





Event summary

- What the people of the world eat today is a long way from ideal. Dietary challenges around the world range from not having enough food to eat, to not being able to afford a healthy diet, to overconsumption, often of unhealthy foods. A tenth of the world's population has difficulty procuring sufficient food to meet their energy needs. A much higher share of the global population around 40% cannot afford a healthy diet, while others who can afford healthy diets do not consume them for a variety of reasons.
- A result of the global dietary challenge is that about one quarter of the world's population suffers from micronutrient deficiencies. Poor quality diets also contribute to an increasing burden of overweight and obesity, leading to non-communicable diseases even in countries where other dietary and nutrition challenges persist. Adults in low- and middle-income countries now account for 70% of the global burden of overweight and obesity. The implications of improved diets in terms of realizing human and economic potential are enormous.
- Ensuring healthy diets for the future requires that we understand the challenges of today; identify and deploy solutions, notably those that reach the most vulnerable; and support governments and other food systems actors to better nourish their populations.





• IFPRI is a leader in bringing nutrition issues into focus and has been generating evidence on how to tackle this massive global challenge from multiple angles. This session will provide insights into ongoing research by IFPRI and our partners across the food system on nutrition and healthy diets and showcase how these efforts can come together to support global, regional, national, and sub-national governments and food systems actors to develop policies and strategies to improve diets.

Agenda

1:00-1:02	Welcome by Neha Kumar and introduction of first three speakers		
1:03-1:10	Introduction and stage setting, Jo Swinnen, IFPRI Director General		
1:10-1:40	Presentation on IFPRI's research on diets and nutrition, Purnima Menon and Channing		
	Arndt, Senior Directors		
1:40-1:50	Initial comments from SC members (2-3 mins each):		
	Himanshu Pathak, ICAR, India		
	Patrick McManus, DFA, Ireland		
	Innocent Musabyimana, African Development Bank		
	Alan Tollervey, FCDO, United Kingdom		
1:50-2:00	Comments/responses by IFPRI researchers (2mins each)		
	Sherwin Gabriel (online)		
	Liz Ogutu (online)		
	Sunny Kim		
	Shalini Roy		
2:00-2:24	Moderated open discussion		
2:24-2:30	Wrap-up 1-minute reflections from IFPRI speakers		





What is a healthy and sustainable diet?

- Promotes health and prevents illnesses
- Enough fruits, vegetables, nuts, seeds, whole grains and legumes
- Sufficient but not excessive calories, starchy staples, animal-sourced foods (milk, eggs, poultry, fish)
- Limited or no foods that could lead to health risks (sugar-sweetened beverages, processed meat, ultra-processed foods)
- Diversity of nutritious and safe foods available, affordable, and yet <u>low</u> <u>environmental footprint</u>





Uruguay dietary ¡DISFRUTÁ DE LA COMIDA, COMÉ SANO Y MOVETE! guidelines, 2016 Si estás lejos de esta meta recordá que con pequeños cambios ya se logran efectos positivos ¿Qué vas a hacer hov para acercarte a la meta? Ethiopia, 2022

A systems view is essential to understand what people eat and why

- Across the life course, what we eat is shaped by multiple forces.
- Food environments are critical to shaping diets of consumers
- What happens in food systems affects both people and the planet





preferences,
affordability, health
and nutrition
knowledge, time,
gender, and
physical
accessibility.





Over 3 decades of research on agriculture and nutrition has helped shape our understanding of the complexity of relationships between agriculture and diets





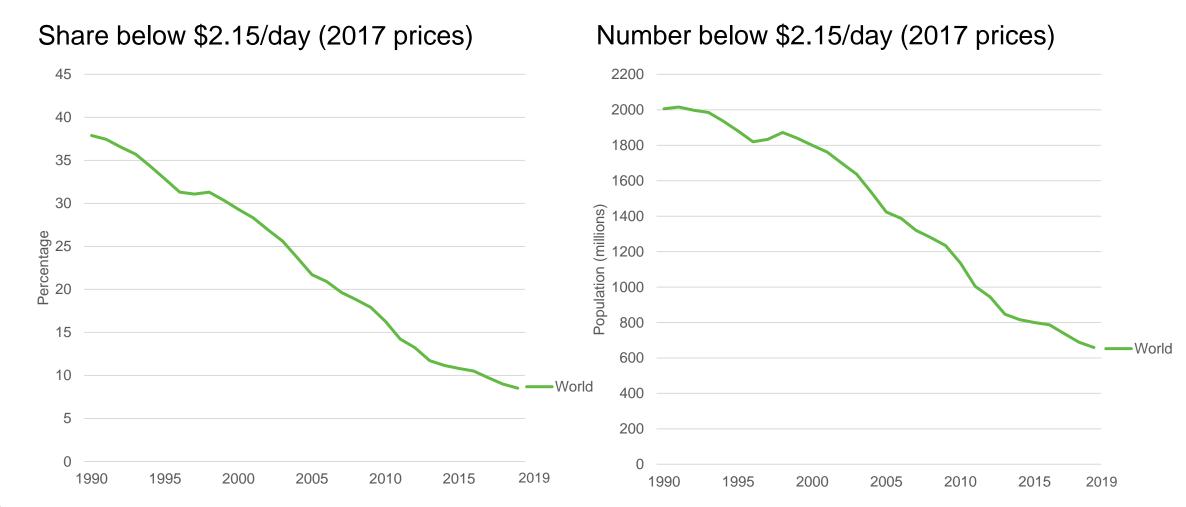






Why we do what we do: The staggering scale and consequences of poor diets, malnutrition

Population living in extreme poverty (1990-2019)







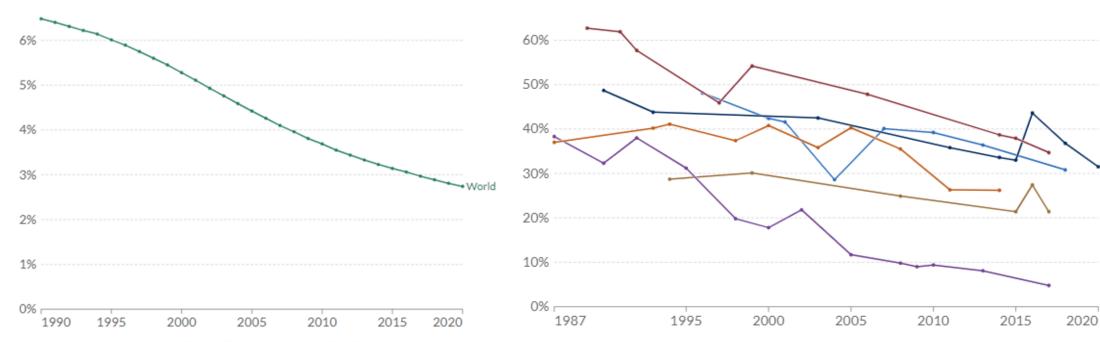
Children are doing much better around the world, but challenges such as childhood stunting remain as we look to the SDGs



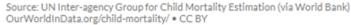


South Africa

China

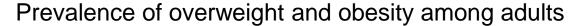




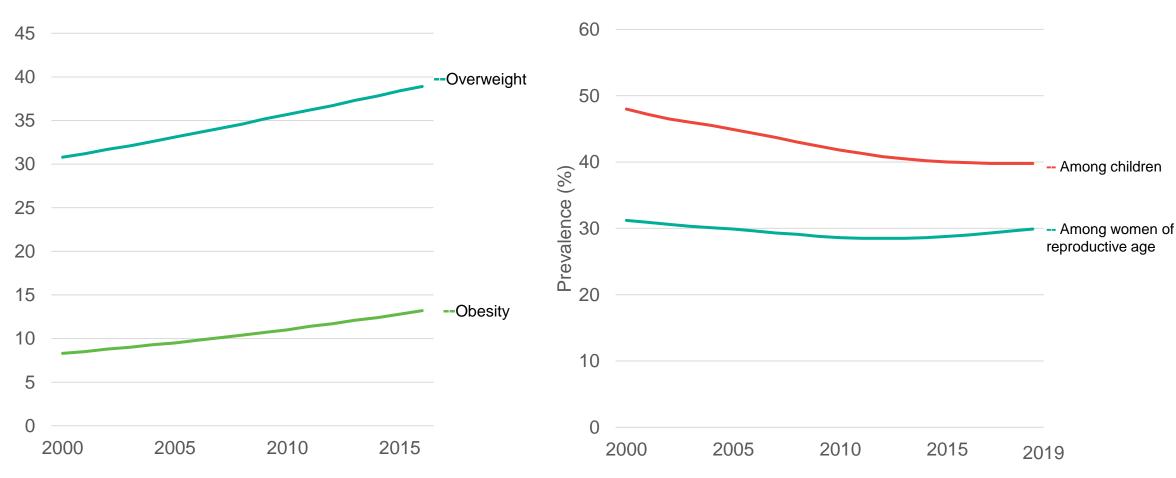




Rising overweight/obesity and stagnant anemia point to the failure of food systems to deliver diets of adequate quality



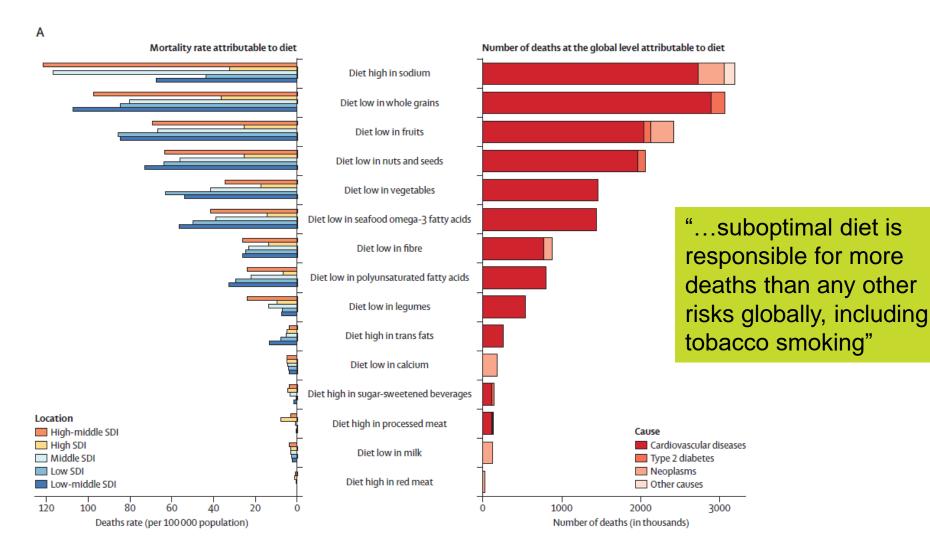








Poor diets are top contributors to the global burden disease around the world







Poor diets are shaping the future of human society and the planet

- Diet-related challenges we face today
 - Shocks to food security
 - Not having enough food to eat, even in stable societal conditions
 - Approximately 40% of the world's population not able to afford a healthy diet
 - Not having access to information about a healthy diet
 - Overconsumption, including of unhealthy foods
- Short- and long-term consequences of poor diets
 - Maternal and child undernutrition
 - Adolescent nutrition
 - Overweight and related NCDs
 - Reduced human capability to respond to climate change while contributing to emissions and other forms of environmental degradation.







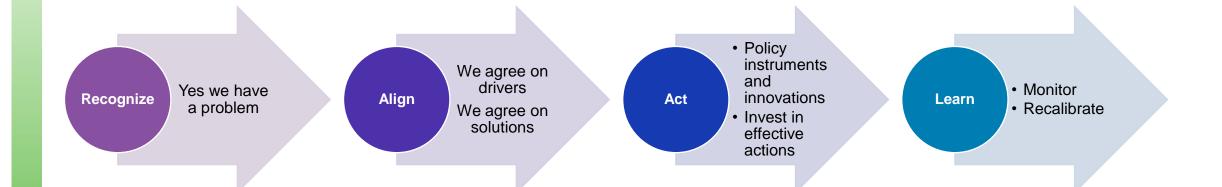






Our research, partnership and engagement approach

Moving an agenda in public policy is complex. A comprehensive approach to bringing evidence to policy is essential



The evolution of **science and evidence**, policy, finance, politics, administrative, societal and cultural perspectives....





Working with a wide range of partners, our research helps tackle the challenges of diets and nutrition in three ways

Clarifying the situation and outlook for diet and nutrition challenges

- Monitoring
- Foresight
- Measurement innovations

Testing diverse solutions to improve diets and nutrition

- Technical innovations
- Shaping consumer choices (information and preferences)
- Reducing structural barriers (affordability, gender and equity)

Shaping enabling environments for healthy diets

- Public policies and investments
- Food environments and markets
- Political economy and governance





What we do: Diverse types of data & evidence to support policy and program communities in enacting change

Analyses and modeling with large data sets

- Describing challenges
- Understanding drivers
- Foresight and modeling

Field-based research and evaluations

- Impact evaluations and trials of innovations
- Concurrent evaluations and implementation research with large-scale programs
- Evidence syntheses

Policy and program support

- Financing research
- Governance and political economy studies
- Active evidence-building with and for policy and program communities









Research area 1: Clarifying the situation and outlook for diet and nutrition challenges

- Monitoring
- Foresight
- Innovations in measurement

Gender and diets/nutrition: Measurement remains critically important to shine a light on challenge areas

Maternal & Child Nutrition WILEY

Development and validation of a health and nutrition module ORIGINAL ARTICLE for the project-level Women's Empowerment in Agriculture Index (pro-WEAI+HN)

Audrey Pereira¹ | Shalini Roy¹ | Sunny S. Kim¹ | Hazel Malapit¹ Gender Assets and Agriculture Project Phase 2 (GAAP2) Health and Nutrition Study T

¹Poverty, Health, and Nutrition Division, International Food Policy Research Institute, Washington, District of Columbia, USA

²CGIAR Research Program on Agriculture for Nutrition and Health, International Food Policy Research Institute, Washington, District of Columbia, USA

³Environment and Production Technology Division, International Food Policy Research Institute, Washington, District of Columbia, USA

Jessica Heckert, Poverty, Health, and Nutrition Division, International Food Policy Research Institute, 1201 St, Washington, Email: J.Heckert@cgiar.org

Elena M. Martinez, Friedman School of Nutrition Science and Policy, Tufts University,

Agricultural development projects increasingly aim to improve health an outcomes, often by engaging women. Although evidence shows such p improve women's and children's health and nutrition and empower wo known about their impacts on women's health- and nutrition-related ag extent to which impacts emerge through women's empowerment, la lack of instruments that measure the dimensions of women's agency t relevant to health and nutrition outcomes. We developed an option tary module for the project-level women's empowerment in agricu WEAI) to measure health- and nutrition-related agency (promethod for developing related indicators used data collected from development programmes implemented across Bangladesh, Burl (pooled sample = 12,114) and applied psychometric analysis confirmatory factor analysis) and the Alkire-Foster methodolo seven indicators covering women's agency in the areas of her



Understanding Local Food Systems in South Asia: An Assessment Approach and Design

Methods Note #1 December 2022

these challenges is the lack of credible

in the region. The TAFSSA food systems

accessible and integrated evidence base

that links farm production, market access,

assessment aims to provide a reliable.

and high-resolution data on food systems

BACKGROUND

Home to one-quarter of humanity-onefifth of whom are youth—South Asia has the world's largest concentration of poverty and malnutrition (1-3). Despite producing one-quarter of the world's consumed food, the region's agrifood systems face formidable challenges in producing an adequate and affordable supply of the diverse foods needed for sustainable healthy diets (4,5). Unhealthy food consumption is rising, and farming systems are threatened by unsustainable groundwater withdrawal due to poorly developed food and energy policies, in addition, South Asia's farmers are both contributors and victims of climate change and extreme weather, which contributes to rural out-migrationparticularly of youth—resulting in rising labor scarcity and increased production

TAFSSA (Transforming Agrifood Systems in South Asia), a CGIAR Regional Integrated Initiative, aims to address these challenges by delivering actionable evidence and scalable innovations across these regions through a coordinated program of research and engagement from farmer to consumer.

dietary patterns, climate risk responses, and natural resource management in Bangladesh, India, Nepal and Pakistan. It is intended to be a multi-year assessment.

APPROACH The approach to the design of the assessment included a review of several conceptual frameworks, consultations with diverse stakeholders and field visits to target locations. A multi-disciplinary team lead the design of the protocol and specific measurement tools.

This research note describes the overall approach and design of the food systems assessment, Detailed protocols, tools and assessment data from the components of the assessment will be available in public domain in the near future.

In this note, we focus on describing the design of the core of the assessment: a primary integrated survey.

One of the roadblocks to addressing











GENDER AND INTRA-HOUSEHOLD DYNAMICS RELATED TO

ocial norms, and access/control over sources influence diets within the usehold? These questions form an egral part of the socio-economic

vers in the food systems framework. address these questions, modules in primary surveys have been eloped using the gender and food ems framework (9). These include tions pertaining to household task ation, perceptions of time poverty, y patterns of women, attitudes as gender norms, financial endence and family support, around mobility, and ership of social organizations,

decisions span three stages: pod enters the kitchen, when

the food is in the kitchen and while the food is being served. In the first stage data on agricultural production and gata on agricultural production and food purchase decision-making such as what is grown, what is purchased and from where gives a sense of women's involvement in these activities. In the second stage, data on the type of equipment used and fuel(s) segregation of duties within the kitchen, and decision-making regarding what is to be cooked and how provides an insight into women's roles in food preparation. In the last stage, information on intra-household stage, information on intra-nouserious allocation of food, sequential order of meal consumption across members and cleaning responsibilities can give and creating responsibilities can are an overview of gender blases in food







Building methods and measurement around factors influencing food choice

Ongoing collaboration with an emerging Drivers of Food Choice network across nutrition-linked initiatives

Food choice behaviors	Intrapersonal drivers of behaviors	Socio-cultural drivers of food choice	Personal food environment	Material assets and resources	Person-state drivers
Acquisition	Time use	Gender and women's empowerment	Affordability	Facilities	Biological features
Preparation	Identity Knowledge,	Lifecourse	Convenience	Food, water, and	
Allocation	attitudes, and beliefs Self-efficacy	perspective	Convenience	housing security	Physiological needs and conditioning
Consumption behaviors	Motivation and expectancies Preferences	Values	Accessibility	Wealth	
Food safety and storage	Habits and routines	Social relationships	Desirability	Transportation	Psychological components
Waste and disposal	Goals and prioritization	Social relationships	Desirability	Transportation	



Source: Christine Blake and Morgan Boncyk, University of South Carolina

Building methods on drivers of food choice: A 2023 multi-partner workshop in S. Asia

Multiple institutions: IFPRI, CIMMYT, IRRI, HKI, Uni. of South Carolina, Wageningen Uni., Wayamba Uni., Uni. of Dhaka, Center for Qualitative Research, icddr,b, National Institute of Nutrition (India), Nutrition International, GAIN, BRAC





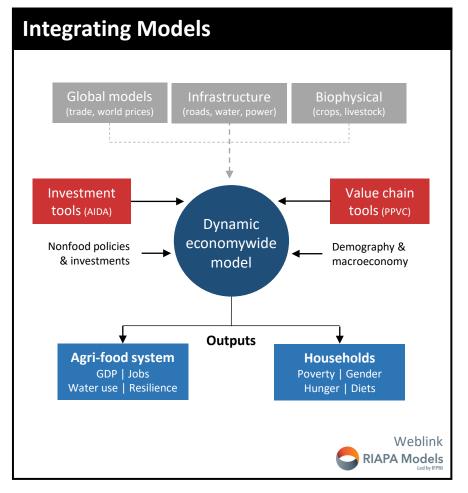


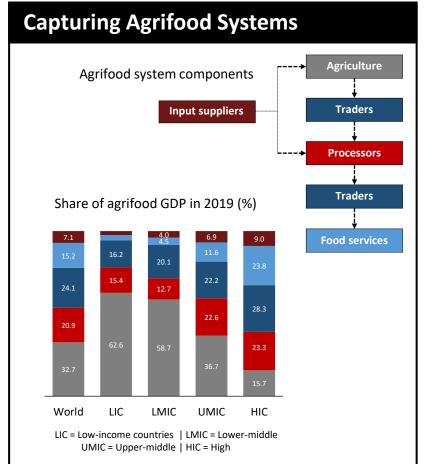
Foresight and Metrics to Accelerate Food, Land and Water Systems Transformation

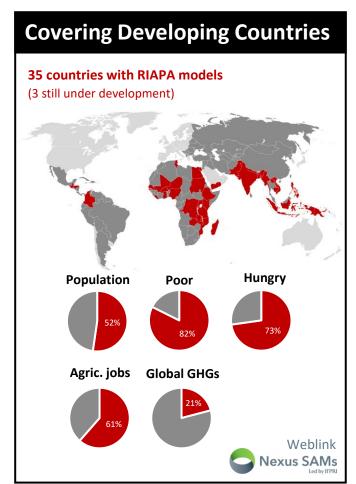
IFPRI's RIAPA Data & Modeling System

Rural Investment and Policy Analysis (RIAPA)

Forward-looking economywide framework that captures entire national economies, unpacks agrifood systems and subnational regions, and tracks how policies, investments, and climate risks affect different sectors, workers and population groups



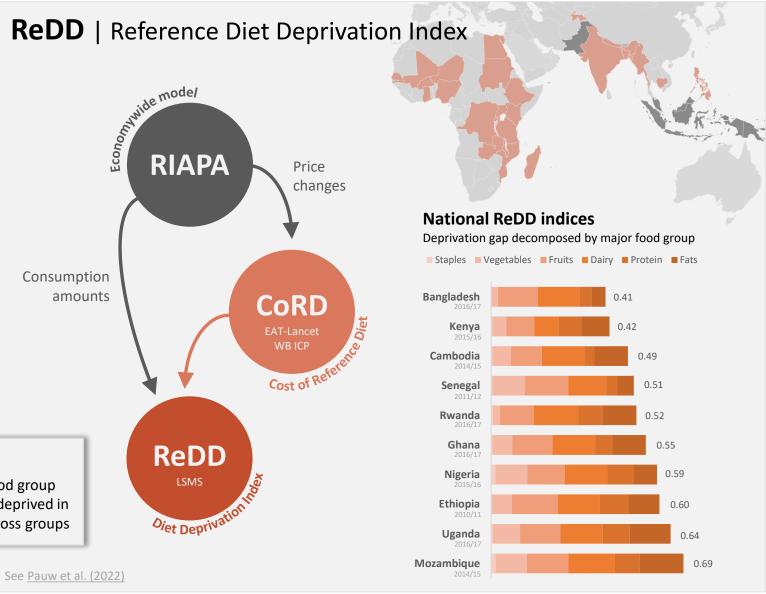




Tracking Diet Costs and Quality

Factoring diets into decision-making

- Should consider dietary change alongside poverty, jobs and other policy goals
- In addition to consumer preferences, diet quality depends on the availability, cost, and affordability of healthy foods
- RIAPA is a model that tracks both product markets/prices and household incomes
- ReDD index is a gap measure: tracks how far consumption levels are from a healthy diet, rather than just counting deprived people
- ReDD can be tracked over time using household surveys (not only used in models)



ReDD is a compound deprivation measure

IncidenceShare of pop. deprived in at least one food groupBreadthNumber of food groups households are deprived inDepthAverage six of food consumption gap across groups

Foresight and Rapid Response Modeling Systems (FARRMS)

Responding to Crises

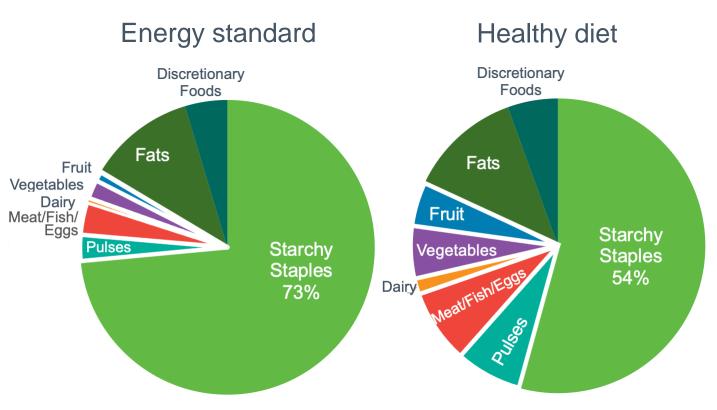
- FARRMS is IFPRI's Foresight and Rapid Response Modeling System
- Modeled impacts of global crises on poverty, hunger, and diet quality
- Impacts vary by country, but
 COVID-19 had a large persistent
 effect on incomes and poverty
- Higher food and fertilizer prices, caused by the Russia-Ukraine war, had a more significant impact on household diets

Deterioration of ReDD Index by end-2023 (%-point deviation from pre-COVID baseline trends) ■ COVID and early recovery (2020-21) ■ World price spikes (2022) ■ Global slowdown (2023) Bangladesh 1.0% **Burkina Faso** 0.9% Cambodia 1.9% DRC 0.6% Ethiopia 0.6% Ghana 0.1% Kenya 0.7% Madagascar 1.7% Malawi 0.9% Mali 1.8% Mozambique 1.5% Nepal 2.5% Niger 0.9% Nigeria 0.1% Rwanda 1.1% Senegal 1.1% Sudan 0.5% Tanzania 0.5% Uganda 0.5% Zambia 0.8%

See Arndt et al. (2023) and Diao and Thurlow (2023)

Myanmar: the energy standard typically used to define food poverty lines results in a food basket heavy in starchy staples & deficient in most essential nutrients

Food basket energy shares



% of Avg. Requirements

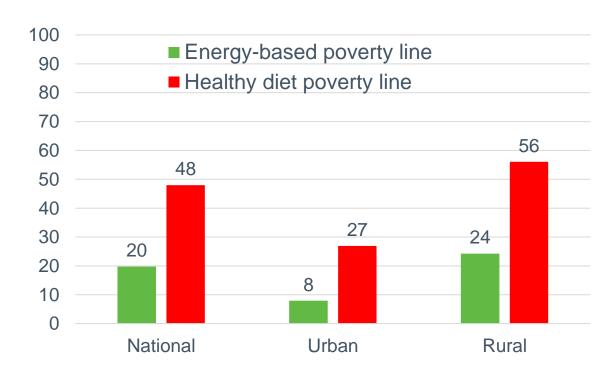
	Energy standard	Healthy diet
Protein	152	207
Calcium	48	110
Iron	100	136
Magnesium	89	137
Phosphorous	132	172
Zinc	85	105
Copper	200	266
Vitamin C	62	212
Thiamin	79	119
Riboflavin	47	82
Niacin	105	128
Vitamin B6	95	130
Folate	71	166
Vitamin B12	52	146
Vitamin A	56	136





Nutrition (healthy diets) as a basic need recasts poverty estimates

- The poverty measures published by the World Bank are anchored in a basic food basket the meets caloric needs.
- Healthy diet food poverty lines reflect food-based dietary guidelines and cultural food norms of relatively poor households
- Aligns poverty measurement practice with the modern paradigm of a healthy, balanced diet for all
- Implications: Applying a healthy diets lens to poverty measurement dramatically increases the proportion of the poor in Myanmar













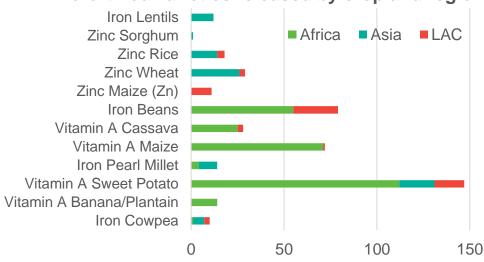
2. Testing diverse solutions to improve diets and nutrition

- Technical innovations
- Shaping consumer choices (information and preferences)
- Reducing structural barriers (affordability and equity)

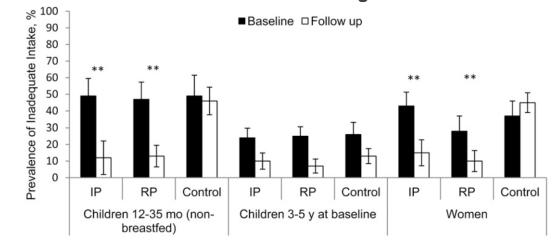
Technical innovation: Nutrient Enriched Crops

- Breed for multiple traits: yield, hardiness, nutrition, and more
- More than 400 nutrient enriched varieties released and now mainstreamed into the One CGIAR and NARES systems.
- Target communities become more nutritionally resilient if shocks shift diets back towards staples.





Introduction of OSP to farming households significantly increased vitamin A intake among children and women

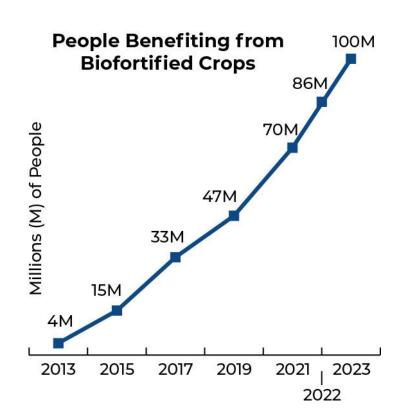




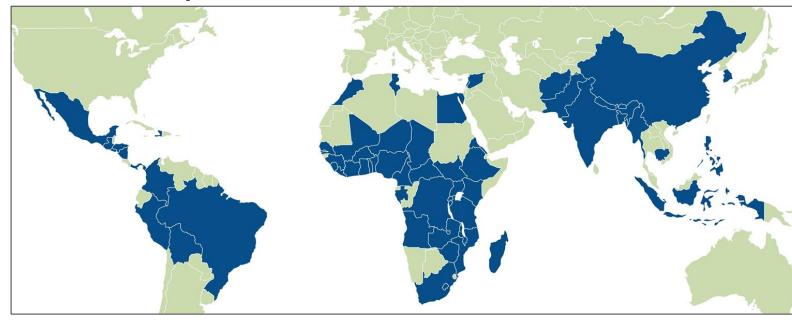


HarvestPlus delivers sustainable impact at scale

- Today, over 86 million people in farming households are eating biofortified foods—progressing rapidly towards
 100 million in later 2023.
- Advocacy led to an African Union declaration in 2022 to scale up biofortification in Africa to make nutrient-rich foods available, accessible, and affordable.
- Zinc wheat in Pakistan expected to reach 30-40% of total wheat growing area in Punjab state.



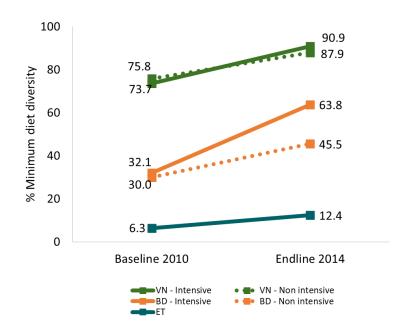
Biofortified Crops Around the World





Shaping diet quality among vulnerable populations: A 14-year journey of testing behavior change innovations at scale

- Alive & Thrive: large-scale behavior change interventions targeting diets of young children in Bangladesh, Vietnam, Ethiopia (2009-2014)
 - Improvements in child dietary diversity
 - Substantial variability by context
 - Impact: Systems strengthening interventions scaled up into large-scale programs globally



- Alive & Thrive: behavior change and systems strengthening interventions to support maternal diets during pregnancy in Bangladesh, Burkina Faso, Ethiopia and India (2015-2023)
 - Improvements in maternal dietary diversity, varied by context
 - Improved consumption of iron supplements
 - Insights on systems levers for nutrition improvements in health systems.
 - Impact: Maternal nutrition efforts being scaled into health systems in focus countries



Sources: Menon P et al, JN 2016; Menon P et al., PLOS Med 2016; Nguyen et al., JN 2017; Kim SS et al., JN 2018; Nguyen et al., JN 2021; Kim et al., JN (R&R)





Improving diets of future generations: School-based behavior change programs in Ethiopia

- Despite pandemic disturbances, interventions delivered at schools in Ethiopia demonstrated
 - Increased dietary diversity
 - Increased consumption of nutritious foods
 - Increased meal frequency
 - But NO impact on unhealthy foods/snacks
- School-based program being explored for scale-up by Government of Ethiopia















Tackling food affordability: Evidence from the Impact Evaluation of Egypt's Takaful and Karama Program

- Impacts on household consumption: 8.8 percent
 - About 1/3 of the total value of the transfer received
- Significant impacts on expenditure on higher value food groups: fruits and meat
 - No significant impact on household dietary diversity, or dietary diversity for woman or children
- Context matters: Households near the threshold already have relatively diverse diet, but transfers increase consumption of high value foods





Tackling affordability of nutritious diets by combining social protection and nutrition behavior change in Bangladesh



Photo credit: Aminul Khandaker, IFPRI-Dhaka

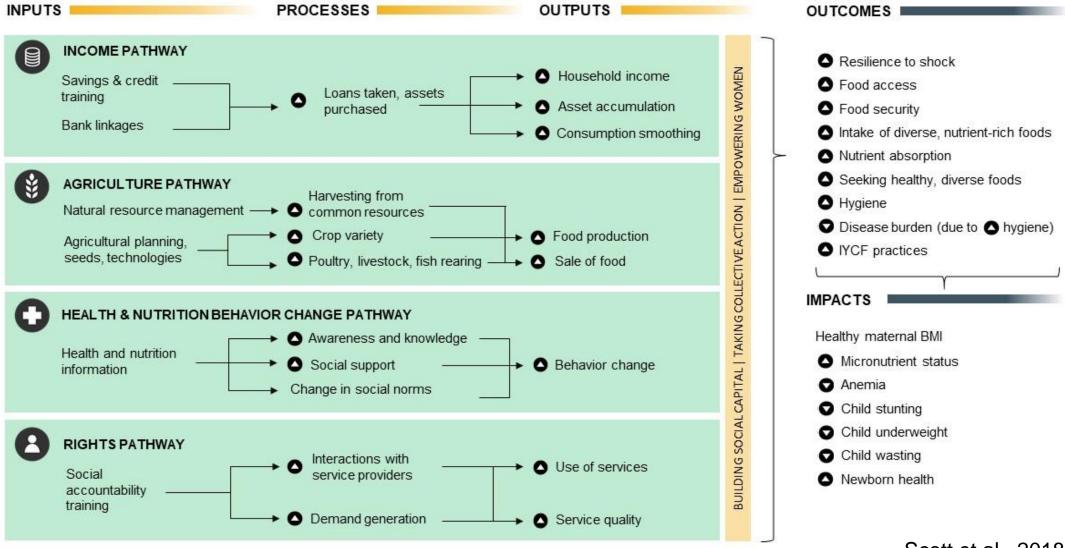
Cash plus behavior change had the greatest impact on diversity of diets				
NORTH		SOUTH		
Cash	Fruit	Cash	Eggs	
Food	Legumes	Food	Legumes	
½ Cash, ½ Food	Legumes	½ Cash, ½ Food	No significant impacts	
Cash+BCC	Legumes Leafy green vegetables Fruit Meat Fish Eggs Milk/dairy	Food+BCC	Legumes Leafy green vegetables Fruit Fish Eggs	

Ahmed et al., IFPRI





Our research has highlighted many pathways to impact of women's livelihoods programs in rural India





Gender as a structural driver of diets:

Research on large-scale multisectoral women's group programs in India sheds light

Diet-related outcomes	JEEVIKA-MC (Bihar)	PRADAN (5 states)
Diet diversity		\
Food security		
Knowledge about food-related behaviour		
Use of kitchen gardens		
Use of safety nets or program funds to purchase food		N/A

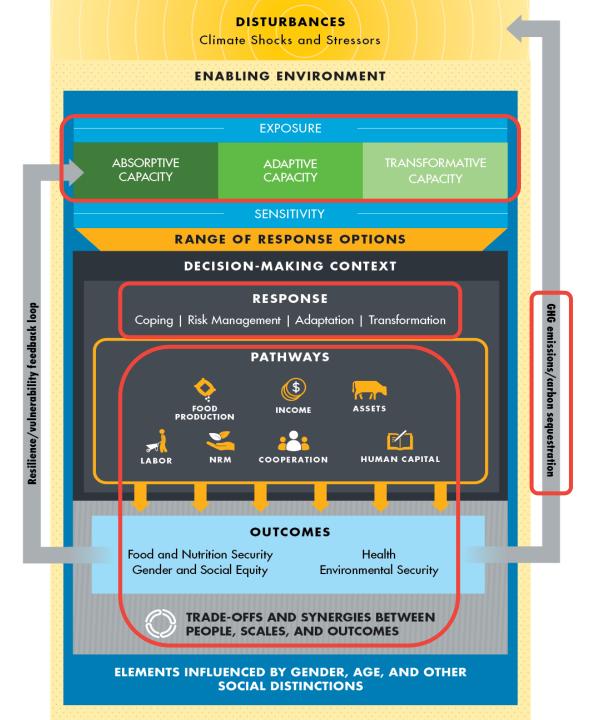
Sources: Scott et al, Current Developments in Nutrition (2022) Raghunathan et al., World Development (2023)

The intersecting worlds of gender, climate and nutrition change Nutrition Dimensions

- Nutritional status influences human sensitivity to shocks/stressors and resilience
- Climate response strategies have implications for diets and nutrition
- Nutrition response strategies and dietary choices have implications for the environment and climate change
- Poor women bear the brunt of both climate and nutrition crises; a gender and equity lens helps us connect the dots











3. Enabling environments for healthy diets

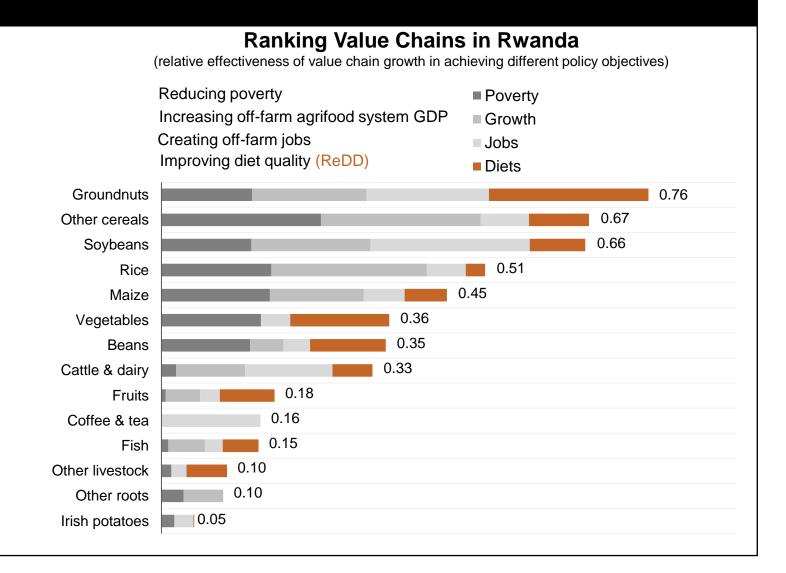
- Public resource allocation
- Food environments— markets and regulation
- Political economy and governance

RIAPA - Investment Prioritization and Balancing Portfolios

Informing Policies

- IFPRI works with partners to prioritize policies to drive food system transformation
- Model effects of investing in different value chains
- Some are more effective in reducing poverty or generating GDP (e.g., cereals)
- Including diet quality can shift priorities (e.g., groundnuts and vegetables become more important)

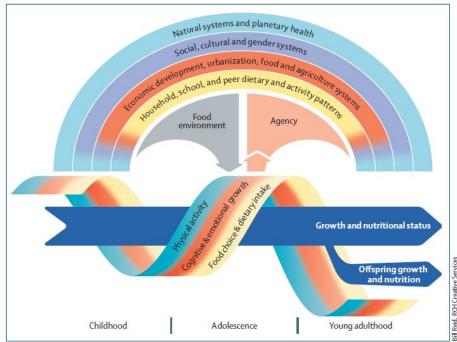
See Diao et al. (2022)

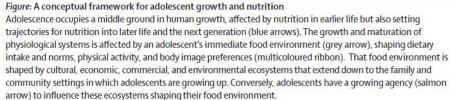






A view of the future of people and the planet requires us to confront issues of markets for nutrition





Lancet Series on Adolescent Nutrition, 2021







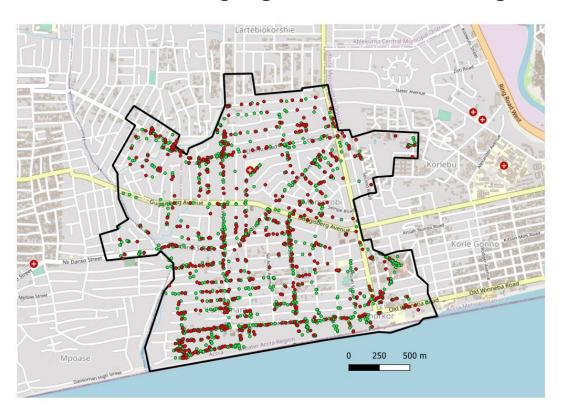




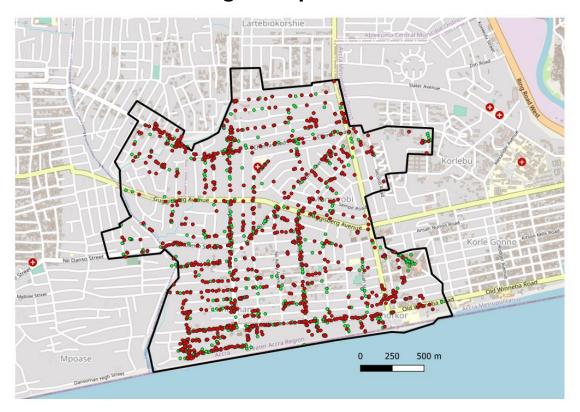


In urban Accra (Ghana), access to both sugar-sweetened beverages and ultra-processed foods is widespread for adolescents

Food outlets selling **sugar-sweetened beverages**



Food outlets selling ultra-processed foods



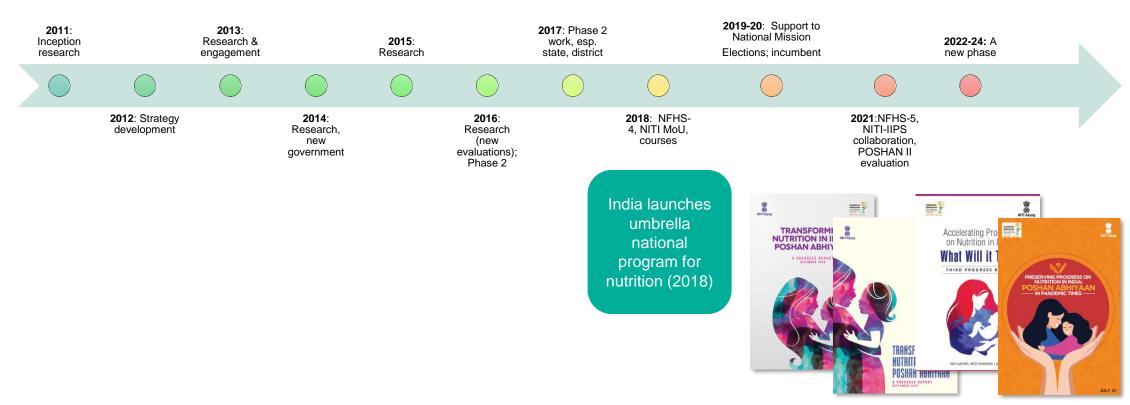




Food outlet

Food outlet selling specific unhealthy foods

Supporting India's policy community with evidence over a decade: Over 50 peer-reviewed papers and engagement with numerous policy processes and actors.





Thematic, opportunistic and responsive research and researchers embedded in policy/program context create a platform for evidence to support policy

Supporting the policy community in Bangladesh with evidence on diets and nutrition since 2009

Understanding the challenge

 The Bangladesh Integrated Household Survey – the only nationally representative survey in South Asia with detailed intrahousehold dietary data

Testing solutions

- Strengthening behavior change interventions focused on vulnerable populations
- Improving affordability of diets through cash transfers and nutrition behavior change communications
- Testing integrated agriculture-gender and nutrition programming with the government of Bangladesh

An enabling policy environment

 Supporting national government efforts to shape nutrition [Country Investment Plans; National Nutrition Services assessments]



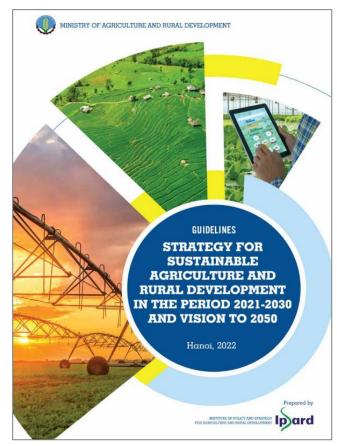




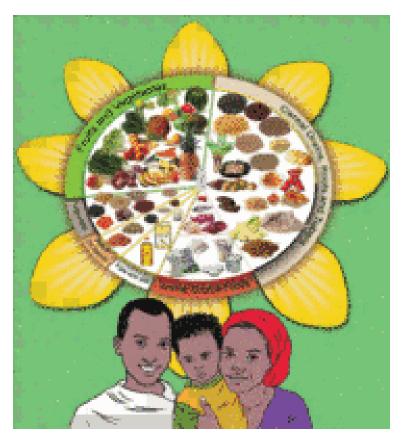




Supporting food systems policy processes in Vietnam and food-based dietary guidelines in Ethiopia with partners



















Working with a wide range of partners, our research helps tackle the challenges of diets and nutrition in three ways

Clarifying the situation and outlook for diet and nutrition challenges

- Monitoring
- Foresight
- Measurement innovations

Testing diverse solutions to improve diets and nutrition

- Technical innovations
- Shaping consumer choices (information and preferences)
- Reducing structural barriers (affordability, gender and equity)

Shaping enabling environments for healthy diets

- Public policies and investments
- Food environments and markets
- Political economy and governance



Deploying our assets and research methods to tackle major challenges to shaping healthy and sustainable diets

- New directions for research on diets in diverse settings: sustainability, foods such as fruits and vegetables, consumption of unhealthy foods and overall dietary patterns, diets in cities and urban areas
- Food environments and food markets as critical connectors between agriculture and diets
- Supporting regional, national and local food systems transformation
- Tackling equity and affordability in the context of healthy sustainable diets
- Diets, climate change and their critical intersections with social equity and gender











Sustainable Healthy Diets















