## 32ND INTERNATIONAL CONFERENCE OF AGRICULTURAL ECONOMISTS (ICAE 2024)

**Transformation Towards Sustainable Agri-Food Systems** 

### ORGANISED SYMPOSIUM FOOD ENVIRONMENTS AND THE LOCAL & TRADITIONAL FOOD SECTOR IN LMICS

August 6, 2024 | 11:00 AM - 12:30 PM

Organizer: Kathrin Demmler, Global Alliance for Improved Nutrition (GAIN), Germany







This symposium addresses the urgent need to transform agri-food systems, focusing on sustainable structures, innovations, policies, and behavioral changes at both global and local levels. A key topic is the role of food environments in reshaping how people sell, buy, prepare, and consume food, and manage food waste. In low- and middle-income countries (LMICs), where malnutrition and diet-related diseases are prevalent, food environments are crucial for promoting healthier, sustainable, and equitable food systems. These environments include external factors like food availability and prices, and personal factors like food accessibility and affordability.

Despite the growth of supermarkets, traditional and local food sectors—such as markets, street vendors, and kiosks—remain primary food sources for lower-income consumers in LMICs. These sectors are essential for shaping food choices and diets but face challenges like poor infrastructure and limited food safety. Understanding the links between traditional food sectors, diets, and nutrition is vital for addressing health inequalities and food insecurity, especially amid rapid urbanization.

The symposium will use an interdisciplinary approach to explore the influence of local food sectors on diets and nutrition in LMICs and identify policy implications for transformative change. It will bring together diverse stakeholders to share research insights and discuss policy impacts.

# CHAIR



Bhuvaneswari Balasubramanian is the Country Director for GAIN in India, supporting effective implementation of evidence based programmatic interventions to mitigate malnutrition at scale and promote healthier diets, with specific focus on vulnerable populations. She comes with experience of driving program delivery excellence in public health nutrition in India, having worked across international NGOs, Indian philanthropies, and development consulting. She is trained as a social scientist with a PhD in Social Sciences from the Tata Institute of Social Sciences, India.

Bhuvaneswari Balasubramanian, GAIN (bbalasubramanian@gainhealth.org)

# PRESENTERS



Kathrin Demmler serves as Lead Technical Specialist under GAIN's Knowledge Leadership team, focusing on food systems governance and policy. She drives research and educational efforts to transform food systems for better nutrition and health in a sustainable manner. Based in Berlin, she serves as GAIN's German representative, fostering partnerships for sustainable food systems. Her background includes a Ph.D. in Agricultural Economics and work at Imperial College London.

Kathrin Demmler, GAIN (kdemmler@gainhealth.org)

### Presenting on - Traditional food markets - how are they associated with diets?

Traditional food markets in LMICs play a crucial role in ensuring a consistent supply of fresh and diverse food options for urban communities, particularly addressing the needs of lower-income consumers. Despite their importance, these markets face significant challenges, such as inadequate infrastructure, substandard facilities, and insufficient food safety practices. While some governments have initiated policies to improve these markets, a lack of comprehensive data in many LMICs hinders the development of urgently needed policy interventions. This presentation provides an in-depth overview of the role and dynamics of traditional markets, drawing on outcomes from a study across five Kenyan localities. Utilizing cross-sectional observational data, the study surveyed nearly 2,000 randomly selected vendors and consumers in various traditional markets. The objective is to comprehend the implications of market food environments on people's diets, emphasizing the critical need for informed policy actions to address these challenges and enhance the overall food environment.









Mywish K. Maredia is a Professor in Agricultural, Food, and Resource Economics at Michigan State University. Her research covers food security policies, agricultural technology adoption, and the economics of agricultural science. With extensive experience in Africa, Latin America, and Asia, she focuses on food system transformation, poverty alleviation, nutrition, and sustainable agricultural technologies.

Mywish K. Maredia, Michigan State University (maredia@msu.edu)

#### Presenting on -Exploring Food Environments and Diet Quality in Urban and Peri-Urban Kenya

This study investigates the impact of food environments (FEs) on diet quality of individuals in urban and peri-urban Nairobi and Kisumu, Kenya. Utilizing 2022 survey data from 1,507 households and 2,152 individuals, the study employs a novel approach to measure FE by including the quality of FEs both around individuals' home and work/school/other commuting destinations. Findings reveal that 93% of adults face moderate or high risk for non-communicable diseases, with commuting behaviors influencing food choices. Controlling for individual fixed effects, daily FEs significantly explain diet quality variations. Individual factors also play a substantial role in this relationship. The study emphasizes the need to consider individual-level factors for a nuanced understanding of the FE and diet quality link. This approach, coupled with comprehensive data, contributes valuable insights to the discourse on FEs and dietary habits in African urban settings. Future analysis will explore these relationships using machine learning algorithms.



Stella Nordhagen (PhD) is the Research Lead, for Food Environments and Supply Chain at GAIN. She supports research activities in several low- and middle-income countries where GAIN works. Her areas of research interest include market-based approaches to improving diets and nutrition, links between nutrition and environmental sustainability, food environments, and drivers of food choice.

Stella Nordhagen, GAIN (snordhagen@gainhealth.org)

### Presenting on - Food safety in traditional markets: challenges and opportunities

One of the challenges facing traditional markets in LMICs is food safety: due to poor-quality infrastructure, limited awareness, and insufficient incentives, there is a high risk of contamination that can result in foodborne illness. This is particularly troublesome from a nutritional perspective, as many of the foods posing the greatest food safety risk—e.g., fresh vegetables and animal-source foods—are also the most nutritious. This presentation will draw on mixed-methods research, including two impact evaluations, from markets in Nigeria and Ethiopia to highlight the current challenges and opportunities for improving food safety in traditional markets, encompassing the perspectives of both consumers and food vendors.



Saroj Kumar Mohanta is the Co-founder & Director for Ecociate Consultants Private Limited. He specializes in market insights, product innovation and has co-created several business models for both social and private businesses, through community partnerships in low-income settings. He has engaged with GAIN to co-create a market-based sustainable nutritious food supply chain for tea garden workers to access safe and nutritious food through 'healthy line shops'.

Saroj Mohanta, Ecociate (saroj@ecociate.com)

### Presenting on - Enabling 'Access' to Nutritious Food for Tea Garden Workforce through Innovative Delivery Systems

In India, where diverse food production caters to a population of 1.3 billion, ensuring nutritional diversity remains a challenge, particularly in Assam's tea estates where workers face limited food choices, relying on government-subsidized cereals and limited market options. Addressing this, GAIN and Ecociate developed a nutritious food supply chain model, strategically placing a food distributor to work with existing shops within tea estates. This model gradually introduced fortified foods, eggs, dairy, and pulses, ensuring daily access and fostering a market-based sustainable business. Operating in 38 tea estates, supported by five distributors and 150 shops, the model independently increased the availability of nutritious food by 64%. The shops achieved annual sales of 7.2 million INR (87,000 USD) and remained self-sustaining during COVID-19. The approach is now replicated in South India.



For more please scan here

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