



United Nations
System

Standing Committee on
Nutrition

COUNTRY LEVEL PROGRAMMING IN NUTRITION-SENSITIVE AGRICULTURE

Part II

International Research Institutions, Donors and International Non-Governmental Agencies’ approaches and actions in countries

FINAL DRAFT

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Introduction

As the idea of bringing agriculture more dynamically into the nutrition picture has gained traction in recent years, many development partner agencies and organizations have embarked on programming initiatives that aim to make agriculture more nutrition sensitive.

In 2013, the UNSCN commissioned a review of country-level programming in nutrition and agriculture to provide a consolidated overview and to raise awareness regarding these initiatives. This report, [FINDINGS FROM A REVIEW OF COUNTRY LEVEL PROGRAMMING IN NUTRITION-SENSITIVE AGRICULTURE](#), presents the findings; it also provides a 'primer' on the concept of nutrition-sensitive agriculture, as well as an overview of cross-cutting considerations in programming, namely gender equality, resilience building and nutrition education.

More specifically, the report provides:

- A background on terminology and research to date;
- An overview of resilience building, women's empowerment and improving nutrition knowledge and practices;
- Basic information on common programming approaches to nutrition-sensitive agriculture;
- Specific examples of agencies' and organisations' programming experience in nutrition-sensitive agriculture;
- A description of challenges to coordination, or at least convergence, as cited or implied in programme documents and mentioned in communications over the course of the study;

This document is PART II of the landscaping of examples on country level programming in nutrition-sensitive agriculture and contains the Individual Briefs of International Research Institutions, Donors and International Non-Governmental Organizations.

Key Recommendations for Improving Nutrition through Agriculture (FAO, 2013) exist and are widely endorsed. However the question remains of what constitutes nutrition-sensitive agriculture in terms of specific projects. The issue is of particular importance when reviewing extant food security and other programmes which may include the word “nutrition” in their title, or claim to address malnutrition in their rhetoric, but which do not include an explicit nutrition component in their design. These types of programmes can be seen as “nutrition related” with potential to impact nutrition, but as long as specific nutrition objectives and actions are not present, they should not technically be considered “nutrition-sensitive”. Although formal selection criteria were not included in the UNSCN Mapping exercise, this consideration informed the choice of which programmes were profiled.

The programme examples from research institutes include the Bioversity International, the Institute for Development Studies (IDS), the International Food and Policy Research Institute (IFPRI) and the Leverhulme Centre for Integrative Research on Agriculture and Health (LCIRAH). The programme examples from donor agencies include the Bill and Melinda Gates Foundation, the Government of Canada's Department of Foreign Affairs, Trade and Development (DFATD) formerly the Canadian International Development Agency (CIDA), the European Union (EU), Irish Aid, the United Kingdom's Department for International Development (DFID) and the World Bank. The programmes examples from non-governmental organizations include Action Against Hunger (ACF) and Helen Keller International (HKI).

SUMMARY

The nutrition sensitive agriculture work currently underway by these organizations ranges from large-scale financial commitments to policy advocacy to technical assistance to applied research. Of the organizations in this review, unlike the UN agencies in the previous brief, many more work specifically in one or two of the highlighted areas (see table below).

The work chronicled below endeavors to address underlying causes of malnutrition through efforts to strengthen value chains to include more nutrient-dense foods and improve access to such foods, promotion of linkages between nutrition and agriculture sectors through integrated policy and planning and support for technological innovations for the measurement of micronutrient deficiencies. Furthermore, programmes support biofortification efforts, homestead production and dietary diversity. All of the examples correspond to the programming approaches described in the main report ¹. Institutional capacity development, technical assistance, and operational research figure prominently.

Overview table on type of country support provided:

Organization	Financial Support / Investments	Policy Advice	Technical Assistance Programmes	Applied Research
Bioversity International				✓
IDS		✓		✓
IFPRI		✓		✓
LCIRAH				✓
BMGF	✓	✓		
DFATD (formerly CIDA)	✓	✓	✓	✓
EU	✓	✓		
Irish Aid	✓	✓		
DFID	✓	✓	✓	✓
World Bank	✓	✓		
ACF		✓	✓	
HKI		✓	✓	

Bioversity International

→ POLICIES / STRATEGIES / MANDATE

Bioversity International is a leading research-for-development organization dedicated to the use and conservation of forest and agricultural diversity to combat poverty and malnutrition and to enhance sustainability. The Nutrition and Marketing Diversity Program promotes the use of agricultural biodiversity in food production systems and value chains and is investigating how diversified diets, using accessible, affordable, culturally acceptable and safe local and traditional foods, can be a sustainable tool to address undernutrition and overnutrition and its related health effects including non-communicable diseases. Strong partnerships and collaborations with donors, research, NGOs, the private sector, especially smallholder food producers, ensure the relevance, sustainability and outreach of the work.

Bioversity International is part of the CGIAR system and its marketing and nutrition work contributes to the CGIAR research program (CRP) on Agriculture for Nutrition and Health (A4NH) as well as other research programmes including the different system research programmes (CRP 1.1 dryland systems; CRP 1.2 humid tropics and CRP1.3 aquatic agricultural systems).

More information on Bioversity's nutrition and marketing diversity work can be found in our nutrition strategy :

http://www.bioversityinternational.org/uploads/tx_news/Bioversity_International_nutrition_strategy_2011-2021_1524.pdf

→ COUNTRY SUPPORT

APPLIED RESEARCH

Agricultural and forest diversity have critical roles to play in sustainable development and food systems, resilience and improved nutrition and health. Bioversity International's Nutrition and Health team is developing evidence and solutions to reduce hunger, malnutrition and obesity through dietary diversity and improved food security. With partners, our research team is looking at nutrition and health through the unique lens of agricultural diversity. A primary focus of our work in nutrition is mothers, infants and young children in West, East and Southern Africa as well as Asia and Latin America, with projects that can be adapted to other regions. Some examples of current projects:

- 1) Improving nutritional health of women and children through increased utilization of local agrobiodiversity in Kenya (INULA); 04/2012 – 03/2014
- 2) Advancing through Sustainable Diets; 07/2012 – 12/2014
- 3) Developing agrobiodiversity-based strategies for better nutrition security among smallholder households in banana growing regions of East Africa; 07/2012 – 06/2015
- 4) Investigating the current and potential role of local biodiversity in meeting nutritional requirements for complementary foods of infants and young children in Southern Benin; 01/2012 – 12/2015

- 5) The effects of market integration on the nutritional contributions of traditional foods to the wellbeing of the rural poor in Africa; 11/2009 – 02/2013
- 6) Mainstreaming biodiversity conservation and sustainable use for improved human nutrition and well-being – Biodiversity for Food and Nutrition Project; 04/2012 – 10/2016
- 7) Role of wild, neglected and underutilized foods in reducing the cost of a nutritionally adequate diet in the Eastern region of Baringo district, Kenya; 01/2012 – 12/2012

This research area contributes to the CGIAR Research Program on [Agriculture for Nutrition and Health](#) through understanding the contribution of a diverse diet to improve nutrition and health.

For more information about our research, we refer to our nutrition strategy: http://www.bioversityinternational.org/uploads/tx_news/Bioversity_International_nutrition_strategy_2011-2021_Summary_1525.pdf

Also we undertake value chain research on neglected and underutilized species.

Not all Actors are doing all of these, may be only 2-3 types of support.

→ GEOGRAPHIC FOCUS

Africa: West African Sahelian countries, Zambesi and Volta basins

Asia-Pacific: Sri Lanka, Turkey, Ganges and Mekong basins

Meso America: Brazil

→ PRIORITY COUNTRIES & PROGRAMS

Uganda/Tanzania	Developing agrobiodiversity-based strategies for better nutrition security among smallholder households in banana growing regions of East Africa; 07/2012 – 06/2015
Kenya	Improving nutritional health of women and children through increased utilization of local agrobiodiversity in Kenya (INULA); 04/2012 – 03/20104 Role of wild, neglected and underutilized foods in reducing the cost of a nutritionally adequate diet in the Eastern region of Baringo district, Kenya; 01/2012 – 12/2012
Benin	Investigating the current and potential role of local biodiversity in meeting nutritional requirements for complementary foods of infants and young children in Southern Benin; 01/2012 – 12/2015
Kenya/Benin	The effects of market integration on the nutritional contributions of traditional foods to the wellbeing of the rural poor in Africa; 11/2009 – 02/2013
Brazil/Sri Lanka/ Turkey/Kenya	Mainstreaming biodiversity conservation and sustainable use for improved human nutrition and well-being – Biodiversity for Food and Nutrition Project; 04/2012 – 10/2016
Global and France/Spain	Advancing through Sustainable Diets; 07/2012 – 12/2014

→ KEY TECHNICAL INTERVENTIONS

- Development of the concepts and metrics to measure sustainable diets
- Indicator development with regard to dietary diversity, dietary quality and biodiversity
- Research on nutrition-sensitive landscapes and the contributions of agricultural and wild biodiversity to nutrition and health
- Modeling, using linear programming, of accessible, affordable, culturally acceptable and safe diets using food composition data, nutrient requirement of the respective population groups and food prices over different seasons
- We are the executing agency with FAO and UNEP of a UNEP/GEF activity with significant funding from the target countries Brazil/Sri Lanka/ Turkey/Kenya on the identification, promotion and use of diversity quality diets.

→ TARGETED POPULATION GROUPS

A primary focus of our work in nutrition is to improve diets and nutrition of mothers and young children, concentrating on the critical first 1000 days of life. In addition, we use indirect methods to improve nutrition through better livelihoods utilizing diversity and do so sustainably.

More generally, Bioversity's work will focus on agro-ecosystems that have a significant agricultural biodiversity potential in areas burdened with a high proportion of malnourished individuals and in developing, transitioning and middle income countries. The 36 countries that are home to 90% of the world's stunted children will receive priority attention. Of these countries, further priority will be given to those with functioning agricultural systems and with the potential to improve their agriculture, or which demonstrate a readiness to accelerate action in nutrition. Smallholder farmers and their communities in low-income countries are the key beneficiaries of our nutrition strategy. Attention will be also dedicated to creating demand and providing access to nutritious foods among people living in urban and peri-urban settings. Communities at risk of losing traditional food systems will be a further focus.

→ MONITORING & EVALUATION

Bioversity's Nutrition Department is a young programme and is mainly doing basic research into the contributions of agricultural and wild diversity to diversified and quality diets and nutrition as well as working towards the development of key indicators of sustainable diets and biodiversity in diets. Household and/or individual dietary diversity, anthropometry and infant and young child feeding practices are some of the key indicators used in our studies. In addition we work in capacity strengthening and policy.

Key indicators

HH and individual dietary diversity

Impact evaluations are not available yet, but Bioversity has an impact assessment unit that is working closely together with the nutrition department.

→ GENDER EQUALITY & WOMEN'S EMPOWERMENT

Bioversity is working towards mainstreaming gender in all its strategies and makes work of collecting sex-disaggregated data where relevant.

Key project activities of the nutrition programme unit almost always depend on significant involvement and inputs from women ('s groups). Women are the main caretakers and in charge of food preparation and feeding. The different projects seek to empower women with better knowledge on foods, nutrition and feeding practices. The nutrition programme also considers men's involvement at strategic points in life of the different project, so that female participants get the necessary support from their husbands and other boys and men to participate in the projects.

→ LESSONS LEARNED & GOOD PRACTICES

Complexity of the pathways that lead from increased biodiversity in agricultural production over increased dietary diversity towards better nutrition and health; evidence building still asks a lot of efforts while evidence is necessary to obtain political (and donor) support. Though increasing dietary diversity and adequacy through better use of locally available foods and biodiversity (food based strategies, whole of diet approach) is often mentioned as one of the more sustainable options towards nutrition security, the proposed 'whole of diet' approach and food based strategies are often asked to compete and fulfill the same expectations as with easier pathways towards nutrition sensitive agriculture such as biofortification.

Much more work is needed to develop indicators that suit Bioversity's nutrition work

Bioversity's nutrition program is a new and growing unit, the recruitment of new experienced staff members over the last year will allow the expansion of the research portfolio and outputs

A comprehensive nutrition strategy has been developed and is guiding the nutrition work at Bioversity International

More and more other programs within Bioversity and the CGIAR CRPs start to understand and value the importance of quality nutrition research in their work

Developing and deploying a linear programming tool to identify gaps in the diet and the contribution of low cost, acceptable and accessible foods to close the gap (in Kenya).

→ KEY PUBLICATIONS & CONTACTS

Fanzo, J.; Cogill, B.; Mattei, F (2012). Metrics of sustainable diets and food systems. Bioversity International, Rome (Italy)

Bioversity International (2011) Improving nutrition with agricultural biodiversity. A manual on implementing food systems field projects to assess and improve dietary diversity, and nutrition and health outcomes. Bioversity International Maccaresse, Italy.

Burlingame B. and Dernini S. (2012) Sustainable diets and biodiversity. Directions and solutions for policy, research and action. Food and Agriculture Organization of the United Nations (FAO), Rome (Italy); Bioversity International, Rome (Italy). 309 p.

Fanzo J, Hunter D, Borelli T and Mattei F (2013). Diversifying Diets: Using Agricultural Biodiversity to Improve Nutrition and Food Security

Termote, C.; Cogill, B.; Deptford, A.; Muguro, S.; Kimere, C.; Grace, J.; Mutangah, J.; Mattei, F.; Fanzo, J. (2013). Role of wild neglected and underutilized foods in reducing the cost of a nutritionally adequate diet in the Eastern region of Baringo district, Kenya. Bioversity International, Rome (Italy); Save the Children UK; National Museums of Kenya.

Vinceti, B.; Ickowitz, A.; Powell, B.; Kehlenbeck, K.; Termote, C.; Cogill, B.; Hunter, D The contribution of forests to sustainable diets (2013). Background paper for the International Conference on Forests for Food Security and Nutrition, FAO, Rome, 13-15 May 2013

Getachew Addis, Asfaw, Z.; Singh, V.; Woldu, Z.; Baidu-Forson, J.J.; Bhattacharya, S. (2013). Dietary values of wild and semi-wild edible plants in Southern Ethiopia. African Journal of Food, Agriculture, Nutrition and Development, Vol. 13(2).

<http://www.bioversityinternational.org/research-portfolio/diet-diversity/>

For more information about Bioversity's work around nutrition and biodiversity, please contact:
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INSTITUTE OF DEVELOPMENT STUDIES (IDS)

→ POLICIES / STRATEGIES / MANDATE

The Institute of Development Studies (IDS) is a leading global charity for international development research, teaching and communications. IDS' vision is a world in which poverty does not exist, social justice prevails and economic growth is focused on improving human wellbeing¹.

Four of the research teams hosted by IDS - Globalization; Governance; Knowledge, Technology and Society; and Vulnerability and Poverty Reduction – provide support to nutrition-sensitive agriculture through applied research and knowledge services. Activities are organized under the following core areas, each of which contributes to an enabling environment for nutrition policies and programmes: (1) building political commitment, (2) mobilizing resources for nutrition, and (3) promoting research uptake.

→ COUNTRY SUPPORT

FINANCIAL SUPPORT OR INVESTMENTS

1. The IDS Accountable Grant, Strengthening Evidence Based Policy (DFID, 2012-2016) is a large and complex four-year grant involving seven outputs or themes. Theme 1: *Accelerating Progress in Reducing Hunger and Undernutrition*, funds work on leveraging value chains to increase access to nutritious foods in Ghana, Nigeria and Tanzania (see Strengthening Agri-Food Value Chains for Nutrition, in “Policy Advice” and “Applied Research”, below). Funding under Theme 1 also supports real time monitoring methods using SMS technology for rapid and reliable assessment of hunger and nutrition statuses, enabling timely policy interventions, as well as the Hunger and Nutrition Commitment Index (HANCI). The HANCI ranks governments on their political commitment to reducing hunger and undernutrition (see section on “Monitoring & Evaluation” for more details.)

2. The Programme on Hunger, Climate and Gender (Irish Aid², 2011-2014) focuses on gathering and sharing evidence on these issues as a means to promote more nuanced, effective gender-aware approaches to food security and climate adaptation policy and practice. While gender issues are mainstreamed throughout the programme, the BRIDGE³-led element of the work has an explicit gender focus, drawing on the expertise and insights of a global community of practitioners, researchers and policy-makers. This programme works primarily in Irish Aid programme countries in sub-Saharan Africa, and is focused on innovative ways to respond to the intertwined challenges of food insecurity, gender inequality and climate change⁴.

POLICY ADVICE

¹ <http://www.ids.ac.uk/about-us>

² The Irish Aid Programme also provides support to the HANCI and field level lesson learning on social protection and capacity development.

³ BRIDGE promotes gender equality through research and information dissemination. It is located within IDS Knowledge Services

⁴ <http://www.ids.ac.uk/project/programme-partnership-between-irish-aid-and-ids-on-hunger-reduction-and-climate-change-adaptation>

The IDS Accountable Grant funds policy advice targeted to focus countries. **Strengthening Agri-food value Chains for Nutrition** is part of this grant. As mentioned below work done under this project includes country-level policy advice to Ghana, Tanzania and Nigeria in regards to working with the private sector in increasing availability of and access to nutritious foods.

Maximizing the Quality of Scaling Up Nutrition Programmes Framework or MQSUN (DFID, 2012-2016) is a DFID funded framework contract supporting the SUN process in a number of high-burden countries. IDS is a member of the MQSUN Consortium led by PATH and including Agha Khan University, Agribusiness Systems International, IFPRI, Health Partners International, and Save the Children. Collectively these partners bring an unparalleled depth of internationally recognized expertise in nutrition, food security, social protection, agricultural market system interventions, and knowledge management with a wide geographic imprint.⁵ Improved nutrition governance - specifically with respect to implementing government-led initiatives – is a primary focus of this programme. IDS is currently leading a livelihoods and nutrition evaluation under MQSUN in Bangladesh. In addition, the programme may support multi-sectoral work in future.

TECHNICAL ASSISTANCE PROGRAMS

1. **The Home Grown School Feeding Programme (Gates Foundation, 2010-2013)** is led by the Partnership for Child Development (PCD) and supports government action to deliver cost effective school feeding programmes sourced from local farmers in sub-Saharan Africa. IDS leads the research component of this programme, and as such is providing direct support to governments in the design and management of school feeding programmes supplied through local agricultural production. The project assesses country readiness and key operational trade-offs, benchmarks, and good practices, analysing how Home Grown School Feeding can most effectively stimulate local agricultural production, boost local and regional food production and create jobs and profitmaking opportunities in rural communities⁶.

2. **AgriDiet (Irish Aid and the Higher Education Authority)** is a joint research project between University College Cork, University College Dublin, the Ethiopian Development Research Institute, Haramaya and Mekelle Universities in Ethiopia, Sokoine and St Augustine's Universities in Tanzania and IDS. The project aims to critically assess how agricultural and broader socio-economic policies and practices in Ethiopia and Tanzania address nutritional goals, especially for children and young women, and the possibilities for scaling-up of successful projects. Outputs include a review of pro-nutrition agricultural interventions in Ethiopia and Tanzania, including analysis of recent impact evaluations and in-depth case studies, development of country-level stakeholder platforms, and development and delivery of knowledge mobilisation strategies that respond to local stakeholders' needs and actively engage them in the update and application of research knowledge.

OPERATIONAL RESEARCH

Operational research comprises the majority of IDS' work in nutrition sensitive agriculture. Examples of programmes which involve field operations in specific countries are described below.

1. **Transform Nutrition (DFID, 2011-2017)** is a research consortium whose members include IDS, IFPRI (lead), Save the Children, the International Centre for Diarrhoeal Disease Research, the Public Health Foundation of India, and the University of Nairobi. Transform Nutrition is currently active in

⁵ <http://www.ifpri.org/book-741/node/8345>

⁶ <http://www.ids.ac.uk/project/home-grown-school-feeding-programme>

Bangladesh, Ethiopia, Kenya and India. The programme is organized around three research pillars or themes, two of which are relevant to nutrition-sensitive agriculture. The first, “Indirect Nutrition Interventions”, is focused on how social protection, agriculture interventions and women’s empowerment can be leveraged to have a greater impact on nutrition. The second, promoting “An Enabling Environment” uses a variety of research methods to examine the political economy of nutrition governance. This includes identifying key drivers of enabling environments, mapping and assessing institutional capacity in focus countries, and developing and validating tools to strengthen accountability and responsiveness.

2. LANSA or Leveraging Agriculture for Nutrition in South Asia (DFID, 2012-2018) is a research consortium led by the MS Swaminathan Research Foundation (India). LANSA’s other members include BRAC (Bangladesh) CSSR (Pakistan), IDS, IFPRI, and LCIRAH. Focus countries are India, Bangladesh, Afghanistan and Pakistan. The core question that research under LANSA will address is: How can South Asian agriculture and related food policies and interventions be designed and implemented to increase their impacts on nutrition, especially the nutritional status of children and adolescent girls?⁷ As with Transform Nutrition, LANSA research is organized under three pillars: First, how can agriculture and food policies be more strongly linked to other underlying determinants of nutrition such as women’s status, poverty induced food insecurity and sanitation? Second, how can policies in areas such as food storage and trade, and public-private engagement be made more likely to reduce undernutrition? And third, how can agricultural interventions be designed to improve diet quality and improve nutrition directly, while simultaneously ensuring livelihood security? LANSA studies under each pillar have a wide scope; examples include econometric analyses of the effects of agricultural income and other variables on dietary diversity to mixed qualitative/quantitative research on leveraging social protection to optimize the nutrition impact of women’s work in agriculture.⁸

3. Partnering for Better Food (GAIN and DFID, 2011-open) is part of a larger IDS research initiative on agri-food business and agricultural trade. Partnering for Better Food is comprised of two projects involving collaboration between IDS and the Global Alliance for Improved Nutrition (GAIN). The first has focused on development of a rapid assessment tool, “Nutritious Agriculture by Design”. The tool aims to enable designers and implementers of agricultural projects to increase the “nutrition-sensitivity” of their projects. “Nutritious Agriculture by Design” has been piloted in Kenya, Bangladesh and Tanzania. A second tool, which provides guidance on working with the private sector to enhance the provision of nutritious foods through value chains is under development, and has been piloted in several countries. (For more details on the tools and publications, see “Monitoring and Evaluation” and “Country Stories”, below.)

4. Strengthening Agri-food Value Chains for Nutrition (DFID, 2012-2016, under IDS Accountable Grant Theme 1) aims to help reduce undernutrition by identifying opportunities to promote food-based approaches led by the private sector. It aims to mobilise private sector resources, capacities and know-how to achieve this goal. The project includes initiatives in mapping value chains for nutritious foods and case studies of working with businesses on provision and marketing of those foods. As such it is also providing country-level and broader guidelines for policy actors seeking to work with the private sector on nutritious food. Work is being done in Ghana, Nigeria and Tanzania. Two reports on Ghana will be available in August 2013: Value Chain Mapping of Nutrient-Dense Foods and Policy Guidelines for Enhancing Food Markets.

4. CIFF Business Case Studies (Children’s’ Investment Fund Foundation, 2013) are similar in nature

⁷ LANSA Inception Report

⁸ LANSA Portfolio of Research Studies

to the country-level value chain work done under Partnering for Better Food. The CIFF studies look at engaging business in making nutritious foods available to the poor, specifically in Nigeria and India.

→ PRIORITY COUNTRIES & PROGRAMMES

This list is not exhaustive but rather provides examples of IDS programmes which have an explicit nutrition sensitive agriculture component,

Ghana	IDS Accountable Grant, Theme 1: <i>Accelerating Progress in Reducing Hunger and Undernutrition/ Strengthening Agri-Food Value Chains for Nutrition</i> : Value chain analysis for increasing access to nutritious foods (see Report titled <i>Strengthening Agri-Food Value Chains for Nutrition: Mapping Value Chains for Nutrient-Dense Foods in Ghana</i> under “Publications”).
Nigeria	IDS Accountable Grant, Theme 1 : <i>Accelerating Progress in Reducing Hunger and Undernutrition/ Strengthening Agri-Food Value Chains for Nutrition</i> : Value chain analysis for increasing access to nutritious foods Potential CIFF Business Case Study
Tanzania	IDS Accountable Grant, Theme 1: <i>Accelerating Progress in Reducing Hunger and Undernutrition/ Strengthening Agri-Food Value Chains for Nutrition</i> : Value chain analysis for increasing access to nutritious foods.
Bangladesh	Transform Nutrition LANSA Trials of “Nutritious Agriculture by Design” tool (under Partnering for Better Food) IDS Accountable Grant, Theme 1: <i>Accelerating Progress in Reducing Hunger and Undernutrition</i> : HANCI Country Analysis
Ethiopia	Transform Nutrition
Kenya	Transform Nutrition Trials of “Nutritious Agriculture by Design” tool (under Partnering for Better Food)
India	Transform Nutrition LANSA CIFF Business Case Studies
Pakistan	LANSA
Afghanistan	LANSA
Tanzania	Trials of “Nutritious Agriculture by Design” tool (under Partnering for Better Food)
Malawi	IDS Accountable Grant, Theme 1: <i>Accelerating Progress in Reducing Hunger and Undernutrition</i> : HANCI Country Analysis
Zambia	IDS Accountable Grant, Theme 1: <i>Accelerating Progress in Reducing Hunger and Undernutrition</i> : HANCI Country Analysis

→ KEY TECHNICAL INTERVENTIONS

IDS applied research includes:

- Stakeholder mapping, case study analysis and other qualitative research to assess institutional and operational capacity
- Value chain analysis
- Needs assessment via critical landscaping of nutrition programming and governance
- Econometric analysis of secondary data at country level
- Real time monitoring methods using SMS technology
- Reviews and systematic reviews (e.g. nutrition surveillance methods, impact of agriculture

- interventions on child malnutrition)
- Innovations in measuring government commitment to reducing malnutrition

→TARGETED POPULATION GROUPS

IDS activities in nutrition-sensitive agriculture target a wide range of audiences and uptake groups:

On the supply side, “Partnering for Better Food” and other value-chain oriented programmes target smallholder farmers, food processors (formal and informal sectors), and traders (formal and informal sectors).

On the demand side, women and children under two are key target populations for all nutrition programmes. In addition, work focused on food value chains aims to reach low income consumers, in both rural and urban areas. LANSa also explicitly targets adolescent girls.

“Nutritious Agriculture by Design” aims to influence the practice of agronomists, agricultural economists and other sector-based practitioners

Finally, all IDS nutrition projects aim to influence decision-making by a variety of policy makers, including donors, national governments, and civil society.

→MONITORING & EVALUATION

The Hunger and Nutrition Commitment Index (HANCI) ranks governments on their political commitment to reducing hunger and undernutrition. The HANCI index is based on three areas of government activity: policies and programmes, legislation, and public expenditure. Although the index includes indicators for both food security and nutrition, it draws a clear distinction between the two and it measures commitment to each separately. To date, 45 developing countries have been ranked according to this index. Case studies for Bangladesh, Malawi and Zambia have also been conducted.

<http://www.hancindex.org/>

http://www.ids.ac.uk/files/dmfile/HANCI_2012_reportv2.pdf?utm_source=hanci

Nutritious Agriculture by Design is a programme planning tool which aims to guide the design or adjustment of agricultural interventions towards better linkages with nutrition. A collaboration between IDS and GAIN, this tool was developed for USAID in the context of its Feed the Future programme. It is structured around potential agriculture to nutrition pathways (based on Hawkes et al. 2012) and places particular emphasis on the role of the private sector (including small firms and informal sector businesses) To date, the tool has been tested by applying it to existing USAID projects in Kenya and Bangladesh. It has also been piloted in a Feed the Future workshop in Tanzania.

<http://nutritiousagriculture-tool1.gainhealth.org/>

<http://www.ids.ac.uk/publication/nutritious-agriculture-by-design-a-tool-for-program-planning-a-gain-ids-discussion-paper>

→GENDER EQUALITY & WOMEN'S EMPOWERMENT

The majority of LANSa's research portfolio addresses women's empowerment either explicitly (e.g.

through studies based on the Women's Empowerment in Agriculture Index) or implicitly (e.g. through studies on land access).

Transform Nutrition's second research pillar aims to build the evidence base for the relationship between local level gender norms, governance, and undernutrition.

<http://www.transformnutrition.org/research/indirect-interventions/women%e2%80%99s-empowerment/>

The programme on Hunger, Climate and Gender provides support to the BRIDGE Gender and Food Security project, which - with support from an international group of experts - takes a critical look at existing approaches to integrating gender dimensions into hunger-focused programmes and policies, considering how these can be improved. A key message is that these programmes need to go beyond recognizing and supporting women's instrumental role in enabling household food security towards challenging social gender norms and contributing to challenging and transforming gender inequalities.

→KEY PUBLICATIONS & CONTACTS

[The Hunger And Nutrition Commitment Index \(HANCI 2012\): Measuring the Political Commitment to Reduce Hunger and Undernutrition in Developing Countries \(2013\)](#)

[GAIN-IDS Discussion Paper Nutritious Agriculture by Design: A Tool for Program Planning \(2013\)](#)

[Strengthening Agri-Food Value Chains for Nutrition: Mapping Value Chains for Nutrient-Dense Foods in Ghana \(2013\)](#)

[Using Mobile Phones for Nutrition Surveillance: A Review of Evidence \(2013\)](#)

[Effectiveness of Agricultural Interventions that Aim to Improve Nutritional Status of Children: Systematic Review \(2012\)](#)

[Fighting Maternal and Child Malnutrition: Analysing the political and institutional determinants of delivering a national multisectoral response in six countries \(2012\)](#)

Much IDS work is published externally or through other organizations. The most recent example relevant to nutrition sensitive agriculture is:

The politics of reducing malnutrition: building commitment and accelerating progress (2013). *The Lancet*, 10.1016/S0140-6736(13)60842-9.

For more information on nutrition sensitive agriculture at IDS, please contact:

INSTITUTE OF DEVELOPMENT STUDIES
Vulnerability And Poverty Reduction Team
Library Road Brighton BN1 9RE UK

<http://www.ids.ac.uk/team/vulnerability-and-poverty-reduction>

→COUNTRY STORIES (1-2 concrete examples of good practices)

Through the Reducing Hunger and Undernutrition theme of the IDS Accountable Grant on Strengthening Evidence-Based Policy, IDS conducted a **value-chain mapping of nutrient dense foods in Ghana**. The [resulting report](#) (2013) identifies and assesses the potential of groundnut products and complementary food products for reducing undernutrition. It maps current value chains for groundnut and complementary food products, concentrating on whether they meet the key criteria of availability, affordability, acceptability and nutritional quality. It analyzes the challenges that inhibit these products from having greater nutrition impact and includes options for interventions to increase the provision of these food types to key target populations. .

The report highlights four broad challenges to the provision of nutrient-dense foods in Ghana:

- Aflatoxin contamination concerns a broad array of foods. It requires coordinated value chain action and the generation of incentives to implement improved practices.
- The absence of mechanisms to signal the nutritional value of foods to consumers spans many products and is a key area for policy intervention.
- Traceable value chains are largely absent in domestic food markets; fostering traceable value chains is key to establishing incentives and upgrading nutrient quality and food safety.
- Private sector actors in Ghana face challenges to building viable business models to market nutrient-dense foods so they reach poor consumers.

These four cross-cutting challenges are key areas for broader policy and programmatic interventions to enhance the provision of nutrient-dense foods through value chains. Policy guidelines tailored to the Ghanaian context and building off the initial mapping exercise are forthcoming.

→ACKNOWLEDGEMENTS

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INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE (IFPRI)

→ POLICIES / STRATEGIES / MANDATE

The International Food Policy Research Institute (IFPRI) is one of 15 centers supported by the **Consultative Group on International Agricultural Research (CGIAR)**, an alliance of 64 governments, private foundations, and international and regional organizations.

IFPRI's mission is to provide research-based policy solutions that sustainably reduce poverty and end hunger and malnutrition. As such, it seeks to generate new knowledge on how to improve the food security of low-income people in developing countries. As a member of the CGIAR consortium, IFPRI's activities are in agriculture and related areas, including forestry, fisheries, and natural resource management.⁹

Given its mission and affiliation, many IFPRI activities - including those which do not include a nutrition objective - can be seen as related to nutrition sensitive agriculture¹⁰. However, unless otherwise noted, the IFPRI activities showcased in this brief include an overt nutrition component, as nutrition impact cannot be assumed. This is true even for projects which are explicitly "nutrition sensitive"¹¹, and certainly the case for those which are not.

→ COUNTRY SUPPORT

FINANCIAL SUPPORT OR INVESTMENTS

1. Several of IFPRI's nutrition projects are supported by CGIAR's Consortium Research Program on **Agriculture for Nutrition and Health** (donors include **Governments of Canada, Australia, Ireland, Netherlands, Russia, Sweden, USA**). Known as **A4NH**, this program is led by IFPRI and includes 10 other CGIAR Centers, as well as a wide variety of other **partners**, including line ministries, INGOs, national and international research institutes, community based organizations, and the private sector. A4NH aims to accelerate progress in improving the nutrition and health of poor people by exploiting and enhancing the synergies between agriculture, nutrition, and health through four key research components:

- Focusing on opportunities to improve nutrition along **value chains** to increase the poor's access to nutritious foods
- Aiming to improve the availability, access, and intake of nutrient-rich, **biofortified** staple foods for the poor
- Addressing food safety issues along the value chain, including the **control of zoonotic diseases** and the better management of agricultural systems to reduce the risk of human diseases
- Addressing the need for **integration** among the agriculture, nutrition, and health sectors, at both the program and policy levels

⁹ <http://www.ifpri.org/ourwork/about>

¹⁰ E.g. Research on improving smallholder access to markets or credit, rural infrastructure, or commodity price policies.

¹¹ Demonstrating evidence of efficacy is a fundamental challenge to nutrition sensitive (as opposed to nutrition specific) interventions and programmes.

- (Gender and capacity strengthening cut across all four components)

A4NH works through three impact pathways: 1) value chains that make more nutritious and safer foods available to the poor, 2) stronger and more effective development programs that successfully integrate agriculture, nutrition and health; and 3) policy that promotes a supportive and enabling cross-sectoral policymaking process and investment environment.¹²

2. While not explicitly nutrition oriented, CGIAR's Consortium Research Program on **Climate Change, Agriculture and Food Security**, or **CCAFS**, provides indirect support to nutrition sensitive agriculture (donors include **Governments of Australia, Denmark, Ireland, Netherlands, Portugal, Russia, Switzerland, and the UK**). Relevant areas of research include [gender and equity analysis](#), building [adaptive capacity](#), managing [risk](#), supporting [low emissions agriculture](#), and [linking knowledge with action](#)¹³.

3. **IFPRI's 2020 Vision for Food, Agriculture, and the Environment** engages in activities related to food, agriculture and the environment. This program increases public awareness of the concept of nutrition sensitive agriculture, notably through its 2011 [Conference on Leveraging Agriculture for Improving Nutrition and Health](#). It also supports initiatives in research, policy dialogue and capacity strengthening¹⁴.

POLICY ADVICE

1. **IFPRI's Country Strategy Support Programmes** provide support to national governments and other development partners, primarily via information and analysis for design and implementation of agricultural and rural development activities. Some country support programmes, for example [Bangladesh](#) and [Uganda](#), look specifically at nutrition. Others, such as [Malawi](#), may not overtly address nutrition but include objectives that are relevant to nutrition sensitive agriculture, such as increased production of legumes and other nutrient rich crops.

2. **A4NH** and **CCAFS** research includes "linking knowledge to action" objectives which aim to influence public sector approaches to agriculture, food security and nutrition. Both programmes work with a wide variety of development implementers in target countries. These include government departments and ministries, the UN and other global initiatives, NGOs, civil society organizations, and farmers groups.

3. Specifically within A4NH, improved nutrition governance is a primary focus under a number of programmes; including **Transform Nutrition**, **LANSA** and **MQSUN**.

TECHNICAL ASSISTANCE PROGRAMS

As a research organization, IFPRI does not provide technical assistance, but does aim to enhance the uptake of research into policy through its communications activities and country Strategy Support Programs, and to enhance capacity for agricultural research through partnerships with other institutions.

OPERATIONAL RESEARCH

¹² A4NH Brochure (2012)

¹³ <http://ccaafs.cgiar.org/>

¹⁴ <http://www.ifpri.org/book-753/ourwork/programs/2020-vision-food-agriculture-and-environment/activities>

Applied research comprises the majority of IFPRI's work in nutrition sensitive agriculture. Examples of programmes which involve field operations in specific countries are described below.

1. Transform Nutrition (DFID, 2011-2017) is a research consortium led by IFPRI whose members include IDS, IFPRI (lead), Save the Children, the International Centre for Diarrhoeal Disease Research, the Public Health Foundation of India, and the University of Nairobi. Transform Nutrition is currently active in Bangladesh, Ethiopia, Kenya and India. The programme is organized around three research pillars or themes, two of which are relevant to nutrition-sensitive agriculture. The first, "Indirect Nutrition Interventions", is focused on how social protection, agriculture interventions and women's empowerment can be leveraged to have a greater impact on nutrition. The second, promoting "An Enabling Environment" uses a variety of research methods to examine the political economy of nutrition governance. This includes identifying key drivers of enabling environments, mapping and assessing institutional capacity in focus countries, and developing and validating tools to strengthen accountability and responsiveness.

2. LANSA or Leveraging Agriculture for Nutrition in South Asia (DFID, 2012-2018) is a research consortium led by the MS Swaminathan Research Foundation (India). LANSA's other members include BRAC (Bangladesh) CSSR (Pakistan), IDS, IFPRI, and LCIRAH. Focus countries are India, Bangladesh, Afghanistan and Pakistan. The core question that research under LANSA will address is: How can South Asian agriculture and related food policies and interventions be designed and implemented to increase their impacts on nutrition, especially the nutritional status of children and adolescent girls?¹⁵ As with Transform Nutrition, LANSA research is organized under three pillars: First, how can agriculture and food policies be more strongly linked to other underlying determinants of nutrition such as women's status, poverty induced food insecurity and sanitation? Second, how can policies in areas such as food storage and trade, and public-private engagement be made more likely to reduce undernutrition? And third, how can agricultural interventions be designed to improve diet quality and improve nutrition directly, while simultaneously ensuring livelihood security? LANSA studies under each pillar have a wide scope; examples include econometric analyses of the effects of agricultural income and other variables on dietary diversity to mixed qualitative/quantitative research on leveraging social protection to optimize the nutrition impact of women's work in agriculture¹⁶.

3. TANDI or Tackling the Agriculture-Nutrition Disconnect in India (Gates Foundation 2010-2012,) aimed to generate broad-based consensus on the nature of the "agriculture-nutrition disconnect" in India and clarify key pathways of potential impact of agricultural growth on nutrition. Project outputs included identification of knowledge gaps and subsequent use of existing datasets to test emerging hypotheses; stakeholder mapping and institutional capacity assessments. An essential part of the project was to create a platform for improving connectivity between Indian development and agriculture economists, nutritionists, policymakers and practitioners¹⁷. TANDI in its current phase is led by the Indira Gandhi Institute of Development Research (see *Gates Foundation Brief*).

4. RAIN or Realigning Agriculture to Improve Nutrition (Irish Aid, 2011-2015,) is a Concern Worldwide program based in Mumbwa District, Zambia which aims to reduce stunting in children under two through integrated agriculture, health and nutrition interventions. IFPRI leads monitoring, learning and evaluation for the project, undertaking impact and process evaluations. Other stakeholders include Mumbwa Child Development Agency, the Zambia Ministry of Agriculture and Cooperatives, and the Zambia Ministry of Health. Project components support i) improved production of high quality foods at homestead level to increase year-round availability of and access to good-quality foods at household level; ii) delivery of social behaviour change communication around

¹⁵ LANSA Inception Report

¹⁶ LANSA Portfolio of Research Studies

¹⁷ <http://www.ifpri.org/book-741/node/8355>

optimal nutrition and health practices; iii) support to district-level Ministries of Health and agriculture to promote cross-sectoral synergies and optimise each sector's impact on stunting. Important outputs of this project aspect are evidence on multi-sectoral strategies for effectively addressing stunting, and research on inter-ministerial collaboration for nutrition¹⁸.

5. SPRING or Strengthening Partnerships, Results and Innovations in Nutrition Globally (USAID 2011-2016) is a multi-country USAID initiative whose goals include building capacity for nutrition in agriculture. SPRING's guiding principles include deepening and broadening the impact of USAID investments, supporting country-led processes while engaging public and private stakeholders, enhancing the capacity of stakeholders at the national level, and integrating a gender perspective throughout. SPRING's implementation team is led by JSI Research & Training Institute Inc. (JSI), Helen Keller International (HKI), IFPRI, Save the Children, and the Manoff Group. IFPRI's role in the project is to generate evidence based learning and evaluation for effective approaches to scale-up nutrition services in 8-10 target countries¹⁹.

6. DDBC or Developing and Delivering Biofortified Crops in Uganda (USAID through Feed the Future) is an example of ongoing collaborative work between IFPRI and HarvestPlus. DDBC is focused on dissemination of two biofortified crops- high-vitamin A orange sweet potato and high-iron beans – in Uganda. Building on past projects, DDBC aims to increase large-scale distribution of these crops along with nutrition information and marketing campaigns. DDBC provides an opportunity to learn what strategies for dissemination of biofortified planting material, trainings, and information campaigns are most cost-effective. It also provides an opportunity to identify important constraints to sustained adoption and diffusion of the biofortified crops²⁰.

7. MQSUN or Maximizing the Quality of Scaling Up Nutrition Programmes Framework (DFID, 2012-2016) is a DFID funded framework contract supporting the SUN process in a number of high-burden countries. IFPRI is a member of the MQSUN Consortium led by PATH and including Agha Khan University, Agribusiness Systems International, IDS, Health Partners International, and Save the Children. Collectively these partners bring an unparalleled depth of internationally recognized expertise in nutrition, food security, social protection, agricultural market system interventions, and knowledge management with a wide geographic imprint. Improved nutrition governance - specifically with respect to implementing government-led initiatives – is a primary focus of this programme. IFPRI's role in MQSUN involves seizing opportunities for relevant operational and evaluative research in DFID priority/high undernutrition burden countries. Opportunities will emerge from DFID country offices over the course of the 4 year initial life span²¹.

8. Aflatoxin and Child Stunting in Kenya (DFID, MTT, 2012-2015) is a controlled intervention study gathering practical information to guide governments and consumers in protecting against aflatoxin²². The study objectives are to: (i) identify storage practices that will reduce aflatoxin contamination, and

¹⁸ <http://www.ifpri.org/book-741/node/8349>

¹⁹ <http://www.ifpri.org/book-741/node/8352>

²⁰ <http://www.ifpri.org/book-741/node/9127>

²¹ <http://www.ifpri.org/book-741/node/8345>

²² Per IFPRI: Aflatoxin is a known toxin that resides in soil and enters plants. There is no technology to prevent entry of aflatoxin into the food chain in the field. Although aflatoxin is harmful to humans, much remains unknown about its specific effects, specifically what the impact is of consuming small or moderate levels of aflatoxin over a long period. Because foods essential to food security in much of the world are vulnerable to aflatoxin, clarification of its impact is important.

(ii) introduce maize testing and swapping to study the impact of reduced aflatoxin exposure on child growth. The study sample is drawn from 65 villages in Meru, Kenya. Households with children under two are eligible. Information on the health effects of aflatoxin and mitigation strategies are being provided to all households in all study villages. In addition to IFPRI, partners include ASI, ACIDI-VOCA, CARITAS Meru, and APHR²³.

9. Millions Fed: Proven Successes in Agricultural Development (Gates Foundation, closed) identified interventions in agricultural development that have substantially reduced hunger, malnutrition and poverty. Part of the **2020 Vision initiative**, Millions Fed documented evidence about where, when, and why these interventions succeeded; to learn about the key drivers and factors underlying success; and to share lessons to help inform better policy and investment decisions in the future²⁴.

➔EXAMPLE COUNTRIES & PROGRAMS

This list is not exhaustive but rather provides examples of IFPRI programmes which provide direct support to nutrition-sensitive agriculture.

Afghanistan	LANSA
Bangladesh	IFPRI Country Strategy Support Programme SPRING LANSA Transform Nutrition
Benin	Value Chains - Enhancing Food and Nutrition Security of Vulnerable Groups in Communities in Benin through Increased Use of Local Agricultural Biodiversity
Bolivia	Biofortification – Developing bean cultivars targeted to specific countries in Central America, the Andean zone and the Caribbean
Burkina Faso	Agriculture associated diseases - Biological control of aflatoxin in maize for enhanced food safety and income Strengthening and evaluating HKI's homestead food production programs
Cote d'Ivoire	Collaboration with HKI on nutrition sensitive agriculture
Cambodia	Value Chains - Value Chain of dried small fish Strengthening and Evaluating HKI's Homestead Food Production Programs
Colombia	Biofortification – Developing bean cultivars targeted to specific countries in Central America, the Andean zone and the Caribbean Biofortification – Development of high B-carotene cassava for Columbia and Haiti
Ecuador	Biofortification - Nutritional Quality Assurance and Enhancement Network
El-Salvador	Biofortification – Developing bean cultivars targeted to specific communities in Central America, the Andean zone and the Caribbean
Ethiopia	Transform Nutrition
Haiti	Biofortification – Developing bean cultivars targeted to specific communities in Central America, the Andean zone and the Caribbean Biofortification – Development of high B-carotene cassava for Columbia and Haiti
	Biofortification – Coordination of biofortification research and development activities in

²³ <http://www.ifpri.org/book-741/node/8353>

²⁴ <http://www.ifpri.org/book-5826/millionsfed/about>

India	<p>grain and tubers to enhance nutritional security in India</p> <p>Biofortification – Partnership-based genetic enhancement of Pearl Millet for High Grain Iron Density for Improved Human Nutrition in India</p> <p>Biofortification – Identification of Micronutrients and Vitamin A Precursor (B-carotene) Dense-Sorghums for Better Health in Western and Central Africa (WCA) and Central India Phase II</p> <p>Value chains – Food Safety and Adulteration in the India Dairy Value Chain</p> <p>Transform Nutrition LANSA TANDI</p>
Kenya	<p>Biodiversity for Food and Nutrition Project - Mainstreaming biodiversity conservation and sustainable use for improved human nutrition and well-being</p> <p>Transform Nutrition</p> <p>Aflatoxin and stunting in Kenya study</p>
Malawi	<p>IFPRI Strategy Support Program</p> <p>Biofortification - Identification of Micronutrients and Vitamin A Precursor (B-carotene) Dense-Sorghums for Better Health in Western and Central Africa (WCA) and Central India - Phase II</p> <p>Rooting out Hunger with OFSP in Malawi</p> <p>Value chains - Improve food quality and diets of nutritionally disadvantaged populations especially women and children</p> <p>Enhancing Child Nutrition and Livelihoods of Rural Households in Malawi and Tanzania through Post-Harvest Value Chain Technology Improvements in Groundnuts</p>
Mali	Value chains- Enhancing Child Nutrition and Livelihoods of Rural Households in Malawi and Tanzania through Post-Harvest Value-Chain Technology Improvements in Groundnuts
Mexico	Biofortification – Developing bean cultivars targeted to specific communities in Central America, the Andean zone and the Caribbean
Mozambique	Value chains - Improve food quality and diets of nutritionally disadvantaged populations especially women and children
Nigeria	<p>Agriculture associated diseases - Increasing awareness of aflatoxin in Nigeria</p> <p>Biofortification - Biofortification of Sub-Saharan staple food crops</p>
Pakistan	LANSA
Peru	Biofortification - Nutritional Quality Assurance and Enhancement Network
Rwanda	Biofortification – Rwanda Super Foods
Senegal	<p>Biofortification – Rwanda Super Foods</p> <p>Collaboration with HKI on nutrition sensitive agriculture</p>
Sierra Leone	Value chains - Improve food quality and diets of nutritionally disadvantaged populations especially women and children
Swaziland	Value chains - Improve food quality and diets of nutritionally disadvantaged populations especially women and children
	Value chains - Enhancing Child Nutrition and Livelihoods of Rural Households in Malawi and Tanzania through Post-Harvest Value-Chain Technology Improvements in Groundnuts

Tanzania	Biofortification - Biofortification of Sub-Saharan staple food crops Collaboration with HKI on nutrition sensitive agriculture
Uganda	Strategy Support Program, including Nutrition Collaborative Research Program (through Feed the Future) and work with HarvestPlus DDBC
Turkey	Biodiversity for Food and Nutrition Project - Mainstreaming biodiversity conservation and sustainable use for improved human nutrition and well-being
Uganda	Biofortification - Biofortification of Sub-Saharan staple food crops Biofortification - DDBC
Zambia	Value chains – Improve food quality and diets of nutritionally disadvantaged populations especially women and children Value Chains – Value chain of dried small fish RAIN
→KEY TECHNICAL INTERVENTIONS	
<p>A4NH applied research falls under four key components. In brief, these are:</p> <ul style="list-style-type: none"> ▪ Value chains for improved nutrition ▪ Increasing availability, access and intake of biofortified staple foods ▪ Food safety, especially in regards to control of zoonotic diseases ▪ Better integration of programme and policy efforts across agriculture, nutrition and health <p>Activities which fall under one or more of these components include:</p> <ul style="list-style-type: none"> ▪ Stakeholder mapping and network analysis, case study analysis and other qualitative research to assess institutional and operational nutrition capacity at central and decentralized levels ▪ Value chain analysis ▪ Econometric analysis of primary and secondary data at country level and across countries ▪ Impact assessment 	
→TARGETED POPULATION GROUPS	
<p>Based on its three main impact pathways, A4NH targets the following populations in its research:</p> <ul style="list-style-type: none"> ▪ Value chain programmes target producers, low income consumers, other value chain members, media and consumer groups, and regulators ▪ Multisectoral development programmes target government, NGOs and public health program implementers. ▪ Policy oriented programmes target policymakers, investors and intergovernmental agencies as enablers for better cross sectoral policy, regulation and investment. <p>Ultimate target populations in terms of nutrition for policies and programs shaped by IFPRI's work are women and children in the first 1000 days.</p>	
→MONITORING & EVALUATION	

IFPRI produces a wide variety of publically available models and composite measurement tools. Of particular relevance to nutrition sensitive agriculture are:

The Women's Empowerment in Agriculture Index, which measures the roles and extent of women's engagement in the agriculture sector in five domains: (1) decisions about agricultural production, (2) access to and decision making power over productive resources, (3) control over use of income, (4) leadership in the community, and (5) time use. It also measures women's empowerment relative to men within their households.

<http://www.ifpri.org/publication/womens-empowerment-agriculture-index>

<http://www.ifpri.org/book-9075/node/9076>

The Global Hunger Index, which combines three equally weighted indicators – undernourishment, child underweight, and child mortality - in one index number

<http://www.ifpri.org/book-8018/ourwork/researcharea/global-hunger-index>

IFPRI's IMPACT Model, which examines alternative futures for global food supply, demand, trade, prices, food security and nutrition. The IMPACT model allows IFPRI to provide both fundamental, global baseline projections of agricultural commodity supply, demand, trade, prices and malnutrition outcomes along with cutting-edge research results on quickly evolving topics such as bioenergy, climate change, changing diet/food preferences, and many other themes.

<http://www.ifpri.org/book-751/ourwork/program/impact-model>

Key indicators include **dietary diversity, anthropometry (usually stunting), biomarkers, and Infant and Young Child Feeding** practices.

One of IFPRI's primary functions is impact evaluation. As such, many of its A4NH activities are assessment oriented. These include some projects cited under "Operational Research" above (e.g. RAIN, Transform Nutrition) as well as:

1. Strengthening and Evaluating [HKI's Homestead Food Production Programs](#) - Helen Keller International (HKI) has been implementing homestead food production (HFP) programs in Asia for the past 20 years and has recently begun implementing HFP programs in Africa as well. In order to better understand the potential of these types of programs to improve maternal and child health and nutrition outcomes, IFPRI is collaborating with HKI to evaluate programs in Cambodia and Burkina Faso²⁵.

2. Evaluation of the impact of a multisectoral nutrition program in Nepal: *Suaahara* is a five-year USAID-funded integrated nutrition program (2011- 2016) in Nepal. It uses a comprehensive, household-based approach to improve access to, and consumption of, nutritious foods in areas with very poor nutrition indicators. Its main objective is to improve the nutritional status of pregnant and lactating women and children under two years of age. One of the distinguishing elements of *Suaahara* is the integration of various sectors—including agriculture—to achieve improved nutrition for vulnerable populations. IFPRI's impact evaluation for *Suaahara* is designed to address what overall project-level impact the *Suaahara* program has on child stunting and anemia (among children under five years of age), and infant and young child feeding practices (among children 0-24 months of age). The baseline survey for this evaluation was done in 2012 and it is anticipated that an endline survey will be done in 2015²⁶.

²⁵ <http://www.ifpri.org/book-741/node/8351>

²⁶ <http://www.ifpri.org/book-741/node/7460>

➔ GENDER EQUALITY & WOMEN'S EMPOWERMENT

Gender research at IFPRI is mainstreamed through a [Gender Task Force](#) and informs most work done under the A4NH program. A [Gender Tool Box](#) is available to assist researchers in applying a gender analysis to their work, and the principal goal of the [Gender and Assets Program](#) is to contribute to poverty reduction through research on policies and interventions that strengthen women's control over critical assets.

The Women's Empowerment in Agriculture Index, which measures the roles and extent of women's engagement in the agriculture sector in five domains: (1) decisions about agricultural production, (2) access to and decision making power over productive resources, (3) control over use of income, (4) leadership in the community, and (5) time use. It also measures women's empowerment relative to men within their households.

<http://www.ifpri.org/publication/womens-empowerment-agriculture-index>

<http://www.ifpri.org/book-9075/node/9076>

A full list of IFPRI's publications on gender is available [here](#).

➔ KEY PUBLICATIONS & CONTACTS

[The impact of irrigation on nutrition, health and gender: A review paper with insights for Africa south of the Sahara \(2013\)](#)

[Women in agriculture: Closing the gender gap \(2013\)](#)

[IFPRI Strategy 2013-2018](#)

[Reshaping Agriculture for Nutrition and Health \(2012\)](#)

[Global Hunger Index 2012](#)

[Global Food Policy Report 2012](#)

For more information on nutrition sensitive agriculture at IFPRI, please contact:

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LEVERHULME CENTRE FOR INTEGRATIVE RESEARCH ON AGRICULTURE AND HEALTH (LCIRAH)

→ POLICIES / STRATEGIES / MANDATE

Established in 2010, LCIRAH is a research institute whose work is guided by an integrated agriculture and health agenda. This “agri-health” paradigm is promoted by the Centre as a unifying approach and methodology for understanding the relationships between agricultural production and population health.

LCIRAH’s research aims to answer the over-arching question: *How do we achieve sustainable food and agriculture systems which promote health and well being for all people?* Agriculture and dietary transition, emerging food borne and zoonotic diseases, agri-food value chains (including work on consumer and private sector behaviour, regulation, food prices and affordability) and development of integrated agriculture and health policies figure prominently in the Centre’s work. LCIRAH is also currently conducting research on the impact of environmental and climate change on agriculture, health and nutrition. All projects are organized under five thematic areas: Agriculture, poverty and health; agriculture, diet and non-communicable diseases (NCDs) in development; emerging food-borne and zoonotic diseases; value chain approaches in agri-health research; and innovative metrics for agriculture and health research evaluation.

The Centre’s holistic focus is reflected in its publication history, which spans a variety of disciplines, namely epidemiology, public health, pharmacology, veterinary science, nutrition, food policy, food marketing, livelihoods analysis, and agricultural, health and development economics.²⁷

→ COUNTRY SUPPORT

FINANCIAL SUPPORT OR INVESTMENTS

The Leverhulme Trust provides start-up funding to LCIRAH as part of its programme **Embedding of Emerging Disciplines**. This five-year research programme (2010-2015) is being coordinated by experts from the London School of Hygiene and Tropical Medicine, the School of Oriental and African Studies, the School of Pharmacy and the Royal Veterinary College. The programme aims to develop an agri-health programme across all six Colleges, and with external partners²⁸.

In addition to the Leverhulme Trust, LCIRAH is also supported externally. **DFID**, the International Food Policy Research Institute (**IFPRI**), the International Livestock Research Institute (**ILRI**), the National Health and Medical Research Council of Australia (**NHMRC**) and **Bloomsbury College** currently fund LCIRAH projects which include nutrition and agriculture.

POLICY ADVICE

LCIRAH is involved in a number of research activities focused on providing evidence to support

²⁷ Annual reports 1&2

²⁸ <http://www.lcirah.ac.uk/node/81>

policy change with respect to agriculture and food systems for improved nutrition. These include both internal work (funded from the core Leverhulme Trust grants) and contractual work supported by DFID, BMGF and USAID. For example:

1. **A study for DFID *Current and Planned Research on Agriculture for Health and Nutrition: A Mapping and Gap Analysis***, to characterize current research on agriculture for improved nutrition. The report includes a synthetic conceptual framework which identifies gaps in (1) research coverage of different impact pathways and (2) methodologies to measure nutritional outcomes of agricultural interventions. This report has received considerable international attention and is in press.
2. **A report for DFID on stunting** as a potential future development goal for government aid programmes. This report brings together evidence for the effect of agriculture, education, economic growth and other factors on stunting and vice versa.
3. **An LCIRAH-funded study and workshop** (additional funding provided by the Bill and Melinda Gates Foundation) to engage the agriculture and food industries, venture capitalists and philanthropists in supporting the improvement of nutrition in low income countries through public-private partnerships.
4. **Pillar 3 of the Leveraging Agriculture for Nutrition in South Asia (LANSA)** programme (see below as well as briefs on the Institute of Development Studies [IDS] and IFPRI). Pillar 3 asks: *“How strong is the evidence that agricultural interventions can be pro-nutrition?”* LCIRAH activities in Pillar 3 involve exploration of agriculture-health linkages in India, Pakistan and Bangladesh.
5. LCIRAH also makes regular contributions to the UK All-Party Parliamentary Group on Food Security as well as other **policy forums**. Through its host organization – The London International Development Centre – LCIRAH will head the Secretariat to a **Global Panel for Agriculture and Food Systems for Nutrition**. Founded in 2013, the Panel’s objectives are to review emerging evidence on agriculture and food systems and provide global leadership for investments and policies in nutrition-sensitive agriculture²⁹.

TECHNICAL ASSISTANCE PROGRAMS

LCIRAH provides upstream research and methodologies for understanding and measuring agricultural impacts on health and vice versa. To have open-ended resources for such basic work is highly unusual, and therefore we have made it a policy not to spend our resources on specific technical assistance programmes but to focus on generation of global public goods in this area.

APPLIED RESEARCH

LCIRAH research may be classified along a spectrum ranging from applied to theoretical, but all of it is focused at improving understanding, tools and metrics. All LCIRAH research projects are interdisciplinary and/or inter-sectoral, involving agriculture, nutrition and health. Examples of current projects with an explicit nutrition focus are as follows (organized according to the thematic areas cited above):

1. Under **Agriculture, Poverty and Health**, work has been done to build the evidence base for the impact of agricultural interventions on nutrition status. This includes the LCIRAH report for DFID

²⁹ LIDC Press Release

cited above on **Current and Planned Research on Agriculture for Health and Nutrition: A Mapping and Gap Analysis** (See Key Publications), a paper on *agricultural interventions' contribution to improving nutrition* (See Key Publications), and a longitudinal study comparing data on agricultural growth and changes in nutrition indicators in different Indian states. The latter aims to better understand the persistence of under-nutrition in the face of national agricultural improvement. PhD studies looking at agri-nutrition links in Burkina-Faso and Nepal (see "Priority countries") have also been launched (2012).

2. Under **Agriculture, Diet and NCDs in Development**, work has been done to build the evidence base for links between changing agri-food chains and dietary transition in low and middle income countries (LMICS). This includes a Philippines-based study using longitudinal data to assess the relationship between changing land use, diet and health; a systematic review of the relationship between agriculture-led food price policy and nutrition; and analyses of price elasticity and cross-price elasticities of demand for different foods in LMICs. The latter's focus is on revealing how populations will respond to changes in the cost of nutritious and non-nutritious foods, and likely health outcomes in different socioeconomic settings.

3. Under **Value-chain Approaches**, work has been done to improve fruit and vegetable consumption in Fiji. Animal source food value chains are also a focus (and are informed by work done under the thematic area on emerging food-borne and zoonotic diseases). In cooperation with the International Livestock Research Institute (ILRI), LCIRAH is undertaking pilot assessments of food safety and nutritional value in three LMIC food value chains – dairy in Tanzania, fish in Egypt and pork in Vietnam. This work is, for the first time, linking nutritional benefits and disease-related disbenefits associated with different food value chains for the poor.

4. Under **Innovative metrics for agriculture and health research and evaluation**, LCIRAH has organized a series of three international conferences (2011, 2012, 2013) with a focus on measuring agricultural impacts on health, as well as a workshop (2012) with the US-based Nutrition Cooperative Research Support Programme [Nutrition CRSP, funded by USAID] to share experiences and approaches to metrics development in agriculture and health. Reports on all four meetings are on the LCIRAH website. In addition, as mentioned above, LCIRAH will play a key role in "Pillar 3" of the LANSa programme, which addresses the question: *How strong is the evidence that agricultural interventions can be pro-nutrition?* LCIRAH, working with partners in South Asia will design metrics and methods to explore agriculture-health linkages in India, Pakistan and Bangladesh. (See priority countries, below, for more details on Pillar 3 LANSa activities.) Building on work published in 2013 a new PhD study will commence in September 2013 on international and national food price indicators that better reflect the nutritional impacts of food price changes on different income groups within countries.

→PRIORITY COUNTRIES & PROGRAMS

This list is not exhaustive but rather provides examples of LCIRAH programmes which have either an explicit nutrition or food based component and are based in agriculture.

Zambia	SUN and RAIN: An assessment of intersectoral policy and action for nutrition, with IFPRI (2011-2017)
India	Exploring drivers of undernutrition across space (states) and time (2011-)
Fiji	The applicability of value chain approaches to address low fruit and vegetable consumption (2011-2014)
Nepal	Women's empowerment in agriculture and child nutritional status in Nepal (with IFPRI) (2012-2013)
Tanzania (dairy) Egypt (fish) Vietnam (pork)	Rapid integrated assessment of food safety and nutrition (with ILRI) (2012-2013)
South Africa	Agriculture, food security, foodways and health in the Makhathini farming region of South Africa (dates to be added)
Burkina Faso	Tree foods, nutrition and food security in the Sahel region of Burkina Faso (dates not provided)
Mozambique	Women's work and household food habits in northern Mozambique (2010-2013)
Malawi	Inclusion of nutrition indicators in the national Farm Input Subsidy Programme (dates not provided)
India Pakistan Bangladesh	LANSA - With colleagues in Asia, LANSA is to design novel metrics and methods to explore agriculture-health linkages on farming systems for nutrition in India; linking microfinance, agricultural and nutritional education in Bangladesh; and understanding the effects of land grants to women in Pakistan on nutritional outcomes for mothers and children.

→KEY TECHNICAL INTERVENTIONS

LCIRAH studies interventions, their design and impact; it does not itself develop or implement interventions. The methods it uses to study interventions include:

- Econometric analysis of secondary consumption and expenditure data
- Value chain analysis
- Qualitative research
- Systematic reviews
- Experimental and quasi-experimental epidemiological research

→TARGETED POPULATION GROUPS

The focus of LCIRAH is on low and middle income countries; hence its research is directed largely there with partners, although its theme on NCDs involves work in industrialized countries, as models for problems which are spreading in LMICs.

→MONITORING & EVALUATION

LCIRAH does not undertake projects itself, but does work on evaluation methodology. In its study on [Current And Planned Research On Agriculture For Improved Nutrition: A Mapping And A Gap](#)

[Analysis \(2012, \)](#) LCIRAH analyzes in some depth the methods being used or proposed for monitoring and evaluation of 150 current research projects on agriculture for improved nutrition and health. This data set has subsequently been used by FAO for a more detailed survey of indicators and meetings.

→ GENDER EQUALITY & WOMEN'S EMPOWERMENT

Two LCIRAH PhD/ PostDoc research projects address women's empowerment explicitly: [A study in Nepal](#) on women's empowerment in agriculture and child nutritional status and [research in Mozambique](#) on women's cash earning activities and household food habits.

Gender equality is implicitly addressed in other country-based LCIRAH projects which look at nutrition and agriculture. For example [research on underlying drivers of undernutrition in India](#) as well as LANSA. The latter cites women's empowerment in agriculture as a cross-cutting theme and considers gender central to its empirical analysis.³⁰

→ LESSONS LEARNED & GOOD PRACTICES

LCIRAH has identified and characterized the need for a more integrated approach to measuring agri-health effects, including more extensive use of existing methodologies in different sectors, and development of new methodologies. The Centre's successes include its convening of a rapidly emerging research community working in this very new area, fostering exchange of ideas and methods development, and identification of research gaps.

→ KEY PUBLICATIONS & CONTACTS

[Current And Planned Research On Agriculture For Improved Nutrition: A Mapping And A Gap Analysis \(2012\)](#)

[How can agricultural interventions contribute in improving nutrition health and achieving the MDGs in least developed countries? \(2013\)](#)

Links:

[About LCIRAH and Agri-Health](#)

[Projects](#)

[Publications](#)

For more information on nutrition sensitive agriculture at LCIRAH, please contact:

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Jeff.Waage@lids.bloomsbury.ac.uk

→ COUNTRY STORIES (1-2 concrete examples of good practices)

We are not involved in project implementation and our studies on projects are "live" and ongoing, so it is not possible to draw "best practices" or success stories (and those should probably come

³⁰ LANSA Inception Report (need to confirm that this is public information)

from the projects themselves, we are only using these for research purposes). In time, we will have a body of methods and analyses that reveal where positive outcomes and impacts have been achieved.

→ACKNOWLEDGEMENTS

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Jeff Waage, Ibi Wallbankm Members of the LCIRAH Management Committee

BILL & MELINDA GATES FOUNDATION (BMGF)

→ STRATEGY & VISION

The Bill & Melinda Gates Foundation recognizes that increasing agricultural productivity and promoting good nutrition are deeply interrelated aspects of addressing hunger and poverty. The critical problems of hunger and malnutrition among women and children in the developing world will be more effectively reduced if the agriculture and nutrition sectors work together.

The goal of the foundation's Agricultural Development strategy is to help smallholder farmers be more productive, with the larger goal of reducing poverty. The goal of the Nutrition program is to ensure that all children have the nutrition they need for a healthy start in life. The Nutrition strategy recognizes that combating undernutrition requires contributions from many sectors, including agriculture. The agricultural sector can ensure that rural families have access not only to more food but also to a wide variety of nutritious foods. The agricultural sector can also serve as a delivery platform for nutrition interventions.

→ SUPPORT

FINANCIAL SUPPORT OR INVESTMENTS

Between now and 2020, according to the Nutrition for Growth event in London 2013, the BMGF plans to invest over USD 850 million in nutrition, including nutrition-specific and nutrition-sensitive programs, with the proportion of around USD 350 million on nutrition-specific program interventions.

The foundation's Agricultural Development and Nutrition programs have selected specific focus areas along the value chain and are making complementary investments in the following areas:

- Biofortification
- Nutrition Education
- Mycotoxins
- Policy and Advocacy
- Research Goals

The **Biofortification** work aims to improve the nutrition of key staple foods by developing enhanced varieties as a sustainable, low-cost means of providing improved access to micronutrients for rural communities that primarily consume non-processed foods. Key investments in this area include nutritionally-enhanced sweet potatoes, maize, beans, cassava, rice, bananas, pearl millet, and wheat (see table below). Partners have successfully demonstrated that higher levels of nutrients can be achieved through breeding and are now moving into a delivery phase for many of these products. To date, the Agricultural Development, Nutrition, and Global Health Discovery teams have committed nearly \$100 million to develop and disseminate nutritionally-enhanced staple foods. Partners include the CGIAR HarvestPlus and International Potato Center.

The following nutrients are enhanced through the crops:

Sweet Potato (Vitamin A), Maize (Vitamin A), Beans (Iron), Cassava (Vitamin A, iron, and protein), Rice (Vitamin A, zinc), Banana (Vitamin A, iron), Pearl millet (Zinc) and Wheat (Zinc).

Nutrition Education: Programs that directly interact with farmers are used as deliver platform for information about practices and behaviors that improve nutrition alongside information on agriculture. Grantees, including Heifer International's (East Africa Dairy Development Project) and Farm Concern International's (Domestic Horticulture Markets program) are currently pursuing this approach.

This integration of nutrition education into agricultural programs, incorporating best practices from behavior change programs focuses on legumes and livestock, because they offer unique opportunities to improve dietary diversity and nutrition at the household level, via women farmers whose increased productivity is more likely to translate into improved health and nutrition for their families.

Mycotoxins: In 2012, the foundation's Agricultural Development, Enteric Disease, and Nutrition teams jointly hosted a meeting of leading international mycotoxin researchers to discuss the health impact of mycotoxins and control measures. The three teams are working together with stakeholders to understand the burden of the problem and its effects on child growth and development, and generate cost-effective interventions to help control the problem.

POLICY ADVICE

Policy and Advocacy: The foundation has supported global and national platforms for cross-sectoral collaboration and the development and integration of agricultural components into nutrition policy planning in several countries. For example, engaging with the International Food Policy Research Institute's 2020 Vision and participating in UN REACH. The IFPRI 20/20 conference held in 2011 is an example of a global conference, while UN REACH is an example of an ongoing cross-sectoral collaboration platform that offers tools and information focused on the country level.

BMGF collaborates also with the New Partnership for Africa's Development (NEPAD) in incorporating nutrition activities and objectives into national agricultural development plans through the Comprehensive Africa Agriculture Development Program (CAADP) process.

OPERATIONAL RESEARCH

The BMGF wants to ensure that agricultural projects which intend to have a nutritional impact have a robust evaluation design so that we advance our knowledge of how to maximize the impact of agricultural investments on nutritional outcomes. The foundation has supported in-depth research efforts such as Tackling the Agriculture-Nutrition Disconnect in India (TANDI). Future research and learning priorities include:

- Understanding the agriculture-nutrition pathway at the population and household levels
- Improving nutritional outcomes along the agricultural value chain
- Measuring the nutritional impact of agricultural projects

Examples are:

Development and delivery of proven and innovative interventions to address undernutrition during pregnancy and the first two years of a child's life is also underway; an example is Mama SASHA, which is working to evaluate whether vouchers for sweet potato vines distributed through health centers increases the consumption of Vitamin-A-rich orange-fleshed sweet potato by pregnant and lactating women and will thus improve the Vitamin A status of their offspring.

BMGF supports *Farm Concern International* whose horticulture production and marketing activities have provided significant opportunities for smallholder farmers in some African countries as development partners and private sector players have negotiated sourcing contracts with large retailers in Europe.

→ GEOGRAPHIC FOCUS & PRIORITY COUNTRIES

The following countries are focused on with regard to nutrition and agriculture linkages: Burkina Faso, Mali, Nigeria, Ghana, Tanzania, Uganda, Ethiopia, Kenya, India and Bangladesh.

→ KEY TECHNICAL INTERVENTIONS

Key areas of technical interventions include: enabling access to production and consumption of adequate nutrient-dense foods and diet diversification to address micronutrient deficiencies.

- Biofortification, with key investments in nutritionally-enhanced sweet potatoes, maize, beans, cassava, rice, bananas, pearl millet, and wheat. The Agricultural Development, Nutrition, and Global Health Discovery teams have committed over \$100 million to develop and disseminate nutritionally-enhanced staple foods.
- Nutrition education.

BMGF works with both governments and private sector to scale up investments, for example in biofortification, nutrition education & behavior change communication³¹ to deliver information about practices and behaviors for improved nutrition alongside the provision of information on agriculture like improved food production and food processing methods. Other priorities include improvement of storage at the farm household and post-harvest activities, meeting quality and quantity commitments, linkages to large-scale and reliable markets, and establishing partnerships between buyers, processors, and farmers' organizations.

→ TARGETED POPULATION GROUPS

Targeted population groups include smallholder farmers and nutritionally vulnerable groups, with prioritization of reaching women farmers.

→ MONITORING & EVALUATION

BMGF grantees have established rigorous monitoring and evaluation plans that include in various cases, baseline-endline surveys and specific research protocols. Process monitoring and impact evaluations are pursued in a number of projects.

The type of indicator chosen varies with the nature of the project and the hypothesized project impact pathway. They include indicators on micronutrient status of selected population groups, nutrient intake, dietary diversity scores, food safety indicators, farm household food loss, nutritional knowledge attitudes and practices, infant and young child feeding practices, women's

³¹ Several grantees, including Heifer International's East Africa Dairy Development Project and Farm Concern International's Domestic Horticulture Markets program.

control over resources and decision-making, household food expenditures, and nutritional status indicators of nutritional vulnerable groups.

→ GENDER EQUALITY & WOMEN'S EMPOWERMENT

The BMGF puts an emphasis on targeting women and women farmers. As smallholder farmers and caretakers of children, women make daily food production and consumption decisions for their families and are more likely to spend additional income on food and healthcare, with proportionally greater impact on children's health and nutrition.

→ LESSONS LEARNED & KEY FUTURE INVESTMENTS

To take the evidence-based factors of success for improving nutrition and health through well designed agricultural investments into consideration.

A key upcoming investment in this area will be the support to an African-led consortium of expertise in agriculture and nutrition that can provide technical assistance to integrate nutrition into agricultural programs, rigorously evaluate results, add to the knowledge base, and ultimately contribute to both improved agricultural productivity and nutrition among the rural poor.

→ KEY PUBLICATIONS & CONTACTS

"Optimizing Nutrition Outcomes from Investments in Agriculture", document published on BMGF website. <http://www.gatesfoundation.org/What-We-Do/Global-Development/Agricultural-Development>

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GOVERNMENT OF CANADA DEPARTMENT OF FOREIGN AFFAIRS, TRADE AND DEVELOPMENT

(FORMERLY CANADIAN INTERNATIONAL DEVELOPMENT AGENCY (CIDA))

→ STRATEGIES & MANDATE

Canada is a global leader in supporting nutrition in developing countries. Food security is a priority theme of Canada's development assistance, as outlined in its Food Security Strategy, and focuses on three areas: food assistance and nutrition, sustainable agricultural development, and research and development.

Nutrition also features prominently in the implementation of Canada's G8 Muskoka Initiative on Maternal, Newborn and Child Health. Canada's development programming to improve nutrition focuses on nutrition-specific interventions as well as leveraging programs in other sectors, such as agriculture, to improve nutrition. Canada is also an active member of the ***New Alliance for Food Security and Nutrition***, a global commitment launched in 2012 by the G-8, which aims to create new partnerships with the private sector to drive agricultural transformation, improve nutrition and encourage sustainable economic growth in Africa. Canada plays an active role in the ***Scaling Up Nutrition (SUN) Movement*** including leading efforts to better track resources aimed at nutrition sensitive programs.

→ SUPPORT

- Canada launched the '**Muskoka Initiative**³²' in 2010, and made nutrition one of three key paths to improve the health of mothers and children.
- Canada has signed the '**Nutrition for Growth Compact**' that outlines the commitments, action, and accountability for resources and results required from all stakeholders to address undernutrition.

FINANCIAL SUPPORT OR INVESTMENTS

Canada is the largest donor to nutrition-specific interventions, investing significantly more than \$100 M per year, and also makes substantial investments in nutrition sensitive agriculture. On June 8, 2013 Canada announced a package of new initiatives totaling \$145 million to support countries to scale up evidence based nutrition interventions and measure what has been achieved.

POLICY ADVICE

- Canada supports the **International Food Policy Research Group (IFPRI)** in Ethiopia (\$5 million, 2009-2013) to strengthen evidence-based policy research, including in the area of nutrition-

³² The Muskoka Initiative on Maternal, Newborn and Child Health is an initiative announced at the G8 summit under Canada's Presidency which commits member nations to collectively spend an additional \$5 billion and other partners to spend an additional \$2.3 billion, totaling \$7.3 billion, between 2010 and 2015 to accelerate progress toward the achievement of Millennium Development Goals 4 and 5, the reduction of maternal, infant and child mortality in developing countries

sensitive agriculture.

- Canada is also supporting the UNSCN (\$99k, 2013) to review and map all nutrition-sensitive agriculture initiatives, activities and programs that integrate nutrition conducted by United Nations agencies, academia, donors, and other stakeholders to increase the global knowledge base on nutrition-sensitive development. Furthermore, Canada continues to advocate for the inclusion of nutrition in broader food security programming.

TECHNICAL ASSISTANCE PROGRAMS

- DFATDC's Partnerships with Canadians also contributes to programming aimed at improving dietary diversity in poor and vulnerable households through interventions such as crop diversification both with and without irrigation, agroforestry, and provision of improved seeds of nutritious crops and varieties appropriate for different agro-ecological zones.
- Canada supports the **International Fund for Agricultural Development (IFAD)** (\$5 million, 2013–2015) through their '**Nutrition-Sensitive Agriculture and Rural Development**' program to work directly with smallholder farmers and the private sector to improve the production of nutritious food and promote nutrition-sensitive agriculture and rural development innovations and (\$75 million, 2013-2015) to help increase access by the rural poor to agricultural technologies, financial services, markets, land, and other natural resources to improve food security and nutrition. Canada's support also aims to strengthen the capacity of **IFAD** to support nutrition-sensitive agriculture in its partner countries.
- Canada supports the **Food and Agriculture Organization of the United Nations (FAO)** to ensure long-term food and nutrition security. This has included support to: Senegal, Sri Lanka, and Honduras for programs to rebuild livelihoods and develop long-term food security; South Sudan to provide young men and women with tools and training to start a new life in farming, rearing livestock, and fishing; West Bank and Gaza to strengthen the governments' response to animal disease outbreaks; and Pakistan to provide seeds and tools following the 2010 floods. Canada supports **homestead food Production** (\$15 million 2013-2016) to improve the nutritional status of women and children in Africa through **home-based agricultural production and nutrition education**.
- Canada supports the **United Nations World Food Programme (WFP)** (\$96.4 million) in response to its 2013 appeals to meet the urgent nutrition and food assistance needs of millions of people in humanitarian crises and situations of food insecurity in such countries as Syria, Somalia, Mali, and the Democratic Republic of Congo. Canada also supports Purchase for Progress (P4P), which uses WFP's food procurement activities to create and enhance markets for food commodities grown locally by low-income or smallholder farmers (the majority of whom are women). This creates an incentive for farmers to develop their crop management skills so they produce better quality food, and helps to raise local farmers' sustainable crop production and yields. P4P seeks to connect small-scale farmers to markets by providing them with the know-how and tools to respond to procurement requests from WFP, and by putting more cash directly into their pockets in return for their crops. Canada has supported P4P in Afghanistan (\$22.8 million), Ghana (\$7.2 million), and Guatemala (\$6 million).
- Finally, Canada is the lead donor to the **UN REACH – Renewed Efforts Against Child Hunger and Undernutrition**, a partnership between UNICEF, WFP, WHO and FAO designed to support developing-country governments in building national capacity to scale-up nutrition programs and integrate nutrition with other development efforts. Canada is supporting REACH activities in 8 countries in sub-Saharan Africa and Asia, and is providing \$15M to the partnership over four years (2011-2015).
- Canada supports the **Canadian Foodgrains Bank** to improve nutrition and increase food security in developing countries around the world by providing expert advice to manage, procure and supply nutritious food; and engage in public policy and education activities related to hunger

and food security. With support from Canada, the Canadian Foodgrains Bank provided food aid, nutrition programs and agricultural assistance to 2.2 million people in 36 countries in 2011-2012.

- Canada supports the **World Health Organization (WHO)** (\$18 million) to improve surveillance and data collection of nutrition-related action in Africa.
- As part of the **Technical Assistance and Capacity Building Component** (\$15.45 million, 2008-2013) of Ethiopia's **Productive Safety Net Program**, Canada provides training to federal, state, and local officials in nutrition-sensitive agricultural programming.
- As part of Canada's support to the **International Fund for Agricultural Development (IFAD)** (\$5 million, 2013–2015) under their '**Nutrition-Sensitive Agriculture and Rural Development**' program, Canada is supporting IFAD's effort to expand its technical capacity in nutrition-sensitive agriculture for the benefit of its partner countries.

APPLIED RESEARCH

- Canada's key international agricultural research initiative is the **Canadian International Food Security Research Fund (CIFSRF)**³³. Canada's Department of Foreign Affairs, Trade and Development (DFATD) contributed \$50 million and the International Development Research Centre (IDRC) contributed another \$12 million during 2009-2014, which supports research partnerships to solve issues related to the access of sufficient, safe and nutritious foods in the developing world. The research contributes to the development of more productive and sustainable agricultural techniques for women smallholder farmers, with the ultimate goal of making food sources more secure and the food produced more nutritious for poor people in developing countries.³⁴
- DFATD and IDRC launched the second phase of the CIFSRF project in April 2013. This \$62.5 million initiative, targeting Africa, will be implemented over five years (2013-2018) and targets the scale up of promising food security results and innovations aimed at increasing agricultural productivity and improving nutrition.
- As part of Canada's commitment under the G-8 New Alliance for Food Security and Nutrition, Canada supports the **Consultative Group on International Agricultural Research (CGIAR)** (\$20 million, 2013-2015) and **HarvestPlus** for research on agriculture for improved nutrition and health including on agricultural technologies and research innovations, as well as best practices, to ensure that nutrition is fully integrated into the design of agriculture and to build public and private partnerships to disseminate and scale up the results of its research for maximum impact. Canada supports their efforts to **biofortify food**—breeding higher amounts of critical micronutrients such as iron, zinc and vitamin A into staple food crops such as wheat, rice and cassava. With support from Canada, HarvestPlus released three vitamin A enriched cassava varieties in cooperation with Nigerian authorities and began to deliver seeds and stalks of biofortified crops in Nigeria, Rwanda, and Zambia.
- The Canadian Food Security Research Fund (\$124 million, 2009-20) supports the development of improved agriculture techniques, some of which improve nutrition.
- Canada also supports research to improve impact assessment, such as the Nutrition Goggles – or **Portable Field Dark Adaptometer** – project (\$1.2 million, 2012-2014) at Johns Hopkins University (JHU). This initiative aims to validate the effectiveness of the innovative and inexpensive nutrition goggles to assess vitamin A deficiency, which could then be used to

³³ Please see the link below for additional information on CIFSRF. Available at:

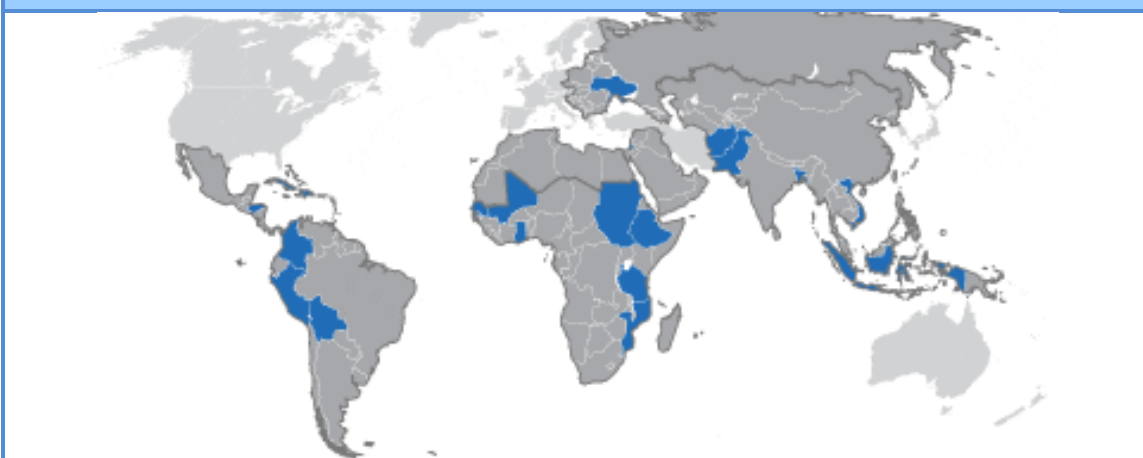
http://publicwebsite.idrc.ca/EN/Programs/Agriculture_and_the_Environment/Canadian_International_Food_Security_Research_Fund/Pages/About.aspx

³⁴ Project description and funding details can be found at: <http://www.acdi-cida.gc.ca/CIDAWEB/cpo.nsf/vLUWebProjEn/6D1C6CF9DB9E2CEF85257AA000376DC8?OpenDocument>

monitor impact in nutrition sensitive agriculture and other programs.

- The **Pan-Africa Bean Research Alliance (PABRA)** (2009-2013) (\$15,300,000) through International Center for Tropical Agriculture, focuses on improving bean crop production in order to increase the nutrition and food security of rural populations (with a focus on women and children).
- The **Support to Rice Research in Africa** (www.africarice.org) (2011-2015) (\$6,066,286) through Africa Rice Center (AfricaRice) project aims to help address the issue of rice production capacity in Africa by supporting local rice farmers, processors and marketers in applying new technologies and techniques for producing quality rice products. It is designed to use the findings of its applied research to influence national and regional policy affecting the African rice industry to ensure that agricultural policy considers the needs of all rice agricultural stakeholders, especially local farmers.

→ GEOGRAPHIC FOCUS



→ COUNTRIES & PROGRAMS

CIDA does not have a specific geographic focus for their nutrition programs, as they have programs in CIDA focus countries and also significant multilateral investments that support nutrition across a range of countries. Examples are:

Bangladesh	<ul style="list-style-type: none"> • In Bangladesh SUN convenors are the World Bank and USAID, with CIDA participating in a supportive role.
Bolivia	<ul style="list-style-type: none"> • Active Communities for Health of Mothers and Children through Plan Canada (2011-2017); \$13,530,000
Ethiopia	<ul style="list-style-type: none"> • Nutritious Maize for Ethiopia through International Maize and Wheat Improvement Center (CIMMYT) (2012 – 2017) \$11,557,000. • Productive Safety Net Program through World Food Program (2008-2013); \$125,550,000. • CIDA actively participates in the "Nutrition Development Partners Meeting (NDPM)", the national donors' policy dialogue forum currently chaired by UNICEF. • CIDA has been instrumental in advocating for the integration of gender equality in the revision of Ethiopia's National Nutrition Program (NNP), and has been providing technical resources to support this through the involvement of the CIDA Program Support Unit (PSU)-based Gender Advisor in the NNP revision working groups.
	<ul style="list-style-type: none"> • Reducing Maternal and Child Undernutrition through UNICEF (2012-2017); \$15,000,000 • Improve Food Security Through Cooperatives in Northern Ghana through Canadian Co-operative Association (CCA) (2013 – 2018); \$7,700,000. Improved Food Security in Northern Ghana; \$18,500,000. • As a "support" donor in Ghana's Scaling Up Nutrition Movement, CIDA has been active in

Ghana	<p>helping the GoG finalize its National Food and Nutrition Policy.</p> <ul style="list-style-type: none"> • CIDA is providing Technical Assistance to the Ministry of Food and Agriculture as a means to input into the National Food and Nutrition Policy and coordinates with other donors and stakeholders at national level fora to help ensure the policy is inclusive and comprehensive. • CIDA's new Maternal and Child Undernutrition Project also supports the Government of Ghana to implement the policy in conjunction with the REACH project.
Honduras	<ul style="list-style-type: none"> • Promoting Food Security in the Choluteca and Rio Negro Watersheds (PROSADE) through Care Canada (2010-2016); \$13,000,000. • Strengthening Food Security in the Poorest Municipalities (PESA); Food and Agriculture Organization of the United Nations (2011-2015); \$17,000,000. • Food Security in the Nacaome and Goascoran Watersheds through Oxfam-Québec (2010-2016); \$12,000,000.
Malawi	<ul style="list-style-type: none"> • Maziko Nutrition Foundations for Women and Children through Care Canada (2012 – 2015) \$6,500,000. • In Malawi in 2011-12, CIDA convened and Chaired the Donor Nutrition Security Group in Malawi to deepen dialogue and strengthen coordination amongst development partners on nutrition. • CIDA is actively involved in the Government of Malawi's SUN Task Force to support the rollout of the SUN in Malawi, and participates in the National Nutrition Committee and Community Management of Acute Malnutrition Technical Working Group. • CIDA is currently participating in a Joint Country Analysis exercise coordinated by resident Heads of Cooperation; the final document will include a chapter on nutrition.
Mali	<ul style="list-style-type: none"> • World Food Program –Food for Work – Infrastructure and Training through World Food Program (2012-2014); \$25,000,000 & (2010-2014); \$6,540,000 • CIDA, as a SUN donor convenor has been active in helping the Gov. of Mali finalize its National Nutrition Policy that was adopted in January 2013. • CIDA is financing also the UN REACH project and is proactive in the Policy Dialogue with other donors to support the Gov. of Mali to prepare and implement the multisectoral costed plan for nutrition.
Senegal	<ul style="list-style-type: none"> • Integrated Support to Food Security and Nutrition through World Food Program (2012-2015); \$20,000,000.

➔ KEY TECHNICAL INTERVENTIONS

Canada's thematic focus on Increasing Food Security focuses on:

- 1) **sustainable agricultural development** to build the capacity of smallholder farmers, agriculture-related organizations and governments and to support national and regional agricultural and food security strategies;
- 2) **food assistance and nutrition** to provide more flexible, predictable and needs-based funding to meet the emergency and long-term food and nutrition needs of the most vulnerable and higher-risk populations; and
- 3) **research and development** to broaden and deepen publicly available research that makes significant improvements to food security outcomes.

Nutrition development programming specifically focuses on scaling up direct nutrition interventions as well as adopting a multisectoral approach, in support of country plans and priorities. Through the multisectoral approach, Canadian support emphasizes nutrition in agricultural, **school feeding** and health programs.

In agriculture, this includes:

- support for **value chain development**, **crop diversification**, and **biofortification** to improve the vitamin and mineral content of food and **food safety**.

- Canada is also supporting the scale up of **nutrient-dense, high-quality food** and supplements to make them more available and accessible in the developing world.
- In addition CIDA supports **agricultural technologies, livelihoods, financial services, markets, land, and other natural resources** to improve **food and nutrition security**.

→ TARGETED POPULATION GROUPS

Canada's main targeted populations for nutrition sensitive agriculture include:

- smallholder farmers (especially in rural areas),
- women, with some focus on children under five years of age and
- most vulnerable and at risk populations.

Where possible, there is also an emphasis on the 1,000 days 'window of opportunity' especially pregnant and lactating women.

→ MONITORING & EVALUATION

Within nutrition sensitive agriculture, Canada is increasing its attention to indicators such as dietary diversity. However, traditionally, given the focus of agriculture programs, nutrition indicators were not necessarily included. Nutrition targets and indicators, such as child growth and anemia, are used much more in direct nutrition programming.

→ GENDER EQUALITY & WOMEN'S EMPOWERMENT

Canada recognizes that women are key to improving the living conditions of their families, nutrition, maternal health, and combating disease. Canada promotes the strengthening of women's equality by supporting women's empowerment through community-based food security programs, training, research and improved market access.

→ EMERGENCY & HUMANITARIAN ASSISTANCE

- Canada's supports partners to provide short-term food assistance responses to address the immediate dietary and nutritional needs of populations, particularly **refugees and internally displaced persons**, affected by natural disasters, crises or conflicts. CIDA's biggest partner in emergency food assistance programming is the World Food Programme which Canada supports institutionally and in a wide range of humanitarian crises.
- Canada also supports WFP to develop and employ innovative approaches to provide food assistance in emergency contexts through enhanced nutrition interventions, (such as the Right Food, Right Time initiative) and by procuring food from farmers to distribute in other locations in the country, while simultaneously building their **livelihood** capacity and local markets.
- Canada also provides significant assistance to the Canadian Food Grains Bank (CFGGB) which supports three types of international humanitarian and development activities: 1) the provision of **food assistance**; 2) **food security initiatives** to support efforts of households and communities to produce and source their own food; and 3) **cash-based nutrition programs**.

→ LESSONS LEARNED & KEY FUTURE INVESTMENTS

- Canada has learned that multisectoral, integrated national nutrition systems and programmes have the greatest potential to impact on household food and nutrition insecurity. Policy coherence, institutional coordination, and the need for synergies and complementarities among agriculture and food systems, health and care, education and employment policies should be emphasized.
- **For agriculture programs to improve nutrition**, explicit nutrition objectives, targets and indicators must be incorporated into the design and implementation of agricultural policies, projects, and investments. There needs to be improved methods to measure nutritional impact that agricultural investments have on nutrition. Focus needs to be given to not only increasing the production and access to foods but also its consumption, ensuring that the poor have access to adequate quantities of safe, good quality food for a nutritionally adequate diet. This includes not only energy, protein and fats but also micronutrients - the vitamins and minerals and other trace elements so necessary for normal growth and development. Evidence shows that household consumption and women's empowerment (including women's control of economic resources and education) are the two pathways linked most closely to nutritional status, and yield the greatest results in decreasing undernutrition.

→ KEY PUBLICATIONS & CONTACTS

- **Food Security Strategy**, 2009. Available at: [http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUIImages/Youth-and-Children/\\$file/food-security-strategy-e.pdf](http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUIImages/Youth-and-Children/$file/food-security-strategy-e.pdf)
- **Strengthening Canada's Contribution to Global Food Security Learning from Canadian Civil Society's Field Experiences A Discussion Paper** by the Canadian Food Security Policy Group, May 2011. Available at: <http://www.foodgrainsbank.ca/uploads/Strengthening%20Canada%27s%20Contribution%20EN.pdf>

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EUROPEAN UNION (EU)

→ STRATEGY & VISION

The European Union adopted a new policy for nutrition in March 2013, committing to reducing the number of stunted children by 7 million by 2025 and supporting efforts to reduce wasting through support to both nutrition-specific and nutrition-sensitive interventions. The EU supports partners' efforts in reducing undernutrition in short and long-term and across multiple sectors including agriculture.

→ SUPPORT

Nutrition is a strategy priority of the EU, especially in the area of global governance of nutrition. The EU plays an active role in the Scaling Up Nutrition (SUN) movement with Commissioner Piebalgs being a member of the SUN lead group and with support to the SUN Secretariat. The EU is an active member of the New Alliance for Food Security and Nutrition, a global commitment launched in 2012 by the G-8. The key strategic priority areas include that the EU, in close collaboration with its partners, will:

- 1) Support mobilization and political commitment for nutrition across sectors to support national efforts mobilize resources and ensure greater coherence amongst donors and overall international support;
- 2) Scale up actions at country level: strengthening human and institutional/system capacity, Increasing interventions specifically designed for nutrition in humanitarian and development settings and increasing nutrition-sensitive actions in humanitarian and development settings;
- 3) Strengthen knowledge and expertise on nutrition, through support for better information for decision making (information systems and applied research) as well as increased technical expertise and assistance for building capacity.

FINANCIAL SUPPORT OR INVESTMENTS

The European Union committed, without prejudice of the ongoing negotiations on the multiannual financial framework 2014-2020, the amount of €410 million for nutrition-specific interventions between 2014-2020 and at least €3.1 billion for nutrition-sensitive programs between 2014- 2020.

POLICY ADVICE

- At country level the EU is in policy dialogue with the Governments and supports the development and implementation of nutrition-sensitive national policies and strategies.
- The EU is supporting the Comprehensive Africa Agriculture Development Programme (CAADP) and supports the further inclusion of nutrition as one important pillar of the National Agricultural Investment Programmes (PNIAs).
- At global level, the EU promotes the enabling global environment for nutrition through its engagement in the G8/G20, the World Health Assembly (WHA), the Committee on World Food Security.
- The EU strives to ensure that nutrition is well reflected in the post-2015 development agenda and will continue to work towards stronger governance of nutrition internationally.

TECHNICAL ASSISTANCE PROGRAMS

The Commission has created a nutrition advisory service of experts, who provide advice to EC country delegations and project managers on identification, formulation and implementation of nutrition programs/projects/strategies as well as leading the policy dialogue.

APPLIED RESEARCH

The EU recognizes the crucial role of relevant and reliable information to inform decisions will continue to strongly support, in its external assistance, agricultural research to be more result-oriented and demand-driven, in order to enhance poverty reduction, food and nutrition security, and sustainable natural resource management. This includes a support to the Agriculture for Nutrition research programme of the CGIAR and various research programmes at regional level.

→ GEOGRAPHIC FOCUS

The EU supports nutrition-sensitive or specific activities in most of the developing countries, either through its humanitarian aid or its development programmes. The EU does not currently have information country by country easily available but is working on its elaboration and envisions presenting a first report on nutrition-sensitive and nutrition-specific activities by the next UN General Assembly. Specific focus countries are countries that are food insecure.

→ KEY TECHNICAL INTERVENTIONS

- The EU puts a strong emphasis on scaling-up both nutrition-sensitive and nutrition-specific interventions with the aim to improve nutrition in the 1000 days window of opportunity. The key technical area for nutrition-sensitive agriculture is food and nutrition security.
- The EU interventions on food and nutrition security focus on smallholder agriculture and rural livelihoods while improving access to quality, diverse, nutrient-dense food through:
 - improved diet (quantity and quality) — by increasing household consumption of own food produced and diversifying production;
 - reduced income poverty — by selling own produce or agricultural labour /employment — with a potential knock-on effect on the quality of the diet, access to health services and care;
 - empowerment of women as income-earners, decision-makers and primary childcare-providers;
 - lower food prices for consumers through increased food production and availability;
- Further details on the technical interventions for improving nutrition through agriculture are described in the Reference document 'Addressing Undernutrition in External Assistance: An Integrated Approach Through Sectors and Aid Modalities'
http://ec.europa.eu/europeaid/infopoint/publications/europeaid/252a_en.htm

→ TARGETED POPULATION GROUPS

- The EU focuses on small scale farmers, women farmers, in order to support the improvements in nutrition of women of reproductive age, pregnant and lactating women and children under five, focusing on the first 1,000 days-the period from pregnancy to the second birthday of a child.

- Special attention is paid to build the resilience of the most vulnerable populations suffering from undernutrition where institutional capacity is weak and frequent disasters or conflict have a devastating effect on the most vulnerable groups as it is the case in fragile countries.

→ MONITORING & EVALUATION

- The EU works with other donors, partner countries and scientific institutions to measure the impact of food and nutrition security interventions and in supporting greater accountability.
- The EU will contribute to the World Health Organization target to reduce stunting by 40%. The EU committed to contribute to the reduction of the number of stunted children under five by 7 million (at least 10%) by 2025 and to develop its accountability framework to measure and track progress between now and 2025.
- Also aligned with the WHA Global Target, the EU will contribute through its overall strategy to reduce and maintain childhood wasting to less than 5%.
- More specific indicators and metrics are currently under discussion.

→ GENDER EQUALITY & WOMEN'S EMPOWERMENT

- The EU has endorsed a Plan of Action for Gender Equality and Women's Empowerment in Development 2012-2015.
- The EU supports the promotion of gender equality and the empowerment of women in all sectors related to nutrition, recognizing women's economic, social, reproductive and domestic roles are all essential for food and nutrition security.
- The EU further supports gender-sensitive social protection policies and actions (e.g. targeting support to pregnant and lactating women to relieve their economic burden during the later stages of pregnancy and the breastfeeding period, or providing child care support to enable women to work).

→ EMERGENCY & HUMANITARIAN ASSISTANCE

- The 2012 EU Resilience Policy 'Learning from food security crises' (2012) aims to improve responses to crises through better action in emergencies and long-term approaches. The EU aims to ensure maximum complementarity and sequencing between humanitarian and development interventions in line with the principles of resilience. Working documents are Action Plan for Resilience in Crisis Prone Countries (2013) and addressing undernutrition in emergencies (2013).
- The European Commission's Humanitarian Aid and Civil Protection department (ECHO) (<http://ec.europa.eu/echo/>) provides support notably for nutrition-specific interventions, but also food assistance (cash, vouchers, in-kind), child and maternal healthcare and, water, sanitation and hygiene, to households who are particularly vulnerable to food insecurity and undernutrition.

→ LESSON LEARNED & KEY FUTURE INVESTMENTS

The EU incorporates lessons learned through its peer review system of quality support groups and through results oriented monitoring of projects.

Future investments in nutrition will be decided in the framework of the next programming exercise (2014-2020) which is now under preparation with partner countries and EU Delegations.

→ KEY PUBLICATIONS & CONTACTS

- Addressing Undernutrition in External Assistance: An Integrated Approach through Sectors and Aid Modalities. January 2011. Prepared by the European commission, France, Germany, Ireland, Poland and the United Kingdom. Available at:
http://ec.europa.eu/europeaid/infopoint/publications/europeaid/documents/252a_en.pdf
- Enhancing Maternal and Children Nutrition in External Assistance: an EU Policy Framework, The European Union Communication on a joint DEVCO and ECHO Policy. March 2013. Available at:
<http://europeanmemoranda.cabinetoffice.gov.uk/files/2013/04/7521-131.pdf>
- Addressing Undernutrition in Emergencies. Communication from the Commission to the European Parliament and the Council: Enhancing Maternal and Child Nutrition in External Assistance: an EU Policy Framework. March 2013. The European Commission Staff Working Document. This document sets the strategic priorities for DG ECHO in the nutrition sector. Available at: http://europeanmemoranda.cabinetoffice.gov.uk/files/2013/04/7521-13_ADD_1.pdf
- The EU Approach To Resilience: Learning From Food Security Crises. Communication From the Commission to the European Parliament and the Council. March 2012. Available at:
http://ec.europa.eu/echo/files/policies/resilience/com_2012_586_resilience_en.pdf
- European Commission Humanitarian Aid and Civil Protection. Nutrition Fact Sheet. June 2013. Available at:
http://ec.europa.eu/echo/files/aid/countries/factsheets/thematic/nutrition_en.pdf
- Aid to Nutrition. European Union institutions. April 2013. Available at:
<http://www.devinit.org/wp-content/uploads/European-Union-institutions1.pdf>
- EU Approach to Resilience: Learning from Food Crises, October 2012. Available at:
http://ec.europa.eu/europeaid/what/food-security/documents/20121003-factsheet_en.pdf
- European Commission Fact sheet: European Union Action on Nutrition in Development Cooperation, http://ec.europa.eu/europeaid/what/food-security/documents/nutrition_factsheet__11-3-13.pdf
- The EU's Long-term Action to Tackle Global Hunger and Undernutrition, 2012.
http://ec.europa.eu/europeaid/what/food-security/documents/food-security_fact_sheet_2012_en.pdf
- EU Plan of Action for Gender Equality and Women's Empowerment in Development 2012-2015. Available at:
http://ec.europa.eu/development/icenter/repository/SEC_2010_265_gender_action_plan_EN.pdf

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IRISH AID

→ STRATEGY & VISION

Ireland's new policy for international development, **'One World, One Future'**, launched in May 2013, continues to place the eradication of hunger at the centre of Ireland's overseas development programme. The 2008 Hunger Task Force Report highlights Ireland's priorities in reducing global hunger and malnutrition: promoting governance and leadership at both national and international levels, supporting poor smallholder farmers (particularly women) in Africa to increase their productivity, and targeting undernutrition in mothers and infants.

Ireland will continue to champion the Scaling Up Nutrition Movement and prioritize addressing maternal, infant and child undernutrition to prevent stunting. Within this context, Irish Aid supports opportunities to link agriculture and nutrition in policies and programs at all levels.

Ireland has met the target of investing 20% of the Irish Aid budget specifically on hunger and is committed to maintaining this in the coming years.

→ SUPPORT

Irish Aid promotes a multisectoral approach to nutrition, as advocated in the Hunger Task Force Report and the Scaling Up Nutrition Movement. This includes supporting the scale up of nutrition-sensitive agriculture programmes and supporting research on nutrition-sensitive agriculture approaches.

FINANCIAL SUPPORT OR INVESTMENTS

In 2013, the Government of Ireland pledged to double its nutrition efforts up to 2020 with an additional €130m for nutrition-specific and nutrition-sensitive programs and interventions. Irish Aid supports nutrition-sensitive agriculture through NGO, government, academic and international organizations, including as a sample, the following institutions/organizations:

- Irish Aid provides funding to support the operational costs of the SUN Secretariat in addition to contributing to a multi partner trust fund to support civil society platforms at country level, and M&E for the movement.
- At country level, Ireland supports the SUN Movement financially to coordinate across sectors and stakeholders by supporting the governments in Zambia, Malawi, Tanzania, Sierra Leone and Ethiopia.

POLICY ADVICE

- Ireland consistently advocates for the inclusion of nutrition-sensitive agriculture in EU positions and policies. Ireland's EU Presidency successfully delivered EU Council Conclusions on Food and Nutrition Security, which included clear references to supporting farmers to diversify to more nutritious produce.
- Ireland advocates for nutrition-sensitive agriculture within the International Financial Institutions, particularly the World Bank. Ireland advocated strongly for a focus on nutrition in the Bank's 2013-15 Agricultural Action Plan. In 2013 Ireland hosted a side event at the World Bank / IMF Spring Meetings together with Canada on Investing in Agriculture for Nutrition.

- Ireland is SUN donor co-convenor (with the US) in Tanzania and Malawi, and supports SUN processes in Ethiopia, Zambia and Sierra Leone. In Tanzania, Ireland is working with other donors to ensure the new agriculture sector development plan is nutrition-sensitive.
- Ireland supported IFPRI's Leveraging Agriculture for Nutrition conference in New Delhi in 2011, and led (together with USAID) the task team to convene a national conference on "Unleashing Agriculture's Potential for Improved Nutrition and Health" in Malawi.
- The Hunger and Nutrition Commitment Index (HANCI) (www.hancindex.org) has been produced by the Institute of Development Studies' (IDS) through funding by Irish Aid and UKAid and support from Transform Nutrition.

TECHNICAL ASSISTANCE PROGRAMS

- Irish Aid funds the Consultative Group on International Agricultural Research (CGIAR) research programme on agriculture, nutrition and health, which includes research on nutrition value chains, biofortification, agriculture-associated diseases and integrated agriculture-nutrition programmes.
- Irish Aid supports Helen Keller International (HKI) to work with rural households to diversify diets through household vegetable gardens and promotion of orange fleshed sweet potato.
- Irish Aid supports National Smallholder Farmer Association of Malawi (NASFAM) on a conservation agriculture programme in Malawi, which increases production of protein-rich legumes.
- Irish Aid funds CARE International in Vietnam that includes farmer training on pig raising, chicken raising, bee keeping and goat raising. A programme in Karamoja, Uganda, implemented by CARE and Oxfam promotes livelihood diversification to improve nutrition.
- Irish Aid supports Technoserv for a programme to build a competitive horticulture sector in Inhambane Province in Mozambique. The focus is on cashew, improved pineapple variety (MD2), and horticulture.
- Irish Aid supports Farmers Union of Malawi to promote bio-fortified and leguminous crops to reduce malnutrition among smallholder farmers in Malawi. The intervention concentrates on behavioural change in order to enhance adoption of nutritious crops among farmers in Malawi.
- Irish Aid supports Concern Worldwide (2012-2016) and their work, including the Realigning Agriculture to Improve Nutrition (RAIN) program to prevent malnutrition in young children by introducing a package of agriculture-based interventions to improve nutrition.
- Irish Aid provides core funding to International Fund for Agricultural Development. IFAD works to with poor rural populations in developing countries to eliminate poverty, hunger and malnutrition; raise their productivity and incomes; and improve the quality of their lives.
- Irish Aid supports closer linkages between UNICEF and the UN food agencies to promote a more integrated approach to addressing hunger, combining agricultural and nutritional interventions.
- Irish Aid has provided funding to London School of Hygiene and Tropical Medicine (LSHTM) for the development of a free online training module on nutrition sensitive agriculture.
- Irish Aid supports Farm Radio International to develop and broadcast radio programmes targeted at smallholder farmers. In Tanzania, the intervention is focused on vegetable production and in Uganda, it is focused on Quality Protein Maize.

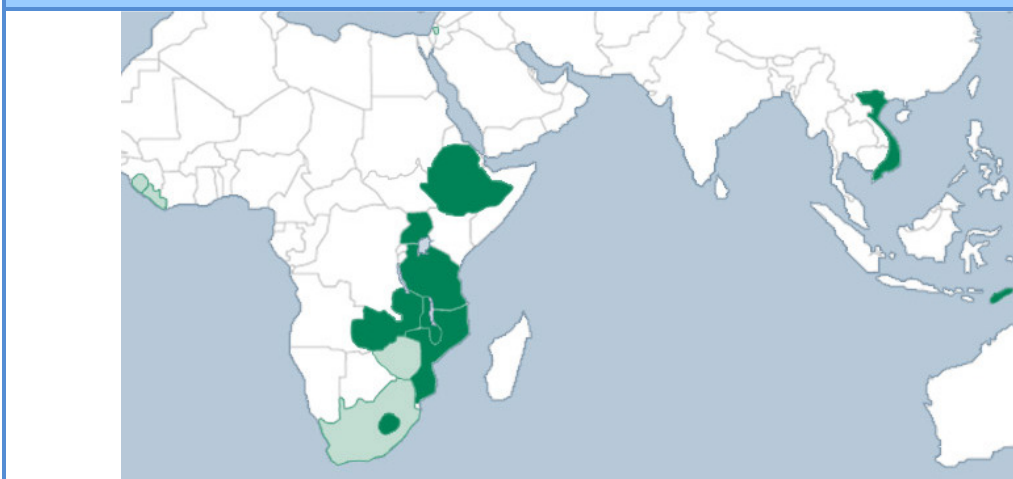
APPLIED RESEARCH

Irish Aid currently supports the Consultative Group on International Agricultural Research (CGIAR) through the CGIAR Research Proposal on Agriculture, Nutrition and Health; and the one on Climate Change, Agriculture and Food Security, as well as bilateral support to the International Centre for

Research in the Semi-Arid Tropics (ICRISAT), the World Agroforestry Centre (ICRAF), the International Potato Centre (CIP), the International Livestock Research Institute (ILRI) and the International Food Policy Research Institute (IFPRI).

In particular, the CGIAR Research Proposal on Nutrition aims to gather evidence on the links between agriculture and nutrition. Irish Aid supports applied research on protein-rich legumes in Malawi through ICRISAT, fruit trees in Malawi through ICRAF, Irish potatoes and Vitamin-A rich orange sweet potatoes in Ethiopia and Malawi through CIP, and dairy and livestock in Tanzania and Uganda through ILRI. Most of these country programmes contain a behavior change component to encourage increased consumption of nutritious food.

→ GEOGRAPHIC FOCUS



→ PRIORITY COUNTRIES & PROGRAMS

Ethiopia	Irish Aid's Country Strategy Programme for Ethiopia supports the expansion and promotion of potato and orange-fleshed sweet potato with the International Potato Centre in five districts of the Tigray region. Irish Aid supports Farm Africa in a programme to encourage diversification among smallholder farmers to poultry, bee-keeping, and fruit cultivation. Irish Aid hosted a retreat with key stakeholders in 2012 to explore the links between agriculture and nutrition.
Lesotho	Irish Aid's Country Strategy Programme for Lesotho supports Catholic Relief Services to increase sustainable food production through conservation agriculture, homestead gardens, managing local natural resources, and enhancing access to financial services; and to improve the maternal, child health and nutritional behaviours for vulnerable rural households through nutrition education.
Malawi	<p>Irish Aid is a SUN donor convener in Malawi. Irish Aid's Country Strategy Programme for Malawi (2010-2014) supports the Government of Malawi's Farm Inputs Subsidy Programme, which aims to increase access to improved inputs (fertilizer, maize seeds, legume seeds) to resource poor farmers, particularly women.</p> <ul style="list-style-type: none"> • Irish Aid support is focused on the provision of legume seeds. Irish Aid supports the International Centre on Research in the Semi-Arid Tropics (ICRISAT) to implement the Malawi Seed Industry Development Project which aims at enhancing seed multiplication (especially legumes), research and enhancing private sector development in seed systems. • Irish Aid supports the World Agroforestry Centre (ICRAF) to implement the Agroforestry Food Security Programme. The programme improves food and nutrition security through the integration of fertilizer trees, fodder trees, fruit and fuel wood

	<p>trees on farms.</p> <ul style="list-style-type: none"> • Irish Aid supports Concern Universal to implement Local Development Support Programme which places particular emphasis on small scale irrigation, agriculture diversification, and winter cropping and sustainable livelihoods in 4 districts, covering 135,000 people. • Irish Aid supports the promotion of Irish potato with the International Potato Centre (CIP). The programme aims at improving food and nutrition security through enhancing productivity, capacity, research and technology dissemination. Vulnerable smallholders, particularly women, are targeted. • Irish Aid provides support to the National Smallholder Farmer Association of Malawi (NASFAM) to promote conservation agriculture within smallholder farming systems. This includes the production of protein-rich legumes. The project targets about 52% women. • Irish Aid supports the Farmers Union of Malawi (FUM) towards the promotion of bio-fortified and leguminous crops to reduce malnutrition among smallholder farmers in Malawi. The intervention concentrates on behavioral change in order to enhance adoption of nutritious crops among farmers in Malawi.
Mozambique	<p>Irish Aid's Country Strategy Programme for Mozambique supports the Provincial Directorate of Agriculture in Inhambane province for productivity improvement and food security of small holder farms particularly women, through the sustainable provision of appropriate technological inputs; the promotion of conservation agriculture and diversification.</p> <p>Irish Aid supports small-holder farmer development and entrepreneurship in Inhambane Province through the two NGOs CARE International and Technoserve. A nutrition perspective is incorporated into both programmes. Irish Aid supports HKI on food fortification and orange fleshed sweet potato promotion.</p>
Sierra Leone	<p>Irish Aid's Programme in Sierra Leone supports nutrition and food security in line with their focus on the fight against global hunger and with the Government of Sierra Leone's Poverty Reduction Strategy, the 'Agenda for Change'.</p> <p>Irish Aid supported smallholder commercialization programs that promote crop intensification, production and diversification; and school feeding programs. Partners include the Food and Agriculture Organisation of the UN, the World Food Programme and UNICEF.</p>
Tanzania	<p>Irish AID is a SUN donor convener in Tanzania.</p> <ul style="list-style-type: none"> • Irish Aid's Country Strategy Programme for Tanzania (2011-2015) supports Commonwealth Agricultural Bureau International (CABI) to train farmers on seed production of African Indigenous Vegetables, which are rich in micronutrients. • Irish Aid supports Save the Children for an integrated agriculture and nutrition programme in the Lindi region. • At the national level, Irish Aid works with the Ministries of Health and Agriculture on nutrition-sensitive planning, hosts the Development Partners Group on nutrition and advocates for increased funding to nutrition and the inclusion of nutrition interventions in district health and agriculture plans, particularly interventions that target women and children. • Irish Aid is working to improve diet and nutritional practices at the household level through support for civil society and community organizations. • Irish Aid supports research institutions and pilot program initiatives that focus on crop diversification and the linkages between agricultural growth and nutrition.
Uganda	<p>Irish Aid's Country Strategy Programme for Uganda (2010-2014) supports a livelihoods programme in Karamoja led by Oxfam, which supports farmers to access animal health extension services, cereal banks and marketing services.</p>
Vietnam	<ul style="list-style-type: none"> • Irish Aid's Country Strategy Programme for Vietnam (2011-2015) supports Helen Keller International to improve the nutrition and micronutrient status of mothers and children under five using nutrition behavior change communication, agricultural training, and the production and consumption of micronutrient rich foods by

	<p>establishing homestead food production.</p> <ul style="list-style-type: none"> Irish Aid provides supported a livelihood project in Nghe An Province through CARE International for poor ethnic minority farmers. Technical training was provided through Farmer-field-school methods focusing on pig raising, chicken raising, bee keeping and goat raising.
Zambia	<ul style="list-style-type: none"> Irish Aid's Country Strategy Programme for Zambia (2012-2016) supports the SUN Partnership Fund in Zambia, which is a pooled fund to support district-level nutrition interventions in sectors such as Agriculture and Health. Irish Aid supports Concern to implement the Realigning Agriculture for Improve Nutrition (RAIN) programme, which aims to improve nutrition through greater integration of the agriculture and nutrition sectors. Irish Aid supports an agricultural livelihoods programme in the Northern Province through Self Help Africa, which helps poor households improve their nutrition through agricultural diversification and marketing.
→ KEY TECHNICAL INTERVENTIONS	
<p>Key technical interventions with focus on maternal, infant and child undernutrition to prevent stunting included:</p> <ul style="list-style-type: none"> maximizing agricultural productivity to sustain economic growth at the household and country levels and to tackle food & nutrition security, support of dietary diversification through support to smallholder farmers to produce more nutrient-dense crops, use of climate-resilient agricultural techniques and promotion of diversified livelihoods in rural areas. support to micronutrient food fortification. <p>In addition Irish Aid supports micronutrient supplementation, breastfeeding, improved care and feeding practices and targeted school feeding.</p>	
→ TARGETED POPULATION GROUPS	
<p>Key focus of Irish Aid's support to nutrition-sensitive agriculture is on :</p> <ul style="list-style-type: none"> Smallholder farmers, particularly women. <p>Irish Aid has a focus on tackling undernutrition in women and infants, particularly in the first 1,000 days between a woman's pregnancy and her child's second birthday.</p>	
→ MONITORING & EVALUATION	
<p>Data are generally used from countries DHS surveys, health information systems and nutrition surveillance. Indicators vary according to context. Reference EU Toolkit Ref Doc #13</p>	
→ GENDER EQUALITY & WOMEN'S EMPOWERMENT	
<ul style="list-style-type: none"> Irish Aid recognizes that women's empowerment is essential for improving food and nutrition security, in its new overseas development policy 'One World, One Future', in Ireland's Hunger Task Force Report and in two Irish Aid Guidance Notes on Gender and Agriculture; and Gender 	

and Nutrition.

- Gender-sensitive agriculture is one of three cross-cutting priorities of Irish Aid's support to smallholder agriculture (nutrition and climate being the other priorities).
- Irish Aid also recognizes that supporting women must be done in a way that does not increase the burden on women, and in a manner that respects traditional ways and social order.
- Irish Aid reports annually to senior management on efforts to advance gender equality and women's empowerment across the programme and results achieved.

→ EMERGENCY & HUMANITARIAN ASSISTANCE

- Irish Aid ensures that their humanitarian relief work is strongly linked with longer term efforts to tackle hunger and undernutrition, and continues to work hard to build sustainable, diverse and nutritious food systems in famine-prone parts of Africa.
- Examples of areas of influence have been in moving EU policy from a narrow focus on food aid to a broader understanding of food assistance and advocating for a broad understanding of resilience beyond food security.

→ LESSONS LEARNED

- Ireland promotes household food and nutrition security, with a focus on the diverse dietary needs of the population, and not just energy needs from staple crops.
- Appropriate nutrition indicators should be included in agriculture/food security programmes.
- Opportunities to link the agricultural and health sectors at local e.g., district level should be identified to foster integrated approaches.
- Nutrition-sensitive agriculture programmes should include a behavior change communication component to ensure producers are aware of the nutritional benefits of the food.
- Women's empowerment is a key element of improving household nutrition, both in reducing their workload to allow for adequate time for feeding/care practices, and to ensure they have the power to use household income to improve household nutrition.

→ KEY PUBLICATIONS & CONTACTS

- One World, One Future Ireland's Policy for International Development. 2013. Available at: <http://www.irishaid.gov.ie/about-us/policy-for-international-development/>
- Hunger Task Force: Report to the Government of Ireland. 2008. Available at: <http://www.irishaid.gov.ie/media/irishaid/allwebsitemedia/20newsandpublications/publicationpdfsenglish/hunger-task-force.pdf>
- Hunger Envoy Report. 2010. <http://www.irishaid.gov.ie/media/irishaid/allwebsitemedia/20newsandpublications/publicationpdfsenglish/hunger-envoy-report.pdf>
- Hunger, Nutrition, Climate Justice 2013: A New Dialogue: Putting People at the Heart of Global Development. Dublin, Ireland. April 15-16, 2013. Available at: <http://www.irishaid.gov.ie/media/irishaid/allwebsitemedia/30whatwedo/hncj-post-conference-report.pdf>

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→ COUNTRY CASE STUDIES	
MALAWI	ZAMBIA
<p>Unleashing Agriculture's Potential for Improved Nutrition and Health in Malawi. Irish Aid supported this conference in September 2011, to bring decision-makers and practitioners from the agriculture, nutrition, and health sectors together to unleash the potential for agriculture – as a supplier of food, a source of income, and an engine of growth – to sustainably reduce malnutrition and ill-health. Malawi was the first country to organize a national event to follow up on and translate the findings and recommendations from the global conference in New Delhi, India, and develop country-specific policy actions.</p> <p>http://www.ifpri.org/publication/unleashing-agricultures-potential-improved-nutrition-and-health-malawi</p>	<p>The Realigning Agriculture to Improve Nutrition (RAIN) programme, currently being implemented in Zambia is working to understand and address the underlying causes of malnutrition and improve household food availability and access. There is an emphasis on understanding how to link improved agriculture with better nutrition to focus on measureable improvements in nutrition, especially for pregnant mothers and children.</p> <p>http://www.ifpri.org/publication/toward-integrated-approach-addressing-malnutrition-zambia</p>

UNITED KINGDOM DEPARTMENT FOR INTERNATIONAL DEVELOPMENT (DFID)

→ STRATEGY & VISION

The Department for International Development (DFID) leads the UK's work to end extreme poverty. DFID aims ending the need for aid by creating jobs, unlocking the potential of girls and women and helping to save lives when humanitarian emergencies occur. In 2011, the UK's position paper on Scaling Up Nutrition committed DFID to reach 20 million children under five and pregnant women with nutrition relevant interventions. In addition, DFID programs aim to ensure another 4 million people have enough food throughout the year by 2015.

DFID's nutrition sensitive approach involves adjusting and re-designing programs across a range of sectors, for example, agriculture, health, water and sanitation and cash transfer programs to ensure that they deliver nutrition results.

→ SUPPORT

In 2013, at the G8, the UK announced its focus on expanding and deepening the impact of the 'New Alliance for Food Security and Nutrition'³⁵ in particular to improve nutrition and empower women. The UK is a key donor partner of the Scaling Up Nutrition movement, and a SUN donor convener in Ethiopia, Nigeria, Pakistan and Zambia.

FINANCIAL SUPPORT OR INVESTMENTS

- On 8 June 2013, the UK announced significant new commitments at 'Nutrition for Growth: Beating Hunger through Business and Science'. Besides its commitment to triple its investment in nutrition-specific programmes, the UK also committed to increase the proportion of spending in relevant sectors that are nutrition-sensitive by 8 percentage between 2013 and 2020, equivalent to over GBP 600 million (or USD 900 million) in total. For more information on UKAid funding consult UKaid dashboard tracker (<http://devtracker.dfid.gov.uk>).
- In addition the UK committed to the launch of new business and science initiatives, including the launch of a 'Global Panel on Agriculture and Food Systems for Nutrition', to provide global research and policy leadership on nutrition-sensitive agriculture.
- The UK also provides support to the scale up of fortified staple foods in Zambia and Tanzania that will reach millions.
- The UK supports the 'Global Agriculture and Food Security Program (GAFSP)' a multi-donor fund set up to help ensure that the global commitments on food and hunger made by the G20 in 2009 are delivered in an efficient and cost-effective manner. It aims to improve agricultural productivity in developing countries and to increase farmers' access to markets whilst increasing the economic resilience of poor people globally. UK's investment in this is GBP 76 million over 2011-2015.

POLICY ADVICE

³⁵ The New Alliance, set up under the US Presidency in 2012, aims to improve food security, farming and agribusiness across Africa in order to help pull 50 million people out of chronic poverty over 10 years. In its first year, more than 50 companies agreed to invest \$3 billion in agriculture in Africa and to sign up to a new code of responsible investment.

Key policy areas on nutrition sensitive agriculture include:

- Support for international political leadership for nutrition-sensitive approaches to make international actors and institutions more supportive of national efforts to tackle undernutrition, through the Scaling Up Nutrition movement, DFID's engagement with G8 and European partners, pushing the UN to deliver better results, and supporting southern civil society organizations to seek more accountability for nutrition outcomes.

APPLIED RESEARCH

The focus areas of DFID support to research include:

- Improving the evidence base on nutrition-sensitive development; support for nutrition-sensitive agriculture research, for example through the development and delivery of biofortified crops such as Vitamin A-enriched orange fleshed sweet potato and new vegetable varieties with high nutritional content suitable for home gardening; support for food fortification, research and roll out of biofortified foods (e.g. orange flesh sweet potato),
- Improving capacity building for development professionals through support of distance learning course e.g. "Programming for Nutrition Outcomes" which is an Open Educational Resource available at the London School of Hygiene and Tropical Medicine.

DFID recently conducted a Mapping and Gap Analysis on "Current and Planned Research on Agriculture for Improved Nutrition"³⁶, that demonstrates that much of the ongoing research does not adequately measure the impacts of agriculture on nutrition outcomes.

- DFID supports research on linkages between nutrition and agriculture including the Global Panel on Agriculture and Food Systems for Nutrition launched at the Nutrition for Growth event in June 2013. The Global Panel will review emerging research evidence on agriculture and food systems and provide global leadership for investments and policies in nutrition-sensitive agriculture, accelerating progress in tackling undernutrition.
- DFID supports the Consultative Group on International Agricultural Research (CGIAR) and their system level objectives to generate policy and technology that will directly support better nutritional health outcomes for the poor. DFID supports CGIAR research programs including Agriculture for Nutrition and Health (www.a4nh.cgiar.org).
- DFID supports the Leveraging Agriculture for Nutrition in South Asia (LANSA) program that aims to answer the question "how can South Asian agriculture and related food policies and interventions be designed and implemented to increase their impacts on nutrition, especially of children and adolescent girls?" The program works in Afghanistan, Bangladesh, India and Pakistan.
- DFID supports the International Food Policy Research Institute (IFPRI) work on linkages between child stunting and aflatoxin through a randomized control trial in Kenya.
- DFID supports the World Vegetable Centre which implements programs on home gardens and dietary diversification.
- DFID supports the International Potato Centre and their scale up of nutritionally improved Orange Fleshed Sweet Potatoes (OFSP) to 1.2 million farming households in Mozambique, Malawi, Rwanda and Kenya. Development of OFSP-based processed products and foods accessible to at least 400,000 urban and rural consumers.
- DFID supports HarvestPlus, a CGIAR challenge program on the fortification of food crops to help reduce micronutrient malnutrition. DFID support will enable the delivery of at least 6 new crop

³⁶ Available at:

http://r4d.dfid.gov.uk/pdf/outputs/misc_susag/LCIRAH_mapping_and_gap_analysis_21Aug12.pdf

varieties to 3 million farming households in 7 countries in Africa and Asia.

- DFID supports 'mNutrition Initiative/Mobile for Development' a business-science partnership to develop and scale up the delivery of nutrition and agriculture related services using mobile phone based. DFID funds will enable the mNutrition initiative to reach the rural population of 10 countries in Africa and 4 in South Asia.
- DFID supports Innovative Metrics and Methods for Cost-Effective Agriculture and Nutrition Programming to stimulate innovation in methods to assess impact of agriculture on human nutrition/health, including the development of novel indicators and metrics.
- DFID is also supporting the program 'Tackling The Neglected Crisis of Undernutrition (Transform Nutrition Research Programme Consortium)' to accelerate reduction in undernutrition in 8 high burden focus countries. (GBP 6 million; 2011-2017) (<http://r4d.dfid.gov.uk/Project/60847/Default.aspx>). The research will strengthen the content and use of nutrition-relevant evidence to accelerate undernutrition reduction through this next decade in the two highest burdened regions-Southern Asia and Eastern Africa. Key research questions for nutrition-sensitive agriculture include: How can social protection, agriculture, and women's empowerment interventions have a greater impact on improving nutrition during the window of opportunity? How can an enabling environment be promoted, and existing and enhanced political and economic resources be used most effectively to improve nutrition?
- DFID supports research that improves information and analysis of food and nutrition insecurity through the 'Life in a Time of Food Price Volatility' Oxfam project (<http://policy-practice.oxfam.org.uk/our-work/food-livelihoods/food-price-volatility-research>). This four-year (2012-2015) research project monitors the impacts of, and responses to, volatile food prices in poor communities in ten developing countries.

TECHNICAL ASSISTANCE PROGRAMS

- The Maximizing the Quality of Scaling Up Nutrition Programmes (MQSUN) (<http://r4d.dfid.gov.uk/Project/61074/Default.aspx>) is a DFID call down contract to provide technical expertise to DFID country offices and the Scaling Up Nutrition movement for the design and implementation of effective nutrition programmes, including nutrition-sensitive technical assistance, drawing on the best available evidence.
- Programming for Nutrition Outcomes is a free open-access educational resource, supported by the DFID available on the London School of Hygiene and Tropical Medicine website (<http://ble.lshtm.ac.uk/course/view.php?id=26>). It is a Master's-level module which has been designed to explore the complicated problem of undernutrition, highlight its multi-sectoral causes and identify potential programmatic solutions: there are specific nutrition-sensitive modules, including Food Strategies for Enhanced Nutritional Status, Dietary Diversification and Biofortification, Agriculture and Nutrition.

→ GEOGRAPHIC FOCUS

The UK's geographical programmatic focus is predominately Africa (East, Central and Southern Africa) and Southern Asia). DFID has an interactive database with project information at: <http://projects.dfid.gov.uk/>

The research activity on agriculture and nutrition linkages focuses on Sub-Saharan Africa and South Asia and the development of global public goods in rural areas. The funded research is organized through multi-countries programmes (listed in section below)

The main multi-countries programmes are:

- **Leveraging Agriculture for Nutrition in South Asia (LANSA):** Afghanistan, Bangladesh, India (in the contrasting states of Bihar, Madhya Pradesh, Orissa and Tamil Nadu), and Pakistan. (<http://www.ifpri.org/book-741/node/9126>)
- **HarvestPlus:** Africa (DRC, Nigeria, Rwanda Uganda, Zambia) and Asia (Bangladesh, India, Pakistan) <http://www.harvestplus.org/>
- **mNutrition:** Africa (Cote d'Ivoire, Ghana, Malawi, Mozambique, Nigeria, Tanzania, Kenya, Rwanda, Uganda, Zambia) and Asia (India, Pakistan, Sri Lanka and Bangladesh).

→ PRIORITY COUNTRIES & PROGRAMS³⁷

DFID has an interactive database with project information at: <http://projects.dfid.gov.uk/>

Afghanistan	DFID is supporting Leveraging Agriculture for Nutrition in South Asia (LANSA), (2012-2017)
Bangladesh	<ul style="list-style-type: none"> • DFID is strengthening the nutritional impact of three poverty programs (-Economic Empowerment of the Extreme Poor Program, -Chars Livelihood Program, and -Urban Partnership for Poverty Reduction) by integrating delivery of nutrition- specific interventions reaching adolescent girls, pregnant women and children under the age of five to enhance the nutritional impact of the livelihood interventions that include asset transfers, cash transfers, training, water and sanitation support and income generation. • DFID supports Leveraging Agriculture for Nutrition in South Asia (LANSA), (2012-2017), • HarvestPlus: (2012-2014) and • mNutrition initiative (2013-2018).
Democratic Republic of Congo	<ul style="list-style-type: none"> • DFID supports HarvestPlus (2012-2014)
Ethiopia	<ul style="list-style-type: none"> • DFID is a SUN donor convener in Ethiopia. • DFID supports the Productive Safety Net Programme (PSNP) which provides cash and food to nearly eight million of the very poorest people and aims to strengthen their livelihoods and access to credit and links producers to markets.
Ghana	<ul style="list-style-type: none"> • DFID supports mNutrition Initiative (2013-2018).
India	<ul style="list-style-type: none"> • DFID is supporting India to scale up a national nutrition cash transfer and launched the South Asia Food and Nutrition Security Initiative (SAFANSI) with the World Bank. • DFID provides support to improve the ability of frontline health and nutrition workers to integrate core hygiene-related health activities in their day-to-day work. • DFID supports Leveraging Agriculture for Nutrition in South Asia (LANSA), (2012-2017). • DFID also supports mNutrition Initiative (2013-2018).
Kenya	<ul style="list-style-type: none"> • DFID supports mNutrition Initiative (2013-2018) and • the IFPRI study on aflatoxin and links to child stunting (2012-2015).
Malawi	<ul style="list-style-type: none"> • DFID is supporting nutrition indirectly through support to agriculture with affordable legume seed (helping to diversify farmers diets and incomes), and providing at least 6-10,000 urban poor households with low cost milk through a pilot dairy marketing project.
Mozambique	<ul style="list-style-type: none"> • DFID is supporting the Harvest Plus Program.
Nigeria	<ul style="list-style-type: none"> • DFID is a SUN donor convener in Nigeria. • DFID supports the HarvestPlus.
Pakistan	<ul style="list-style-type: none"> • DFID is a SUN donor convener in Pakistan. • DFID supports Leveraging Agriculture for Nutrition in South Asia (LANSA), (2012-2017), • HarvestPlus (2012-2014) and • mNutrition Initiative (2013-2018).
Rwanda	<ul style="list-style-type: none"> • DFID supports HarvestPlus (2012-2014) and mNutrition Initiative (2013-2018).

³⁷ Budgets are “basic nutrition aid” from Top recipients of nutrition and food ODA disbursements (2009–2011 average). Source: DAC CRS dataset. Accessed February 2013

Sri Lanka	<ul style="list-style-type: none"> • DFID supports mNutrition Initiative (2013-2018).
Uganda	<ul style="list-style-type: none"> • DFID supports HarvestPlus (2012-2014) and mNutrition Initiative (2013-2018).
Zambia	<ul style="list-style-type: none"> • DFID is a SUN donor convener in Zambia. • DFID supports HarvestPlus that addresses micronutrient deficiencies such as vitamin A and zinc by introducing biofortified staple crops, including efficacy trials. • DFID supports mNutrition Initiative (2013-2018).

→ KEY TECHNICAL INTERVENTIONS

DFID focuses on the following key areas for technical interventions:

Agricultural inputs, especially agricultural technologies (including time and labor saving technologies for women), biofortification, food fortification, post-harvest handling management, natural resource management, behavior change communication and nutrition education; and support for monitoring and evaluation for nutrition –sensitive agriculture.

→ TARGETED POPULATION GROUPS

Priority targeted populations for nutrition-sensitive agriculture includes:

- smallholder farmers, consumers and agriculture extension workers while prioritizing pregnant women and young children under the age of five at risk of undernutrition.

→ GENDER EQUALITY & WOMEN'S EMPOWERMENT

- The UK is committed to putting girls and women at the centre of their development assistance as laid out in the New strategic vision for women and girls (DFID, 2011).
- The UK is leading on five priority areas to put women's empowerment at the heart of nutrition-sensitive agriculture and promote women's economic empowerment through the New Alliance including:
 - Linking women scientists to women farmers, creating a special facility to provide loans to women farmers, developing a fund or program for women to access quality farm inputs, incentivize businesses to buy commodities from women farmers and provide greater support for women-owned agribusinesses.

→ EMERGENCY & HUMANITARIAN ASSISTANCE

- DFID leads the UK government's response to humanitarian emergencies in developing countries. Further information on emergency and humanitarian assistance can be found on the DFID project database.
- In DFID's response to its Humanitarian Emergency Response Review, the UK committed to making resilience a core part of the work of all our country offices, and to play international leadership on this important area of work. Resilience will be embedded in all DFID country programs by 2015.

→ LESSONS LEARNED & KEY FUTURE INVESTMENTS

DFID will continue to review the evidence base and scale up its investments in nutrition –sensitive

investments including agriculture to 2020.

→ KEY PUBLICATIONS & CONTACTS

- Scaling Up Nutrition: The UK's Position Paper on Undernutrition. September 2011. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/67466/scal-up-nutr-uk-pos-undernutr.pdf
- An Update of the Neglected Crisis of Undernutrition: Evidence for Action'. Available at: www.gov.uk/government/uploads/system/uploads/attachment_data/file/67319/undernutrition-finalevidence-oct12.pdf, October 2012.
- Promoting Innovation and Evidence-Based Approaches to Building Resilience and Responding to Humanitarian Crises: A DFID Strategy Paper. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/67438/prom-innov-evi-bas-appr-build-res-resp-hum-cris.pdf.
- Current and Planned Research on Agriculture for Improved Nutrition: A Mapping and a Gap Analysis. A report for DFID. Leverhulme Centre for Integrative Research on Agriculture and Health (LCIRAH) and Centre for Sustainable International Development, University of Aberdeen. Lead authors: Corinna Hawkes, Rachel Turner, Jeff Waage. August 2012. Available at: http://r4d.dfid.gov.uk/pdf/outputs/misc_susag/LCIRAH_mapping_and_gap_analysis_21Aug12.pdf
- Overview of DFID's work approaches are set out on the UK government's website: Reducing Hunger and Malnutrition in Developing Countries. August 2013: Available at: <https://www.gov.uk/government/policies/reducing-hunger-and-malnutrition-in-developing-countries>

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THE WORLD BANK

→ POLICIES / STRATEGIES / MANDATE

The World Bank promotes long-term economic development and poverty reduction by providing technical and financial support to help countries reform particular sectors and/or implement specific projects³⁸.

Although improving food security has been a long term, implicit goal of Bank efforts to improve the resilience of agricultural systems and rural livelihoods, the Bank's agriculture portfolio has worked predominantly on only the availability and accessibility aspects of food security. Some past strategies have presented food and nutrition security as focus areas but they were not adequately followed through. However, the Bank's current Agriculture Action Plan or AAP (FY 2013-2015) includes nutrition as one of seven emerging areas of emphasis alongside the core business lines which are as follows:

1. Raise Agricultural Productivity
2. Link Farmers to Markets and Strengthen Value Chains
3. Facilitate Rural Non - Farm Income
4. Reduce Risk, Vulnerability, and Gender Inequality
5. Enhance Environmental Services and Sustainability

The current AAP also includes "increasing the share of agriculture projects with an explicit focus on nutrition" as a Key Action. As such, beginning with its FY2012 portfolio, the Bank is currently committed to reviewing all approved agriculture projects in terms of nutrition sensitivity³⁹.

→ COUNTRY SUPPORT

FINANCIAL SUPPORT OR INVESTMENTS

1. As part of their **commitments in the AAP**, agriculture investments are screened for opportunities to include nutrition through the Bank's standard due diligence process. In some cases in Africa, South Asia, and Latin America, there are dedicated staff in the agriculture units that serve as focal points for nutrition to lead mainstreaming efforts.
2. Beyond the Bank's core budget, some trust funds for agriculture activities focus on funding nutrition sensitive agriculture. One example is the **Global Agriculture and Food Security Program (GAFSP)**. Established in 2010, GAFSP is a multi-donor initiative to competitively fund country implemented activities to improve agriculture and food security. Projects in the current GAFSP portfolio include ones with activities that explicitly address nutrition (please see Nepal country example, below). The World Bank hosts the Trustee and the Coordination Unit for GAFSP.

POLICY ADVICE

³⁸ <http://www.imf.org/external/np/exr/facts/imfwb.htm>

³⁹ Tanimichi Hoberg, Y (2013). *The World Bank's Approach to Mainstreaming Nutrition in Agriculture* [Power Point slides]. ICN2 Preparatory Technical Meeting, Rome, November 14, 2013.

Secure Nutrition is a Bank-funded virtual platform whose primary objective is narrowing knowledge gaps regarding nutrition sensitive service delivery and M&E within agriculture. Secure Nutrition aims to influence Bank projects as well as contribute to global knowledge and the public good. The platform's core staff is multisectoral, comprised of personnel from agriculture, nutrition, and the Bank's Poverty Reduction and Equity Group. One rationale for the multisectoral makeup of Secure Nutrition is to facilitate "silo breaking" within the Bank. However Secure Nutrition is also reaching beyond the Bank to facilitate information exchange and dialogue with CSOs, academic research institutions, and bilaterals. The platform currently has 14 partner organizations in addition to the Bank⁴⁰.

One important Secure Nutrition knowledge product is **Improving Nutrition through Multisectoral Approaches**. Published in 2012, this report provides operational guidance on how to mainstream nutrition into agriculture, social protection and health-based projects to maximize the impact of Bank investments on nutrition outcomes for women and young children. Although targeted first and foremost to Bank field staff, the findings of this report are also relevant to external programming efforts.

The **LAC Nutrition Beam** serves a similar function as Secure Nutrition but is region specific. A knowledge platform for development practitioners working in Latin America and the Caribbean, the Nutrition Beam sponsors seminars and other events on value chains and other topics relevant to increasing the nutrition sensitivity of Bank investments and initiatives in LAC.

The **South Asia Food and Nutrition Security Initiative (SAFANSI)** is a multi-donor trust fund that supports linking food security and nutrition in the South Asia region through three broad program areas:

- Analysis: improving evidence and analysis on the most cost effective ways to achieve food and nutrition security in South Asia.
- Advocacy: improving awareness of food and nutrition security-related challenges, and advocacy for action amongst relevant stakeholders.
- Capacity Building: strengthening regional and in-country policy and programming capacity to achieve food and nutrition security outcomes⁴¹.

The ultimate objective of SAFANSI is to increase the commitment of governments and development partners to more effective and integrated food and nutrition-related policies and investments. For example, SAFANSI's **Multisectoral Simulation Tool (MST)** aims to help countries understand how different types of interventions at varying scales are likely to impact nutritional outcomes and the cost of reaching their nutrition goals. The MST uses a causal model that links multisectoral interventions to nutritional outcomes. It allows users to determine what time, money, and effort is required to operate a given intervention at a desired scale. To date, the MST has been piloted in Bangladesh. However SAFANSI currently has programs in Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka⁴².

As mentioned above, the Bank's current AAP includes increasing the share of agriculture projects with an explicit focus on nutrition" as a Key Action. As such, beginning with its FY2012 portfolio, the Bank has committed to reviewing all approved agriculture projects in terms of nutrition sensitivity. Initial results show 12 percent of all FY12 and 10 percent of all FY13 (to date) agriculture projects

⁴⁰ <http://www.firstpost.com/topic/organization/world-bank-interview-yurie-tanimichi-hoberg-at-the-gcard2-video-1yAZdjnYEVE-959-1.html>.

⁴¹ World Bank. 2013. Improving Nutrition through Multisectoral Approaches. Washington DC: World Bank

⁴² <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/0,,contentMDK:22818531~pagePK:146736~piPK:146830~theSitePK:223547,00.html#obj>

included an explicit focus on nutrition. Examples are support to and technical assistance in community-based nutrition education, food safety initiatives, nutrition modules in extension services, and dissemination of biofortified crops⁴³.

Although the Bank aims to exceed this baseline, there is no figure available regarding a target number. This is largely due to the fact that investments by the Bank are loans (not grants) and thus are demand-driven and cannot be pre-determined.

→EXAMPLE COUNTRY & PROGRAM

Nepal	Nepal Agriculture and Food Security Project (GAFSP) 2013-2018 Support to production of nutritionally significant crops Integration of nutrition into extension curriculum Support to household small livestock and poultry production Support to household kitchen gardens Home economics training, nutrition education, behavior change communication Promotion of women-friendly labor saving technologies
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→TARGETED POPULATION GROUPS

Smallholder farmers are the primary target population of Bank-funded agriculture projects due to their strong focus on poverty reduction. However, as part of the broader institutional effort to encourage nutrition sensitivity, Bank TTLs (team task leaders) working in agriculture are currently encouraged to include the following considerations in their project design:

- Which population groups suffer most from malnutrition in the country or region where the project will be operating? Is it reasonable to expect that the project could reach one or more of these groups?
- How is the project expected to influence gender-specific time demands? Are time demands for women likely to reduce time for child care? If so, can additional time demands be offset with labor-saving technologies for women?
- Who in the household is most likely to control how the additional income is spent? Can project design be adjusted to increase women's discretionary income?
- Do farmers reside close enough to markets that they would reasonably be expected to use income to purchase most of their dietary components? If not, is there anything the project could do to improve access to diverse diets, especially for women and young children, e.g., diversified production, improved infrastructure?
- Is the agriculture project targeted in the same geographic area as other health, water and sanitation, and social protection programs, which are also important for reducing malnutrition? If yes, is it feasible to encourage agriculture, health, and social protection staff to consider joint supervision and monitoring visits?⁴⁴
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⁴³ Tanimichi Hoberg, Y (2013). *The World Bank's Approach to Mainstreaming Nutrition in Agriculture* [Power Point slides]. ICN2 Preparatory Technical Meeting, Rome, November 14, 2013.

⁴⁴ World Bank (2013). *Improving Nutrition through Multisectoral Approaches*. The World Bank: Washington DC.

→MONITORING & EVALUATION

Almost all Bank-funded agricultural projects consider women's participation in some project funded activities as an indicator of gender equity. Gender disaggregated data may be collected in any aspect of project funded activities including: agricultural technology, provision of inputs, strengthening of producer or water user associations, and land administration⁴⁵.

TTLs are also encouraged to use food consumption indicators (e.g. Dietary Diversity Scores) to monitor and evaluate nutrition outcomes of agricultural projects.⁴⁶

→GENDER EQUALITY & WOMEN'S EMPOWERMENT

The Bank has been promoting gender equality in development since 1977. More information on gender mainstreaming in Bank-funded agriculture projects as well as in other types of programming is available at the Bank's [gender website](http://www.worldbank.org/en/topic/gender).⁴⁷

→EMERGENCY & HUMANITARIAN ASSISTANCE

Although most agriculture-based projects funded through the **Global Food Crisis Response Program (GFRP)** did not include an explicit nutrition component, many of its activities can be seen as "nutrition-related", including: food-for-work programs, school feeding programs, and provision of basic nutrition services to vulnerable populations. GFRP is almost fully allocated and will close in 2015.

→KEY PUBLICATIONS & CONTACTS

From Agriculture to Nutrition: Pathways, Synergies and Outcomes

<http://siteresources.worldbank.org/INTARD/825826-1111134598204/21608903/January2008Final.pdf>

Leveraging Agriculture for Improving Nutrition and Health

www.ifpri.org/sites/default/files/publications/oc66.pdf

Global Monitoring Report 2012: Food Prices, Nutrition, and the Millennium Development Goals

<http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1327948020811/8401693-1327957211156/8402494-1334239337250/Overview.pdf>

Prioritizing Nutrition in Agriculture and Rural Development: Guiding Principles for Operational Investments.

http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2012/12/05/000386194_20121205024326/Rendered/PDF/NonAsciiFileName0.pdf

⁴⁵ Ibid

⁴⁶ Ibid.

⁴⁷ <http://www.worldbank.org/en/topic/gender>

Improving Nutrition Through Multisectoral Approaches Agriculture and Rural Development.
http://search.yahoo.com/r/?ylt=A0oG7IZL2ndRfTcAettXNyoA; ylu=X3oDMTE1OWVyNmoyBHNIYwNzcgRwb3MDMwRjb2xvA2FjMgR2dGIkA01TWTawNV8xMTk-/SIG=14q1pi4i9/EXP=1366837963/**http%3a//www.securenutritionplatform.org/Documents/Improving%2520Nutrition%2520through%2520Multisectoral%2520Approaches_full%2520doc.pdf

Improving Nutrition through Multisectoral Approaches:
<https://www.securenutritionplatform.org/Pages/DisplayResources.aspx?RID=151>

Implementing Agriculture for Development. World Bank Group Agriculture Action Plan 2013-2015
http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2013/05/23/000333037_20130523100445/Rendered/PDF/779110WP0Ag0Ac0than0the0Board0paper.pdf

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Yurie Tanimichi-Hoberg, Leslie Elder



Action Against Hunger – ACF International

→ SUMMARY

Action Against Hunger (ACF) is an international humanitarian agency dedicated to fighting hunger in a needs-based, context-specific, community-based, participatory manner. ACF integrates activities in emergency nutrition, longer-term food security, and water, sanitation & hygiene. To tackle the underlying causes of hunger, we address a range of social, organizational, technical, and resource concerns essential to a community's well-being. (<http://www.actionagainsthunger.org/>)

→ SUPPORT

ACF provides both short term assistance in crises with distribution of food, cash and other aid to prevent hunger. In the long term, it functions to prevent hunger by assisting in replanting of crops and restocking livestock. ACF provides seeds and tools for agricultural recovery, veterinary and livestock assistance, and small business assistance.

POLICY ADVICE

ACF's main policy advices on nutrition-sensitive agriculture for both countries and international actors (donors, international institutions) can be found in the 'recommendations' part of the 2013 report "Sowing the Seeds of Good Nutrition" (available <http://www.actioncontrelafaim.org/en/content/seeds-of-good-nutrition>; the report - http://www.actioncontrelafaim.org/sites/default/files/publications/fichiers/sowing_the_seeds_of_good_nutrition_acf_0.pdf, its executive summary and the 3 country case studies on which it is built can be found at the bottom of the page)

Summary of the main recommendations:

- Prioritizing the nutrition goal within agricultural policies and programmes
- Incorporating nutrition and food consumption indicators into agricultural information and monitoring systems
- Strengthening policy coordination around nutrition
- Ensuring nutrition training opportunities for agriculturalists
- Increasing the level of funding for the implementation of nutrition-sensitive agriculture strategies and programmes

Refer as well to : ACF, 2013, *Aid for Nutrition: Maximising the impact of nutrition sensitive interventions*: <http://www.actionagainsthunger.org.uk/mediaroom/latest-news/broadening-the-scope-of-nutrition-action/>

On a more practical side, Action Contre la Faim / ACF International published in July 2011, a guideline, *Maximising the Nutritional Impact of Food Security and Livelihoods Interventions, A manual for field workers*, aiming at providing practical guidance to country teams (<http://www.actioncontrelafaim.org/fr/content/maximising>). This manual promotes mainstreaming nutrition into the standard FSL activities and practices, by increasing collaboration between sectors, and to raise awareness of humanitarian practitioners on the impact they can have on nutrition by implementing nutrition-sensitive interventions and by promoting adequate nutrition practices. It promotes the systematic use of a 'nutrition lens' at each step of the project cycle and a close

collaboration between sectors. It also emphasizes the need to dispel the myth that economic growth and agricultural development in particular equals automatically improved nutritional status.

Through the production and dissemination of this practical guidance manual to field practitioners, but also policy makers, ACF aims at sharing lessons learnt and best practices to maximise impact of food security and livelihoods programming.

Organisation and core content of the manual

- **Section 1** outlines the basics of undernutrition, and explains the interlinkages and synergies between FSL and nutrition.
- **Section 2** provides simple and practical guidance on how to adopt and promote nutrition-sensitive practices and interventions following the different steps of the project cycle, around 8 main recommendations. It is written using **bullet points, and key messages are highlighted to ensure easy access and enable quick reading**. Links to **web pages and suggested reading** are provided at the end of each chapter, and **boxes provide tips and concrete examples**.
 - Guidance 1: Identify the scale and determinants of undernutrition
 - Guidance 2: Conduct a nutrition-sensitive assessment
 - Guidance 3: Identify the most nutritionally vulnerable
 - Guidance 4: Aim for nutrition impact
 - Guidance 5: Budget for Nutrition-sensitive programmes
 - Guidance 6: Enhance the nutritional benefits of FSL interventions & do no harm
 - Guidance 7: Empower Women
 - Guidance 8: Include nutrition promotion & Behavior Change Strategy

Finally, ACF has also actively been involved in the development of the 10 key recommendations on agriculture programming for nutrition and the 5 recommendations on agriculture policies.

TECHNICAL ASSISTANCE PROGRAMS

Mainly direct project delivery currently

Implementing partner of the FAO led ECHO funded Capacity building project : INTEGRATED NUTRITION IN FOOD SECURITY PROGRAMMING (2013-2014)

APPLIED RESEARCH

No applied research project specifically related to agriculture on going at the moment.

A study on Impact of Low Input Gardens on the wellbeing of People Living with HIV in Chipinge District, Zimbabwe, finalized in 2011.

Relevant sections of the ACF International Research Strategy 2012-2015

Strategic Objective 1.1: To improve the diagnosis and analysis of undernutrition to be able to improve the quality and design of programmes

Today, improving tools and methods to diagnosis and analyze undernutrition both at *individual* and *population* levels remain operational challenges. *At the individual level*, the current ongoing debates about the use of anthropometric indicators to characterize and include wasted children in operational programs calls for further research. There is a need for new information on assessing the best way of identifying individuals with undernutrition using relatively simple methodologies. These issues needs to be tackle in the light of operational considerations which are to include children in an easier way without compromising efficacy and taking into account field constraints. *At the community level*, there are still some needs for identifying the best methodological designs (data and tools) for nutritional surveillance and for operational Early-Warning Systems. Undernutrition

presents a seasonality pattern in some contexts which renders it predictable at some point. Finally, there is a need to get better analysis of the causes of undernutrition in a given area. Methods and tools are needed to provide caseload estimations in a much anticipated timeframe and to provide ACF team better analysis on the risk factors associated with undernutrition in different areas.

Strategic Objective 1.3: To measure and ultimately improve impact of sectoral and multisectoral interventions on undernutrition

There is a need to demonstrate the impact of curative services, e.g. through the better measurement of coverage and improved Monitoring & Evaluation tools, and to gradually improve our understanding of the impact of preventive strategies. Measuring and attributing a nutritional impact to sectoral and/or complex multi-sectoral interventions is a difficult task. Current methods for measuring outcomes and impact, for assessing coverage and cost-effectiveness/cost-benefits of interventions in undernutrition have shown limited results so far, so that little evidence exists on the effectiveness of preventive interventions aiming at improving the nutritional status of individuals and/or undernutrition prevalence and incidence. To demonstrate which activities have the best impact on undernutrition ACF could develop a staggered strategy. In order to accumulate data quickly ACF could start by before and after studies, going to case control studies and thus informing future intervention studies.

Strategic Objective 1.4: To identify and assess the efficacy of innovative and sustainable approaches to prevent undernutrition

It is postulated that associating treatment and prevention approaches is more effective in the long-run to address undernutrition. Preventive measures, targeting the direct and underlying causes of undernutrition, rely on the identification of the pathways leading to undernutrition in a specific context and to bring a change to these pathways so as to prevent new cases to appear. Those comprise issues with access to clean water and sanitation, hygiene, access to quality food, mitigation of the feeding costs, traditional care practices specially (but not exclusively) for new-born children and the early diagnosis and prompt treatment of children illness that are known to induce undernutrition. Preventive approaches rely on cross-sectoral interventions. Yet we know little about their efficacy and the efficacy of each of their components. As such, it will be critical to gather evidence on the effectiveness of innovative and reproducible preventive approaches, adapted to each context and to the needs of the population, for the prevention of undernutrition.

→GEOGRAPHIC FOCUS

Asia, Africa, Caribbean & Latin America

→PRIORITY COUNTRIES & PROGRAMS

Some main examples will do

Other examples available in: *ACF, 2013, Newsletter - ACF Experiences from the Field: Aligning Food Security & Livelihoods and Nutrition.*

<https://www.securenutritionplatform.org/layouts/mobile/disform.aspx?List=59adfa6e-1746-4279-95b0-2ba0701b1d0f&View=b068cfd6-eb6b-431d-b4de-b5afbb766360&ID=259>

Myanmar	SUSTAIN : A Nutrition sensitive Food Security Intervention http://www.actioncontrelafaim.org/fr/content/aligning-casestudies
Haiti	Fresh Food Vouchers to strengthen diet diversification and improve resilience http://www.actioncontrelafaim.org/fr/content/aligning-casestudies
Mali	Health Gardens, a nutrition centered approach

	http://www.actioncontrelafaim.org/fr/content/aligning-casestudies
Guinea	"Porridge Mums": Combining Income Generating Activities and Undernutrition Prevention (forthcoming publication)
Liberia	Strengthening Integrated Systems Management and Prevention of Malnutrition in Greater Monrovia (forthcoming publication)
Pakistan	Nutrition Mainstreaming in Flood Response Programming (forthcoming publication)

→ KEY TECHNICAL INTERVENTIONS

ACF outlines five pathways by which agriculture and nutrition are linked, basing their approaches off of these pathways. ACF promotes homestead food production, micronutrient-rich crop varieties such as sorghum and millet, biofortification techniques such as the use of orange-fleshed sweet potato (though they oppose the use of fortification with genetic engineering), biodiversity and sustainable agriculture, improved post-harvest handling, improved processing techniques, food handling education, and most of all, the principle to do no harm with proposed interventions.

→ TARGETED POPULATION GROUPS

Conflict-affected populations, drought/famine affected areas, acutely malnourished women and children.

Vulnerable individuals are identified based on anthropometric data, rates of exclusive breastfeeding, dietary diversity scores, caloric intake, low birthweight rates, and status of Vitamin A, iodine, and iron. Vulnerable households are identified by limited or no access to land, households spending a large proportion of income on food, female or child-headed households, marginalized households, households with chronically ill members, households in vulnerable climatic regions, or displaced persons. Within these vulnerable populations, ACF prioritizes PLW, children under two, and to a broader extent, women of childbearing age.

→ MONITORING & EVALUATION

Before implementing a nutrition intervention, ACF conducts baseline evaluations to collect data on infrastructure, local capacity, available resources, geography, infrastructure, and nutritional status. These data help to customize more effective responses. In their field worker manual on Maximising the Nutritional Impact of Food Security and Livelihoods Interventions, ACF highlights the importance of conducting joint, intersectoral assessments involving staff from FSL, nutrition, WASH, and MHCP. ACF argues for a pre-post M&E plan with control groups, using outcome indicators (such as anthropometric data) to determine nutritional impact.

ACF currently works on exploring ways to improve M&E system to better capture nutritional impacts of its nutrition-sensitive interventions.

KEY INDICATORS

(From ACF, 2011, Maximising the Nutritional Impact of Food Security and Livelihoods Interventions)

There is no ready-to-use solution and the indicators to be used will vary according to the nature and the duration of the intervention. Once you have conducted your nutrition-sensitive assessment and identified the different pathways through which your project may have an impact on nutrition, you will be well placed to determine the most pertinent indicators. Always consult with your nutrition,

MHCP and WASH colleagues when working on the following steps; they will provide additional technical and/or operational support and guidance.

4.1 Include a nutrition objective in the logical framework, when this is attainable

The nutrition objective in the log frame refers to the direct or indirect improvement of nutritional status by the project beneficiaries as a result of utilising the services provided by the programme. This objective explicitly demonstrates how the project contributes to improve the nutritional status of the population. Make sure, however, that the objective is attainable within the framework of the project.

Different scenarios are possible depending on if the intervention includes only FSL activities or is integrated with other sectors. FSL interventions have great potential to improve the nutritional status of an individual (e.g. by increasing access to nutritious food, by improving the diversity of diet and/or by improving household incomes), but other factors will intervene before these positive effects are translated into an improved nutritional status (e.g. access to health care and child care patterns). Integrated programming is hence more likely to show impacts on the nutritional status as the intervention seeks to tackle a variety of the underlying determinants.

In a multi-sectoral programme that includes integrating nutrition, MHCP with FSL and WASH activities, the specific objective could be to reduce the prevalence of wasting, provided a number of conditions are met (e.g. at least 3-year intervention, SMART surveys prior to the intervention and at its conclusion, controlling for confounding factors and other determinants). Note that measuring impact is difficult but this should not prevent ACF from doing it when the situation allows.

4.2 Have at least one outcome or impact indicator related to improved nutrition

The chosen nutrition outcome or impact indicators will vary according to the nature and the duration of the intervention. They will reflect changes either at the outcome or at the impact levels, based on the nutrition objective as defined in the section above. In all cases, the indicators have to be SMART (specific, measurable, achievable, relevant and time-bound).

- Outcome refers to the short/medium term change induced by the project.
- Impact is the long-term benefit for targeted groups and the wider society.

Refer to section 1.7.3 'Designing indicators' in the ACF M&E guidelines for FSL interventions for detailed information.

As stated earlier, the measurable effects of stand-alone FSL interventions on the nutritional status are likely to be less significant (with the potential exception of food aid interventions) than multi-sectoral interventions, thus most changes will be detected at outcome level. The graphic below shows potential impact and outcome indicators, depending on the objective and on which level of the causal chain it is located.

4.2.1 Use dietary diversity scores (DDS) to measure the outcome of a short-term (<1 year) standalone FSL intervention

Dietary diversity is one of the determinants of nutritional status but is not an indicator per se of the nutritional status. Dietary diversity scores are easy-to-measure proxy indicator of food security and are cheap, quick and easy to analyse. They also allow measuring trends and are sensitive to change. See Table 6 below for an example of the use of DDS in a FSL project. Refer to ACF FSL assessment guidelines and ACF M&E guidelines for FSL interventions for further details.

Bear in mind that the household dietary diversity score (HDDS) is used as a proxy for household food security and it reflects, in a snapshot form, the economic ability of a household to consume a variety of foods. The individual dietary diversity score (IDDS) on the other hand aims to capture nutrient adequacy and is a proxy indicator of nutritional status. IDDS is also useful to determine the consumption of programme-promoted foods, if any.

4.2.2 Use anthropometric measurements to measure the impact of long-term FSL programming

For long-term, integrated programming and specific FSL interventions such as food aid, anthropometric measurements can be used to measure the nutritional impact, in addition to dietary diversity scores. A number of conditions must, however, be met (e.g. context stability, at least 3-year intervention, SMART surveys at start and conclusion of the intervention, statistical treatment of confounding factors and determinants, etc.).

Weight-For-Height (WFH) for children and Body-Mass Index (BMI) for women allow the assessment of programme impact in terms of reduction of wasting or acute malnutrition. Changes in wasting are rapid to observe and can be captured even within one year. Attributing this change to a programme, however, is more complex as external factors such as seasonality, or other interventions tackling other determinants of undernutrition may play a significant role. A longer time frame is hence needed. Anthropometric measures also have the advantage of capturing the effects on both income and dietary diversification effects of FSL interventions.

Although the MUAC (Mid-Upper Arm Circumference) is mentioned as one of the core FSL M&E indicators to measure nutrition impact, it is important to keep in mind its limitations. MUAC is used as an indicator of acute malnutrition and is primarily an indicator of risk of mortality. MUAC does not measure growth faltering or other forms of undernutrition.

The impact of an intervention on stunting (or chronic undernutrition measured by height-for-age) may be observed in some situations where PLW and children under two are direct beneficiaries, and the intervention lasts a minimum of 3 to 5 years. Stunting is much slower to change than wasting and is less influenced by seasonality and disease outbreaks. In addition, stunting in children mainly occurs during the window of opportunity (from conception to two years of age) and this is the time when preventive actions have the greatest impact on its occurrence. Stunting in children of 3 years or older usually reflect growth retardation at an earlier age, and is often irreversible.

4.2.3 Systematically account for nutrition promotion and changes in behaviour, notably nutrition practices

To enhance the impact of the project, always include nutrition promotion in projects that are shorter than one year and construct a comprehensive behaviour change strategy (BCS), based on behaviour change communication, for longer-term projects. The messages for nutrition promotion will be defined in collaboration with the nutrition and MHCP teams and delivered by project teams. Behaviour change strategy, on the contrary, is a long-term strategy that aims at changing deep-rooted behaviour and will be designed and piloted by the MHCP teams. This said, the country where you work may have already developed its own nutrition agenda including national protocols for acute malnutrition, food-based dietary guidelines, nutrition messages and IEC material. If available and in line with ACF standards and protocols, ACF will use and build on the existing resources and material provided by the line Ministry, or at minima work in collaboration with the Ministry.

Changes in nutrition practices and behaviour may be accounted for through pre-post KAP surveys. It is however relatively easy to measure change in knowledge, but it is difficult to measure sustainable change in practices and behaviour.

NUTRITION-SENSITIVE AGRICULTURE ASSESSMENTS, INDEXES, SCALES AND SURVEYS

- Information about the magnitude and severity of undernutrition, its causes and its variation in time (SMART surveys, secondary data on undernutrition prevalence, nutrition causal analysis, seasonal calendar)
 - Assessment of the level of commitment of the government in tackling undernutrition
 - Assessment of food consumption patterns and dietary intake (Household Dietary Diversity Score (HDDS), Index-Member Dietary Diversity Score (IDDS), Food frequency Questionnaires)
 - Assessment of care practices and capacities, health and environmental conditions
- Exploration of local perceptions of undernutrition.

→GENDER EQUALITY & WOMEN'S EMPOWERMENT

Empower women farmers, both to allow them more control over income and household spending — which usually leads to more being spent on the feeding and care of young children, as well as to correct for unequal access to labour and inputs that means that women's plots often achieve lower yields than men's;

The intervention should advocate for women's access to land, livestock, education, childcare, financial services, extension services, technology, markets and employment.

The project should not hamper women from doing their essential normal tasks or lead to any major additional workload for women or conflict within the family. Planning of the intervention should be carefully designed taking into account the normal workloads. Ideally, the planning should be discussed with the women targeted in the future intervention.

Protect the nutritional status of women: promote less labour-intense alternatives and/or activities for pregnant and lactating women. Pregnant women at later stages of pregnancy (4-9 months) should not be enrolled in physical labour but should still receive support, partly because of increased energy requirements

Provide support and safe and quiet 'breastfeeding corners' for lactating mothers enrolled in the programme, where pregnant women are also encouraged to rest. The capacity/location of the place is designed based on the percentage of PLW. Related costs (e.g. local material, furniture, etc) should be forecast in the budget.

Engage fathers, substitute caregivers and other family members, notably mothers-in-law, to help boost adequate IYCF and care. Communities, fathers and other decision-making authorities (religious and/or political) should be sensitised about maternal care, women's workload and sharing of tasks, and how these affect the well-being of community members.

Initiate and support community childcare initiatives or day-care centres when the situation allows, assisting working parents with their childcare responsibilities. Urban women may benefit the most of this kind of intervention as they have less access to extended family networks.

→EMERGENCY & HUMANITARIAN ASSISTANCE

Nothing specific to emergency. Refer to ACF, 2011, *Maximising the nutritional impact of FSL Interventions* manual, sections 6.4 Food Aid and 6.6 Cash-based interventions

→LESSONS LEARNED & KEY FUTURE INVESTMENTS

Complement agricultural programs with education and communication, health services, water and sanitation. Smallholder agriculture cannot achieve better nutrition alone.

Promote home gardens and small-scale livestock rearing for increased diversity of production and consumption. Children's nutrition often improves: effects that are stronger when these programs are combined with education on diet, child care and hygiene;

Empower women farmers

Invest in Behavior change communication skills and capacity

Pilot and assess effectiveness of nutrition-sensitive interventions ; enhance monitoring of nutritional impact

Promote and assess effectiveness of integrated multi-sectoral programming

Enhance skills in nutrition basics for non-nutritionist staff and promote cross-sectoral work and support

From an advocacy – policy perspective: ACF promotes a twin track approach: a sectoral approach from the agricultural-food security sector is required (making the sector integrating nutritional considerations and giving a higher level of priority to nutrition: “acting sectorally”) as well as a multisectoral approach to fight undernutrition (in which the agricultural sector should participate, play a role, contribute and importantly become more accountable for its nutrition impacts, together with other sectors – “acting multisectorally”). Both approach are important and required to make change happen (not a either-or question)

→KEY PUBLICATIONS & CONTACTS

ACF’s main publication on nutrition-sensitive agricultural and food security programmes is: Maximising the Nutritional Impact of Food Security and Livelihoods Interventions:

<http://www.actioncontrelafaim.org/fr/content/maximising>

Different case studies of ACF field programmes have been developed to illustrate more concretely ACF’s approach to making its programmes more sensitive to nutrition: they can be found on

<http://www.actioncontrelafaim.org/fr/content/aligning-casestudies>

Reference to Advocacy publications (report and country case studies from Peru, Burkina Faso and Kenya): <http://www.actioncontrelafaim.org/en/content/seeds-of-good-nutrition>

ACF, 2013, *Aid for Nutrition: Maximising the impact of nutrition sensitive interventions*:

<http://www.actionagainsthunger.org.uk/mediaroom/latest-news/broadening-the-scope-of-nutrition-action/>

Other useful publication

Smallholder Agriculture’s Contribution to Better Nutrition (Hunger Alliance commissioned report, written by ODI):

http://www.actionagainsthunger.org/sites/default/files/publications/Smallholder_agricultures_contribution_to_better_nutrition_-_FINAL_April_20131.pdf

Small scale big impact (12-page Summary of the above) is available:

http://reliefweb.int/sites/reliefweb.int/files/resources/HA%20small%20scale%20big%20impact%2012pp_d5.pdf

Nutrition-Sensitive Agriculture Focal Persons:

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→COUNTRY CASE STUDIES

Myanmar

The combination of women’s empowerment activities, giving women access to inputs and social services, promotion of sustainable agricultural biodiversity, and capacity building of institutions contribute to a lasting programmatic impact.

http://www.actionagainsthunger.org/sites/default/files/publications/ACF_Myanmar_Aligning_Case_Study_EN_Aug_2012_LD.pdf

Liberia

- Coordination at planning and implementation stage between FSL and Nut Units facilitated effective integration of FSL and Nut interventions in the field.
- FSL team was trained on ENA messages and contributed to strengthen ENA messages dissemination
- Health facility staff promoted production and consumption of nutritious food through demonstration plots installed at health centers and provided ENA messages
- Improvement in nutrition knowledge and practice was higher when people were engaged in garden activities.
- Methods of message delivery could have been more participatory and more innovative methods such as community theatre and film should have been considered.
- Associate nutrition education with practical home gardening activities to enable beneficiaries to see and better understand the links to nutrition.

Mali

- The implementation strategy of the Health Gardens aiming to work specifically with women is relevant because of their role within the households and particularly for the feeding and care of children. This strategy is feasible in terms of reproducible strategy. However, the workload of women must be taken into account, as it may sometimes prevent them from caring for children, which is part of the causes of malnutrition. ACF recommends therefore the implementation of community-based “nurseries” to take care of children by grandmothers for example.
- The dissemination of messages, be it within nutrition education or within farming techniques and technology, must be done more gradually, taking into account the beneficiaries’ level of knowledge and understanding.
- Sun-drying of vegetables products does not preserve the quality and nutritional value of products and does not ensure sufficient food hygiene. Sensitization on hygiene should better cover hygiene aspects in food preparation, drying (using shell or solar dryers) and products processing / post processing.
- Setting up a rigorous monitoring system is required as part of a Health Garden to better monitor outputs, outcomes and impacts. This should go through the definition of SMART indicators from the outset and their control in real time.
- The implementation of a Health Garden requires a sustained presence of technical support personnel and nutrition education.

<http://www.actioncontrelafaim.org/fr/content/aligning-casestudies>



Helen Keller International

→ POLICIES / STRATEGIES / MANDATE

The mission of Helen Keller International is to save the sight and lives of the most vulnerable and disadvantaged, combatting both the causes and consequences of blindness and malnutrition by establishing programs based on evidence and research. To this end, HKI has been refining its model for **Enhanced Homestead Food Production (E-HFP)** since 1990. E-HFP aims to address the three underlying causes of malnutrition in poor households by increasing their access to nutrient-dense foods, improving essential nutrition and hygiene practices, and improving links with health services. Promoting the empowerment of women to contribute to thriving families is also an integral objective of the program.

→ COUNTRY SUPPORT

HKI collaborates with local non-governmental organizations (NGOs) and government structures to establish **diversified animal and horticulture production** in communities where local diets are poor and hunger is common. In partnership with agricultural partners the program trains female village model farmers or other women leaders in improved cultivation techniques that emphasize nutrient-dense foods but also include products with high market value. These community leaders establish demonstration plots and use these as a platform to train other **women** in the community and to supply them with materials to establish their own improved HFP, including small-scale animal production and/or fisheries. These demonstration farms also serve as a **platform for nutrition, hygiene and health education**, where these same farmers gather to learn about the nutritional needs of women, infants and young children as well as on crucial water, sanitation and hygiene measures and preventive health care. Production and nutrition activities are linked to ensure families understand the importance of consuming the nutritious products of the gardens and husbandry and are able to use these to prepare health complementary foods. Discussions also build community awareness of discriminatory gender norms to encourage acceptance of more equitable roles and responsibilities for all and enhance women's influence on household decisions, particularly around food and care. The program works to **build the capacity and commitment of local governmental and NGO partners** to provide sustained technical assistance on both agriculture and nutrition communities by the end of the three year project cycle.

FINANCIAL SUPPORT OR INVESTMENTS

E-HFP is supported by numerous donors, including the U.S., Canadian, Irish and Dutch governments, the European Union, the Mondelez International Foundation and GAIN. We are collaborating with the International Food Policy Research Institute (IFPRI) and the University of British Columbia (UBC) on impact evaluations of the program. And we receive support from the Gates Foundation and McKnight Foundation to promote the production and consumption of biofortified foods outside the framework of E-HFP (notably, orange-fleshed sweet potato, iron and zinc-rich varieties of millet and sorghum).

POLICY ADVICE

In building for the sustainability of E-HFP, HKI advocates with the appropriate government partners

for crucial extension services to optimize agriculture and livestock production. To advance nutrition objectives, HKI provides training to Ministry of Health personnel using the Essential Nutrition Actions (ENA) and Essential Hygiene Actions (EHA) frameworks to strengthen provision of nutrition counseling and related services and to reinforce capacity-building at the community level. Advocacy with health partners focuses on requesting their sustained support for the ENA within the health sector and communities. HKI works at national and global levels to advocate for increased investments in the prevention of malnutrition and in nutrition-sensitive agriculture to ensure the health and wellbeing of all people and as an engine of economic growth.

TECHNICAL ASSISTANCE PROGRAMS

The training of participating households in **improved agricultural and animal husbandry** covers low-cost technologies such as the cultivation of bed systems, crop rotation and mulching for continuous soil improvement, selection of varieties for year round production, vegetable diversification with an average of 10 varieties, grafting, the use and preparation of compost, integrated pest management and water management; and improved poultry management including shed construction, feed preparation, and protection from predators. In Cambodia diversified fish farming has been successfully introduced.

Nutrition training uses the ENA framework, which applies behavior change communications to support the adoption of improved practices and adult learning methodologies. Recently the curriculum has expanded the emphasis on Essential Hygiene Actions to reduce the infections that undermine health and development.

Workshops to **promote gender equity** at the community level create a safe space in which to discuss and challenge the cultural norms that undermine food security and good nutrition, including care for pregnant and breastfeeding women, women's access to marketing opportunities and women's influence over decisions about food purchases, reproduction and child feeding and care. Additionally, dialogues among husbands, wives, mothers-in-law and other stakeholders build skills in communication, assertiveness, and problem-solving.

APPLIED RESEARCH

HKI uses program theory as the basis for defining how we anticipate E-HFP will address the identified nutrition and health problems, to inform our approach for continuously monitoring and improving program delivery, and ultimately to evaluate the impact of the program on a range of outcomes. HKI is continuously feeding back lessons learned from our programs globally to refine and strengthen the E-HFP model.

→ GEOGRAPHIC FOCUS

HKI's assists the vulnerable and disadvantaged. We intervene in 7 countries in Asia, with E-HFP in: Bangladesh, Cambodia, Nepal, Indonesia, the Philippines and Vietnam. We work in 13 countries of Africa with E-HFP in: Burkina Faso, Côte d'Ivoire, Mali, Niger, Senegal and Tanzania.

→ PRIORITY COUNTRIES & PROGRAMS

E-HFP began in Bangladesh and has reached scale there and in Nepal and Cambodia. In Cambodia the Fish on Farms pilot is very promising.

In Africa the program began in 2009 in Burkina Faso and Tanzania, and has since expanded to Côte d'Ivoire, Mali, Niger and Senegal.

→KEY TECHNICAL INTERVENTIONS: EXAMPLES FROM BANGLADESH

The most diversified E-HFP program is in Bangladesh, where the interventions include:

- Optimal techniques for homestead production of nutrient-dense vegetables, fruits and poultry at Village Model Farms (VMFs) and individual households
- Essential Nutrition Actions and Essential Hygiene Actions
- Improved marketing practices and information access
- *Nurturing Connections* integrated gender and nutrition curriculum
- Enhancing linkages for women to agricultural extension and health services

→TARGETED POPULATION GROUPS: EXAMPLES FROM BANGLADESH

All programs prioritize women with children <2 years at entry into program. In Bangladesh geographic coverage in recent years includes:

- Landless and other marginalized communities in Barisal and Khulna divisions (or 'southern coastal Bangladesh')
- Extreme-poor communities of Chittagong Hill Tracts
- *Char* (Riverine Island) areas of northwest Bangladesh
- Communities in Sylhet Division

→MONITORING & EVALUATION

Pathways expected to lead to program impact, improved nutritional status of women and children, include: 1) increased women's production of micronutrient-rich foods to ensure household access to and consumption of these foods; 2) increased income and food security through the sale of surplus production; 3) improved health and nutrition-related knowledge and practices among all household members; and 4) increased women's asset holdings and decision-making authority.

Key indicators: 1) diversity and volume of household plant and animal food production; 2) use of improved production techniques; 3) household income and assets; 4) household food insecurity access scale; 5) health and nutrition knowledge; 6) minimum dietary quality among children 6-23 months; 7) women's dietary diversity; 8) prevalence of child stunting or height for age z-scores; 9) prevalence of underweight among non-pregnant women (BMI<18.5); 10) prevalence of low hemoglobin concentration among children 6-23 months and non-pregnant women.

Impact evaluations undertaken in Nepal and Burkina Faso; underway in Bangladesh, Cambodia, Indonesia, Vietnam, Burkina Faso and Tanzania.

→GENDER EQUALITY & WOMEN'S EMPOWERMENT

Gender empowerment is embedded in the model which provides all technical assistance through women farmers while recognizing the entire web of community members must be engaged in re-examining and changing discriminatory gender norms. Workshops raise awareness of how current norms may perpetuate poverty and malnutrition. Training in household budgeting is offered to couples. Land tenure rules are challenged.

<https://www.securenutritionplatform.org/SuccessStories/Lists/Posts/Post.aspx?ID=48>
http://www.hki.org/research/Food%20Security%20Insights_Gender_HFP_Jan_2012.pdf

→EMERGENCY & HUMANITARIAN ASSISTANCE

In Bangladesh HKI used E-HFP to help communities devastated by cyclones rebuild livelihoods and nutrition through E-HFP. In Mali HKI is testing a streamlined model that can respond quickly to food emergencies caused by climate and political strife. The resilience elements of the model include income-generating opportunities, strengthened capacity for diversified HFP, increased availability and access to nutrient-rich foods, and improved knowledge and practice of preventive nutrition actions, leading to increased ability to withstand shocks and build assets for the future.

→LESSONS LEARNED & GOOD PRACTICES

Connections to local agricultural extension services and supply chains are vital, including seeds and animal vaccines. In many settings investment in government services has been neglected, while private sector actors ignore marginalized communities. Water shortages are chronic challenges in the Sahel and in some districts of Nepal, and long-term solutions require government investments in improved water management and irrigation systems. HKI's model emphasizes integrated pest management and compost fertilizers, reducing the need for chemical inputs.

HKI's model is designed as a gender-sensitive and nutrition-sensitive agricultural program, thus it addresses in a comprehensive way the causes of malnutrition in some of the most impoverished communities in the world.

→KEY PUBLICATIONS & CONTACTS

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→COUNTRY STORIES (1-2 concrete examples of good practices)

<p>In Nepal, the Action Against Malnutrition through Agriculture (AAMA) project funded by USAID achieved the following:</p> <ul style="list-style-type: none"> • Strong improvement in household food production in volume and diversity (nutrient-rich plants and animal source foods) and on household income and food security; • Notable and positive influence on household nutrition practices such as feeding at least four groups including eggs to children 6-23 months of age and women’s diet during pregnancy. • Significantly lowered the risk of underweight and anemia among women and of anemia in young children. • Important impact on the government of Nepal’s national nutrition action plans and multisectoral policies and investments. • Strengthened government capacity at national, district and local levels to manage and support multisectoral development programs. • Provided model for and supporting scale up in 20 of the country’s 75 districts. 	<p>In Bangladesh E-HFP has reached over 1 million households. Across communities E-HFP participants</p> <ul style="list-style-type: none"> • Were significantly more likely to report non-traditional roles in household income generation and decision making • Were enabled by a group marketing structure to sell surplus even without freedom to travel to markets. <p>In the targeted communities of Barisal division, surveys five years apart found that among participants in the program:</p> <ul style="list-style-type: none"> • Average vegetable production over a 3-month period increased from 3 to 70 kg; • Average egg production increased from 16 to 67; • The proportion of children 6-23 months who consumed at least 3 different food groups in one day increased from 43 to 86% and among their mothers the proportion increased from 34 to 62%. • Prevalence of acute malnutrition (low weight for height) decreased significantly from 25.1 to 17.5%. • Median household income from HFP over a two-month period increased from 0 to 1000 takas.
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UNITED NATIONS SYSTEM

STANDING COMMITTEE

ON NUTRITION

The United Nations System Standing Committee on Nutrition (UNSCN) is the food and nutrition policy harmonization forum of the United Nations. Its vision is a world free from hunger and malnutrition, where there are no longer impediments to human development.

UNSCN

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