#### NWO Food and Business Research Fund (ARF)

**Project: Macro Nutrient Enrichment of first-line food cereals with milk protein to** produce affordable value added cereal products in Uganda/East Africa

#### **CONSORTIUM PARTNERS**



VAI. Proiect Consortium







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### Overview

- In Africa, most efforts in cereal nutrient enrichment have been largely aimed at micronutrients and less on macronutrients
- Macronutrient deficiency especially related to protein remains a challenge to millions in Africa
- The objective of our work was to introduce high quality animal protein to cereal flours to improve amino acid balance and vegetables as sources of micronutrients

## Main innovation

• Enhancement local cereal based flours with animal protein from cow milk.

Utilization of locally available vegetables as sources of micro-

nutrients;





# Research output

- New products developed as a result of addition of vegetables as a sources of micro nutrient
- Improved quality control and packaging of the products
- Improvement in the shelf life of the products
- Products now certified by Uganda National Bureau of Standards
- Production transitioned from incubation to full commercialization with a AFRITASTE brand
- Market upscale; products now widely sold in supermarkets in Uganda and border points. market will continue to grow as the company improves capacity
- Two articles published in peer-reviewed journals
- An MSc. Student graduated

## Next steps

- Need for research funding to conclude integrated drying process
- Research funding to conclude vegetable enhanced cereal product
- Need for financing to continue up-scaling the business through acquisition of advanced processing technologies