

Traditional fermented foods to promote food and nutrition security in Africa

Entrepreneurship, value chains, product development and microbial ecology in Zambia, Zimbabwe and Benin

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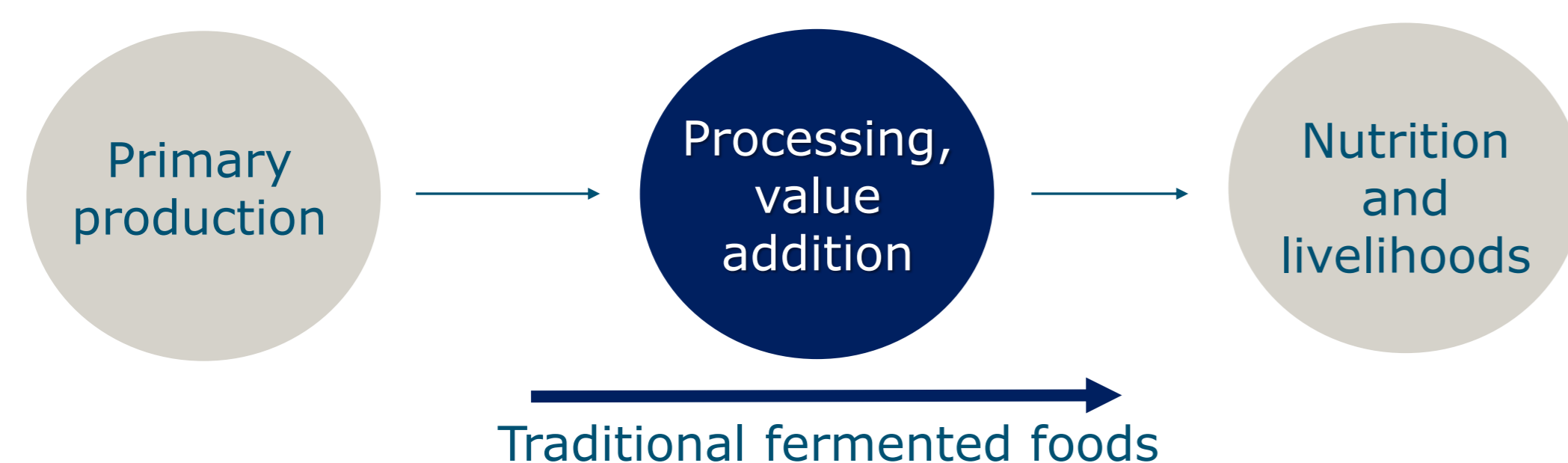


Traditional fermented foods

Transformation of raw materials by microbes to safe foods

- Low cost technology
- Increased nutritional and commercial value
- Culturally embedded
- Opportunities for entrepreneurship and livelihoods

Traditional fermented foods are underutilized



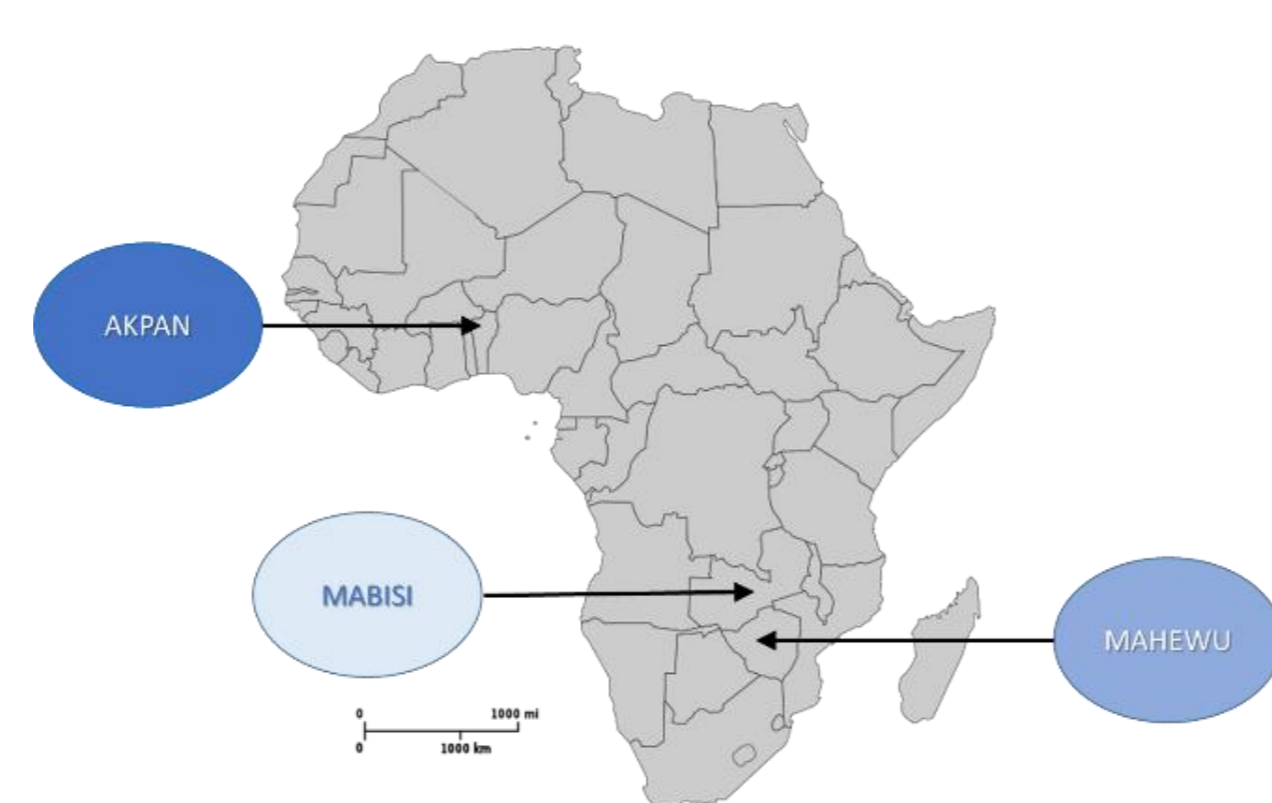
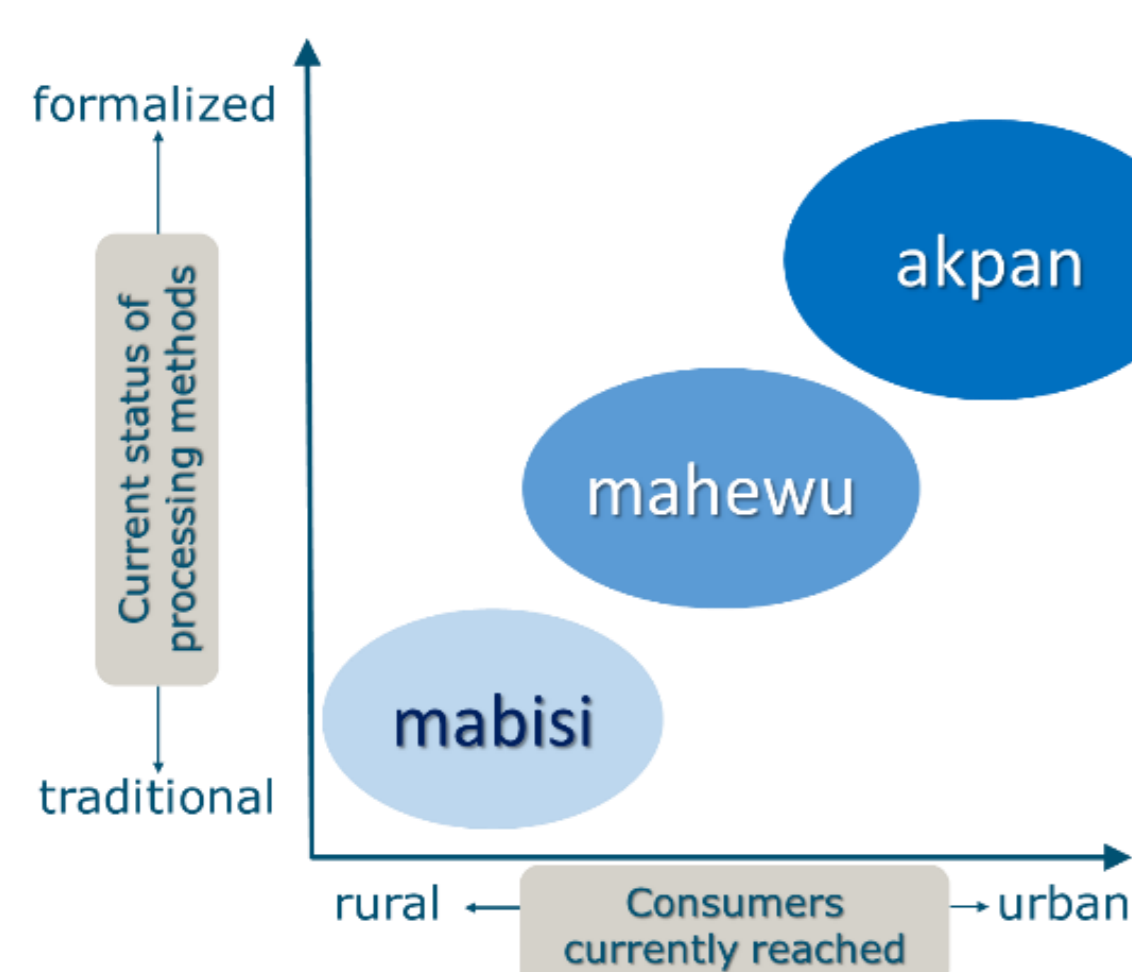
Traditional fermented foods are produced at small scale by mostly female processors. They are for home consumption and are sold at local markets. The process relies on transformation by microbes of raw materials into safe and attractive products. Previous findings have inspired the present project.

- Unique and diverse microbial communities shape product properties
- Stable microbial communities make stable and safe products
- Urban consumers with limited access prefer traditional product
- Best practices for successful production, formalization and upscaling
- Probiotic properties, benefits to gut microbiota composition and health
- Economic and cultural empowerment of local producers and consumers

Aim and focus

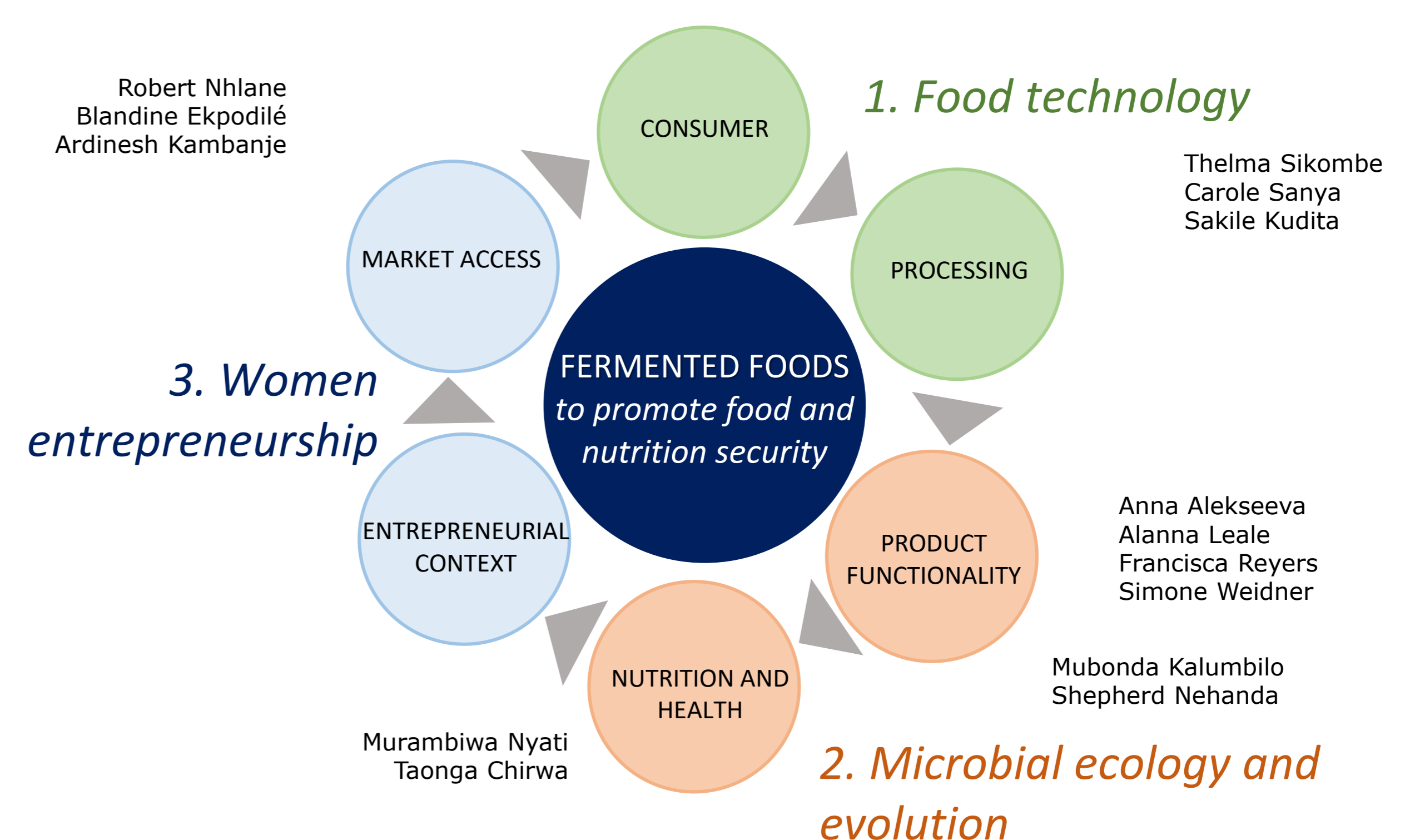
To improve existing traditional non-alcoholic fermented foods to contribute to food and nutrition security, using products in three African countries as focal examples.

1. Upgrading of traditional processing
2. Enhancing and exploiting functional microbial and food properties
3. Strengthening local value chains by fostering women entrepreneurship



We use three products that span a range of how much formalization has taken place and if these projects are mainly consumed in rural or urban locations.

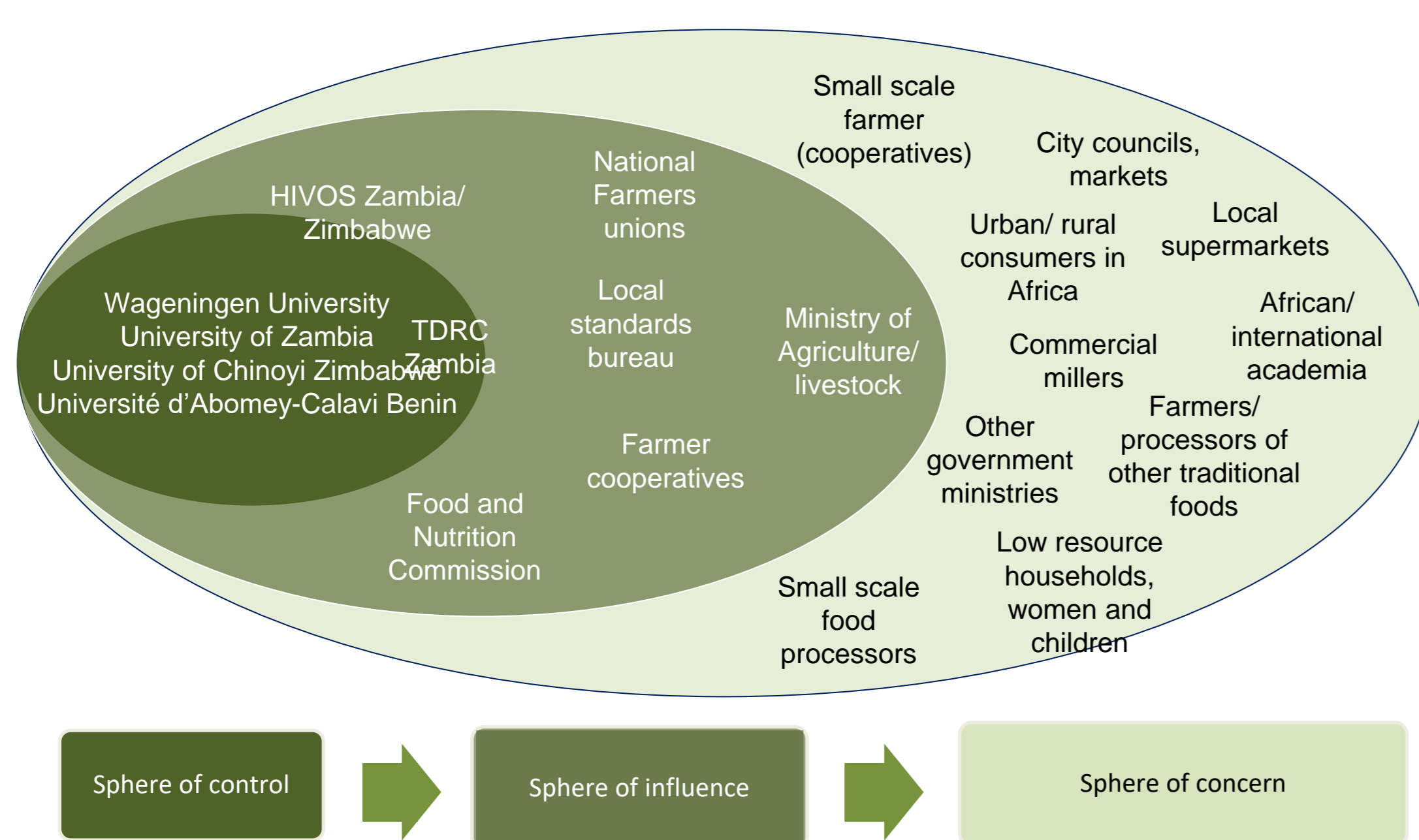
Mabisi from Zambia is made from raw milk; Mahewu; Mahewu from Zimbabwe and Akpan from Benin are from maize and other cereal.



Project overview: content-driven linking of disciplines. Names are PhD candidates, postdocs and technician working on the project.

Projected outcomes and impact

- Formalized and optimized processing using traditional methods
- Formal standards approved by legal institutions
- Optimized and enhanced microbial functionality using ecological and evolutionary principles
- Measures of impact of these foods on quality of diets and ways to promote health
- Women's entrepreneurs influence on institutional context, resilience to shocks and promotion of livelihoods
- Capacity building in academic networks, local partners
- Promote local foods, improve diets and nutrition, build value chains and livelihoods using traditional knowledge
- Current local processors/entrepreneurs remain at centre stage



Partner and stakeholder map

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Partners:



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