

CURRICULUM VITAE

CAROLINE MWENDE MAKAU

A – PERSONAL DETAILS

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DRIVING LICENCE UEH 070
DATE OF BIRTH 2nd December, 1987.
LANGUAGES English and Kiswahili (*Fluently spoken and written*)
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B – CAREER OBJECTIVE

To provide key industry solutions in technical, operational and management aspects of product Q&FS / R&D services; whereby my skills in problem analysis and solving, gained through study and work experience, hard work, dedication and flexibility as regards to assimilating new technologies that will aid in value addition.

C – EDUCATIONAL BACKGROUND:

Academic Qualifications:

2013 – 2016 Egerton University

Msc. Food Science (Food Safety)

Thesis title: The Prevalence of *Brucella Abortus* and mycotoxin contamination of animal feeds and implications on milk safety in rural and peri-urban small-holder dairy systems in Kenya.

2007 – 2011 Egerton University

BSc. Food Science and Technology (First Class Honours)

2001 – 2005 Loreto Girls' High School – Limuru, K.C.S.E.

Mean grade of B+ (plus)

Professional Training:

<u>Date</u>	<u>Course</u>
February 2019	External Manufacturing Quality Management (Mars University)
June 2018	Lead Auditor Training Course ISO 22000 Food Safety Management Systems (SGS)
December 2017	Six sigma and Lean: quantitative tools for quality and productivity (TUM School of Management)
February 2011	Environmental Impact Assessment and Audit & Environmental Management System (ISO 14000 series) (Egerton University)

Professional Associations:

1. Full Member of National Quality Institute (Kenya Bureau of Standards) – KEBS/NQI/M/PER/401
2. National Environment Management Authority (Associate Expert) Registration Number: 7372
3. The Organization for Women in Science for the Developing World

D -WORK EXPERIENCE

- 1. The Mars Wrigley Confectionery Kenya Limited, A local subsidiary of Mars, Inc. dealing in the manufacture and sell of confectionery including chewing gum, bubble gum and chocolate**

December 2017 – Up to Date

Position: Quality in Distribution Technologist (SSA)

- Establish, implement, maintain and update the Quality& food safety system in compliance with ISO 22000:2005/FSSC 22000 standard requirements in the Sub Saharan Market unit.
- Deliver Market unit Scope for all audits, and registrations (Eg. Product, Factory & Market QMP, Halaal and PVoC (Pre-Export Verification of Conformity) in Sub-Saharan Markets.
- Keep driving compliance for Market foundational standards; External Manufacturing Management, Distribution quality management, Transport and Storage specification, Product disposal, traceability, hold and release, customer & consumer care, Recall, Retail age, logistics verification process and product related incident process
- Support the Scientific and regulatory Affairs function by providing input into gap assessments on local and regional regulatory standards that affect the Market Unit. Responsible for registration and re-registrations of products in Sub-Sahara Africa markets through preparation and submission of documentation to regulatory agencies.
- Monitor regulatory activities in assigned markets(SSA),determine current and expected regulatory status of new ingredients and additives, researches interpretations regarding the safety and acceptability, assures SRA data bases are upto date and anticipate regulatory issues and work with project teams to resolve them.
- Participates as part of the Company Crisis Team or Local Response Team and leads efforts to support these activities, minimizing impact to the company. Change Management Process, and Standards Implementation request, by providing and coordinating an accurate compliance review, detailed food safety/regulatory impact, anticipated issues on business, mitigation plans, action tracking and reporting status
- Responsible to be visible and give Q&FS&SRA Compliance guidance, pro-active risk identification and mitigations, in all projects and work streams. Ensure verification and validation execution of such actions and mitigations by Stakeholders.
- Has accountability to guide and validate on Q&FS& SRA Compliance of ingredients, packaging, formulas, labelling, claims, communication, scripts, premier items, are in full compliance with laws and regulations in markets produced ,sold imported and exported.
- Support distributor's and external manufacturer capability development and continuous improvements and facilitate distributor's and external manufacturer qualification process to ensure Wrigley and product quality integrity preserved in market respectively.
- Support Market Unit Q&FS to implement the distributors auditing program, including audit planning, distributors gap assessment, follow-up of distributors CAPA (Corrective Actions and Preventive Actions), including non-conformance administration/management;
- Responsibility for compliance expertise in all Mars Q&FS/SRA standards and policies, external food compliance related laws, legislations, regulations and Q&FS/SRA systems and tools.
- Lead & Maintain MEA MU Quality & Food Safety internal audit & training calendar and update accordingly.
- Track, follow-up and report status of Corrective Actions &Preventative Actions, management review meeting actions and internal audits in Nexus.
- Representative of Q&FS in Market unit Management review meetings and a member of the Food defense and bioterrorism team

- o) Planning and execution of mock Traceability recalls that extend to the market up to retail level.
- p) Any general Q&FS/SRA related support to the area of External Management, Horizon Scanning, and Change Management. Support the legal and translation, and laws database accuracy management.

Achievement

1. Timely delivery of track and trace project thus facilitating hold /release and locate finished goods globally within Atlas operated MWC distribution network in 4h, by the deployment of the global Q&FS traceability solution.
2. Successful registration and re-registration of products in Sub Saharan Africa Region (Kenya, Tanzania, Nigeria and Ghana).

2. February 2016 – December 2017

The Mars Wrigley Confectionery Kenya Limited, A local subsidiary of Mars, Inc. dealing in the manufacture and sell of confectionery including chewing gum, bubble gum and chocolate.

Position: Quality & Food Safety specialist (MEA BU)

- a) Establish, implement, maintain and update the Quality& food safety system in compliance with ISO 22000:2005/FSSC 22000 standard requirements in the Business unit and Factory Site.
- b) Keep driving compliance for foundational standards; Allergens, supplier Quality Management, HACCP, GMP, Product Related Incident Management Process and traceability in the BU.
- c) Ensures the development, implementation, and verification effectiveness of quality systems affecting all aspects of Receiving, manufacturing, wrapping and dispatch operations, in compliance with the Wrigley Quality Management System (WQMS). Mars Quality Management Process and local regulatory requirements.
- d) Responsible for developing testing plans, reviewing and analysing data, in order to recognise trends and opportunities for improvement/ corrective action, by using process capability and other statistical or quality engineering tools.
- e) Drives continuous improvement activities, which result in cost savings, higher efficiencies and high quality product performance.
- f) Responsible for establishing programmes, training and implementing with all appropriate personnel, Good Manufacturing Procedures (GMP's), HACCP and other quality systems identified under the accountabilities of Quality Assurance.
- g) Ensures that the Factory Laboratory provides accurate and precise results, complying with government and company policies and requirements. Utilises the information to provide direction, corrective measures and decision making in the Factory.
- h) Drives Work with Supplier Quality Assurance function in driving performance of suppliers in providing Wrigley with safe, high quality ingredients and materials packaging, ensuring taking appropriate preventive and corrective action on non-conformance to standards.
- i) Provides continuous knowledge that raises the competency level at all levels of the organisation. Responsible for audit and corrective action follow up with providers of local printing and packaging firms.
- j) Responsible for establishing and maintaining the Factory Sensory Program, in alignment with Global Quality and Food Safety Assurance. The activities shall support product quality ownership on the production floor, resulting in compliance to product specifications.
- k) Provides leadership to support perfect product transfers and launches in conjunction with Research and Development function. This includes the monitoring and support in

implementation of activities, roles, and responsibilities to ensure GOLD standard products are produced each and every time.

- l) Assured that products are manufactured and packaged according to documented specifications, standards and process control plans set by the Company and government, to meet the requirements of consumer driven products.
- m) Leads the Factory Quality and food safety performance measures, which includes providing leadership, facilitation and active participation, as defined by Factory Management
- n) Motivates, trains and develops people to ensure the highest level of employee performance and engagement.
- o) Responsible for the site implementation of new product & process R&D activities including new product, process, and packaging activities and the resolution of process related technical issues
- p) Responsible for reporting problems with quality and food safety management system to the quality and food safety team and factory manager.
- q) Leads Progressive Quality pillar ensure successful fulfilment of all planned activities according factory and pillar's TPM master plan.
- r) Responsible to promote a safe working environment

Achievement

- Part of the BU Q&FS lead team that involved in roll out of Mars Quality and food safety program at MEA BU contributing to compliance rating following the external audit conducted by LRQA (2016.)
- Part of the team that delivered **Juicy Fruit chunk** (new product, scale brand) within budget.

3. May 2014 – December 2015

Agrigreen Alliance Africa Limited, *A consultancy firm committed to environmental conservation and sustainable agriculture with the aim of enhancing food security and therefore sustainable lives in Africa*

Position: Agriculture value chain consultant

- a) Involvement in assessment of current state of agriculture value chains through conducting research surveys.
- b) Conducting environmental impact assessment (EIA) and audits for various clients
- c) Conducting agriculture value chain assessments, analysis and develop appropriate reports
- d) Conduct detailed analysis of capacity, cost structure and key opportunities/ constraints for each segment of the agriculture value chain.
- e) Design activities that increase smallholder agricultural production and market linkages that lead to increased profitability of on-farm enterprises.

Achievement

- Facilitated market linkages through on-line platforms that lead to increased profitability of on-farm enterprises.

4. July 2012 – September 2013

TopVet Pharma Limited, *Local agents of Sonarome India, which is a leading manufacturer of food flavours and fragrances in East Africa.*

Position: Quality Assurance Supervisor

- a) Food safety Team leader
- b) Lead, manage and coordinate all the activities associated with the plant's GMP and Pest Control activities.
- c) Support other QA functions including management review, internal audits and label control
- d) Maintain corrective action (CA) database for GMP related findings and regularly communicate status.

- e) Development of the company quality plan for all products as well as the Standard Operating Procedures (SOPs) in terms of quality manuals and GMP manuals.
- f) Co-coordinating and implementing Food Safety and Quality Management Systems, HACCP and ISO 22000:2005

Achievement

- Leading the internal audit program to ensure 100% evaluation of conformity, effectiveness and implementation of QMS requirements to inform continual improvement.

5. September 2011 to May 2012

The Mars Wrigley Confectionery Kenya Limited, *A local subsidiary of Mars, Inc. dealing in the manufacture and sell of confectionery including chewing gum, bubble gum and chocolate.*

Position: *Quality Assurance specialist*

Duties and responsibilities

- a) Conducting checks in Quality Activity areas for effective implementation of good laboratory practice and good manufacturing practice
- b) Monitoring process control parameters, testing & inspection of finished products to ensure that they attain customer specifications.
- c) Artwork Management and monitoring compliance of statutory, regulatory and internal requirements (coding, expiry dates and weight) for finished goods.
- d) Assisting functional heads in reducing consumer/customer complaints through pro-active testing, investigations, inspection and reporting.
- e) Facilitate and partner in internal audits and other audits carried out by regulatory agencies and key customers.
- f) Participation in product development by conducting product formulation test trials, sensory evaluations and consumer acceptance surveys.
- g) ISO 9001:2008 Quality Management System, ISO 22000:2005 food safety management system, ISO 14001:2004 Environmental management system, HACCP plan and the Quality plan validation and verification.
- h) Daily reporting of all areas of continuous improvement team activities and problems encountered in the assurance of quality and food safety.
- i) Carrying out environment, occupational health and safety audits and raising near-miss tags and non-conformance reports for all observations
- j) Managing the calibration program for monitoring and measuring devices in the factory.
- k) Participating in cross-functional teams in development, documentation, follow up of closure and effectiveness of corrective and preventive actions for all quality and food safety incidences in the factory.
- l) Releasing and blocking ingredients, packaging materials and non-conforming products on SAP system after quality inspection.

Achievement

- Follow through of corrective and preventive actions for all quality and food safety incidences in the factory leading to 10% reduction of customer and consumer complaints

5. January 2008 – May 2011

Guildford Dairy Institute (Egerton University) Dairy and Food Science Science and Technology Students Association.

Position: Head of Marketing and sales department.

Duties and responsibilities

- a) Head of marketing and sales of Dairy products in the university and its environs and also during university functions such as sporting activities, graduation ceremonies and tree planting campaigns.
 - b) Participation in production of yoghurt, fresh milk and cheese.
 - c) Participation in quality control and quality assurance of dairy products.
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E- WORKSHOPS

1. Tropical and Subtropical Agricultural and Natural Resource Management (TROPENTAG) Conference. 18th – 21st September, 2016. University of Natural Resources and Life Sciences (BOKU Vienna), Austria - Demonstrated two poster presentations
2. South Africa Science Forum – CSIR International Convention Centre, Pretoria, (8th - 9th December 2016)
3. Web 2.0 for Agriculture and Rural Development organized by CTA (The Technical Center for Agricultural and Rural Cooperation ACP –EU) – Accra, Ghana

F- COMPUTER LITERACY

Proficiency in Computer Applications (MS-Office Suite of Applications), MS Project and statistical software (SPSS, SAS, MINITAB)

G –ACHIEVEMENTS

1. Participation in Mars Market unit PRIMP functional expert and HACCP (Essential, Advanced and Train the trainer) trainings – March 2017
 2. Leadership skills for career development certificate -Participation in African Women in Agriculture research and development fellowship mentee program gaining science , research and leadership skills – CGIAR (2016)
 3. (March 2015) Awarded the Science, technology and innovation grant from Kenya National commission for science, technology and innovation towards my Msc. Research proposal.
 4. Research work was supported financially by German Ministry of Education and Research (BMBF) through ReLOAD Project: Reduction of Post-Harvest Losses and Value Addition in East African Food Value Chains.
 5. (May 2015) Participation in writing of extension materials for farmers workshop at Egerton University
 6. (2008 – 2011) Trained and earned a certificate as a HIV/AIDS peer counselor at Egerton University and acquiring leadership and inter-person skills.
 7. Earned a certificate of merit due to being the best graduate student in the faculty of agriculture in 2011
 8. Earned a Certificate of Achievement due to Excellent Academic Performance in 2008/2009 Academic year and thus being in the Dean's List of Honour.
 9. Awarded the Gold and Silver Award under the Kenya President's Award Scheme which is affiliated to The Duke of Edinburgh's Award International Association.(2011 & 2009)
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H-PUBLICATIONS

1. Makau CM, Matofari JM, Muliro PS & Bebe BO (2016) Aflatoxin B₁ and Deoxynivalenol contamination of dairy feeds and presence of Aflatoxin M₁ contamination in milk from small holder dairy systems in Nakuru, Kenya. ***International Journal of food contamination 3:6***
2. Mwende, M. C., Wafula, M. J., Simiyu, M. P., & Omedo, B. B. (2016). Association of on-farm feeds handling practices with fungal growth and Mycotoxin production on feeds in smallholder dairy farms, Nakuru, Kenya. ***African Journal of Agricultural Research, 11(39), 3741-3750.***
3. Assessment of Prevalence and Risk factors to Bovine Brucellosis in Small holder Dairy Farms in Nakuru County, Kenya. – **BMC research notes (Under journal review)**

4. Evaluation and Optimization of the pure millet fortification with pumpkin (*Cucurbita* spp) and *Amaranthus* spp on Vitamin A and Iron levels and bio-availability in baby weaning formula—**Elsevier (Under journal review)**
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I – REFEREES

1. Andrew Wanga Site Quality and Food Safety Manager, Wrigley, Cell: +254720857369 Email: Andrew.wanga@Wrigley.com	2. Prof. Joseph W. Matofari Senior Lecturer, Dairy & Food Science and Technology Department, Faculty of Agriculture, Egerton University. Cell: +254722671843 Email: jmatofari@gmail.com	3. Susan Omondi, Sr. Quality and Food Safety Manager (SSA) Wrigley EA LTD Cell: +254729716912 Email: Omondisa74@gmail.com
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