer acceptance of *mcheni*.
45. **Oswald Nyirenda: 2011.** Oswald Nyirenda: Consumer behaviour of rural Malawian farmers: The case study of Kambumbwe village, T.A. Chadza, Lilongwe District.
46. **Ernest Kingstone: 2011.** Effects of variety and processing methods on sorghum gluten free baked products.
47. **George Chilomo: 2011.** Assessment of consumer acceptance of milk from legumes: a case of bambara nuts, cowpeas and soy beans.
48. **Grace Kaunda: 2010.** Incidence of Aflatoxins in peanut based products especially those used for nutritional rehabilitation of HIV positive malnourished mothers and children.
49. **Gladys Manyenje: 2010.** Effects of annealing cassava on cooking, sensory characteristics and starch digestibility of cassava/maize blended flour.
50. **Stella Mlewa: 2010.** Development of a precooked breakfast cereal from malted sorghum.
51. **Ivy Vale: 2009.** Evaluation of six groundnut varieties for peanut butter making.
52. **Sangwani Chavula: 2009.** Consumer preference and sensory characterization of peanut butter available at the market.
53. **Robert Kaonga: 2009.** Evaluation of sorghum varieties for malting.
54. **Oswald Nyirenda: 2009** Consumer behaviour of rural Malawian farmers: The case study of Kambumbwe village, T.A. Chadza, Lilongwe District
55. **Patricia Katungwe: 2008.** Physical and sensory characteristics of maize flour based snacks containing micronised cowpea flour
56. **Gertrude Mphwanthe: 2008.** The effects of milling and heat- moisture treatment of cassava on physico-chemical and functional properties of cassava-maize blended flour
57. **Amenye Mulwafu: 2008.** Physicochemical and functional properties of composite flour consisting of maize and micronised cowpea flours

H10 Mentorship

Mentor for the ARUA-UKRI /FSNet-Africa Postdoc fellowship 2021-2023

Mentor for African Women in Agricultural Research and Development (AWARD) program:

- Mrs. Amenye Ndiwo Banda- 2014-2015;
- Ms. Kitty Ngoli - 2013 -2014; Technician, Food Science and Technology Department, Bunda College, LUANAR
- Dr. Victoria Ndoro - 2008-2009, Faculty member, Department of Human Ecology, Chancellor College, University of Malawi.

H11 Professional responsibilities

External Examination

PhD External Examiner, 2020- The Nutritious Drink: a culturally adapted nutrient supplement for adults and adults living with HIV in Malawi by Rhodas Moya, Wageningen University, Netherlands.

PhD External Examiner, 2018 - Gamma-irradiation of cowpeas to understand the mechanisms responsible for the hard to cook defect by Talknice Zvamaziva Jombo, University of Pretoria

MPH External Examiner, 2017- Evaluation of the effect of macronutrient and micronutrient supplementation on cognitive function in moderately malnourished pregnant women in southern Malawi- Joseph Maulana, College of Medicine, University of Malawi.

MSc External Examiner, 2016 - Production of instant cowpea flour by micronisation, Phetolo Perseverance Sibanda, University of Pretoria

Internal examiner

A Clotilda Sawasawa, Comparison of preparation methods, consumption patterns and nutrient composition of bananas and plantains (*Musa spp.*) In Karonga and Mulanje districts in Malawi, LUANAR

Limbikani Matumba: The effect of maize harvesting methods, storage conditions and flour preparation on aflatoxin incidence and human dietary exposure in Mpingu Extension Planning Area, Malawi, UNIMA, Chancellor College

H12. Continuing professional development

- Finance for Non- Finance Executives- Bunda College Heads and Deans of Faculty, April to May 2021, Agribusiness Department, LUANAR, Online.
- Fraud Training for UNICEF Implementing Partners - 21 April 2021, Online

- Finance for Non- Finance Executives, 16 – 18th March, 2021, Malawi Institute of Management, Sun N Sand Holiday resort, Mangochi
- Cooperate Governance Orientation for Board of Directors for Parastatals in Malawi, 11 – 13th November 2020, at Nkopola Lodge in Mangochi, Malawi.
- Association of African Universities, Leadership Development X training workshop. 26th to 30th June, 2017; held at 2000 Hotel, Kigali- Rwanda.
- LUANAR-MSU Innovation Scholar for Leadership Tract (2016-2017).
- Fellow of Norman E Borlaug fellowship on International Agricultural Science and Technology working on postharvest aflatoxin management in maize and groundnuts. University of Georgia and Virginia Tech University (September 8 to November 14, 2014)
- Attended a Science Writing Course organized by African Women in Agricultural Research and Development (AWARD) held in Nairobi, Kenya from 16th to 21st June 2014
- Attended an AWARD Women’s Leadership and Management Course organized by African Women in Agricultural Research and Development (AWARD) held in Kampala, Uganda from 4th to 10th May, 2014
- Attended a Mentoring Orientation Workshop organized by African Women in Agricultural Research and Development (AWARD) held in Nairobi, Kenya from 23 to 28 March 2014,
- Attended a three day course on ‘Effective Leadership and Management for LUANAR Heads of Departments and Deans of Faculty’ offered by Malawi Institute of Management. (20th to 22nd December 2013).
- Attended a two day course on processing for removal of Aflatoxin contaminated peanuts conducted by The University of Georgia, TWIN with support from the USAID funded Southern Africa Trade Hub. (9-11th September 2013).
- Attended a Mentoring Orientation Workshop organized by African Women in Agricultural Research and Development (AWARD) held in Kampala, Uganda from 18 to 21 March 2013,
- Attended the 11th International Postgraduate Course on Production and Use of Food Composition Data in Nutrition organized by EuroFir, InFOODS and Hosted by TURBITAK at Gebze-Kocaeli, Turkey from 7-17 October, 2012.
- Attended a McKnight Foundation funded training on GIS held in Lilongwe, May 15-16, 2012.

- Attended a Seminar on tropical agriculture and Tourism for developing countries, Hainan, 13 October – 2nd November 2010.
- Attended a Workshop for Mid-Career Training Workshop on Leadership and Management by RUFORUM through Catalyzing Change in African Universities.
- Attended a four day training of trainers workshop on e-resources organized by ITOCA (Information Training and Outreach Centre for Africa. 13-16 October, 2009, at Chancellor College in Zomba, Malawi.
- Attended a Mentoring Orientation Workshop organized by African Women in Agricultural Research and Development (AWARD) held in Mombasa, Kenya from 6 to 11 October, 2008.
- Attended a training of trainers workshop on “Processing of specific food products” organized by OVOP and conducted by The Food Technology Center of Jomo Kenyatta University of Agriculture and Technology, 19 – 21 November 2007. Bunda College, Lilongwe, Malawi.
- Certificate in Applied Food Analysis, Jomo Kenyatta University of Agriculture, 1999