foodSAMSA
IMPROVE LOCAL FOOD ENVIRONMENTS

Newsletter #2— Dec 2023

Editorial

Dear readers, we are delighted to share yet another exciting newsletter of our FoodSAMSA project, which outlines the progress on the collaborative research between the institutions in Africa (Non-Communicable Disease Research Unit of the South African Medical Research Council, Chronic Disease Initiative for Africa at the University of Cape Town and School of Public Health at the University of the Western Cape) and our partner at the Ludwig-Maximilians-Universität (LMU Munich) in Germany. The project is supported regionally by the Africa Food Environment Research Network (FERN) and aims at informing policy and practice to curb the double burden of malnutrition. All FoodSAMSA Work Packages have made substantial progress in 2023, and we acknowledge the financial support of the German Federal Ministry of Food and Agriculture (BMEL), without which this progress would not have been possible.

The past year has been very productive, despite minor setbacks emanating from unforeseen community stakeholder changes. Many milestones were achieved, including completion of the investigation of the food environment in South African townships; initiation of the participatory research with community stakeholders in these townships; and liaison with a range of stakeholders, including policymakers, business, and civil society actors, which were to maximize the practical and policy impact of our research. This year we also recruited several junior researchers into the project, of which some developed mini-projects that will inform their Masters' or PhD thesis. We also expanded existing regional networks across Africa by supporting the organization of the 2023 FERN Conference and developing pathways for impact. This puts us closer to the realization of our research outcomes, which include developing models linked to different parts of the food system that will support the improvement of local food environments, aimed at curbing the double burden of malnutrition in the region. These exciting achievements are outlined in the different sections below.

Kind regards,

A/Prof Zandile Mchiza
Non-Communicable Disease Research Unit
South African Medical Research Council
Co-PI FoodSAMSA

Inside this issue

About us

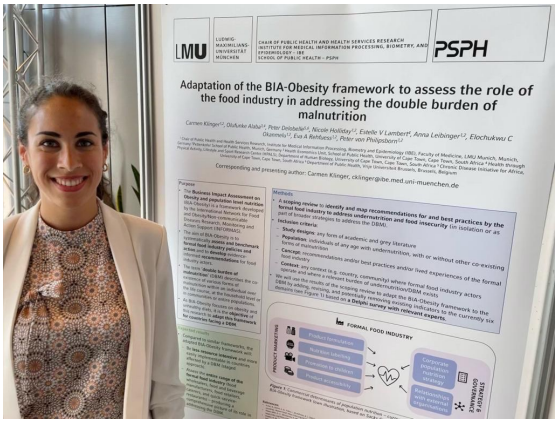
FoodSAMSA is a three-year project that addresses the double burden of malnutrition (undernutrition, micronutrient deficiencies, obesity) by assessing its determinants and by exploring interventions at the macro (policy), meso (community) and micro (interpersonal) level.

The project includes the adaptation of existing approaches for assessing and improving food environments to countries facing a double burden of malnutrition; implementation of these adapted approaches in South Africa; strengthening capacity and expanding regional networks to support food environment and systems research and action across sub-Saharan Africa.

The project is conducted by three partner institutions in South Africa (SAMRC, University of the Western Cape School of Public Health and Chronic Disease Initiative for Africa) and Ludwig-Maximilians-Universität (LMU) in Munich, Germany.

WP1 work on complex systems mapping of the double-burden of malnutrition (DBM) started in early 2022. First, available evidence and literature on the drivers and levers of the DBM in South Africa were assessed and mapped to identify current research gaps. Based on this, the research team agreed to focus activities on the micro (individual/household) and meso-level (community). An interview topic guide was developed to support key informant interviews, which started in December 2023 after recruitment of meso-level stakeholders (academic experts, civil society representatives, government). Recruitment and interviews of micro-level stakeholders (community health workers) are planned for February-March 2024, and group model building workshops for micro- and meso-level stakeholders in March-April 2024. The workshops will be informed by the interview data to help identify seed variables that will be used to develop two complex systems maps – the main outcome of WP1. You can read more about the study in the study protocol published online with the Open Science Framework.

WP2 The study protocol for the scoping review on recommendations for and best practices by the formal food industry to address undernutrition and the DBM was also registered with the Open Science Framework and presented at the 2023 ISBNPA conference in Uppsala, Sweden. The scoping review is currently in its final stage and includes 148 documents (academic and grey literature), and data extraction has been completed. Results are synthesized to inform adaptation of the INFORMAS BIA-Obesity framework for countries facing a double burden of malnutrition (DBM). The team is also preparing for a Delphi study that will be



conducted in the first half of 2024, where potential undernutrition and DBM indicators to be added to the BIA-Obesity framework will be shared and discussed with an expert panel. A market analysis to identify relevant food and beverage manufacturers, retailers and fast food restaurants in South Africa has also been conducted and the companies that will be assessed using the adapted BIA-Obesity tool, will be contacted in early 2024.

INFORMAS
Benchmarking food environments

Fig. 1: Geospatial mapping of F&B advertisements in two townships in the Cape Town Metro

WP3 aims to assess healthy food environment policies in South Africa using the Food-EPI tool (Healthy Food Environment Policy Index) developed by INFORMAS, which has recently been updated to include indicators on the DBM. The evidence document with updated Food-EPI policy indicators, including on the DBM, was validated by a core group of nutrition experts, and the first workshop to benchmark the implementation of policies in South Africa against international best practices took place in a hybrid format at Groote Schuur Hospital in late October 2023. The discussion on current food and nutrition policies, as well as gaps in current regulations, was dynamic and well attended, and the next workshop, where stakeholders will discuss priority actions for strengthening food and nutrition policy, is planned for March 2024. Preliminary results of the benchmarking exercise will be shared at local and international platforms in 2024 and a manuscript to document the process is being prepared.

WP4 expanded its research team with four field coordinators, two doctoral and three Masters' students, 1 junior and 1 postdoc researcher to assist with data collection and analysis. This made it possible to successfully investigate the nature of the food environments in three South African townships and to geospatially map the outcomes (Figure 1). The methodologies used to achieve these outcomes included a web-based software (Survey123) which links to the ESRI satellite system and the SAMRC RedCap survey, an online research electronic data capture software tool, which assisted in capturing GPS coordinates that were superimposed onto Western Cape maps. Preliminary results were shared in a poster presentation at the European Public Health Conference in Dublin in late 2023 and two papers are under development.

In addition, relationships were forged with three new non-governmental organisations that coordinate community health workers in the study area. This was necessary to co-create the materials that will be used in WP6 as part of the multimedia entertainment education on food & nutrition literacy among township dwellers.

Fig. 2: Workshop with informal shop owners

WP5 researchers have made great progress in their understanding of the commercial landscape in which informal food businesses in Cape Town's poor neighbourhoods operate. They successfully developed a method to capture the GPS coordinates of community shops in the study sites onto the SAMRC RedCap system despite some technical glitches. The instrument was successfully pilot tested in Kensington and used to map all the study sites, assisted by officers from the City of Cape Town Law Enforcement Agency and South African Police Service.

The team also successfully created an observational checklist and questionnaire on RedCap. The questionnaire was self-administered in a pilot in a community outside of the study areas to ascertain its validity, and community shop proprietors were informed of the study and invited to take part. Conversations were held with business and civil society, including Somali business leaders running community shops in Cape Town. A workshop was held with these shop owners in Dec 2023 (Figure 2) and followed by a focus group discussion in which challenges of running informal food business in the Western Cape was discussed to inform the refinement of the informal food business model.

WP6 will use the outcomes of WP4, the information scripts that were produced to develop comic booklets and video clips. Focus group discussions were organized centered around the nutrition knowledge, consumer behavior, purchasing power, and the social, cultural, and financial factors that influence the food choices of community health workers (CHWs) in the townships. CHWs were asked to keep food diaries for one month, to be able to map their families' food-purchasing habits, their food purchasing power, and their engagement with informal food business In addition, a quantitative survey related to the factors mentioned above was developed on RedCap to expedite the data collection process. These data will be used to develop the multimedia edutainment material aimed at improving food and nutrition literacy, including healthy food procurement and increased healthy food purchasing and financial power among CHWs in poor townships in South Africa.

WP7 focuses on network building and capacity development. As part of the networking with the Africa Food Environment Research Network (FERN), the team organized a series of two webinars in 2023, around the use of spatial analysis of community nutrition and local food environments (Dr Eichinger, VU Amsterdam) and scoping review methodology in food environment research (C Klinger, LMU Munich), respectively. Two more webinars are planned for 2024. Liaison with FERN also resulted in formal collaboration in the 3rd Food Environment Research Network Meeting (FERN2023) in Africa as part of the Local Organizing Committee. The conference was co-chaired by the WP7 lead and used to showcase FoodSAMSA and WP specific results and updates. WP1 and 2 research protocols and preliminary WP6 results were shared with an audience of 100-150 regional and global researchers and policy-makers, and networking activities conducted with researchers from the region whose work relates directly or indirectly to improving food environments in Africa.

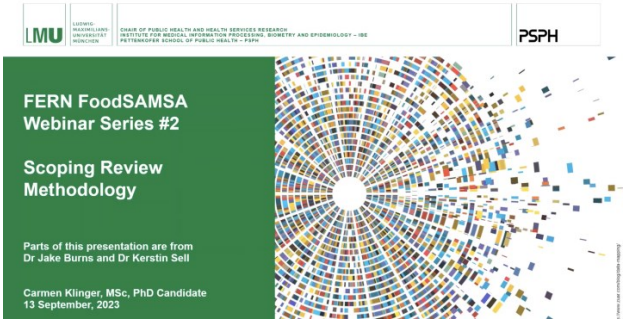
The FERN listserv was also used for preliminary mapping of food environment researchers in the region, which will complement a scoping review of the scientific and grey literature planned in partnership with the author of the earlier review (Turner et al., 2019) and in line with reconvening of the Agriculture, Nutrition and Health (ANH) Academy—FE Working Group in December 2023. A timeline for implementation was discussed and networking activities with the UWC DSI/NRF Centre of Excellence in Food Security and other local research and government partners strengthened.

The WP7 lead partner (CDIA) was also nominated as a core partner in a new The Guild-African Research Universities Alliance Cluster of Excellence on Food Environment Actions for the Promotion of Health, which was launched in Brussels in June 2023 and will seek to advance the study of food environment research, capacity building and policy-related activities over the next ten years.

WP8 focuses on integrated knowledge translation (IKT), including the dissemination of project outputs at relevant local and international fora. In 2023, several protocols and preliminary results were presented at international conferences, including International Society for Behavioral Nutrition and Physical Activity in Uppsala, Sweden, and the European Public Health Conference in Dublin, Ireland. Several presentations were also made at the 3rd FERN Meeting and methodological support offered to WP focal points throughout the year. An issue briefs workshop to share with project stakeholders is planned in conjunction with the second consortium meeting and will be organized in collaboration with the Stellenbosch University Centre for Evidence-Based Healthcare (EBHC) in April 2024.

MEALS4NCDs
Providing Measurement, Evaluation, Accountability & Leadership Support (MEALS) for NCDs Prevention

FERN FoodSAMSA Webinar Series (#2)



3rd Africa Food Environment Research Network Meeting

Facilitating the identification, collation and valorisation of food environment research, policy and practice in Africa

As part of our partnership with the University of Ghana Meals4NCDs Project by Prof A Laar, FoodSAMSA co-hosted the third Africa Food Environment Research Network Meeting (#FERN2023) from 1-3 November 2023. The meeting was held under the theme 'Facilitating the identification, collation, and valorisation of food environment research, policy, and practice in Africa' and hosted online, attended by 100-150 food environment researchers and policymakers. Special attention was paid to early career researchers and postgraduate students in the first 5 years of work, complemented by more seasoned researchers working in this field. FoodSAMSA was represented by the Co-PIs (A/Profs P Delobelle and Z Mchiza) who hosted several sessions and provided an update on the different WPs; PhD candidates Ms N Holliday and C Klinger, who presented an update on the complex systems mapping to identify drivers and levers of the double burden of malnutrition in South Africa (WP1), and the scoping review to identify and map recommendations for, and best practices by, the formal food industry to address undernutrition and the double burden of malnutrition (WP2), respectively. Lastly, K Muhali Mulalo shared some lessons from the Multimedia Entertainment Nutrition Health Intervention, which is part of WP6.

Spotlight on Researcher

Name: Nicole Holliday
Ludwig-Maximilians-Universität, Munich, Germany
WP1: Complex systems mapping to identify drivers and outcomes of the double burden of malnutrition
WP3: Mapping and benchmarking of public nutrition policies (Food-EPI)

I began to work with the FoodSAMSA project in spring 2022 and am now continuing in my role as part of my PhD research on food environment interventions to address malnutrition and sustainability. In FoodSAMSA, I work primarily on WP1, which uses a complex systems mapping approach and group model building workshops with stakeholders from the Cape Town Metro region to create complex systems maps of the drivers of the double burden of malnutrition in that area; and WP3, which applies the Food-EPI framework to the context of South Africa to evaluate the extent of implementation of food and nutrition policies. Before my work with FoodSAMSA, I received my undergraduate degree in public health from Oregon State University in the USA and my MSc in Global Urban Health from the University of Freiburg in Germany. I love the collaborative nature of FoodSAMSA and the opportunity to really interact and engage with stakeholders across different sectors and understand food environments from many different levels and perspectives. I look forward to spending some time in South Africa!

Name: Jillian Hill
NCDRU, SA Medical Research Council, Cape Town, South Africa
WP5 lead: Leveraging informal food businesses to improve the community food environment in South Africa

I am a Specialist Scientist at the South African Medical Research Council . My research focus includes healthy lifestyles, NCD prevention and the food environment. My interests lie in community behavior change, participatory research and project evaluation. I have extensive experience in qualitative approaches to inform the development of interventions. These include a focus on improving lifestyles such as healthy diets, physical activity, and tobacco cessation. The lifestyle intervention measures are employed in a current project, the South African Diabetes Prevention Programme (SA-DPP), where I am project manager and Co-PI. An earlier example, the HealthKick Diabetes Prevention Program (a randomized controlled trial in primary schools) produced an evidence base, and educational material and tools for school interventions that local and international researchers and interventionist draw upon. In the street food project, which comprised my PhD research, I developed a sustainable Street Food Vending Model for selling healthy and safe street foods in Cape Town and surrounding areas; with a second objective of enabling street vendors to make a sustainable living and consumers to make healthy choices regarding the food they purchase. My role in FoodSAMSA is to lead WP5; to expand, revise and update the Street Food Vending Model (SFVM), to support health-promoting changes to the informal food environment and the livelihoods of informal food economy actors.

Name: Muhali Mulalo Kenneth
University of the Western Cape, School of Public Health, Cape Town, South Africa
WP6: Refinement, implementation and evaluation of the multimedia entertainment-education (MM-EE) intervention to improve food and nutrition literacy and food choices

I have a Bachelor of Environmental Sciences (BENVSc) from the University of Venda (UNIVEN) and embarked on an academic journey at the University of the Western Cape (UWC) School of Public Health (SOPH) in 2013, where I commenced my role as a National Research Foundation intern working on the Prospective Urban and Rural Epidemiological Study (PURE), with a focus on the environmental, biological, and societal influences on obesity and non-communicable diseases. In 2016, I became a research officer for the Diabetes Prevention Program (Sivile Senza / Lifestyle Africa), an intervention study which sought to mitigate the risk of non-communicable diseases within communities by inspiring individuals to adopt healthier lifestyles and emphasizing proper nutrition and regular physical activity. In 2019, I assumed the role of coordinator for the Household and HIV (Sinako) research project, a randomized controlled trial aimed to empower individuals living with HIV by enhancing their household HIV competency through targeted interventions and education. I joined the FoodSAMSA team in 2022, leading WP6 and coordinating fieldwork activities for other WPs. In 2023 I embarked on a journey to become a junior researcher by starting a Masters in Public Health (MPH).

Name: Olufunke Alaba

School of Public Health,
University of Cape Town,
South Africa
WP1-3

Spotlight on Researcher

I hold a PhD in economics with a two-year postdoctoral fellowship in health economics from the Department of Economics at the University of Pretoria. I am Senior Lecturer in the Health Economics Unit at the School of Public Health at the University of Cape Town, and involved in research, teaching, and consultancy services in the areas of Health Economics and Equity, Sustainable Development, Social Determinants of Health, Food Security, Poverty, and Inequality. I have interacted with various international institutions and agencies and hold a fellowship with the Pan-African Scientific Research Council among others. I am associated with the Chronic Disease Initiative for Africa and involved in several FoodSAMSA WPs.

FoodSAMSA Consortium members

Chronic Disease Initiative for Africa (UCT)

A/Prof Dr Peter Delobelle (Chronic Disease Initiative for Africa)
Prof Dr Vicki Lambert (Health through Physical Activity, Lifestyle and Sport)
Dr Olufunke Alaba (Health through Physical Activity, Lifestyle and Sport)

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Dr Martina Lembani (UWC School of Public Health)
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Hloli Nonkeneza, MSc (UWC School of Public Health)
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For more information visit: https://foodsamsa.samrc.ac.za/