32ND INTERNATIONAL CONFERENCE OF AGRICULTURAL ECONOMISTS (ICAE 2024)

Transformation Towards Sustainable Agri-Food Systems

ORGANISED SYMPOSIUM

HEALTHY, SUSTAINABLE, AND AFFORDABLE DIETS :
NEW METHODS & TOOLS FOR EVIDENCE-BASED POLICYMAKING & PROGRAMMING

August 6, 2024 | 1:00 PM - 3:30 PM

Organizer: Flaminia Ortenzi, Global Alliance for Improved Nutrition (GAIN), Switzerland

Transforming food systems is crucial to achieving global nutrition and sustainability goals, but requires balancing complex – sometimes conflicting – priorities across nutrition, environment, economics, culture, and more. This symposium at the 32nd International Conference of Agricultural Economists explores recent advances in innovative, data-driven research to inform evidence-based policies and programs focused on improving access to healthy and sustainable diets for all. Presentations showcase new frameworks, methods, and tools being applied in low- and middle-income countries and regions, such as sub-Saharan Africa and Asia, to generate actionable evidence.

Specific topics include (i) nutrient profiling models identifying foods with high nutritional value and low environmental footprints; (ii) nutrition-sensitive affordability analyses of foods and diets for vulnerable populations; (iii) diet optimization models balancing multiple objectives; (iv) tools improving access to fragmented food systems data; (v) cross-cutting considerations examining methodological challenges in evaluating food systems interventions; and (vi) assessments of small-holder farmer programs in India to enhance nutrition and climate resilience.

Collectively, these studies demonstrate cutting-edge applications of data, methods, and analytics to guide food systems transformation toward improving diet quality, nutrition, and sustainability, while ensuring affordability and acceptability. Discussions will explore opportunities and priorities for further methodology development in this critical area.

CO-CHAIRS

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)

Purnima Menon is the Senior Director of Food and Nutrition Policy at the International Food Policy Research Institute (IFPRI). She also serves as a Senior Research Fellow and previously led South Asia Nutrition Programs. Over the past decade, she has directed POSHAN, an initiative enhancing evidence use for nutrition in India. Dr. Menon has led research on scaling up maternal and child nutrition interventions and evaluating large-scale behavior change programs. Her work spans India, Bangladesh, Ethiopia, Haiti, Vietnam, and Nepal. She co-convenes a global nutrition policy course and serves on various advisory groups. Dr. Menon holds a Ph.D. in International Nutrition from Cornell University.

Purnima Menon, IFPRI

PRESENTERS

Flaminia Ortenzi is a Research Associate within the Knowledge Leadership team at GAIN, with a background in food science, nutrition and global/public health. She is passionate about finding innovative, holistic, evidence-based solutions to the triple burden of malnutrition and other global health challenges. She works on various projects in a research, knowledge translation, and management capacity in the areas of healthy, sustainable, and affordable diets, nutrient profiling, micronutrient deficiencies, and behaviour change.

Flaminia Ortenzi, GAIN, Switzerland (fortenzi@gainhealth.org)

Presenting on -Identifying Nutritious Foods with Low Environmental Impacts
This presentation will focus on the methods and results of a recent research project aimed at (i) developing a new nutrient profiling model called the Nutritional Value Score to holistically assess foods' nutritional value, and (ii) conducting related nutritional Life Cycle Assessments to identify foods with low environmental impacts. The combined results from the two components of the project allow to determine which foods have the lowest environmental impact per unit nutritional value. These findings provide evidence-based guidance to programs and policies on which foods to prioritize to address both nutritional and environmental concerns in a given context.

Will Masters is Professor of Food Economics and Policy in the Friedman School of Nutrition at Tufts University. He is coauthor of the new textbook Food Economics: Agriculture, Nutrition and Health (https://bit.ly/FoodEconBook). He collaborated with GAIN to conduct affordability assessments of target foods within the context of low-cost healthy diets, together with Rachel Gilbert and Leah Costlow, doctoral candidates in the Friedman School at Tufts, as part of the Food Prices for Nutrition project (https://sites.tufts.edu/foodpricesfornutrition).

Will Masters, Tufts University (william.masters@tufts.edu)

Presenting on -Targeting Nutrient-Rich Foods for Bottom-of-Pyramid Consumers in Low- and Middle-Income Countries

Increasing access to healthy diets is a key challenge for improving nutrition globally. This study examines the affordability of healthy diets including nutrient-rich target foods relative to least-cost diets for bottom-of-pyramid (BoP) consumers in four sub-Saharan African countries. Using nationally representative household surveys and retail price data, we calculate the additional cost and change in affordability from incorporating dairy, eggs, vegetables, dried fish, and chicken into model diets meeting international dietary guidelines. Results indicate the target foods identified by nutrition programming are frequently the least expensive options, so including them imposes little or no premium on overall diet costs. However, healthy diets remain unaffordable for most BoP consumers. Affordability and costs vary substantially between locations. Tailoring interventions and policy to these realities can improve diet quality.
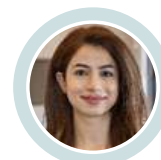
Dr. Mahya Tavan is a postdoctoral research fellow with the Sustainable Nutrition Initiative (SNi®) at the Riddet Institute. Her research focuses on dietary optimisation and sustainable diets. Prior to joining SNi®, Dr Tavan held a research role at the University of Melbourne, Australia, where she carried out various research on sustainable food production, resource use efficiency and biofortification of fresh food.

Dr. Mahya Tavan, SNi (m.tavan@massey.ac.nz)

Presenting on - Optimizing Diets for Nutrition, Sustainability, Affordability, and Acceptability with the iOTA Model

Designing diets that are nutritious, environmentally sustainable, affordable, and socially acceptable is essential for food systems transformation. This study introduces the innovative iOTA model for diet optimization along these dimensions. The iOTA Model is an optimisation tool for sustainable diets that helps identify what shifts are needed to make diets more nutritious and affordable, and minimise their environmental impact, while still being acceptable to the consumer. The model provides a quantitative, evidence-based approach to analyze trade-offs and identify optimal diets suited to local needs. Applying optimization methods like iOTA can guide impactful policies and interventions for nutrition and sustainability.

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 - Methodological Challenges with Evaluating Food Systems Interventions

While there is growing global momentum behind food systems approaches to improve planetary and human health—including nutrition—there is limited evidence of what types of food systems interventions work. Evaluating these types of interventions is challenging due to their complex and dynamic nature and lack of fit with standard evaluation methods. This presentation will draw on a portfolio of six evaluations of food systems interventions intended to improve nutrition to identify key methodological challenges and formulate recommendations to improve the quality of such studies. It will focus on five challenges: a lack of evidence base to justify the intervention approach; the dynamic and multifaceted nature of the interventions; addressing attribution; collecting or accessing accurate and timely data; and defining and measuring appropriate outcomes. In response to these, it will provide some cross-cutting recommendations and highlight opportunities for new method development in this space.
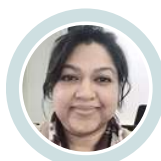
Dr. Sabiha Sultana is the Program Manager for Food Systems Dashboard at GAIN, Bangladesh. A medical doctor and public health professional with experience in research, program, and policy advocacy, she is focused on research and evaluation on food fortification and value chain, adolescent nutrition, maternal and child nutrition and workforce nutrition, and Scaling UP Nutrition Business Network.

Dr. Sabiha Sultana, GAIN Bangladesh (ssultana@gainhealth.org)

Presenting on - Leveraging Data to Understand and Improve Food Systems Performance

Food systems are complex and cut across many sectors, leading to fragmented data and presenting challenges for understanding their diverse and interconnected functions. This study introduces the Food Systems Dashboard (FSD), a tool making food systems data readily available. The FSD combines over 300 indicators on nutrition, food environments, food production, resilience, and sustainability from global datasets. The presentation demonstrates using the FSD to holistically analyze food systems. Users can explore data to understand interconnections across sectors and geographies (Describe); identify priority challenges (Diagnose); and inform decisions (Decide). The FSD provides a singular access point for food systems data otherwise siloed among sources. By leveraging data in this way, FSD enables more rigorous, evidence-based efforts to evaluate and enhance food systems to support nutrition and sustainability goals.

Drishti Makhijani is a consultant at GAIN India, driven by her passion for social impact, and seeking novel solutions at the delicate nexus of climate, agriculture and nutrition.

Drishti Makhijani, Consultant, GAIN India (drishtimakhijani01@gmail.com)

Presenting on- Interconnectedness of Climate Resilience, Livelihoods, Nutrition: Evaluating Programs for Smallholder Farmer Communities (India)

The nutritional status of a population and the impact of climate change are critical indicators of a country's development. Often, the interconnectedness of these issues is overlooked, despite their profound influence on human health, environmental sustainability, and economic performance. In India, the challenges are amplified by its large population, heavy reliance on agriculture, and diverse ecological landscapes. Climate change disrupts crop yields, leading to price hikes and loss of livelihoods, making nutritious diets inaccessible. At the same time, unsustainable agricultural practices negatively impact the environment. This work underscores the importance of efforts designed to improve climate resilience and nutritional outcomes, with a focus on sustainable agricultural practices. The initiative evaluates sustainable agriculture programs across select states, highlighting opportunities for enhancing climate resilience, livelihoods, and nutritional outcomes through intentional intersections. It aims to outline successful initiatives and provide evidence-based insights for policymakers and stakeholders to replicate effective programs.

For more please scan here

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