

**NAME:** Josephine Marigu Njeru

**DATE OF BIRTH:** 1989

**ACADEMIC BACKGROUND:** BSc Microbiology, University of Eldoret

**CONTACTS:** [marigujoephine@gmail.com](mailto:marigujoephine@gmail.com);

#### **WORK EXPERIENCE**

**FIELD OF EXPERTISE:** Post-harvest loss assessment, Fish Quality Control, Fish Product Development

**RESEARCH INTERESTS:** Fish post-harvest loss monitoring and mitigation, Diversification of fish products through value addition; Use of microbial analyses to determine the shelf life of fish products'; Bio-prospecting of aquatic flora and fauna for novel bioactive compounds such as antioxidants and antimicrobials

**APPOINTMENTS:** 2017-To Date –Assistant Research Scientist (Marine Natural Products), KMFRI  
2015-2017 – Laboratory Assistant, Indicus East Africa Bovine IVF Lab  
2012 – Research Attache (Forest Pathology), Kenya Forestry Research Institute

#### **SELECTED PROJECTS PARTICIPATED IN**

1. A pilot postharvest fish loss assessment using the informal fish loss assessment method (IFLAM), load tracking (LT) and questionnaire loss assessment method (QLAM) conducted at 5 landing sites in the South Coast of Kenya. (October – December 2019)
2. Evaluation of the operational efficiency of the hybrid windmill solar tunnel dryer after upscaling of the drying capacity and introduction of an ice-making unit to mitigate post-harvest losses within the fish value chain in Kipini, Kenya (July – December 2019)
3. Baseline survey on the status of cold-chain infrastructure at selected landing sites in the South Coast of Kenya towards the introduction of a lightweight insulated cold-chain container to mitigate against post-harvest losses (October – December 2019)
4. Bio-prospecting in the South Coast of Kenya: Towards discovery of novel biologically active molecules from marine flora and fauna with suitable application in pharmaceutical and manufacturing industries (February, 2020)
5. Baseline survey on fish handling, processing technologies and socio-economics of fishing communities in Kwale and Kilifi counties by Fraunhofer ISE, Kenya Marine and Fisheries Research Institute (KMFRI), Kenya Industrial Research and Development Institute (KIRDI), Technical University of Mombasa (TUM) and Innotech GM (March,2019)
6. Strategic Integrated Action Plan (2017-2022) Development for the Fish Value Chain in Mombasa County within the Agricultural Sector Development Support Programme, Phase II (Dec 2018 – Mar 2019)
7. Evaluation of the effectiveness of the hybrid windmill solar tunnel dryer in Kipini from (March to May, 2018)
8. Baseline survey on fish handling among artisanal fish traders: Introduction of the improved fried fish box (Mama Karanga box) to traders in Kwale County (February 2018)

#### **SELECTED TECHNICAL REPORTS PREPARED**

1. Peter Oduor-Odote, **Josephine Marigu Njeru**, Raymond Ruwa, Rael Achieng and Grace (2020). Monitoring the use of ice cubes produced using the hybrid windmill solar tunnel dryer system in Kipini and upgrading it to produce 100kg of ice flakes. KMFRI Research Report No. OCS/FIS/2019-2020/B1.ii pp. 24
2. Peter Oduor-Odote, Cyprian Odoli, **Josephine Marigu Njeru**, Raymond Ruwa, Maurice Omega and Rael Achieng' (2020). A pilot baseline survey to quantify fish post-harvest losses in Kwale County

(Jasini, Jimbo, Shimoni, Gazi and Mkunguni). KMFRI Research Report No. OCS/FIS/2019-2020/ C1.13 i pp. 44

3. Peter Oduor-Odote, **Josephine Marigu Njeru**, Raymond Ruwa, and Grace Wanjiku (2020). Design, fabrication & transfer of the light-weight insulated cold chain box for selected fisherfolk to mitigate post-harvest losses in Kwale County. KMFRI Research Report No. OCS/FIS/2019-2020/ C1.13.ii pp. 27
4. Odote, P., Ruwa, R., **Marigu, J.**, Omega M., Achieng' R. (2018). Baseline Survey Report: Introduction of the improved fried fish display shelves "Mama Karanga boxes" in Kwale County. Kenya Marine and Fisheries Research Institute.
5. Odote, P., Ruwa, R., **Marigu, J.**, Omega M. (2018). Performance improvement of the hybrid windmill solar tunnel dryer at Kipini in Tana River by reduction of fish drying period from four to three days. Kenya Marine and Fisheries Research Institute.