

A4NH operates from a simple premise: agriculture and food systems are driven by consumers. To then realize its enormous potential to significantly improve the nutrition and health of people around the world, agricultural research must consider both consumption and supply.

The CGIAR Research Program on Agriculture for Nutrition and Health (A4NH) links consumption – of healthy, affordable, and safe foods – with supply, offering an innovative perspective on the relationship between agriculture, nutrition, and health through research that strengthens the knowledge base and new partnerships that lead to real outcomes.

A4NH focuses on addressing challenges related to food system transformation, the rising burden of foodborne disease, and emerging health risks, like antimicrobial resistance. The program recognizes addressing inequality related to gender or other social categories is a development objective in its own right, and an important condition for achieving improved nutrition and health.

As CGIAR's only research program on nutrition and health, A4NH brings a unique multi-sectoral perspective to the system-level outcome of improving food and nutrition security for health. Recognizing the magnitude of the task, A4NH is led by IFPRI and managed by a group of four other CGIAR centers and two academic institutions, and brings together the talents and resources of other CGIAR Centers plus a wide range of partners, to carry out research activities through five unique, yet complementary, flagship programs and three cross-cutting units in at least 30 countries.



Analysis, Collaboration Key to Food System Improvements

The Food Systems for Healthier Diets (FSHD) flagship research program was established as part of A4NH's second phase. Through it, A4NH is responding to concerns about global diet trends and demand from countries for knowledge needed for navigating food system transformations to better address problems such as undernutrition, micronutrient deficiencies, and overnutrition.

In 2017, researchers embarked on an in-depth analysis of food systems in four focus countries—Bangladesh, Ethiopia, Nigeria, and Viet Nam—to determine what and where food systems research is needed and to identify possible entry points for interventions. To develop a research agenda, they held several rounds of national-level consultations to gather opinions and insights and test ideas for approaches as the overall process developed. They also conducted an in-depth literature review to draw on existing research and understand the national context.

The first national analysis to be completed, Ethiopia, served as a case study to refine methods of study and information-sharing for the other countries. It also informed the research agenda in Ethiopia for work over the next several years, including several activities now implemented that developed from ideas that arose from partners. Researchers are working with the Ethiopian Public Health Institute to develop food-based dietary guidelines, a key tool identified during the analysis for educating people on what constitutes a healthy diet. They are also building local capacity by engaging young Ethiopian researchers in food systems work through a small grants project for graduate students.

FSHD researchers are building strong partnerships with local stakeholders, including government, nongovernmental organizations, research institutions, and development partners, and laying the foundation for future collaboration in identifying strategies and opportunities that will lead to systemwide improvements with real impacts for consumers in the focus countries.

FSHD is led by Wageningen University and Research, in collaboration with Bioversity International, IFPRI, CIAT, IITA, and the Global Alliance for Improved Nutrition.

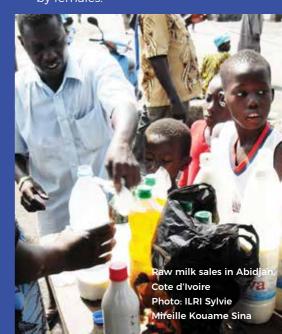
Growing Efforts to Solve a Silent Threat

Alfatoxins, produced by molds that widely contaminate foods and feeds, are one of many "silent" threats in Africa, affecting health, income, and livelihoods. A4NH research carried out by IITA, ILRI, ICRISAT, and IFPRI has drawn more attention to viable solutions to this problem. One solution is the biocontrol product Alfasafe®, developed by IITA with USDA-ARS, which limits aflatoxin contamination in both maize and groundnuts, keeping harvests safe for and consumption. IITA is implementing strategic partnerships private companies government entities across Africa to produce, distribute and use Aflasafe products. These efforts expanded in 2017, as IITA worked with private sector companies and both state and federal governments to scale up Aflasafe much more widely. Private companies in Senegal and Gambia (BAMTAARE SA), Nigeria (HarvestField

Industries Limited; HIL), and 24 farm-based businesses participating in the AgResults Aflasafe Pilot project were instrumental in supplying Aflasafe to farmers and to buy treated crops to sell at premium prices. with small Working medium-scale agricultural enterprises in Nigeria, the AgResults Aflasafe project determined how entrepreneurs could be incentivized to distribute Aflasafe as a path to establishing a sustainable market for aflatoxin-safe crops. In Kenya, the Aflasafe production and distribution is done by the private sector, with the Kenyan Agriculture and Livestock Research Organization producing Aflasafe the Ministry of Agriculture purchasing and distributing Aflasafe to farmers.

In 2017, Aflasafe was used by both maize and groundnut farmers, in 79,050 and 26,350 hectares,

respectively. For maize, 67,192.5 ha were managed by male farmers and 11,857.5 ha managed by females. Among groundnut farmers, the products were used in 14,492.5 ha managed by males and 11,857.5 ha by females.





By 2022, we expect to be able to demonstrate observable changes, among our partners and in the countries where we work, as a result of A4NH research.

MILLION

more farm households in at least 12 countries, including nine in Africa and three in Asia, will have adopted improved varieties, breeds, or trees and/or improved management practices

PERCENT

fewer women reproductive age who will be consuming less than the adequate number of food Ethiopia. aroups in Bangladesh, Vietnam, and Nigeria.

MILLION

more people, of which 50 percent are women, will be without deficiencies of one or more of the following essential micronutrients: iron, zinc, iodine, vitamin A, folate, and vitamin B12 in at least 14 countries, ten countries in Africa and four in Asia.

A4NH Results Framework

A4NH Portfolio Impact Pathways IDOs & **SLOs** and Key Actors **Cross-Cutting IDOs Enhanced smallholder** market access Food Systems for Healthier Diets Increased incomes and **Poverty Agri-food Value**

Chains Pathway

• Producers

Chain agents

Policies Pathway

Development

Programs Pathway

health program implementers (NGOs and

governments)

• Policymakers and investors

Civil society organizations

· Agriculture, nutrition, and

and industry groups

• Intergorvernmental agencies

Consumers

Regulators

Flagship 2:

Biofortification

Flagship 3: Food Safety

Flagship 4: Supporting Policies, Programs, and Enabling Action through Research

Flagship 5: Improving Human Health



Country Coordination and Engagement (CCE)

Monitoring, Evaluation, and Learning (MEL)

Gender, Equity, and Empowerment (GEE)



Enabling environment

National partners and

beneficiaries enabled

improved

Reduced

Improved Food and Nutrition Security for Health

Improved Natural Resource Systems and **Ecosystem** Services

> Cross-Cutting Issues

Global Partners For Impact

A4NH's work is guided by seven managing partners:



International Food Policy Research Institute: Lead Center for A4NH, hosting the Program Management Unit and cross-cutting units; leads Flagship 4, all research clusters Flagship 4, and the country coordination teams Bangladesh and India: and co-leads Flagship 2, all clusters research Flagship 2, and a research cluster in Flagship 1.



Bioversity International: Leads partnership with Rome-based UN agencies (FAO, IFAD, WFP) and co-leads a research cluster in Flagship 1.



International Center for Tropical Agriculture (CIAT): Leads the country coordination team in Vietnam and co-leads Flagship 2, all research clusters in Flagship 2, and a research cluster in Flagship 1.



International Institute of Tropical Agriculture (IITA): Leads a research cluster in Flagship 3 and the country coordination team in Nigeria.



International Livestock Research Institute (ILRI): Leads Flagship 3, two research clusters in Flagship 3, and a research cluster in Flagship 5; and co-leads Flagship 5, a research cluster in Flagship 5, and the country coordination team in Ethiopia.



London School of Hygiene and Tropical Medicine: Leads partnership with public health research institutions and a research cluster in Flagship 5, co-leads Flagship 5 and a research cluster in Flagship 5.



Wageningen University and Research Centre: Leads Flagship 1 and co-leads all Flagship 1 research clusters.

Working to Achieve The Global Goals

The call for agriculture to support better nutrition and health is reflected in the discussions leading up to the United Nations' 2030 Agenda for Sustainable Development and in the new CGIAR Strategy and Results Framework. A4NH puts this desire to unite agriculture, nutrition, and health into action, with all five research flagships working to contribute to both SDG 2 and SDG 3.



















We would like to thank all funders who supported this research through their contributions to the CGIAR Trust Fund www.cgiar.org/funders

Contact us

CGIAR Research Program on Agriculture for Nutrition and Health International Food Policy Research Institute 1201 Eye Street, NW, 12th Floor Washington, DC 20005

John McDermott

Email: j.mcdermott@cgiar.org

Tel: 1.202.862.5600



RESEARCH
PROGRAM ON
Agriculture for
Nutrition
and Health

www.a4nh.cgiar.org