ABOUT THE ANH ACADEMY

The Agriculture, Nutrition & Health (ANH) Academy is a global research network in agriculture and food systems for improved nutrition and health to serve as a platform for learning and sharing.

The ANH Academy is part of the three workstreams of the Innovative Methods and Metrics for Agriculture Nutrition Actions (IMMANA) programme. It is also a broader partnership that aims to bring together researchers and users of research cutting across disciplines and sectors to tackle the complex interactions between agriculture, food systems, nutrition, health and environment. It is particularly focused on facilitating rapid sharing of innovative methods, metrics and emerging research findings and strengthening research capacity in this interdisciplinary area.

The ANH Academy is jointly founded and managed by the Leverhulme Centre for Integrative Research in Agriculture and Health (LCIRAH), IMMANA and CGIAR Research Program on Agriculture for Nutrition and Health (A4NH).

The main objectives of the ANH Academy are to:

• Share innovative research in agriculture and food systems for improved nutrition and health;
• Stimulate the development and harmonisation of new research;
• Help strengthen the capacity of the research community to undertake inter-sectoral and interdisciplinary research; and
• Facilitate the uptake of robust evidence in policies and programming in agriculture and food systems for improved nutrition and health.

More information: www.anh-academy.org

ORGANISING PARTNERS

The ANH Academy Week would not have been possible without the generous contributions from a range of partner organisations and individuals for whose support we are enormously grateful.

The 2018 ANH Academy Week is organised and funded by:

in partnership, and with the support of:
With a rapidly changing environment and a renewed commitment from the international community to fighting malnutrition at the global level, there has never been a more important time to focus on the complex linkages between agriculture, nutrition and health. It is only through a concerted effort cutting across sectors and disciplines that we can achieve real progress in ensuring optimal nutrition and health for everyone through sustainable and inclusive policies and interventions in agriculture and food systems.

It is against this backdrop that the Agriculture, Nutrition & Health (ANH) Academy and its partners have been convening the ANH Academy Week since 2016.

The ANH Academy Week is a series of annual events that bring together the community of researchers and users of research (practitioners and policymakers) working at the intersection of agriculture, nutrition and health.

The objective of the ANH Academy Week series is to foster knowledge exchange, innovation and learning around ANH research.

The ANH Academy Week consists of two interlinked components:

1) Learning Labs - a series of training sessions in interdisciplinary agriculture, nutrition and health research;

2) Research Conference - an abstract-driven symposium featuring oral presentations, poster sessions and keynote speeches, as well as plenary round tables, side events and working group discussions.

The first ANH Academy Week took place in Addis Ababa, Ethiopia, in June 2016 and the second was held in Kathmandu, Nepal, in July 2017.

The 2018 event, held in Accra, Ghana, saw the conference return to Africa, with a range of new local, regional and international partners, and a vibrant group of over 300 participants from all over the world. This year, the conference was enhanced by new innovative presentation formats as well as new technologies including live webstreaming and a conference app.
THE WEEK IN NUMBERS

343 participants FROM 49 COUNTRIES

138 speakers at the Symposium

17 Learning Labs held

45 hours of Learning Labs

68 Poster presentations

21 bursary awardees

PARTICIPANT FEEDBACK

90% of the participants found the event excellent or very good.

66% of the participants will certainly or most likely attend again.

As the main benefits of attending, the participants mentioned building new connections, research collaborations and partnerships, and the possibility to learn and share knowledge across sectors and academic disciplines.

WHAT THE PARTICIPANTS TOLD US

“It was good to see research outside my main discipline. I like the interdisciplinary nature of this conference as well as its focus.”

“(I can now) Understand many concepts better and (I have) enhanced (my) capacity to conduct research. I have new research ideas.”

“It was great! One of the best conferences I attended so far: active, lively...”

“(I) Felt inspired, excellent networking opportunities, side meeting potential.”

“This was my first time attending (...). I appreciated the emphasis on incorporating local context, and environmental awareness (the plastic free pledge was great!). The diversity of participants was fantastic and added a great level of richness to the whole experience.”
The week began with two days of interactive Learning Labs, delivered by international experts and covering a broad range of topics. The aim was to strengthen practical skills, knowledge and capacity around key methods, metrics and theories used in agriculture, nutrition and health research and practice. Participants were encouraged to step outside their disciplinary zones in order to learn something new.

LEARNING LABS

PLENARY DISCUSSION ON INTEGRATING ENVIRONMENT INTO AGRICULTURE-NUTRITION RESEARCH

London School of Hygiene & Tropical Medicine (LSHTM) and SOAS University of London

There is a growing body of research that seeks to understand the interdependence between agriculture, nutrition and the environment. This plenary Learning Lab gave a brief overview of why these links are important and looked at some of the common methodological approaches and challenges. Agriculture, while contributing to better nutrition and health, is also one of the biggest contributors to CO₂ emissions and water usage. In this session, examples were shown of how to analyse and capture the environmental footprint of various production and consumption patterns, including their level of greenhouse gas emissions and water use.

PLENARY MASTERCLASS AND DISCUSSION ON ETHICS: PRINCIPLES, PROTOCOLS AND PROCEDURES FOR ANH RESEARCH

Coordinated by the CGIAR Research Program on Agriculture for Nutrition and Health (A4NH)

This session introduced a research ethics and quality framework that considers multiple principles of research including relevance, scientific credibility, legitimacy, and effectiveness. The panel then provided examples of protocols and procedures they have found relevant to their work that include: ethical considerations and national and institutional review boards for research ethics; how to improve research design for studies; engagement of participants of research and feedback of results to stakeholders, and more.

QUALITATIVE RESEARCH METHODS FOR ANH RESEARCH

Leverhulme Centre for Integrative Research on Agriculture and Health (LCIRAH)

One of the hallmarks of ANH Academy Week is the opportunity to enhance knowledge and explore new tools to improve research. In this session, researchers explained some of the approaches and methods for conducting qualitative social research, including how it can address agriculture, nutrition, and health challenges; how to integrate it with other research methods; and practical skills for applying it. Participants were guided through and able to practice interviewing skills and coding, and reflect on the methods used.

INTRODUCTION TO ECONOMICS FOR AGRI-HEALTH RESEARCHERS

Tufts University & University of Ghana

Many ANH researchers want to engage with economic data and methods, but their professional training is in health or agricultural sciences. This Learning Lab introduced them to the causal framework used by economists to explain and predict behaviour related to food production and markets, and their implications for dietary intake. Researchers were introduced to the principal analytical tools used in economics and provided with examples of empirical application to agriculture and nutrition. This allowed agri-health scientists to incorporate economic principles into their analyses of farm production, dietary intakes, and other outcomes of individual choice and social interaction. This session is one of our most popular Learning Labs, now held annually.
DRIVERS OF FOOD CHOICE BEHAVIOUR
University of South Carolina
Healthy food systems provide the foods necessary for sustained nutrition of a population. Rapid changes in food systems are shifting traditional dietary practices towards consumption of industrially or locally processed foods in countries regardless of income classification. In this session, participants were presented with frameworks and methods for studying drivers of food choice, followed by discussion and brainstorming policy and programme actions. To better understand these changes and how they occur, they worked to evaluate the influence of changes on food choice behaviours, and considered what actions might alter specific choices.

USE OF MODELLING TOOLS TO INFORM DECISIONS FOR NUTRITION-SENSITIVE AGRICULTURAL PROGRAMMES
London School of Hygiene & Tropical Medicine (LSHTM) & United Nations World Food Program (WFP)
This interactive session introducing some of the available nutrition modelling tools presented data requirements for those tools, demonstrated analysis methods, and discussed how to interpret and use results at various stages. Organisers used a case-based scenario approach that enabled participants to examine results and decide what to analyse next to inform decisions on how to strengthen the nutrition sensitivity of different agricultural programs. The session concluded with a discussion about potential applications of the tools presented and their potential value to ANH Academy members.

MEASURING THE HEALTHINESS OF THE DIET
Wageningen University & Research
Food systems research increasingly focuses on improving the quality of diets in low and middle-income countries (LMIC), where the risks for negative health consequences of both under- and over-nutrition are rapidly increasing. This focus on healthy diets goes along with the need for sound metrics to assess diet quality in LMIC. Accordingly, this session introduced the concept of a healthy diet, the three dimensions of healthy diet (quantity, quality, and diversity), and how to measure the healthiness of the diet. Participants learned how to use food-based dietary guidelines to assess a healthy diet and apply a metric of a healthy diet to the research or development program they are working on.

ENERGY COUNT(S): MEASURING ENERGY EXPENDITURE IN AGRICULTURAL AND RURAL LIVELIHOODS USING ACCELEROMETER DEVICES
University for Development Studies, Ghana & University of Reading
There is a well-recognised need to incorporate and understand the human energy expenditure dimension in agri-health analyses. Accelerometry-based technologies can provide an improved picture on patterns of energy expenditure and scale up empirical measurement. This session drew on a multi-country IMMANA-funded project to present methodology developed for generating reliable energy expenditure profiles of rural agricultural households in LMICs using wearable accelerometer devices. Participants learned about protocol and steps developed during the research, and discussed ethical considerations and empirical applications of the methodology.

MEANING OF LINEAR GROWTH: APPROPRIATE USE OF GROWTH AS A MEASURE IN DEVELOPMENT
International Food Policy Research Institute (IFPRI) & University of South Carolina
This session provided participants with an understanding of how linear growth can and should be used as a measure in development. Presenters shared the history of using growth as a measure of healthy development of infants and young children, then discussed measures and indicators. The group applied these concepts to understand the meaning of child linear growth retardation, differentiating between outcomes to which poor linear growth is causally linked, and outcomes for which growth is instead a marker, before concluding with discussing appropriate use of linear growth as a development measure. The session elicited a lively discussion on the use and utility of stunting as an outcomes measure for ag-nut programmes.

“YOU CAN’T MANAGE WHAT YOU DON’T MEASURE”: METRICS FOR FOOD SAFETY
US Agency for International Development (USAID) & International Livestock Research Institute (ILRI)
This food safety and nutrition session built from a recently published report on food safety metrics and introduced participants to two specific food safety measures: health risk and health burden. Through presentations and active group work, participants came to an understanding of the principles, including differences and uses of hazard- and risk-based approaches to food safety, and how to obtain and interpret measures of health and economic burden of foodborne disease, including the nutrition dimensions and their implications for policy development.

COMMUNICATE SO SOMEONE HEARS YOU: TOOLS TO EFFECTIVELY REACH YOUR AUDIENCES (AND TRAPS TO AVOID)
Innovative Methods and Metrics for Agriculture and Nutrition Actions (IMMANA) & CGIAR Research Program on Agriculture for Nutrition and Health (A4NH)
In today’s fast-paced, mobile-based culture, people want information that is clear and easy to understand. In this session, presenters took participants through a range of tools and techniques, from harnessing the power of social media to reducing dependence on Power Point, providing concrete suggestions to improve visibility and accessibility of research. Attendees considered how to identify and package research findings and impacts, as well as what communications styles work for different audiences.

USING THE PROJECT-LEVEL WOMEN’S EMPOWERMENT IN AGRICULTURE INDEX (PRO-WEAI) FOR NUTRITION-SENSITIVE PROGRAMMING
CGIAR Research Program on Agriculture for Nutrition and Health (A4NH)
Many agricultural development projects aim to empower women, but how can we tell which interventions are most effective? The project-level Women’s Empowerment in Agriculture Index (pro-WEAI) is a tool for measuring empowerment, agency, and inclusion of women in the agriculture sector. In this session, participants learned about the quantitative and qualitative tools that make up pro-WEAI, as well as its nutrition- and health-focused add-ons. Participants then took on a data analysis activity in Stata in which they calculated and presented pro-WEAI results from an example data set.
FOOD SYSTEM SUSTAINABILITY AND DRIVERS: METHODOLOGICAL CHALLENGES FOR A GLOBAL ANALYSIS

International Center for Tropical Agriculture (CIAT)

In this session about food system dynamics, participants explored a range of approaches, methods, and metrics used in this area, along with relative merits. Presenters used results from ongoing research on food systems to provide learning material about the sustainability and drivers of food systems. Two main entry points for the discussion were a systematic analysis of indicators of food system sustainability across four dimensions: environmental, economic, social, and food security and nutrition; and an analysis of drivers of food systems conducted at a global level. Discussion focused on methodologies and approaches that were put in place to ensure identification of indicators and drivers was conducted in a rigorous, replicable, and robust manner.

INTEGRATING GENDER INTO AGRICULTURE-NUTRITION RESEARCH

University of Texas, Austin & CGIAR Research Program on Agriculture for Nutrition and Health (A4NH)

Gender plays an essential role in agriculture, nutrition, and health. Gender roles can determine who raises which crops and animals, how resources are allocated, and who can access food and healthcare. This session introduced participants to the agriculture-nutrition pathways – a framework for understanding how agricultural production is related to nutrition and health outcomes – and how they can be used to integrate gender into agriculture, nutrition, and health research. After hearing a case study of how a research team integrated gender and WASH into a poultry-focused nutrition intervention in Burkina Faso, participants discussed the gender dimensions of their own research questions and brainstormed methods and tools to answer these questions.

MAKING PUBLIC-PRIVATE PARTNERSHIPS WORK FOR FOOD SYSTEMS FOR HEALTHIER DIETS: ENGAGEMENT IS ESSENTIAL, BUT HOW TO IMPLEMENT?

Global Alliance for Improved Nutrition (GAIN) & Wageningen University & Research

The private sector is the main investor in food systems at every stage, from farm to fork. Businesses are part of the problem and part of the solution for reducing malnutrition and improving diets within food systems. In this session, participants considered how to develop productive relationships with businesses to accelerate sustainable and healthier diets, and build partnerships that support the transformation of businesses to become a bigger part of the solution.

AFFORDABILITY OF NUTRITIOUS DIETS

Indicators of Affordability of Nutritious Diets in Africa (IANDA), Tufts University & University of Ghana

Policies and programmes are increasingly focused on making nutritious diets more affordable, at the times and places where people are most at risk for malnutrition. Work has focused on prices of individual foods, but new techniques use prices of many different foods to compute the overall cost of meeting dietary standards at each time and place. This session equipped participants with skills to calculate and interpret indicators for the overall cost of nutritious diets, using real data to measure trends over time, seasonal fluctuations, and spatial differences.

CHANGING OUR BEHAVIOUR TO DESIGN BEHAVIOUR CHANGE PROGRAMMES

People in Need

The vast majority of development interventions have one thing in common: their goals can be achieved only if the target groups start practising new behaviours, such as washing hands with soap, using new agronomic practices, or sending girls to school. Many development interventions fail because they are based on incorrect assumptions about why people do not practise the promoted behaviour. This session broke myths of behaviour change, introduced the Barrier Analysis as a formative research technique for designing interventions, and presented some reflections on the organisational change needed to institutionalise effective behavioural change programming.

INNOVATIVE METHODS AND METRICS FOR AGRICULTURE AND NUTRITION ACTIONS (IMMANA)

The session featured results and insights from the Innovative Methods and Metrics for Agriculture and Nutrition Actions (IMMANA) programme. The panel discussed the value of working on interdisciplinary methods and metrics, asserting that a metric provides common ground and allows for a shift of disciplinary boundaries. The panelists were asked to consider three questions: 1. How has focusing on methods and metrics changed your thinking as a scientist? 2. How do you think the IMMANA programme has contributed to your discipline or field? 3. What gaps do you see in methods and metrics for ANH? After the panel, IMMANA-funded projects (IMMANA Grant and Fellowship holders) presented their emerging methods, metrics and tools at an interactive fair, including a scale to measure household-level water insecurity, a metric to assess vegetable intake, and a method of estimating post-harvest losses, among others.
After a fast-paced Learning Lab programme came the Research Conference, held in plenary over three days in order to facilitate the cross-pollination of ideas and evidence among the many disciplines represented by the participants. As well as eight abstract-driven sessions, this element of the week featured mini poster presentations, panel discussions, keynote speeches, and networking opportunities.

Welcome Address and Welcome Panel

Dr Suneetha Kadiyala, Associate Professor, LSHTM
John Nortey, Deputy Director, Ministry of Food and Agriculture, Ghana
Amos Laar, President, African Nutrition Society
Mphumuzi Sukati, Senior Nutrition and Food Systems Officer, FAO
Paulina Addy, Ministry of Food and Agriculture (MOFA), Ghana, Deputy Director for Women in Agriculture

The Research Conference kicked off with a central question: How do we guide changes in agriculture and food systems to nourish the world’s population in a way that is healthy, sustainable, equitable and just?

The opening panel captured the challenges faced by those working in agriculture, nutrition, and health. Panelists stressed problems arising from the multiple burdens of malnutrition, particularly in Africa, and the vital importance of working across sectors to find new solutions. The conclusion was that progress is being made, but we don’t have the luxury of “taking our foot off the gas pedal.”
Recent initiatives, such as the decade of nutrition or the 2030 Agenda for Sustainable Development, represent an opportunity for global leaders to come together, speak the same language and to work towards theSDGs. Each part of the food system has the potential to influence the quality, safety and sustainability of our diets, and agriculture plays a role in producing nutritious and sustainable food. First, our food system is not conducive to the consumption of healthy diets. Second, globalisation of food trade means contaminated food travels fast to many parts of the world. Third, the diet we are consuming is not what health information is available. Provocatively, the speaker compared integrating agriculture and health to the chicken and egg scenario concluding that in fact both are equally important. Bonfoh shared his experience of working with a pan-African consortium called African Science Partnership for Intervention Research Excellence (ASPIRE), which focuses on an integrated approach to disease control – One Health. Essentially, One Health is a collaboration between sectors and disciplines, the key questions being: What do you lose when you don’t collaborate? What do you gain if you do? What’s the value added? The ASPIRE consortium has developed a framework of determinants of health, where health is seen as the outcome of all activities. The speaker described several examples, predominantly from Côte d’Ivoire, where the consortium looked at agriculture indicators to better understand health indicators e.g. size of plot, agricultural revenue, use of pesticides. Further, he gave other examples of agriculture and health being closely connected and thus requiring an integrated approach when it comes to interventions: tackling malaria, tuberculosis, Ebola, non-communicable diseases and even mental health. In conclusion, Bonfoh again noted the existing fragmentation of topics, sectors, disciplines, approaches and methodologies at the agriculture-nutrition-health nexus. To move forward, we must put it all into context of all the three disciplines and build our capacity in systems thinking. When designing agriculture interventions, one should ideally not only look at market information, but also what health information is available. Today over 70 varieties of OFSP are bred across the continent, but more needs to be done to take the intervention to the large change in human health. It was a challenging undertaking, since nutrition is a very complex domain. The team used two models: the first one focused on food system impacts of raising vitamin A status among women and children. The team undertook, since nutrition is a very complex domain. The team used two models: the first one focused on an integrated approach to disease control – One Health. Essentially, One Health is a collaboration between sectors and disciplines, the key questions being: What do you lose when you don’t collaborate? What do you gain if you do? What’s the value added? The ASPIRE consortium has developed a framework of determinants of health, where health is seen as the outcome of all activities. The speaker described several examples, predominantly from Côte d’Ivoire, where the consortium looked at agriculture indicators to better understand health indicators e.g. size of plot, agricultural revenue, use of pesticides. Further, he gave other examples of agriculture and health being closely connected and thus requiring an integrated approach when it comes to interventions: tackling malaria, tuberculosis, Ebola, non-communicable diseases and even mental health. In conclusion, Bonfoh again noted the existing fragmentation of topics, sectors, disciplines, approaches and methodologies at the agriculture-nutrition-health nexus. To move forward, we must put it all into context of all the three disciplines and build our capacity in systems thinking. When designing agriculture interventions, one should ideally not only look at market information, but also what health information is available.

**PROF. BASSIROU BONFOH**
Managing Director, Centre Suisse de Recherches Scientifiques in Côte d’Ivoire
Director, Afrique One
“Ecosystem & Population health: expanding the frontiers in health”

Bassirou Bonfoh talked about intertwined and mutually reinforcing impacts of agriculture, nutrition and health.

**DR. SOUMYA SWAMINATHAN**
Deputy Director-General (Programmes), World Health Organization

This keynote speech was delivered via a video link. Soumya Swaminathan spoke about a number of challenges we face today. First, our food system is not conducive to the consumption of healthy diets. Second, globalisation of food trade means contaminated food travels fast to many parts of the world. Third, the diet we are consuming is not sustainable. Each part of the food system has the potential to influence the quality, safety and sustainability of our diets, and agriculture plays a role in producing nutritious and diverse food and increasing the amount of available foods. Recent initiatives, such as the decade of nutrition or the 2030 agenda, represent an opportunity for global leaders to come together, speak the same language and to work towards the achievements of the SDGs.

**DR. MATILDA LAAR**
Lecturer, University of Ghana, and IMMANA Fellow

Matilda Laar shared her personal journey as an early career researcher working at the intersection of agriculture, nutrition and health. During her doctoral studies in nutrition, Laar realised that her perspective was incomplete without a better understanding of agricultural concepts. An IMMANA Postdoctoral Fellowship enabled her to take a closer look at the Ghana School Feeding Program. This opportunity offered Laar first-hand experience of the challenges faced by previously separate government institutions that had to work together in order to link agriculture, nutrition and health for better programme outcomes. In conclusion, the speaker called on other early career professionals in the field to contribute to identifying multidisciplinary approaches to addressing the multiple burden of malnutrition.

**DR. JAN LOW**
Principal Scientist, International Potato Center (CIP)
2016 World Food Prize Laureate

Jan Low shared lessons from her experience of integrating orange flesh sweet potato (OFSP) into interventions. Jan started her work in the 1990s when agriculture and nutrition were still seen as separate fields and when the low nutrient white-fleshed potato was the dominant variety across Africa. Noting that sweet potato was widely grown across the continent and cheaper than other sources of vitamin A, Jan and her team asked themselves how they could make a marginal change in a food system that would lead to a large change in human health. It was a challenging task, since nutrition is a very complex domain. The team used two models: the first one focused on the marketing component alongside agriculture and nutrition; the second, based on the so-called Mama Sasha study, emphasised nutrition education as a way of raising vitamin A status among women and children.

Today over 70 varieties of OFSP are bred across the continent, but more needs to be done to take the interventions to scale. Low stressed the importance of nutritional education and working with local advocates and community health workers. Now, the target is reaching 10 million families in 14 countries by 2020, and for that goal to be met Low believes it is essential to move beyond the first 1000 days and target schools with nutritional messaging. Nutrition education should become part of the training curriculum for doctors and nurses. Researchers ought to continue providing governments with evidence that integrating biofortified foods into interventions is a worthy, cost-effective investment.
DISCUSSION PANELS

SHARING EXPERIENCES ACROSS CONTINENTS: EVIDENCE-INFORMED POLICYMAKING IN AFRICA AND ASIA

Experts from across research and policy discussed the various routes that research evidence can take towards informing decision-making. For researchers, it is necessary to understand policymaking needs for evidence, in order to respond to the demand and build relationships of trust. Getting government stakeholders involved from the outset of research programmes can help facilitate science-to-policy processes and encourage a sense of ownership for research results. Concluding remarks from a donor representative reiterated three essentials for policy uptake: 1. Create a demand for research evidence; 2. Identify champions; 3. Integrate a communications and research uptake strategy into projects from the start.

PERSPECTIVES ON FOOD SYSTEMS FOR NUTRITION AND HEALTH

This panel discussion highlighted country-specific perspectives on food systems for nutrition and health. Panelists emphasised the need to listen to beneficiaries, both those producing food and those consuming it. Research findings and policy measures must be properly communicated to consumers. Policymakers are accountable to the public, and it’s from a bottom-up approach that change should come about. Yet we are witnessing a leadership deficit – we need to nurture leaders and equip them with expertise to use data to deliver results. Speakers concluded by calling for greater integration of sectors, all working together in synergy to tackle malnutrition, and for focus on long-term policies that can withstand changes of government.

ABSTRACT-DRIVEN SESSIONS

SESSION 1

GENDER PATHWAYS IN AGRICULTURE TO NUTRITION

The evidence on agriculture-nutrition linkages is mixed – one potential reason is that gender is an important mediator in these linkages. The papers in this session presented a rich set of methods and approaches to unpack the role of gender in agriculture and nutrition. A study conducted in Pakistan revealed that about one quarter of infants showed so-called catch-up growth, despite living in a challenging environment, which is associated with maternal height, maternal education, and paternal education. Evidence from six countries in Africa and Asia revealed that greater equality in the household is better for nutrition outcomes. However, these results were not uniform or consistent, since gender norms are context specific. A study using DHS data from five countries in East Africa found that women’s empowerment seems to influence child nutrition outcomes through maternal BMI.

SESSION 2

AGRICULTURAL PRODUCTION AND NUTRITION LINKAGES

This session, held in two parallel blocks, featured presentations of a variety of studies from across the world on the linkages between agricultural production and nutrition. One of the studies looked at the impact of livestock ownership on dietary outcomes in children. While better incomes and livestock ownership are likely to improve children’s diets, improved market access may in fact reduce a child’s chances to consume dairy, as this high-value product is instead sold in the market. Two studies focused on the impact of home gardens, finding them beneficial for food security, diet quality and associated with good anthropometric characteristics among women of reproductive age.
SESSION 3

PROGRAMME EVALUATIONS AND OPERATIONAL RESEARCH

The panel shared studies from a range of countries, looking at chronic undernutrition and what role agriculture can play. The aim was to unpack the differences between interventions, which can reveal what works, how it works, and under what conditions. One study explored long-term effects of an urban nutrition-sensitive agriculture project in Senegal. The intervention included ‘micro-gardens’, hen houses, behaviour change communication, and women’s empowerment activities. The study found that only one-fifth of the households continued to grow vegetables, whereas three-quarters continued to raise chickens. Some nutritional impacts were sustained, and this seems to have been achieved primarily through increased consumption of poultry. One of the papers aiming to address the question of ‘how an intervention works’ discussed how much exposure to a radio show was needed to change knowledge, production and consumption of orange-fleshy sweet potatoes in Uganda. The radio show did improve production and consumption, but around as many as 44 episodes were needed to achieve the desired increase in knowledge.

SESSION 4

TOOLS, METHODS AND METRICS: INNOVATION AND VALIDATION

This session introduced novel, innovative methods, metrics and tools to help researchers and policy makers understand linkages between agriculture, nutrition and health. A study from Ghana looked at seasonal patterns of intra-household energy expenditure, time-use, and food intake. It found that the greater proportion of time and energy that women spent on domestic activities appears to involve a trade-off against opportunities for economic activities and social interaction. Another study involved a country prioritization for biofortified crop interventions across Africa, Asia, and Latin America, using a Biofortification Priority Index (BPI). It found that of the 18 top ranking country per crop-micronutrient combinations, 14 are in Africa. A case study from Telangana, India, investigated food environments in low- and middle-income countries using a novel Qualitative Geographical Information Systems (Q-GIS) approach and participatory photography. Emerging themes included diverse food acquisition strategies (including market and non-market sources); the role of social contracts, credit, and informal markets; the sense of community and trust in local vendors; and gendered food acquisition practices.

SESSION 5

FOOD POLICY FOR NUTRITION AND HEALTH

This session presented evidence from studies on the links between governmental policies and diets and nutrition. One of the studies mapped food purchasing practices, the food retail environment and dietary intake of the urban poor in Hanoi. The study found that most daily energy and vitamin A, zinc, iron and calcium intakes came from foods purchased from traditional food retail outlets (where food safety is not guaranteed), while the majority of the ultra-processed foods consumed were purchased from modern retail outlets. Researchers argued that policy needs to support both nutrition and food safety for the urban poor. A study conducted in Ethiopia examined how nutrition is framed in policy: there is growing focus on overweight/obesity and non-communicable diseases, but the main emphasis is still on undernutrition. Nutrition is recognised in policy documents as a ‘cross-cutting’ issue with a need of multi-sectional actions beyond interventions just within the health sector.
SESSION 6
PLANETARY AND HUMAN HEALTH LINKAGES

Environmental factors affect nutrition and human health through a variety of pathways, which the studies presented in this session illustrate. Qualitative research from Ghana used photo voice to show the effects of small-scale mining on food security in a local community. Among others, the community reported an increase in food prices, farm land and physical access to markets being destroyed, food contamination and a transition to a less diverse diet. Two studies looked at links between agricultural practices and vector-borne diseases. In Benin, switching rice irrigation from continuous flooding to alternate wet-drying was shown to reduce Anopheles mosquito larval populations. In Cote d’Ivoire, it was suggested that conversion of forest to palm oil plantations may be driving mosquitoes to human-populated areas with implications for yellow fever, dengue and other diseases.

SESSION 7
DRIVERS OF FOOD CHOICE

This session, held in two parallel blocks, showcased studies examining a variety of drivers of food choice. One of the studies, conducted in Ghana, looked at food prices and found that vegetables, a very nutrient-dense food, are the main group for which cost varies significantly across time and space. In Ghana vegetables are the most expensive food group. A study of Maasai pastoralists examined decreasing consumption of milk amongst young children due to changing livelihood strategies and lifestyles, and increasing urbanisation. A study from Tanzania shed light on the practice of “eating down” amongst pregnant women due to certain socio-cultural beliefs, e.g. excluding animal products from the diet to avoid the complications of birthing a large baby.

SESSION 8
AGRICULTURE, FOOD SAFETY AND HEALTH

This session highlighted different aspects of food safety. One of the studies examined the impact of reducing dietary aflatoxin exposure on child linear growth in Kenya using a cluster randomised controlled trial. The study found an effect on linear growth at midline but not endline, putting into question whether aflatoxin research should focus on linear growth at all. Another paper looked more broadly at current efforts and future prospects on food safety capacity building in Africa. The researchers noted growing interest and investment in food safety issues from donors and the private sector, but certain areas still receive little focus, such as the informal sector and microbiological hazards (markets that feed a large proportion of the population); consumer awareness and private sector capacity.
In addition to the Learning Labs and scientific sessions, ANH Academy Week 2018 offered delegates ample opportunities to network informally and attend side meetings. This was made possible thanks to generous contributions from our partners and sponsors.

Side events held throughout the week included:

- **African Economic Research Consortium (AERC) Panel Session**
- **Ag2Nut Community of Practice meet-up**
- **CGIAR Research Program on Agriculture for Nutrition and Health (A4NH) Equity Consultation**
- **Chatham House and International Livestock Research Institute (ILRI) report launch: ‘Unlocking Potential: Livestock Derived Foods and the First 1,000 Days’**
- **Global Challenges Research Fund (GCRF) Meeting**

Donors and funded programmes were able to capitalise on having the global community of ANH researchers and practitioners in one place by holding meetings with partners and/or grantees, including Drivers of Food Choice and IMMANA.

Conference participants had a chance to attend two official receptions, sponsored by Chatham House, ILRI and Wellcome Trust, as well as Drivers of Food Choice and Leveraging Agriculture for Nutrition in South Asia (LANSA). A highlight of the week was an off-site social event held at one of the premier jazz bars in Accra.
Among the most lively moments of ANH Academy Week 2018 were the poster sessions, whereby 68 presenters could showcase their work.

A lively and popular innovation introduced by the organisers in 2016 and continued since, was mini poster presentations – each presenter had exactly one minute to give their presentation and encourage the audience to visit their poster. Conference participants voted for the best poster through the official conference app.

The closing address reminded participants of the pivotal importance of interdisciplinary research at the nexus of agriculture, nutrition and health for solving the global malnutrition challenge, and of the need to work across sectors, including bridging the research-policy-practice gap.

Also during this session, prizes were awarded for best poster and best presentation:

**Best poster:** Ramya Ambikapathi (presented by Simone Passarelli), Harvard T.H. Chan School of Public Health. ‘Fathers’ nutrition knowledge is associated with household’s, women’s, and child’s dietary diversity in the Agriculture to Nutrition Study in Ethiopia.’

**Poster runner up:** Aurillia Ndiwa, Bioversity International. ‘Improving nutrition, health and environmental conversation through local biodiversity in Busia County’

**Most innovative and engaging oral presentation:** Sera Young, Northwestern University. ‘Development and testing of a household water insecurity measure that is equivalent across countries’

**Runner up:** Francis Oduor, Bioversity International. ‘Does caregivers’ nutritional knowledge and attitudes mediate seasonal shifts in children’s dietary patterns – a case study of rural young children in Western Kenya.’
ANH ACADEMY WEEK 2019 – SAVE THE DATE!

As part of our mission to maximise opportunities for participation and engagement around the world we are committed to relocating the annual ANH Academy Week to a different region each year. We are very pleased to announce that the next ANH Academy Week will take place on 24-28 June 2019, in Hyderabad, India.

SCIENTIFIC COMMITTEE

Jeff Waage, (Chair)  LCIRAH & LSHTM
Matilida Steiner-Asiedu, (co-Chair) University of Ghana
Alan Dangour  LCIRAH-SHEFS-LSHTM
Amos Laar  University of Ghana & African Nutrition Society
Bhavani Shankar  LCIRAH & SOAS
Christine Blake  University of South Carolina
Daniel Mongiardi  LCIRAH-LSHTM
Daniel Sarpong  University of Ghana
Delia Grace  A4NH
Edward Joy  LCIRAH & LSHTM
Hung Nguyen  A4NH
Inge Brouwer  A4NH
Jess Fanzo  John Hopkins University
Joe Yates  ANH Academy & LSHTM
John McDermott  A4NH
Noora-Lisa Aberman  IFPRI
Patrick Webb  Tufts University
Paula Dominguez-Salas  LCIRAH & LSHTM
Robyn Alders  University of Sydney
Stuart Gillespie  IFPRI
Suneetha Kadiyala  ANH Academy & LSHTM
William Masters  Tufts University

ADVISORY COMMITTEE

Richard Adanu (Chair)  University of Ghana
Suneetha Kadiyala (co-Chair)  LSHTM
Abdoulaye Kalé  Cellule de Lutte Contre la Malnutrition (CLM)
Amos Laar  African Nutrition Society
Lizzy Igbine  Nigerian women agro allied farmers association (Niwaafa)
Mary Mpereh  Development Policy Division, National Development Planning Commission
Paulina Addy  Ministry of Food and Agriculture (MOFA)
Saa Dittoh  University for Development Studies, Tamale (Northern-Ghana)
Sahlab Mawuli  FAO - RAF
Witness Simbanegavi  African Economic Research Consortium (AERC)

LOGISTICS COMMITTEE

Amanda Wyatt  A4NH
Anna Marry  LSHTM
Daniel Mongiardi  LCIRAH
Gladys Arhin  IFPRI
Janet Hodur  A4NH
Joe Yates  LSHTM
John McDermott  A4NH
Kiron Jones  LCIRAH
Lucy Billings  IFPRI
Ore Kolade  LSHTM
Sofia Kalamatianou  LSHTM
Suneetha Kadiyala  LSHTM
Tigist Defabachew  A4NH
Zachary Gersten  Tufts University
The ANH Academy Week would not have been possible without the generous contributions from a range of partner organisations and individuals for whose support we are enormously grateful.

THE 2018 ANH ACADEMY WEEK IS ORGANISED AND FUNDED BY:

IN PARTNERSHIP, AND WITH THE SUPPORT OF: